

Indoor Climate Research & Training

Using Smart Meters to Target Efficiency Measures

Website:

icrt.appliedresearch.illinois.edu

Proposal Idea: Develop Algorithms to Target Measures Using Smart Meter Data

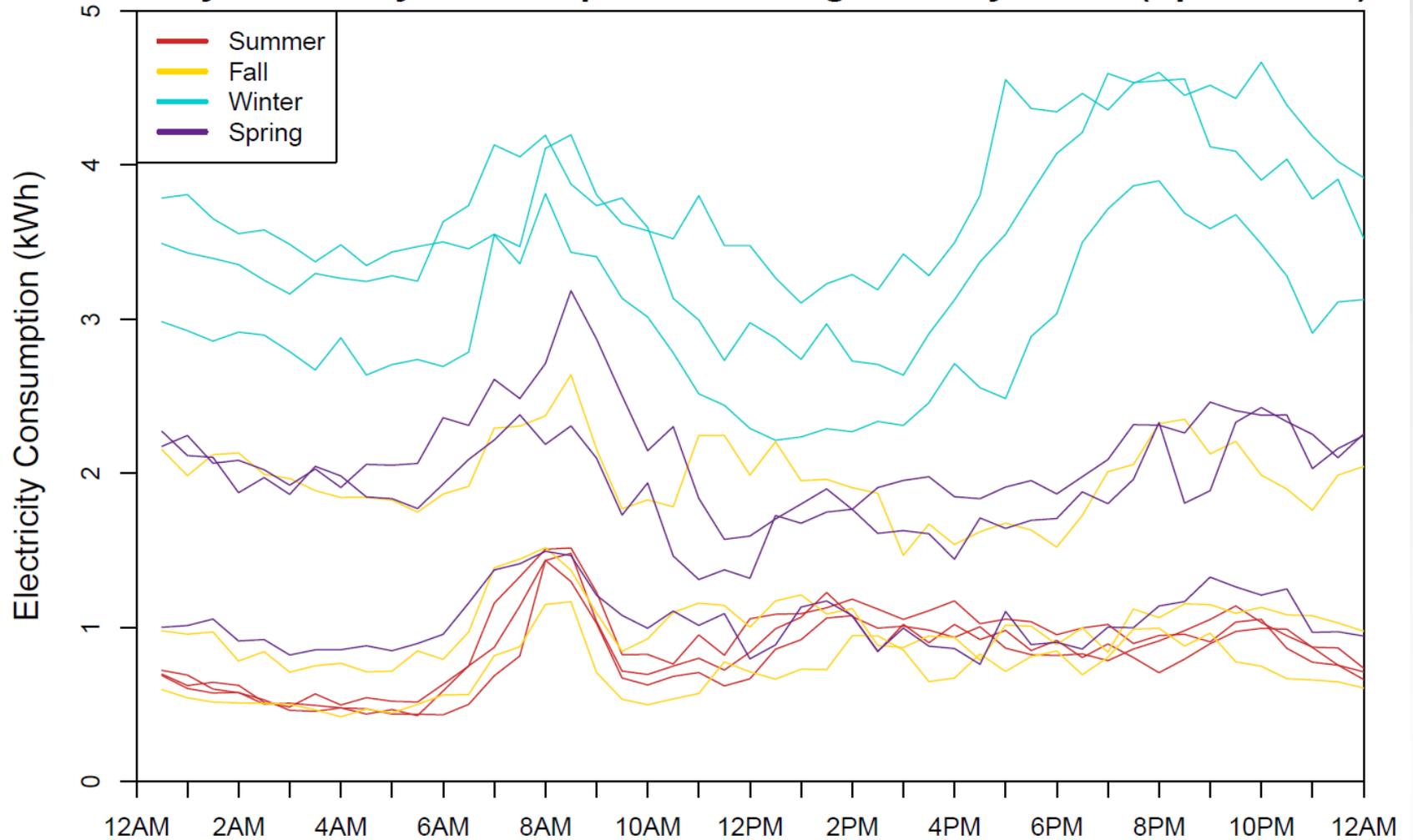
- ▶ Smart meters are installed throughout Illinois
- ▶ Provide data at relatively fine intervals
- ▶ Conceptually, should be able to use pattern analysis to disaggregate end uses
- ▶ Could then identify end uses that show particularly high energy usage and target EE efforts



