



# AEP Phase I Report

December 31, 2014

The Commonwealth of Massachusetts

## Accelerated Energy Program 2012-2014

[www.mass.gov/DCAMM/aep](http://www.mass.gov/DCAMM/aep)



DIVISION OF  
CAPITAL ASSET  
MANAGEMENT &  
MAINTENANCE



## Acknowledgements

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The AEP team extends its gratitude to the members of the AEP Leadership Steering Committee and Implementation Committee for lending their time and expertise to provide critical feedback and for their ongoing efforts to support clean energy and environmental initiatives across hundreds of state facilities. A list of these people is provided in *Appendix B*.

A special thanks goes to the many state officials who recognized the importance of leadership and provided critical support to Phase I of the AEP. These include former Executive Office for Administration and Finance Secretaries Jay Gonzalez and Glen Shor, former DCAMM Commissioner Carole Cornelison, as well as, former Energy and Environmental Affairs Secretaries Richard Sullivan and Maeve Vallely-Bartlett, former Undersecretary for Energy Mark Sylvia and former Acting Commissioner of DOER Meg Lusardi.

We would also like to acknowledge all former and current DCAMM staff for their dedicated efforts and steadfast commitment that resulted in the successful achievement of the ambitious goals of AEP Phase I, including the Energy Efficiency and Sustainable Buildings Group lead by Hope Davis and Jenna Ide. DOER's Leading By Example (LBE) team led by Eric Friedman was a collegial and collaborative partner, providing invaluable leadership and guidance over the entire three year duration. We thank the DCAMM staff from the offices of Finance, Legal, and Planning, Design, and Construction for their invaluable support of the AEP.

Finally, we would like to acknowledge the many current and former consultants, contractors, and advisors that have played a critical role in developing and implementing the AEP, including EE&D (team led by Dave Ward), Fort Hill (team led by Kevin Bernier), MOCA Systems, and NeCEC Institute (team led by Kevin Doyle).

## About this Report

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This Report is an expansion of the quarterly reports issued throughout the AEP Phase I. A list of related reports issued by the AEP team during Phase I is provided in *Appendix A*.

### Accomplishments

This Report highlights the major accomplishments of DCAMM and DOER to achieve the six main goals of the AEP including initiating work at 700 sites. It provides details on the expected investment of \$470 million that will result in the saving of \$42.5 million a year in energy costs, which represents 19% reduction in energy use across the portfolio.

To best convey the complexity of the Program, this Report outlines the most significant 9 major challenges encountered over the first three years, the approaches used to overcome these challenges and the lessons learned.

### Partnerships

The success of the AEP was made possible through partnerships established with the Department of Energy Resources (DOER), state agencies, campus personnel, and electric and gas utility companies. This Report describes the achievements made through these partnerships to implement energy and water savings projects across the Commonwealth.

### AEP 2.0

Lastly, this Report touches upon the goals of the second phase of the AEP (“AEP 2.0”). Among the goals is to complete the retrofit projects that were initiated during AEP Phase I. The AEP team is also working to sustain the energy savings gains from these projects as well as advance the energy performance of state facilities through potential new projects, practices and technologies to achieve additional savings.

Feb. 27, 2015

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## Introduction

The Commonwealth of Massachusetts has been recognized as a national leader in energy and water efficiency for its establishment of clean energy policies and its implementation of innovative, sustainable, and economical energy and water solutions.

In 2014, for the fourth consecutive year, the Commonwealth was **ranked the top state in the nation** for energy-efficiency policies and programs by the American Council for an Energy-Efficient Economy (ACEEE). This distinction recognizes many initiatives in Massachusetts, including the investment and savings in energy efficiency for residential, low income, commercial and industrial electric and natural gas customers, delivered through the Mass Save® program. The Leading By Example (LBE) program is also a key factor in this ranking. LBE was established in April 2007 by Executive Order No. 484, which set aggressive energy and greenhouse gas reduction goals, as well as renewable energy goals for state government operations.



In December 2011, the Accelerated Energy Program (AEP) was established to accelerate the implementation of energy and water savings projects across the Commonwealth and help the Commonwealth comply with Executive Order 484. The AEP aimed to reduce energy consumption by 20-25% over 700 state sites, creating over 4,000 clean energy jobs and saving the Commonwealth an estimated \$43 million annually.

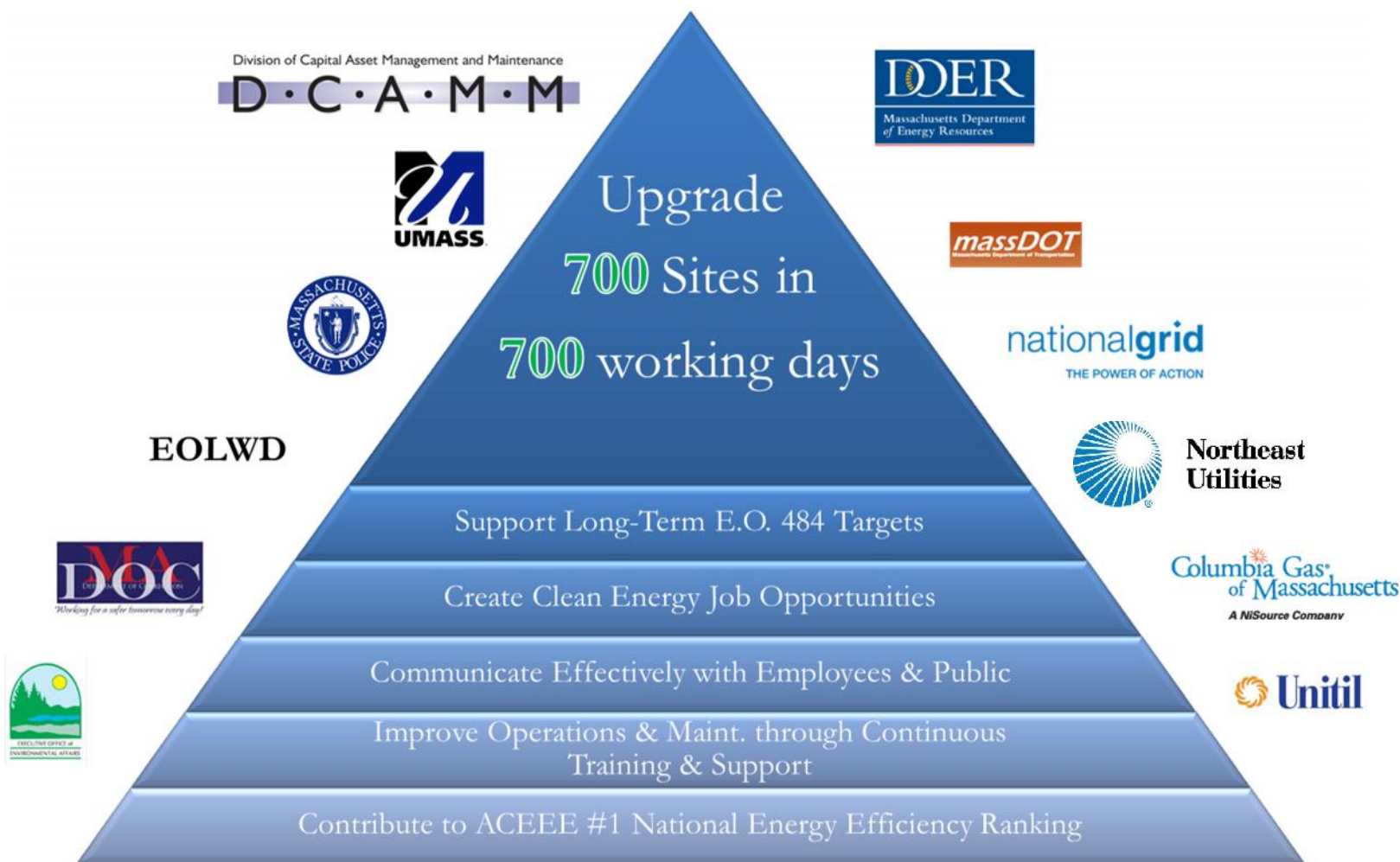
The AEP Phase I was a three year initiative from January 2012 through December 31, 2015. DCAMM, in coordination with the Department of Energy Resources, partner state agencies, and utility companies, initiated the energy and water efficiency retrofits of 700 sites encompassing thousands of buildings throughout the Commonwealth. The AEP Phase I was executed in conjunction with other energy conservation and facility management initiatives across the Commonwealth and provided access and opportunity for small, minority, and women-owned businesses. By all accounts, AEP Phase I was a remarkable success.

The second phase of the AEP (called AEP 2.0) was started in January 2015, with a primary goal to implement the retrofit projects that were initiated during AEP Phase I and are still underway. Other work has been identified for AEP 2.0 to sustain the performance gains achieved during Phase I as well as advance facility energy performance.



## Program Goals & Objectives

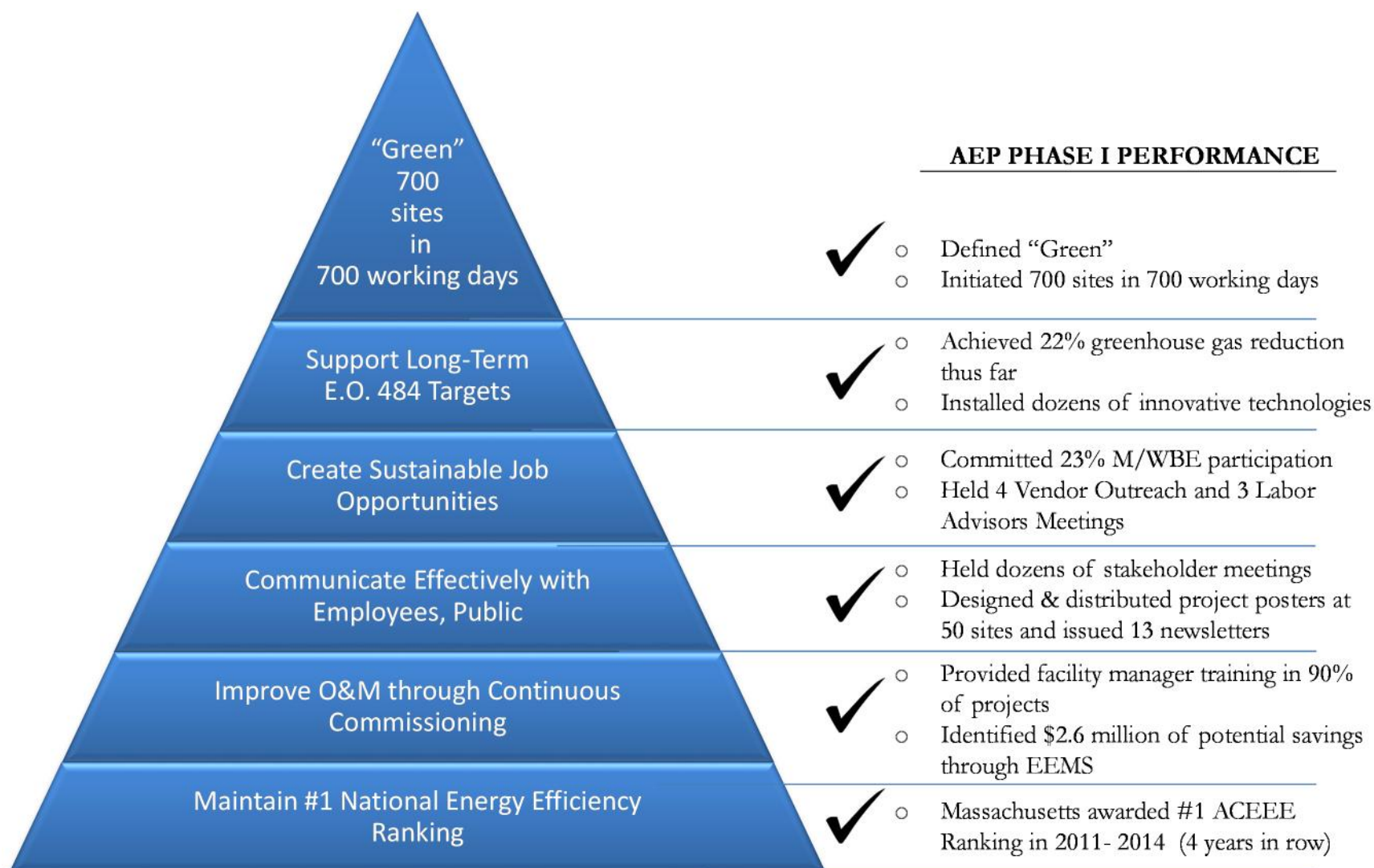
DCAMM and DOER worked with a number of partners, agencies and utilities to accomplish the six main objectives of the AEP. The program objectives and some example partners, agencies and utilities are represented in the graphic below.



<sup>1</sup>AEP Metrics are provided in *Appendix C*.

## Summary of Performance

DCAMM and DOER achieved the six main objectives of the AEP, as summarized below. Additional details on AEP Phase I performance is provided in *Appendix C*.



## Summary of Major Accomplishments

The AEP achieved some significant successes and achievements, as summarized below.



*New gas boilers at NCCI Gardner replace inefficient oil-fired system. Site achieves \$2.4 million annual cost reduction.*



*Ceremonial rebate check from National Grid for Gardner District Court energy project*



*AEP quarterly implementation team meeting, held with DOER, at UMass Medical center.*

### INITIATED PROJECTS

- Completed 222 sites and started work at 478 sites
- Incorporated Deferred Maintenance, such as new boilers and chillers
- Included Code Upgrades, such as accessibility and electrical
- Developed Towards Zero Net Energy pilot projects, reaching over 50% reduction

### RESULTS

- \$470 million investment projected with \$86 million invested thus far
- \$42.5 million annual savings projected with \$8 million committed thus far
- 25% average energy use reduction targeted with 19% achieved thus far
- \$24 million utility company incentives projected with \$4.4 million received thus far

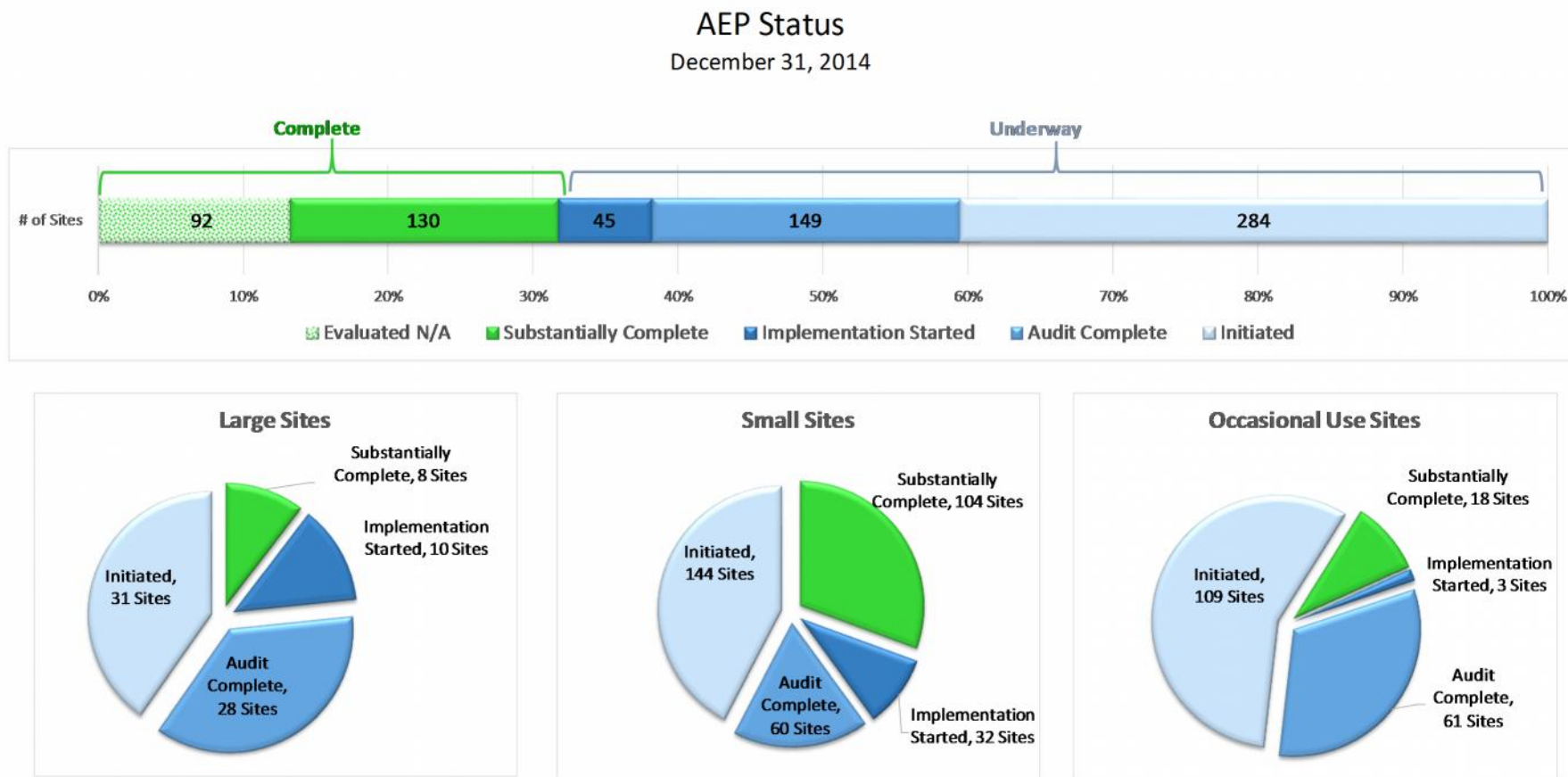
### PARTNERSHIPS

- Department of Energy Resources (DOER)
- Leadership Steering Committee (multiple agencies)
- Electric and Gas Utility Companies
- Energy Contractors and Business Representatives
- Public and Private Workforce Advisors



## Summary of Progress

The chart below shows progress at the end of Phase I on December 31, 2014.



\* These pie charts show the status of sites by category. They do not include the 92 sites that were determined to have no potential to save energy (Evaluated - N/A).

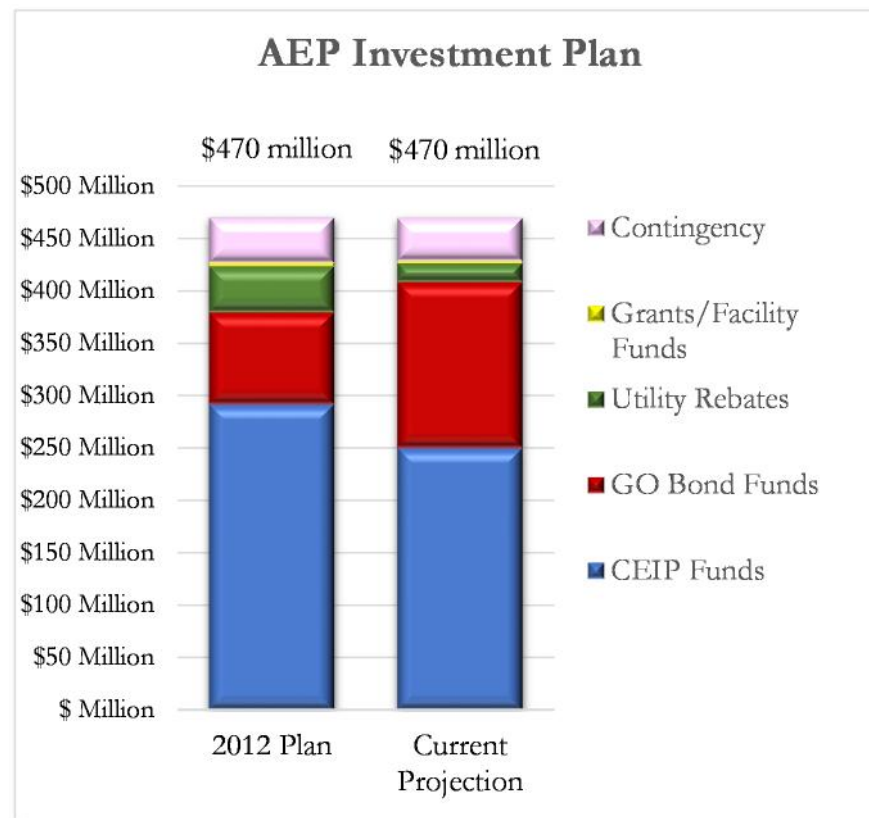
## Summary of Financials

### Investment Plan

The AEP is budgeted at \$427 million with a 10% contingency which totals \$470 million. AEP projects are funded by a combination of CEIP (“off cap”) Bonds, G.O. Bonds, utility incentives and other funding sources.

As highlighted in the chart to the right, the current AEP investment plan of \$470 million matches the original investment plan defined at the start of the AEP in 2012; however, the proportion of sources has changed.

Additional GO bond funds are needed to address significant deferred maintenance needs at several AEP sites. Addressing deferred maintenance needs is critical to the life cycle of facilities and the safety of its occupants. Furthermore, combining energy systems repairs with an energy savings project typically is more cost-effective than procuring such work as separate projects. While combining the project has an overall positive facility benefit, the energy savings payback is extended. Consequently, the proportion of GO bonds to CEIP funding for the program has increased. The availability of utility incentives is also affected by increased project payback.



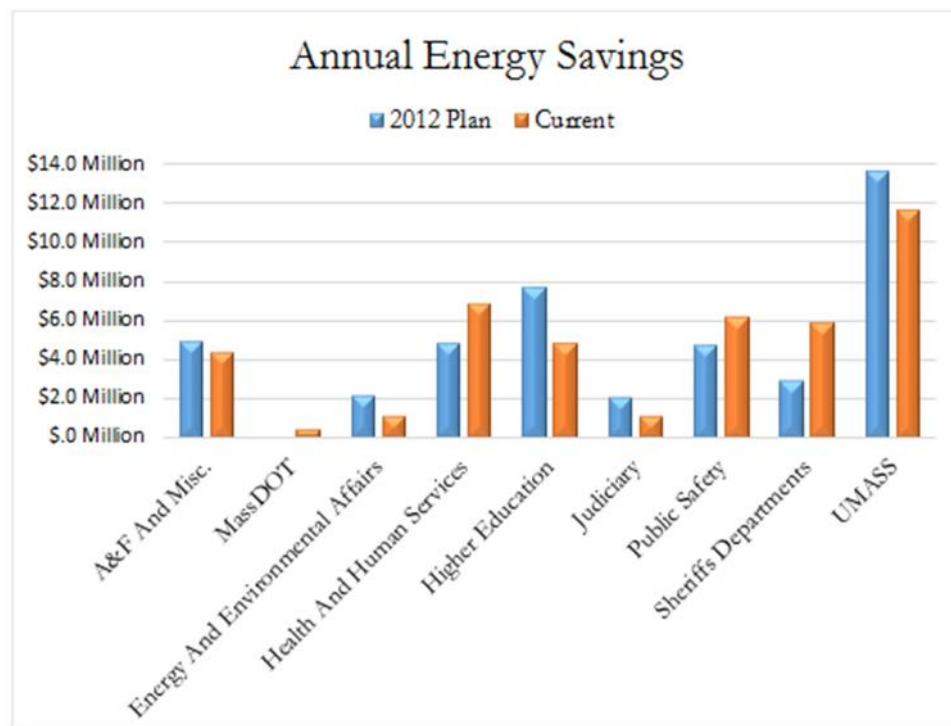
## Annual Energy Savings

The AEP budget for energy and water conservation measures was developed and approved based on the estimated annual energy savings at each site.

The current AEP annual energy and water savings is projected to be \$42.5 million, which matches the financial plan defined at the start of the AEP in 2012 (\$43 million).

As highlighted in the chart to the right, the current AEP savings estimate has been adjusted by program area based on the specific opportunities identified at each site.

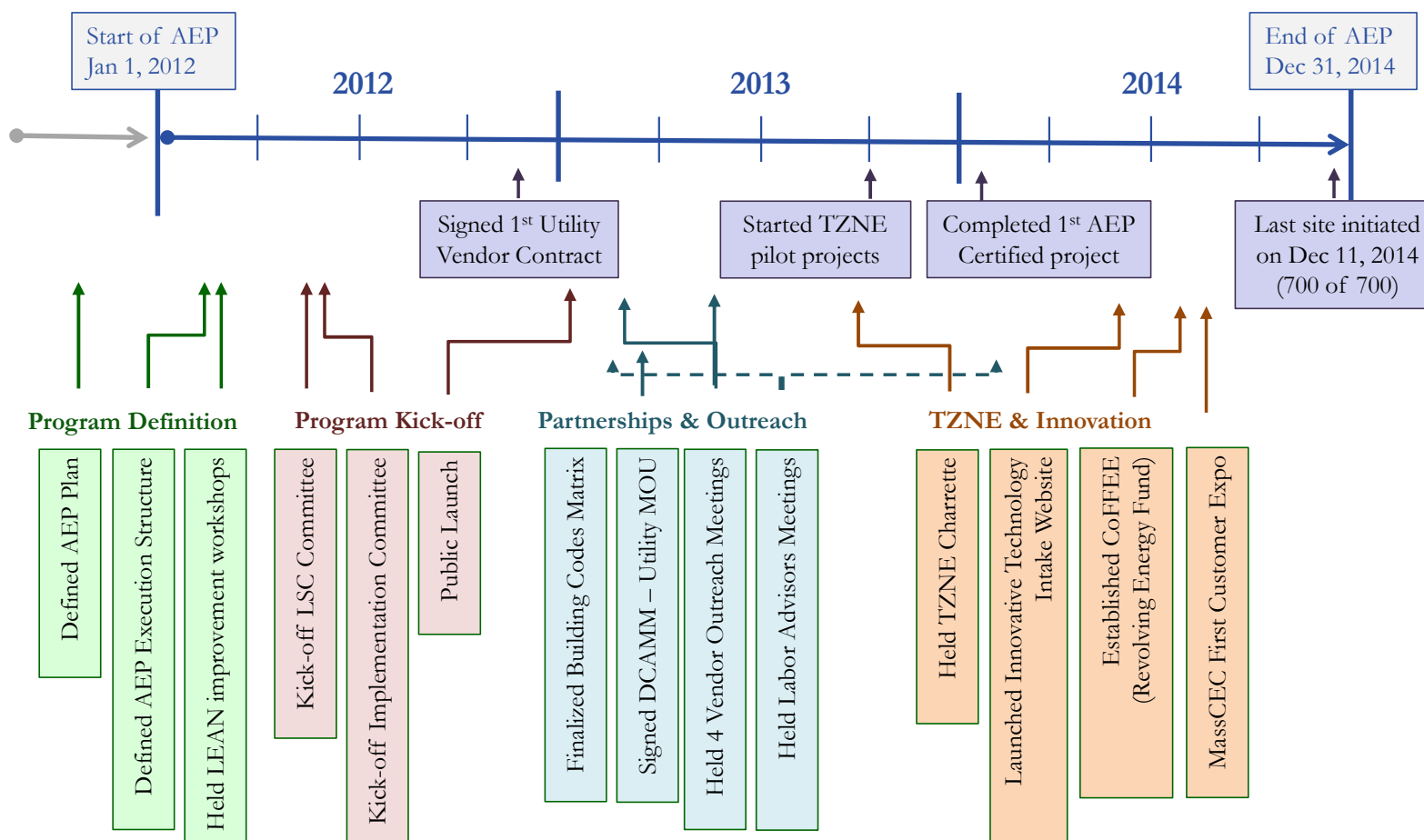
While the AEP identified more sites than expected that do not require an energy retrofit (92 sites designated as Evaluated – N/A), the AEP achieved deeper savings at select TZNE pilot sites and other sites to enable the Commonwealth to anticipate achieving the original savings goals. Note that the estimates are based on current prices and do not account for projected utility cost escalation.



## AEP Key Highlights

Phase I of the AEP was a complex program with many stakeholders and a variety of working groups. The timeline below displays some of the key highlights of the program. The AEP team initiated work at the first site immediately after the start of the AEP, even before the AEP was fully planned and defined, to be able to initiate work at all 700 sites before the end of the AEP in December 31, 2014.

A complete listing of reports issued by the AEP during Phase I is provided in *Appendix A*.



## Program Challenges and Approach



## Program Approach

Prior to the start of the AEP in December 2011, DCAMM had an established energy program and team that had worked in collaboration with state agencies to retrofit approximately **45%** of all Commonwealth facilities on a square footage basis over the prior decade. In those 10 years, DCAMM managed the investment of **\$213 million** in energy and water projects which had resulted in **\$18 million** in annual savings.

The AEP challenged DCAMM to accelerate its established Energy Program and greatly expand upon the Program's reach to include all facilities, large and small, throughout the Commonwealth.



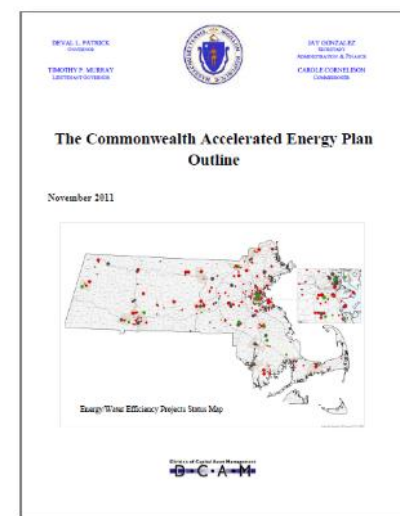
*Prior to the start of the AEP, DCAMM installed new boilers and other ECMs at the Department of Development Services' Hogan and Wrentham Developmental Centers to reduce greenhouse gases by 58% and save \$2.5 million in annual energy costs.*

### The Plan

DCAMM, in coordination with its partners, responded to the challenge by developing and publishing the AEP Plan Outline in November 2011.

To implement the AEP, three key elements were pursued concurrently:

1. **People:** Strategic utilization of resources and regular, substantive communication between all stakeholders.
2. **Process:** Identification of high potential improvement areas and development of an alternative procurement plan.
3. **Tracking & reporting:** Improved and standardized metrics for tracking and for strategic reporting to various audiences.



## Benchmarking Best Practices

Shortly after approval of the *AEP Plan Outline*, the AEP researched best practices from other organizations such as MassDOT (particularly, its Accelerated Bridge Program (ABP)), the United States Army Corps of Engineers, Harvard University, and Partners Healthcare.

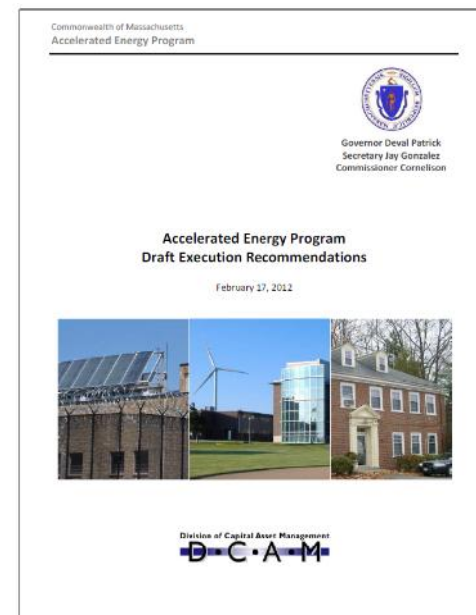


The AEP benchmarked how these organizations had launched and managed similar complex, aggressive and visible projects across a broad portfolio of assets. These organizations offered tremendous insight across a range of program dimensions including:

- Development of comprehensive implementation plans
- Structuring of organizational committees and responsibilities
- Management of retrofit projects
- Development of centers of excellence
- Creation of new standards and processes
- Management of energy data and program performance reporting

## Execution Recommendations

Based on the insights garnered from assessment of best practices by these organizations and input from interagency charrettes, the AEP developed a blueprint for executing the program in the *AEP Draft Execution Recommendations* published in February 2012.

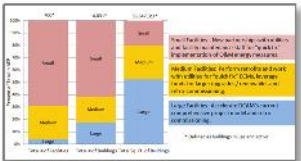


## Program Implementation Challenges

The AEP was a bold initiative with significant challenges that needed to be addressed to successfully achieve the Program's objectives. A list of the major challenges is provided below. The approach developed to meet these challenges is provided on the following pages.



**1. Engage and align a wide range of stakeholders**



**2. Translate goal of “greening” every facility into definable actions**



**3. Retrofit 445 small decentralized sites with new system**



**4. Complete program on-time (in 3 years)**



**5. Ensure quality retrofits are installed while maintaining schedule**



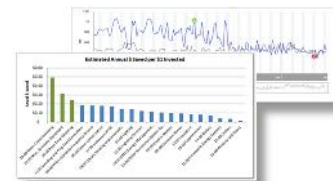
**6. Promote access and opportunities for women / minority contractors and workers**



**7. Reveal program goals and results to employees and public**



**8. Achieve ambitious energy savings goals**



**9. Sustain the energy and water savings gains**



## Challenge #1: Engage and align a wide range of stakeholders

People were the most important element in successfully creating and implementing the AEP Plan. To achieve the goals of the AEP, the team brought together personnel from DOER, facility managers, utility companies, vendors, and multiple DCAMM departments.

The AEP developed partnerships through structured committees and working groups, as well as through scheduled and ad hoc meetings. By clearly defining and structuring roles, the AEP team avoided the potential for strained relationships that could have resulted from the aggressive three year schedule.

### Approach: Establish and Cultivate Partnerships

- Department of Energy Resources (DOER)
- Leadership Steering Committee (100+ leaders from key agencies and utilities)
- Utility companies
- Energy contractors and business representatives
- Public and private advisors and consultants



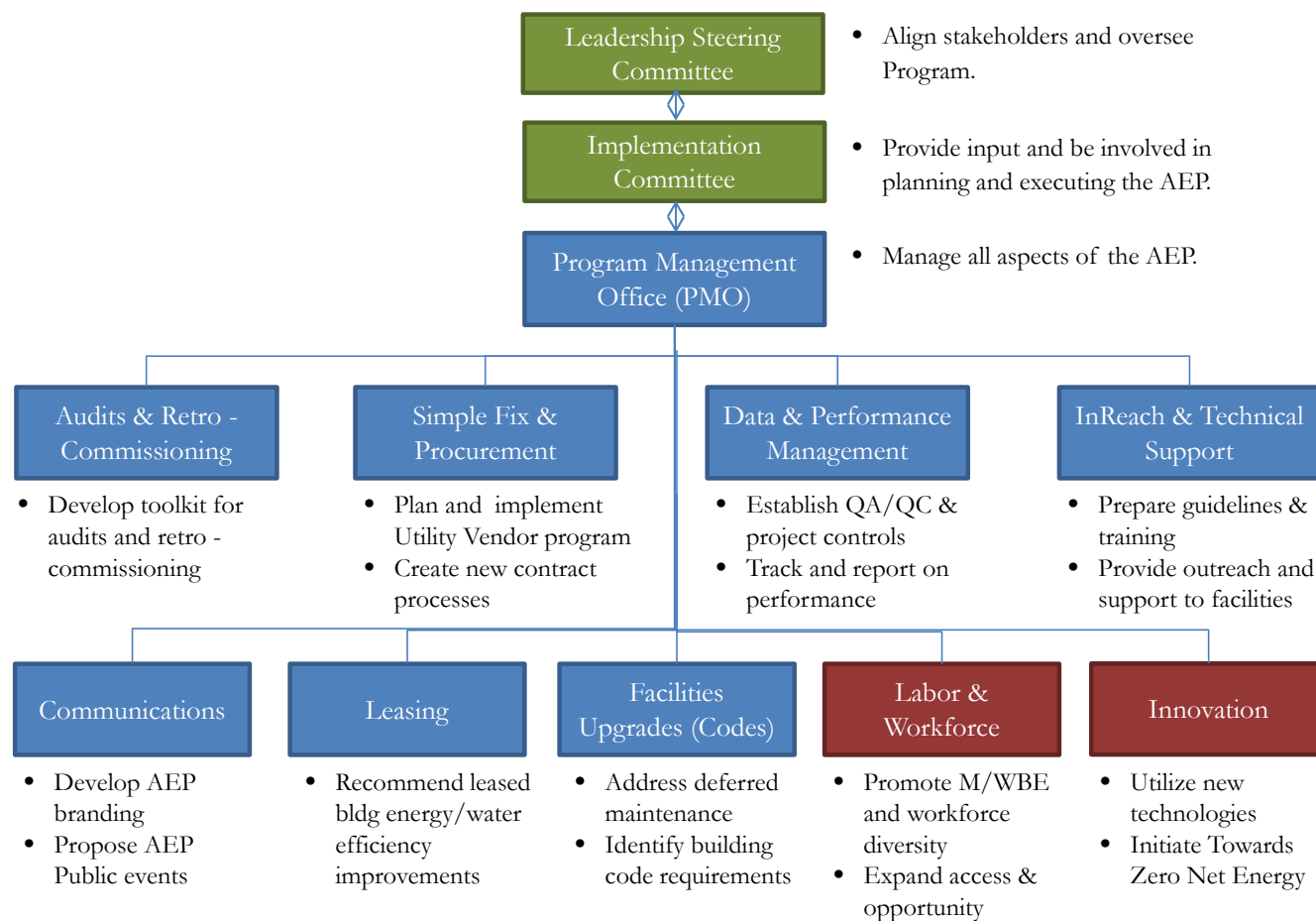
*The AEP issued dozens of newsletters to keep stakeholders informed of important program activities.*



*DCAMM Director Hope Davis presenting an overview of the AEP at the first Implementation Committee Meeting on March 2, 2012.*

The AEP developed an organizational structure, regular meeting schedules and a reporting system to engage with the wide range of program stakeholders. A conceptual graphic of the program organization is highlighted below. At the nucleus of the AEP was the Program Management Office (PMO), established to manage and coordinate all aspects of the program.

