IMPACT: PAST, PRESENT & FUTURE

LEAN Update to EEAC
November 2022

AGENDA

Past:

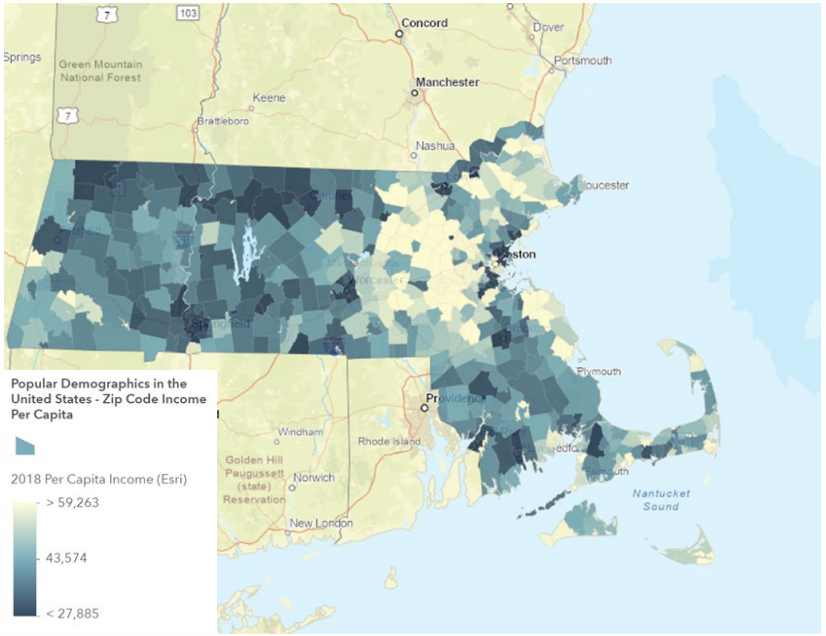
- How Community Action entered the energy efficiency industry
- Why Community Action delivers the program
- How the programs have evolved over the years
- Impact Community Action has had on industry
- Accomplishments

Present

- Current Status
- How programs are implemented
- Leveraging
- Successes and Challenges

Future:

- Strategies to achieve goals
- Solutions to current challenges
- Electrification
- DER Update



Past

How did it begin?

- Community Action History: We are Community
- Origination of WAP, Heartwap
- Evolution of WAP and buildout of LEAN delivery infrastructure
- Restructuring and GCA
- Accomplishments

Community Action Agencies

Creation of Community Action Agencies as 1-stop center for low-income services

By law, CAAs are run by Communities. Board of Directors includes:

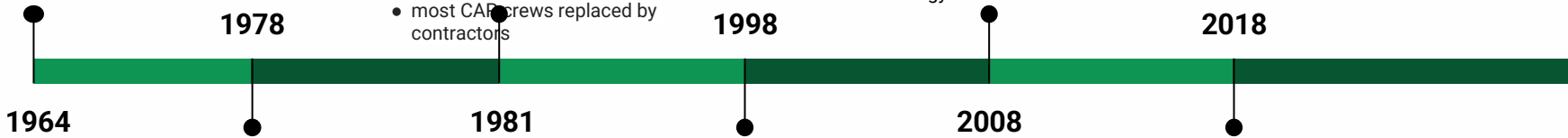
- 1/3 democratically selected low-income community members
- 1/3 local elected officials or their representatives
- 1/3 community groups and interests

Creation of Heating Assistance Program in MA

- CAAs deliver more robust heating assistance to low-income customers under new federal Low-Income Home Energy Assistance Program (HEARTWAP in MA)
- continually work to leverage federal funding to improve delivery
- most CAP crews replaced by contractors

Creation of Mass Save Program under the Green Communities Act and passage of GWSA

- Building off LEAN's early work, the statute requires:
- dedicated share of funding for low-income customers continued role for CAAs in delivering assistance to those customers due to their federal role in providing low-income energy assistance



Creation of Federal Weatherization Assistance Program (WAP) and CAA energy role

In response to energy crisis, CAAs take on new role providing:

- Weatherization
- heating assistance

Electricity Restructuring and formation of LEAN

- Introduction of the Lead Vendor Structure
- CAAs formalized the Low Income Energy Affordability Network

Strategic electrification

Strategic electrification is added to Mass Save Program, starting the process to align policy efforts under the GCA and the GWSA

Community Action Agencies

1998 Restructuring Statute

- Led by Action and ABCD, created the Low Income Energy Affordability Network (LEAN) and the Lead Vendor Structure
- Stakeholder engagement at cornerstone
- CAA-CSG partnership helped transform the LI model into much of the MassSave model

> “The low-income residential demand side management and education programs shall be implemented through the low-income weatherization and fuel assistance program network and shall be coordinated with all electric and gas distribution companies in the commonwealth with the objective of standardizing implementation." G.L. c. 25, sec. 19(c).”

