



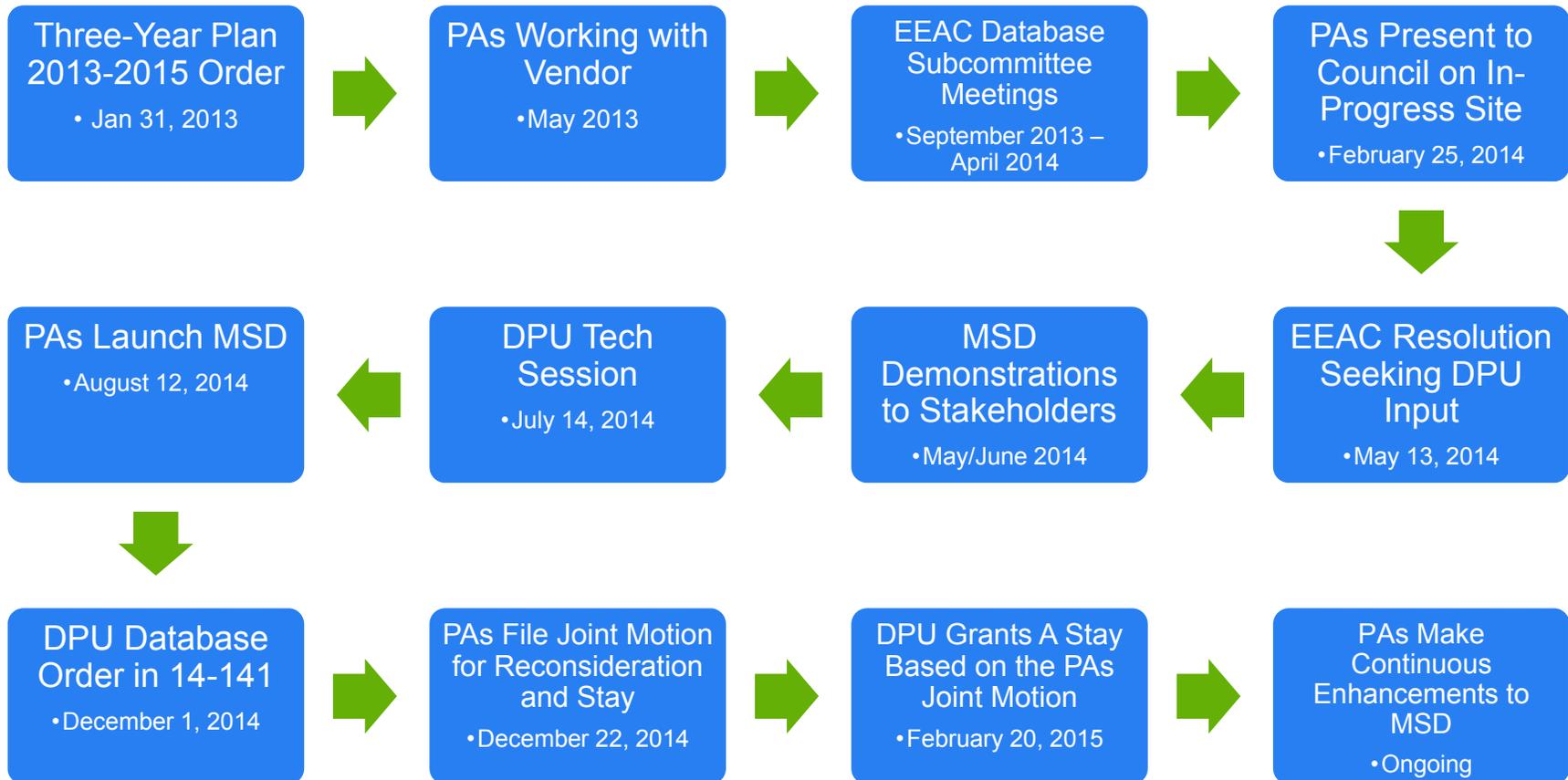
Mass Save Data

EVOLUTION AND CONTINUOUS ENHANCEMENT

Presentation to the EEAC – September 20, 2017



Background 2013 to Present



EEAC Resolution Sought DPU Input



Following the database subcommittee process, the EEAC sought DPU input to:

1. Identify the data inputs required to inform the EEAC and the DPU in their respective mandates to oversee the pursuit of all cost-effective energy efficiency on a statewide basis
2. Determine recommended data privacy controls

Database Order



Primary DPU directives:

- Populate a statewide energy efficiency database with all data the Program Administrators currently report (i.e., data included in the D.P.U. 08-50 tables, benefit-cost ratio screening tools, and technical reference manual).
- Provide budget, participation, savings, and benefits data for all measures (i.e., all data currently provided at the measure level in the benefit-cost ratio screening model, wherever possible) aggregated to the zip code level, subject to aggregation standards to make this information anonymous, thereby protecting customer privacy.
- Provide customer usage data by customer sector, aggregated at the zip code level.