DCAMM established a Leadership Steering Committee and an Implementation Committee to develop and promote a clear vision for the AEP as well as generate communication for outreach, training and employee motivation. A list of participants on these committees is provided in *Appendix B*. Working groups were established in identified areas that required new tools and practices or improved processes and capabilities. The two working groups highlighted in red color (Labor & Workforce and Innovation) were established after the start of the AEP, based on feedback and experience during program development and initial implementation.





## LESSON LEARNED

**Leverage Existing Programs to Align Goals**

At the start of the AEP, there were many existing sustainability initiatives across the Commonwealth such as DOER's Leading By Example, MAFMA's annual training programs and the GreenDOT initiative. In addition, many of the community colleges and state universities had established sustainability programs focused on meeting the goals of their Climate Action Plans.

DCAMM learned to align the AEP with these initiatives as a complementary and supportive program to encourage stakeholder participation and leverage the momentum of these on-going initiatives. For example, the AEP held bi-monthly implementation committee meetings in conjunction with the LBE meetings because the same people tended to participate in both meetings.



*Former DCAMM Commissioner Carole Cornelison engaging with the AEP Implementation Committee at a joint meeting held with DOER's LBE at the UMass Medical Center.*

## Challenge #2: Translate goal of “greening” every facility into definable actions

At the start of the AEP, DCAMM was completing a 5 year energy plan and scoping out the next set of projects. There was no master plan that identified all state-owned sites that would benefit from an energy retrofit. A systematic method for screening sites based on the facility’s overall status (e.g., active, in use or demolished) was established to identify the sites that would benefit from an energy retrofit.

The AEP screened the sites as follows (more information is provided in *Appendix D*):

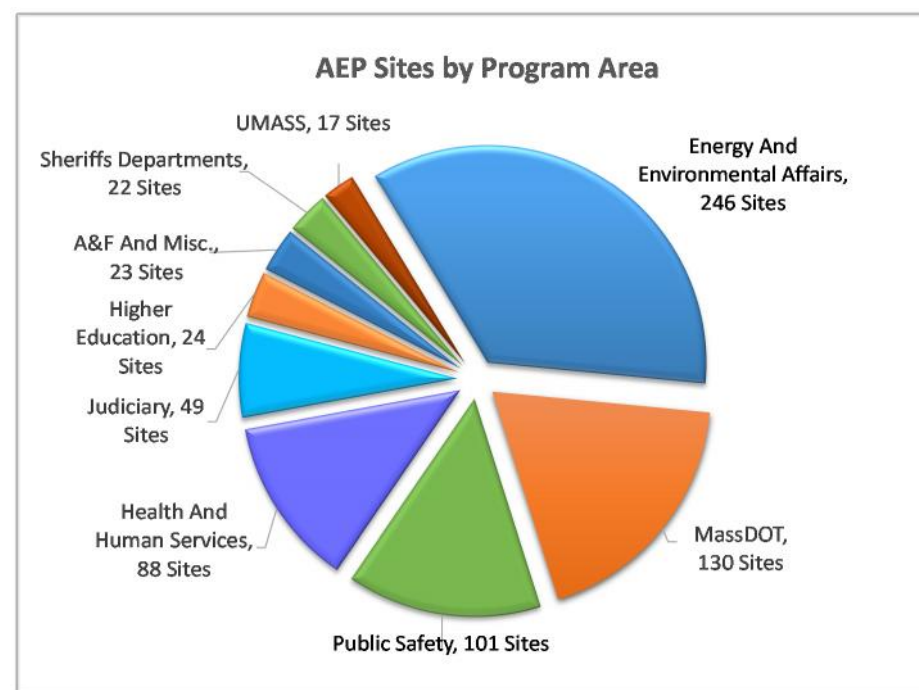
- 873 sites listed in CAMIS (The Commonwealth’s Asset Management Information System which includes an inventory of properties in the state’s portfolio)
- 818 sites were “active”
- 780 sites were “in use” (e.g., not vacant, not going to be demolished, not surplus, and not mothballed)
- 748 sites had not been retrofitted by an energy project since 2007 (in the prior 5 years)
- **700 sites consumed energy and would potentially benefit from an energy retrofit**

The AEP targeted the 700 sites that would benefit from an energy retrofit. When the 700 sites were finalized in March 2012, there were approximately 700 working days left to initiate retrofits before the end of the AEP Phase I on December 31, 2014. As such, the program objective “700 sites in 700 days” was adopted.

In addition, the AEP created a monthly process for reviewing any additional sites identified by agencies or DCAMM that may be added to the pool of sites. A process map of the definition methodology is provided in *Appendix D*.

### Approach: Identify sites to retrofit, define “green”, and create AEP Certification levels

- Identified the sites that needed to be retrofitted.
- Designated sites by “Large”, “Small” and “Occasional use” for targeting levels of retrofit, budgets and savings estimates.
- Defined “green” and AEP certification levels.



*The graphic provides an overview of the 700 sites by Program Area.*

## What is “Green”?

A goal of the AEP was to “green” every facility, but there was no universally accepted, quantifiable measure of “green” to use to recognize achievement of the goal and track progress. Furthermore, the expectations for savings varied due to the size, function and condition of each site.

The AEP developed an approach as follows:

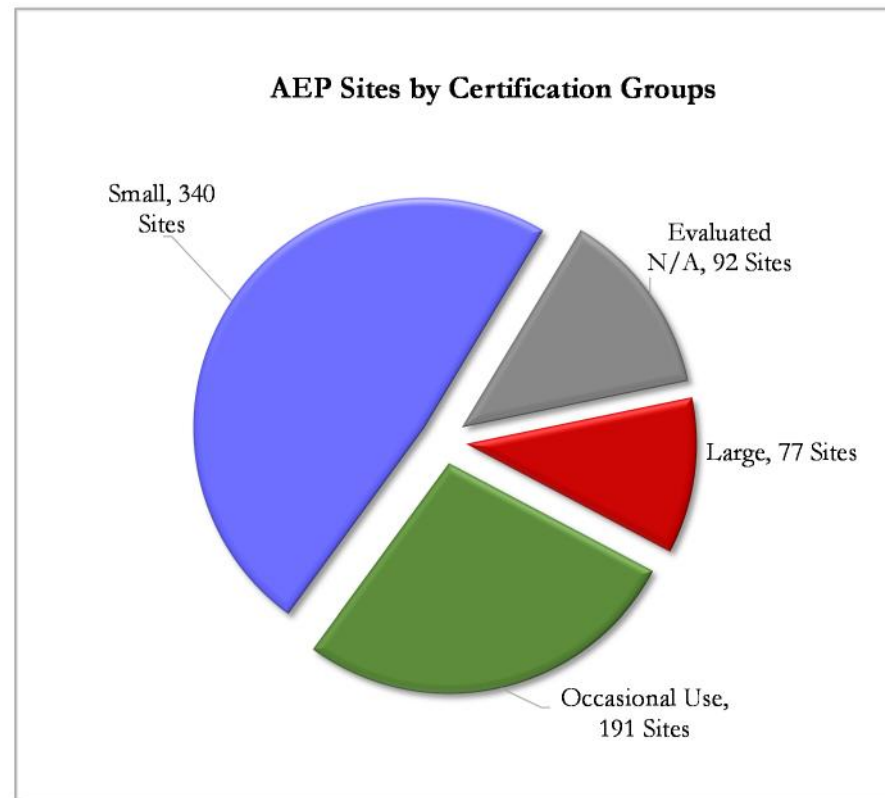
1. Evaluate all sites, and designate those sites that did not need a retrofit as Evaluated N/A.
2. Retrofit sites that would benefit from any cost effective energy conservation measures no matter how minimal the retrofit may be.
3. Encourage greater savings by creating AEP Certification designations with clear standards.

The AEP reporting and metrics include all of these types of sites.

## AEP Certification Criteria

The AEP developed criteria and language for AEP Certified and AEP Certified Plus designations for sites in the AEP portfolio. The reduction requirements for individual sites to achieve AEP Certified designation varied based on site size and type. For instance, larger sites with comprehensive projects can typically expect deeper measures and greater savings than smaller sites that are addressed through utility vendor projects. *Appendix F* provides a description of each type of project.

In addition, Large and Small sites are eligible for AEP Certified Plus designation with 50% reduction in at least 2 of the following categories: site energy use, greenhouse gas emissions, and energy costs. Additional details on AEP Certification criteria by type of site is provided in *Appendix E*.

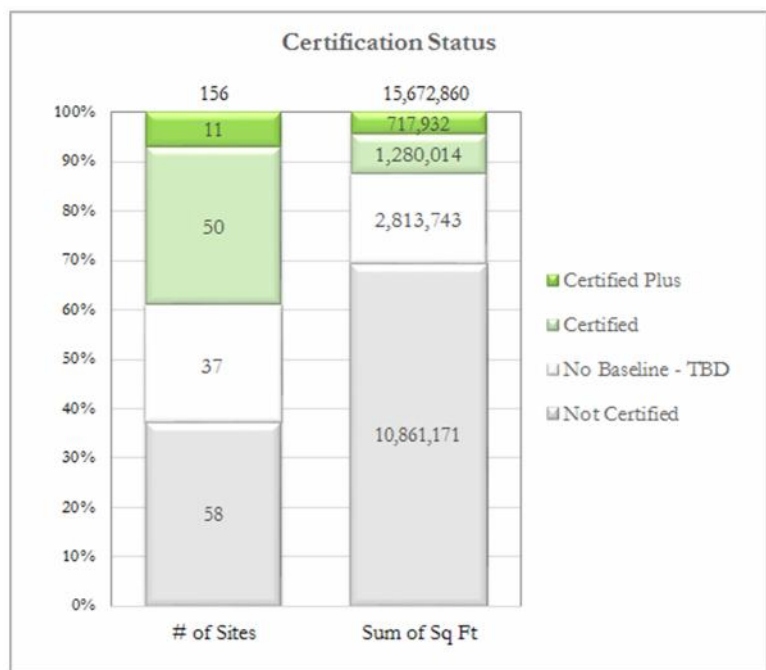


*The graphic provides an overview of the 700 sites by AEP Certification Groups.*

## AEP Certification Status

When a retrofit contract is approved by DCAMM with a final scope of ECMs and costs, the AEP finalizes the evaluation for AEP Certification.

Of the **156 sites** that have either been completed or have a signed contract as of December 31, 2014, **61 sites** achieved AEP Certification, including **11 sites** achieving AEP Certified Plus designation. The graphic below highlights the Certification Status by number of sites and square footage of building space.



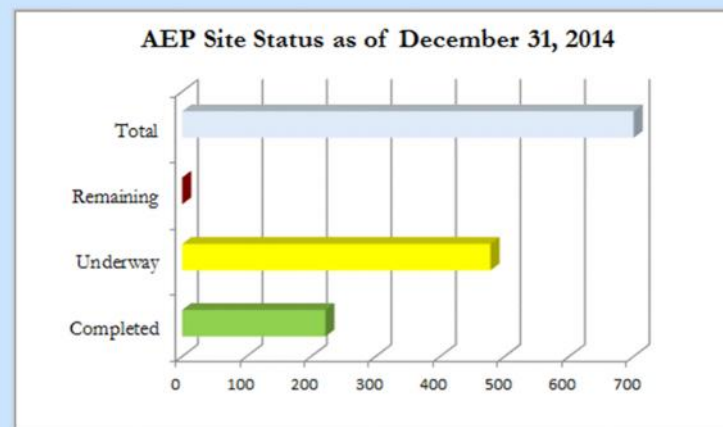
*\* The AEP does not have energy baseline information on 37 sites but is working with vendors to finalize the collection and documentation of baseline data to verify energy savings assumptions and finalize certification designations.*

## LESSON LEARNED

### What Gets Measured, Gets Done!

Top-down goals such as “700 sites in 700 days” focused the AEP team on the speed of initiation. However, other metrics such as “achieving 25% savings” required more time and resources. Tradeoffs occurred on a daily basis to achieve the measured goals. The number of underway sites is not necessarily correlated with other important metrics such as jobs and savings.

As highlighted in the graph below, the primary measurement used to communicate with agency and administration leadership was the AEP Site Status which simplified a very complex process. The AEP team worked diligently to meet this goal while also trying to prioritize the other metrics that received less attention such as annual energy savings, project implementation, workforce development and facility staff training.





### Challenge #3: Retrofit 445 small and decentralized sites with new system

The AEP required DCAMM to retrofit a large number of sites that it had rarely worked with before, such as Mass Highway depots, DCR campgrounds and Health and Human Services group homes.

With support from DOER, and under the authority of the Massachusetts Green Communities Act, DCAMM created an innovative contracting solution with utilities to retrofit hundreds of small and occasional use sites across the Commonwealth. The new procurement approach involved direct contracting with utility-approved vendors.

- In Q3 2012, DCAMM met with several utility vendors to gauge interest in participating in program.
- In Q4 2012, DCAMM signed the first contract with a utility-approved vendor (RISE Engineering) for 15 court facilities.
- In Q1 2013, DCAMM reached out to ALL Project Expediter (PEX) vendors of utility companies to invite participation.
- In Q2 2013, DCAMM released a Simple Fix Toolkit that included all required documents for implementing utility vendor projects.
- **By Q4 2014, DCAMM had initiated work at 445 sites through 13 vendors and 36 separate scopes of work (SOW).**

#### Approach: Create NEW procurement method

- Created Utility Vendor Contracting (coordinating between DCAMM Legal, Finance, Contracts, and Construction business units)
- Developed new DCAMM internal processes (bundling, M/WBE, change orders, close out)
- Guided and supported new vendors (initial meetings, FAQs, follow up meetings)
- Assigned work based on successful implementations.

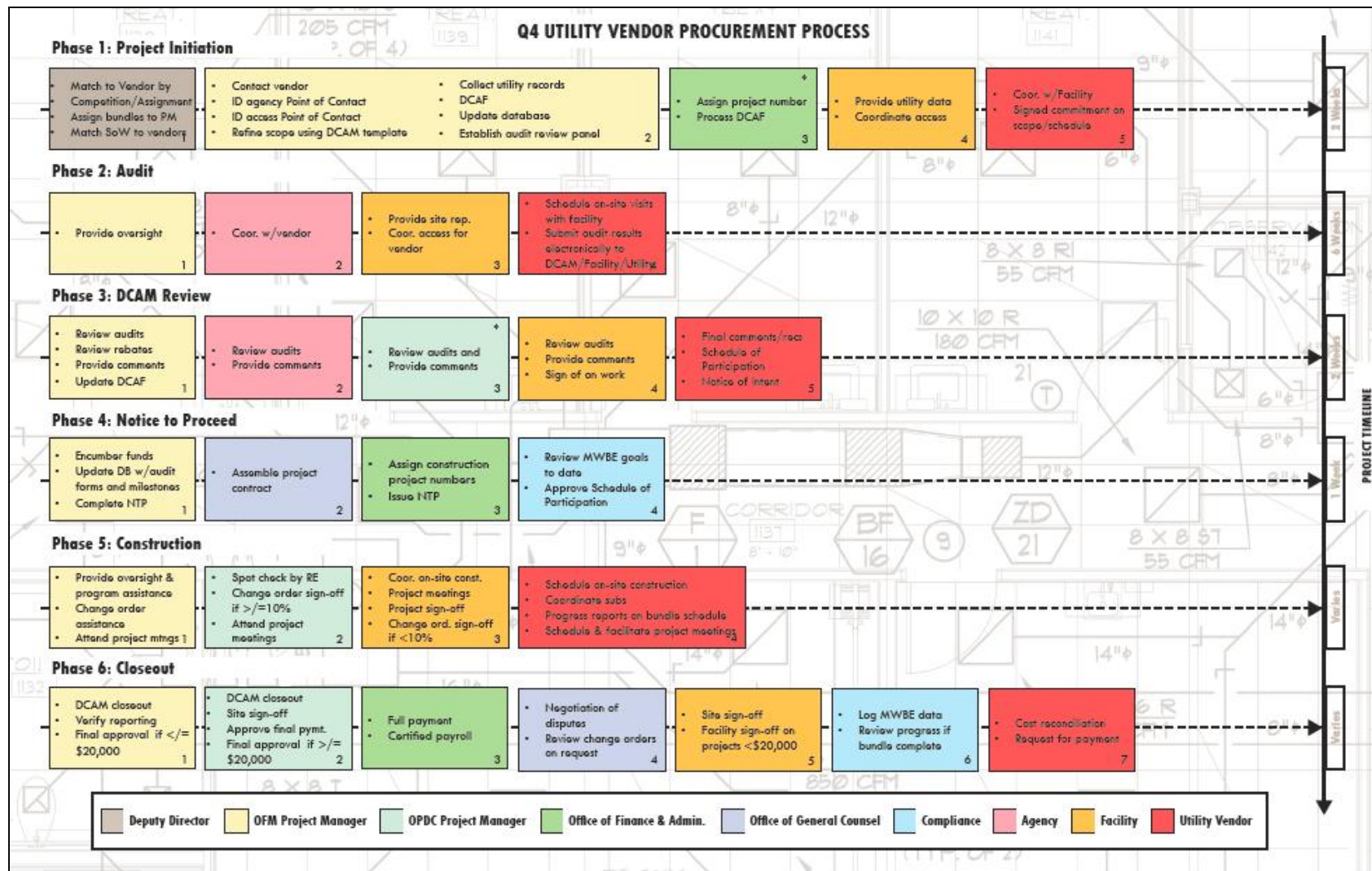


*In Q4 2012, DCAMM and DCR held a coordination meeting at Nantasket Beach Reservation in Hull, MA to address the 212 small and occasional use sites managed by DCR.*



## Creating the NEW Procurement Processes

The AEP team, lead by the Simple Fix and Procurement Working Groups, mapped out an entirely new utility vendor contracting process that included new steps, activities and durations across all phases of project implementation. The graphic below highlights the new utility vendor procurement process and the roles assigned to each participant. Although this looks complex, a typical large energy project has 199 steps.



## LESSON LEARNED

### Contractors don't always staff up for surge work

Vendors do not always ramp up staff to meet surge demand but instead level-load work which takes longer to complete. However, larger economic forces (the recession) potentially affected the willingness of vendors to hire.

One of the most formidable challenges of the AEP was the creation and implementation of an efficient method for retrofitting 445 small sites within 3 years.

A total of 36 separate scopes of work that sorted the 445 sites into larger bundles were issued to 13 different utility vendors, with an average of 3 bundles per vendor. While many of the vendors indicated they would staff up to complete the surge work in a short period of time, most of the vendors ended up using their existing staff which resulted in prolonging the time required to complete the surge work.

Steps that initially were expected to take 254 days ended up taking 505 days. The AEP team adjusted its original expectations of progress with revised schedules.



*The National Guard Northbridge Armory was retrofitted through utility vendor contracting.*

## Challenge 4: Complete program on-time (within 3 years)

One of the most challenging aspects of the AEP was to complete the program on-time (within 3 years) by initiating work at 700 sites by December 31, 2014.

This required comprehensive planning and management of resources to orchestrate hundreds of projects and keep them on track. It was imperative that the AEP PMO identify problems before they occurred to effectively resolve them before they became crises and resulted in delays.

The AEP PMO established a centralized program controls team to structure and develop a program master schedule, program budget (spending plan) and risk register with mitigation plan. The program controls team updated the schedule, budget and risk mitigation plan on a monthly basis and provided reports to all stakeholders.



*In August 2012, the AEP team participated in a two day planning and prioritization charrette. They segmented and prioritized sites for implementation by the end of 2014.*

### Approach: Establish program controls with transparent reporting

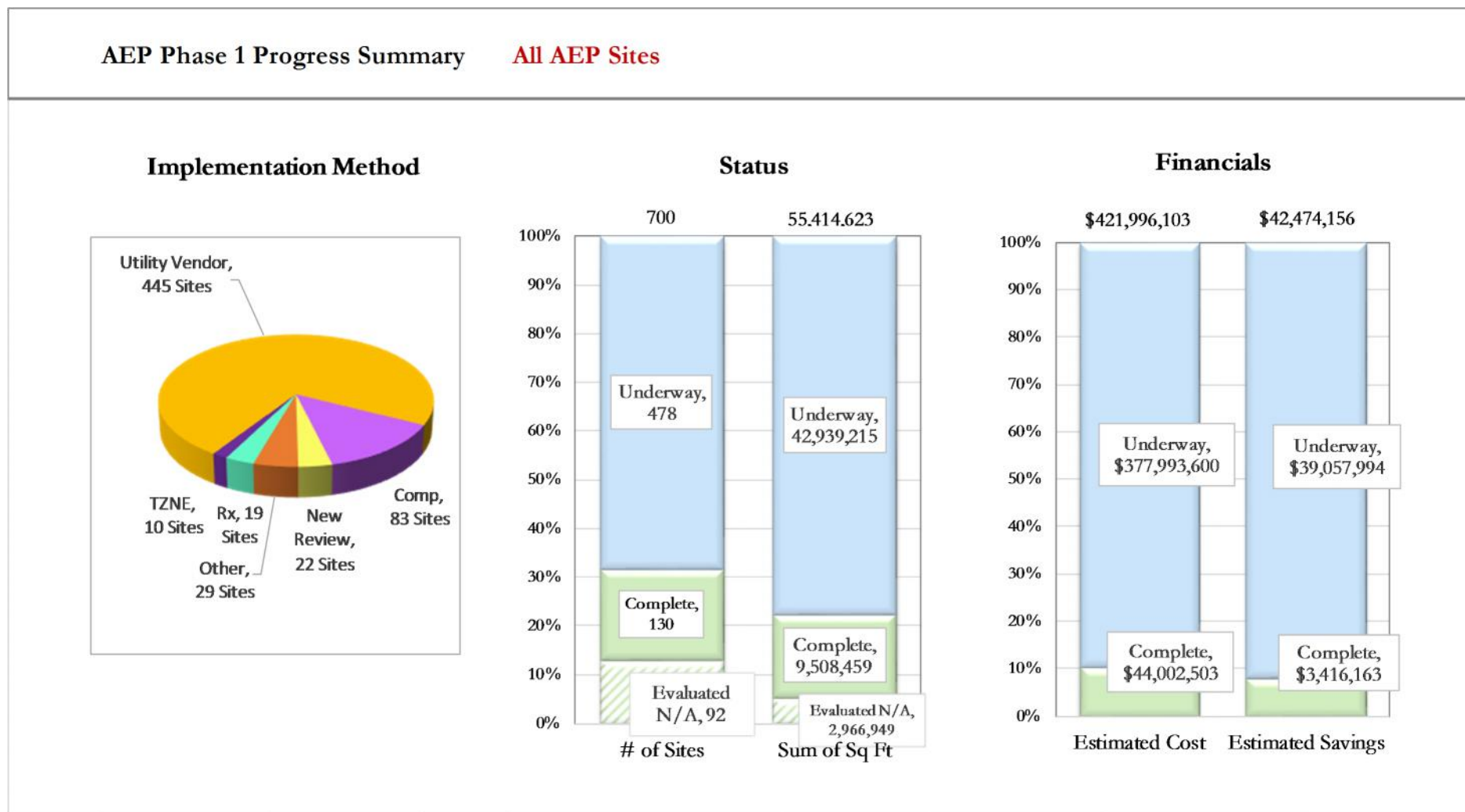
- Schedules
  - Prioritized work for implementation.
  - Structured reportable milestones.
  - Streamlined work through LEAN process improvement workshops.
- Costs
  - Estimated budgets and set target milestone durations to predict spending durations.
  - Created financial plan incorporating multiple funding sources.
- Risks
  - Established risk register with mitigation plans and held meetings with subject matter experts to address risks.
- Reporting
  - Created new “site-based” data management solution to complement existing “project-based” system.
  - Issued Monthly PMO Reports and Quarterly Leadership Steering Committee Reports.

### Program Controls Reporting

The AEP developed a budget and master schedule that enabled the program tracking and reporting across all projects based on updates from DCAMM project managers. The team standardized the way information was compiled, validated progress, and reported on status to internal and external stakeholders.

The graphic below is an example of how AEP data was used for program controls reporting. The AEP reviewed the data monthly. Adjustments were made regularly to ensure the program was on schedule and within budget.

A description of the procurement methods used to implement projects in the AEP is provided in *Appendix F*. An AEP summary by program area is provided in *Appendix H*.



Sites are categorized as "Completed" when energy projects at these sites are substantially completed or when the site has been evaluated and determined to not benefit from an energy project under the AEP because the site does not consume energy or is undergoing other plans (Evaluated N/A).



## Reportable Schedule Milestones

The AEP used five different retrofit approaches to address the range in size and type of buildings in the AEP Portfolio. Different activities were required for each procurement method. A system was developed to identify common reportable milestones across all procurement methods with target durations between activities. The chart below represents the AEP master schedule template that notes target durations for each of the five procurement methods. The reportable milestones are highlighted in yellow.

	Performance Contract				Energy Design Build				Retro-Commissioning				Utility Vendor				Study Only/New Review			
Project Phase	Milestone	Common DCAM Process	Target Duration (days)	Total Days	Milestone	Common DCAM Process	Target Duration (days)	Total Days	Milestone	Common DCAM Process	Target Duration (days)	Total Days	Milestone	Common DCAM Process	Target Duration (days)	Total Days	Milestone	Common DCAM Process	Target Duration (days)	Total Days
Planning	Site Selection		0	0	Site Selection		0	0	Site Selection		0	0	Site Selection	Site Selection (Bundle)	0	0	Site Selection		0	0
	Facility Meeting/ Information Gathering		23	23	Facility Meeting/ Information Gathering		23	23	Facility Meeting/ Information Gathering		23	23	Facility Meeting/ Information Gathering	Review "Intro Email" & Complete CAMIS building forms	23	23	Facility Meeting/ Information Gathering		23	23
	Facility Approval		20	43	Facility Approval		23	46	Facility Approval		20	43	Facility Approval	FM Approve Sites for Retrofit	8	31	Facility Approval		23	46
	Project Initiated	DCAF Approved	15	58	Project Initiated	DCAF Approved	15	61	Project Initiated	DCAF Approved	15	58	Project Initiated	T&C Contract Signing at DCAMM	9	40	Project Initiated	DCAF Approved	15	61
Audit / Study	Scope of Work Audit/Study	Level 1	60	118	Scope Of Work Audit/Study	Level I-II	63	124	Scope of Work Audit/Study	Rx Investigation	60	118		Prepare "SOW Package"	3	43	Scope of Work Audit/Study		60	121
	Audit Started		10	128	Audit Started		10	134	Audit Started	NTP Feasibility Study	10	128	Audit Started	Email "SOW Package to Team (Simple Fix WG, UV, FM)	2	45	NTP Issued for Audit / Study		10	131
	Audit Drafted		105	233	Audit Drafted		107	241	Audit Drafted	Draft Feasibility Study	105	233	Audit Approved	Draft Audit uploaded	115	160	Audit Approved		107	238
	Commonwealth Review		95	328	Commonwealth Review		105	346	Commonwealth Review	E-Team Review/ Complete	95	328	Review - Audit Approved			160	Commonwealth Review		105	343
	Audit Approved		21	349	Audit Approved		21	367	Audit Approved	Feasibility Study Complete	21	349	Audit Approved	Pre-Approval e-mail Sent	15	175	Audit Approved		21	364
	N/A		0	349	Preliminary Design Complete	(BOD, Level III Audit)	215	582	N/A		0	349				175	Not Applicable			
Procurement	Procurement Started	Issue RFP	45	394	Procurement Started	Issue RFP	58	640	Procurement Started	NTP for Investigation	85	434	Procurement Started	Final Audit Approved	75	250				
	Proposals Received		45	439	Proposals Received		51	691	Proposal Received for SOW	Draft Investigation Report	40	474	N/A			250				
	Selected proposer approved		75	514	Selected proposer approved		79	770	N/A	Final Investigation	30	504	N/A			250				
IGA	Audit Contract Signed		40	554	Not Applicable				Not Applicable				Not Applicable							
	Audit/Preliminary Design Complete		75	629																
	IGA Approved		60	689																
Implementation	Implementation Starts	ESA Signed	80	769	Implementation Starts	ESA Signed	82	852	Implementation Starts	NTP for Implementation	40	544	Implementation Starts	NTP for Implementation (U-13)	75	325				
	Final Design Complete		84	853	Final Design Complete		84	936	Facility ISA	N/A		544				325				
	Construction Starts		2	855	Construction Starts		51	987	Facility Procurement	N/A		544				325				
	Substantial Completion (80%)		219	1074	Substantial Completion (80%)		219	1206	Substantial Completion (80%)	Receive Implementation Report	170	714	Substantial Completion (80%)		135	460				
	Final Project Acceptance		60	1134	Final Project Acceptance		142	1348	Final Project Acceptance			714	Final Project Acceptance	Approval By Utility/Facility	20	480				
Post-Construction /Performance Term	Performance Term Starts			1134	Post-Construction Starts		0	1348	Not Applicable				Not Applicable							
	Ongoing M&V Reports			1134	Ongoing Maintenance		0	1348												
	Contract Closeout			1134	Contract Closeout		25	1373	Contract Closeout		10	724	Contract Closeout		25	505				

Data represented in this report is as of 12/31/2014 unless otherwise indicated

3/3/2015 1:44 PM



## Monthly Schedule

The AEP team produced a detailed program schedule each month to review status of projects and identify problem areas.

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The graphic above is an example monthly AEP program schedule from a Monthly Controls Report. Each retrofit project is listed on a separate row, organized by project manager. The Reportable Schedule Milestones are highlighted in the column by date, annotated with a different color.

## Risk Management

Given the AEP's complexity, the identification and mitigation of risks was an important factor in successful program management.

The table below lists a sample of the AEP's remaining risks for the completion of the initial phase of the AEP. The table includes the defined risk response and risk owner. Risks are categorized by the area of the program affected (i.e. planning, data management, communications). Quarterly Reports contain these evolving risk tables.

Risk Identifier	Risk	Impact Description	Risk Score (1=Low 6=High)	Timeline	Risk Response
Implementation Planning					
IP-R3	Additional sites requested to be included in AEP by Agencies may not receive funding.	Schedule and funding impacts to program.	2	Near term	Continue to coordinate with Facility Managers and Agencies to finalize AEP scope. Prioritize AEP sites for implementation.
IP-R4	Ability to achieve an average of 25% savings in energy costs across AEP sites		5		Develop new procurement approach for "deep energy retrofits" or "toward net zero energy".
Procurement Management					

In the example Risk Register highlighted above, each risk is scored as a combination of the probability of the risk being realized and the risk's potential impact on the AEP. This approach helped the AEP prioritize which risks were most important to address.

## LEAN Workshops

The AEP participated in six LEAN workshops to shorten procurement durations of energy design-build and comprehensive performance projects. This was required to be able to complete the program on-time.



The top photo above shows the AEP team participating in a LEAN workshop to shorten project procurement durations. The bottom photo shows the AEP team participating in a LEAN Rapid Improvement Workshop (RIW) to identify a new data management solution to address the "site-based" requirements of the AEP.

## LESSON LEARNED

### Don't underestimate the multiple benefits of project controls and reporting

Robust program controls (cost, schedule and risk management) were needed to achieve the AEP's aggressive program schedule, coordinate hundreds of projects, and keep people informed.

As the AEP progressed, the PMO needed a way to track progress towards the 700 sites with more detail. To ensure that all 700 sites were initiated on-time, the team started to predict which sites would be initiated the next month and color code by likelihood of success. The team identified issues based on this report and tracked actions.

Without this control system, the AEP would not have initiated work at all 700 sites by December 31, 2014. It is important to note that controls take significant time and constant vigilance.

Sites Remaining		96	Quarters Remaining		1	Plan		
Predicted Initiations for Q3 & Q4					Risk Based Expectations			
		# of Sites	# of NEW Initiations	Pessimistic Risk Assessment	# of Sites	# of NEW Initiations		
	Already Initiated	77	48	100%	77	48		
	In Good Shape	44	33	95%	42	33		
	Actions Needed to Complete	21	8	80%	17	6		
	Significant Actions Needed	9	5	50%	3	3		
		151	96		140	90		
Utility Vendor Projects	DCAF	Utility Vendor	# of Sites	# Remaining	PM	8/31 Schedule	Current Schedule	
AEP1501E UT1	Y	DCR - Southeast 1 & 3	Greenlee	12	12	Kathlyn Menyo	9/4/2014	9/4/2014
AEP1412E UT1	Y	DCR - Central 1 - Residual	To Be	16	1	Jessica Brand	7/31/2014	9/18/2014
AEP1502E UT1	Y	DCR - Central 2 & West 3	RUSE	24	21	Dave Lewis	9/24/2014	10/5/2014
AEP1503E UT1	Y	DCR - Ruck 2	Groves	9	2	Kathlyn Menyo	11/10/2014	11/4/2014
AEP1504E UT1	Y	DOE1 - South/East & Shutoff 2	Buwer Connections	6	0	Kathlyn Menyo	11/10/2014	11/4/2014

The graphic above shows an excerpt from the AEP Predicted Site Initiation Report.

## Challenge 5: Ensure quality retrofits are installed while maintaining schedule

To retrofit 700 sites, the AEP needed a large pool of facility advisors and vendors. Many of these vendors were new to DCAMM. The AEP team implemented a rigorous quality program to ensure every retrofit was “done right the first time”.

The AEP established a centralized quality management team and hired a resident engineer to ensure utility vendor projects were executed in a consistent manner with regard to quality and cost effectiveness across all sites by various vendors. All large projects had 1-2 resident engineers assigned. An AEP Monthly Quality Report was produced to address and track issues identified.



*The photo above was taken by the AEP Resident Engineer during a quality inspection of a retrofit by AEP utility vendor RISE at Uxbridge District Court.*

### Approach: Implement rigorous quality management

- Created Standardized Processes
  - Building code checklist
  - Audit data collection templates and reports
  - Accessibility checklist
  - Vendor Scopes of Work
- Performed Quality Control (QC) Checks
  - Resident Engineer inspections on small projects
  - Technical reviews
  - Vendor pricing analysis

### Standardized Processes

The AEP created a set of practices, principles and templates for managing projects in a standardized manner. The intent was to create successful and repeatable processes, yet continuously improve these processes. These quality assurance tools were used by DCAMM and vendors across all projects.

### Adhering to Building Codes

To avoid potential problems that could result in project delays, and with assistance from the Board of Building Regulations and Standards (BBRS), the AEP developed a comprehensive building code checklist for addressing code issues across building and project types. The checklist was integrated into the standardized audit template and used by vendors during the performance of energy audits.



### Standardizing Energy Audit Data Collection

The AEP developed a standardized audit template that includes a set of minimum standards for audit reports, including guidelines for content and threshold values for the costs and savings of identified ECMs.

