



BENCHMARKING ADVISORY COMMITTEE

Meeting #4

February 21, 2020

OUR GOALS FOR TODAY

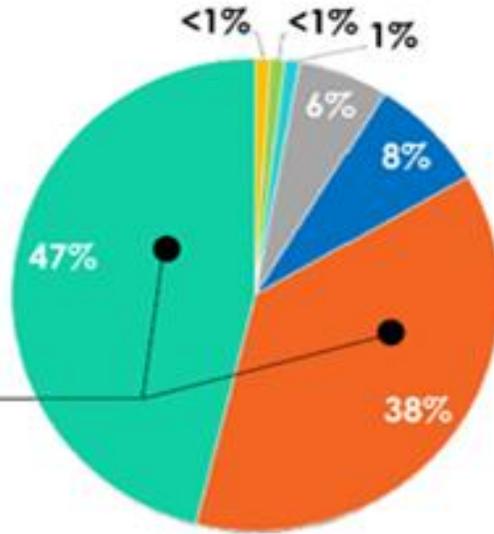
- Why Benchmarking?
- Review Meeting-3 highlights
- Benchmarking Experience from Other Market
- Building stock review
- Policy Structure, Compliance, and Recognition Options
- Next Steps

Why Benchmarking?

San Antonio's 2016 Greenhouse Gas Emissions

85%

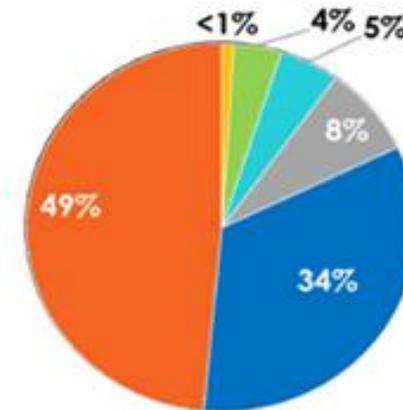
of the opportunity to reduce GHG emissions lies within Transportation & Buildings



San Antonio's Total Emissions by Sector



Building Sector Energy Use



FUEL



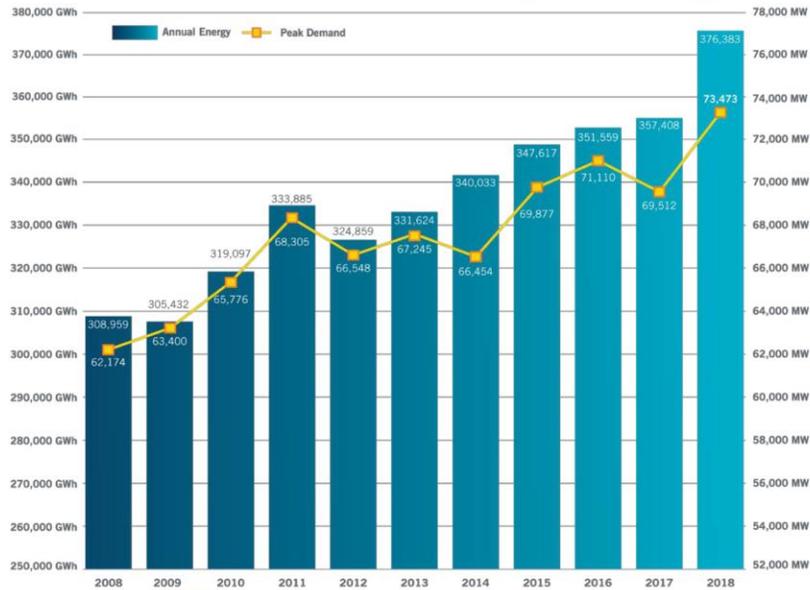
ELECTRICITY



Why Benchmarking?

