



Spotlight on Michigan: Sweeping the State for Ultimate Success

Key Takeaways

- Design your program strategies with continuous improvement in mind
- Prepare your approach to identify what offerings your target community finds most compelling
- Plan, launch quickly, and focus on learning from initial and subsequent responses real-time
- Prime your audience before a campaign to build awareness and the credibility of a new program

Sweeps are an intensive, house-by-house campaign designed to convince 80 percent of the homeowners in a neighborhood to complete a home energy upgrade

The Better Buildings Neighborhood Program is part of the national Better Buildings Initiative led by the U.S. Department of Energy.

To learn how the Better Buildings Neighborhood Program is making homes more comfortable and businesses more lucrative and to read more from this Spotlight series, visit betterbuildings.energy.gov/neighborhoods.

A Sweeping Experiment: Better Buildings Tests Offerings in Michigan Neighborhoods

BetterBuildings for Michigan is a statewide program using an innovative neighborhood “sweeps” delivery model to reach its residential target audience. Sweeps target one 420-home neighborhood at a time with a blitz of outreach, contractor scheduling, and short-term energy efficiency promotions. Within the context of this approach, the program has set the stage for experimental design—structuring the sweeps to test which variations of program offerings most effectively persuade consumers to upgrade their homes. With these learning goals at the program core, BetterBuildings for Michigan is on track to understanding homeowner motivations, and in the process, is laying a strong and flexible foundation for future energy efficiency efforts.

Design Strategies for Continuous Learning and Refinement

The neighborhood sweeps approach is an intensive, house-by-house campaign designed to convince 80 percent of the homeowners in a neighborhood to complete a home energy upgrade. Each of 27 sweeps is a “mini-experiment” that tests customer responses to various marketing and outreach strategies, financing options, and incentive offerings. The program will offer different combinations of these components to align with the experimental nature of the program design. Learning from each sweep, BetterBuildings for Michigan will use the outcomes of these pilot efforts to inform future statewide efforts.

Within each sweep, homeowners are offered several packages of options for their energy upgrade, allowing the program to explore various ways to bundle efficiency measures.



Table 1. Initial Neighborhood Sweep Home Energy Upgrade Packages and Expected Results

	Description of Initial Home Energy Upgrade Packages	Anticipated Participation Rates	Estimated Savings (\$/year)
Non-participants	None	19 percent	-
Low-income homes referred to State Weatherization Assistance Program (WAP)	Referral of customers to applicable program providers (no direct services through Better Buildings)	25 percent	-
Base package	Basic home weatherization and efficiency measures, direct installation	28 percent	\$300-\$450
Group 1 services	Home weatherization and replacement of a major appliance (e.g., furnace)	19 percent	\$550-\$1,100
Group 2 services	Whole-home upgrade, including intensive weatherization and insulation, new furnace or water heater	7 percent	\$700-\$1,600
Group 3 services	“Green” home upgrade, adds new windows and additional ENERGY STAR® qualified appliances	2 percent	\$900-\$2,000

Table 1 describes a preliminary approach for upgrade levels and indicates anticipated participation rates.

To reduce unintended variables and facilitate easy comparison of the results, each of the sweeps has a budget of nearly \$290,000 and focuses on one “neighborhood” of 420 homes, typically of mixed income, where approximately 95 percent of the housing stock was built before 1970.

Identify Compelling Program Offerings

BetterBuildings for Michigan has put active learning, information sharing, and program adaptation at the core of each neighborhood sweep to understand which program offerings resonate with homeowners and to what degree. The regional coordinators who run sweeps in their territories incorporate several basic required elements into each 420-home sweep. Outreach for each sweep must include internally consistent program messaging. Every participating household will have an assessment, complete the base package, and receive an assessment report with additional recommended upgrades. Within this structure, regional coordinators help program staff tailor each sweep’s outreach strategies, finance offerings, and incentives to the target neighborhood, incorporating lessons from previous sweeps along the way.

Document Results and Lessons Learned to Adjust in Real Time

A key challenge of this experimental program model, which Michigan is still refining, is ensuring that learning and information sharing take place effectively and efficiently. Regional coordinators knew they had to communicate closely with each other and program staff to ensure that the program as a whole understands which strategies are working well. With their first few sweeps, staff members hosted a mid-sweep debrief, and then a more thorough discussion at the end of each sweep where regional coordinators captured lessons



¹ Participation rates estimated based on Michigan utility sweep programs from the early 1990s. Program staff expects that package offerings will vary each sweep’s participation rate.

Throughout the three-year grant period, the program will experiment with:

- Interest rates for financial packages
- Customer co-payments for the energy evaluation
- The types and number of incentive offerings
- Contractor incentives for up-selling
- Bundling of energy efficiency measures
- Marketing messages emphasizing savings, comfort, health, environment, and others

For example, a sweep might explore whether shifting certain energy efficiency measures from the base package to the next package level increases customer participation in the more comprehensive upgrade.