**Site - Audit Template**

Audit Date	6/19/2012	Site Contact - Name	John Faro
CAMIS Site Code	WLDN2	Site Contact - Title	NE Regional Supervisor
Site	WALDEN POND STATE RESERVATION	Site Contact - #	978-369-3254
Secretariat	Energy & Environmental Affairs	Site Contact - Email	
Agency	DEPARTMENT OF CONSERVATION AND RECREATION	Auditor Prime	EE&D
Site Address		Auditor Sub	EE&D
Site City	Concord, MA	Auditor - Name	David Ward
Site ZIP		Auditor - Title	Principal Auditor
Prim Elect Util	Municipal	Auditor - #	508-460-1946
Project Number	DCP1207 AD1	HD Contact - Email	davefward@gmail.com
Data Source	Audit		
Date of NTP	4/3/2012		

Building Codes	Building Name	Sq Ft	Audited	In Use	Elect	Fossil	Water
<b>Totals</b>	<b>14</b>	<b>9,404</b>	<b>13</b>	<b>13</b>	<b>7</b>	<b>2</b>	<b>2</b>
430DEM0401	GALLERY SHED	150	Y	Y	N	N	N
430DEM0402	GARAGE	300	Y	Y	N	N	N
430DEM0403	NATURE CENTER SHED	160	Y	Y	Y	N	N
430DEM0780	BARN	830	Y	Y	Y	N	N
430C							

**Site - Audit Results**

Audit Date	6/19/2012	Site Contact - Name	John Faro
Site Code	WLDN2	Site Contact - Title	NE Regional Supervisor
Site	WALDEN POND STATE RESERVATION	Site Contact - #	978-369-3254
Secretariat	Energy & Environmental Affairs	Site Contact - Email	
Agency	DEPARTMENT OF CONSERVATION AND RECREATION	Auditor Prime	EE&D
Site Address		Auditor Sub	EE&D
Site City	Concord, MA	Auditor - Name	David Ward
Site ZIP		Auditor - Title	Principal Auditor
Prim Elec Util	Municipal	Auditor - #	508-460-1946
Project Number	DCP1207 AD1	HD Contact - Email	davefward@gmail.com
Data Source	Audit		
Date of NTP	4/3/2012		

Energy Conservation Measure	Cost		Annual Savings			Simple PB [yrs]
	Estimated Install Cost [\$]	Utility Incentive [\$]	Energy [MMBtu]	Water [Gallon]	Cost [\$]	
<b>Totals</b>	<b>\$ 22,911</b>	<b>\$ -</b>	<b>139</b>	<b>372</b>	<b>\$ 7,345</b>	<b>3.1</b>

*An extract of the Audit Template is shown above.*

### Meeting Accessibility Requirements

To ensure retrofits were in compliance with the American with Disabilities Act (ADA) and Massachusetts Architectural Access Board (MAAB) regulations, the AEP developed a new process and form to identify when an AEP project triggers compliance issues that may require additional accessibility upgrades.

The AEP established regular meetings with DCAMM's Office of Planning, Design and Construction (OPDC) and developed tracking reports to coordinate efforts.



*Members of the AEP team visited sites and documented accessibility problems. Common issues, highlighted in the photos above, include non-compliant signage related to accessible restrooms and automatic door openers as well as a ramp to the accessible entrance that is missing a handrail.*

## Quality Control (QC) Checks

The AEP team conducted quality control checks at key stages of the retrofit process to alert the AEP PMO to any problems that may be occurring across vendors and procurement methods. The quality manager and resident engineer conducted technical reviews of audits and performed site evaluations and inspections on a sample of the projects during and following completion of the work. *Appendix G* provides a list of these sites.

The focus of the reviews was to identify any issues that were encountered on a single project, and to correct them at the program level. This helped to improve the consistency in quality across all projects in the program.

The AEP PMO met monthly to review the results of the QC checks and discuss follow up actions required to address shortfalls that may be occurring. Each month, a quality report was issued to document findings and actions agreed upon.



*The photos above were taken during quality inspections at the Dudley District Court (shown right) and at the Lynn Armory (shown left).*

### Top QC Issues Identified & Resolved

1. Identified cost effective ECMs missed by auditors
2. Guided auditors to complete audits to meet ASHRAE Level II standards
3. Ensured utility vendor pricing to DCAMM matched their pricing contracted with utilities
4. Helped to identify utility accounts and meters at sites and map to the Commonwealth's Massachusetts Energy Insight database (MEI)
5. Improved energy savings calculations
6. Created punch lists for work not completed as prescribed by vendors



## LESSON LEARNED

### Simple Projects are Not So Simple

At the Marlborough District Court shown in the picture below, the utility vendor hired by the AEP team proposed the implementation of a variable frequency drive (VFD). After installation and during start up, the team noted that the HVAC system was unbalanced.



While the installation of the VFD was relatively simple, the next task of investigating the reason for the imbalance in the system was complex and difficult. The utility vendor spent months working with a balancing company and expert advisors to finally determine that a pre-existing return air fan (RAF) was improperly installed. The team ultimately disconnected the RAF and balanced the system.

To get the work done in a high quality manner, the AEP team, facility manager and vendors need to be prepared to overcome unexpected challenges. Complexities like these in small, medium and large projects make it difficult to create realistic metrics for project completion.

## Challenge 6: Promote access and opportunity for women / minority contractors and workers

An important objective of the AEP was to create sustainable job opportunities across the Commonwealth. To accomplish this goal, the AEP team connected with the larger labor and workforce community. The team developed a workforce strategy and partnered with DCAMM's Office of Compliance to develop a process for ensuring that M/WBE participation and workforce diversity goals were met.

### Labor & Workforce Advisors

The AEP established a group of Advisors from state agencies, community colleges, job training programs, industry associations, and workforce advocacy groups. The AEP Workforce Advisors met three times to help develop an AEP workforce strategy, guide the implementation of actions throughout the AEP, and identify opportunities to expand efforts beyond the AEP to other DCAMM business units.

### Approach: Make labor and workforce connections

- Created and met with Labor & Workforce Advisors
- Developed workforce strategy
- Hosted four regional vendor outreach events
- Implemented changes to project solicitations (Included link to listing of MWBE firms, added offering on-the-job training, directed contractors to State's "one-stop" employment centers to recruit potential workers)



*The photos above show participants in the three (3) meetings with the Workforce Advisors.*

## Vendor Outreach Meetings

DCAMM held Vendor Outreach Meetings at four locations across the Commonwealth to attract a diverse pool of vendors, provide them with an opportunity to meet DCAMM staff from various offices, and learn how to do business with DCAMM. In addition, participants were given a chance to meet other potential business partners through an interactive expo forum.

A total of 243 people participated in the meetings, including 87 people representing small businesses, 31 representing WBE firms and 26 representing MBE firms. About half of the people who participated in the meetings represented firms that had not previously obtained DCAMM certification.

## Expanded Pool of Vendors

At the start of the AEP, DCAMM analyzed the pool of consulting firms under contract and determined that a potential capacity shortfall existed that posed a risk to completing the AEP on-time.

To address the potential shortfall of consulting firms, DCAMM solicited additional proposals for qualified firms to become approved Facility Advisors under an existing statewide contract. In response to the solicitation, DCAMM added 32 new consulting firms, including 8 firms certified by the Supplier Diversity Office.

## Updated language in RFPs

Proposers are encouraged to provide on-the-job training to prepare people for clean energy, energy efficiency and green building careers. A continually updated online directory of the programs offered through 4-year colleges, community colleges, vocational/technical schools, apprenticeships, and other job training programs can be found at [www.cleanenergyeducation.org](http://www.cleanenergyeducation.org).

Please describe the degree to which the Proposer currently engages in on-the-job training, and any efforts the Proposer will pursue in providing such training if selected as the contractor for this project.

*The language above was added to the RFP template for large energy conservation projects.*



*The photos above show participants at the four Vendor Outreach meetings held across the Commonwealth in 2013.*



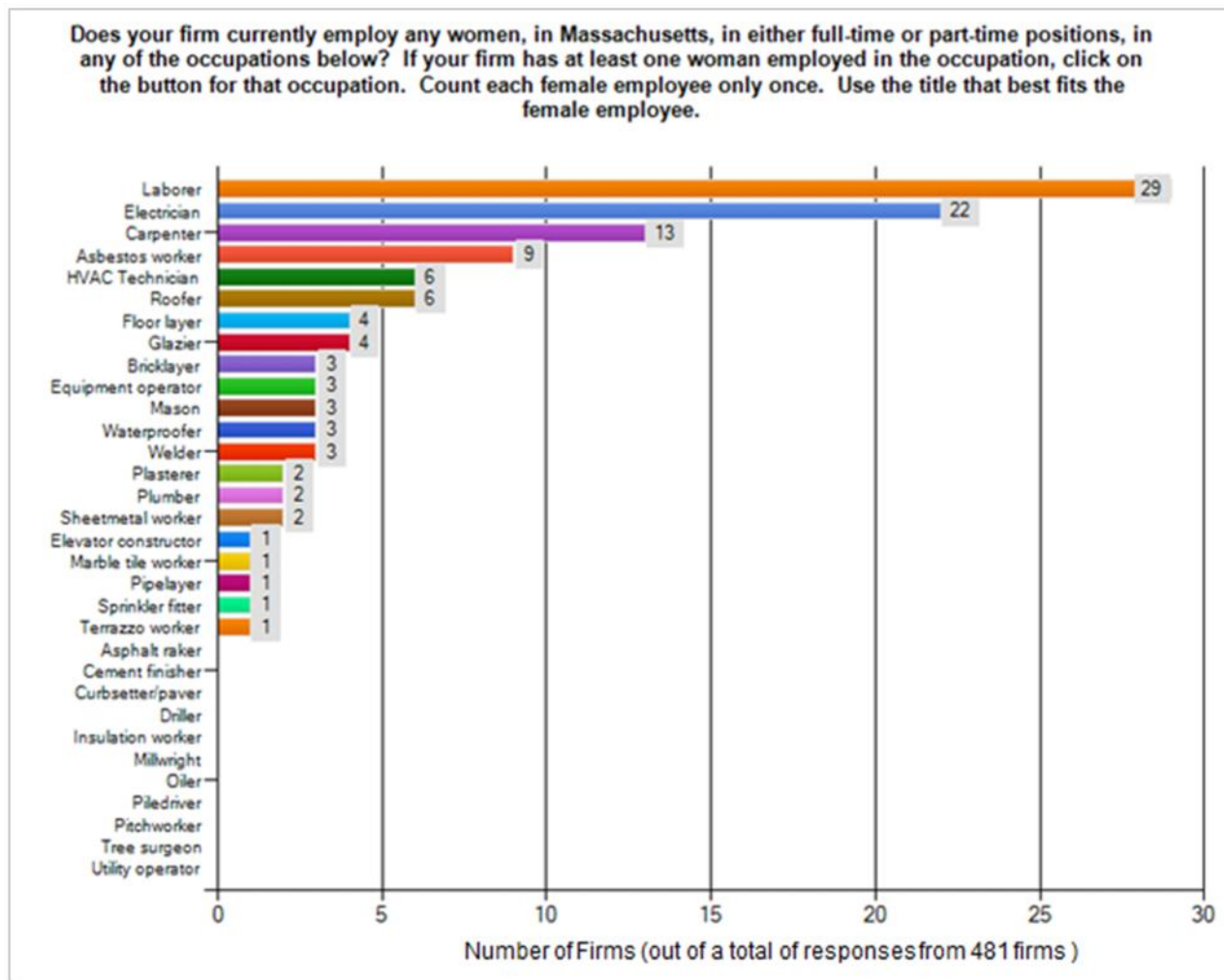
## Contractor Survey of Women in Nontraditional Employment

One of the key workforce concerns of the AEP was the lack of consistent success in the ability of contractors to meet goals for direct employment of women<sup>1</sup>.

To gather needed information about employment of women in selected trades and occupations and to learn about current outreach, recruitment and strategies used by contractors, DCAMM commissioned the New England Clean Energy Council Institute to conduct an online survey of contractors in many construction-related categories.

The survey was issued to 1,162 different contractors with responses from a total of 481 contractors (41% response rate). Results confirmed that there are not enough women in the “roster” of companies to meet goals.

<sup>1</sup> This workforce concern has been identified at DCAMM for all construction projects, not just AEP projects.



The graphic above represents responses from the 481 firms regarding employment of women in 22 construction occupations. Only 29 of the 481 firms that responded employ women as Laborers. Firms had fewer women employed in the other occupations, with no women employed in 11 occupations.

## LESSON LEARNED

### Workforce Development Takes Time

Increasing the involvement of women and people of color in non-traditional trades and occupations is a long-term effort requiring the active involvement of multiple stakeholders.

As demonstrated by the NECEC Institute survey of DCAMM contractors, the participation of women in many important trades and occupations is very low, and the number of contractors taking effective, independent action is also low.

The process of occupational selection and progress is a complex mix of cultural, personal, and economic factors. DCAMM and the AEP had limited independent ability to quickly affect the number of women and people of color in non-traditional occupations during the three year duration of the AEP Phase I.

DCAMM and other state agencies do have some leverage and can make use of this in coordination with others in the larger workforce development system. Some of these tools are detailed in the AEP Labor and Workforce Development summary report from the October 20, 2014 LWD Advisors' event, available at the following link.

[www.mass.gov/dcam/aep](http://www.mass.gov/dcam/aep)

Metrics	Target	As of End of Phase I (Dec 31, 2014)
Workforce (Construction)		
- Minorities	15.3%	5.9%
- Women	6.9%	0.3%
M/WBE Participation (Commitment / Awards) <sup>3</sup>		
- Design Contracts	17.9%	12.7%
- Construction Contracts	10.4%	23.0%

<sup>3</sup> WBE participation is based on DCAMM Compliance data available on 26 projects in construction and 6 design contracts, which are currently the only ones reporting. This does not include DOER, Agency or Other projects.



## Challenge 7: Reveal program goals and results to employees and public

To achieve the goals of the AEP, a partnership was established with facility managers. Facility managers were instrumental in selecting ECMs and coordinating implementation of ECMs and renewable energy systems at each site in collaboration with energy auditors and designers.

### Collaborated with Facility Managers

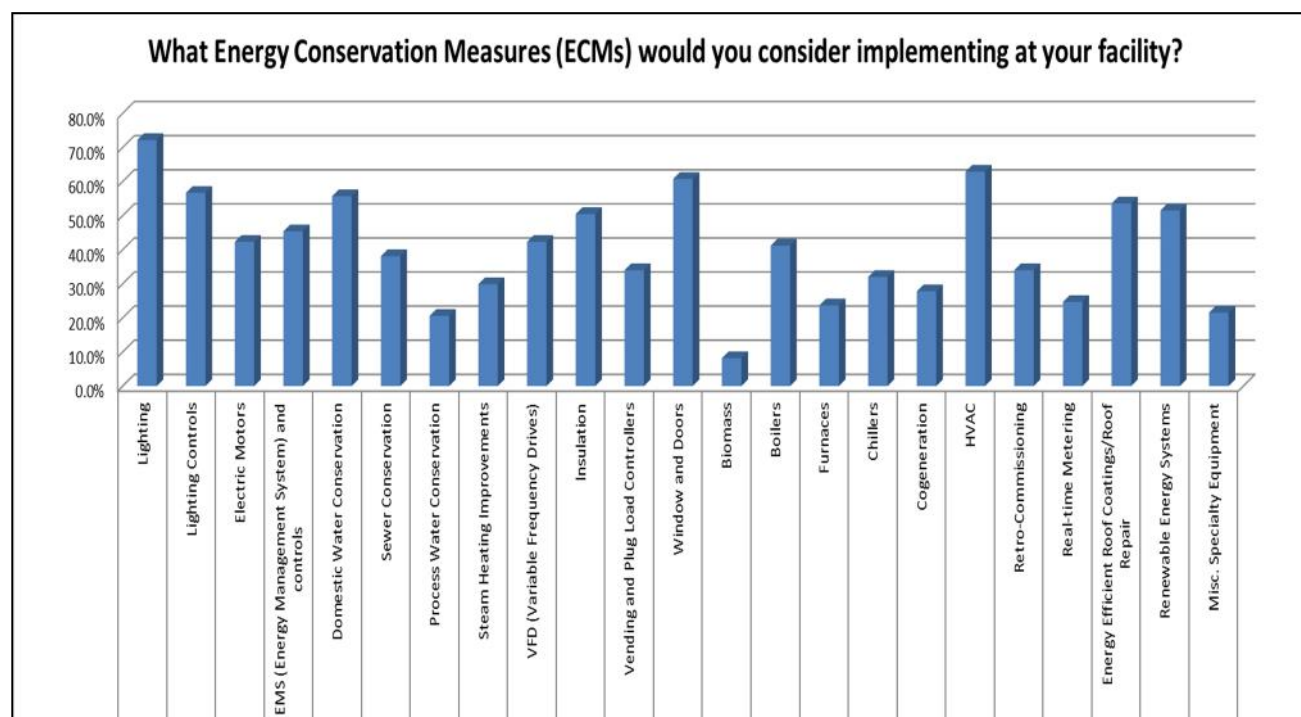
At the start of the AEP, DCAMM issued a survey to facility managers to help determine and prioritize the types of projects that would be included in the AEP. The secondary purpose was to verify the information in DCAMM's Capital Asset Management Information System (CAMIS) and update data where possible.

### Issued AEP Newsletters

The AEP team produced thirteen (13) bi-monthly newsletters which provided concise updates on the progress of the AEP, major milestones accomplished and other program highlights.

### Approach: Establish an “InReach” program for facility managers

- Conducted survey to solicit needs of facility managers
- Provided AEP posters and certification plaques
- Supported broader communication of program including regional press events
- Develop training and ongoing measurement & verification (M&V) ideas



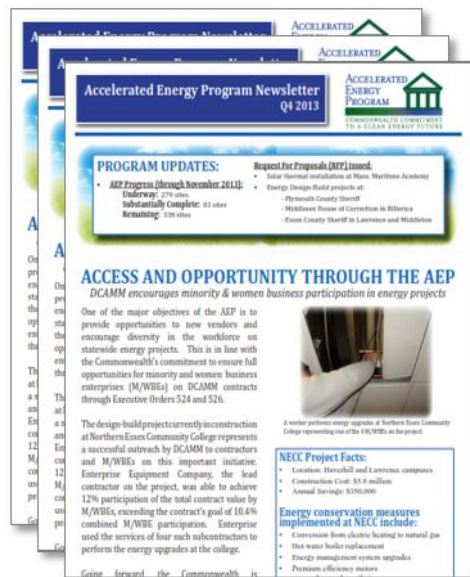
*The graphic above represents responses from facility managers to one of the survey questions issued at the start of the AEP. Initial results of the survey indicated that energy conservation measures (ECMs) were needed at most facilities to improve the water and energy usage, correct deferred maintenance and improve long-term sustainability.*

## Provided AEP Kits to Help Facility Staff Communicate With Staff & Visitors

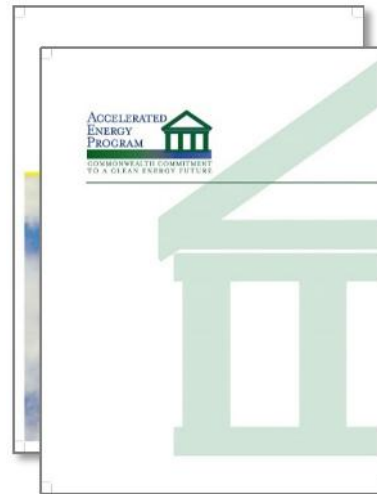
A comprehensive toolkit of information, FAQs, posters, certification plaques and awards was developed to help communicate AEP work at each site. The AEP rolled-out these materials with multiple agencies. Agencies were encouraged to work with the AEP team to customize the posters and include agency logos to convey the collaborative partnership between DCAMM and the client agencies. The AEP Welcome Package contained a welcome brochure, an example facility interest letter, an FAQ sheet and PowerPoint presentation. Posters were produced to notify occupants of the future work to be performed (“Coming Soon” posters), to communicate details of work being done (“Pardon Our Appearance” posters), and to celebrate achieving AEP Certification (“Certification” poster and plaque).

## AEP Certification Plaques & Posters

### AEP Bi-Monthly Newsletters



### AEP Welcome Package



*The graphic above highlights the AEP Bi-monthly newsletters and some of the materials provided to facility managers in the AEP Kits.*

## Broader Communication of AEP

The AEP team supported the Commonwealth in the broader communication of the program by celebrating successes at individual facilities with the facility managers and agency leadership. Some of the notable events are highlighted below.

Northern Essex Community College (Haverhill) – Jan 2014



Pittsfield Armory - May 2014



ArchitectureBoston Expo - Nov 2013



Gardner Regional Event highlighting NCCI Gardner and Gardner District Court - Sept 2014



O'Neil Memorial Rink (Charlestown) - 2012



MASSBuys EXPO (Worcester) - May 2012



Bradley Palmer State Park (Topsfield) - Sept 2013



MAFMA's semi-annual meeting (Stow) - Nov 2013



Springfield Technical Community College - Jan 2013





## LESSON LEARNED

### Partnering with Facility Managers is Critical

While retrofitting MassDOT highway depots as shown in the picture below, an AEP utility vendor did not coordinate with the MassDOT facility manager to determine future uses of the buildings and equipment being evaluated, as required in an energy audit. As a result, the utility vendor specified replacement of lighting that was subsequently replaced by MassDOT as part of a separate project.

The AEP project was delayed and a change order was required, creating complexity that could have been avoided with engagement with the facility manager.

The AEP team has increased its outreach to different levels of facility staff to assist with coordination.



*A highway depot as shown above is the base of highway operation for snow plowing, sign maintenance, and highway landscaping.*

## Challenge 8: Achieve Ambitious Energy Savings Goals

The Leading By Example (LBE) program was established in April 2007 by Executive Order No. 484, which set aggressive energy and greenhouse gas reduction goals and renewable energy goals for state government operations.

The AEP was established to accelerate the implementation of energy and water savings projects and help the Commonwealth comply with the goals.

The target of the AEP was to reduce energy consumption by 19% over 700 state sites. In the summer of 2013, which marked the half-way point of the AEP, DCAMM assessed the progress to date and concluded that current efforts were only producing an estimated 22% reduction. Higher targets for deeper savings were needed at select sites to achieve the LBE goals.

### AEP Innovative Technology Vendor Intake Portal

New energy saving technologies were needed to achieve the desired energy savings.

The AEP team partnered with DOER and the Operational Services Division (the state's purchasing agency) to develop a processes for vetting, evaluating, piloting and procuring innovative, clean energy technologies.

The team published an online web intake form to funnel and screen potential vendors of innovative technologies. Thirty-seven (37) vendors have registered their products and services to date through the Portal.

### Approach: Encourage Innovation and Introduce TZNE

- Innovation
  - Published Innovative technology online web intake form
  - Piloted innovative technologies such as ground-source and air-source heat pumps
  - Participated in Massachusetts Clean Energy Center's (MassCEC) First Customer Expo
- Towards Zero Net Energy (TZNE)
  - Held TZNE charrette
  - Piloted 9 TZNE projects

 The screenshot shows the 'Mass.gov' website with the 'Energy and Environmental Affairs' section active. The breadcrumb trail reads: '# EEA Home > Services & Assistance > Guidance & Technical Assistance > Leading by Example > Clean Energy Innovative Technology Intake Form'. The form title is 'Clean Energy Innovative Technology Intake Form'. Below the title, it states 'Fields Marked with a \* are required' and provides a link for 'Click here for Technology Intake Form instructions'. The form fields include: '\* Today's Date' (with a calendar icon), 'Company Information' section containing '\* Company', 'Address', '\* City', '\* State', '\* Zip', '\* Primary Contact Name', '\* Email', and '\* Phone'.

*The web-based Innovative Technology Intake Form is shown above.*



## Implemented Innovative Technologies

The AEP partnered with facility managers to install innovative technologies that would achieve deeper energy savings. Some notable technologies are highlighted below.

Essex Sheriff's Department  
Demand Response and Custom Metal-  
enclosed Switchgear



Georges Island, DCR  
Off grid electricity with PV arrays  
with battery storage



Concord Armory  
Burner Booster



Sheriff's Departments. in Middlesex,  
Plymouth and Essex  
Automated water management system for  
lavatories



Berkshire House of Correction  
Instantaneous water heater paired with  
condensing boilers and solar thermal



Bristol Community College  
ZNE lab  
with ground-  
source and  
air-source  
heat pumps



## Towards Zero Net Energy (TZNE) Charrette

DCAMM and DOER determined that a new and innovative approach was required on select sites to achieve deeper energy savings.

The AEP leveraged the recommendations provided by the Massachusetts Zero Net Energy Task Force in 2009, to launch a new Towards Zero Net Energy (TZNE) retrofit approach. TZNE was defined as an approach to retrofitting facilities that, at a minimum, would achieve deeper energy retrofits (40% or more) and also would strive for zero net energy through the installation of renewable energy systems.

On September 13, 2013, the AEP hosted a charrette with 74 attendees from cross-functional disciplines including architects, energy engineers, planners, educators, and facility managers. This integrated team documented best practices from prior TZNE projects and made recommendations to DCAMM for specific actions to implement TZNE retrofits on DCAMM energy projects going forward. The *AEP TZNE Charrette Report* was issued to all participants.

### TZNE Pilot Sites

The AEP piloted TZNE actions at nine sites across the Commonwealth, as follows:

1. Cape Cod Community College
2. Holyoke Community College
3. Greenfield Community College
4. Plymouth County Sheriff's Department
5. Essex Sheriff's Department (Lawrence and Middleton)
6. Georges Island
7. Lancaster Complex
8. North Central Correctional Institute
9. Soldiers' Home Chelsea

Actions recommended at the charrette were implemented at each site based on their specific dynamics and needs.



*The AEP-hosted charrette, on September 13, 2013, brought together a group of 74 people from various disciplines to discuss how to implement Towards Zero Net Energy (TZNE) retrofits at state facilities.*

### TZNE “Just Do Its”

Some of the recommendations made to the DCAMM by the integrated team at the TZNE charrette were actions that could be implemented without significant effort. These actions were called “Just Do Its”. The following are the major categories of JDI actions

1. Assign the right team
2. Define TZNE goals and align with existing conditions
3. Get buy in at ALL levels
4. Establish integrated processes
5. Incorporate innovative solutions
6. Time retrofits with deferred maintenance
7. Manage post-project operations

## Massachusetts as a First Customer Cleantech Expo

Purchasers and representatives from state agencies, authorities, and municipalities attended a half-day Massachusetts as a First Customer Cleantech Expo at the Bentley University Conference Center on October 1, 2014.

The Expo, sponsored by the Massachusetts Clean Energy Center, marked the launch of the Massachusetts as a First Customer Program, a pilot program that supports the introduction of cutting-edge commercially ready clean energy and water technologies into the marketplace.



*As highlighted in the picture above, representatives from the AEP team and other public agencies explored innovative technologies with vendors at the Cleantech Expo.*

## LESSON LEARNED

### Necessity is the catalyst for invention

Innovation across technologies, processes, and people is needed to achieve goals.

Similar to many of the community colleges in the Commonwealth, the majority of buildings at Holyoke Community College (HCC) were built with concrete structures without insulation.

HCC was a pilot TZNE site, and identifying an innovative solution to repair the structure and improve insulation is required to achieve significant energy use reduction. The AEP team has been researching solutions with support from a DOER Zero Net Energy grant.



*The photo above shows the many concrete structures at HCC.*



## Challenge 9: Sustain the energy and water savings gains

Energy management has been an important part of the Commonwealth's Integrated Facility Management (IFM) initiative, because energy and water costs represent a considerable proportion of the operating costs of facilities. Energy accounts for as much as 10 percent of a local government's annual operating budget (U.S. DOE, 2005), a proportion that is likely to grow as energy prices rise.

In AEP Phase I, the Commonwealth had a goal to reduce annual energy costs by **\$43 million**, which is estimated to be a **25% reduction** in annual energy and water costs across the portfolio of facilities.

The AEP team, in collaboration with DCAMM's IFM initiative and facility managers, developed new methods of sustaining these impressive energy savings gains.

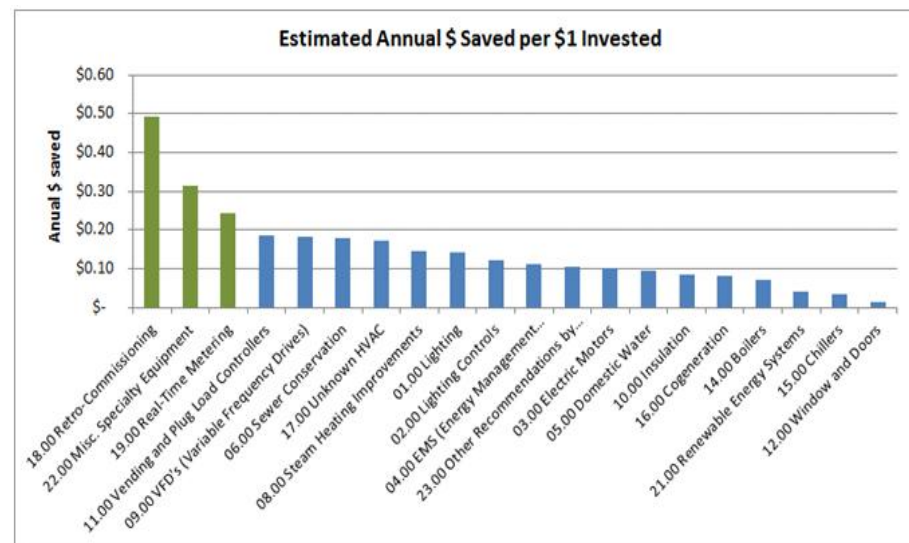
### Information is Key

The most important step to maintaining savings is to effectively track and monitor annual energy and utility costs.

The key figure in this context is the energy usage performance metric of kBtu per square foot per year (kBtu/sqft-yr). This measurement enables the Commonwealth and facility managers to effectively assess a building's current energy efficiency relative to prior years as well as compared with other similar buildings.

### Approach: Enhance Facility Energy Management Capabilities

- Mapped facility utility accounts to online energy reporting
- Developed site- or facility-based data management system
- Expanded training and new measurement and verification (M&V) approaches
- Increase participation in demand response programs



*The AEP team analyzed energy savings gains and developed new M&V approaches. The graph above shows an analysis of energy savings based on data from DCAMM's energy project database.*

## On-line Tracking of Facility Energy Usage

Through federal American Recovery and Reinvestment Act (ARRA) funding, DOER allocated almost \$10 million to install more than 1,300 energy meters across 25 million square feet of state buildings and transmit real-time energy consumption data to a central web-based portal. The Enterprise Energy Management System (EEMS), provides DCAMM, DOER and dozens of large state facilities and campuses with the ability to monitor in real-time how energy is being used on a building level. This technology has improved many sites' abilities to quickly respond to energy anomalies and react almost immediately to incorrect building schedules, helping to reduce energy use and costs.

At the start of the AEP, only **30%** of the facilities listed in CAMIS were mapped to Massachusetts Energy Insight (MEI), the web-based tool funded by DOER to provide online energy usage information by agency and site. A disconnect between the two tools made it difficult for service providers to define baseline energy usage that is necessary to calculate energy savings produced by potential ECMs. In addition, this disconnect made it nearly impossible for DCAMM to effectively track and monitor ongoing energy savings achieved from implementation of these ECMs.

Working closely with DOER and their vendor, Peregrine, the AEP team used information collected during energy audits performed during the AEP to map the utility accounts and meter information in MEI.

Through effective data management, DCAMM and DOER successfully mapped **70%** of the CAMIS site codes to utility account numbers in MEI, which represents **87%** of the energy usage across the AEP facility portfolio. This reflects an increase of approximately **57%** compared to the start of the AEP.

A new version of MEI was released during the AEP that provides web-based public access to utility account information linked to state facilities as listed in CAMIS.



*The Massachusetts Energy Insight (MEI) dashboard provides users with analytic tools to compare buildings on an energy use per area metric.*



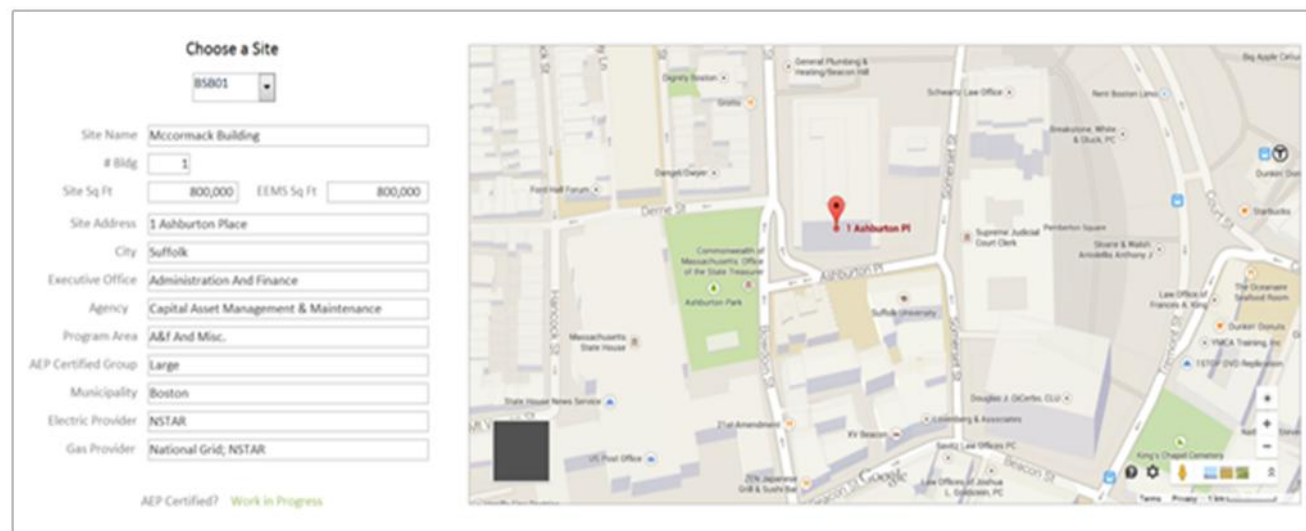
## “Facility-based” Energy Data Management

The AEP needed a robust approach to manage data on a facility basis to identify energy savings opportunities as well as to track and report on project status and energy savings.

Prior to the start of the AEP, DCAMM’s Energy team had been inputting energy data into a web-application called the Energy Project Database (EPDB), which was an effective approach to managing large comprehensive projects, the focus of DCAMM prior to the AEP.

To address the complex data management needs of the AEP, the team greatly expanded the existing energy data management capabilities to integrate data from multiple sources and create a “site-based” data structure and reporting solution.

After consultation with DCAMM’s IT personnel, the AEP team developed functional upgrades to the EPDB and developed a new but temporary Facility Energy Database (FEDB). The long term solution is integration into the state’s new CAMIS system.



*The facility overview feature in the FEDB displays general information about a state facility and its location on a map.*

## Ongoing Performance Verification

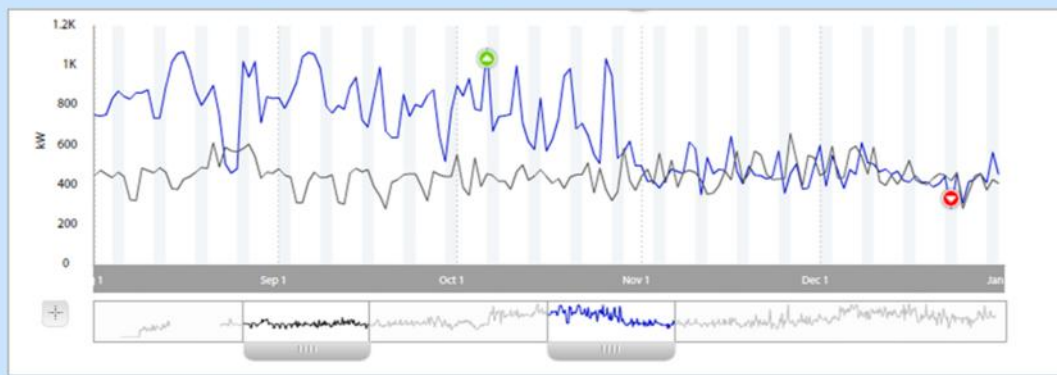
Building systems and their controls change over time and tend to drift further and further away from the optimum condition. In addition, facility operators typically need training and support on new building systems to be able to effectively maintain them at the efficiency level intended.

As part of a TZNE pilot at the North Central Correctional Institution in Gardner, the AEP developed a new ongoing performance verification scope of work to verify that the building systems commissioned during the energy project implementation phase were performing at the level expected and documented during the design and construction phase of the project. DCAMM will compare actual weather-normalized energy usage of building systems to pre-installation energy usage to quantitatively determine if savings have been obtained and maintained.

## LESSON LEARNED

## Energy Analytics Can Help Sustain Gains

Real-time facility energy usage data (EEMS) is available at 470 state buildings across 25 million square feet. Energy analytics performed on building usage can identify savings, as highlighted in the graph below.



## UMass Lowell

EEMS was used to analyze energy usage and identify measures to implement to reduce annual energy costs. For example, the energy usage at the Tsongas Center was **30% higher year over year**. Based on this information, the facility staff investigated the situation, identified that the control system was not working properly and fixed the problem.

Measure Type	# of Identified Measures	Annual Savings
Peak Demand and Usage Spikes	301	\$644,200
Energy Intensity/Unexpected Usage	88	\$592,000
Heating Optimization	205	\$339,000
Night Setback	191	\$417,000
Day-to-Day Comparison	380	\$180,000
Extended Breaks	150	\$120,000
Night Baseload	32	\$111,000
Weekend Setback	57	\$92,000
Delayed Start	44	\$91,000
Holidays	216	\$44,000
<b>Total</b>	<b>1,664</b>	<b>\$2,630,200</b>

A list of common energy problems and estimated annual savings is listed in the table above.

## Summary

The table below provides a summary of the AEP challenges, approaches made by the AEP team to address these challenges, and the most important lessons learned as demonstrated through an example.