Energy Demand

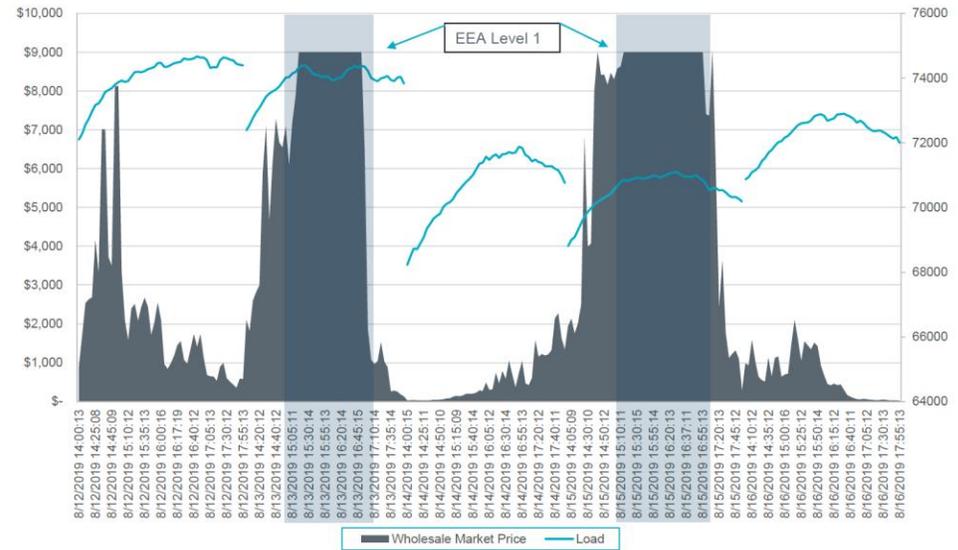
Consistent Load Growth in ERCOT (2008-2018)



