



BENCHMARKING ADVISORY COMMITTEE Meeting-1

October 22, 2019

OUR GOALS FOR TODAY

- Provide an overview of benchmarking and programs.
- Review Roundtable highlights
- Set the benchmarking topics and Advisory Committee expectations

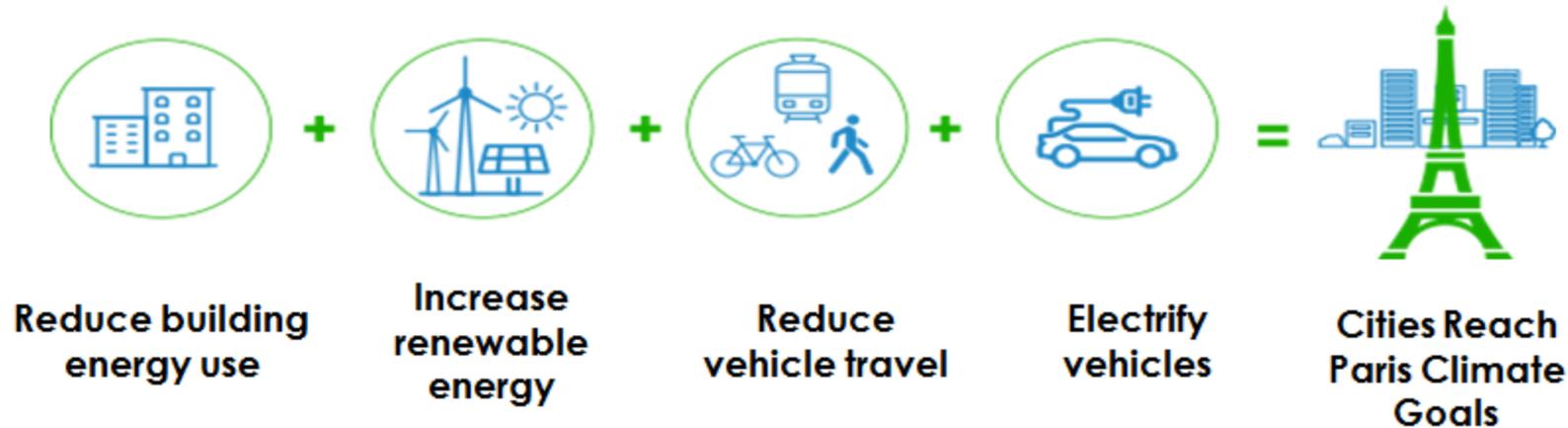
SAN ANTONIO'S PARTICIPATION IN AMERICAN CITIES CLIMATE CHALLENGE PROVIDES EXPERT SUPPORT...



Background

- SA Tomorrow Sustainability Plan adopted August 11, 2016
 - Vision: “*San Antonio is a leader in high performance and resilient buildings and infrastructure.*”
- On September 24, 2018, the EPA announced that Bexar County was in marginal nonattainment of federal ozone standards.
- On June 22, 2017, City Council passes Resolution # 17-3844 in support of the Paris Climate Agreement.
- San Antonio’s population projected to increase by one million people by 2040.
- San Antonio’s Climate Action and Adaptation Plan, adopted on October 17, 2019, identifies benchmarking of large buildings as a strategy to reduce energy consumption

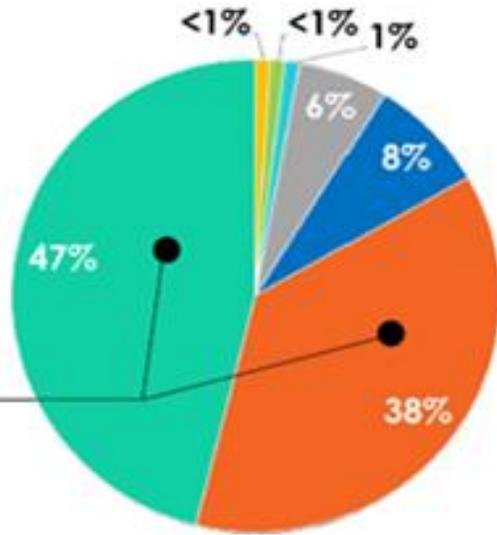
The **American Cities Climate Challenge** is a Bloomberg Philanthropies initiative that aims to accelerate and deepen U.S. cities’ efforts to create the greatest climate impact through 2020 and showcase the benefits – **good jobs, cleaner air, and cost savings** – that climate solutions brings.