Community Action Agencies

Fuel Assistance: Primary entry point for weatherization

- Now approximately 134,000 families
- Annual income verification, mostly only in heating season; expedited renewals
- ~20-25% of LIHEAP and discount families are new each year
- Entry to Weatherization and other Energy Efficiency
- Also to DOE Heating Systems for 4000-5000 per year, managed by priority system (seniors, disabled, young children, high energy use)
- Additionally, the HEARTWAP program conducts almost 4,000 clean & tunes a year

Community Action Agencies

Foundation for success!

- Over 255,000 1-4 family weatherized units through CAAs in Massachusetts since 1977
- Over 70% renters

LEAN Impact

Income Eligible Program Performance (SF & MF), 2010-2021

Total Benefits	
Actual dollars	**$ 2.6 billion**
as % of planned	**106%**
Lifetime Electric Savings	
MWh, Actual	**4 million**
as % of Planned	**104%**
Lifetime Gas Savings	
Therms, Actual	**466 million**
as % of Planned	**113%**
Expenditures	
Actual dollars	**$ 1.1 billion**
as % of Planned	**94%**
No. of Participants	**473, 756**

*More information available at www.masssavedata.com

Over 11 years, 473,756 participants 106% of planned benefits achieved.

CAP Innovations

In Energy since 1977

- Including models for non-low-income in Mass. and across the US
- Heating system protocols
- Heating system for renters (with PAs)
- Tenant/landlord agreements
- Project management model: quarterbacking, procurement, QC, no co-payments
- Low Income Multifamily Program including PHAs, CDCs
- Refinance Roadmap for large LIMF projects
- Arrearage management (with PAs)
- Development and implementation of new measures, including with MTC, CEC: LED distribution, innovative weatherization