PUBLIC

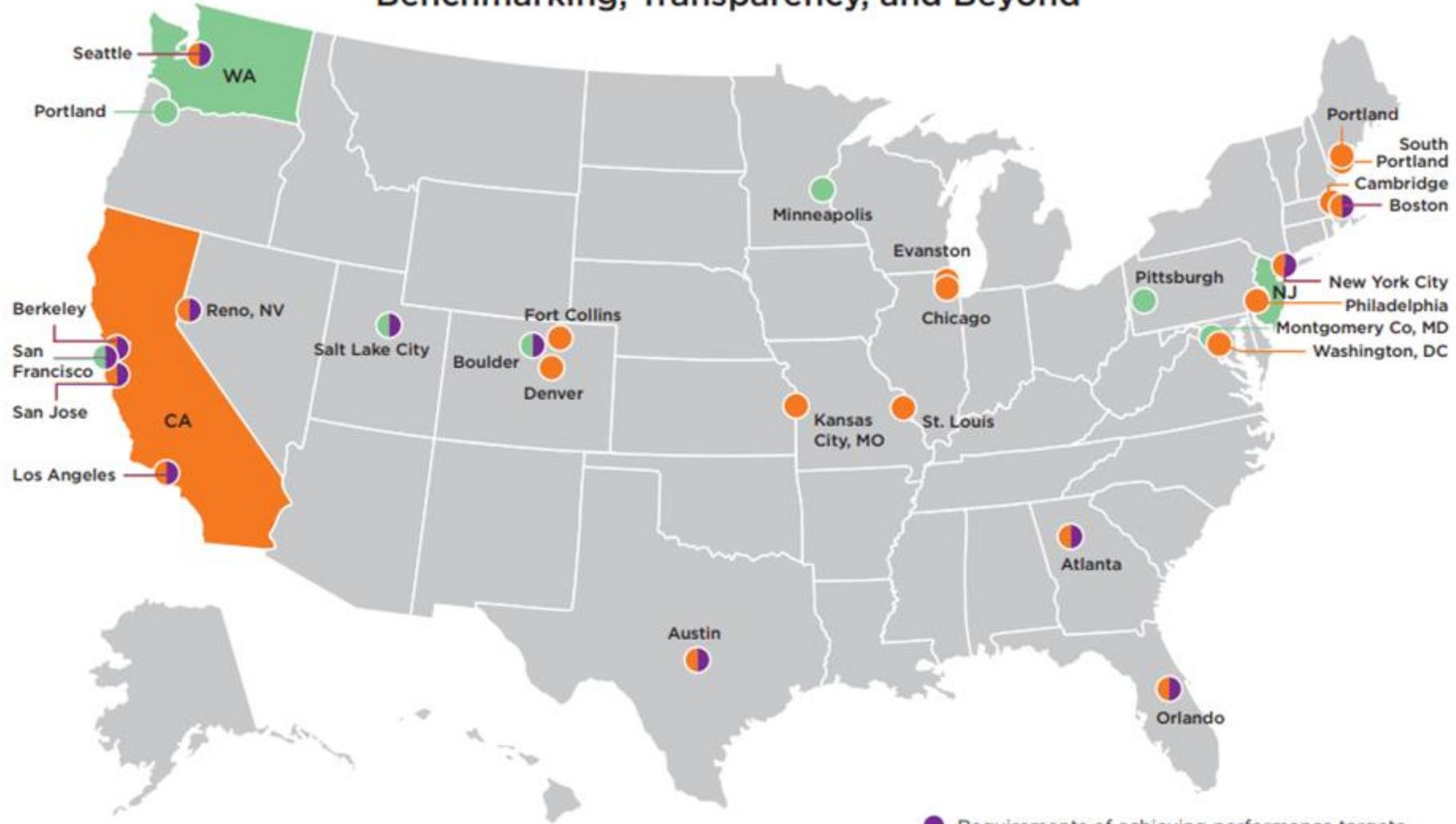
Energy Costs and Demand Charges

Peak Week: Wholesale Prices and Load (2 to 6 p.m.)



PUBLIC

U.S. City, County, and State Policies for Existing Buildings: Benchmarking, Transparency, and Beyond



- Requirements of achieving performance targets or completing additional actions
- Benchmarking policy for public, commercial, and multifamily buildings adopted
- Benchmarking policy for public and commercial buildings adopted



Meeting 3 Recap

Meeting 3 - Recap

- Benchmarking Tools presentation by Anna Morton
 - Useful to identify opportunities for energy and cost savings
 - ESPM has related tools to assess upgrades for buildings
- Building Owner Capacity Development
 - City would consider providing support to train owners and managers on benchmarking tools and best practices
 - BAC Members interested in level of effort towards benchmarking

Benchmarking Level of Effort

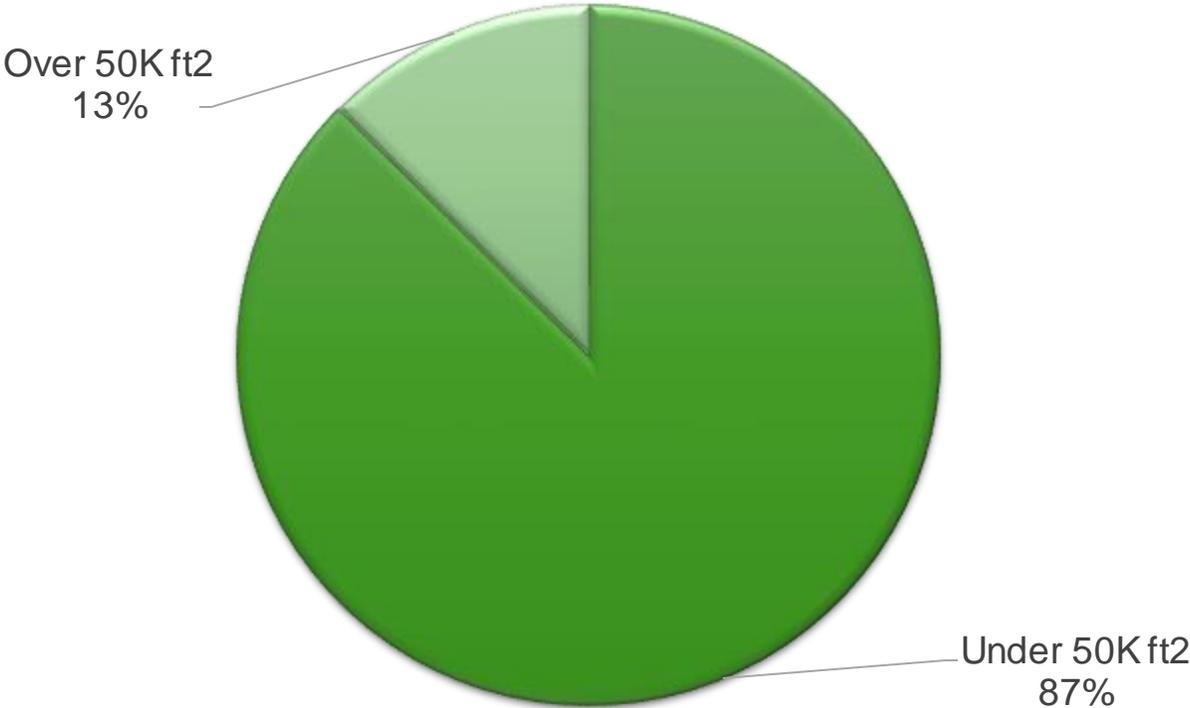
- **Building Owner Time Commitment**
 - Energy Star Portfolio Manager account one-time setup
 - 30 minutes to 8 hours depending upon number of buildings and complexity
 - Reporting one-time per year:
 - 1-2 hours per property
- **Resources for Building Owners**
 - Workshops, trainings and events:
 - Benchmarking 101
 - Help Desk – Office hours for in person, online, or phone assistance.
 - Benchmarking Support
 - Property Assessed Clean Energy (PACE)
 - CPS Energy Rebates