Aggregation Standards as Set Forth by DPU



To maintain the privacy of customer data:

Residential Sector

- Aggregate and report data at the zip code level, provided that the aggregated data represents at least 100 customers.

Commercial and Industrial Sector

- Aggregated data must represent at least 15 customers, with no single customer accounting for more than 15 percent of electric or gas usage.

Zip Code Aggregation

- For zip codes that do not meet these standards, data must be combined with a bordering zip code until the aggregation standard for that customer sector is met.

Motion for Reconsideration



PAs implemented many items included in the Order

PAs filed the motion based on feasibility, cost, and privacy considerations, including:

- Concerns on lack of due process and record evidence
- Lack of review on cost or cost-effectiveness
- Concerns about significant value, meaningfulness, and benefit to customers
- Privacy and aggregation standards not explored

Department stayed the compliance filing by hearing officer memo

Notwithstanding the motion, PAs have continued engagement and collaborative work to enhance MSD

MSD Addresses Key Elements of the Order



Performance data

- Includes all data the PAs currently report in energy efficiency data tables, as well as measure level information from the BCR models, with all data consistent with D.P.U. 11-120. Also includes link to electronic [Technical Reference Library](#).

Measures

- Includes quantity, incentives, savings, and benefits from 2016 and going forward.

Geographic

- Includes residential (including low-income) and C&I savings, usage, and incentives data by city/town; residential data by zip code; and C&I data by zip code for the City of Boston (reflecting privacy concerns for smaller cities/towns).

Additional Data Since Order Based on Stakeholder Comments



[Home Energy Services Activity](#)

- including closure rates

[HEAT Loan Measure Report](#)

[GHG Reductions](#)

- with emissions equivalents

[Sales & Savings](#)

[Cost to Deliver](#)

Continuing Enhancements



PAs continue to make improvements in data, functionality, and usability of MSD, for example:

New [Time Series](#) now allows user to look at quarterly or annual data over time

Throughout site, data can be viewed as table or graph, can be exported to Excel flat file (to aid in analysis), .pdf format, and .jpg

Improvements to assist user, e.g., [participant](#) definitions

For all new data included, PAs examine the cost of making the data available, the direct energy efficiency purpose and benefit, whether the data will be meaningful, and whether the aggregation standards will provide useful results (i.e., whether privacy aggregation will negate the desired granularity)

PAs have received positive feedback on usefulness of MSD from various stakeholders

Spotlight on Geographic



Includes county, town/city, and zip code (residential and C&I for City of Boston) level usage, savings, and incentives data (consistent with aggregation standards set forth in Order)

Data can be viewed in a [map](#) or [table](#) view

Now includes data from 2013, 2014, and 2015 customer profile studies

Cities and towns have used this data to compare to similar towns, calculate GHG, and compare usage across years

PAs engaging in continuing discussions with cities/towns on additional information
•Cities/towns can also get significant data on municipal buildings through DOER's [Mass Energy Insight](#)

Evaluation Database



- Another significant source of data and data analytics is the EM&V database that assists in gathering, aggregating, verifying, and analyzing customer usage, tracking, and third-party data.

Maintained by a third-party vendor to support evaluation work, including customer profile studies

Maintains privacy - includes non-public PA information that only third-party vendor can view under NDA (PAs cannot view another PA's customer data)

Vendor provides aggregated reports from database to PAs, consultants, and other evaluation vendors, including customer usage, savings, project, and participant data

Data Update Frequency



Monthly

- Data by sector

Quarterly

- Data by core initiative, GHG reductions, HES, HEAT Loan updated

Annually

- Final core initiative and measure data (starting in 2016) updated at Plan and annually following each Plan-Year and Term Report

As Data Becomes Available from Evaluation Vendor

- Geographic data updated when profile studies are nearly complete (PAs working with vendor to receive usage data prior to completion of report)

Data Sources



Performance Data

- from PA tracking systems, matches DPU filed tables and EEAC quarterly reports and data dashboards

Measure Data

- from PA BCR models

Geographic

- from customer profile studies and evaluation database

GHG Emissions

- emissions factors provided by DEP; GHG conversion factors from EPA

HEAT Loan and HES data

- from implementation vendors

Technical Reference Library

- from evaluation studies or EM&V agreed-upon assumptions

Costs



PAs spent approximately \$100,000 statewide in 2016 on database vendor hosting and maintenance

Evaluation database paid for through EM&V budget and utilized for various evaluation purposes

PAs continue to balance costs and benefits associated with maintaining a robust database to ensure ratepayer dollars are prudently used and maintain overall cost-effectiveness

Wrap-Up



- MSD has evolved and currently provides robust energy efficiency data with a high level of functionality and a user-friendly experience
- MSD includes various data, including performance details, measure savings, and city/town data
- Consistent with Department's Order, PAs maintain aggregation standards to protect customer privacy
- PAs welcome suggestions for enhancements to MSD

Thank you