Challenge	Approach	Lessons Learned
1. Engage and align a wide range of stakeholders <ul style="list-style-type: none"> <li>a. A wide range of stakeholders needed to “buy in” to program as well as help with implementation of retrofits at 700 sites.</li> </ul>	Establish and cultivate partnerships	Leverage existing programs to align goals
2. Translate goal of “greening” every facility into definable actions <ul style="list-style-type: none"> <li>a. DCAMM did not know which sites owned by the Commonwealth needed to be retrofitted.</li> <li>b. There was a significant range of types and sizes of buildings and sites across the portfolio of 700 sites.</li> <li>c. DCAMM and DOER did not have a definition for “green” or “energy retrofit” to allow for r.</li> <li>d. In addition to the 700 owned sites, there were hundreds of sites leased from other owners that did not have a means to improve energy efficiency.</li> </ul>	Identify sites to retrofit, defined “green”, and create AEP Certification levels	What gets measured, gets done!
3. Retrofit 445 small and decentralized sites with new system <ul style="list-style-type: none"> <li>a. Existing procurement methods would not enable DCAMM to meet timeline expectations.</li> </ul>	Create NEW procurement method	Contractors don’t always staff up for surge work
4. Complete program on-time (in 3 years) <ul style="list-style-type: none"> <li>a. Needed to achieve goals within 3 years without knowing if it was possible.</li> <li>b. There were not enough existing vendors under contract to complete work.</li> <li>c. The existing durations for procurement of comprehensive energy projects for large sites would take too long.</li> <li>d. A financial plan was needed but the historic basis for estimating costs and schedule durations was not relevant to the new implementation methods to be utilized for the AEP.</li> </ul>	Establish program controls with transparent reporting	Don’t underestimate the multiple benefits of project controls and reporting

e. There was no established program controls method for monitoring, tracking and reporting on project status across 700 sites on cost, schedule and risk.		
<p>5. Ensure quality retrofits are installed while maintaining schedule</p> <p>a. The method for collecting energy audit data was not standardized or consistent across project types.</p> <p>b. Existing quality controls would not ensure quality of work and consistent pricing from all vendors across 700 sites.</p> <p>c. There was no method for identifying and addressing building codes and accessibility requirements that might need to be part of each retrofit.</p>	Implement rigorous quality management	Simple projects are not simple: Marlborough District Court
<p>6. Promote access and opportunity for women / minority contractors and workers</p> <p>a. It was not clear if the AEP could achieve the M/WBE and workforce diversity participation goals.</p>	Make labor and workforce connections	Workforce development takes time
<p>7. Reveal program goals and results to employees and public</p> <p>a. Needed to find a way to keep all parties informed of projects to enable timely decisions and to avoid duplication of efforts.</p>	Establish an “InReach” program for facility managers	Partnering with facility managers is critical: MassDOT
<p>8. Achieve ambitious energy savings goals</p> <p>a. Utility accounts and meters were only known for 30% of sites, making it difficult to quantify potential annual energy savings and approve ECMs based on payback.</p> <p>b. Current approaches to energy retrofits would not achieve the targeted energy savings.</p> <p>c. There were many new and innovative clean energy technologies and solutions that were not being actively procured by vendors but could help achieve more energy savings.</p> <p>d. There were more cost effective approaches to finance small projects than using the model for large comprehensive projects.</p>	Encourage innovation and introduce TZNE	Necessity is the catalyst for invention: Holyoke Community College
<p>9. Sustain the energy and water savings gains</p> <p>a. A new “Site-based” approach was needed to integrate data from multiple sources to enable AEP to assess energy usage performance, track savings and identify ECMs not implemented during initial work.</p> <p>b. Staff need to be trained to identify and respond to changes in energy and water consumption.</p>	Enhance facility energy management capabilities	Energy analytics can help sustain gains: UMass Lowell

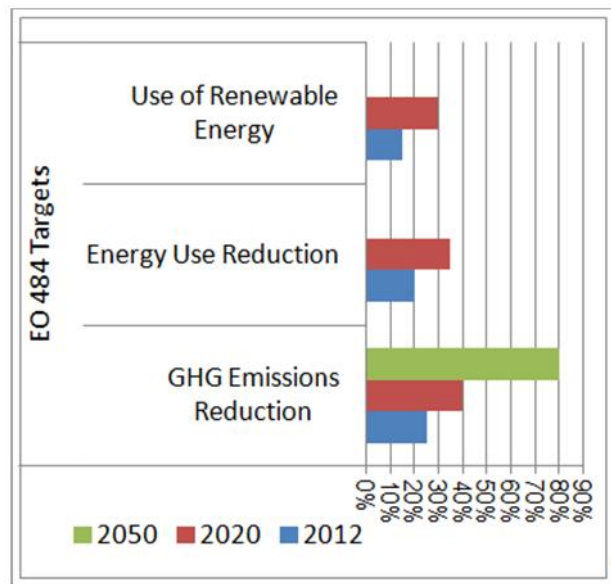


## AEP Going Forward (AEP 2.0)

## Leading By Example - 2020

Established in April 2007 through Executive Order No. 484 (EO 484), the Leading by Example Program (LBE) charges state government agencies to reduce its greenhouse gas emissions, cut energy consumption (per square foot and weather normalized), and increased use of renewable energy.

The graphic below highlights EO 484 Targets set for 2012, 2020 and 2050.



### Great Progress... But More Work Required

DOER recently released a report titled, Executive Order 484: Toward Our Target that highlights progress achieved against the 2012 targets.

Overall, the Commonwealth met the goals for greenhouse gas reduction (**25% reduction** in 2012) with a 72% reduction in the use of heating oil between 2006 and 2013.

The Commonwealth now gets **15% of its electricity** from on-site generation from renewable energy sources and from natural gas powered combined heat and power (CHP) systems. A total of 7.7 MW of solar has been installed across state facilities, up from less than 100 kW in 2007, and there is 10.5 MW of installed wind power, up from 600 kW in 2007.

However, the Commonwealth has only achieved **3% energy use reduction** since 2004, well short of the 20% reduction target. The next phase of the AEP will focus on helping the Commonwealth achieve the 2020 target for energy use reduction of 35% as well as greenhouse gas reduction of 40%.

### High Performance Buildings

Although much of the work associated with AEP has occurred at existing buildings, DCAMM and other agencies have been working to make sure that new buildings are constructed to high performance standards, helping to reduce the rate of growth in energy consumption and even reduce energy use over the long-term.

Since 2006, some 37 buildings have been certified to meet the Massachusetts LEED Plus standard. More impressively, 25 of these have been certified by the U.S. Green Building Council at the LEED Gold level (the 2nd highest rating), and 1 state facility has achieved the highest LEED platinum level.

Additionally, DCAMM has worked successfully to move beyond LEED, designing and constructing buildings that attempt to meet the zero net energy (ZNE) building standard. Two such ZNE buildings have been built, and there are others in various design and construction stages. These ZNE buildings will generate as much on-site energy from clean renewable sources as they consume over the course of a year.



*The new Field Headquarters building for the Massachusetts Div. of Fisheries and Wildlife in Westborough achieved Net Zero Energy design through the implementation of a 290 kW rooftop PV system, geothermal heat pumps, radiant heating and cooling, high quality building envelope design and materials, storm water management, and a state of the art building management system.*

## How to Meet LBE 2020 Goals?

Work initiated by the AEP in Phase I is expected to achieve an energy use reduction of 25% across the portfolio of sites. This will greatly help the Commonwealth reach the 35% reduction goal, but more work will be required to achieve the goal.

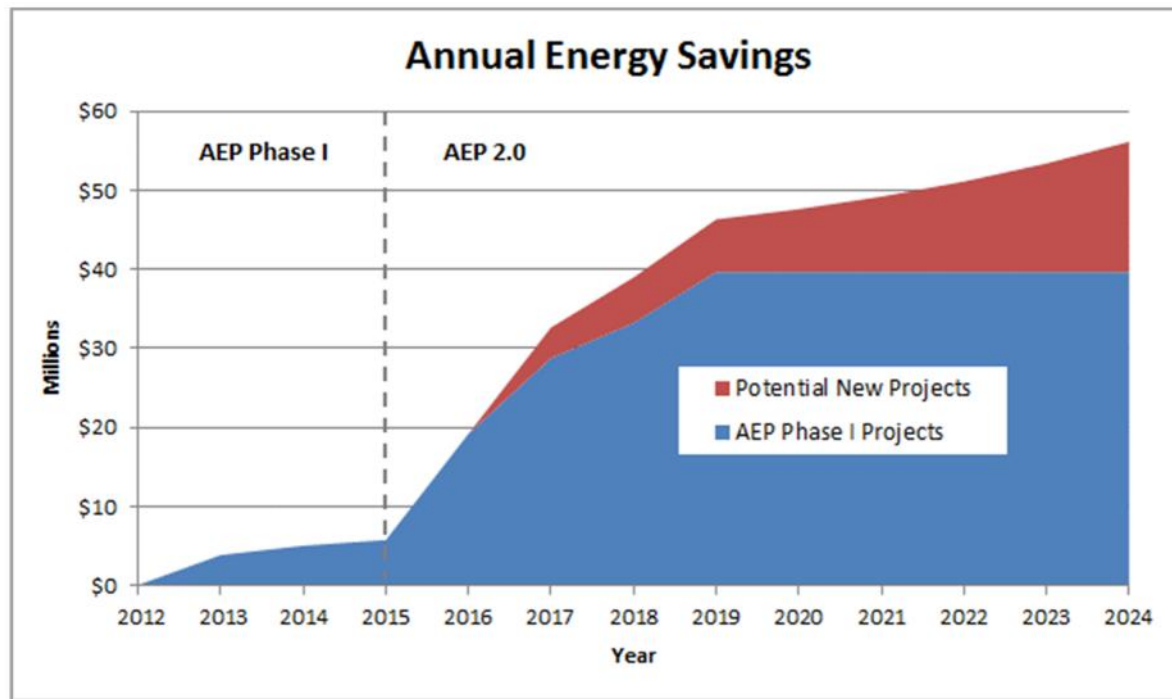
As the AEP team implements projects that have been initiated during the AEP Phase I, the team is strategizing with DOER and others on how best to leverage the momentum established during Phase I of the AEP to focus AEP 2.0 on helping state government achieve the aggressive goals of LBE 2020.

## AEP 2.0 - Implementation of Ongoing Projects

DCAMM initiated work at 700 sites during Phase I of the AEP, and is in the process of completing the implementation of these ongoing projects. The Commonwealth is expected to save a total of \$40 million a year in energy costs from the implementation of these projects, which represents 25% reduction in energy use across the portfolio.

As highlighted in blue in the graph below, there is considerable work remaining to complete the implementation of these projects in AEP 2.0 and achieve the expected energy savings from projects initiated during AEP Phase I.

The AEP team is working diligently to implement these projects. In addition, the AEP team is working to sustain the energy savings gains from these projects as well as advance the performance of these facilities through potential new projects to achieve additional savings. The graph below highlights the potential new projects that will be implemented in red color.



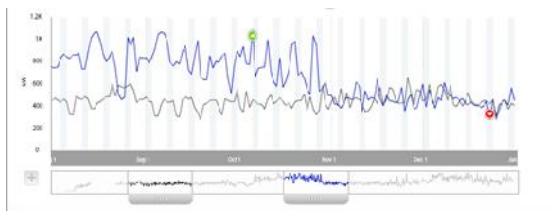


## AEP 2.0

DCAMM, in partnership with DOER and state agencies, has initiated work going forward on AEP 2.0, as summarized below.



*Weatherization at Uxbridge Court House*



*Data from Enterprise Energy Management System (EEMS) shows changes in energy use patterns*



*Burner Booster innovative technology to improve efficiency of oil systems. Installed at Concord Armory.*

### IMPLEMENT ONGOING PROJECTS

- Complete the 478 projects underway including 69 large comprehensive projects and retro-commissioning projects as well as 357 utility vendor projects
- Increase renewable energy projects
- Introduce more innovative technologies
- Implement retro-commissioning

### SUSTAIN GAINS

- Increase use of metering and measuring
- Train facility managers & occupants
- Implement continuous commissioning
- Enhance communication and feedback

### ADVANCE PERFORMANCE OF STATE BUILDINGS

- Develop additional project opportunities
- Deliver Towards Zero Net Energy Buildings
- Incorporate resiliency in new construction projects
- Offer additional creative financing, potentially using new partnerships and models such as power purchase agreements
- Model total cost of ownership

## AEP Phase I Report

### Appendix A

#### Reports Issued by AEP

(as of December 31, 2014)

## Documents Posted and Reports Issued by AEP

Documents posted on the DCAMM website:

### Program Kick-Off

- AEP Implementation Committee Kick-off Meeting Presentation – Mar 2, 2012
- AEP Leadership Steering Committee Kick-off Meeting Presentation – Mar 16, 2012

### AEP Newsletters

- October 2012
- November 2012
- December 2012 / January 2013
- February / March 2013
- April / May 2013
- June / July 2013
- August / September 2013
- October / November / December 2013
- January / February 2014
- April / May 2014
- June / July 2014
- August / September 2014
- October / November 2014

### Leadership Steering Committee Quarterly Reports and Presentations

- 2012 Q2
- 2012 Q3
- 2012 Q4
- 2013 Q1
- 2013 Q2

- 2013 Q3
- 2013 Q4
- 2014 Q1
- 2014 Q2
- 2014 Q3

### Partnerships & Outreach

- AEP Labor & Workforce Advisors Kick-off Meeting Presentation – Jan 31, 2013
- Report from Jan 31, 2013 LWD Advisors Meeting
- Vendor Outreach Presentation – Mar 5, 2013
- TZNE Charrette Report – Sep 13, 2013
- Summary report from LWD Advisors Meeting of Apr 10, 2014
- Aiming Beyond Compliance case study - Aug 2014
- Summary of LWD Advisors Meeting/Panels - Dec 2014

Additional reports issued (please contact DCAMM for a copy):

### Project Definition

- DCAMM Energy Team Report to Commissioner – Oct 7, 2011
- Commonwealth Accelerated Energy Plan Report – Nov 9, 2011
- Accelerated Energy Plan Outline & Presentation– Nov 2011
- AEP Conditions and Data Analysis Working Group Workbook – Jan 12, 2012
- Data Collection and Analysis Report – Feb 3, 2012
- LEAN Process Improvements for Energy Procurement – Mar 9, 2012
- AEP: 700 facilities in 700 days – Apr 19, 2012
- Energy Usage Baseline Report – Apr 19, 2012
- Evaluation of Consulting Firms for AEP – Jun 20, 2012

### Supporting Research and Reports

- Summary of Contractor Interviews re: Diversity/MWBE use - Dec 2013
- Results of Contractor Survey re: Employment of Women - Dec 2014



## **AEP Phase I Report**

### Appendix B

#### AEP Leadership Steering Committee and Implementation Participants

(as of December 31, 2014)

Members of LBE in Green, Members of  
Energy Efficiency and Sustainable Buildings  
group in Purple.

**Leadership Steering Committee**

Paul Antoniewicz (JUD)  
Scott Arneil (JUD)  
Carld Auguste (NStar)  
Mukiya Baker-Gomez (DCAMM)  
John Bello (JUD)  
Martin Benison (OSC)  
Kevin Bernier (Fort Hill)  
Celia Blue (RMV)  
Stephen Brown (DCR)  
Robert Cahill (DCAMM)  
Dana Clowes (ANF)  
Robert Coates (NU)  
Ned Codd (MassDOT)  
Deborah Coleman (EOHHS)  
Penelope Connor (NStar)  
Carole Cornelison (DCAMM)  
Hope Davis (DCAMM)  
Paul DiPaolo (DOC)  
Kevin Doyle (NECEC)  
John Duffy (UML)  
Sandra Duran (DCAMM)  
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Mary Farrell (EHS)  
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Bill Fogarty (Holyoke CC)  
Eric Friedman (DOER)  
Martha Goldsmith (DCAMM)

Jay Gonzalez (ANF)  
Anthony Granger (JUD)  
Taran Grigsby (DCAMM)  
Frank Gundal (NStar)  
Eileen Gunn (MassDOT)  
Katie Hammer (ANF)  
Col. Thomas Harrop (MAANG)  
Elizabeth Hemmond (CTR)  
Jenna Ide (DCAMM)  
Crystal Johnson (MassDOT)  
Scott Jordan (ANF)  
Rachel Kaprielian (EOLWD)  
Shirin Karanfiloglu (DCAMM)  
Meghan Kelly (ANF)  
Andrea Laing (DCAMM)  
Michael Lambert (DCAMM)  
Howard LaRosse (MassArt)  
James LeBlanc (ANF)  
Ken Lortie (DCAMM)  
Meg Lusardi (DOER)  
Erin McCabe (EHS)  
Ezra McCarthy (NGrid)  
Liz Minnis (DCAMM)  
BJ Mohammadipour (DCAMM)  
Col. Timothy Mullen (MAANG)  
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Joseph Naughton (RGT)  
Sean Nelson (RGT)  
Hongyan Oliver (MassDOT)  
Donald Pettey (MassDOT)  
Jeffrey Quick (DOC)  
Dolores Randolph (DCAMM)  
Sneha Sachar (NGrid)

Thomas Shack (CTR)  
Victoria Sheehan (MassDOT)  
Kathy Sheppard (CTR)  
Glen Shor (ANF)  
Luis Spencer (DOC)  
Mark Sylvia (EEA)  
Edward Terceiro (DHE)  
Patricia Vantine (EEA)  
Christina Wescott (EOLWD)  
Kevin Whalen (DCR)  
Carol White (Ngrid)  
Jules Williams (MassDOT)

**Implementation Committee**

Michael Abrahams (DCR)  
Ruth Alfasso (MDPH)  
Kevin Allen (DCR)  
Paul Antoniewicz (JUD)  
Dean Arnold (DCAMM)  
Carld Auguste (Nstar)  
Andy Backman (DCR)  
Mukiya Baker-Gomez (DCAMM)  
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Jessica Brand (DCAMM)  
Robbie Brown (DCAMM)  
Stephen Brown (DCR)  
Patrick Cahillane (HSD)

Scott Calisti (DCAMM)  
 Dan Campbell (HCC)  
 Kent Carlson (DCR)  
 Jeremy Caron (DCAMM)  
 AnPing Chi (DCAMM)  
 Vincent Cirigliano (DCAMM)  
 Robert Coates (NU)  
 Penelope Conner (Nstar)  
 John Crisley (DCAMM)  
 Hope Davis (DCAMM)  
 Doug Davis (DCAMM)  
 Jillian DiMedio (DOER)  
 Camila Dinamarca (DCAMM)  
 Tony Dover (DCAMM)  
 Kevin Doyle (NECEF)  
 Kathy Driscoll (Mass Maritime)  
 Beth Eromin (DCAMM)  
 Ian Finlayson (DOER)  
 James Freeley (DCAMM)  
 Eric Friedman (DOER)  
 Scott Gauthier (Quinsigamond CC)  
 Alex Genereux (DCAMM)  
 Jacob Glickel (MassPort)  
 Martha Goldsmith (DCAMM)  
 Richard Goulet (DCAMM)  
 Trey Gowdy (DOER)  
 Heidi Green (DCAMM)  
 Christina Halfpenny (DOER)  
 Bill Hanson (DCAMM)  
 Ryan Harold (DCAMM)  
 Bob Harvey (DCAMM)  
 Mike Hayes (UMass/Dartmouth)  
 Andrea Hessenius (DOER)  
 Joannetta Hill (DOT)  
 Joseph Hogan (DYS)  
 Juanita Holler (UMass)  
 Jenna Ide (DCAMM)

Jamieson Jacquart  
 (UMass/Dartmouth)  
 Dan Jarmolowicz (DCAMM)  
 Jacqueline Johnson  
 Yvonne Jones (DCR)  
 Jack Keleher (DCAMM)  
 Hugh Kelleher  
 Charles Kelsey (DCAMM)  
 Carol Kemp (DCAMM)  
 Paul Hession (DOC)  
 Brendan Kiley (DEP)  
 Patrice Kish (DCR)  
 Graham Knowland (DCAMM)  
 Andrea Laing (DCAMM)  
 James LeBlanc (ANF)  
 John LeMay (Middlesex CC)  
 David Lewin (DCAMM)  
 Dave Lewis (DCAMM)  
 Krista Lillis (DCAMM)  
 Jay Linnehan (Middlesex CC)  
 Nathanael Lloyd (DCR)  
 James Malary (DCAMM)  
 Michael Malia (DCAMM)  
 Gretchen Manning (MCCEO)  
 Lorraine Marchand-Barton  
 (DCAMM)  
 Maggie McCarey (DOER)  
 Sean McGloin (NGrid)  
 Christopher McIntosh (DCAMM)  
 Kaitlyn Menyo (DCAMM)  
 Rita Mercado (DCAMM)  
 Barbara Meyer (DCAMM)  
 Sally Miller (DCAMM)  
 BJ Mohammadipour (DCAMM)  
 Nicholas Moreno (DEP)  
 Edward Nicosia (DCAMM)  
 Dmitriy Nikolayev (OSD)

Steve O'Connor (DCAMM)  
 John O'Donnell (DCAMM)  
 Tom Paine (UMass/Dartmouth)  
 Peter Pepe (DOC)  
 Patricia Peterson (DCAMM)  
 Elsie Petit-Frere (DCAMM)  
 Robin Pfetsch (DCR)  
 Paul Piraino (UMass/Lowell)  
 Jeff Quick (MassDOT)  
 Gilles Quintal (DCAMM)  
 Stacey Quish (DCAMM)  
 Edward Ransom (DCAMM)  
 John Reardon (MEP/EEA)  
 Michael Reinhardt (DCAMM)  
 Richard Reney (Northshore CC)  
 Mary Richmond (DCAMM)  
 Tom Riley (DPS/BBRS)  
 Gail Rosenberg (DCAMM)  
 Erin Ross (DCAMM)  
 Domenick Sacco (DCR)  
 Arnold Sapenter (DEP)  
 Ann Schiro (DCAMM/Courts)  
 David Schmidt (MWCC)  
 Victoria Sheehan (MassDOT)  
 Raul Silva (DCR)  
 John Sites (DDS)  
 Michael Skinner (National Grid)  
 Ezra Small (UMass)  
 Maureen Socha (Springfield Tech  
 CC)  
 Raymond Soohoo (DCAMM)  
 Ann Storer (DCAMM)  
 Tom Tagan (DCAMM)  
 Eric Teicholz  
 Ruth Teixeira (DCR)  
 Ed Terceiro (DHE)  
 Bill Tivnan (DCAMM)

David Tremblay (Fort Hill)  
Kanika Udomsay (DCAMM)  
Judith Underwood (Cape Cod CC)  
Maria Andrea Urrutia (DOER)  
Peter Walworth (MBTA)  
Dave Ward (EED)  
Al Weisz (DCAMM)  
Carol White (NGrid)  
Stephen White (DCAMM)  
Jamieson Wicks (MassArt)  
Allen Wiggin (DCAMM)  
PJ Wolf (BHCC)  
Julia Wolfe (OSD)  
Suzanne Wood (UMass Medical)  
Fred Yule (DCR)  
Donald Zanetti (BSH)



## **AEP Phase I Report**

### Appendix C

#### Performance Metrics

(as of December 31, 2014)

## Performance Metrics

Goal	Metrics	Target	As of End of Phase I (Dec 31, 2014)
Accelerate delivery of energy projects to 3 years and maximize energy and water conservation.	Underway and Complete	700 Sites	700 Sites
	<i>Large Sites (over 100,000 Sq. Ft.)</i>	77	77
	<i>Small Sites (under 100,000 Sq. Ft.)</i>	340	340
	<i>Occasional Use Sites</i>	191	191
	<i>Evaluated N/A Sites</i>	92	92
	Investment in Energy Efficiency Measures (in \$ millions)	\$470 million	\$85.9 million
	Spending to date		\$57.5 million <sup>1</sup>
	Annual Energy & Water Savings (in \$ millions)	\$43 million	5.8 million <sup>2</sup>
Communicate progress and encourage full participation.	Average Payback on Total Contract Value (ECC)	≤ 10 Years	14.2 Years <sup>6</sup>
	DCAMM AEP Public Website Hits	20% annual increase	Remained constant from initial quarter
	Issue bi-monthly newsletter (InReach)	Bi-Monthly	13 Issued
Create clean energy job opportunities across the Commonwealth.	Total Jobs Created <sup>4</sup>	4,230	518
	- Total Construction Jobs (as reported) <sup>5</sup>	2,115	122
	Workforce (Construction)		
	- Minorities	15.3%	5.9%
	- Women	6.9%	0.3%
	M/WBE Participation (Project Commitment / Awards) <sup>3</sup>		
	- Design Contracts	17.9%	12.7%
	- Construction Contracts	10.4%	23.0%

<sup>1</sup> Spending to date includes all sites that have been initiated.

<sup>2</sup> Actual includes all sites with a Status of "Implementation Started" or "Substantially Complete".

<sup>3</sup> M/WBE participation is based on DCAMM Compliance data available on 26 projects in construction and 6 design contracts that are reporting. Does not include DOER, Agency or Other projects.

<sup>4</sup> Total Jobs Created is estimated at 9 personnel per \$1 million spent and includes indirect jobs (administration, finance, etc.) employed by contractors (estimate developed by consultant for ARRA program.)

<sup>5</sup> Construction Jobs Created is estimated at 4.5 personnel per \$1 million spent and only includes personnel assigned to construction jobs. This metric aligns with workforce jobs reported by contractor to DCAMM, which only include labor.

<sup>6</sup> Average Payback on Total Contract Value includes Deferred Maintenance items which improve building condition but negatively affect Payback.

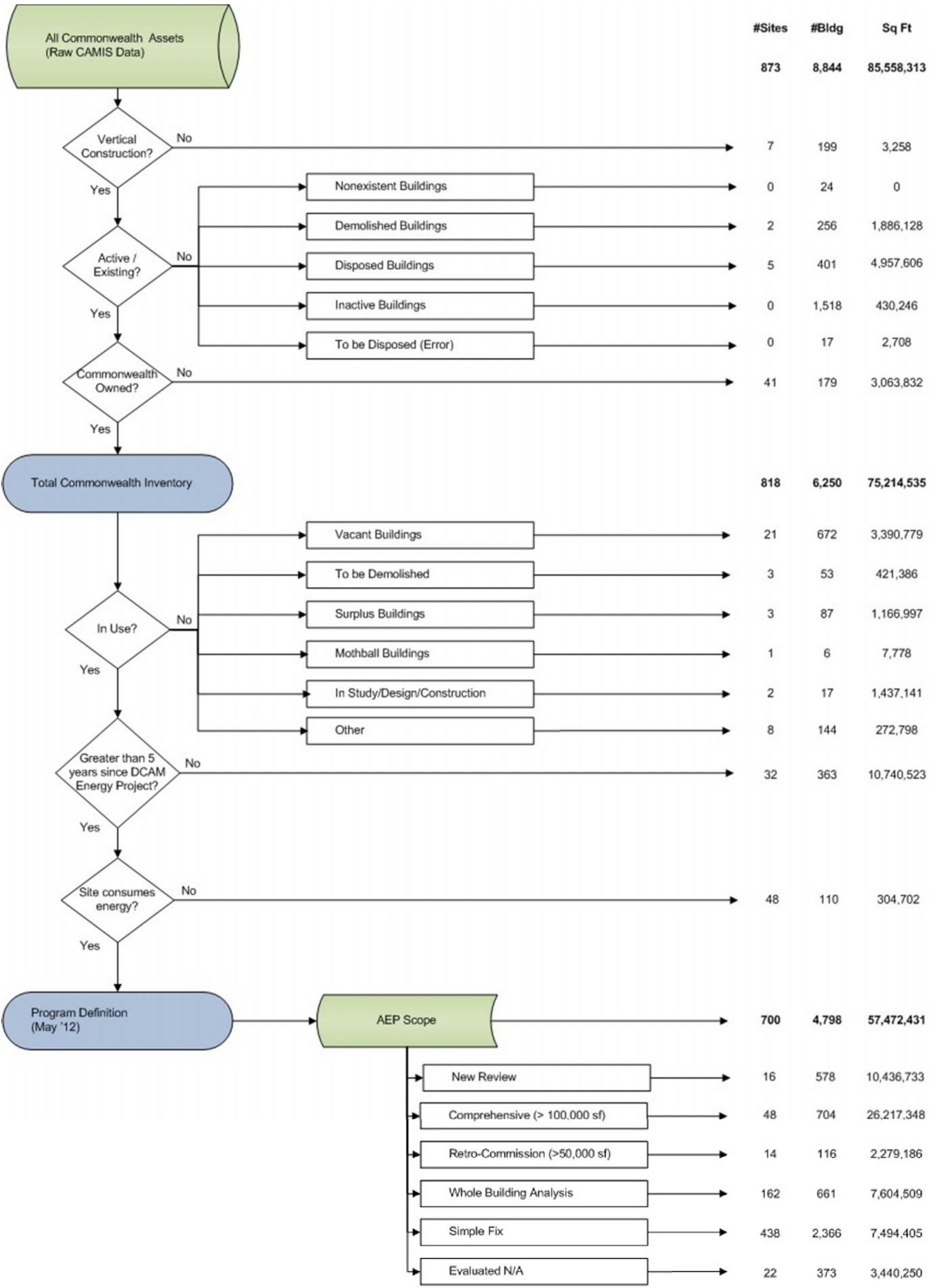
# **AEP Phase I Report**

## Appendix D

### Initial Program Planning and Definition Methodologies

(as of December 31, 2014)

Program Planning and Definition Methodologies





# AEP Phase I Report

## Appendix E

### AEP Certification Criteria

(As of December 31, 2014)

## AEP Certification Criteria

The overall goal of the AEP is to reduce energy use, greenhouse gas emissions, and/or energy costs by 25% and to implement water retrofits at all feasible sites. Every effort will be made to achieve certification at individual sites.

	Large Sites (i.e. hospitals, colleges, prisons)	Small Sites (i.e. police barracks, career centers)	Occasional Use Sites (i.e. ice rinks, state parks)
<b>AEP Certified</b>	1. Achieve a <b>25%</b> reduction in at least 2 of the following categories: site energy use, greenhouse gas emissions, energy costs. 2. Energy consumption must be reduced by at least 10%	1. Achieve a <b>20%</b> reduction in at least 2 of the following categories: site energy use, greenhouse gas emissions, energy costs. <b>If energy baseline unavailable, implement at least five energy conservation measures.</b> 2. Energy consumption must be reduced by at least 10%	Meet the reduction threshold for small sites <b>or if baseline unavailable implement at least three energy conservation measures.</b>
	Large and Small Sites		Occasional Use Sites
<b>AEP Certified Plus</b>	1. Achieve a 50% reduction in at least 2 of the following categories: site energy use, greenhouse gas emissions, energy costs; 2. Energy consumption must be reduced by at least 20% 3. Establish energy and facility maintenance training program for staff; and 4. Develop plan for preventative maintenance to keep systems operating at optimum efficiency.		Not eligible

## AEP Phase I Report

### Appendix F

#### Types of Energy Projects

(as of December 31, 2014)

## Types of Energy Projects

DCAMM and DOER have developed a comprehensive implementation strategy for sites in the AEP. The implementation strategy and conservation measures recommended are based on several site characteristics such as size, building usage, and energy usage intensity. This approach allows the Commonwealth to leverage existing retrofit programs with utilities and facility maintenance staff.

### Towards Zero Net Energy Retrofits

The Massachusetts Zero Net Energy Buildings (ZNEB) Task Force issued recommendations in March 2009 to guide the Commonwealth on the delivery of ZNEBs. The guiding principle was that achieving the zero net energy performance goal may be infeasible for some buildings, but the broader state objective should be to reduce energy loads to the minimum practical level, produce onsite as much as the required energy as reasonable from renewable resources, and purchase locally generated renewable energy to satisfy remaining needs.

DCAMM and DOER are establishing a new innovative approach to retrofitting buildings and sites in the AEP that, at minimum, achieve deeper energy retrofits (40% or more in annual energy savings) and incorporate cost effective onsite renewable energy systems.

### Comprehensive Retrofits

E.O. 484 requires that DCAMM retrofit all sites over 100,000 square feet. Comprehensive retrofit projects involve complex measures requiring longer construction durations and, in most cases, a design phase. These measures include the combination of major renovations such as HVAC systems, energy management systems, and building envelope improvements. Comprehensive projects will provide the greatest savings and improvements in energy efficiency across the state inventory.

### Utility-Approved Vendor Contracting

The utility-approved vendor contracting process allows DCAMM project managers to simplify and streamline the way energy and water conservation measures are implemented at designated groups of state facilities. These contracts use utility pre-approved vendors, authorized under M.G.L. c.25A §14.

This process will be used for the majority of the sites and buildings in the AEP, but only represents a small percentage of square footage in the AEP. These sites generally have less than 50,000 sq. ft. of facility space with relatively simple electrical equipment or HVAC systems. The majority of sites being retrofitted through this process are managed by the Department of Conservation and Recreation (DCR) and the Massachusetts Department of Transportation (MassDOT).

The majority of energy conservation measures will be lighting upgrades (bulbs, fixtures, lamps, LEDs), lighting controls, HVAC filters, resetting control set points, programmable thermostats, simple weatherization (weather stripping, caulking, window film, etc.) and water conservation.



## Retro-Commissioning (RCx)

E.O. 484 requires that all buildings over 50,000 square feet be retro-commissioned; however, it is a recommended practice for any modern building with an energy management system. Retro-commissioning is the application of the engineering and operational analysis to existing buildings that improves how building equipment and systems function together, which is typically called the commissioning process. Depending on the age of the building, retro-commissioning can often resolve problems that occurred during design or construction, or address problems that have developed throughout the building's life. Retro-commissioning improves a building's operations and maintenance (O&M) procedures to enhance overall building performance.

Many of the sites that have a building with over 50,000 square feet of space include additional, smaller buildings on the same site. Typically, retro-commissioning of smaller buildings does not generate enough savings to justify an investment in detailed engineering analyses. As such, retro-commissioning is planned only for the larger buildings on these sites; other approaches will be pursued for the smaller buildings.

## New Review

DCAMM retrofitted 16 sites between 2000 and 2007 that will be re-evaluated for additional savings as part of the AEP. DCAMM will review these sites, documenting results since the original retrofit and identifying additional energy savings potential since the last major improvement was completed. Savings will only be achieved if DCAMM identifies a viable project.

## Other

There are sites in the AEP Portfolio that are being retrofitted by a project management team other than DCAMM's Energy Team. These sites are being retrofitted directly by the agency, DOER or through a major renovation project through DCAMM's Office of Planning, Design and Construction (OPDC).

## Evaluated – N/A

There are sites in the AEP portfolio that do not consume energy resources or do not require energy retrofits because they have recently been retrofitted, or some sites were determined to have extremely low or no potential to save energy. This may be due to the fact that these sites are scheduled to close before the useful life of new measures is reached, they are slated for a major renovation, or their structures do not consume energy (fire towers, etc.).

