Key California Laws

Supporting Use of Data for Public Benefit

- AB 1103 – Time of sale commercial energy disclosure
- AB 758 – Comprehensive Energy Efficiency for Existing Buildings

Limiting Use of Data

- CPUC "Privacy Rules" (Regulations re: Public Utilities Code 8380 (SB1476)
- California Information Practices Act – Limiting disclosure by state agencies (Civil Code 1798)
- California Constitution: Individual right to privacy (Article 1, Section 1)

San Francisco Existing Commercial Buildings Ordinance

All commercial buildings must have:

A Benchmark

An Action Plan

Transparency

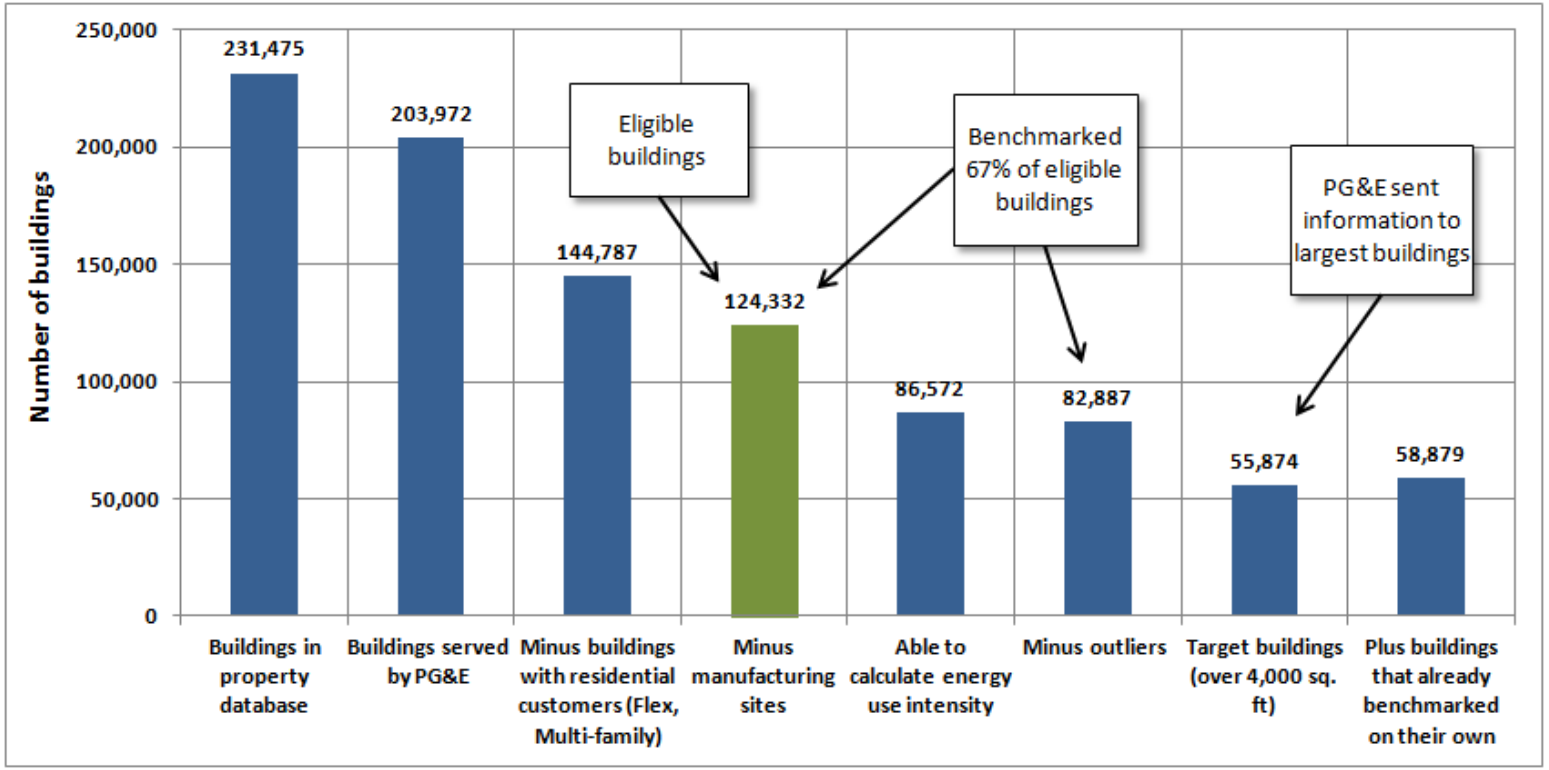
California Benchmarking and Data Access

- AB 1103 – Passed 2007, effective Jan 2014
- State Dept of General Services benchmarking
- PG&E offers
  - Portfolio Manager upload via web services (since 2008)
  - Green Button
    - Single meter download, electric-only
    - Also offers Green Button Connect (web service, still electric)
  - “Customer Data Access” due ~2015, gas & electric
  - All mechanisms require consent for each meter