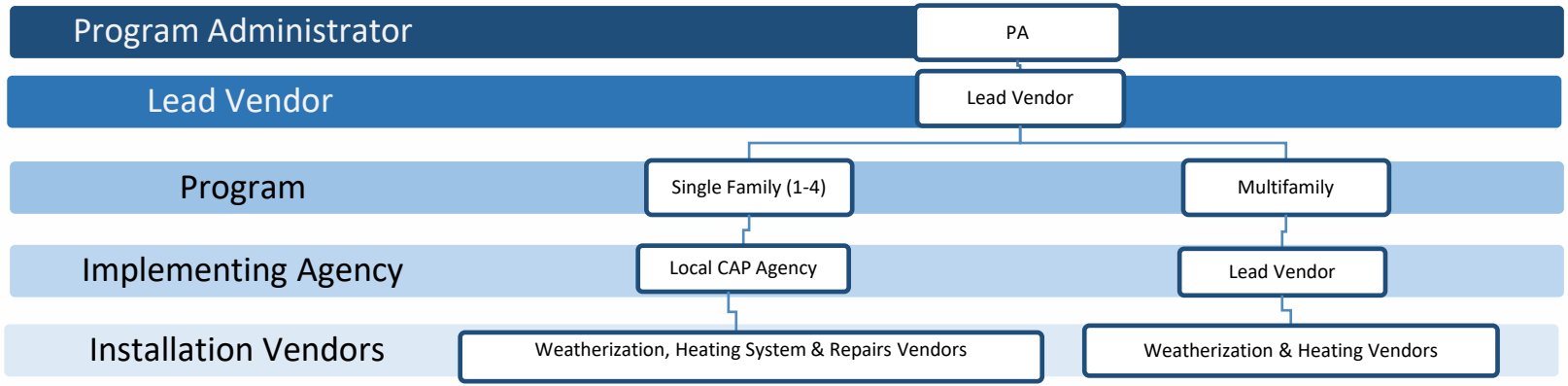
Present

Implementation

- Implementation Model
- Project Process
- Leveraging
- Successes and Challenges

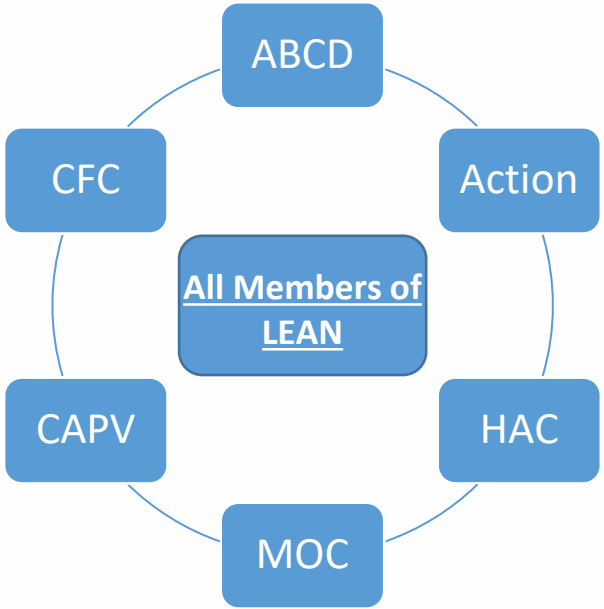
LEAD VENDOR STRUCTURE

IE MassSave Delivery Structure



LEAD VENDORS

LEAN Members

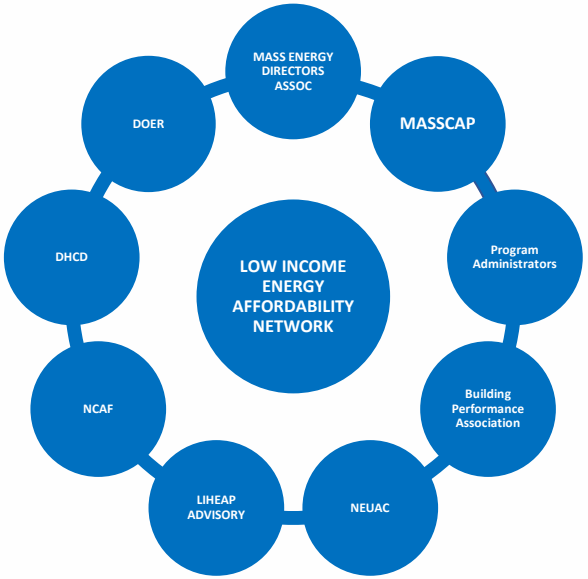


Program Administrator	Lead Agency
National Grid	Action, Inc.
Eversource & EGMA	ABCD, Inc.
Berkshire Gas	Community Action Pioneer Valley
Liberty Gas	Citizens for Citizens
Unitil	Montachusett Opportunity Council
Cape Light Compact	Housing Assistance Corporation

Structured to Deliver

Lead Vendor model provides streamlined client experience despite complex implementation life-cycle & broad network inputs

Lead Vendor



RESPONSIBILITIES

Marketing, Implementation & Reporting

Marketing and Customer Engagement

- Strategize, plan and execute marketing with PAs to discount rate clients
- Includes direct mail, bill inserts, email and local engagement
- Agencies also conduct direct mail, outbound calling and local events

Project Implementation: Manage job from start to finish

- Home Energy Assessment
- Bidding, Contracting
- Appliance assessment & Delivery
- 100% Quality Control
- Liaise with Inspectional Services, Fire Inspectors, 3rd Party QA/QC

Payments & Reporting

- Collect and collate all required digital data
- Leveraging
- Report all client and measure details to PAs
- Facilitate all contractor payments
- No Customer Copay