## AEP Phase I Report

### Appendix G

#### Quality Control Checks Performed During Phase I

(as of December 31, 2014)

## Quality Control Sites for AEP Phase 1

Project Number	Site Code	Site Name	Technical Review	Site Inspection	Construction Review
<b>Utility Vendor Sites</b>					
AEP1301E UT1	TRC21	Fitchburg District Court	20-Feb-09	1-May-10	21-May-10
	TRC24	Gardner District Court	20-Feb-09	11-Jul-09	11-Nov-09
AEP1407E UT1	DPW28	MacArthur Blvd Falmouth	22-May-10	NA	NA
	DPW64	Falmouth Depot	22-May-10	NA	NA
AEP1302E UT1	MIL05	Braintree Armory	9-Apr-09	17-Apr-09	3-Aug-10
	MIL42	Quincy Armory	3-Apr-09	17-Apr-09	Not Completed
AEP1303E UT1	MIL39	Northbridge Armory	18-Jun-09	5-Nov-09	22-Sep-10
	MIL27	Melrose Armory	6-Jun-09	28-Oct-09	Not Completed
AEP1304E UT1	DPW42	Chelmsford Depot	24-Jul-09	30-Mar-10	30-Mar-10
	DPW86	Lawrence Winthrop Ave	11-Jun-09	30-Mar-10	30-Mar-10
AEP1305E UT1	UMA03	Marine Biological Station	4-Mar-10	30-Mar-10	Not Completed
	UMA10	Agricultural Research Station	1-Apr-10	NA	NA
AEP1306E UT1	DPW96	Medford Facility	22-Jun-10	26-Jun-10	Not Completed
	DPWC5	Reading Depot	23-Jun-10	26-Jun-10	Not Completed
AEP1307E UT1	MAUD2	Maudslay State Park	1-Jan-10	29-Jan-10	Not Completed
	BRAD2	Bradley Palmer State Park	18-Aug-09	28-Oct-09	Not Completed
	HALB2	Halibut Point State Park	1-Aug-09	27-Feb-09	Not Completed
	WILB3	Willard Brook State Forest	27-Mar-10	NA	NA
AEP1406E UT1	MDC32	Olsen Memorial Pool	25-May-10	NA	NA
AEP1411 UT1	MDC47	Bryan Memorial Rink	30-Jul-10	NA	NA
AEP1308E UT1	VET01	Vet Cemetery Whichenton	19-Nov-09	19-Feb-10	29-Oct-10
	FWE21	Plum Island Fishery	30-Dec-09	29-Jan-10	29-Oct-10
AEP1310E UT1	TRC96	Falmouth District-Juvenile Court	21-Sep-10	NA	NA
AEP1414E UT1	DPWG3	Westford Depot	22-Sep-10	NA	NA
	DPWE4	DOT Sturbridge Depot	23-Nov-10	NA	NA
AEP1309E UT1	DMR11	LGR Region II Grafton	30-Jan-10	18-Feb-10	Not Completed
AEP1402E UT1	FREE1	Freetown-Fall River State Forest	25-Aug-10	27-Sep-10	Not Completed
	MDC56	Ponkapoag Golf Course	21-Oct-10	NA	NA
	WATS1	Watson Pond State Park	21-Dec-10	NA	NA



Project Number	Site Code	Site Name	Technical Review	Site Inspection	Construction Review
AEP1311E UT1	DMR01	LGR Region 1 Amherst	17-Jul-09	27-Jan-10	9-Dec-10
	DMH29	Gandara MH Center	17-Jul-09	19-Feb-10	4-Dec-10
	MIL40	Pittsfield Armory	31-Mar-10	NA	NA
AEP1314E UT1	FWE27	Roger Reed Salmon Hatchery	30-Apr-10	30-May-10	Not Completed
	LWSP4	Lake Wyola State Park	9-Dec-10	NA	NA
AEP1404E UT1	DPW02	Athol Depot	27-Apr-10	NA	NA
AEP1403E UT1	CHPL4	Sara Jane Sherman Pool	21-Oct-10	NA	NA
	SFPL4	John H. Thomas Memorial Pool	23-Nov-10	NA	NA
AEP1312E UT1	SDH02	Sheriff's Hampden Springfield	25-Jun-10	4-Dec-10	Not Completed
	SDB01	Sherif's Berkshire Old	25-Jun-10	NA	NA
	SDP01	Sheriff's Department Plymouth	25-Nov-10	NA	NA
AEP1409E UT1	DPW09	MDH Becket Depot	9-Dec-10	NA	NA
AEP1405E UT1	MDC81	Ulin Memorial Rink	25-May-10	NA	NA
	MDCC8	Dealtry Pool	30-Apr-10	NA	NA
AEP1401E UT1	MDC33	Bajko Memorial Rink	31-Jul-10	30-Nov-10	Not Completed
	HVRK2	Veterans Memorial Rink	31-Jul-10	NA	NA
	MDC45	Marine Park Reservation (Murphy Rink)	22-Oct-10	NA	NA
	MDC11	Seriti Memorial Rink	24-Nov-10	NA	NA
<b>Comprehensive Sites</b>					
BSB1205 ES1	DCP02	State Transportation Building	28-Aug-10	Not Completed	Not Completed
DCP1329E ES1	DCP27	Mass Information Technology Center	28-Jul-10	NA	NA
NAC1102 EC1	NAC00	Mass College of Liberal Arts	11-May-10	29-Jun-10	Not Completed
TRC1401E ES1	TRC31	Lowell / Lawrence District Court	28-Oct-10	NA	NA
SDF1401E ES1	SDF00	Sheriff's Franklin	16-Sep-10	Not Completed	Not Completed
DCR1302E ES1	MDCD9	Georges Island	22-Nov-10	NA	NA
RCC1301E ES1	RCC00	Roxbury Community College	11-Nov-10	NA	NA
DOC1301E ES1	DOC05	MCI - Framingham	30-Apr-10	Not Completed	Not Completed
CHE1401E ES1	CHE00	Soldiers Home Chelsea	17-Dec-10	NA	NA
SSA1101 ES1	SSA00	Salem State University	25-May-10	Performance Contract	18-Dec-10





Project Number	Site Code	Site Name	Technical Review	Site Inspection	Construction Review
<b>Retro-Commissioning Sites</b>					
CME1501E RX1	CME00	Chief Medical Examiner Boston	Not Completed	Not Completed	Not Completed
DYS1302E RX1	DYS03	Central Youth Service Center	4-Jun-09	24-Jun-09	Not Completed
DES1401E RX1	DES01	Job Center Fall River	Not Completed	NA	NA
<b>New Review Sites</b>					
GCC1402E ES1	GCC00	Greenfield Community College	December 28, 2010	Not Completed	NA
BSC1501E ES1	BCC00	Bridgewater State College	Not Completed	NA	NA

*"Not Completed" indicates QC Review could not be performed because site never reached this level of completion in AEP Phase 1.*

## AEP Phase I Report

### Appendix H

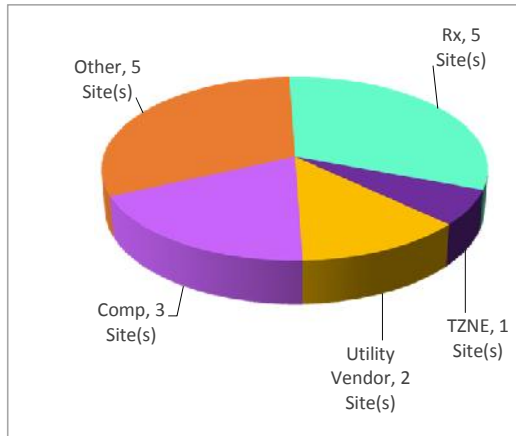
#### Phase I Progress Status – Site Listing by Program Area

(as of December 31, 2014)

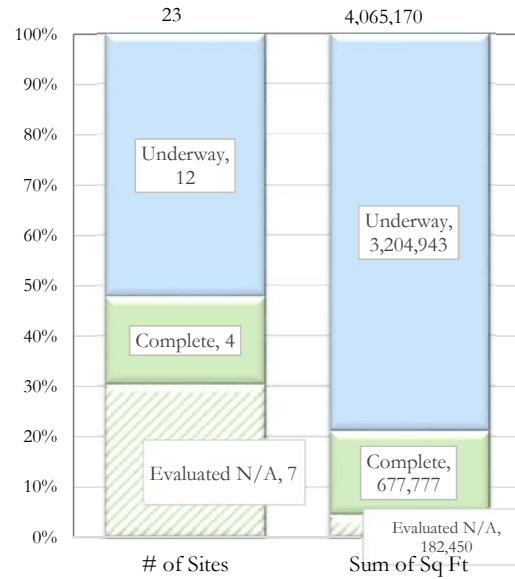
## AEP Phase 1 Progress Summary

## A&F And Misc.

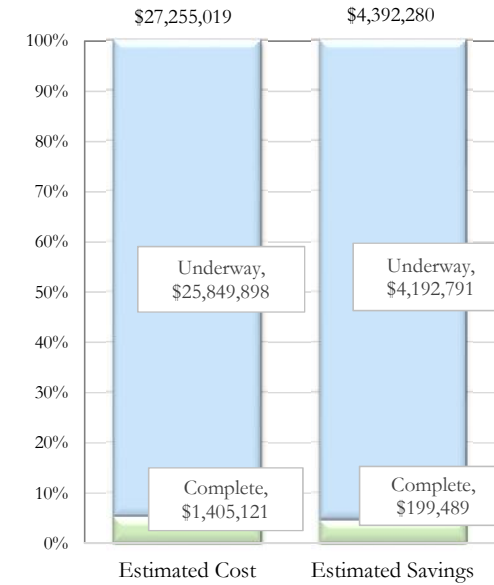
### Implementation Method



### Status



### Financials



Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
<b>A&amp;F And Misc.</b>					-						
Capital Asset Management & Maintenance					-						
BSB00	Hurley Building	1	Boston	347,022	BSB1204 DC1	Other	Audit Complete	\$ -	\$ 300,000	Large	---
BSB01	McCormack Building	1	Boston	800,000	DCPTBD3	Other	Initiated	\$ -	\$ 732,580	Large	---
BSB03	State House	1	Boston	650,000	AEP1306E UT1	Utility Vendor	Implementation Started	\$ 22,341	\$ -	Large	
BSB03	State House	1	Boston	650,000	BSB1201 EC1	FA - Comp	Substantially Complete	\$ 1,285,250	\$ 179,904	Large	No
BSB03	State House	1	Boston	650,000	BSB1402E EC1	FA - Comp	Audit Complete	\$ 6,514,750	\$ 377,143	Large	---
BSB04	Pittsfield State Office Site	1	Pittsfield	54,062	DCP1417 HS2	Other	Audit Complete	\$ -	\$ 41,717	Small	---
BSB05	Springfield State Office Liberty St	1	Springfield	21,000	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
BSB06	Lindemann Building	1	Boston	225,875	DCP1021 ES1	FA - Comp	Audit Complete	\$ 4,468,736	\$ 198,912	Large	---
DCP02	State Transportation Building	1	Boston	901,000	DCP1118 HS1	Other	Audit Complete	\$ -	\$ 1,092,165	Large	---
DCP06	1010 Comm Ave	1	Brookline	53,868	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DCP10	Lancaster Complex OSP	21	Lancaster	176,822	DCP1510E ES1	TZNE	Initiated	\$ 2,121,864	\$ 176,822	Large	---
DCP15	Springfield State Office Dwight St	1	Springfield	125,000	DCP1228 FC1	Other	Implementation Started	\$ -	\$ 116,855	Large	
DCP18	Oakdale Complex OSP	4	West Boylston	41,530	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DCP22	Our Lady Of The Afflicted Rectory	2	Waltham	5,412	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DCP23	North American Indian Affairs	1	Boston	39,000	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DCP24	Old Grafton State Hospital OSP	3	Grafton	2,660	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DCP27	Mass Information Technology Center	1	Chelsea	425,000	DCP1329E ES1	FA - Comp	Audit Complete	\$ 11,216,764	\$ 1,051,706	Large	---
DCP30	Surplus Medfield State Hospital	3	Medfield	18,980	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
Department Of Veterans Services					-						
VET00	Veterans Cemetery Agawam	3	Agawam	9,887	AEP1308E UT1	Utility Vendor	Substantially Complete	\$ 32,771	\$ 3,785	Small	No
VET01	Veterans Cemetery Winchendon	6	Winchendon	10,240	AEP1308E UT1	Utility Vendor	Substantially Complete	\$ 59,200	\$ 2,204	Small	No
Division Of Employment And Training					-						
DES00	Job Center Brockton	1	Brockton	29,562	DES1401E RX1	FA - Rx	Initiated	\$ 227,083	\$ 18,215	Small	---
DES01	Job Center Fall River	1	Fall River	10,600	DES1401E RX1	FA - Rx	Initiated	\$ 112,360	\$ 4,603	Small	---
DES03	Job Center New Bedford	1	New Bedford	10,000	DES1401E RX1	FA - Rx	Initiated	\$ 106,000	\$ 8,833	Small	---
DES04	Job Center Taunton	1	Taunton	7,650	ELW1300 RX1	FA - Rx	Substantially Complete	\$ 27,900	\$ 13,596	Small	Yes
Secretary Of State					-						
SEC00	State Archives Building	1	Boston	100,000	SEC1501E RX1	FA - Rx	Initiated	\$ 1,060,000	\$ 73,239	Small	---
		23		4,065,170							
								\$ 27,255,019	\$ 4,392,280		

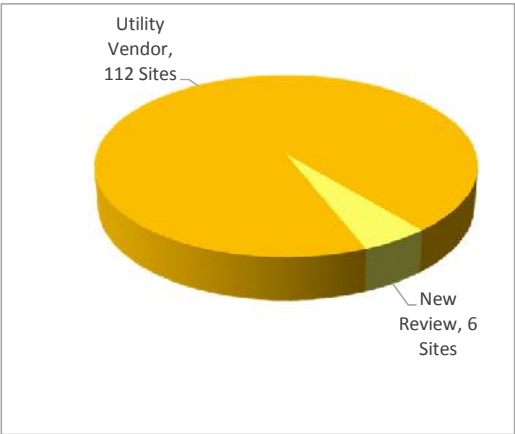




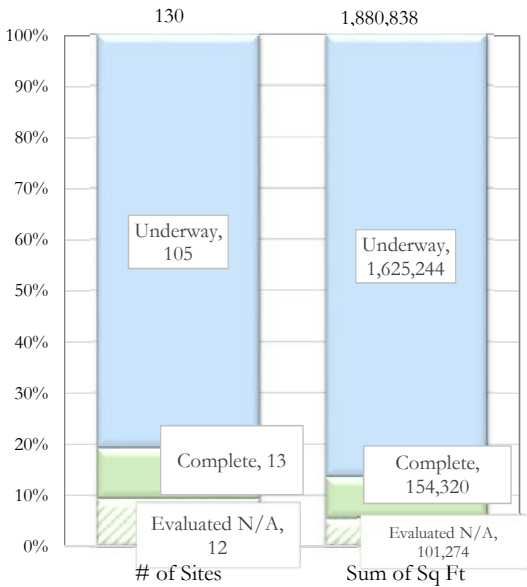
AEP Phase 1 Progress Summary

MassDOT

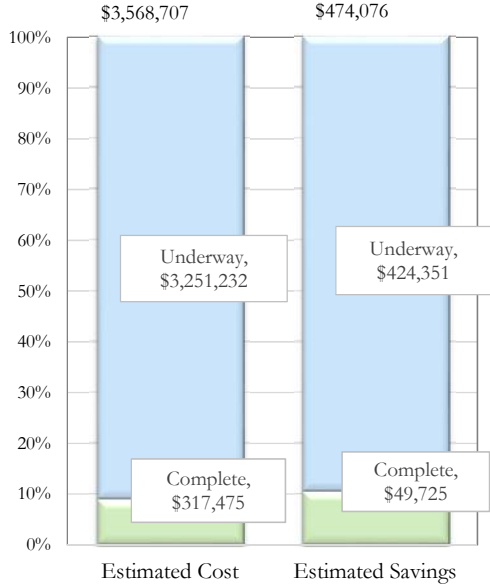
Implementation Method



Status



Financials



Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
<b>MassDOT</b>											
Massachusetts Department Of Transportation											
DPW01	Andover Depot-D4	6	Andover	8,505	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DPW02	Athol Depot-D2	5	Athol	8,900	AEP1404E UT1	Utility Vendor	Audit Complete	\$ 23,976	\$ 5,037	Small	---
DPW03	Avon Depot-D5	5	Avon	8,776	AEP1408E UT1	Utility Vendor	Initiated	\$ 17,552	\$ 1,755	Small	---
DPW06	Barnstable Depot-D5	3	Barnstable	5,032	AEP1407E UT1	Utility Vendor	Implementation Started	\$ 5,333	\$ 743	Small	TBD
DPW07	Park & Ride Facility-D5	4	Barnstable	1,600	AEP1407E UT1	Utility Vendor	Audit Complete	\$ 65,690	\$ 8,055	Small	---
DPW09	Becket Depot-D1	7	Becket	8,902	AEP1409E UT1	Utility Vendor	Initiated	\$ 58,687	\$ 3,091	Small	---
DPW10	Bedford Depot-D4	6	Bedford	8,142	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DPW11	Belchertown Depot-D2	8	Belchertown	9,801	AEP1404E UT1	Utility Vendor	Audit Complete	\$ 49,757	\$ 4,509	Small	---
DPW12	Bernardston Depot-D2	8	Bernardston	19,340	AEP1404E UT1	Utility Vendor	Initiated	\$ 38,680	\$ 3,868	Small	---
DPW15	Salem/Beverly Bridge House-D4	1	Beverly	600	AEP1304E UT1	Utility Vendor	Implementation Started	\$ 4,070	\$ 594	Occasional	Yes
DPW24	Wang Building	2	Boston	104,096	DOT1501E ES1	New Review	Audit Complete	\$ -	\$ 76,239	Large	---
DPW27	So Boston D St Facility - D4	3	Boston	29,568	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	
DPW28	Macarthur Blvd Depot-D5	3	Bourne	5,780	AEP1407E UT1	Utility Vendor	Implementation Started	\$ 3,328	\$ 79	Small	No
DPW29	Sagamore Depot-D5	4	Bourne	14,148	AEP1407E UT1	Utility Vendor	Implementation Started	\$ 25,271	\$ 3,153	Small	Yes
DPW30	Boxborough Depot D3	3	Boxborough	11,500	AEP1506E UT1	Utility Vendor	Initiated	\$ 23,000	\$ 2,300	Small	---
DPW31	Boxford Depot-D4	2	Boxford	5,080	AEP1304E UT1	Utility Vendor	Substantially Complete	\$ 7,969	\$ 1,368	Small	No
DPW32	Boylston Depot-D3	2	Boylston	1,825	AEP1506E UT1	Utility Vendor	Initiated	\$ 3,650	\$ 365	Small	---
DPW33	Braintree Depot-D4	15	Braintree	27,970	AEP1410E UT1	Utility Vendor	Initiated	\$ 55,940	\$ 5,594	Small	---
DPW35	Bridgewater Depot-D5	16	Bridgewater	40,883	AEP1408E UT1	Utility Vendor	Initiated	\$ 81,766	\$ 8,177	Small	---
DPW37	Buckland Depot-D1	5	Buckland	11,109	AEP1409E UT1	Utility Vendor	Initiated	\$ 22,218	\$ 2,222	Small	---
DPW38	Burlington Depot-D4	7	Burlington	8,414	AEP1306E UT1	Utility Vendor	Implementation Started	\$ 5,906	\$ 588	Small	No
DPW41	Charlton Depot-D3	3	Charlton	10,650	AEP1506E UT1	Utility Vendor	Initiated	\$ 21,300	\$ 2,130	Small	---
DPW42	Chelmsford Depot-D4	11	Chelmsford	21,336	AEP1304E UT1	Utility Vendor	Substantially Complete	\$ 47,786	\$ 8,569	Small	No
DPW44	Cohasset Depot-D5	10	Cohasset	19,590	AEP1408E UT1	Utility Vendor	Initiated	\$ 39,180	\$ 3,918	Small	---
DPW46	Crosby Corner Facility	3	Concord	14,000	AEP1306E UT1	Utility Vendor	Implementation Started	\$ 9,498	\$ 1,772	Small	TBD
DPW47	Elm St Facility-D4	4	Concord	20,070	AEP1306E UT1	Utility Vendor	Implementation Started	\$ 30,271	\$ 6,982	Small	No
DPW48	Dalton Depot-D1	7	Dalton	15,818	AEP1409E UT1	Utility Vendor	Initiated	\$ 60,689	\$ 3,329	Small	---
DPW50	Dartmouth Faunce Corner-D5	10	Dartmouth	9,554	AEP1410E UT1	Utility Vendor	Initiated	\$ 19,108	\$ 1,911	Small	---
DPW51	Dartmouth State Road-D5	4	Dartmouth	12,204	AEP1410E UT1	Utility Vendor	Initiated	\$ 24,408	\$ 2,441	Small	---
DPW53	Deerfield Depot-D2	10	Deerfield	43,521	AEP1404E UT1	Utility Vendor	Initiated	\$ 87,042	\$ 8,704	Small	---

Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
DPW54	Dennis Depot-D5	3	Dennis	6,480	AEP1407E UT1	Utility Vendor	Implementation Started	\$ 5,160	\$ 386	Small	No
DPW57	Duxbury Depot-D5	5	Duxbury	11,820	AEP1410E UT1	Utility Vendor	Initiated	\$ 23,640	\$ 2,364	Small	---
DPW59	Erving Depot-D2	4	Erving	7,179	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DPW61	Braga Bridge-D5	3	Fall River	7,120	AEP1408E UT1	Utility Vendor	Initiated	\$ 14,240	\$ 1,424	Small	---
DPW62	Fall River Main/Alton-D5	3	Fall River	2,536	AEP1408E UT1	Utility Vendor	Initiated	\$ 5,072	\$ 507	Small	---
DPW63	State Pier Facility	2	Fall River	96,120	AEP1410E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 19,224	Small	---
DPW64	Falmouth Depot-D5	7	Falmouth	11,132	AEP1407E UT1	Utility Vendor	Implementation Started	\$ 10,938	\$ 1,011	Small	No
DPW67	Foxborough Depot-D5	10	Foxborough	7,876	AEP1408E UT1	Utility Vendor	Initiated	\$ 15,752	\$ 1,575	Small	---
DPW68	Franklin Depot-D3	6	Franklin	15,122	AEP1506E UT1	Utility Vendor	Initiated	\$ 30,244	\$ 3,024	Small	---
DPW69	Freetown Braley Road-D5	5	Freetown	13,556	AEP1410E UT1	Utility Vendor	Initiated	\$ 27,112	\$ 2,711	Small	---
DPW70	Freetown So Main Street-D5	5	Freetown	7,092	AEP1410E UT1	Utility Vendor	Initiated	\$ 14,184	\$ 1,418	Small	---
DPW71	Gloucester Drawbridge-D4	1	Gloucester	680	AEP1304E UT1	Utility Vendor	Substantially Complete	\$ 5,284	\$ 723	Occasional	Yes
DPW73	Goshen Depot-D1	7	Goshen	12,193	AEP1409E UT1	Utility Vendor	Initiated	\$ 24,386	\$ 2,439	Small	---
DPW74	Granby Depot-D2	1	Granby	2,400	AEP1404E UT1	Utility Vendor	Substantially Complete	\$ 3,340	\$ 421	Occasional	Yes
DPW75	Greenfield Depot-D2	2	Greenfield	3,596	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DPW76	Hanover Depot-D5	6	Hanover	12,514	AEP1408E UT1	Utility Vendor	Initiated	\$ 25,028	\$ 2,503	Small	---
DPW78	Haverhill Depot-D4	4	Haverhill	12,705	AEP1304E UT1	Utility Vendor	Substantially Complete	\$ 26,124	\$ 4,015	Small	No
DPW79	Hopkinton Depot-D3	4	Hopkinton	10,906	AEP1414E UT1	Utility Vendor	Audit Complete	\$ 22,761	\$ 1,768	Small	---
DPW80	Hudson Depot 3	2	Hudson	4,060	AEP1506E UT1	Utility Vendor	Initiated	\$ 6,706	\$ 590	Small	---
DPW81	Huntington Depot-D1	3	Huntington	8,191	AEP1409E UT1	Utility Vendor	Initiated	\$ 16,382	\$ 1,638	Small	---
DPW82	Ipswich Depot-D4	4	Ipswich	8,475	AEP1306E UT1	Utility Vendor	Substantially Complete	\$ 3,950	\$ 881	Small	Yes Plus
DPW84	Lancaster Depot-D3	4	Lancaster	14,829	AEP1506E UT1	Utility Vendor	Initiated	\$ 29,658	\$ 2,966	Small	---
DPW85	Lawrence Marsten St Depot-D4	4	Lawrence	12,811	AEP1304E UT1	Utility Vendor	Substantially Complete	\$ 72,509	\$ 12,899	Small	No
DPW86	Lawrence Winthrop Av-D4	2	Lawrence	6,250	AEP1304E UT1	Utility Vendor	Substantially Complete	\$ 7,820	\$ 993	Small	Yes Plus
DPW87	Lee Depot-D1	5	Lee	21,489	AEP1409E UT1	Utility Vendor	Initiated	\$ 42,978	\$ 4,298	Small	---
DPW88	Lenox Depot-D1	7	Lenox	54,409	DOT1501E ES1	New Review	Initiated	\$ 100,000	\$ 10,882	Small	---
DPW90	Lexington/Arlington HQ Depot-D4	16	Arlington	41,689	AEP1306E UT1	Utility Vendor	Substantially Complete	\$ 70,674	\$ 9,413	Small	Yes
DPW93	Littleton Depot-D3	6	Littleton	13,400	AEP1506E UT1	Utility Vendor	Initiated	\$ 26,800	\$ 2,680	Small	---
DPW94	Manchester Depot-D4	2	Manchester	5,800	AEP1304E UT1	Utility Vendor	Implementation Started	\$ 21,974	\$ 2,596	Small	No
DPW95	Mattapoissett Depot-D5	9	Mattapoissett	12,350	AEP1410E UT1	Utility Vendor	Initiated	\$ 24,700	\$ 2,470	Small	---
DPW96	Medford Facility-D4	2	Medford	29,768	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	

Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
DPW97	Methuen Pleasant Facility-D4	1	Andover	360	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DPW98	Middleborough Bridge-D5	3	Middleborough	7,852	AEP1408E UT1	Utility Vendor	Initiated	\$ 15,704	\$ 1,570	Small	---
DPW99	Middleborough Garage-D5	3	Middleborough	37,944	AEP1408E UT1	Utility Vendor	Initiated	\$ 75,888	\$ 7,589	Small	---
DPWA0	Middleborough Maintenance-D5	5	Middleborough	7,535	AEP1408E UT1	Utility Vendor	Initiated	\$ 15,070	\$ 1,507	Small	---
DPWA1	Middleborough Traffic-D5	7	Middleborough	7,972	AEP1408E UT1	Utility Vendor	Initiated	\$ 15,944	\$ 1,594	Small	---
DPWA2	Millbury Depot-D3	6	Millbury	17,094	AEP1506E UT1	Utility Vendor	Initiated	\$ 34,188	\$ 3,419	Small	---
DPWA3	Milton Depot-D4	7	Milton	18,628	AEP1410E UT1	Utility Vendor	Initiated	\$ 37,256	\$ 3,726	Small	---
DPWA6	Newbury Depot-D4	9	Newbury	8,815	AEP1304E UT1	Utility Vendor	Substantially Complete	\$ 21,093	\$ 2,763	Small	Yes
DPWA8	North Adams Depot-D1	4	North Adams	14,555	AEP1409E UT1	Utility Vendor	Initiated	\$ 29,110	\$ 2,911	Small	---
DPWA9	North Attleborough Depot-D5	8	North Attleboro	11,344	AEP1408E UT1	Utility Vendor	Initiated	\$ 22,688	\$ 2,269	Small	---
DPWB2	Northampton Headquarters D2	3	Northampton	26,194	DOT1501E ES1	New Review	Initiated	\$ 52,388	\$ 5,239	Small	---
DPWB3	Northampton Rte 5 Depot-D2	6	Northampton	14,504	AEP1404E UT1	Utility Vendor	Audit Complete	\$ 20,059	\$ 2,598	Small	---
DPWB4	Northampton Rte 9 Depot-D2	3	Northampton	10,820	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DPWB5	Northborough Depot-D3	3	Northborough	8,372	AEP1506E UT1	Utility Vendor	Initiated	\$ 16,744	\$ 1,674	Small	---
DPWB6	Norton Depot-D5	7	Norton	8,368	AEP1408E UT1	Utility Vendor	Initiated	\$ 16,736	\$ 1,674	Small	---
DPWB7	Orange Depot-D2	2	Orange	6,951	AEP1404E UT1	Utility Vendor	Audit Complete	\$ 26,142	\$ 4,356	Small	---
DPWB8	Orleans Depot-D5	4	Orleans	17,952	AEP1407E UT1	Utility Vendor	Implementation Started	\$ 30,668	\$ 3,655	Small	TBD
DPWB9	Otis Depot-D1	4	Otis	11,849	AEP1409E UT1	Utility Vendor	Initiated	\$ 23,698	\$ 2,370	Small	---
DPWC0	Oxford Depot-D3	7	Oxford	17,862	AEP1506E UT1	Utility Vendor	Initiated	\$ 35,724	\$ 3,572	Small	---
DPWC1	Palmer Depot-D2	7	Palmer	7,823	AEP1404E UT1	Utility Vendor	Audit Complete	\$ 11,363	\$ 1,481	Small	---
DPWC2	Peabody/State Police Barracks4	5	Peabody	17,050	AEP1306E UT1	Utility Vendor	Implementation Started	\$ 19,791	\$ 3,669	Small	Yes Plus
DPWC3	Pittsfield Depot-D1	8	Pittsfield	21,836	AEP1409E UT1	Utility Vendor	Initiated	\$ 43,672	\$ 4,367	Small	---
DPWC4	Plymouth Depot-D5	9	Carver	9,988	AEP1410E UT1	Utility Vendor	Initiated	\$ -	\$ -	Small	---
DPWC5	Reading Depot-D4	6	Reading	4,998	AEP1306E UT1	Utility Vendor	Implementation Started	\$ 40,109	\$ 8,787	Small	Yes Plus
DPWC7	Revere Depot-D4	6	Revere	17,494	AEP1304E UT1	Utility Vendor	Substantially Complete	\$ 32,609	\$ 4,242	Small	No
DPWC8	Rowley Depot-D4	5	Rowley	12,585	AEP1306E UT1	Utility Vendor	Substantially Complete	\$ 15,967	\$ 3,042	Small	TBD
DPWC9	Rutland Depot-D3	4	Rutland	10,310	AEP1506E UT1	Utility Vendor	Initiated	\$ 20,620	\$ 2,062	Small	---
DPWD0	Salisbury Depot-D4	8	Salisbury	8,110	AEP1304E UT1	Utility Vendor	Implementation Started	\$ 11,951	\$ 1,722	Small	Yes Plus
DPWD1	Sandwich Depot-D5	9	Sandwich	9,446	AEP1407E UT1	Utility Vendor	Implementation Started	\$ 19,922	\$ 1,790	Small	TBD
DPWD2	Seekonk Depot-D5	4	Seekonk	5,044	AEP1408E UT1	Utility Vendor	Initiated	\$ 10,088	\$ 1,009	Small	---
DPWD4	Sheffield Depot-D1	4	Sheffield	13,929	AEP1409E UT1	Utility Vendor	Initiated	\$ 27,858	\$ 2,786	Small	---
DPWE0	South Hadley Depot-D2	7	South Hadley	15,057	AEP1404E UT1	Utility Vendor	Initiated	\$ 30,114	\$ 3,011	Small	---
DPWE1	Springfield Depot-D2	3	Springfield	8,331	AEP1404E UT1	Utility Vendor	Implementation Started	\$ 10,976	\$ 1,687	Small	No

Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
DPWE2	Sterling Depot-D3	6	Sterling	26,418	AEP1506E UT1	Utility Vendor	Initiated	\$ 52,836	\$ 5,284	Small	---
DPWE3	Stoughton Depot-D5	8	Stoughton	9,925	AEP1408E UT1	Utility Vendor	Initiated	\$ 19,850	\$ 1,985	Small	---
DPWE4	Sturbridge Depot-D3	5	Sturbridge	16,460	AEP1414E UT1	Utility Vendor	Audit Complete	\$ 32,649	\$ 4,904	Small	---
DPWE5	Sudbury Depot-D3	3	Sudbury	13,420	AEP1414E UT1	Utility Vendor	Audit Complete	\$ 30,920	\$ 2,762	Small	---
DPWE6	Swansea Depot-D5	6	Swansea	13,084	AEP1408E UT1	Utility Vendor	Initiated	\$ 26,168	\$ 2,617	Small	---
DPWE7	Taunton Administration-D5	5	Taunton	41,510	DOT1501E ES1	New Review	Initiated	\$ 440,006	\$ 32,032	Small	---
DPWE8	Taunton Bridges-D5	8	Taunton	12,636	AEP1408E UT1	Utility Vendor	Initiated	\$ 25,272	\$ 2,527	Small	---
DPWF0	Tewksbury Depot-D4	8	Tewksbury	18,658	AEP1304E UT1	Utility Vendor	Implementation Started	\$ 24,566	\$ 4,095	Small	Yes Plus
DPWF1	Townsend Depot-D3	5	Townsend	26,200	AEP1414E UT1	Utility Vendor	Audit Complete	\$ 36,936	\$ 7,991	Small	---
DPWF2	Truro Depot-D5	3	Truro	8,972	AEP1407E UT1	Utility Vendor	Implementation Started	\$ 9,782	\$ 711	Small	TBD
DPWF3	Upton Depot-D3	8	Upton	14,223	AEP1414E UT1	Utility Vendor	Audit Complete	\$ 18,708	\$ 2,160	Small	---
DPWF4	Uxbridge Depot-D3	5	Uxbridge	9,732	AEP1414E UT1	Utility Vendor	Audit Complete	\$ 12,980	\$ 1,635	Small	---
DPWF5	Sharon Walpole Depot-D5	10	Walpole	16,904	AEP1410E UT1	Utility Vendor	Initiated	\$ 33,808	\$ 3,381	Small	---
DPWF6	Ware Depot-D2	1	Ware	4,000	AEP1404E UT1	Utility Vendor	Substantially Complete	\$ 2,350	\$ 396	Occasional	Yes
DPWF7	Wareham Depot-D5	8	Wareham	10,358	AEP1410E UT1	Utility Vendor	Initiated	\$ 20,716	\$ 2,072	Small	---
DPWG0	West Brookfield Facility-D2	4	West Brookfield	7,314	AEP1506E UT1	Utility Vendor	Initiated	\$ 14,628	\$ 1,463	Small	---
DPWG1	West Springfield Depot D2	6	West Springfield	20,245	AEP1404E UT1	Utility Vendor	Audit Complete	\$ 58,277	\$ 8,679	Small	---
DPWG2	Westfield Depot D2	3	Westfield	9,920	AEP1404E UT1	Utility Vendor	Implementation Started	\$ 17,399	\$ 2,764	Small	Yes
DPWG3	Westford Depot-D3	4	Westford	15,280	AEP1414E UT1	Utility Vendor	Audit Complete	\$ 31,414	\$ 3,224	Small	---
DPWG4	Westminster Depot-D3	8	Westminster	13,972	AEP1414E UT1	Utility Vendor	Audit Complete	\$ 13,708	\$ 1,492	Small	---
DPWG5	Westwood Depot-D4	10	Westwood	22,064	AEP1410E UT1	Utility Vendor	Initiated	\$ 44,128	\$ 4,413	Small	---
DPWG6	Whitman Depot-D5	11	Whitman	13,278	AEP1408E UT1	Utility Vendor	Initiated	\$ 26,556	\$ 2,656	Small	---
DPWG7	Williamstown Depot-D1	8	Williamstown	9,300	AEP1409E UT1	Utility Vendor	Initiated	\$ 18,600	\$ 1,860	Small	---
DPWG8	Winchendon Depot D-2	7	Winchendon	8,309	AEP1404E UT1	Utility Vendor	Audit Complete	\$ 12,328	\$ 1,394	Small	---
DPWG9	Windsor Radio Tower-D1	2	Windsor	936	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DPWH2	Worcester Headquarters-D3	9	Worcester	25,477	DOT1501E ES1	New Review	Initiated	\$ 50,954	\$ 5,095	Small	---
DPWH3	Wrentham Depot-D5	9	Wrentham	20,123	AEP1408E UT1	Utility Vendor	Initiated	\$ 40,246	\$ 4,025	Small	---
DPWH4	Yarmouth Depot-D5	10	Yarmouth	8,764	AEP1407E UT1	Utility Vendor	Implementation Started	\$ 26,410	\$ 3,097	Small	TBD
DPWH5	Framingham Facility D3	3	Framingham	4,396	AEP1414E UT1	Utility Vendor	Audit Complete	\$ 20,561	\$ 679	Small	---
DPWH6	Dedham Depot-D4	3	Framingham	6,160	AEP1410E UT1	Utility Vendor	Initiated	\$ 12,320	\$ 1,232	Small	---
DPWH9	Carver Depot-D5	1	Carver	2,400	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DPWI3	Lexington/Arlington HQ Depot-D4	3	Arlington	38,416	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Small	---
DPWI3	Lexington/Arlington HQ Depot-D4	3	Arlington	38,416	DOT1501E ES1	New Review	Initiated	\$ -	\$ -	Small	---
DPWTBD1	Foxhill Bridgehouse	(blank)	Lynn	(blank)	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A

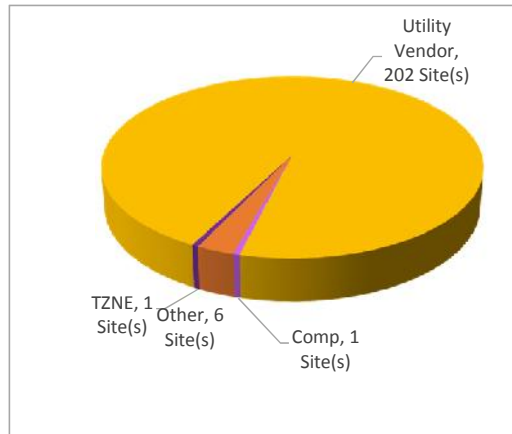


Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
DPWTBD2	Lowell 131	(blank)	Lowell	(blank)	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DPWTBD3	Plymouth Rt 25 Visitor Center	1	Plymouth	1,950	AEP1410E UT1	Utility Vendor	Initiated	\$ -	\$ -	Small	---
DPWTBD4	Dartmouth Office & Garage	1	Dartmouth	11,800	AEP1410E UT1	Utility Vendor	Initiated	\$ -	\$ -	Small	---
<b>Grand Total</b>		<b>130</b>		<b>1,880,838</b>				<b>\$ 3,568,707</b>	<b>\$ 474,076</b>		