San Antonio's 2016 Greenhouse Gas Emissions

85%

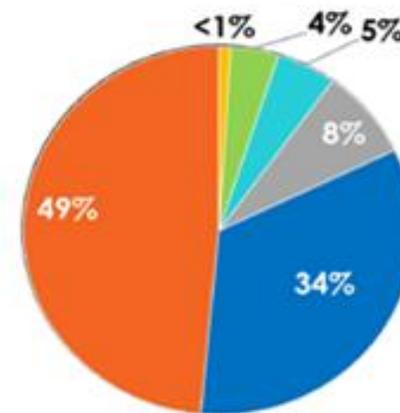
of the opportunity to reduce GHG emissions lies within Transportation & Buildings



San Antonio's Total Emissions by Sector



Building Sector Energy Use



FUEL



ELECTRICITY

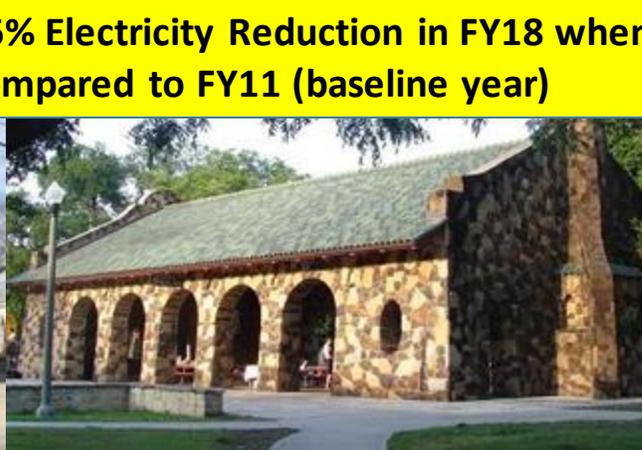


Leading By Example - City Facilities



15M square feet of building area

16% Electricity Reduction in FY18 when compared to FY11 (baseline year)



Roundtable Recap

Roundtable Breakout Groups: SWOT Analysis

- Industry/Associations
- Portfolio Owners & Managers
- Equity & Community Groups