Customer Engagement

Communicating with customers

CAAs outreach to Discount Rate customers

CAAs manage energy efficiency customer at local level

CAAs with respond to customer inquiries through scheduling Assessment

Home Assessment in 4-6 weeks, depending on the existing scheduled assessments

LEAN backs up local agency where needed

PROJECT MANAGEMENT MODEL

Quarterbacking

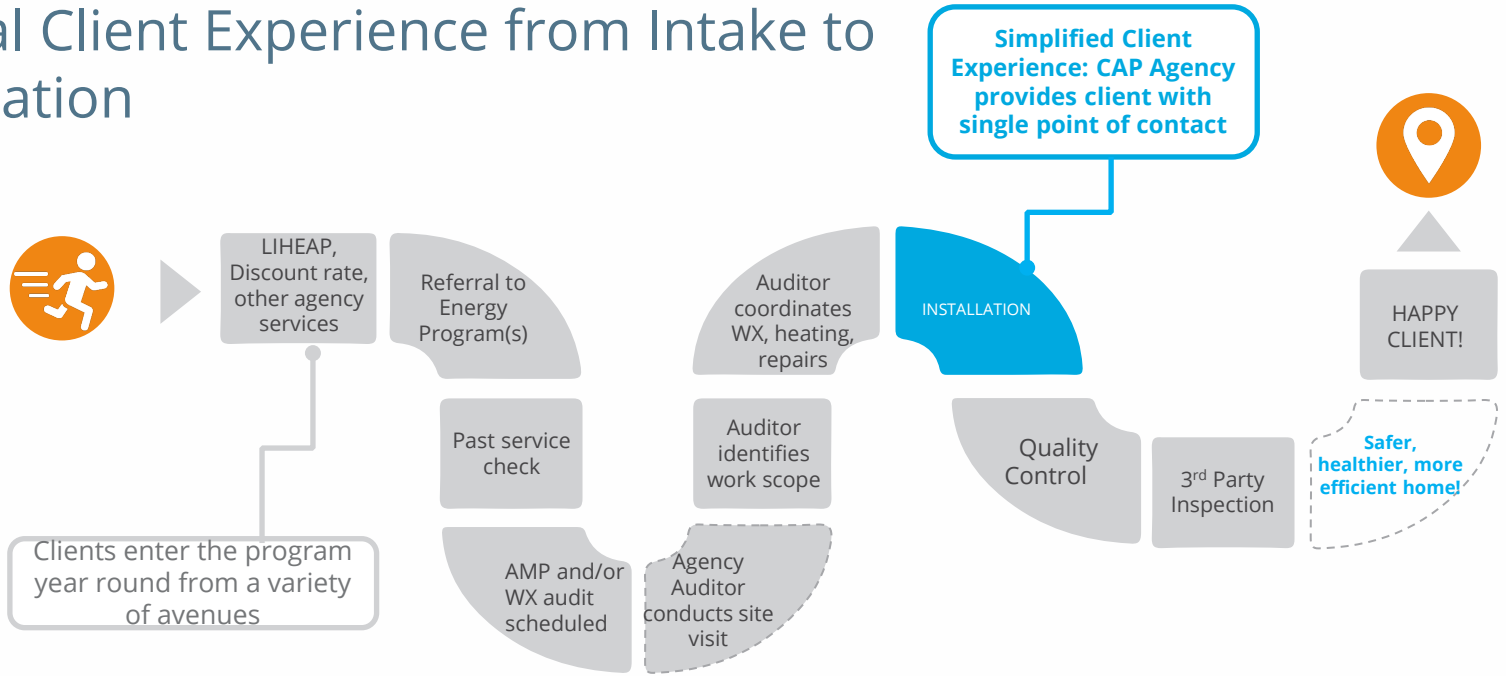
General Contracting on behalf of client

Outreach & Intake	Building Assessment	Contractor Selection	Scheduling & Initial Contractor Walkthrough	Quality Control
Agencies conduct outreach & intake through LIHEAP & other sources, **market to all discount customers** leveraging non-PA funding	BPI Certified & DHCD Qualified energy auditors assess all projects and develop work scopes	Agencies vet all licensed and insured weatherization & heating contractors, roofers and electricians	Energy auditors manage all projects in the field – first day installation vendor walkthrough & in-process inspection and troubleshooting	Energy auditors conduct 100% final quality control inspections to ensure work completeness and quality

"Quarterback" implementation model guarantees comprehensive efficiency work at high quality and with quantifiable, verifiable savings at no cost to LI household.

Client Journey

Typical Client Experience from Intake to Installation



Budgeting

Allocations across CAAs

Percent of poverty → **Clear Goals** → **Monitoring**

- Budgets are allocated in proportion of poverty in a CAA service territory
- Each PA budget is allocated independently

- Goals shared at beginning of each 3 year plan with each CAA
- Goals are broken down into primary buckets: AMP, weatherization, heating system and heat pumps

- CAA progress to achieving goals is monitored closely by Lead Vendors
- If there are local needs to meet excess demand or reduced CAA capacity, Lead Vendor provides support

Procurement & Pricing

WAP Pricing

With DHCD, LEAN determines prices every two years from prices offered for each measure by all participating vendors

- Fair, transparent and inclusive
- Eliminates cost and delay need to bid out each job (SF)
- Enables to deliver at scale
- IE MassSave adopts
- MF adopts pricing with discount
- Subject to extraordinary conditions

Bidding Heating Systems

Heating systems procured through bidding

- Fair, transparent and inclusive
- Each project is custom

Below market pricing

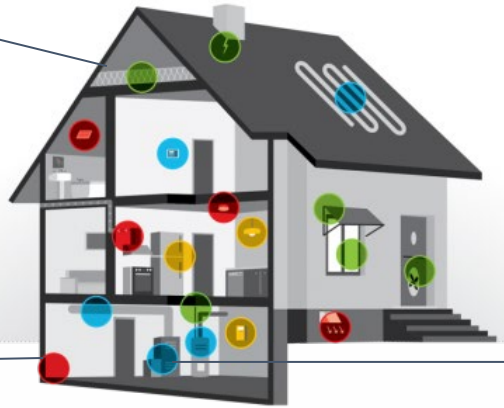
Our procurement model forces down pricing.