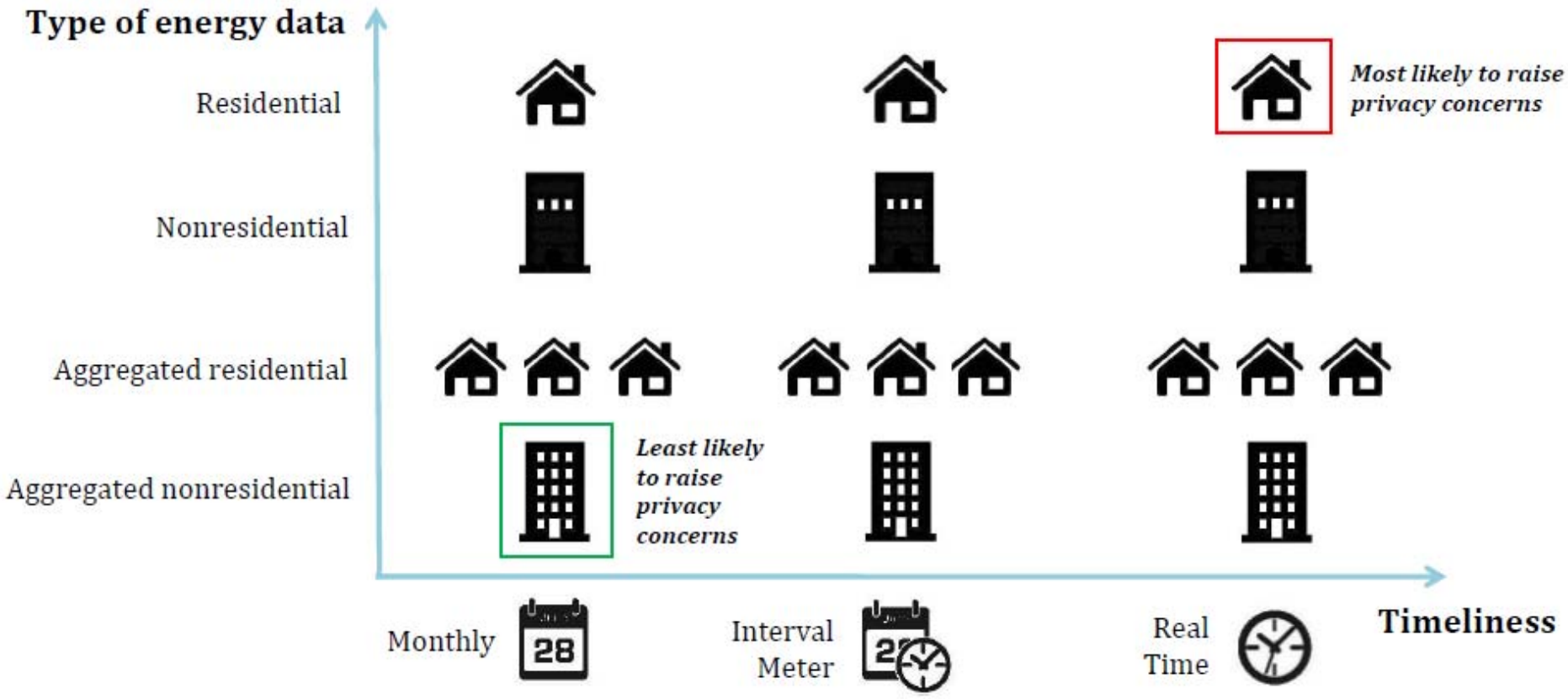
Utilities Serve Meters, not Buildings

PG&E Proxy Benchmark

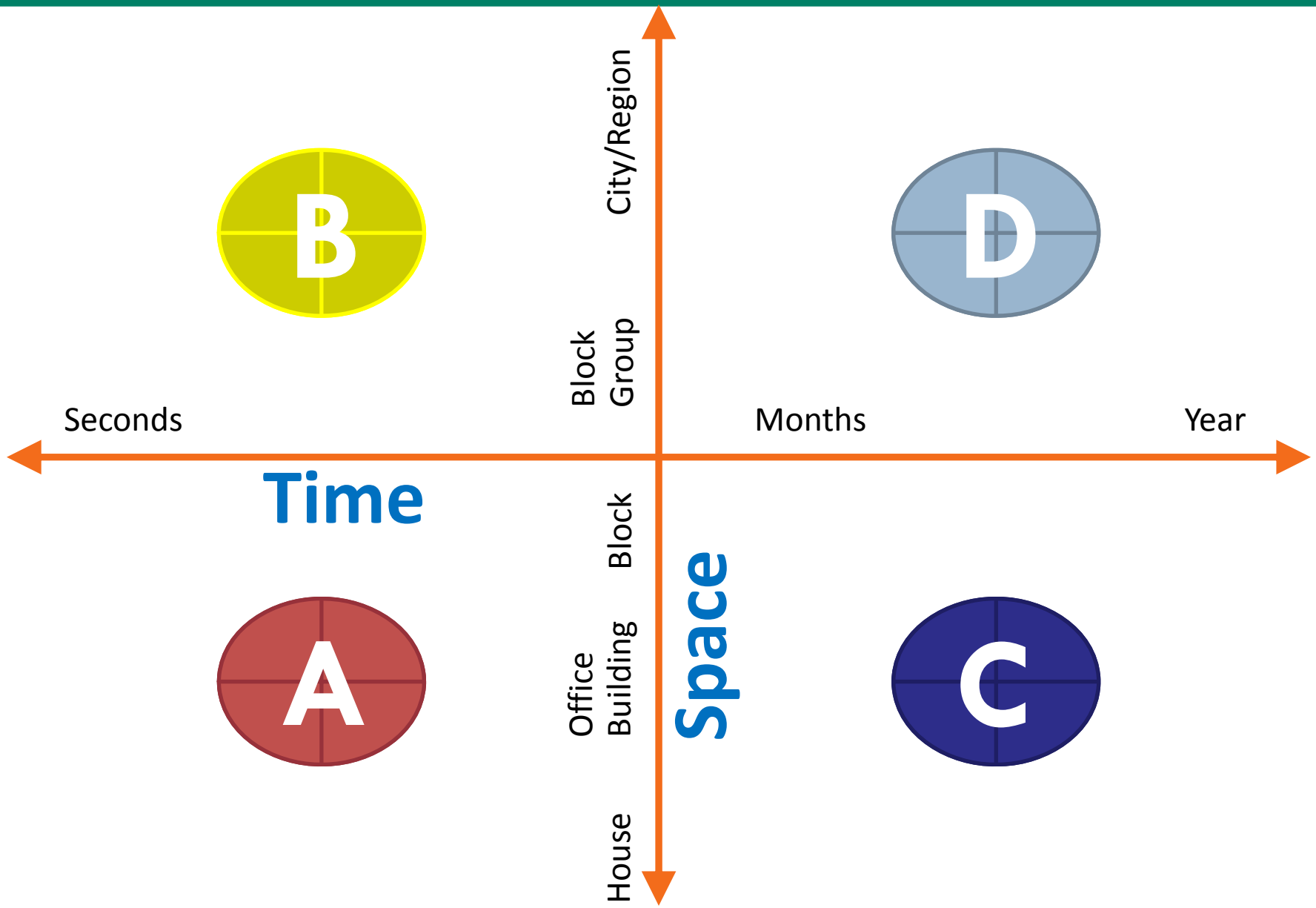
- Consultant associated meters with buildings.
- Able to calculate energy use for 29% of buildings in service territory