Current Efforts

- ▶ ICRT, in partnership with UIUC Civil and Environmental Engineering, have gained access to ComEd smart meter data through an NDA with Environmental Defense Fund
- ▶ Have done some preliminary scoping of the potential for end use identification

Daily Electricity Consumption of a Single Family Home (Space Heat)



Pilot method & costs

- ▶ Primary cost is for UIUC student time. Estimated period of 3 years
- ▶ Total: \$300,000

Impact

- ▶ Allows for targeting of time and resources
 - Reduced audit time
 - Targeting mailings/recruitment

- ▶ Delivers biggest impact to residents by targeting end uses that have biggest savings potential

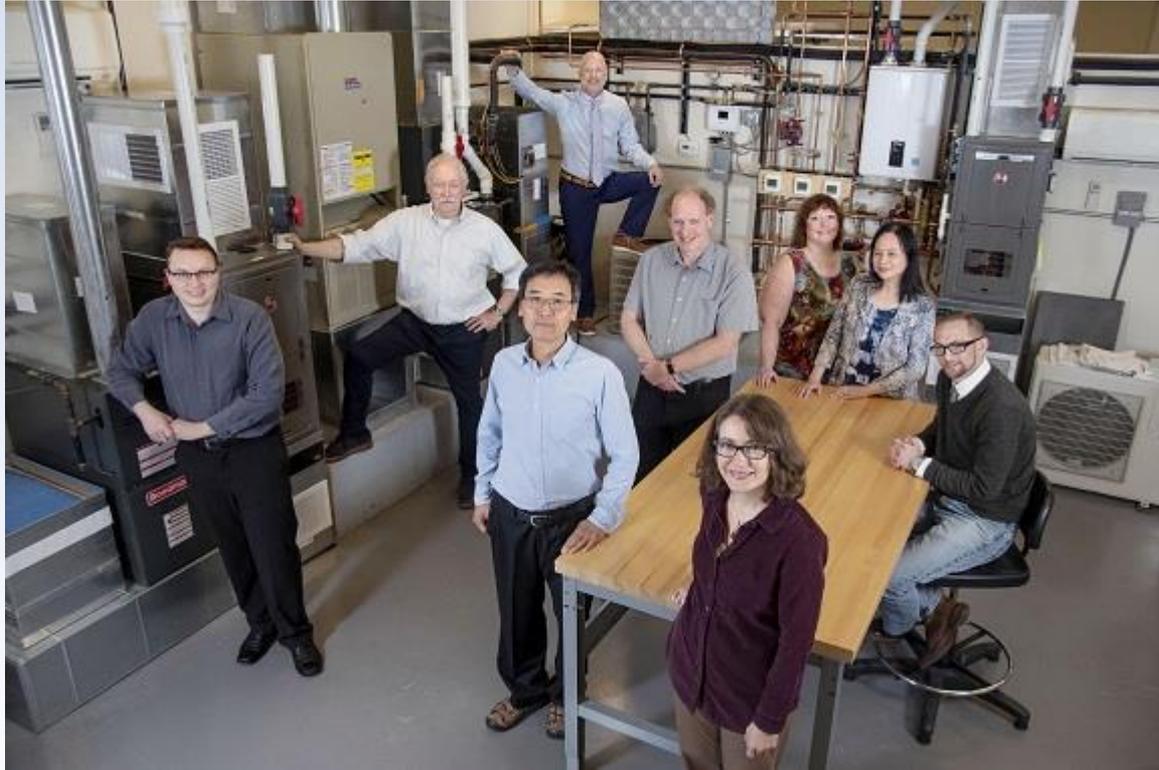
Questions?

Contact:

Paul Francisco
Applied Research Institute
pwf@Illinois.edu



Indoor Climate Research & Training



Website:
icrt.appliedresearch.illinois.edu