## Large Commercial New Construction Market Profiling

J. Ryan Barry, KEMA, Portland, ME Ferit Ucar, APPRISE, Princeton, NJ Andrew Wood, National Grid, Waltham, MA

This poster presents an overview of the methodology and selected results from a quantitative profile of the large commercial new construction market in Massachusetts.

In 2010, the Massachusetts Program Administrators commenced a multi-year research agenda to characterize its large commercial and industrial new construction market. The overarching objective of the research is "to define the attributes of a specific market area in enough detail that the program planners and administrators can use the information for improving program implementation." The evaluation team developed a comprehensive overview of the market for the design and construction of large commercial facilities in the state. The market overview includes quantitative profiles of large commercial new construction customers and the new construction supply chain.

The quantitative profile of large commercial new construction was developed with electric and natural gas program participation records, utility provided usage data, and the F. W. Dodge "Players" database. The Players database played a central role in the market characterization. The Players database contains retrospective information on commercial and industrial construction projects that, according to Dodge, have begun construction. These data are developed by field reporters employed by McGraw Hill who regularly visit construction permitting offices to identify newly permitted building projects and who make follow-up contacts with project managers to collect information on the status of construction and the businesses that are involved with construction.

The evaluation team created an initial snap shot of the Massachusetts new construction market with an analysis the Dodge data for 1996 through 2009. This trend analysis was followed by the merging of the Players database with the program participation records and the utility usage data for a representative sample of new buildings. The combined database was used to develop a comprehensive characterization of large commercial construction projects completed, in terms of building type, size, new construction program penetration and energy use.

The research recommends moving forward with year two of the market characterization research agenda using the constructed database of sampled buildings as the bases for future research, including on-site data collection.