Key Challenge: Access to Data



Data Access Map to Frame Discussion



Result

	Specific location, small time interval	Geographic aggregation, small time interval	Specific location, large time interval	Geographic aggregation, large time interval
Quadrant	A	B	C	D
Sensitivity	**High** Identifies location & specific actions	**Moderate** Not identifiable	**Moderate** Identifies location, not specific actions	**Low** Not identifiable
Public Policy Value of Broad Access	**Limited** Necessary for academic research and voluntary services	**Moderate** Load shape can help set city/ territory efficiency targets	**High** Informs priorities for investment in buildings & neighborhoods	**High** Essential for greenhouse gas emissions tracking and city planning.

Result

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Sensitivity	**High**	**Moderate**	**Moderate**	**Low**
Useful to Study	• Limits of demand response • Customer to DR program signals • Effect of building age & shell on DR • Impact of rate design (including Critical Peak Pricing) • Plug load management • Effect of weather on residential PV output	• Effect of geographically targeted measures on load shape. (Example: Intensive appliance installation in a targeted city/zone vs. a "control" area • Demand response program design	• Effect of building characteristics on energy consumption (such as building age, shell, most recent permit, etc.) • Relate energy use to demographic trends such occupant age, vulnerable population, linguistic isolation, proximity to cooling shelter for climate adaptation • Efficiency program effectiveness	• Community greenhouse gas program impacts • Renewable resource planning • Effect of efficiency programs on community/ neighborhood energy use.

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Suggested Protection	Access only via: •Customer consent •Academic research with NDA and protocols, similar to Census •Opt-out notification?	• City or County aggregation: Public data (as with CSI program) • Block-group (or largest scale vulnerable to geographic disaggregation): Available to EE/renewable energy service providers under NDA, or via user interface designed to limit potential.	• Available to building owner or designated representative for benchmarking (voluntary or mandatory)	• Publicly accessible • Published to the web • Updated annually

Utility Data Access Policies Supporting Benchmarking

Utility	Minimum meters to share whole building monthly data with owner	City with Benchmarking Policy
ConEdison (NY)	2 (i.e. no threshold)	NYC
Avista Utilities (WA)	2	Seattle
Seattle City Light (WA)	2	Seattle
Commonwealth Edison (IL)	4	Chicago
Austin Energy (TX)	4 (4/80 rule)	Austin
Puget Sound Energy (WA)	5	Seattle
Pepco (DC)	5	DC
Colorado PUC (CO)	15/15 rule	(Boulder?)
Pacific Gas & Electric	100% consent required	San Francisco

US DOE Resources

SEE Action

STATE & LOCAL ENERGY EFFICIENCY ACTION NETWORK

The State and Local Energy Efficiency Action Network (SEE Action) is a state- and local-led effort facilitated by the U.S. Department of Energy and the U.S. Environmental Protection Agency to take energy efficiency to scale and achieve all cost-effective energy efficiency by 2020. SEE Action offers publications, events, and technical assistance to state and local decision makers as they provide low-cost, reliable energy to their communities through energy efficiency.

Energy Benchmarking, Rating, and Disclosure

- A Utility Regulator's Guide to Data Access for Commercial Building Energy Performance Benchmarking
- Benchmarking and Disclosure: State and Local Policy Design Guide and Sample Policy Language
- Energy Benchmarking, Rating, and Disclosure for Local Governments Fact Sheet
- Energy Benchmarking, Rating, and Disclosure for State Governments Fact Sheet
- Energy Benchmarking, Rating, and Disclosure for Regulators of Ratepayer-Funded Programs Fact Sheet