Successful programs must effectively and efficiently share lessons learned.

learned with detailed notes. However, the program has now recognized that a more structured approach is required to understand and efficiently document the variables leading to strategy effectiveness.

Program staff determined the need to capture real-time feedback during the sweep, improve post-sweep evaluation of messages and strategies used, and assign a larger evaluation budget to support these two efforts. To address the need for information during a sweep, neighborhood canvassers will journal feedback from all homeowners, whether or not they participate in the program, during the door-knocking phase of the sweep. The program is developing a process for rapidly digesting the information and the results of these efforts will inform program delivery adjustments during each sweep.

Ready, Fire, Aim! Ferndale Facilitates Learning

The first neighborhood sweep kicked off in Ferndale, Michigan, in November 2010, and concluded in January 2011. That sweep included knocking on doors, distributing mailers, organizing community group meetings, hosting in-home informational meetings for neighbors, and sponsoring a program-wide press event with Michigan's governor. Strategically placed yard signs and magnetic signs with the national Better Buildings logo on contractor vans attracted homeowners' attention and helped create significant word-of-mouth buzz about the program. At the close of that sweep, 91 of the 420 homes (22 percent) had completed the base package—close to the anticipated 28 percent penetration rate; however, only eight homes had completed upgrades beyond the base package.

Programmatic evolution is underway to understand the effectiveness of the various sweep design elements and to further increase the number of upgrades completed. One realization resulting from the Ferndale sweep was that program staff underestimated the effort required to convert homeowners from the base package to upgrade, especially in mixed-income neighborhoods. As a result, BetterBuildings for Michigan is expanding marketing and outreach efforts to help educate homeowners regarding the value of upgrades.

Launch Quickly and Learn

In launching their first sweep within six months of receiving Department of Energy (DOE) seed funding, the program team emphasized the need to focus intensely on recognizing weaknesses and errors and analyzing what worked so that adjustments could be made to increase the efficacy of future sweeps. While residential energy efficiency programs typically take a year or more to launch, program staff members felt that it was more important to get their programs off the ground, execute sweeps, and learn from their experiences. They were aided in this endeavor by their initial extensive program and organizational planning, conducted prior even to receiving Better Buildings funding. With neighborhood sweeps being so detailed, program staff members recognized that it would be impossible for them to plan for every contingency or execute everything perfectly the first time. The neighborhood sweep in Ferndale was a deliberate experiment, not just in its design, but also in its execution.



Act on Results—Prime the Neighborhood in Advance

Based on the Ferndale effort, the program has already identified a number of sweep design elements to improve, and these lessons have been applied to two other completed sweeps and additional sweeps in the planning process. One of the key takeaways was that concerted priming of the targeted neighborhood for the sweep is essential. Subsequent sweeps have solicited early adopters within the neighborhood to act as energy efficiency champions, helping to spread the word at community events, on websites, at press events, and at community meetings. Regional coordinators are also leveraging local community organizations' volunteers and outreach infrastructures to implement the sweeps. In addition, engaging community organizations is helping to build credibility for the new program and alerting homeowners to expect an outreach specialist at their doorstep.



Michigan

Accomplishments

Within Six Months of Program Launch

- Three sweeps completed and two in progress
- Evaluation of 1st sweep completed and lessons integrated into future sweeps
- 847 homes visited during completed sweeps, of which 371 completed base upgrade package

Program Elements

Driving Demand

- Neighborhood sweeps
- Volunteers

Workforce

- Leveraging existing contractor requirements, training, and contractor base
- 100 percent quality assurance inspection for new program contractors, random inspections for experienced contractors with good program records

Financing

- Leveraging financing program from Michigan Saves
- Credit enhancements with local credit union for residential loans
- Revolving loan fund for commercial loans

Program Facts

- DOE Seed Funding: \$30 million
- Building Types: Residential and Commercial
- Building Upgrade Goal: 9,180 homes and 131 commercial buildings
- Job Creation Goal: More than 2,000 new jobs

BetterBuildings for Michigan

BetterBuildings for Michigan is “sweeping” neighborhoods to promote energy efficiency upgrades to homeowners and businesses and build demand for more than 2,000 sustainable, green jobs. Michigan’s program is focusing on 27 target communities to reach more than 11,000 homeowners. The program is also working with 130 commercial, industrial, and small business owners to complete energy efficiency upgrades. BetterBuildings for Michigan was developed by the Michigan Energy Office and Michigan Saves—a non-profit organization dedicated to making energy improvements easy and affordable—in collaboration with public, private, and non-profit partners throughout the state including the City of Grand Rapids, the Economic Development Corporation of the City of Detroit, and the Southeast Michigan Regional Energy Office.

Learn More

www.betterbuildingsformichigan.org

BetterBuildings for Michigan Contact

Robert Jackson, Manager, Co-Principal Investigator
Michigan Energy Office
jacksonr1@michigan.gov, 517-373-2731

Jeff Williams, Project Director, Co-Principal Investigator
Michigan Saves
jwilliams@michigansaves.org, 734-494-2190