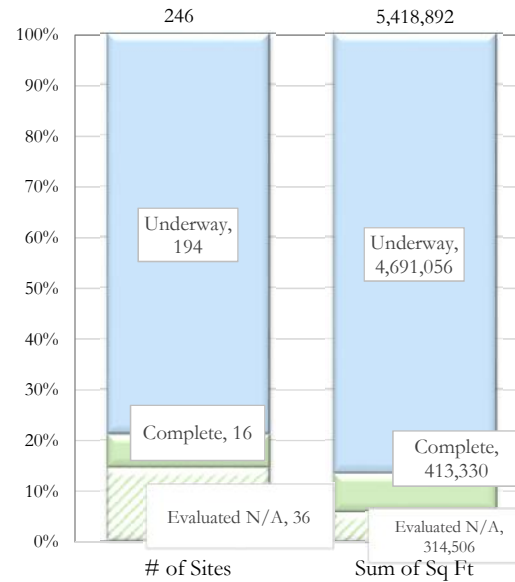
## AEP Phase 1 Progress Summary

## Energy And Environmental Affairs

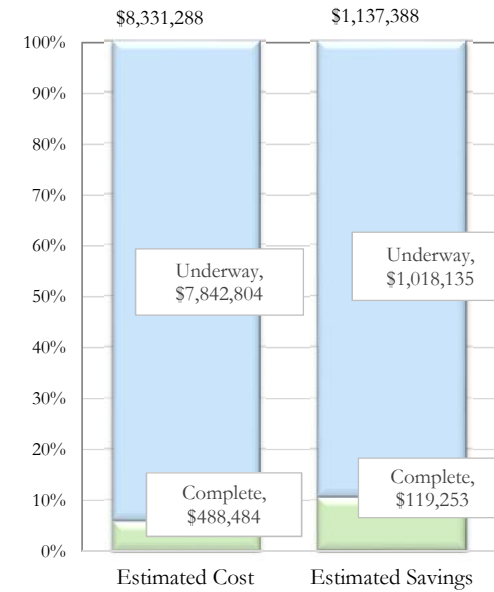
### Implementation Method



### Status



### Financials



Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
<b>Energy And Environmental Affairs</b>											
Department Of Conservation And Recreation											
AGAP4	Agawam State Pool- Agawam	4	Agawam	9,196	AEP1403E UT1	Utility Vendor	Initiated	\$ 1,575	\$ 967	Occasional	---
AMES2	Ames Nowell State Park- Abington	5	Abington	2,818	AEP1501E UT1	Utility Vendor	Initiated	\$ 5,636	\$ 564	Occasional	---
ASHL3	Ashland State Park	3	Ashland	1,937	AEP1501E UT1	Utility Vendor	Initiated	\$ 3,874	\$ 387	Occasional	---
ATTP1	Spatcher Pool	5	Attleboro	9,628	AEP1402E UT1	Utility Vendor	Initiated	\$ 19,256	\$ 1,926	Occasional	---
AUBR3	Horgan Memorial Skating Rink	1	Auburn	31,844	AEP1412E UT1	Utility Vendor	Initiated	\$ 63,688	\$ 6,369	Occasional	---
BEAR5	Beartown State Forest	15	Monterey	15,324	AEP1314E UT1	Utility Vendor	Initiated	\$ 30,648	\$ 3,065	Occasional	---
BFPL3	Bennett Field Pool	3	Worcester	12,210	AEP1412E UT1	Utility Vendor	Initiated	\$ 38,360	\$ 2,274	Occasional	---
BLST3	Blackstone River Heritage Park	4	Uxbridge	10,672	AEP1412E UT1	Utility Vendor	Initiated	\$ 27,090	\$ 2,797	Occasional	---
BRAD2	Bradley Palmer State Park	21	Topsfield	70,104	AEP1307E UT1	Utility Vendor	Implementation Started	\$ 60,096	\$ 7,415	Occasional	No
BREW1	Brewster State Forest	7	Brewster	39,405	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
BRIM4	Brimfield State Forest	12	Brimfield	16,826	AEP1403E UT1	Utility Vendor	Initiated	\$ 4,285	\$ 695	Occasional	---
BRRK2	John G Asiaf Memorial Rink	6	Brockton	45,219	AEP1503E UT1	Utility Vendor	Initiated	\$ 90,438	\$ 9,044	Occasional	---
CALL3	Callahan State Park	3	Framingham	2,930	AEP1415E UT1	Utility Vendor	Initiated	\$ 5,860	\$ 586	Occasional	---
CHBL5	Chester/Blandford State Forest	10	Chester	8,132	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 1,010	\$ 312	Occasional	---
CHIP4	Chicopee State Park	9	Chicopee	12,345	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 9,485	\$ 1,470	Occasional	---
CHPL4	Sara Jane Sherman Memorial Pool	3	Chicopee	9,910	AEP1403E UT1	Utility Vendor	Initiated	\$ 31,677	\$ 2,701	Occasional	---
CLNT3	Clinton Pool	5	Clinton	11,725	AEP1412E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 17,011	Occasional	---
CLSF5	Clarksburg State Park	8	Clarksburg	7,550	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 11,945	\$ 1,522	Occasional	---
COCH3	Cochituate State Park	14	Wayland	11,437	AEP1501E UT1	Utility Vendor	Initiated	\$ 22,874	\$ 2,287	Occasional	---
CORR1	Marthas Vineyard State Forest	6	Edgartown	7,538	AEP1407E UT1	Utility Vendor	Audit Complete	\$ 7,673	\$ 1,486	Occasional	---
CRGW4	Connecticut River Greenway	10	Northampton	9,082	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 4,897	\$ 593	Occasional	---
DARF5	D.a.r. State Forest	22	Goshen	10,467	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 22,921	\$ 3,478	Occasional	---
DEML1	Demarest Lloyd State Park	5	Dartmouth	2,530	AEP1501E UT1	Utility Vendor	Initiated	\$ 5,060	\$ 506	Occasional	---
DIGR1	Dighton Rock State Park	5	Berkley	2,777	AEP1402E UT1	Utility Vendor	Initiated	\$ 5,554	\$ 555	Occasional	---
DOUG3	Douglas State Forest	10	Douglas	15,155	AEP1412E UT1	Utility Vendor	Initiated	\$ 5,246	\$ 898	Occasional	---
ELLS1	Ellisville Harbor State Park	5	Plymouth	8,052	AEP1501E UT1	Utility Vendor	Initiated	\$ 16,104	\$ 1,610	Occasional	---
ERVV4	Erving State Forest	16	Erving	8,932	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 18,639	\$ 1,596	Occasional	---
FD011	Fire District1(Shawme Crowel S.R)	16	Sandwich	5,622	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
FGIL1	F. Gilbert Hills State Forest	7	Foxborough	12,572	AEP1402E UT1	Utility Vendor	Initiated	\$ 22,434	\$ 268	Occasional	---
FITP3	Fitchburg Pool	4	Fitchburg	8,209	AEP1502E UT1	Utility Vendor	Initiated	\$ 30,660	\$ 588	Occasional	---
FKRK1	Veterans Memorial Rink Franklin	1	Franklin	33,000	AEP1402E UT1	Utility Vendor	Initiated	\$ 66,000	\$ 6,600	Occasional	---
FREE1	Freetown Fall River State Forest	14	Freetown	8,959	AEP1402E UT1	Utility Vendor	Audit Complete	\$ 13,722	\$ 1,146	Occasional	---
FRHP1	Heritage State Park	2	Fall River	16,125	AEP1402E UT1	Utility Vendor	Audit Complete	\$ 52,676	\$ 6,478	Occasional	---
FRPL1	Lafayette Pool	3	Fall River	8,624	AEP1501E UT1	Utility Vendor	Initiated	\$ 17,248	\$ 1,725	Occasional	---
FRRK1	Driscoll Skating Rink	1	Fall River	35,865	AEP1503E UT1	Utility Vendor	Initiated	\$ 71,730	\$ 7,173	Occasional	---
FTPH1	Fort Phoenix Beach Reservation	4	Fairhaven	5,628	AEP1402E UT1	Utility Vendor	Audit Complete	\$ 10,664	\$ 719	Occasional	---
GBFM2	Great Brook Farm State Park	24	Carlisle	54,416	AEP1415E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 10,883	Occasional	---

Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
GCSP2	Greycourt State Park	2	Methuen	6,200	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 14,030	\$ 898	Occasional	---
GDRK4	Skating Rink Gardner	1	Gardner	31,720	AEP1412E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 25,538	Occasional	---
GHSP4	Gardner Heritage State Park	(blank)	Gardner	(blank)	AEP1502E UT1	Utility Vendor	Initiated	\$ 15,370	\$ 2,927	Occasional	---
GRAN5	Granville State Forest	7	Granville	3,940	AEP1502E UT1	Utility Vendor	Initiated	\$ 7,880	\$ 788	Occasional	---
GRRK4	Collins-Moylan Rink	1	Greenfield	31,800	AEP1403E UT1	Utility Vendor	Initiated	\$ 41,364	\$ 2,609	Occasional	---
GSPL2	Geisler Memorial Pool	5	Lawrence	12,700	AEP1415E UT1	Utility Vendor	Initiated	\$ 9,725	\$ 1,910	Occasional	---
HALB2	Halibut Point State Reservation	6	Rockport	16,027	AEP1307E UT1	Utility Vendor	Implementation Started	\$ 19,983	\$ 2,664	Occasional	No
HAMP4	Hampton Ponds State Park	11	Westfield	20,260	AEP1314E UT1	Utility Vendor	Initiated	\$ 9,638	\$ 1,366	Occasional	---
HARP2	Harold Parker State Forest	16	North Reading	10,144	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 19,340	\$ 4,076	Occasional	---
HBCH1	Horseneck Beach Reservation	19	Westport	20,072	AEP1501E UT1	Utility Vendor	Initiated	\$ 40,144	\$ 4,014	Occasional	---
HGPL2	Higgins Pool	4	Lawrence	11,689	AEP1415E UT1	Utility Vendor	Initiated	\$ 4,125	\$ 392	Occasional	---
HHSP4	Holyoke Heritage State Park	3	Holyoke	93,900	AEP1403E UT1	Utility Vendor	Initiated	\$ 20,806	\$ 3,370	Occasional	---
HKRK4	Henry J Fitzpatrick Rink	1	Holyoke	27,921	AEP1403E UT1	Utility Vendor	Initiated	\$ 52,263	\$ 9,843	Occasional	---
HKSP4	Mt.holyoke Range State Park	7	Amherst	10,992	AEP1502E UT1	Utility Vendor	Initiated	\$ 21,984	\$ 2,198	Occasional	---
HPSP3	Hopkinton State Park	12	Hopkinton	17,164	AEP1405E UT1	Utility Vendor	Audit Complete	\$ 44,225	\$ 5,970	Occasional	---
HVRK2	Veterans Memorial Rink Haverhil	2	Haverhill	33,412	AEP1401E UT1	Utility Vendor	Audit Complete	\$ 83,853	\$ 5,762	Occasional	---
LDEN4	Lake Dennison Recreation Area	9	Winchendon	3,334	AEP1502E UT1	Utility Vendor	Initiated	\$ 16,869	\$ 2,419	Occasional	---
LDPL4	John Thompson Pool	4	Ludlow	7,757	AEP1403E UT1	Utility Vendor	Initiated	\$ 17,712	\$ 6,294	Occasional	---
LLHP2	Lowell Heritage State Park	16	Lowell	22,811	AEP1415E UT1	Utility Vendor	Initiated	\$ 45,622	\$ 4,562	Occasional	---
LLOR4	Lake Lorraine State Park	1	Springfield	2,000	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
LLPL2	Raymond Lord Pool	4	Lowell	11,577	AEP1415E UT1	Utility Vendor	Initiated	\$ 23,154	\$ 2,315	Occasional	---
LLRK2	John Janas Skating Rink	1	Lowell	30,000	AEP1503E UT1	Utility Vendor	Audit Complete	\$ 94,691	\$ 13,206	Occasional	---
LMPL3	Leominster Pool	5	Leominster	9,700	AEP1412E UT1	Utility Vendor	Initiated	\$ 46,845	\$ 4,184	Occasional	---
LMSF3	Leominster State Forest	10	Westminster	6,798	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 10,290	\$ 1,365	Occasional	---
LWHP2	Lawrence Heritage State Park	5	Lawrence	30,897	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 49,910	\$ 9,324	Occasional	---
LWSP4	Lake Wyola State Park	4	Shutesbury	5,352	AEP1314E UT1	Utility Vendor	Initiated	\$ 10,704	\$ 1,070	Occasional	---
MASS1	Massasoit State Park	9	Taunton	9,780	AEP1501E UT1	Utility Vendor	Initiated	\$ 19,560	\$ 1,956	Occasional	---
MAUD2	Maudslay State Park	25	Newburyport	32,317	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 9,870	\$ 1,269	Occasional	---
MDC00	Mystic River Reservation	3	Arlington	2,512	AEP1415E UT1	Utility Vendor	Initiated	\$ 5,024	\$ 502	Occasional	---
MDC03	Quabbin/Ware HQ & Park	28	Belchertown	53,952	AEP1403E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 10,790	Occasional	---
MDC04	Beaver Brook Reservation	7	Belmont	9,259	AEP1415E UT1	Utility Vendor	Initiated	\$ 18,518	\$ 1,852	Occasional	---
MDC11	Steriti Memorial Rink	1	Boston	40,800	AEP1503E UT1	Utility Vendor	Audit Complete	\$ 80,956	\$ 7,605	Occasional	---
MDC12	Science Pk/Craigie Bridge/Locs	3	Boston	11,300	AEP1507E UT1	Utility Vendor	Initiated	\$ 22,600	\$ 2,260	Small	---
MDC13	Charles River Rsrv/Allston Pool	3	Boston	12,800	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MDC14	MDC Brighton Upper Basin Facility	5	Boston	64,700	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MDC15	Pool & Rink/Reilly Memorial	2	Boston	40,862	AEP1503E UT1	Utility Vendor	Audit Complete	\$ 97,659	\$ 14,575	Occasional	---
MDC16	Pool/Artesani	2	Boston	4,120	AEP1507E UT1	Utility Vendor	Initiated	\$ 8,240	\$ 824	Occasional	---
MDC17	Rink/Daly Memorial	3	Boston	33,000	AEP1507E UT1	Utility Vendor	Initiated	\$ 66,000	\$ 6,600	Occasional	---
MDC18	Charles River Dam	1	Boston	32,000	AEP1507E UT1	Utility Vendor	Initiated	\$ 64,000	\$ 6,400	Small	---

Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
MDC19	Emmons H Oneill Memorial Rink	1	Boston	30,000	ZDOERRINKS	Other	Substantially Complete	\$ 110,600	\$ 17,362	Occasional	TBD
MDC1A	Shea Memorial Rink	1	Quincy	30,000	AEP1507E UT1	Utility Vendor	Initiated	\$ 60,000	\$ 6,000	Occasional	---
MDC1B	Ware River Watershed	3	Oakham	4,848	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 9,820	\$ 2,127	Occasional	---
MDC1C	Middlesex Fells North Central Facil	10	Stoneham	46,454	AEP1415E UT1	Utility Vendor	Initiated	\$ 92,908	\$ 9,291	Small	---
MDC20	Beake Bridge	1	Boston	288	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MDC21	Harbor Region Headquarters	1	Boston	12,750	AEP1406E UT1	Utility Vendor	Audit Complete	\$ 380	\$ 135	Small	---
MDC22	Malibu Beach	5	Boston	2,356	AEP1406E UT1	Utility Vendor	Audit Complete	\$ 52,404	\$ 2,687	Occasional	---
MDC23	MDC Warehouse	1	Boston	4,000	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MDC24	Old Colony Division Maint Facility	2	Boston	33,200	AEP1406E UT1	Utility Vendor	Audit Complete	\$ 21,240	\$ 2,837	Small	---
MDC25	Rink/Devine Memorial	1	Boston	40,000	AEP1401E UT1	Utility Vendor	Audit Complete	\$ 92,245	\$ 10,484	Occasional	---
MDC25	Rink/Devine Memorial	1	Boston	40,000	DOER Rinks	Other	Substantially Complete	\$ -	\$ 23,150	Occasional	TBD
MDC26	Tenean Beach	6	Boston	1,672	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MDC27	Constitution Beach	6	Boston	33,700	AEP1406E UT1	Utility Vendor	Audit Complete	\$ 19,730	\$ 3,546	Occasional	---
MDC29	Brainard Street House	3	Boston	6,524	AEP1406E UT1	Utility Vendor	Audit Complete	\$ 7,990	\$ 942	Small	---
MDC31	Neponset River Park Reservation	8	Boston	1,732	AEP1406E UT1	Utility Vendor	Audit Complete	\$ 7,890	\$ 637	Occasional	---
MDC32	Pool/Olsen Memorial	3	Boston	48,000	AEP1406E UT1	Utility Vendor	Audit Complete	\$ 49,368	\$ 5,909	Occasional	---
MDC33	Rink/Bajko Memorial	1	Boston	45,000	DOER Rinks	Other	Substantially Complete	\$ -	\$ -	Occasional	TBD
MDC33	Rink/Bajko Memorial	1	Boston	45,000	AEP1503E UT1	Utility Vendor	Audit Complete	\$ 98,324	\$ 9,071	Occasional	---
MDC34	Stony Brook Div Maint Facility	1	Boston	7,586	AEP1406E UT1	Utility Vendor	Audit Complete	\$ 9,260	\$ 1,803	Occasional	---
MDC35	Stony Brook Reservation	3	Boston	8,080	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MDC37	Kelly Rink	6	Boston	1,500	AEP1401E UT1	Utility Vendor	Audit Complete	\$ 40,075	\$ 1,786	Occasional	---
MDC38	Southwest Corridor Park	4	Boston	17,000	AEP1406E UT1	Utility Vendor	Initiated	\$ 79,348	\$ 11,557	Occasional	---
MDC41	Cass Memorial Pool	2	Boston	5,900	AEP1411E UT1	Utility Vendor	Initiated	\$ 11,800	\$ 1,180	Occasional	---
MDC43	Carson Beach	12	Boston	12,436	AEP1411E UT1	Utility Vendor	Initiated	\$ 24,872	\$ 2,487	Occasional	---
MDC44	Castle Island	20	Boston	189,213	AEP1411E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 37,843	Occasional	---
MDC45	Marine Park Reservation	7	Boston	37,480	DOER Rinks	Other	Substantially Complete	\$ -	\$ -	Occasional	TBD
MDC45	Marine Park Reservation	7	Boston	37,480	AEP1503E UT1	Utility Vendor	Audit Complete	\$ 100,000	\$ 13,152	Occasional	---
MDC46	Charles River Resvn/havey Beach	1	Boston	1,500	AEP1411E UT1	Utility Vendor	Initiated	\$ 3,000	\$ 300	Occasional	---
MDC47	Rink/Bryan Memorial	1	Boston	39,000	AEP1411E UT1	Utility Vendor	Audit Complete	\$ 28,538	\$ 3,919	Occasional	---
MDC52	Veterans Memorial Pool Cambridge	3	Cambridge	7,400	AEP1411E UT1	Utility Vendor	Initiated	\$ 14,800	\$ 1,480	Occasional	---
MDC53	Pool/McCrehan Memorial	2	Cambridge	3,000	AEP1411E UT1	Utility Vendor	Initiated	\$ 6,000	\$ 600	Occasional	---
MDC54	Rink/Simoni Memorial	1	Cambridge	33,000	AEP1411E UT1	Utility Vendor	Initiated	\$ 66,000	\$ 6,600	Occasional	---



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MDC56	Golf Course/Ponkapoag	7	Canton	19,590	AEP1402E UT1	Utility Vendor	Initiated	\$ 39,180	\$ 3,918	Occasional	---
MDC57	Pool/Vietnam Veterans Memorial	3	Chelsea	8,354	AEP1411E UT1	Utility Vendor	Initiated	\$ 16,708	\$ 1,671	Occasional	---
MDC59	Wachusett Resvr Watershed	21	Clinton	32,315	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 17,760	\$ 2,796	Occasional	---
MDC60	Wachusett Reservoir Watershed	10	Clinton	26,260	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MDC62	Elm Bank Reservation	11	Wellesley	81,083	AEP1408E UT1	Utility Vendor	Audit Complete	\$ 100,000	\$ 17,892	Small	---
MDC64	Allied Veterans Memorial Pool/Rink	3	Everett	57,500	AEP1507E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 11,500	Occasional	---
MDC65	Quabbin Fishing Area 3	5	Hardwick	809	AEP1502E UT1	Utility Vendor	Initiated	\$ 1,618	\$ 162	Occasional	---
MDC68	Fort Revere Reservation	4	Hull	9,284	AEP1402E UT1	Utility Vendor	Initiated	\$ 18,568	\$ 1,857	Occasional	---
MDC69	Nantasket Beach Reservation	10	Hull	38,415	ZDCRPILOT	Other	Substantially Complete	\$ 50,087	\$ 16,483	Occasional	TBD
MDC71	Peddocks Island	7	Hull	35,758	AEP1501E UT1	Utility Vendor	Initiated	\$ 71,516	\$ 7,152	Occasional	---
MDC72	MDC Mystic Dist/Bait Shop	1	Lynn	4,096	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MDC73	Rink/William Connerly Memorial	1	Lynn	35,000	AEP1401E UT1	Utility Vendor	Audit Complete	\$ 70,696	\$ 9,448	Occasional	---
MDC74	Middlesex Fells Reservation	4	Malden	1,344	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 7,600	\$ 723	Occasional	---
MDC75	Holland Memorial Pool	2	Malden	13,825	AEP1507E UT1	Utility Vendor	Initiated	\$ 27,650	\$ 2,765	Occasional	---
MDC77	Flynn Memorial Rink	1	Medford	28,500	AEP1503E UT1	Utility Vendor	Audit Complete	\$ 88,949	\$ 12,825	Occasional	---
MDC78	Blue Hills Division Maint Facility	9	Milton	29,240	AEP1411E UT1	Utility Vendor	Initiated	\$ 58,480	\$ 5,848	Occasional	---
MDC79	Blue Hills Reservation	72	Milton	103,371	DCP1501E ES1	FA - Comp	Initiated	\$ 100,000	\$ 20,674	Occasional	---
MDC80	Neponset District Special Services	1	Milton	4,028	AEP1405E UT1	Utility Vendor	Audit Complete	\$ 5,474	\$ 517	Small	---
MDC81	Rink/Ulin Memorial	1	Milton	54,000	AEP1405E UT1	Utility Vendor	Substantially Complete	\$ 95,498	\$ 16,931	Occasional	TBD
MDC82	Lynn/Nahant Beach	2	Nahant	16,690	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 15,240	\$ 1,886	Occasional	---
MDC83	Nahant Division Maint Facility	1	Nahant	11,792	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 54,770	\$ 6,888	Small	---
MDC84	North Quabbin Watershed	3	New Salem	6,322	AEP1502E UT1	Utility Vendor	Initiated	\$ 12,644	\$ 1,264	Occasional	---
MDC85	Quabbin Fishing Area 2	5	New Salem	738	AEP1502E UT1	Utility Vendor	Initiated	\$ 1,476	\$ 148	Occasional	---
MDC86	Charles River Resvn - Newton	1	Newton	2,400	AEP1415E UT1	Utility Vendor	Initiated	\$ 4,800	\$ 480	Occasional	---
MDC87	Charlesriver Resvn/Boathouse- Newton	1	Newton	3,884	AEP1415E UT1	Utility Vendor	Initiated	\$ 7,768	\$ 777	Occasional	---
MDC90	Quabbin Fishing Area 1	6	Pelham	833	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MDC96	Quincy Homestead	2	Quincy	19,741	AEP1507E UT1	Utility Vendor	Initiated	\$ 39,482	\$ 3,948	Small	---
MDC99	Wollaston Beach Reservation	7	Quincy	2,280	AEP1507E UT1	Utility Vendor	Initiated	\$ 4,560	\$ 456	Occasional	---
MDCA2	Eliot House	1	Revere	4,000	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 18,394	\$ 1,557	Small	---
MDCA4	Revere Beach Reservation	8	Revere	34,950	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 41,307	\$ 5,226	Occasional	---
MDCA5	Revere Division Maint Facility	2	Revere	2,950	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MDCA6	Rink/Paul Cronin Memorial	1	Revere	38,400	AEP1507E UT1	Utility Vendor	Initiated	\$ 24,800	\$ 4,740	Small	---
MDCA7	Breakheart Reservation	16	Saugus	10,748	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 17,880	\$ 3,528	Occasional	---
MDCA8	Amelia Fairhart Dam	2	Somerville	23,125	AEP1405E UT1	Utility Vendor	Audit Complete	\$ 80,148	\$ 5,330	Small	---

Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
MDCA9	Blessing Of The Bay	1	Somerville	1,950	AEP1405E UT1	Utility Vendor	Audit Complete	\$ 35,989	\$ 3,257	Occasional	---
MDCB1	Dilboy Stadium And Pool	3	Somerville	19,600	AEP1405E UT1	Utility Vendor	Audit Complete	\$ 27,542	\$ 2,222	Occasional	---
MDCB2	Veterans Memorial Rink	1	Somerville	32,000	AEP1405E UT1	Utility Vendor	Audit Complete	\$ 82,777	\$ 10,563	Occasional	---
MDCB3	Latta Brothers Memorial Pool	2	Somerville	7,000	AEP1405E UT1	Utility Vendor	Audit Complete	\$ 45,420	\$ 4,469	Occasional	---
MDCB8	Pool/hall Memorial/Fells Rsrsv	3	Stoneham	9,080	AEP1415E UT1	Utility Vendor	Initiated	\$ 18,160	\$ 1,816	Occasional	---
MDCC3	Charles River Resrvn - Waltham	1	Waltham	3,200	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	
MDCC7	Rink/Veterans	1	Waltham	30,500	AEP1406E UT1	Utility Vendor	Audit Complete	\$ 87,760	\$ 22,116	Occasional	---
MDCC8	Dealtry Pool	3	Watertown	4,920	AEP1405E UT1	Utility Vendor	Audit Complete	\$ 23,201	\$ 822	Occasional	---
MDCD2	Golf Course/Leo J. Martin Memorial	6	Weston	13,672	AEP1415E UT1	Utility Vendor	Initiated	\$ 27,344	\$ 2,734	Occasional	---
MDCD6	Pool/Rink/Connell Memorial	1	Weymouth	38,900	DOER Rinks	Other	Substantially Complete	\$ -	\$ -	Occasional	TBD
MDCD6	Pool/Rink/Connell Memorial	1	Weymouth	38,900	AEP1503E UT1	Utility Vendor	Audit Complete	\$ 100,000	\$ 27,264	Occasional	---
MDCD8	Winthrop Beach	1	Winthrop	1,100	AEP1507E UT1	Utility Vendor	Initiated	\$ 2,200	\$ 220	Occasional	---
MDCD9	Georges Island	13	Boston	1,044,492	DCR1302E ES1	TZNE	Audit Complete	\$ 857,803	\$ 52,276	Occasional	---
MDCE0	Brookwood Farm	4	Canton	10,029	AEP1501E UT1	Utility Vendor	Initiated	\$ 20,058	\$ 2,006	Occasional	---
MDCE1	Lovells Island	5	Boston	4,175	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MDCE2	Lloyd Memorial Pool	2	Melrose	15,194	AEP1415E UT1	Utility Vendor	Initiated	\$ 30,388	\$ 3,039	Occasional	---
MDCF6	Miscellaneous MDC - Newton	1	Newton	3,800	AEP1415E UT1	Utility Vendor	Initiated	\$ 7,600	\$ 760	Occasional	---
MDCF9	Miscellaneous MDC - Boston	21	Boston	28,525	AEP1405E UT1	Utility Vendor	Audit Complete	\$ 28,896	\$ 4,369	Small	---
MDCH3	Sudbury Watershed	2	Southborough	4,600	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MGRC4	Mt Grace State Forest	12	Warwick	3,793	AEP1502E UT1	Utility Vendor	Initiated	\$ 7,586	\$ 759	Occasional	---
MGRY5	Mount Greylock Reservation	35	New Ashford	32,681	AEP1502E UT1	Utility Vendor	Initiated	\$ 65,362	\$ 6,536	Occasional	---
MHWK5	Mohawk Trail State Forest	30	Hawley	27,515	AEP1502E UT1	Utility Vendor	Initiated	\$ 55,030	\$ 5,503	Occasional	---
MLPL3	Senator P. Eugene Casey State Pool	4	Milford	8,640	AEP1412E UT1	Utility Vendor	Initiated	\$ 37,545	\$ 1,288	Occasional	---
MLRK3	John J Navin Rink	1	Marlborough	33,800	AEP1502E UT1	Utility Vendor	Initiated	\$ 67,600	\$ 6,760	Occasional	---
MORE3	Moore State Park	6	Paxton	6,183	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 4,760	\$ 1,271	Occasional	---
MSSF1	Myles Standish State Forest	39	Carver	50,172	AEP1501E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 10,034	Occasional	---
MSUG4	Mount Sugarloaf Reservation	6	Deerfield	17,182	AEP1502E UT1	Utility Vendor	Initiated	\$ 34,364	\$ 3,436	Occasional	---
MTOM4	Mount Tom Reservation	13	Holyoke	16,492	ZDCRPILOT	Other	Substantially Complete	\$ 5,494	\$ 2,380	Occasional	TBD
MWAS5	Mount Washington State Forest	6	Mount Washing	3,694	AEP1502E UT1	Utility Vendor	Initiated	\$ 7,388	\$ 739	Occasional	---
NARK5	Vietnam Memorial Skating Rink	1	North Adams	25,410	AEP1403E UT1	Utility Vendor	Initiated	\$ 84,906	\$ 15,977	Occasional	---
NBDG5	Natural Bridge State Forest	2	North Adams	1,960	AEP1502E UT1	Utility Vendor	Initiated	\$ 3,920	\$ 392	Occasional	---
NBRK1	Hetland Memorial Skating Arena	1	New Bedford	36,271	AEP1405E UT1	Utility Vendor	Audit Complete	\$ 100,000	\$ 19,286	Occasional	---
NICK1	Nickerson State Park	60	Brewster	29,859	AEP1407E UT1	Utility Vendor	Audit Complete	\$ 59,718	\$ 5,972	Occasional	---
NWRK2	Henry Graf Skating Rink	1	Newburyport	29,614	AEP1401E UT1	Utility Vendor	Audit Complete	\$ 100,000	\$ 22,524	Occasional	---
OAKF3	Oakes Ames Memorial Park	8	Easton	28,778	AEP1501E UT1	Utility Vendor	Initiated	\$ 57,556	\$ 5,756	Occasional	---
OCTM5	October Mountain State Forest	7	Lee	8,389	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 4,462	\$ 569	Occasional	---
OTIS5	Tolland State Forest	15	Otis	7,889	AEP1502E UT1	Utility Vendor	Initiated	\$ 15,778	\$ 1,578	Occasional	---

Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
O'TR4	Otter River State Forest	22	Templeton	18,046	ZDCRPILOT	Other	Substantially Complete	\$ 22,587	\$ 5,068	Occasional	TBD
PBRK2	Mcvann Okeefe Memorial Rink	1	Peabody	30,000	AEP1401E UT1	Utility Vendor	Audit Complete	\$ 98,595	\$ 12,548	Occasional	---
PITT5	Pittsfield State Forest	15	Pittsfield	12,971	AEP1502E UT1	Utility Vendor	Initiated	\$ 25,942	\$ 2,594	Occasional	---
PLRK1	John A Armstrong Memorial Rink	1	Plymouth	36,271	AEP1402E UT1	Utility Vendor	Initiated	\$ 72,542	\$ 7,254	Occasional	---
PLSP1	Plymouth Rock State Park And Pier	2	Plymouth	2,376	AEP1402E UT1	Utility Vendor	Initiated	\$ 4,752	\$ 475	Occasional	---
PURG3	Purgatory Chasm State Reservation	5	Sutton	7,022	AEP1412E UT1	Utility Vendor	Initiated	\$ 4,221	\$ 1,944	Occasional	---
QUIN3	Quinsigamond State Park	6	Worcester	17,223	AEP1412E UT1	Utility Vendor	Initiated	\$ 14,420	\$ 2,046	Occasional	---
R3HQ3	Regional Headquarters	1	Clinton	2,560	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
R4HQ4	Region 4 Headquarters	5	Amherst	10,200	AEP1502E UT1	Utility Vendor	Initiated	\$ 20,400	\$ 2,040	Small	---
R5HQ5	South Mountain Reg. 5 HQ	1	Pittsfield	9,124	AEP1502E UT1	Utility Vendor	Initiated	\$ 18,248	\$ 1,825	Small	---
ROBN4	Robinson State Park	10	Agawam	7,403	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 4,073	\$ 1,252	Occasional	---
RTLD3	Rutland State Park	10	Rutland	8,002	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 13,900	\$ 1,242	Occasional	---
RXHP2	Roxbury Heritage State Park	3	Boston	20,102	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	
SALB2	Salisbury Beach State Reservation	14	Salisbury	26,193	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 27,835	\$ 6,685	Occasional	---
SBPL4	Andrew J Petro Pool	5	Southbridge	9,444	AEP1412E UT1	Utility Vendor	Initiated	\$ 31,705	\$ 769	Occasional	---
SCUS1	Scusset Beach State Resvn - Bourne	8	Sandwich	16,734	AEP1407E UT1	Utility Vendor	Audit Complete	\$ 29,957	\$ 8,145	Occasional	---
SFPL4	John H Thomas Memorial Pool	2	Springfield	8,962	AEP1403E UT1	Utility Vendor	Initiated	\$ 32,623	\$ 2,868	Occasional	---
SFRK4	Ray Smead Memorial Rink	1	Springfield	27,467	AEP1403E UT1	Utility Vendor	Initiated	\$ 52,642	\$ 5,080	Occasional	---
SHCR1	Shawme Crowell State Forest	30	Sandwich	21,657	AEP1407E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 53,601	Occasional	---
SKIN4	Joseph Allen Skinner State Park	11	Hadley	17,654	AEP1502E UT1	Utility Vendor	Initiated	\$ 35,308	\$ 3,531	Occasional	---
SNDW1	Dem Land Parcel	7	Sandwich	9,639	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
SPEN3	Spencer State Forest	8	Spencer	5,146	AEP1412E UT1	Utility Vendor	Initiated	\$ 880	\$ 220	Occasional	---
SVYM5	Savoy Mountain State Forest	16	Savoy	9,292	AEP1502E UT1	Utility Vendor	Initiated	\$ 18,584	\$ 1,858	Occasional	---
TNRK1	Theodore J. Alexio, Jr. Rink	1	Taunton	30,000	AEP1402E UT1	Utility Vendor	Initiated	\$ 60,000	\$ 6,000	Occasional	---
UPTN3	Upton State Forest	4	Upton	10,490	AEP1412E UT1	Utility Vendor	Initiated	\$ 75	\$ 37	Occasional	---
VHPL3	Vernon Hill Playground Pool	5	Worcester	11,990	AEP1412E UT1	Utility Vendor	Initiated	\$ 36,975	\$ 6,605	Occasional	---
WACH3	Mount Wachusett Reservation	18	Princeton	17,947	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 48,017	\$ 5,289	Occasional	---
WATS1	Watson Pond State Park	2	Taunton	2,732	AEP1402E UT1	Utility Vendor	Initiated	\$ 5,464	\$ 546	Occasional	---
WBNR1	Waquoit Bay Nerr	4	Falmouth	14,157	AEP1407E UT1	Utility Vendor	Audit Complete	\$ 23,691	\$ 4,542	Occasional	---
WEBB2	William Webb Memorial Park	7	Weymouth	40,068	AEP1402E UT1	Utility Vendor	Initiated	\$ 10,377	\$ 442	Occasional	---
WELL4	Wells State Park	10	Sturbridge	4,585	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	
WEST3	Westminster State Forest	19	Westminster	48,910	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 45,630	\$ 5,529	Occasional	---
WGHP5	North Adams Author Museum	1	North Adams	7,020	AEP1502E UT1	Utility Vendor	Initiated	\$ 14,040	\$ 1,404	Small	---
WILB3	Willard Brook State Forest	23	Ashby	14,443	AEP1307E UT1	Utility Vendor	Audit Complete	\$ 21,178	\$ 3,073	Occasional	---