Building Stock

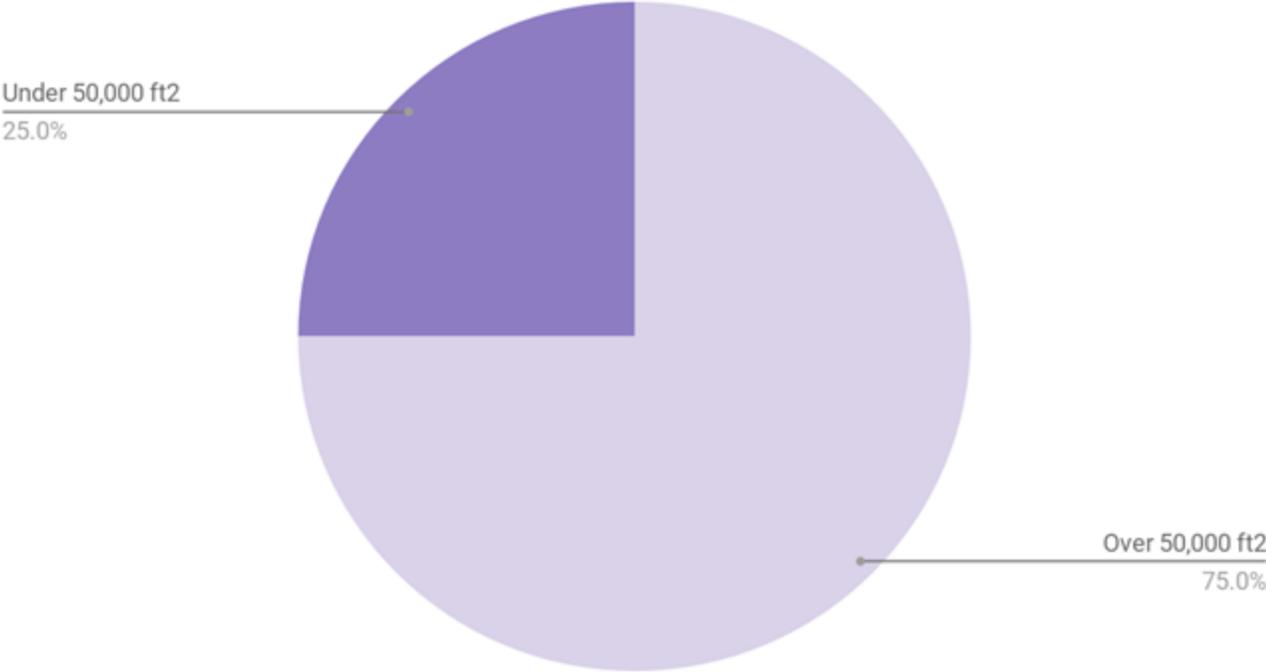
Non-Residential Buildings
in San Antonio