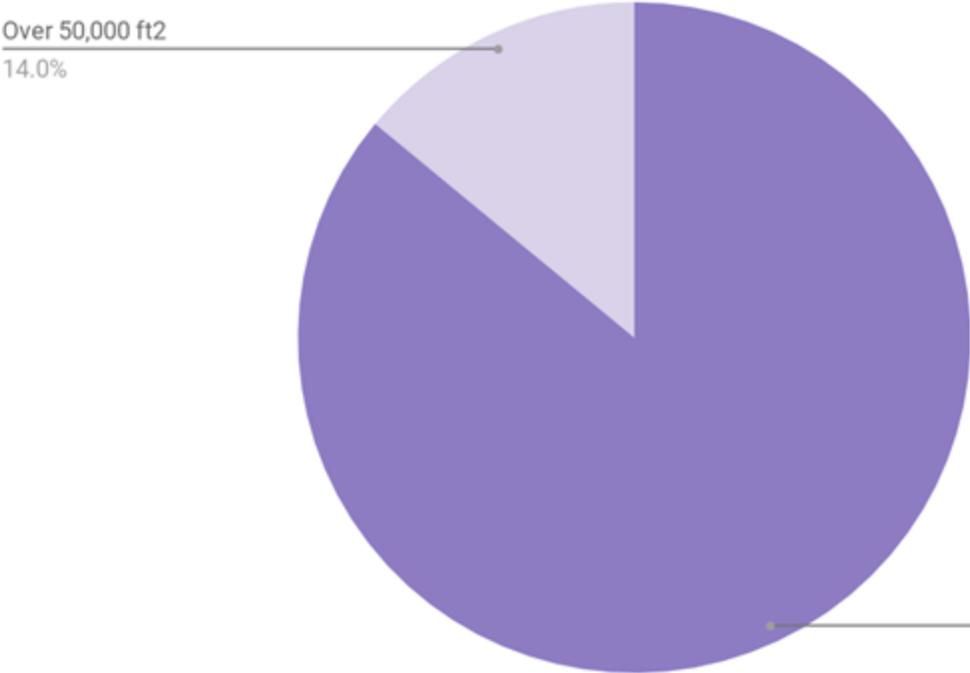
Introduction to Benchmarking

San Antonio Commercial Building Stock Breakdown

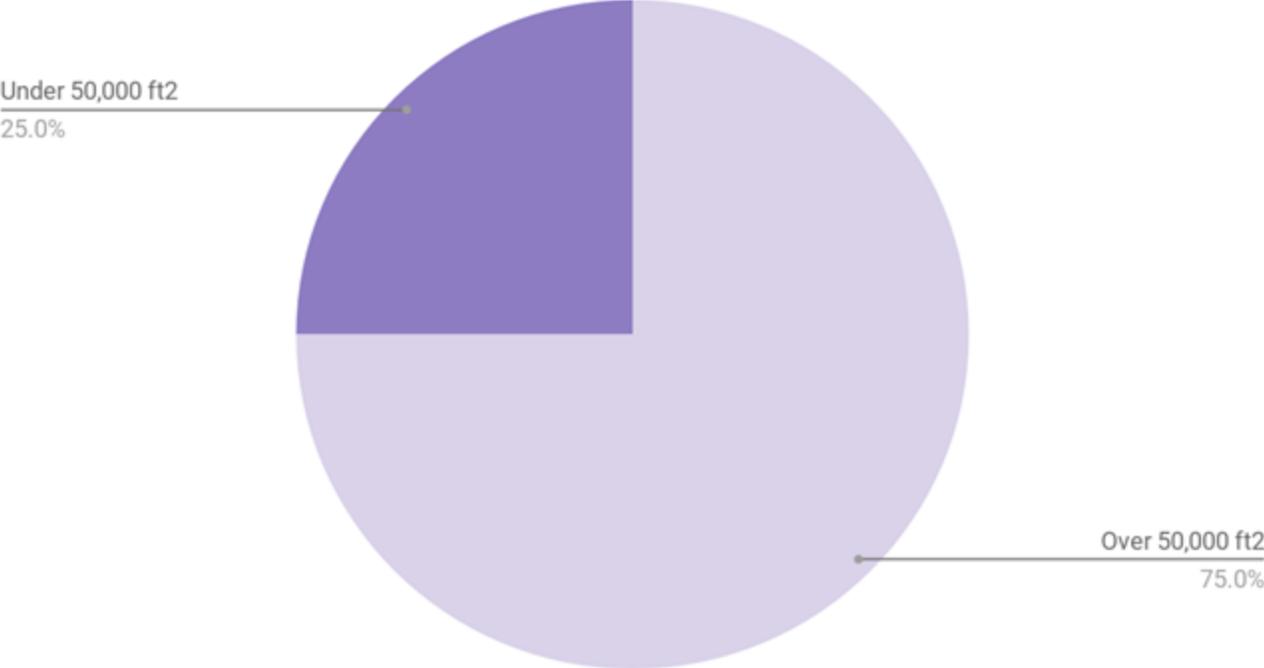
Type	Count				Area (SF)			
	0 to 50k ft ²		50k Ft ² +		0 to 50k ft ²		50k Ft ² +	
Flex	647	4.3%	48	2.2%	8,805,875	7.3%	4,949,435	1.4%
Health Care	76	0.5%	78	3.6%	2,033,238	1.7%	14,433,141	4.0%
Hospitality	227	1.5%	173	8.0%	5,306,509	4.4%	26,052,461	7.2%
Land	10	0.1%	2	0.1%	155,555	0.1%	285,000	0.1%
Multifamily	559	3.7%	867	40.1%	7,584,570	6.3%	189,467,341	52.4%
Office	2768	18.4%	354	16.4%	26,163,859	21.7%	49,572,333	13.7%
Retail	10012	66.6%	439	20.3%	61,599,289	51.1%	51,023,742	14.1%
Specialty	705	4.7%	186	8.6%	8,387,652	7.0%	21,647,415	6.0%
Entertainment	34	0.2%	13	0.6%	423,074	0.4%	3,923,048	1.1%
Total	15038		2160		120,459,621		361,353,916	