- Removing marketing costs from contractor brings down price
- Quarterbacking model and advocacy for customer

Leveraging

Bringing together funding sources to maximize services

Weatherization: Leverage DOE WAP Contribution & PA Funding



Heating System: Leverage Maximum HEARTWAP Contribution & PA Funding

Measures leveraged through WAP/HEARTWAP:

- Clean & Tunes on heating systems
- Health and Safety

Leveraging

Bringing together funding sources to maximize services

Single Family has three Primary funding sources:

- DOE WAP
- HEARTWAP
- MassSave Funding

Discount rate clients not on FA

Receive full services, but with MassSave funding only

What Projects can be leveraged:

- Single Family (1-4 units)
- Fuel Assistance eligible

Leveraging determined locally at CAA level.

Adjust leveraging amount on project basis to maximize the benefit of all funding sources

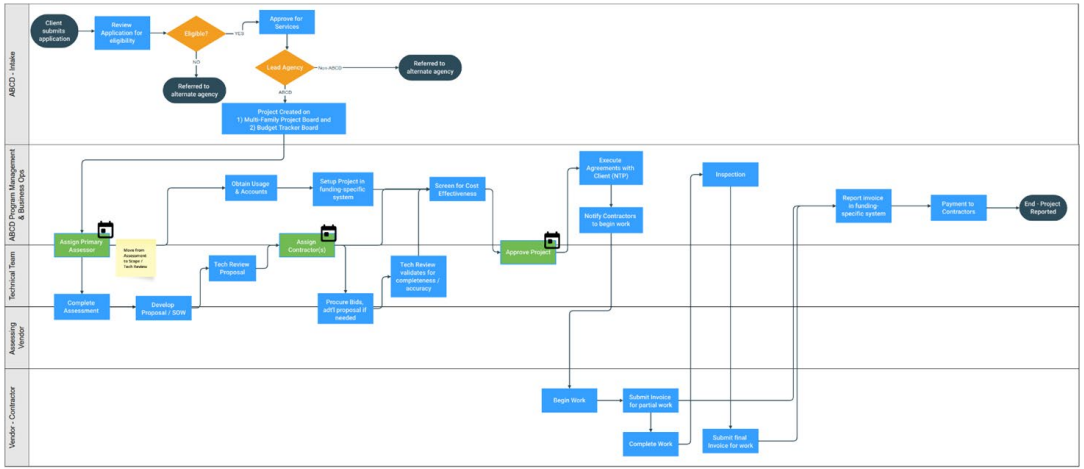
Benefits of leveraging

- Stretching both ratepayer and taxpayer funding (especially for heating system)
- Structure and rules
- Funding for low or no savings measures

Challenges with leveraging

- Budget years don't align
- Discount rate clients not on FA
- Different reporting systems

Multifamily Project Management



- Highly custom
- 5 Major Phases
- 10 Key Milestones
- Numerous nuanced decision points
- Cross-functional Client Services, Project Mgmt, Technical, Business Operations, Contracting, Legal, Finance, Fuel Assistance
- External coordination with CAPs, PAs, other lead vendors, owners, tenants, management, advocacy groups, vendors, contractors
- Multiple facilities per application
- Up to 4 work scopes per facility

Lean | mass save
Savings through energy efficiency

Projects in process

Current projects, pipeline, DER & NOAH outreach will meet Three Year Goals

Range of projects	• Incentive amounts: $7,000 - $3.3M • Savings: 300-86,000 therms/1,000-375,000 kWh • Units: 5 - 1,200
Overall MF project Count	• In Process & Completed: 500+ • Intake/under review: 900+ • Average of approx. 40 new workscopes/month
Small Multifamily	• 60+ projects • Varying in scopes from traditional wx, in-unit wx and HVAC (boilers and heat pumps)
Large Multifamily	• 7 projects > $1M started in 2022 • 5 Projects between $500,000 - $1M started in 2022 • 100+ projects less than $50,000

Future

Electrification

Strategies and Improvements: The Future is Now!

