

ARRA SmartGrid Investment Grant Projects Data

R. Scott Crowder III

National Renewable Energy Lab







ARRA SmartGrid Program Highlights

- Department of Energy Provided \$4.5B
- Awards to 131 SmartGrid Projects
 - 99 Investment grants to individual utilities
 - 16 Regional demonstration projects
 - 16 Storage demonstration projects
- 13 Consumer Behavior Studies



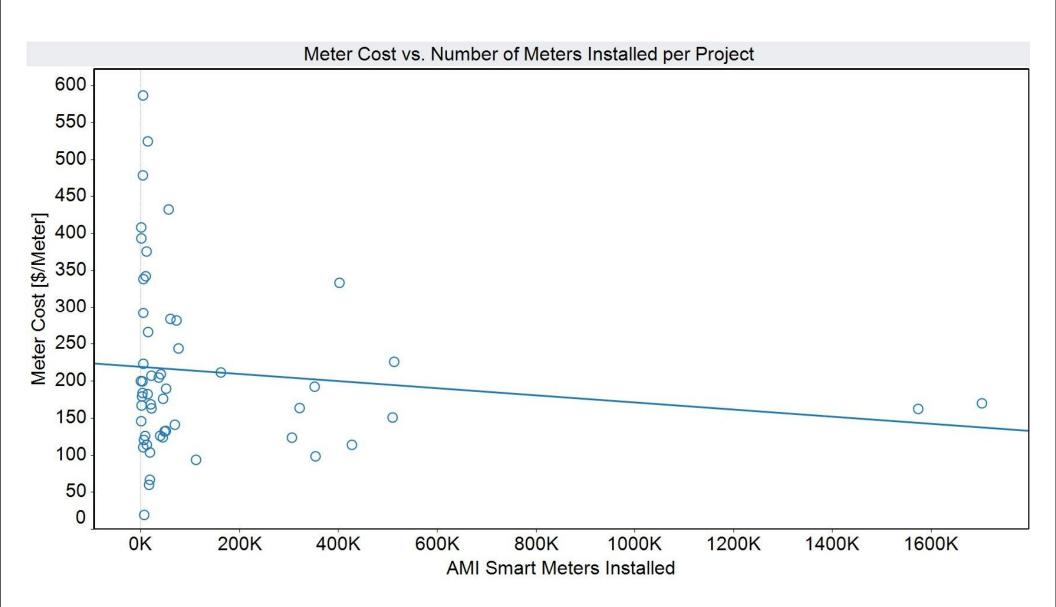
ARRA Projects Data Types

- Collecting Three Types of Data
 - Build Metrics: Installed equipment and costs
 - Quarterly Data, Starting Q4 2010
 - Publically available via SmartGrid.gov
 - Impact Metrics: Calculated benefits
 - Semi-Annual Data, Starting Summer 2011
 - Individual reports business sensitive
 - Aggregated data available via SmartGrid.gov
 - Detailed meter and consumer behavior data
 - Data is business sensitive
 - Aggregated Data Available via SmartGrid.gov