San Antonio - Commercial Buildings Breakdown

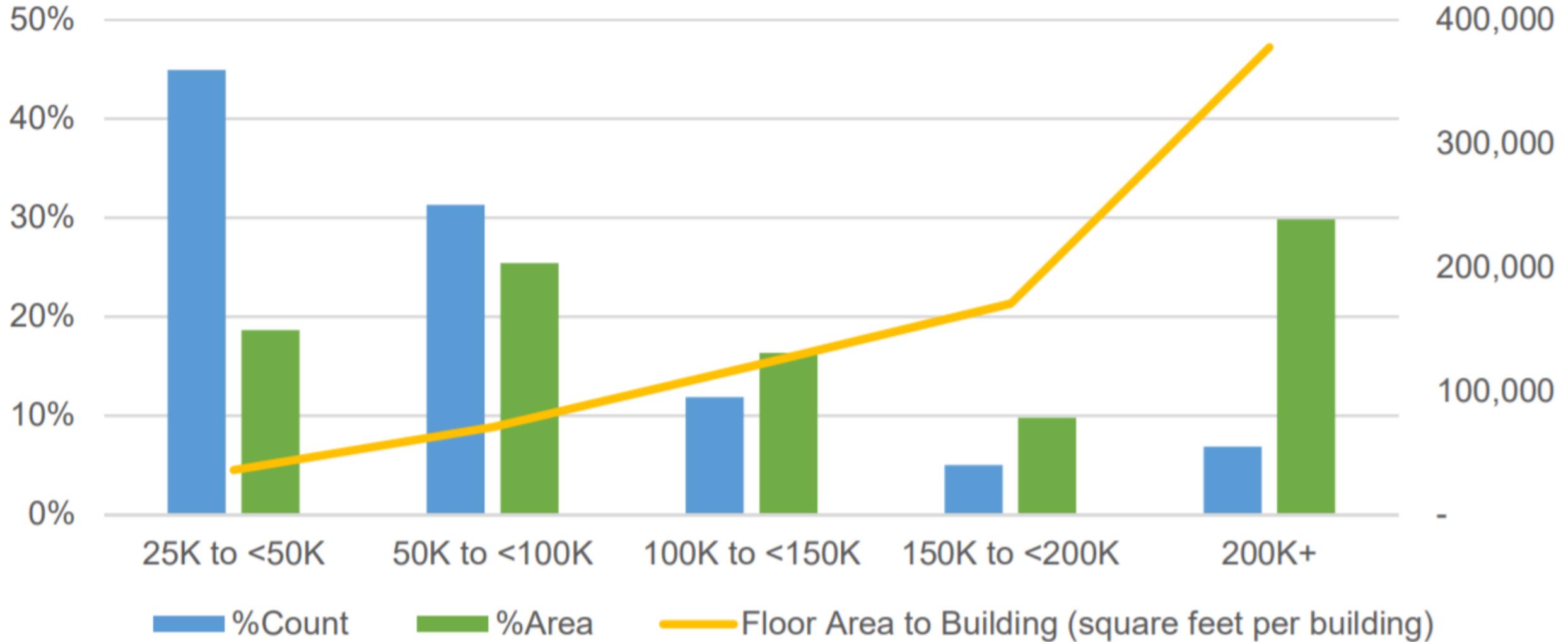
Number of Buildings



Covered floor area



Building Composition in San Antonio



San Antonio Building Stock Breakdown

Commercial	Count			
Type	0 to 50k ft ²		50k Ft ² +	
Flex	647	4.3%	48	2.2%
Health Care	76	0.5%	78	3.6%
Hospitality	227	1.5%	173	8.0%
Land	10	0.1%	2	0.1%
Multifamily	559	3.7%	867	40.1%
Office	2768	18.4%	354	16.4%
Retail	10012	66.6%	439	20.3%
Specialty	705	4.7%	186	8.6%
Entertainment	34	0.2%	13	0.6%
Total	15038		2160	

Multi-Family		
Unit Count	Count	Count % of Total
35-49	45	4.67%
50-99	166	17.22%
100-149	140	14.52%
150-199	111	11.51%
200-249	159	16.49%
250-299	150	15.56%
300+	193	20.02%
Total	964	100%

Policy Structure, Compliance, and Recognition

City	Policy			Buildings Included	Additional Elements	
	Date Passed	Number of Buildings	Area (sf)		Water Tracking	Other Requirements
Orlando	Dec 2016	826	125.6 million	Non-res and MF ≥ 50k sf	-	Audit/RCx every 5 years if ENERGY STAR < 50; Qualified Benchmarker
Los Angeles	Dec 2016	14,000	900 million	Non-res & MF ≥ 20k sf	✓	ASHRAE Level II Audit & RCx every 5 years
Chicago	Sept 2013	3,500	900 million	Non-res & MF ≥ 50k sf	Voluntary	Data verification every 3 years
Atlanta	April 2015	2,900	402 million	Non-res & MF ≥ 25k sf Municipal ≥ 10k sf	✓	Audit every 10 years, unless ENERGY STAR certified or similar