- Challenges & Solutions
- Heat Pumps in Single Family
- Deep Energy Retrofit
- Strategic Weatherization

Challenges

In the 2022-2024 Program Term

Electrification:

- User adoption
- High operating costs (gas to electric)
- Unpredictable electric rates
- Maintenance costs when switching from electric baseboard to HP
- User operation
- Determining full vs. partial displacement
- Existing distribution

Statewide Implementation:

- Significant increase in program goals and budgets
- Evolving policies, new measures and new technologies: Focus on GHG, building controls/wifi thermostats and potential of DR
- Persisting COVID impacts on workforce, supply chain, quiet quitting
- Inflation costs, rapidly changing pricing
- Increased stakeholder engagement

Solutions

Electrification:

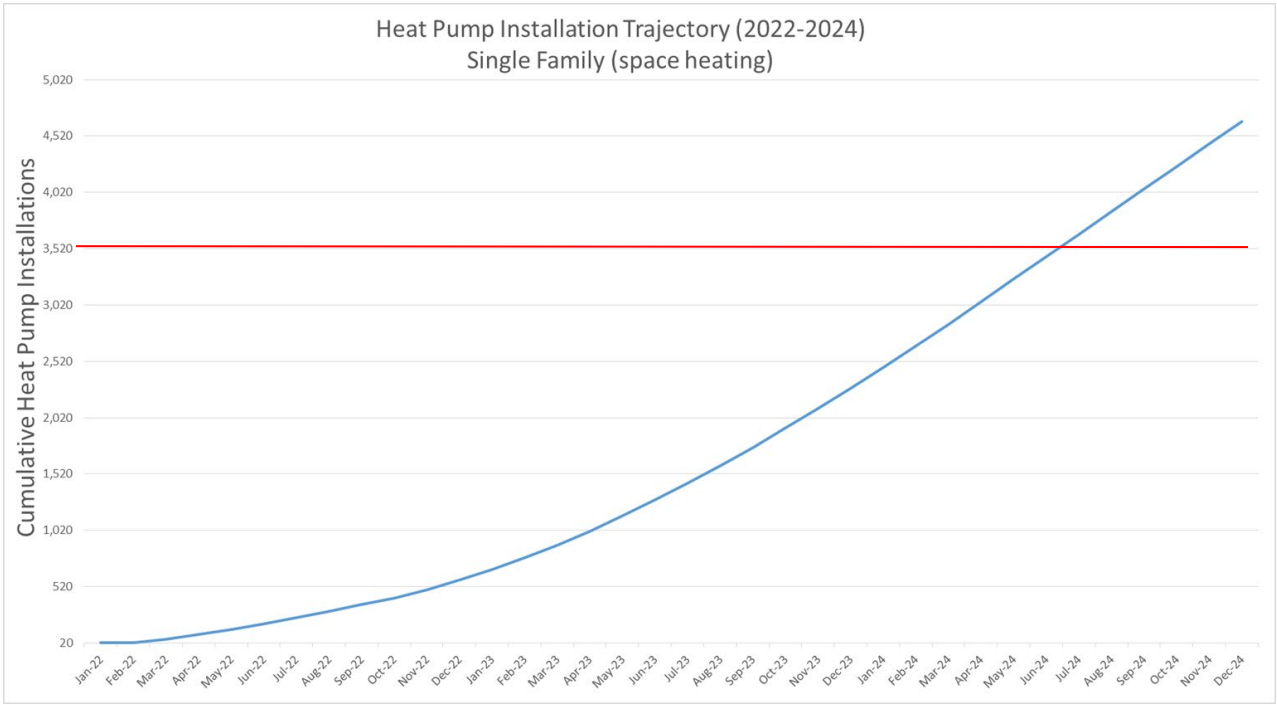
- Renters & 50% rule
- Additional staff training and continual engagement (design/scoping)
- Expanded HVAC contractor network
- Meeting customer demand for heat pumps
- PA Funded Maintenance
- Strategic weatherization
- Meeting customer needs re gas to electric, including education about heating cost impacts

Statewide Implementation:

- Scaling Operations: Internal Process Refinements: Implement project management tools like Monday.com
- Increased Staffing: 2x increase in administrative and field staff
- Increased support from Lead Vendors
- Establishment of Statewide Client Services Center: facilitating customer service
- Increased On-site Network Engagement: Adding to existing CAA training, updates and best practices
- Expanding Vendor Network: Contracting with more market rate vendors

Electrification

Achieving Single Family Heat Pump Goals!