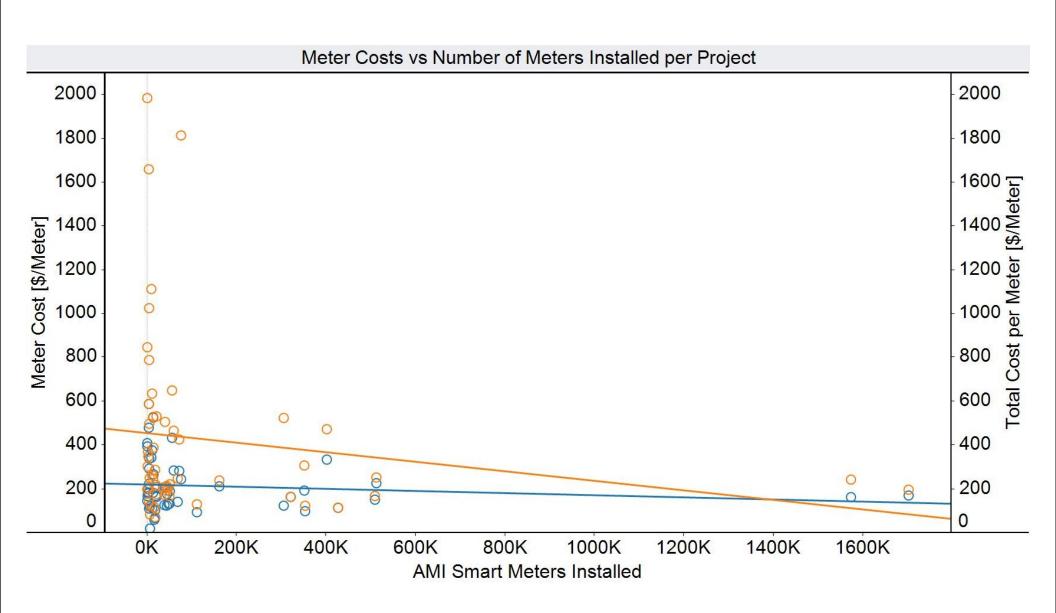


AMI Meter Cost by Number Installed





Data from the ARRA Projects

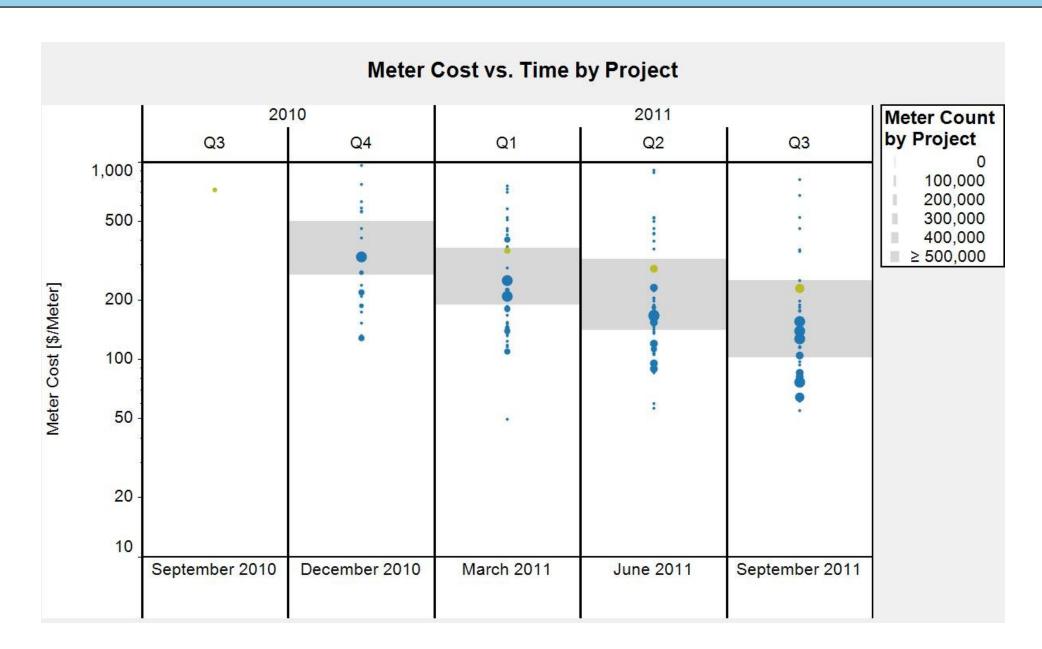


(Blue markers indicate AMI meter costs. Gold markers indicate sum of costs associated with AMI Meter.)