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WILD2	Willowdale State Forest	1	Ipswich	1,932	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
WLDN2	Walden Pond State Reservation	14	Concord	9,404	ZDCRPILOT	Other	Substantially Complete	\$ 22,911	\$ 7,352	Occasional	TBD
WNDL4	Wendell State Forest	13	Wendell	5,344	AEP1502E UT1	Utility Vendor	Initiated	\$ 10,688	\$ 1,069	Occasional	---
WNS5	Windsor State Forest	5	Windsor	1,509	AEP1502E UT1	Utility Vendor	Initiated	\$ 3,018	\$ 302	Occasional	---
WOMP2	Wompatuck State Park	20	Hingham	36,544	ZDCRPILOT	Other	Substantially Complete	\$ 85,381	\$ 24,220	Occasional	TBD
WRRK3	Charles J. Buffone Rink	1	Worcester	31,200	AEP1412E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 39,357	Occasional	---
FD021	Fire District2 (Myles Standish S.F)	11	Carver	5,161	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	
FD031	Fire District3 (Freetown S.F.)	5	Freetown	2,294	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	
FD125	Fire District12 (Pittsfield S.F)	4	Pittsfield	924	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	
Department Of Environmental Protection					-						
EQE01	State Material Recovery Facility	6	Springfield	36,100	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 69,578	\$ 11,196	Small	---
Department Of Food And Agriculture					-						
AGR01	Eastern States Exposition Grounds	1	West Springfield	14,052	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
Fisheries Wildlife & Environmental Law Enforcement					-						
FWE00	Northeast District Headquarter	3	Acton	5,055	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
FWE01	Ayer Game Farm	7	Ayer	14,596	AEP1308E UT1	Utility Vendor	Initiated	\$ -	\$ -	Occasional	---
FWE03	WMA Swift River	17	Belchertown	15,727	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 8,570	\$ 390	Occasional	---
FWE04	Mclaughlin State Trout Hatchery	7	Belchertown	13,103	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 69,802	\$ 9,840	Occasional	---
FWE05	Southeast District Headqtrs	4	Bourne	10,076	AEP1308E UT1	Utility Vendor	Substantially Complete	\$ 2,606	\$ 144	Small	No
FWE07	WMA Stafford Hill	5	Cheshire	21,733	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
FWE09	FWE District Headquarters	1	Dalton	2,816	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 9,531	\$ 971	Small	---
FWE10	Crane Fish And Wildlife Preserve	2	Falmouth	1,194	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
FWE16	WMA Housatonic River Valley	1	Lenox	3,220	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
FWE18	Bitzer Fish Hatchery	12	Montague	8,717	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 10,620	\$ 1,281	Occasional	---
FWE20	WMA Winnimisset	2	New Braintree	10,336	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
FWE21	Plum Island Fishery	1	Newburyport	4,366	AEP1308E UT1	Utility Vendor	Substantially Complete	\$ 11,135	\$ 1,577	Occasional	No
FWE23	Lobster Hatchery	1	Oak Bluffs	5,115	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
FWE27	Roger Reed Salmon Hatchery	6	Palmer	13,430	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 5,848	\$ 433	Occasional	---

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Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
FWE28	WMA Peru	2	Peru	1,196	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
FWE29	District Headquarters- Pittsfield	2	Pittsfield	3,776	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 13,311	\$ 445	Small	---
FWE31	Game Farm	1	Sandwich	312	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
FWE32	Sandwich Fish Hatchery	6	Sandwich	4,323	AEP1308E UT1	Utility Vendor	Substantially Complete	\$ 1,386	\$ 739	Occasional	No
FWE33	Flood Control	1	Shrewsbury	2,160	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
FWE34	Sunderland Fish Hatchery	10	Sunderland	12,740	AEP1314E UT1	Utility Vendor	Audit Complete	\$ 4,164	\$ 379	Occasional	---
FWE41	WMA Westborough	4	Westborough	17,655	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
FWE42	WMA Savoy	1	Windsor	600	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
FWE44	Arthur F.sullivan Fish Hatchery	5	Sandwich	9,152	AEP1308E UT1	Utility Vendor	Substantially Complete	\$ 1,640	\$ 160	Occasional	No
FWE45	Annisquam River Marine Fishery Stn	6	Gloucester	21,132	AEP1308E UT1	Utility Vendor	Substantially Complete	\$ 79,159	\$ 3,687	Occasional	TBD
Massachusetts Environmental Police				-							
DCP19	Mass Environmental Police - Lyman School	5	Westborough	16,907	AEP1308E UT1	Utility Vendor	Audit Complete	\$ 100,000	\$ 2,068	Small	---
LLOR4x	Mass Environmental Police - Lake Lorraine	1	Springfield	4,524	AEP1507E UT1	Utility Vendor	Initiated	\$ 9,048	\$ 905	Small	---
<b>Grand Total</b>		<b>246</b>		<b>5,418,892</b>				<b>\$ 8,331,288</b>	<b>\$ 1,137,388</b>		

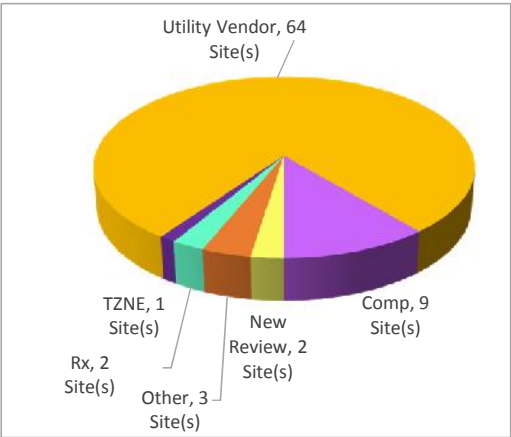




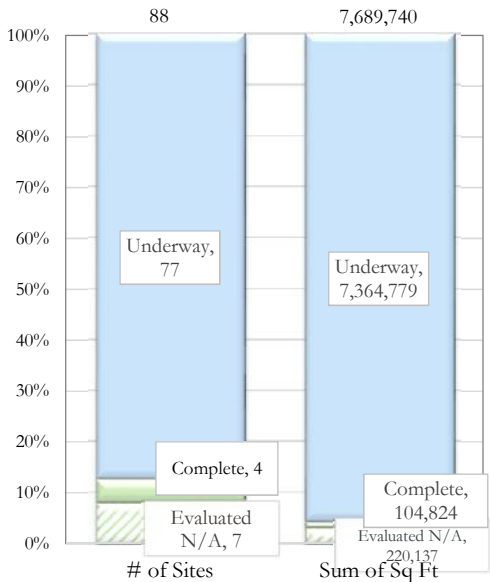
AEP Phase 1 Progress Summary

Health And Human Services

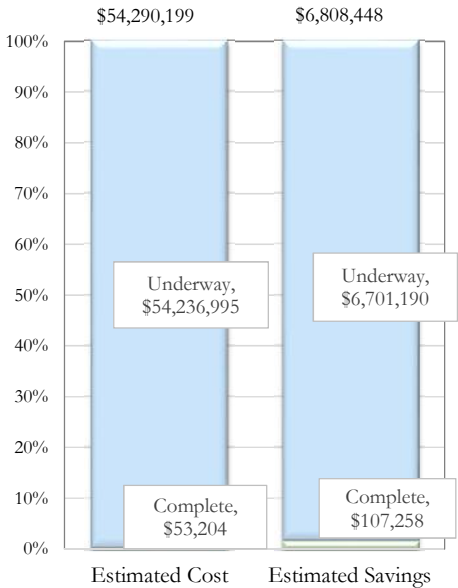
Implementation Method



Status



Financials



Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
<b>Health And Human Services</b>											
	Chelsea Soldiers Home			-							
CHE00	Soldiers Home - Chelsea	11	Chelsea	491,488	CHE1401E ES1	TZNE	Audit Complete	\$ 8,630,635	\$ 593,244	Large	---
	Department Of Developmental Services			-							
DMR00	Acton - LGR Region III	2	Acton	4,080	AEP1413E UT1	Utility Vendor	Initiated	\$ 8,160	\$ 816	Small	---
DMR01	LGR Region I Amherst	2	Amherst	7,224	AEP1311E UT1	Utility Vendor	Implementation Started	\$ 67,600	\$ 8,369	Small	Yes
DMR02	LGR Region V Brockton	1	Brockton	3,700	AEP1413E UT1	Utility Vendor	Initiated	\$ 7,400	\$ 740	Small	---
DMR03	LGR Region V Canton	3	Canton	4,055	AEP1413E UT1	Utility Vendor	Initiated	\$ 8,110	\$ 811	Small	---
DMR05	LGR Region III Danvers	5	Danvers	7,252	AEP1413E UT1	Utility Vendor	Initiated	\$ 14,504	\$ 1,450	Small	---
DMR07	LGR Region V Foxborough	2	Foxborough	3,269	AEP1413E UT1	Utility Vendor	Initiated	\$ 6,538	\$ 654	Small	---
DMR09	LGR Region II Gardner	2	Gardner	27,120	AEP1309E UT1	Utility Vendor	Implementation Started	\$ 8,083	\$ 1,674	Small	No
DMR10	LGR Region III Georgetown	4	Georgetown	7,886	AEP1309E UT1	Utility Vendor	Implementation Started	\$ 19,140	\$ 8,038	Small	No
DMR11	LGR Region II Grafton	4	Grafton	19,356	AEP1309E UT1	Utility Vendor	Implementation Started	\$ 8,452	\$ 1,661	Small	No
DMR12	Lexington - LGR Region III	6	Lexington	6,956	AEP1309E UT1	Utility Vendor	Audit Complete	\$ 24,557	\$ 4,670	Small	---
DMR13	LGR Region III Lynnfield	2	Lynnfield	6,280	AEP1413E UT1	Utility Vendor	Initiated	\$ 12,560	\$ 1,256	Small	---
DMR14	LGR Region VI Medfield	3	Medfield	3,014	AEP1413E UT1	Utility Vendor	Initiated	\$ 6,028	\$ 603	Small	---
DMR16	LGR Region V New Bedford	2	New Bedford	3,770	AEP1413E UT1	Utility Vendor	Initiated	\$ 7,540	\$ 754	Small	---
DMR18	LGR Region III North Reading	3	North Reading	4,196	AEP1413E UT1	Utility Vendor	Initiated	\$ 8,392	\$ 839	Small	---
DMR19	LGR Region V Norton	2	Norton	2,830	AEP1505E UT1	Utility Vendor	Initiated	\$ 5,660	\$ 566	Small	---
DMR20	LGR Region I Pittsfield	7	Pittsfield	11,228	AEP1404E UT1	Utility Vendor	Substantially Complete	\$ 17,925	\$ 5,236	Small	No
DMR21	Glavin Regional Center	14	Shrewsbury	120,868	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DMR22	LGR Region I Springfield	2	Springfield	7,006	AEP1404E UT1	Utility Vendor	Substantially Complete	\$ 12,591	\$ 3,521	Small	No
DMR23	Taunton - LGR Region V	26	Taunton	36,898	DDS1504E ES1	FA - Comp	Initiated	\$ 1,038,000	\$ 103,800	Small	---
DMR25	Templeton Developmental Center	61	Templeton	272,854	DDS1101 ES1	FA - Comp	Initiated	\$ 3,274,248	\$ 205,877	Large	---
DMR26	LGR Region III Tewksbury	5	Tewksbury	6,200	AEP1413E UT1	Utility Vendor	Initiated	\$ 12,400	\$ 1,240	Small	---
DMR27	Walter E. Fernald School	83	Waltham	989,192	DDS1501E ES1	Other	Implementation Started	\$ 0	\$ 2,435,466	Large	TBD
DMR28	Wellesley- LGR Region II	3	Wellesley	3,011	AEP1413E UT1	Utility Vendor	Initiated	\$ 6,022	\$ 602	Small	---
DMR29	LGR Region I Westfield	4	Westfield	6,132	AEP1413E UT1	Utility Vendor	Initiated	\$ 12,264	\$ 1,226	Small	---
DMR32	Shrewsbury- LGR Region II	1	Shrewsbury	2,800	AEP1413E UT1	Utility Vendor	Initiated	\$ 5,600	\$ 560	Small	---
DMR34	LGR Region V Wrentham	11	Wrentham	25,655	AEP1413E UT1	Utility Vendor	Initiated	\$ 51,310	\$ 5,131	Small	---
DMR35	Belchertown - LGR Region I	2	Belchertown	9,075	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DMR37	LGR Region II Rutland	2	Rutland	3,432	AEP1413E UT1	Utility Vendor	Initiated	\$ 6,864	\$ 686	Small	---
DMR38	DMR Group Home	3	Danvers	8,051	AEP1413E UT1	Utility Vendor	Initiated	\$ 16,102	\$ 1,610	Small	---
DMR39	Middleton Colony	3	Middleton	900	AEP1413E UT1	Utility Vendor	Initiated	\$ 1,800	\$ 180	Small	---

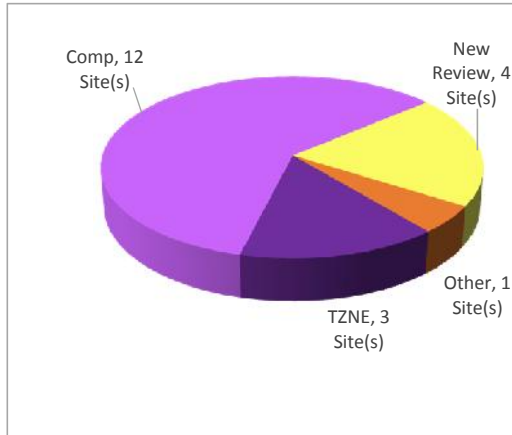
Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
DMR40	DMR - Lancaster	1	Lancaster	999	AEP1413E UT1	Utility Vendor	Initiated	\$ 1,998	\$ 200	Small	---
DMR41	DMR - Worcester	1	Worcester	2,000	AEP1413E UT1	Utility Vendor	Initiated	\$ 4,000	\$ 400	Small	---
DMR42	DMR - Saugus	1	Saugus	999	AEP1413E UT1	Utility Vendor	Initiated	\$ 1,998	\$ 200	Small	---
DMR43	DMR - Taunton	2	Taunton	1,998	AEP1413E UT1	Utility Vendor	Initiated	\$ 3,996	\$ 400	Small	---
DMR44	DMR - Wareham	1	Wareham	999	AEP1413E UT1	Utility Vendor	Initiated	\$ 1,998	\$ 200	Small	---
DMR45	DMR - Acton	1	Acton	999	AEP1413E UT1	Utility Vendor	Initiated	\$ 1,998	\$ 200	Small	---
DMR46	DMR - Dorchester	1	Boston	999	AEP1413E UT1	Utility Vendor	Initiated	\$ 1,998	\$ 200	Small	---
DMR47	DMR - Framingham	2	Framingham	1,998	AEP1413E UT1	Utility Vendor	Initiated	\$ 3,996	\$ 400	Small	---
DMR48	DMR - Waltham	4	Waltham	3,996	AEP1413E UT1	Utility Vendor	Initiated	\$ 7,992	\$ 799	Small	---
DMR49	DMR - Westboro	2	Westborough	1,998	AEP1413E UT1	Utility Vendor	Initiated	\$ 3,996	\$ 400	Small	---
Department Of Mental Health											
DMH00	Choice Housing Andover	4	Andover	5,082	AEP1508E UT1	Utility Vendor	Initiated	\$ 10,164	\$ 1,016	Small	---
DMH02	Solomon Carter Fuller Mental Health	2	Boston	327,267	DMH1503E ES1	FA - Comp	Initiated	\$ 3,272,670	\$ 297,515	Large	---
DMH04	W. Roxbury Choice Housing	1	Boston	2,944	AEP1413E UT1	Utility Vendor	Initiated	\$ 5,888	\$ 589	Small	---
DMH05	Cape Cod/Islands Mental Health Ctr	2	Bourne	34,598	AEP1504E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 21,688	Small	---
DMH06	Brockton Mental Health Ctr	1	Brockton	55,000	AEP1504E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 25,997	Small	---
DMH07	Choice Housing Brookline	1	Brookline	4,200	AEP1413E UT1	Utility Vendor	Initiated	\$ 8,400	\$ 840	Small	---
DMH08	Choice Housing Chelsea	1	Chelsea	4,087	AEP1413E UT1	Utility Vendor	Initiated	\$ 8,174	\$ 817	Small	---
DMH09	Choice Housing Danvers	1	Danvers	5,256	AEP1508E UT1	Utility Vendor	Initiated	\$ 10,512	\$ 1,051	Small	---
DMH10	Fall River Choice Housing	1	Fall River	3,545	AEP1413E UT1	Utility Vendor	Initiated	\$ 7,090	\$ 709	Small	---
DMH11	Corrigan Mental Health Ctr	4	Fall River	69,717	AEP1504E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 29,435	Small	---
DMH12	Falmouth Choice Housing	1	Falmouth	5,885	AEP1407E UT1	Utility Vendor	Implementation Started	\$ 6,701	\$ 3,353	Small	Yes
DMH13	Franklin County Mental Health Assoc	1	Greenfield	14,763	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DMH14	Haverhill Choice Housing	1	Haverhill	4,087	AEP1508E UT1	Utility Vendor	Initiated	\$ 8,174	\$ 817	Small	---
DMH16	Harry C. Solomon Mntl Health Center	1	Lowell	67,456	AEP1505E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 20,346	Small	---
DMH17	Lynn Choice Housing	1	Lynn	3,209	AEP1508E UT1	Utility Vendor	Initiated	\$ 6,418	\$ 642	Small	---
DMH20	Nantucket Choice Housing	1	Nantucket	5,471	AEP1413E UT1	Utility Vendor	Initiated	\$ 10,942	\$ 1,094	Small	---
DMH24	Northampton Ctr For Children/Family	7	Northampton	18,048	AEP1413E UT1	Utility Vendor	Initiated	\$ 36,096	\$ 3,610	Small	---
DMH26	Quincy Mental Health Center	3	Quincy	66,332	AEP1505E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 59,180	Small	---
DMH28	Saugus Choice Housing	1	Saugus	4,200	AEP1508E UT1	Utility Vendor	Initiated	\$ 8,400	\$ 840	Small	---
DMH29	Gandara Mental Health Center	1	Springfield	9,200	AEP1311E UT1	Utility Vendor	Substantially Complete	\$ 22,688	\$ 2,815	Small	No
DMH31	Swampscott Choice Housing	2	Swampscott	5,000	AEP1508E UT1	Utility Vendor	Initiated	\$ 10,000	\$ 1,000	Small	---
DMH32	Taunton State Hospital	20	Taunton	361,907	DMH0902 ES1	New Review	Audit Complete	\$ 4,316,017	\$ 374,897	Large	---
DMH33	Wenham Choice Housing	1	Wenham	2,161	AEP1508E UT1	Utility Vendor	Initiated	\$ 4,322	\$ 432	Small	---
DMH34	Westborough State Hospital	1	Westborough	97,563	AEP1505E UT1	Utility Vendor	Initiated	\$ -	\$ -	Large	---
DMH36	Whitman Choice Housing	1	Whitman	5,270	AEP1413E UT1	Utility Vendor	Initiated	\$ 10,540	\$ 1,054	Small	---
DMH37	Worcester State Hospital	13	Worcester	906,263	DCP1239 HC2	Other	Audit Complete	\$ -	\$ 95,686	Large	---

Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
DMH40	Western MA Area Office	2	Northampton	86,147	AEP1505E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 17,583	Small	---
DMH41	DMH Group Home	2	Danvers	4,563	AEP1508E UT1	Utility Vendor	Initiated	\$ 9,126	\$ 913	Small	---
Department Of Public Health											
DPH00	Lemuel Shattuck Hospital	3	Boston	702,471	AEP1309E UT1	Utility Vendor	Implementation Started	\$ 97,874	\$ 16,801	Large	TBD
DPH02	Mass Hospital School	31	Canton	457,080	DPH1306E ES1	FA - Comp	Audit Complete	\$ 21,478,014	\$ 1,222,590	Large	---
DPH03	Tewksbury State Hospital	60	Tewksbury	1,025,922	DPH1505E ES1	FA - Comp	Initiated	\$ 102,592	\$ 441,094	Large	---
DPH04	Western Mass Hospital	7	Westfield	169,735	AEP1312E UT1	Utility Vendor	Initiated	\$ -	\$ -	Large	---
DPH04	Western Mass Hospital	7	Westfield	169,735	DPH1305E ES1	New Review	Audit Complete	\$ 1,281,700	\$ 104,906	Large	---
Department Of Youth Services											
DYS00	Judge Connelly Youth Center	1	Boston	55,800	DYS1401E ES1	FA - Comp	Initiated	\$ 669,600	\$ 43,059	Small	---
DYS01	Metropolitan Youth Service Center	3	Boston	74,000	DYS1402E ES1	FA - Comp	Initiated	\$ 888,000	\$ 51,778	Small	---
DYS02	Western Youth Service Center	8	Springfield	122,645	DYS1404E ES1	FA - Comp	Initiated	\$ 2,029,319	\$ 101,584	Large	---
DYS03	Central Youth Service Center	5	Westborough	180,550	DYS1302E ES1	FA - Comp	Audit Complete	\$ 4,584,259	\$ 98,329	Large	---
DYS03	Central Youth Service Center	5	Westborough	180,550	DYS1302E RX1	FA - Rx	Implementation Started	\$ 149,257	\$ 41,022	Large	No
DYS04	Westfield Youth Service Center	3	Westfield	57,702	DYS1404E ES1	FA - Comp	Initiated	\$ 485,942	\$ 57,695	Small	---
DYS05	Paul T. Leahy Center	4	Worcester	46,636	DYS1502E ES1	FA - Rx	Initiated	\$ 494,342	\$ 35,987	Small	---
DYS07	Brewster Multiservice Center	28	Brewster	44,085	AEP1407E UT1	Utility Vendor	Audit Complete	\$ 100,000	\$ 10,165	Small	---
DYS09	Howland Detention Services	1	Taunton	18,000	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DYS10	Murray Community Services	1	Taunton	29,275	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DYS11	NFI Shelter Care	1	Middleton	14,336	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	
DYS12	DYS - Lancaster	2	Lancaster	13,820	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DYS13	DYS - Grafton	8	Grafton	38,074	AEP1402E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 16,532	Small	---
DYS14	DYS - Lowell	1	Lowell	15,004	AEP1505E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 6,515	Small	---
DYS15	DYS - Taunton	1	Taunton	77,390	DYS1404 ST1	Other	Substantially Complete	\$ -	\$ 95,686	Small	TBD
Holyoke Soldiers Home											
HLY00	Soldiers Home - Holyoke	9	Holyoke	245,231	HLY1501E ES1	New Review	Initiated	\$ 24,523	\$ 106,107	Large	---
<b>Grand Total</b>		<b>88</b>		<b>7,689,740</b>				<b>\$ 54,290,199</b>	<b>\$ 6,808,448</b>		

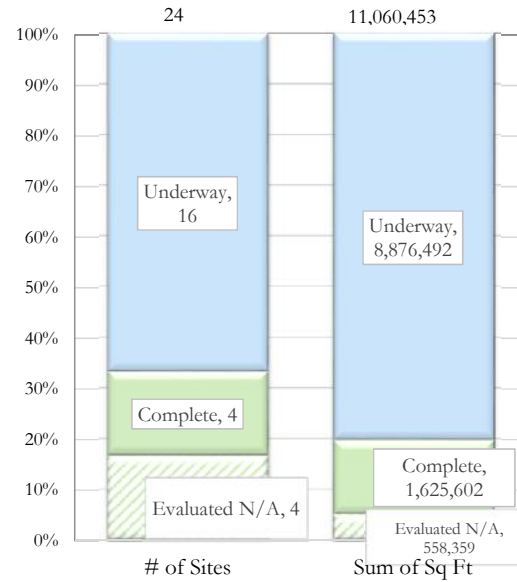
## AEP Phase 1 Progress Summary

## Higher Education

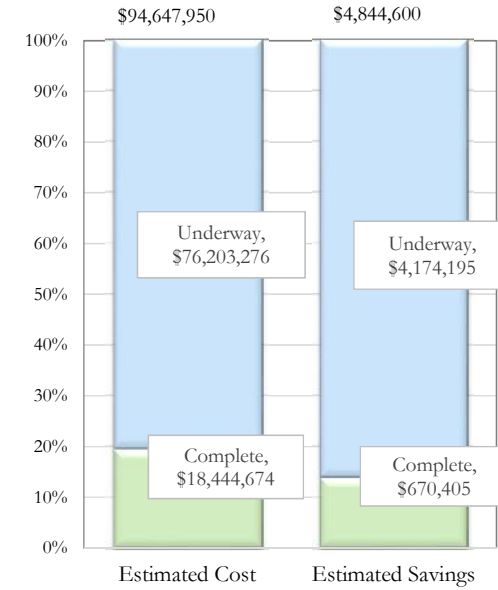
### Implementation Method



### Status



### Financials





Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
<b>Higher Education</b>											
Berkshire Community College											
BCC00	Berkshire Community College	15	Pittsfield	297,720	BCC1401E ES1	New Review	Audit Complete	\$ 11,756,343	\$ 321,435	Large	---
Bridgewater State College											
BSC00	Bridgewater State University	44	Bridgewater	1,175,183	BSC1501E ES1	New Review	Initiated	\$ 117,518	\$ 5,000	Large	---
Bristol Community College											
BRC00	Bristol Community College	11	Fall River	356,641	BRC1001 ST1	Other	Implementation Started	\$ -	\$ -	Large	
Cape Cod Community College											
CCC00	Cape Cod Community College	14	Barnstable	330,254	CCC1402E ES1	TZNE	Initiated	\$ 3,963,048	\$ 330,254	Large	---
Essex Agricultural And Technical High School											
DOE00	Essex Agricultural Tech Institute	38	Danvers	205,241	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
Fitchburg State College											
FSC01	Fitchburg State University	22	Fitchburg	949,809	FSC1301E ES1	FA - Comp	Audit Complete	\$ 10,837,219	\$ 556,981	Large	---
Greenfield Community College											
GCC00	Greenfield Community College	8	Greenfield	301,146	GCC1402E ES1	TZNE	Audit Complete	\$ 3,613,752	\$ 186,135	Large	---
Holyoke Community College											
HCC00	Holyoke Community College	13	Holyoke	594,726	HCC1301E ES1	TZNE	Audit Complete	\$ 4,744,911	\$ 346,067	Large	---
Mass Bay Community College											
MBC00	Mass Bay Community College	5	Wellesley	191,695	MBC1501E ES1	New Review	Initiated	\$ 19,170	\$ 83,237	Large	---
Massachusetts College Of Art											
MCA00	Mass College Of Art And Design	9	Boston	812,835	MCA1501E ES1	FA - Comp	Initiated	\$ 9,754,020	\$ 759,870	Large	---
Massachusetts College Of Liberal Arts											
NAC00	Mass College Of Liberal Arts	22	North Adams	437,869	NAC1102 EC1	FA - Comp	Audit Complete	\$ 4,401,250	\$ 169,272	Large	---
Massachusetts Maritime Academy											
MMA00	Massachusetts Maritime Academy	27	Bourne	328,764	MMA1401E EC1	FA - Comp	Audit Complete	\$ 189,200	\$ 2,342	Large	---
Middlesex Community College											
MCC00	Middlesex Community College	12	Bedford	226,008	MCC0901 EC2	FA - Comp	Substantially Complete	\$ 324,113	\$ 6,524	Large	No
MCC00	Middlesex Community College	12	Bedford	226,008	MCC1301E ES1	FA - Comp	Implementation Started	\$ 5,403,121	\$ 110,684	Large	Yes
Mt. Wachusett Community College											
MWC00	Mount Wachusett Community College	12	Gardner	491,789	MWC1310 TR1	New Review	Implementation Started	\$ 39,660	\$ 2,831	Large	TBD
North Shore Community College											
NSC00	North Shore C C Danvers	8	Danvers	273,989	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
NSC02	North Shore - Hathorne Campus	5	Danvers	65,077	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
NSC03	North Shore - Beverly	1	Beverly	14,052	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A

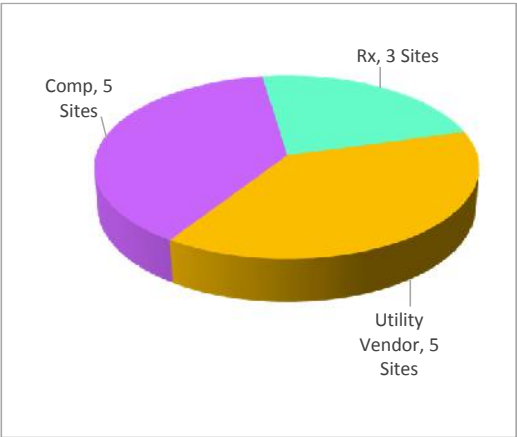
Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
Northern Essex Community College											
NEC00	Northern Essex Comm Col Haverhill	13	Haverhill	382,079	NEC0901 EC1	FA - Comp	Substantially Complete	\$ 5,917,000	\$ 353,586	Large	No
NEC01	Northern Essex Comm Col Lawrence	2	Lawrence	63,436	NEC0901 EC1	FA - Comp	Substantially Complete	\$ 761,232	\$ 6,276	Small	No
Roxbury Community College											
RCC00	Roxbury Community College	6	Boston	431,626	RCC1301E ES1	FA - Comp	Initiated	\$ 5,179,512	\$ 325,107	Large	---
Salem State College											
SSA00	Salem State University	35	Salem	949,454	SSA1101 EC1	FA - Comp	Implementation Started	\$ 1,814,379	\$ 212,247	Large	No
SSA00	Salem State University	35	Salem	949,454	SSA1101 EC2	FA - Comp	Implementation Started	\$ 2,991,218	\$ 65,460	Large	No
Springfield Technical Community College											
STC00	Springfield Tech Community College	21	Springfield	954,079	STC1318E EC1	FA - Comp	Substantially Complete	\$ 11,442,329	\$ 304,019	Large	No
Westfield State College											
WSC00	Westfield State University	17	Westfield	683,929	WSC1301E ES1	FA - Comp	Audit Complete	\$ 4,862,331	\$ 154,222	Large	---
Worcester State College											
WOR01	Worcester State College	15	Worcester	543,052	WOR1401E EC1	FA - Comp	Initiated	\$ 6,516,624	\$ 543,052	Large	---
<b>Grand Total</b>		<b>24</b>		<b>11,060,453</b>				<b>\$ 94,647,950</b>	<b>\$ 4,844,600</b>		



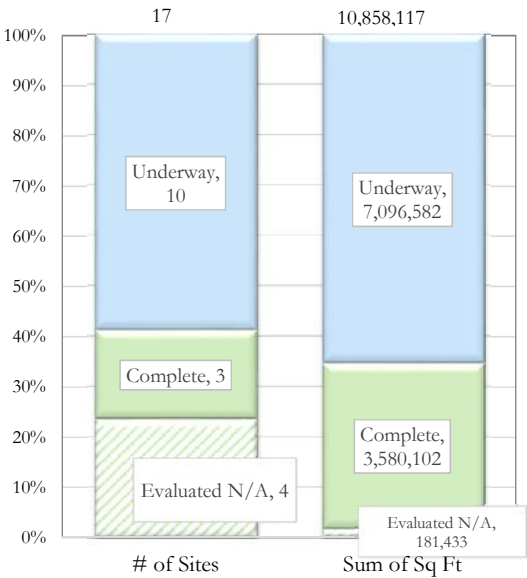
AEP Phase 1 Progress Summary

UMASS

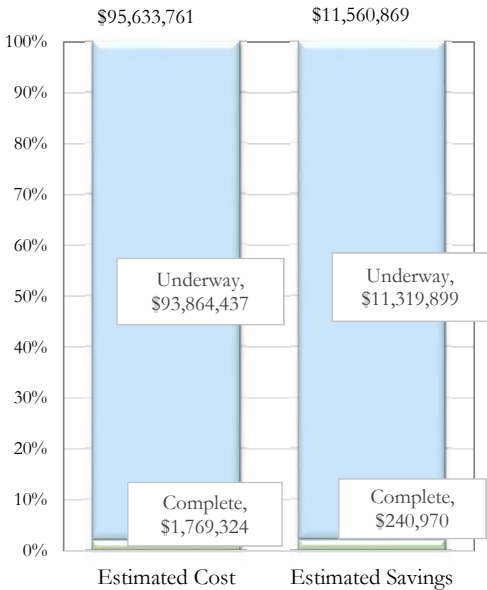
Implementation Method



Status



Financials



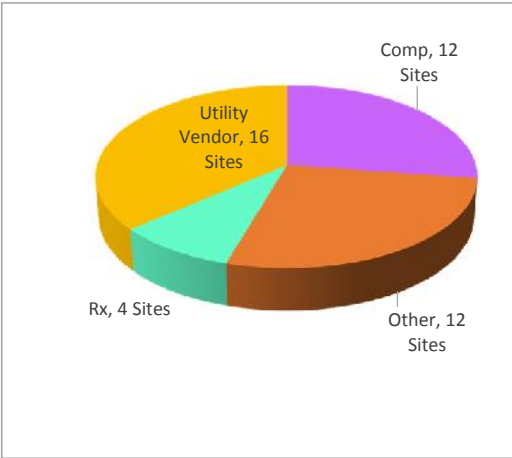
Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
<b>UMASS</b>											
University Of Massachusetts At Amherst											
UMA00	UMASS - Amherst	27	Amherst	3,483,790	UMA0901 ES1	FA - Comp	Initiated	\$ 20,000,000	\$ 2,699,164	Large	---
UMA00	UMASS - Amherst	27	Amherst	3,483,790	UMA1101 EC1	FA - Comp	Substantially Complete	\$ 1,670,160	\$ 225,918	Large	No
UMA00	UMASS - Amherst	27	Amherst	3,483,790	UMA1401E ES1	FA - Comp	Initiated	\$ 6,365,400	\$ 636,540	Large	---
UMA01	Horticultural Experiment Center	7	Belchertown	30,904	UMA1301E RX1	FA - Rx	Substantially Complete	\$ 40,281	\$ 4,568	Small	No
UMA02	Dairy Biotechnology Center	16	Deerfield	65,408	UMA1301E RX1	FA - Rx	Substantially Complete	\$ 58,883	\$ 10,484	Small	Yes
UMA03	Marine Biological Research Station	3	Gloucester	3,756	AEP1508E UT1	Utility Vendor	Initiated	\$ 7,512	\$ 751	Small	---
UMA04	Hadley Farm	33	Hadley	135,166	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
UMA06	Radio Astronomy Observatory	(blank)	New Salem	(blank)	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
UMA07	UMASS - Mount Lincoln Radio Station	3	Pelham	1,607	AEP1508E UT1	Utility Vendor	Initiated	\$ 3,214	\$ 321	Small	---
UMA08	Agr Experiment Station Wareham	10	Wareham	23,844	AEP1508E UT1	Utility Vendor	Initiated	\$ 47,688	\$ 4,775	Small	---
UMA09	Extension Service Station	3	Concord	6,300	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
UMA10	Agricultural Experiment Station	14	Waltham	49,309	AEP1508E UT1	Utility Vendor	Initiated	\$ 98,618	\$ 9,862	Small	---
University Of Massachusetts At Boston											
UMB00	UMASS Boston	15	Boston	2,476,994	UMB1501E RX1	FA - Rx	Initiated	\$ 1,627,700	\$ 162,770	Large	---
UMB05	UMASS Boston Agr Exp Station - Ntk	5	Nantucket	8,803	AEP1508E UT1	Utility Vendor	Initiated	\$ 17,606	\$ 1,761	Small	---
University Of Massachusetts At Lowell											
LOW00	UMASS Lowell Billerica	1	Billerica	39,967	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
LOW02	UMASS Lowell Lowell	62	Lowell	2,736,006	UML1301E ES1	FA - Comp	Audit Complete	\$ 21,665,173	\$ 1,358,368	Large	---
LOW05	UMASS Lowell Tsongas Center	1	Lowell	(blank)	UML1301E ES1	FA - Comp	Audit Complete	\$ 2,910,000	\$ 163,295	Small	---
University Of Massachusetts Medical School											
UMM00	University Of Mass Medical Center	4	Worcester	1,550,452	UMW1401E ES1	FA - Comp	Initiated	\$ 28,505,226	\$ 3,968,592	Large	---
UMM01	State Laboratory Institute	3	Boston	245,811	DPH1350E ES1	FA - Comp	Audit Complete	\$ 12,616,300	\$ 2,313,700	Large	---
<b>Grand Total</b>		<b>17</b>		<b>10,858,117</b>				<b>\$ 95,633,761</b>	<b>\$ 11,560,869</b>		