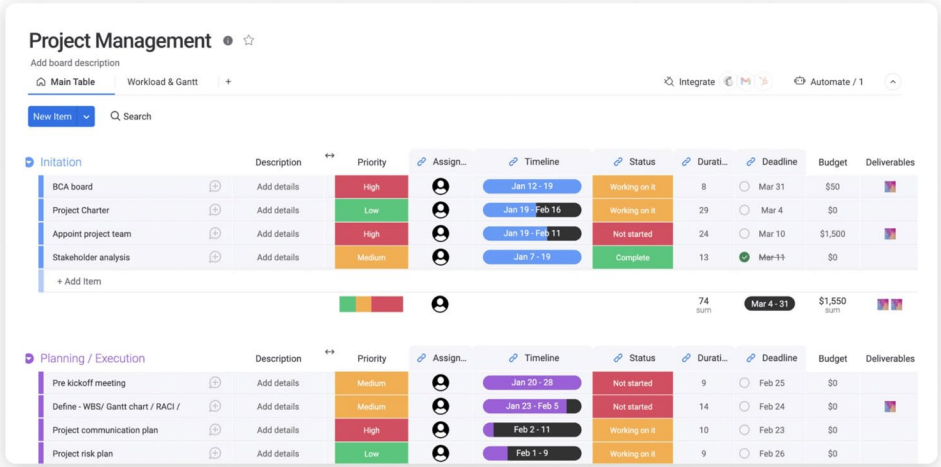


Deep Energy Retrofits

New Process for determining incentives

Network Engagement

Communication, Coordination and Data Management



- ABCD & Action have both implemented Monday.com statewide for client tracking, project management and communications with CAAs
- Tool enables clearer and cleaner tracking of updates, project statuses and client communications

TESTIMONIALS

Key Takeaways

- Consistent delivery of goals since 1977, with constantly increasing budgets
  - In last 11 years, 473,756 MassSave participants (including MF), 106% of planned benefits, compare with 292,762 current discount customers
  - Over 255,000 1-4 family weatherized units through CAAs in Massachusetts
  - Constant innovation, including MassSave model itself
- Iterative Strategies underway to meet increased goals under new budgets and priorities with increased capacity and customer engagement
  - Monday.com and other Project Management tools
  - Doubled staff
  - Statewide Client Services Center
  - Increased on-site engagement
  - Expanded contractor network

TESTIMONIALS

Contractors, owners, renters

“Over the past decade, the LEAN Program has supported energy efficiency projects across Winn’s portfolio of nearly 10,000 apartments throughout the state. Thanks to the LEAN Program, we have been able to address capital needs and reduce energy consumption through LED lighting retrofits, boiler plant replacements, pump upgrades, and weatherization projects. ABCD and Action have been tremendous partners to WinnCompanies and our clients, reviewing, approving, and implementing projects big and small, from appliance upgrades, to air source heat pump conversions, injection foam, smart controls, and multi-phased, major rehab projects. LEAN Program vendors are communicative, professional, and dependable, whether working directly in residents’ homes or in a penthouse boiler room.”
– Christina McPike, Director of Energy and Sustainability, WinnCompanies

TESTIMONIALS

Contractors, owners, renters

"Through its efforts, Valley Home Improvement (VHI) has come across nearly 200 properties (representing ~400+units) in Lawrence alone that it has not been able to serve. Through this new relationship, ABCD/Action have begun to reach out to these customers and allowing VHI to directly serve them. This will allow hundreds of customers to lower their utilities bills through weatherization services and 100% of it delivered in the language they prefer. This includes initial outreach, customer intake, energy assessments, scheduling, and weatherization. VHI is also working with local sub-contractors that can deliver high quality services with a bi-cultural/bi-lingual scope."

-Abel Vargas, President, Valley Home Improvement

VALLEY HOME INSULATION

Thank you!

Questions?

James P. Collins IV
James.collins@bostonabcd.org

APPENDIX

2017 Recommendations

Status Update

#1 Identify small MF owners	Done
#2 Data points to assess program implementation	Consensus on KPI
#3 Statewide audit tool	CAAs provide all required data to PAs
#4-5 MassSave Marketing	MassSave marketing Note that the marketing-related recommendations were disrupted by COVID and LEAN is working with PAs to leverage opportunities for greater coordination on marketing.
#6 Review specific measure suggestions	Done

Community Action Agencies

What is a Community Action Agency and the link to Energy Efficiency Programming?