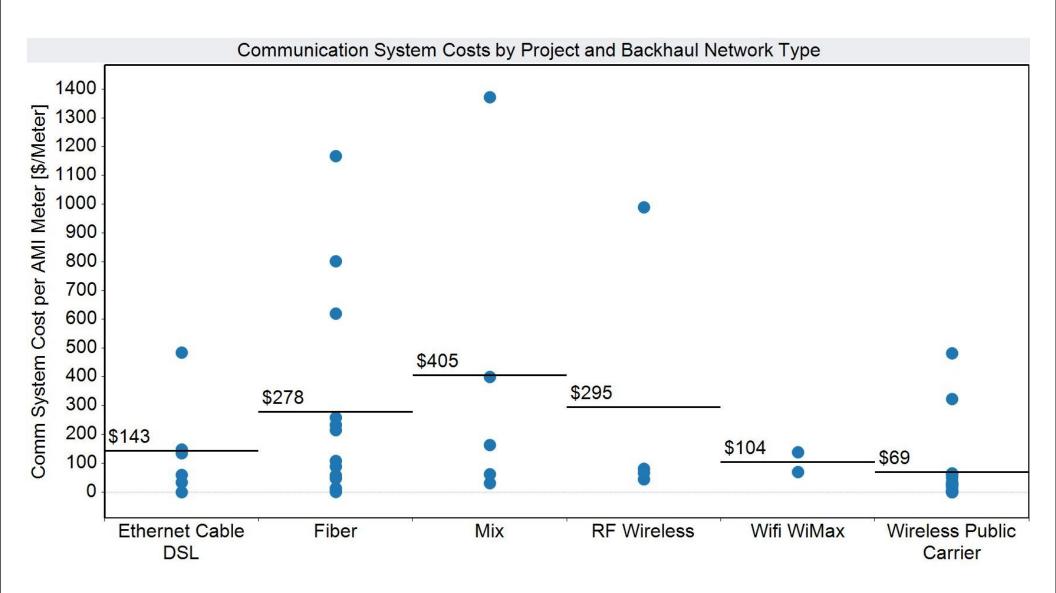


Meter Costs Over Time



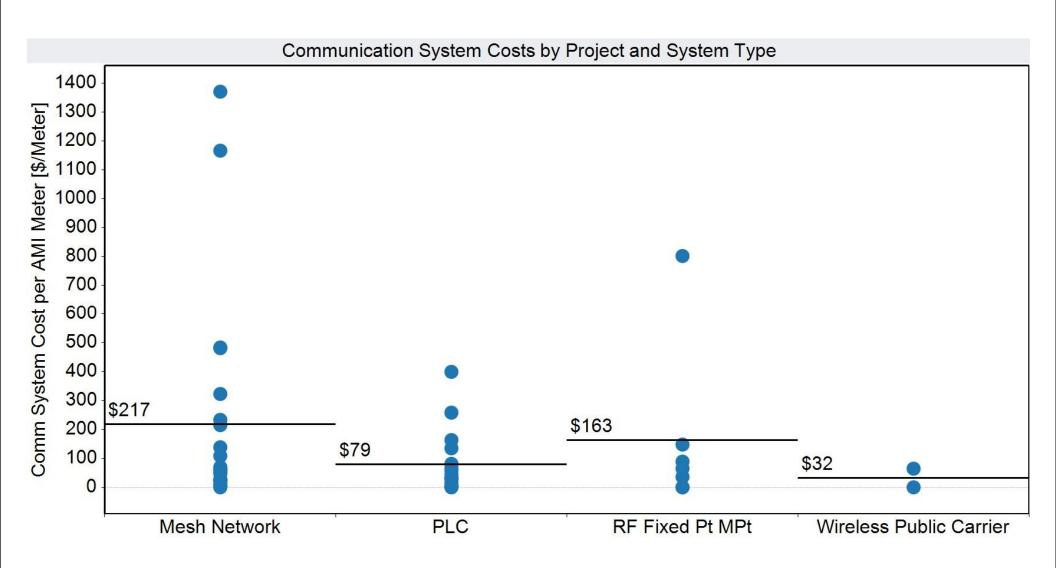


Communication Cost by Technology



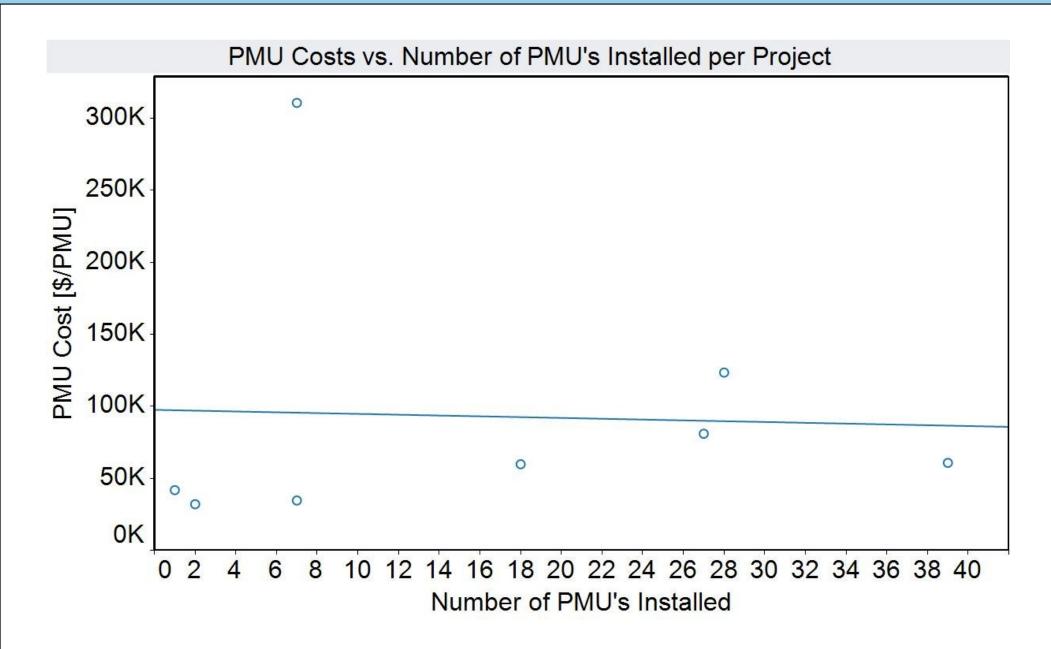


Communication Cost by Technology





PMU Cost by Number Installed





- Benefit Data
 - Coming soon
- Consumer Behavior Data
 - Will use ESPI to collect data
 - Analysis techniques and results will be published
- Public Data and Analysis Results Will Be Available on SmartGrid.gov