



Behavior Reference Manual Home Energy Reports

Deviation from whitepaper saving calculation methodology and potential next steps

August 20, 2019

Process to set and recalibrate Home Energy Reports (HER) Behavior Reference Manual (BRM)

Pilot HER Wave(s)

The pilot wave's energy savings (calculated by Oracle) set the initial deemed savings value each year for the BRM (presented in a white paper)

Following HER Waves

The deemed savings value is used to calculate energy savings for waves that follow

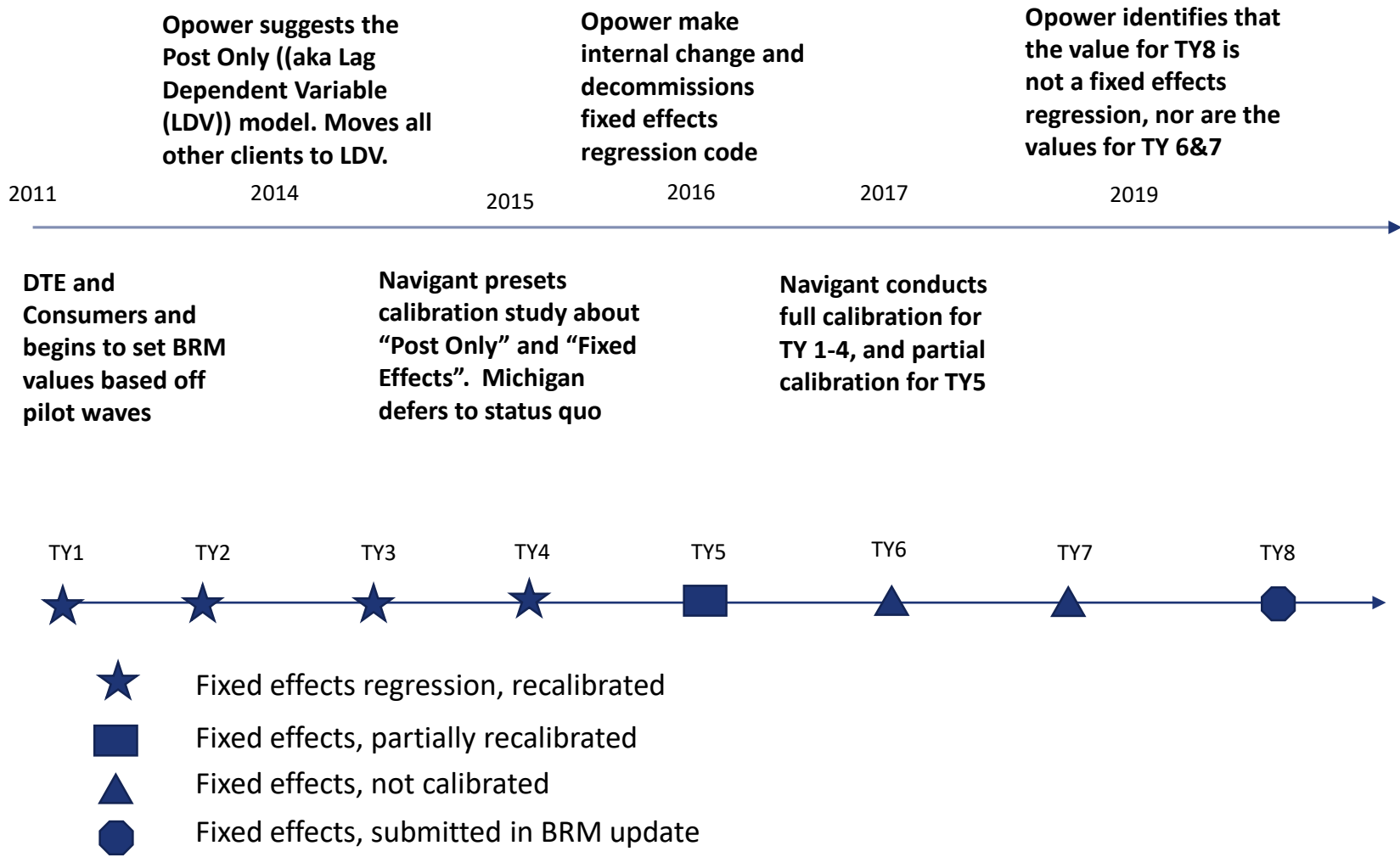
HER Value Calibration

The pilot and following waves actual data are aggregated to calibrate an even more precise estimated savings value (calculated by Navigant). This has been completed for BRM values for years 1-4, and partially year 5.

Annual Review

Evaluator presents the calculated energy savings as compared to the deemed savings. This effort helps to inform the needs for HER value calibration.

HER BRM Value Setting Timeline



Possible Next Steps

Options	Pros	Cons
Keep current BRM values and re-submit the TY8 value to include Fixed Effects Regression	<ul style="list-style-type: none"> • Least expensive • TY8 conforms to white paper • Can be completed quickly 	<ul style="list-style-type: none"> • TY6 & 7 savings values don't conform to white paper
Update TY6-8 values to include Fixed Effects Regression based on pilot wave	<ul style="list-style-type: none"> • Less expensive • All savings values conform to white paper • May be completed quickly 	<ul style="list-style-type: none"> • TY 6 & 7 don't have calibrated values
Conduct calibration for TY5-7 Fixed Effects Regression based on commercialized waves and update TY8	<ul style="list-style-type: none"> • All savings values conform to white paper • All values are TY1-7 have been calibrated 	<ul style="list-style-type: none"> • More expensive • Timing will be past the 2020 BRM update
Convert savings estimates for all years to LDV methodology	<ul style="list-style-type: none"> • Michigan no longer is an outlier in how HER programs are evaluated • Michigan follows UMP recommendations for how to evaluate HER programs 	<ul style="list-style-type: none"> • Most expensive • Timing will be past the 2020 BRM update