- Community Action Agencies (CAAs or CAPs) were established nationally in 1964 with the creation of the Economic Opportunities Act, which was the vehicle created for programming under Lyndon Johnson's "War on Poverty.
- CAAs were and are required under the CSBG Act to establish a tripartite Board of Directors (controversial at the time)
- By 1968, there were 1,600 CAAs in 2/3 of the counties nationwide
- This federal funding directed in large part by these community based Boards resulted in an explosion of programming and resources to these low-income neighborhoods, including:
  - Establishment of Community Health Centers (The first being Columbia Point Health Center in Boston)
  - Summer Jobs Programs and Workforce Development
  - Creation of Head Start
  - Surplus Food Programs
  - Family Planning Services

Tripartite Board of Directors:

- 1/3 Democratically selected members of the low-income community
- 1/3 local elected officials or their representatives
- 1/3 of members are from major groups and interests in the community

Community Action Agencies

Beginning of Energy Role

- CAAs were established in communities of need by the time of the first oil crisis in 1973. Rising oil prices spurred early efforts to tighten buildings and provide vouchers for emergency oil deliveries
- By the second oil crisis in 1978, when oil costs had quadrupled, the Weatherization Assistance Programs were formalized at the Department of Energy (DOE) in 1979 and the LIHEAP (Fuel Assistance) Program was established in 1980
- At that time, in the northeast, over 60% of all households heated with oil. And, because the majority of low-income families lived in the inner cities, most of those housing units were built before codes required insulation

Community Action Agencies

Fuel Assistance: Original entry point for weatherization

- Fuel Assistance is a safety net program that serves between 175,000-200,000 families per year.
- Household income must be verified each year and benefits are directly paid to the heating providers (in most cases).
- Seasonal program; so income verification occurs during the fall/winter season. Funding for this program is such that many LIHEAP CAAs need to lay off staff during the spring/summer period.
- Each eligible LIHEAP household is forwarded to the electric and/or gas utility to be added to the discount rate (for those that have discount rates)
- Approximately 70-75% of utility customers on the discount rate are referred through the LIHEAP Program in Massachusetts (which is a great leverage of a federally funded program for a client benefit)

Community Action Agencies

Fuel Assistance: Original entry point for weatherization

- Each year, every applicant from the previous program period (including over-income clients who applied but did not qualify) is mailed a re-certification application which can be returned with an updated income and household information. This process eliminates the need to visit intake office in person.
- New applications are taken starting November 1 (which do require in-person visits to establish identity and complete an application with an intake worker
- Historically, new applicants represent about 20% of the yearly total, which is also reflected in the discount rate numbers

Community Action Agencies

Weatherization and Heating Systems

- The demand for weatherization retrofits were (mostly in the form of blown cellulose) grew as a result of the first oil crisis.
- Federal weatherization
- While there was early programming in the early 1970's, the establishment of the Department of Energy (DOE) Weatherization Program in 1979 dramatically increased the energy efficiency support for low-income families.
- Implementation in the early days of the DEO weatherization program was primarily accomplished by in-house crews in conjunction with the CETA Job Program at the time.
- With the elimination of CETA in 1981, the weatherization program quickly pivoted to the contractor model that exists today
- Many of the CETA workers, with the support of the CAAs, started local weatherization companies to do this work, many of which exist in some form today
- DOE funding in Massachusetts allowed for about 4,000-5,000 households to be completed per year statewide. A priority system was established as a reasonable pathway for implementation. Seniors, disabled, families with young children and high energy

Community Action Agencies

Energy Safety Net

- Heating Repairs Program began in conjunction with the LIHEAP Program in 1981. At first in the form of emergency no heat repairs and tune-ups. And later expanding to complete heating system replacement for failed units and also efficiency reasons
- The HHS heating program existed as a critical safety net for LIHEAP households. No heat calls were responded to within 18 hours and emergency replacements within days.
- During heating season, landlords were (and are) required to provide working heating equipment, so CAAs routinely worked with landlords and inspectional services staff to ensure response when those customers called
- Heating replacement protocols and guidelines developed rapidly during this period impacting local processes on asbestos remediation, fire department inspections, permitting, equipment quality. Because of this large scale effort over 15 years, emergency calls were reduced by 75%
- After restructuring, the utility greatly expanded income eligible heating replacements
- In 2000, the renter heating initiative began which allowed heating replacements for efficiency reasons. This finally allowed renters that paid for their own heating to benefit directly for heating efficiency improvements

Community Action Agencies

Weatherization: 1980s into 1990s

- Blending with WAP: state, HHS, HUD, Oil Overcharges & Spills, and utilities
- HHS HEARTWAP: clean and tune, repairs, emergency replacements at first
- Inspectional services coordination for landlords to meet heat obligation
- Project management/quarterbacking model
- Units doubled, then tripled, then declined in 1990s back to earlier levels as funding declined
- Coordination with DEP and other officials to address asbestos in siding and heating systems