Tune-Up Accelerator Webinar (03.26.20)
Participant Questions & Answers

Compiled by OSE and PNNL.

1) (Several asked) Can we get a copy of this presentation?
   a) Yes, a recording and PDF here: http://www.seattle.gov/environment/climate-change/buildings-and-energy/building-tune-ups/tune-up-accelerator. The final report should also be published and posted there and on DOE's portal by summer 2020.

2) Better for building performance standards to reference HERS, or reference Energy Star, or Zero Energy Ready Home, or LEED, or...?
   a) Current tune-ups requirement is for commercial buildings only. Building performance standards still under consideration, so no info on that currently.

3) Any energy performance measurement and verification approach preferred (Smart Meter, or breaker-based like Sense)?
   a) No preference. M&V is not required, it was just part of the Accelerator Program.

4) Was DOE Audit Template used to report audit findings?
   a) No, we used a custom reporting spreadsheet. If you want to see what it looks like, go http://www.seattle.gov/environment/climate-change/buildings-and-energy/building-tune-ups/tune-up-accelerator and look under the "Archive Documentation" for the "Tune-Up Accelerator Summary Report (Excel)." Please note that the tune-ups mandate program has not moved to an online reporting platform.

5) (Several asked) Where should we submit our email to obtain relevant PNNL publications as they are developed?
   We have made a note of those requesting the PNNL report and analysis of this project and will contact interested parties when it has been published. Additional requests may be forwarded by submitting a ticket via the Asset Score Help Desk:
   https://help.buildingenergyscore.com/support/home

6) Was the "PNNL Retuning Estimates" for the DOE/PNNL 9 building types the same as the Asset Score or a different tool?
   a) This was based upon nine Department of Energy (DOE) commercial building prototype models used in PNNL's Re-Tuning energy savings research. Asset Score may model all of the building types used in the retuning research prototypes (office, retail, school and hotels), with the exception of Supermarket/Grocery Store.

7) Was data transparency part of the agreement for participation in these programmes? Was/is there any push-back on this?
   a) Yes, participants were informed the Asset Score and Tune-Up would be shared with the City; however, results for buildings are all anonymous in our reporting.

b) There was not pushback because it is a requirement of the tune-ups mandate and also a requirement to get the incentive for early compliance.

8) Is an ASHRAE Level 3 Audit required to generate the Asset Score model?
No. A building may be modeled in Asset Score with a minimal set of inputs, though it may be fine-tuned with additional levels of detail. ASHRAE Level 3 audits require a more rigorous engineering analysis focusing on the potential capital-intensive energy efficiency measures. An energy model is usually created and calibrated to facilitate the analysis. ASHRAE level 3 doesn't specify what modeling tool to use.

9) I can't find any online Spark tool presence; the website looks down. Is it still in use?
   a) NEEA has been doing some work on it and may be transitioning it.

10) Are those savings from bills, or predicted?
   a) The M&V savings used data reported to Energy Star Portfolio Manager, but as noted, only 4-10 months of post tune-up months were available. We do hope to update this.

11) What common barriers to participation were identified, if any?
   a) Staff capacity and budget were the biggest.

12) What sort of analysis went into dividing the buildings into size ranges?
   a) The size ranges for tune-ups were based on actual numbers of buildings in Seattle and the GFA reporting to the energy benchmarking program to roughly divide them so that not too many buildings had to report in any given year. (Most years have about 200-250 that need to report.)

13) How much assistance is provided to participants through the TUA for economic analysis?
   a) UW IDL was able to provide rough cost estimates for implementation of the Level 3 Building Renewal Plans (5 buildings).

14) Any theories on why the Spark report (level 1) was to motivating to buildings?
   a) It generally was *not* motivating. We think it was because the owners were very focused on their own business needs and just getting the tune-up itself completed. For most, tune-ups was a new concept and enough to manage.

15) Does a contracting firm have to attend a training in order to be qualified to participate in the program?
   a) No, but they must meet the following qualifications: http://www.seattle.gov/environment/climate-change/buildings-and-energy/building-tune-ups/how-to-comply#HireaTUSpecialist

16) In the meantime, any resources on decreasing energy load during COVID19 shelter in place?
   a) We have not created any resources yet. To date, utilities have been focused on making sure customers who have been laid off can pay their bills. This is an evolving situation, so resources

may be made available.

17) What was the Tune Up program implementation cost?
    a) The total program cost across 3.5 years was about $3 million, $1.2 of which was Federal and $1.8 local match from several sources.

18) Can you please go into the finding that improving the envelope is considered too expensive?
    The cost-effectiveness analysis data behind the Asset Score recommendations have shown that recommendations to add envelope insulation (particularly adding insulation to walls) may require higher costs and are difficult to estimate the energy savings without running more intense analysis than the tool provides.

19) If only 11 of 38 Spark reports showed a positive return, what is the other 27 reports show? Was anything done with those 27 reports?
    a) The reports that didn't have a positive NPV were likely because the building type just wasn't a good fit for the model. It is really geared for commercial leased offices and the best results were found with those. IDL did not pursue the reports that did not pencil further.

20) Are the Plus Incentives for building tune-up based on quantified energy savings? or verified operations?
    a) With few exceptions, the "Plus" incentives are all per kWh deemed savings. Exception is the new Existing Building Commissioning (EBCx) program: https://energysolutions.seattle.gov/wp-content/uploads/City-Light-EBCX-Factsheet.pdf

21) What percentage of buildings had green teams or sustainability program teams?
    a) This was not something we tracked for the program.

22) Some references suggested by PNNL related to building management and Covid-19:

- Guidance for Building Operations During the COVID-19 Pandemic by Lawrence J. Schoen (*From ASHRAE Journal Newsletter, March 24, 2020)*
- ASHRAE Position Document on Airborne Infectious Diseases
- ASHRAE general coronavirus resources
- ASHRAE Study: Modeling Person to Person Contaminant Transport in a Mechanical Ventilation Space