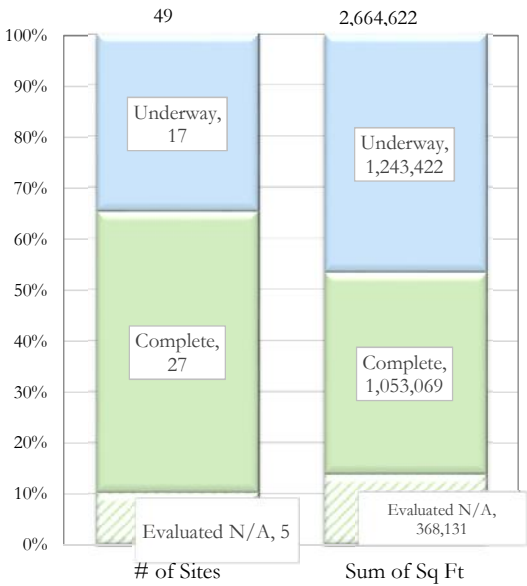
AEP Phase 1 Progress Summary

Judiciary

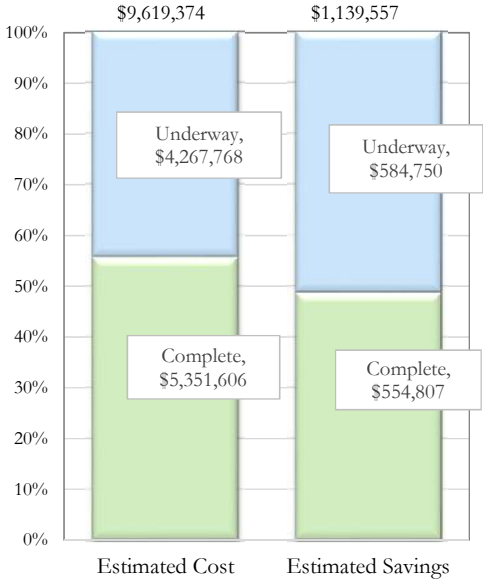
Implementation Method



Status



Financials





Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
<b>Judiciary</b>											
Trial Court											
TRC00	Ayer District Court	1	Ayer	35,400	AEP1301E UT2	Utility Vendor	Substantially Complete	\$ 95,286	\$ 14,102	Small	Yes
TRC05	Dorchester Municipal Court	1	Boston	77,000	ZTRCDOER	Other	Substantially Complete	\$ -	\$ 59,418	Small	TBD
TRC12	Cambridge Probate Family Court	1	Cambridge	75,580	TRC0604 HC1	Other	Audit Complete	\$ -	\$ -	Small	---
TRC13	East Cambridge Trial Court	1	Cambridge	42,000	TRC0604 HC1	Other	Substantially Complete	\$ -	\$ -	Small	
TRC15	Chicopee District Court	1	Chicopee	20,250	TRC0802 EC2	FA - Comp	Substantially Complete	\$ 1,242,153	\$ 45,363	Small	Yes
TRC16	Clinton District Court	1	Clinton	19,440	AEP1301E UT2	Utility Vendor	Substantially Complete	\$ 59,875	\$ 6,751	Small	No
TRC17	Concord Prob Family District Court	1	Concord	25,219	AEP1508E UT1	Utility Vendor	Audit Complete	\$ 50,438	\$ 5,044	Small	---
TRC18	Dudley District Housing Court	1	Dudley	18,048	AEP1301E UT2	Utility Vendor	Substantially Complete	\$ 69,086	\$ 11,825	Small	Yes
TRC19	East Brookfield District Court	1	East Brookfield	44,223	AEP1301E UT2	Utility Vendor	Substantially Complete	\$ 45,011	\$ 5,611	Small	No
TRC20	Fall River Trial Court Durfee	1	Fall River	75,000	AEP1310E UT1	Utility Vendor	Audit Complete	\$ 100,000	\$ 38,437	Small	---
TRC21	Fitchburg District Court	1	Fitchburg	40,300	AEP1301E UT1	Utility Vendor	Substantially Complete	\$ 84,731	\$ 9,957	Small	No
TRC22	Fitchburg Family Prob Law Library	2	Fitchburg	18,700	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
TRC23	Framingham District Court	1	Framingham	33,738	ZTRCDOER	Other	Substantially Complete	\$ -	\$ 26,034	Small	TBD
TRC24	Gardner District Court	2	Gardner	17,425	AEP1301E UT1	Utility Vendor	Substantially Complete	\$ 98,188	\$ 9,098	Small	Yes
TRC25	Greenfield Trial Court	1	Greenfield	47,186	TRC0606 DC1	Other	Implementation Started	\$ -	\$ -	Small	
TRC27	Haverhill District Court	1	Haverhill	20,400	TRC1214 HC1	Other	Initiated	\$ -	\$ 4,080	Small	---
TRC28	Holyoke District Court	1	Holyoke	20,000	TRC0802 EC2	FA - Comp	Substantially Complete	\$ 388,701	\$ 20,963	Small	Yes
TRC29	Lawrence Superior Court	1	Lawrence	43,680	TRC1401E ES1	FA - Comp	Audit Complete	\$ 863,277	\$ 55,779	Small	---
TRC30	Fenton Judicial Center	1	Lawrence	165,000	TRC1408E RX1	FA - Rx	Initiated	\$ 1,749,000	\$ 120,845	Large	---
TRC31	Lowell District Court	1	Lowell	57,200	TRC1401E ES1	FA - Comp	Audit Complete	\$ 107,903	\$ 24,163	Small	---
TRC32	Lowell Superior Probate Family Cour	1	Lowell	89,723	TRC1401E ES1	FA - Comp	Audit Complete	\$ 125,049	\$ 22,536	Small	---
TRC33	Lynn District Court	1	Lynn	40,875	AEP1301E UT2	Utility Vendor	Substantially Complete	\$ 95,191	\$ 16,201	Small	No
TRC34	Malden District Court	1	Malden	24,124	AEP1301E UT2	Utility Vendor	Implementation Started	\$ 93,553	\$ 7,482	Small	No

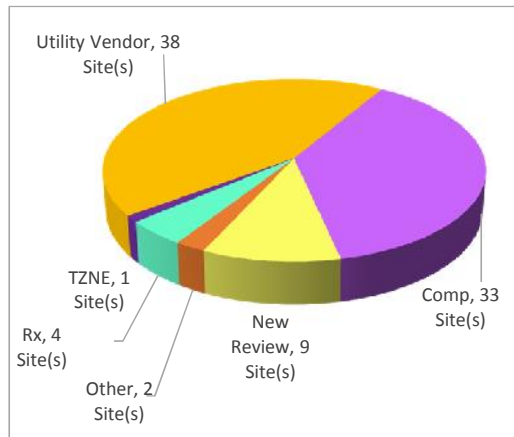
Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
TRC35	Marlborough District Court	1	Marlborough	39,000	AEP1301E UT1	Utility Vendor	Substantially Complete	\$ 66,218	\$ 11,623	Small	No
TRC36	Milford District Court	1	Milford	18,940	AEP1301E UT1	Utility Vendor	Substantially Complete	\$ 97,111	\$ 10,636	Small	Yes
TRC38	Newburyport District Court	1	Newburyport	56,437	TRC1408E RX1	FA - Rx	Initiated	\$ 598,232	\$ 43,550	Small	---
TRC39	Newburyport Superior Court	1	Newburyport	8,617	TRC1408E RX1	FA - Rx	Initiated	\$ 91,340	\$ 6,649	Small	---
TRC40	Newton District Court	1	Newton	20,000	ZTRCDOER	Other	Substantially Complete	\$ 8,430	\$ 1,471	Small	TBD
TRC41	Palmer District Court	1	Palmer	20,506	TRC0802 EC2	FA - Comp	Substantially Complete	\$ 157,993	\$ 11,466	Small	Yes
TRC42	Peabody District Court	1	Peabody	40,247	AEP1310E UT1	Utility Vendor	Implementation Started	\$ 93,569	\$ 16,333	Small	No
TRC44	Salem Probate Court	1	Salem	41,500	TRC1209 ST1	Other	Implementation Started	\$ -	\$ 32,024	Small	
TRC45	Salem Superior Court	1	Salem	20,539	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
TRC46	Somerville District Court	1	Somerville	27,305	ZTRCDOER	Other	Substantially Complete	\$ -	\$ 21,070	Small	TBD
TRC47	Springfield Court Complex	1	Springfield	245,000	TRC0802 EC2	FA - Comp	Substantially Complete	\$ 1,316,948	\$ 117,320	Large	No
TRC48	Uxbridge District Court	1	Uxbridge	14,574	AEP1301E UT1	Utility Vendor	Substantially Complete	\$ 52,797	\$ 9,747	Small	Yes
TRC49	Waltham District Court	1	Waltham	23,871	ZTRCDOER	Other	Substantially Complete	\$ -	\$ 18,420	Small	TBD
TRC50	Westborough District Court	1	Westborough	21,624	AEP1301E UT1	Utility Vendor	Substantially Complete	\$ 34,446	\$ 5,134	Small	No
TRC51	Woburn District Court	1	Woburn	26,235	ZTRCDOER	Other	Substantially Complete	\$ -	\$ 20,245	Small	TBD
TRC52	Worcester Trial Court	1	Worcester	427,457	TRC1211 ES1	FA - Rx	Implementation Started	\$ 303,555	\$ 198,193	Large	No
TRC59	Northampton Probate Family Court	1	Northampton	21,424	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	
TRC60	Northampton Superior District Court	2	Northampton	61,475	TRC0802 EC2	FA - Comp	Substantially Complete	\$ 907,530	\$ 49,653	Small	Yes
TRC63	Springfield Housing Juvenile Court	1	Springfield	48,900	TRC0802 EC2	FA - Comp	Substantially Complete	\$ 168,290	\$ 22,082	Small	No
TRC64	Pittsfield District Court	1	Pittsfield	22,380	TRC0802 EC2	FA - Comp	Substantially Complete	\$ 78,252	\$ 7,518	Small	No
TRC65	Pittsfield Superior Court	1	Pittsfield	27,500	TRC0802 EC2	FA - Comp	Substantially Complete	\$ 49,773	\$ 6,120	Small	No
TRC66	Pittsfield Probate Family Court	1	Pittsfield	27,060	TRC0802 EC2	FA - Comp	Substantially Complete	\$ 235,594	\$ 16,979	Small	Yes
TRC78	Taunton Superior/Juvenile/Law Libry	1	Taunton	42,896	TRC0602 DC2	Other	Audit Complete	\$ -	\$ -	Small	---

Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
TRC93	Taunton Court Complex	1	Taunton	157,076	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	
TRC94	Fall River Justice Center	1	Fall River	150,392	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
TRC96	Falmouth District/Juvenile Court	1	Falmouth	3,156	AEP1310E UT1	Utility Vendor	Implementation Started	\$ 91,852	\$ 9,635	Small	TBD
<b>Grand Total</b>		<b>49</b>		<b>2,664,622</b>				<b>\$ 9,619,374</b>	<b>\$ 1,139,557</b>		

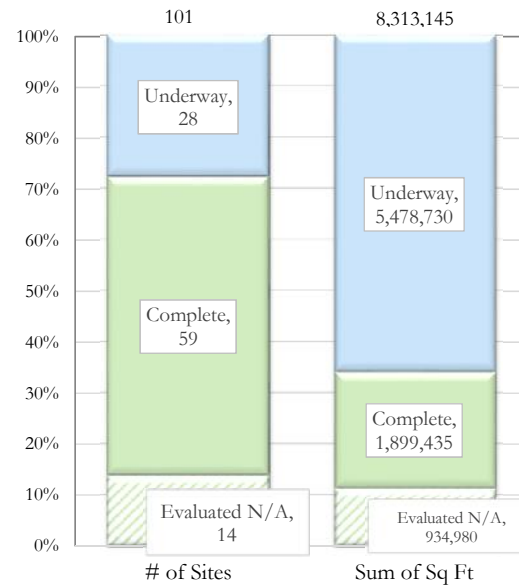
## AEP Phase 1 Progress Summary

## Public Safety

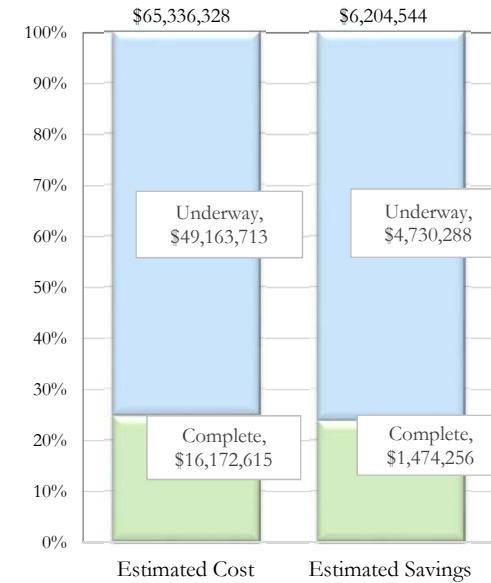
### Implementation Method



### Status



### Financials



Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
<b>Public Safety</b>											
Criminal Justice Training Council											
CJT00	New England Police Institute- Agawam	(blank)	Agawam	(blank)	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
Department Of Corrections											
DOC03	MCI - Concord	37	Concord	518,138	DOC1401E ES1	FA - Comp	Audit Complete	\$ 10,952,250	\$ 879,436	Large	---
DOC04	Northeastern Correctional Center	27	Concord	128,741	DOC1401E ES1	FA - Comp	Audit Complete	\$ 1,453,940	\$ 121,263	Large	---
DOC05	MCI - Framingham	31	Framingham	355,861	DOC1301E ES1	FA - Comp	Audit Complete	\$ 18,168,580	\$ 1,250,537	Large	---
DOC06	North Central Correctional Institute	59	Gardner	436,411	DOC0902 EC1	TZNE	Substantially Complete	\$ 13,405,395	\$ 1,104,630	Large	Yes Plus
DOC07	Bay State Correctional Ctr Norfolk	18	Norfolk	219,117	DOC1502E ES1	New Review	Initiated	\$ 21,912	\$ 91,151	Large	---
DOC08	MCI - Norfolk	76	Norfolk	646,646	DOC1502E ES1	New Review	Initiated	\$ 64,665	\$ 269,031	Large	---
DOC09	MCI - Plymouth	20	Plymouth	56,504	AEP1312E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 10,000	Small	---
DOC11	MCI - Cedar Junction	30	Walpole	666,225	DOC1502E ES1	New Review	Initiated	\$ 66,623	\$ 287,621	Large	---
DOC13	Masac (Mass Alcohol & Substance)	12	Bridgewater	45,957	DOC1504E ES1	New Review	Initiated	\$ 4,596	\$ 19,955	Small	---
DOC14	Massachusetts Treatment Center	3	Bridgewater	177,982	DOC1504E ES1	New Review	Initiated	\$ 17,798	\$ 77,282	Large	---
DOC15	Bridgewater State Hospital	16	Bridgewater	167,966	DOC1504E ES1	New Review	Initiated	\$ 16,797	\$ 72,065	Large	---
DOC16	Old Colony Correctional Center	11	Bridgewater	312,447	DOC1504E ES1	New Review	Initiated	\$ 31,245	\$ 135,495	Large	---
DOC17	Southeastern Correctional Center	54	Bridgewater	570,778	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
DOC19	South Middlesex Correctional Center	8	Framingham	74,884	DOC1301E ES1	FA - Comp	Audit Complete	\$ 452,334	\$ 37,572	Small	---
DOC21	Pondville Correctional Center	10	Norfolk	117,360	DOC1502E ES1	New Review	Initiated	\$ 11,736	\$ 50,959	Large	---
DOC23	Boston Pre-release Center	3	Boston	45,818	DOC1402E RX1	FA - Rx	Initiated	\$ 485,671	\$ 35,356	Small	---
DOC24	MCI Shirley	72	Shirley	610,490	DOC1501E RX1	FA - Rx	Initiated	\$ 6,471,194	\$ 520,831	Large	---
DOC25	Souza Baranowski Correctional Ctr	8	Shirley	558,342	DOC1501E RX1	FA - Rx	Initiated	\$ 5,918,425	\$ 518,476	Large	---
DOC30	Bridgewater Correctional Core Serv	29	Bridgewater	198,072	DOC1504E ES1	New Review	Initiated	\$ 19,807	\$ 73,294	Large	---
DOC31	DOC Resource Management	3	Norfolk	3,110	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
Department Of Fire Services											
DFS00	Mass Firefighting Academy	14	Stow	119,506	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
Department Of State Police											
POL00	Police Barn Acton	4	Acton	15,068	AEP1308E UT1	Utility Vendor	Substantially Complete	\$ 20,780	\$ 1,336	Small	TBD
POL01	Police Station Andover	1	Andover	4,000	POL0303 EC3	FA - Comp	Substantially Complete	\$ 6,502	\$ 321	Small	No
POL02	Police Station Athol	1	Athol	7,931	POL0303 EC3	FA - Comp	Substantially Complete	\$ 8,936	\$ 268	Small	No



Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
POL03	Police Station Bourne S	2	Bourne	9,182	POL0303 EC3	FA - Comp	Substantially Complete	\$ 48,946	\$ 4,334	Small	No
POL04	Police Station Brookfield	2	Brookfield	4,190	POL0303 EC3	FA - Comp	Substantially Complete	\$ 23,473	\$ 2,325	Small	No
POL05	Police Station Cheshire	2	Cheshire	4,224	POL0303 EC3	FA - Comp	Substantially Complete	\$ 35,586	\$ 3,012	Small	Yes
POL06	Police Station Concord	1	Concord	4,800	POL0303 EC3	FA - Comp	Substantially Complete	\$ 30,547	\$ 3,692	Small	No
POL08	Police Station Foxborough	1	Foxborough	9,280	POL0303 EC3	FA - Comp	Substantially Complete	\$ 40,288	\$ 4,102	Small	No
POL09	General Headquarters Compound	8	Framingham	144,211	POL0303 EC3	FA - Comp	Substantially Complete	\$ 66,941	\$ 5,207	Small	TBD
POL10	Police Station Grafton	1	Grafton	5,770	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	
POL11	Police Station Holden	4	Holden	19,322	POL0303 EC3	FA - Comp	Substantially Complete	\$ 73,672	\$ 9,070	Small	Yes
POL12	Police Station Lee	3	Lee	5,354	POL0303 EC3	FA - Comp	Substantially Complete	\$ 22,319	\$ 2,003	Small	Yes
POL13	Police Station Leominster	2	Leominster	8,145	POL0303 EC3	FA - Comp	Substantially Complete	\$ 43,829	\$ 3,037	Small	No
POL14	Police Station Middleborough	4	Middleborough	22,398	POL0303 EC3	FA - Comp	Substantially Complete	\$ 92,938	\$ 7,997	Small	Yes
POL15	Police Station Nantucket	2	Nantucket	4,537	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
POL16	Police Station Newbury	2	Newbury	4,200	POL0303 EC3	FA - Comp	Substantially Complete	\$ 36,807	\$ 3,380	Small	No
POL17	Police Station Northampton	8	Northampton	18,398	POL0303 EC3	FA - Comp	Substantially Complete	\$ 64,351	\$ 9,182	Small	Yes
POL18	Police Station Norwell	1	Norwell	4,800	POL0303 EC3	FA - Comp	Substantially Complete	\$ 29,290	\$ 2,568	Small	No
POL19	Police Station Oak Bluffs	2	Oak Bluffs	6,710	POL0303 EC3	FA - Comp	Substantially Complete	\$ 13,288	\$ 1,643	Small	Yes
POL20	Police Station Russell	2	Russell	7,750	POL0303 EC3	FA - Comp	Substantially Complete	\$ 50,705	\$ 4,100	Small	No
POL21	Police Station Shelburne	1	Shelburne	7,931	POL0303 EC3	FA - Comp	Substantially Complete	\$ 30,654	\$ 1,808	Small	No
POL22	Police Station Springfield	2	Springfield	3,716	POL0303 EC3	FA - Comp	Substantially Complete	\$ 40,113	\$ 3,821	Small	No
POL23	Sturbridge State Police Barracks	2	Sturbridge	7,476	POL0303 EC3	FA - Comp	Substantially Complete	\$ 41,996	\$ 2,677	Small	No
POL24	State Police Crime Lab	1	Sudbury	25,576	POL0303 EC3	FA - Comp	Substantially Complete	\$ 113,365	\$ 9,871	Small	Yes
POL25	Police Station Yarmouth	2	Yarmouth	11,096	POL0303 EC3	FA - Comp	Substantially Complete	\$ 33,154	\$ 2,839	Small	No

Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
POL27	Revere State Police Barracks	1	Revere	16,504	POL0303 EC3	FA - Comp	Substantially Complete	\$ 17,848	\$ 375	Small	No
POL28	Police Station Boston Eabos	1	Boston	5,200	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
POL29	S. Boston State Police- 125 WJD	2	South Boston	16,658	POL0303 EC3	FA - Comp	Substantially Complete	\$ 78,041	\$ 5,240	Small	No
POL31	Police Station Danvers	1	Danvers	27,273	POL0303 EC3	FA - Comp	Substantially Complete	\$ 125,044	\$ 18,436	Small	Yes
POL32	Police Station Medford	1	Medford	12,000	POL0303 EC3	FA - Comp	Substantially Complete	\$ 69,803	\$ 4,495	Small	Yes
POL33	Special Operations Marine Division	1	Boston	4,992	POL0303 EC3	FA - Comp	Substantially Complete	\$ 38,605	\$ 6,663	Small	No
POL36	Police Station Milton	1	Milton	4,180	ZPOL36DOER	Other	Substantially Complete	\$ -	\$ 1,815	Small	TBD
Emergency Management Agency				-							
CDA00	Civil Defense Headquarters	3	Framingham	35,910	EPS1401E EC1	FA - Comp	Audit Complete	\$ 1,969,788	\$ 164,000	Small	---
Military Division				-							
MIL01	Armory - Agawam	1	Agawam	14,200	AEP1311E UT1	Utility Vendor	Substantially Complete	\$ 56,500	\$ 8,087	Small	Yes Plus
MIL02	Armory - Ayer	1	Ayer	14,832	AEP1303E UT1	Utility Vendor	Substantially Complete	\$ 40,287	\$ 4,566	Small	Yes
MIL03	Armory - Barnstable - Hyannis	1	Barnstable	17,855	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MIL04	Armory - Bourne	1	Bourne	73,890	AEP1310E UT1	Utility Vendor	Initiated	\$ 21,904	\$ 2,658	Small	---
MIL05	Armory - Braintree	1	Braintree	18,445	AEP1302E UT1	Utility Vendor	Substantially Complete	\$ 48,419	\$ 13,696	Small	Yes
MIL06	Armory - Brockton	1	Brockton	23,285	AEP1308E UT1	Utility Vendor	Substantially Complete	\$ 12,088	\$ 1,894	Small	No
MIL07	Armory - Cambridge	1	Cambridge	26,700	AEP1302E UT1	Utility Vendor	Substantially Complete	\$ 22,149	\$ 5,739	Small	No
MIL09	Armory - Chicopee	1	Chicopee	16,962	AEP1404E UT1	Utility Vendor	Substantially Complete	\$ 59,800	\$ 6,286	Small	Yes
MIL11	Armory - Concord	1	Concord	36,500	AEP1309E UT1	Utility Vendor	Substantially Complete	\$ 44,111	\$ 5,344	Small	No
MIL12	Armory - Danvers	1	Danvers	23,200	AEP1303E UT1	Utility Vendor	Substantially Complete	\$ 45,560	\$ 8,439	Small	Yes
MIL13	Armory - Fall River	1	Fall River	39,040	AEP1310E UT1	Utility Vendor	Initiated	\$ 78,080	\$ 7,808	Small	---
MIL14	Armory - Falmouth	1	Falmouth	17,200	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MIL16	Armory - Framingham	3	Framingham	63,518	AEP1302E UT1	Utility Vendor	Substantially Complete	\$ 53,145	\$ 9,475	Small	No
MIL17	Armory - Gardner	1	Gardner	18,600	AEP1303E UT1	Utility Vendor	Substantially Complete	\$ 85,128	\$ 13,783	Small	Yes

Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
MIL18	Armory - Greenfield	1	Greenfield	30,692	AEP1311E UT1	Utility Vendor	Substantially Complete	\$ 87,925	\$ 8,479	Small	Yes
MIL19	Armory - Hingham	2	Hingham	40,300	AEP1302E UT1	Utility Vendor	Substantially Complete	\$ 25,912	\$ 9,753	Small	Yes
MIL21	Armory - Hudson	2	Hudson	39,892	AEP1303E UT1	Utility Vendor	Substantially Complete	\$ 51,975	\$ 6,476	Small	Yes
MIL22	Armory - Leominster	1	Leominster	16,484	AEP1303E UT1	Utility Vendor	Substantially Complete	\$ 30,516	\$ 5,656	Small	Yes
MIL23	Armory - Lexington	1	Lexington	31,761	AEP1302E UT1	Utility Vendor	Substantially Complete	\$ 22,984	\$ 6,730	Small	Yes
MIL24	Armory - Lynn	2	Lynn	44,798	AEP1303E UT1	Utility Vendor	Substantially Complete	\$ 44,823	\$ 6,759	Small	Yes
MIL27	Armory - Melrose	1	Melrose	25,500	AEP1303E UT1	Utility Vendor	Audit Complete	\$ 100,000	\$ 10,877	Small	---
MIL28	Armory - Methuen	3	Methuen	97,626	AEP1303E UT1	Utility Vendor	Implementation Started	\$ 19,248	\$ 1,438	Small	No
MIL29	Armory - Middleborough	1	Middleborough	17,205	AEP1302E UT1	Utility Vendor	Substantially Complete	\$ 80,272	\$ 19,281	Small	Yes Plus
MIL30	Armory - Milford	1	Millford	33,200	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MIL31	National Guard Headquarters	2	Milford	264,651	AEP1309E UT1	Utility Vendor	Substantially Complete	\$ 84,376	\$ 16,321	Large	No
MIL33	Mass National Guard Supply Depot	1	Natick	60,000	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MIL35	Armory - Newburyport	3	Newburyport	23,795	AEP1303E UT1	Utility Vendor	Audit Complete	\$ 81,872	\$ 5,501	Small	---
MIL36	Armory - Newton	1	Newton	26,890	AEP1302E UT1	Utility Vendor	Substantially Complete	\$ 21,137	\$ 6,860	Small	Yes
MIL38	Armory - Northampton	1	Northampton	14,556	AEP1404E UT1	Utility Vendor	Substantially Complete	\$ 44,000	\$ 8,089	Small	Yes
MIL39	Armory - Northbridge	2	Northbridge	17,440	AEP1303E UT1	Utility Vendor	Substantially Complete	\$ 34,872	\$ 4,243	Small	Yes
MIL40	Armory - Pittsfield	1	Pittsfield	19,500	AEP1311E UT1	Utility Vendor	Substantially Complete	\$ 87,556	\$ 10,931	Small	Yes Plus
MIL42	Armory - Quincy	2	Quincy	32,200	AEP1310E UT1	Utility Vendor	Initiated	\$ 80,261	\$ 12,175	Small	---
MIL43	Camp Curtis Guild	43	Reading	176,394	MIL1402E ES1	FA - Comp	Initiated	\$ 2,116,728	\$ 38,514	Large	---
MIL47	Armory - Springfield66	1	Springfield	43,095	AEP1311E UT1	Utility Vendor	Substantially Complete	\$ 95,693	\$ 12,861	Small	Yes
MIL49	Armory - Ware	1	Ware	18,447	AEP1303E UT1	Utility Vendor	Substantially Complete	\$ 37,757	\$ 7,601	Small	Yes
MIL51	Armory - Westfield	2	Westfield	53,394	AEP1311E UT1	Utility Vendor	Substantially Complete	\$ 76,008	\$ 10,637	Small	Yes
MIL55	Museum - Worcester	1	Worcester	65,424	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
MIL56	Armory - Taunton	1	Taunton	20,866	AEP1309E UT1	Utility Vendor	Substantially Complete	\$ 92,992	\$ 8,837	Small	Yes

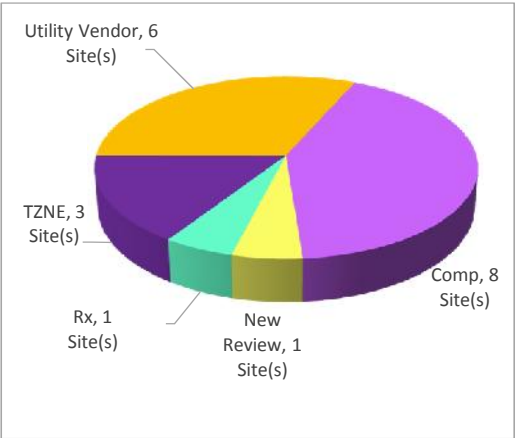
Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
MIL57	Armory - Worcester	1	Worcester	27,892	AEP1309E UT1	Utility Vendor	Substantially Complete	\$ 38,710	\$ 5,073	Small	No
MIL58	Camp Edwards Otis ANGB	2	Sandwich	38,300	AEP1310E UT1	Utility Vendor	Initiated	\$ 61,696	\$ 12,204	Small	---
MIL59	Armory - Dorchester	1	Boston	27,354	AEP1302E UT1	Utility Vendor	Substantially Complete	\$ 32,971	\$ 8,615	Small	No
MIL60	Armory - Bridgewater	1	Bridgewater	14,200	AEP1308E UT1	Utility Vendor	Substantially Complete	\$ 11,733	\$ 3,498	Small	No
Office Of The Chief Medical Examiner				-							
CME00	Chief Medical Examiner	1	Boston	27,750	CME1402 HS1	Other	Initiated	\$ 294,150	\$ 21,414	Small	---
CME01	Chief Medical Examiner - Sandwich	1	Sandwich	7,775	CME1501E RX1	FA - Rx	Initiated	\$ 82,415	\$ 3,376	Small	---
Registry Of Motor Vehicles				-							
RMV00	Registry Of Motor Vehicles	(blank)	Marlborough	(blank)	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
RMV02	Registry Of Motor Vehicles Worc	1	Worcester	32,400	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
<b>Grand Total</b>		<b>101</b>		<b>8,313,145</b>				<b>\$ 65,336,328</b>	<b>\$ 6,204,544</b>		



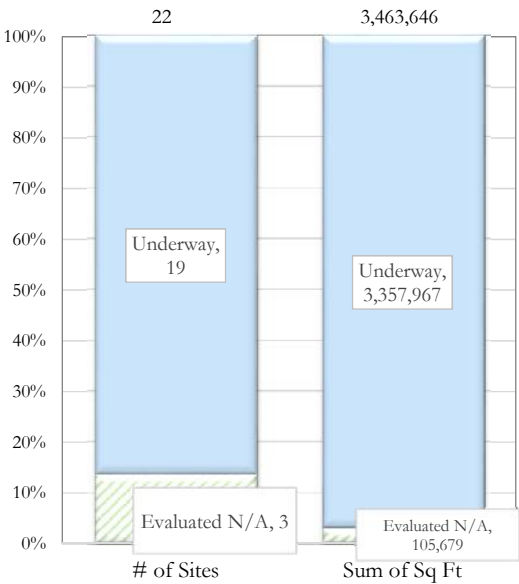
AEP Phase 1 Progress Summary

Sheriffs Departments

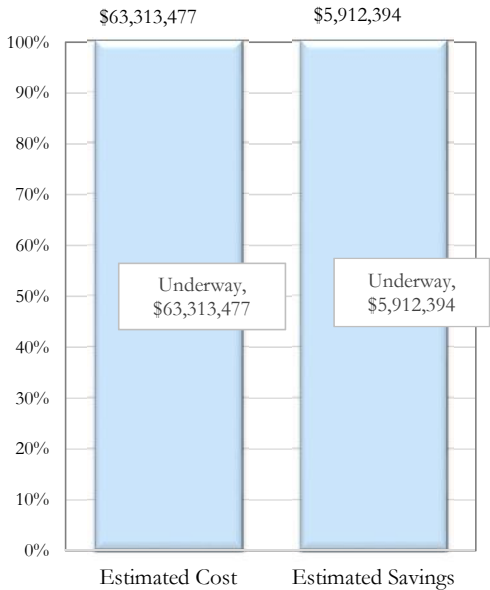
Implementation Method



Status



Financials



Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
<b>Sheriffs Departments</b>											
Sheriffs Department Barnstable											
SDC00	Sheriffs Dept-Barnstable-Correction	11	Bourne	178,769	AEP1508E UT1	Utility Vendor	Initiated	\$ 100,000	\$ 135,933	Large	---
Sheriffs Department Berkshire											
SDB00	Sheriffs Berkshire New	4	Pittsfield	167,075	SDB1201E EC1	FA - Comp	Implementation Started	\$ 3,520,756	\$ 364,672	Large	Yes Plus
SDB01	Sheriffs Berkshire Old	3	Pittsfield	49,730	AEP1312E UT1	Utility Vendor	Implementation Started	\$ 48,162	\$ 10,990	Small	No
Sheriffs Department Bristol											
BSD00	Sheriffs Bristol Dartmouth	21	Dartmouth	299,451	BSD1401E ES1	FA - Comp	Audit Complete	\$ 15,250,467	\$ 1,113,457	Large	---
BSD01	Sheriffs Dept-Bristol-New Bedford	3	New Bedford	213,905	BSD1401E ES1	FA - Comp	Audit Complete	\$ 2,089,680	\$ 170,278	Large	---
Sheriffs Department Dukes											
SDD00	Sheriffs Dept-dukes	4	Edgartown	9,096	AEP1504E UT1	Utility Vendor	Initiated	\$ 18,192	\$ 1,819	Small	---
SDD01	Sheriffs Dept-Dukes-airport	3	Edgartown	4,230	AEP1504E UT1	Utility Vendor	Initiated	\$ 8,460	\$ 846	Small	---
Sheriffs Department Essex											
SDE00	Sheriffs Essex Lawrence	6	Lawrence	88,286	SDE1301E EC1	TZNE	Audit Complete	\$ 2,617,311	\$ 70,463	Small	---
SDE01	Sheriffs Essex Middleton	12	Middleton	237,543	SDE1301E EC1	TZNE	Audit Complete	\$ 7,050,250	\$ 584,304	Large	---
SDE03	Sheriffs Dept-Essex-Salisbury	1	Salisbury	5,248	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	
Sheriffs Department Franklin											
SDF00	Sheriffs Franklin	4	Greenfield	118,050	SDF1401E ES1	FA - Comp	Initiated	\$ 7,309,096	\$ 401,123	Large	---
Sheriffs Department Hampden											
SDH01	Sheriffs Hampden Chicopee	4	Chicopee	60,426	SDH1401E RX1	FA - Rx	Implementation Started	\$ 640,516	\$ 46,628	Small	TBD
SDH02	Sheriffs Hampden Springfield	1	Springfield	13,382	AEP1312E UT1	Utility Vendor	Audit Complete	\$ 100,000	\$ 13,523	Small	---
Sheriffs Department Middlesex											
SDM00	Sheriffs Middlesex Cambridge	1	Cambridge	84,608	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	N/A
SDM01	Sheriffs Dept-Middlesex-Billerica	15	Billerica	368,594	SDM1202 ES1	FA - Comp	Audit Complete	\$ 5,837,980	\$ 502,891	Large	---
Sheriffs Department Norfolk											
SDN00	Sheriffs Dept-Norfolk-Dedham	3	Dedham	154,500	SDN1501E ES1	FA - Comp	Initiated	\$ 1,637,700	\$ 113,155	Large	---
SDN01	Sheriffs Dept-Norfolk-alt Cntr	5	Braintree	15,823	Evaluated NA	Evaluated NA	Evaluated N/A	\$ -	\$ -	Evaluated N/A	
Sheriffs Department Plymouth											
SDP00	Sheriffs Dept-Plymouth-main	8	Plymouth	437,553	SDP1202 ES1	TZNE	Implementation Started	\$ 3,868,976	\$ 526,558	Large	No
SDP01	Sheriffs Dept-Plymouth-farm	19	Plymouth	34,498	AEP1312E UT1	Utility Vendor	Audit Complete	\$ 68,996	\$ 6,900	Small	---
Sheriffs Department Suffolk											
SDS00	Sheriffs Dept-Suffolk-House Corr	8	Boston	565,642	SDS1501E ES1	FA - Comp	Initiated	\$ 6,787,704	\$ 528,784	Large	---
SDS01	Sheriffs Dept-Suffolk-County Jail	1	Boston	342,316	SDS1502E ES1	New Review	Initiated	\$ 34,232	\$ 148,639	Large	---



Site Information					AEP Program Status					AEP Certification	
Program Area Agency Site Code	Site Name	# Bldg	Municipality	Sq Ft	Project Number	Procurement Strategy	Status	Current Working Estimate	Annual Savings	AEP Certified Group	AEP Certified
	Sheriffs Department Worcester			-							
SDW00	Sheriffs Dept-Worcester-W Boylston	1	Boylston	14,921	SDW0901 ES1	FA - Comp	Audit Complete	\$ 6,325,000	\$ 1,171,431	Small	---
<b>Grand Total</b>		<b>22</b>		<b>3,463,646</b>				<b>\$ 63,313,477</b>	<b>\$ 5,912,394</b>		