Policy Elements



Policy Elements

Phasing

By Building Type

- Year 1: Commercial
- Year 2: + Multifamily

By Square Footage

- Year 1: 100K and larger
- Year 2: 50,000 and larger

Compliance Frequency

Annual Benchmarking

Retuning/Audits/Other

- Every 5 Years
- Every 10 Years

Public Disclosure

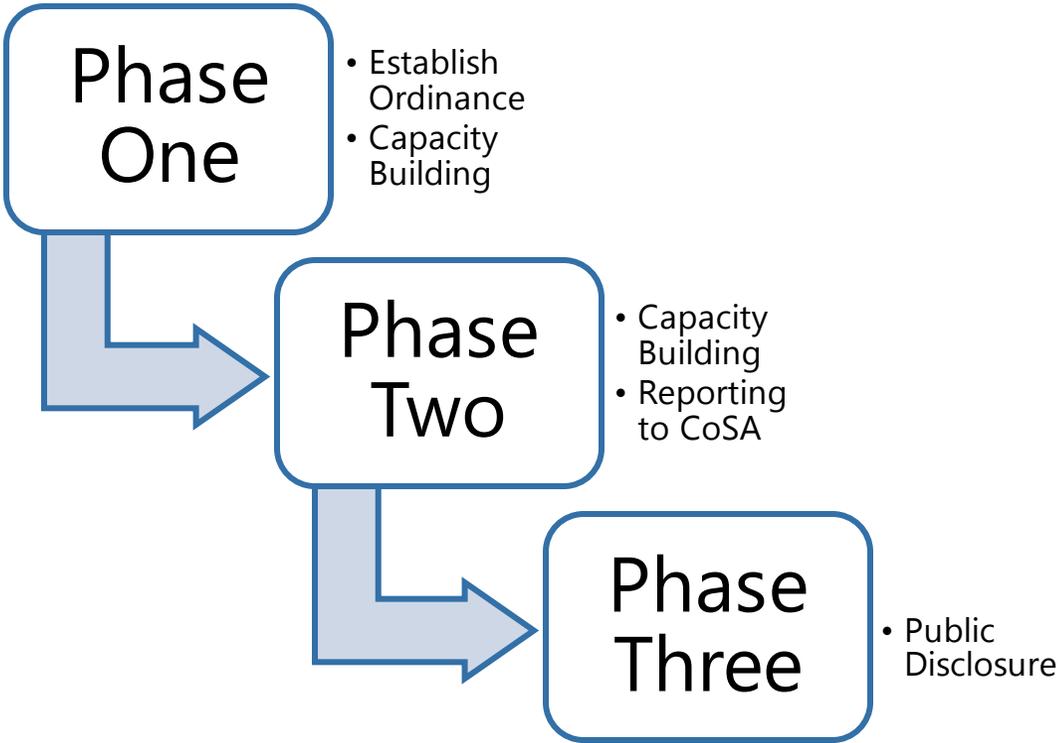
Timing

- Do you disclose in Year 1 or wait until Year 2, treating Year 1 and a break-in period?

What do you disclose?

- ENERGY STAR score (or EUI equivalent)
- Building size (square footage)
- Building type
- Energy bill data

Scenario Example



Commercial, Multifamily & Municipal	50,000 sf and greater
Energy and Water Data	Energy Star Score or EUI

Recognition

- Awards by City/Mayor
- Competition
- Certifications
- Other?



Discussion

- What policy elements do you think we should consider?
- What are good examples of engaging with property owners?

Proposed Meeting Schedule

- ~~Meeting 1 – Oct 22, 2019~~
 - ~~Meeting 2 – Dec 17, 2019~~
 - ~~Meeting 3 – Jan 21, 2020~~
 - ~~Meeting 4 – Feb 21, 2020~~
 - Meeting 5 – Mar 24, 2020
 - Meeting 6 – Apr 23, 2020
- ~~Building stock and benchmarking tools~~
 - ~~Energy data management, privacy, and use~~
 - ~~Building owner capacity development and support~~
 - ~~Policy structure, compliance, and recognition~~
 - Implementation phasing and support; financing tools

Contacts

- Doug Melnick, Chief Sustainability Officer, City of San Antonio, Douglas.Melnick@sanantonio.gov
- T. Adil Chowdhury, Climate Advisor, Natural Resources Defense Council, achowdhury@nrdc.org