San Antonio - Commercial Buildings Breakdown

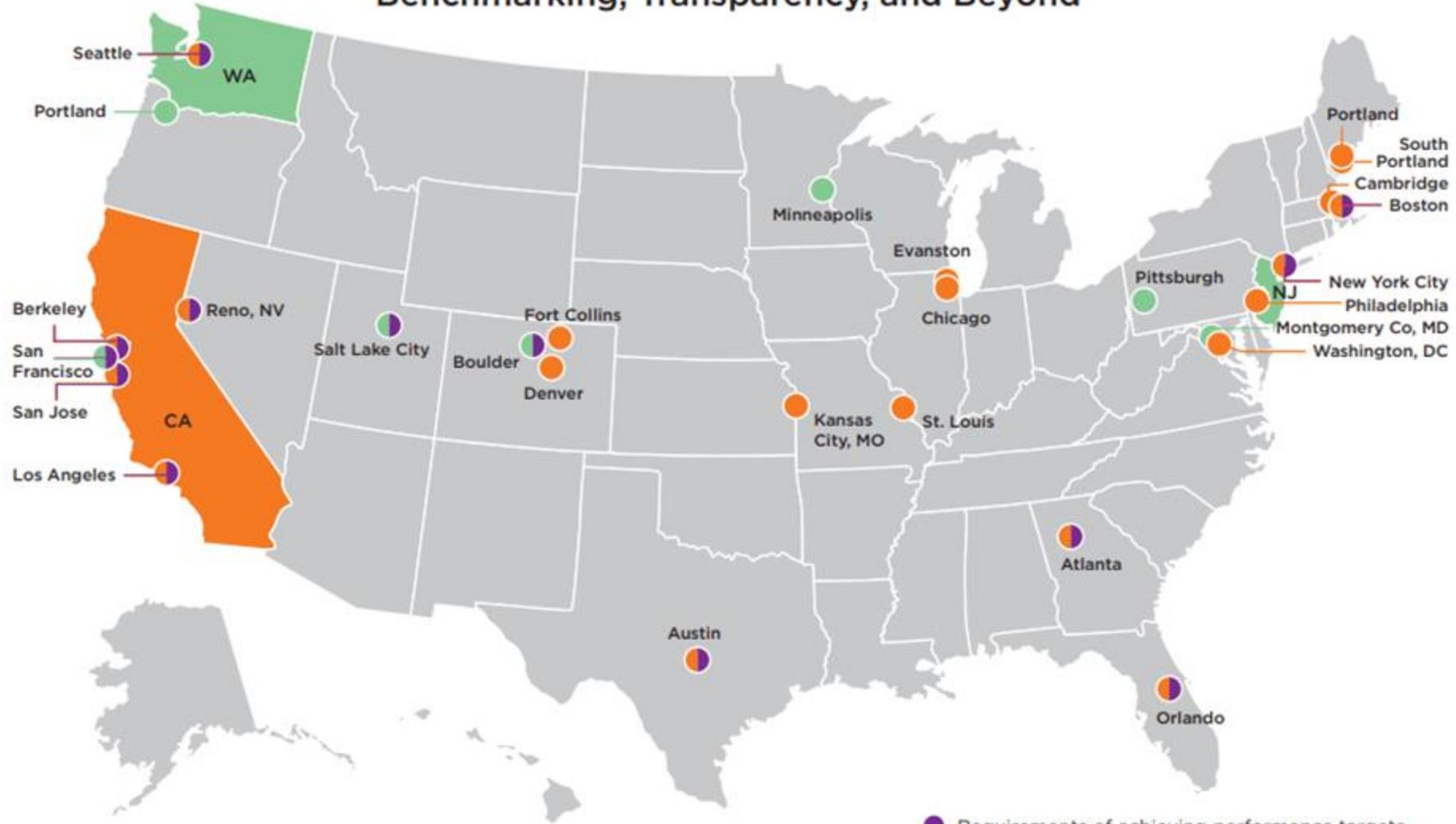
Number of buildings



Covered floor area



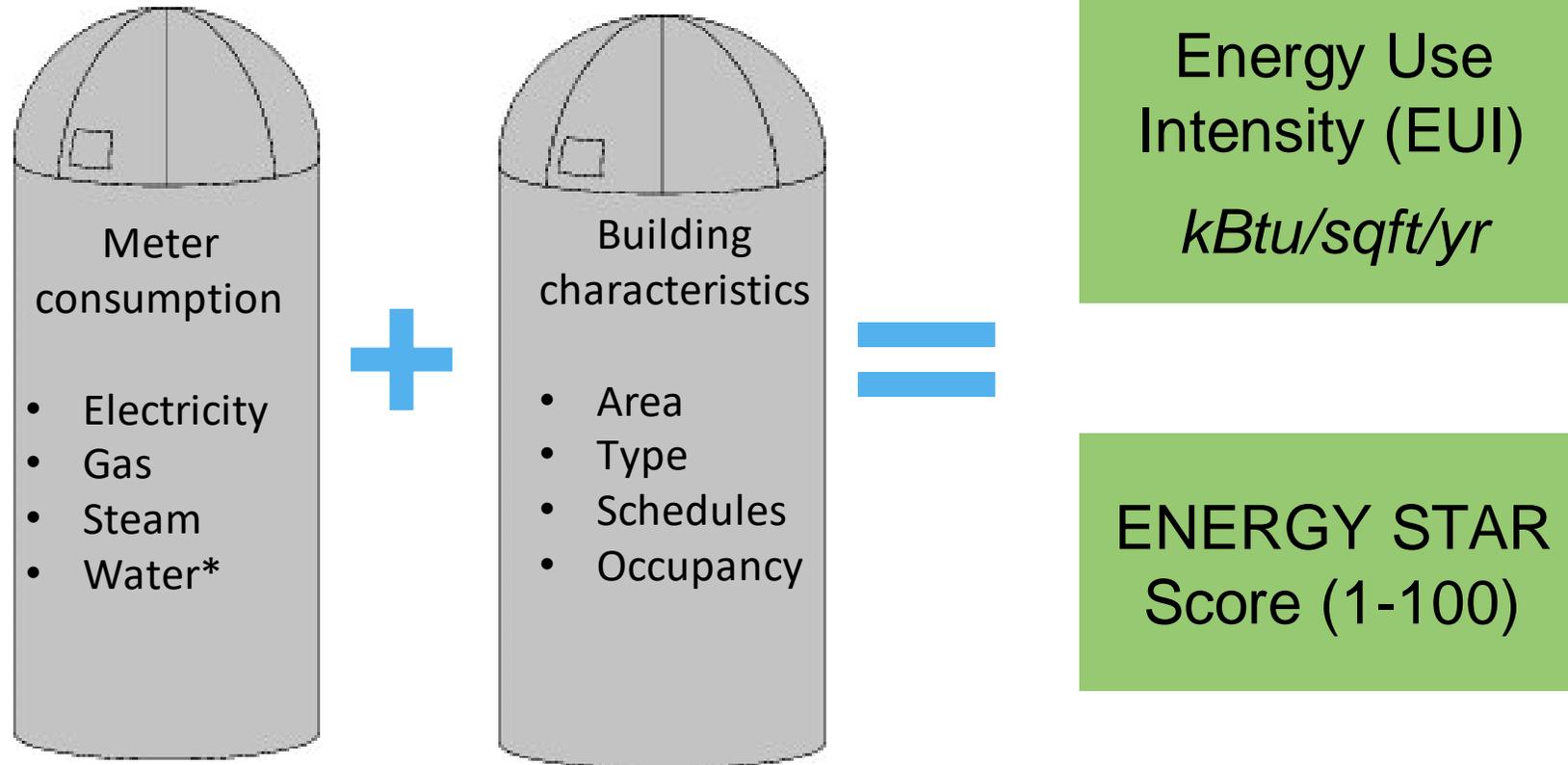
U.S. City, County, and State Policies for Existing Buildings: Benchmarking, Transparency, and Beyond



- 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



Energy Benchmarking



* Not used in the ENERGY STAR scoring

Benefits of Benchmarking

YOU CAN'T MANAGE WHAT YOU DON'T MEASURE



Flag hidden problems



Drive more energy actions, faster



Peer-to-peer building performance comparison



Prioritize energy actions and make informed decisions



Realize savings from reduced energy and water use



Achieve higher occupancy, rental, and sales values

Benchmarking Reduces Energy Consumption & Saves \$\$\$

Chicago

 **4.4%** Energy consumption in properties reporting for 4 consecutive years
\$12.7M Bill savings/year

Minneapolis

 **3.4%** Energy Consumption from 2014-2016
\$ 21 M Cumulative bill savings

New York City

 **6%** Cumulative reduction over three years

Denver

 **4.5%** Energy Consumption
\$13.5M Bill savings/year

Seattle

 **3%** Reduction in properties reporting for three or more years

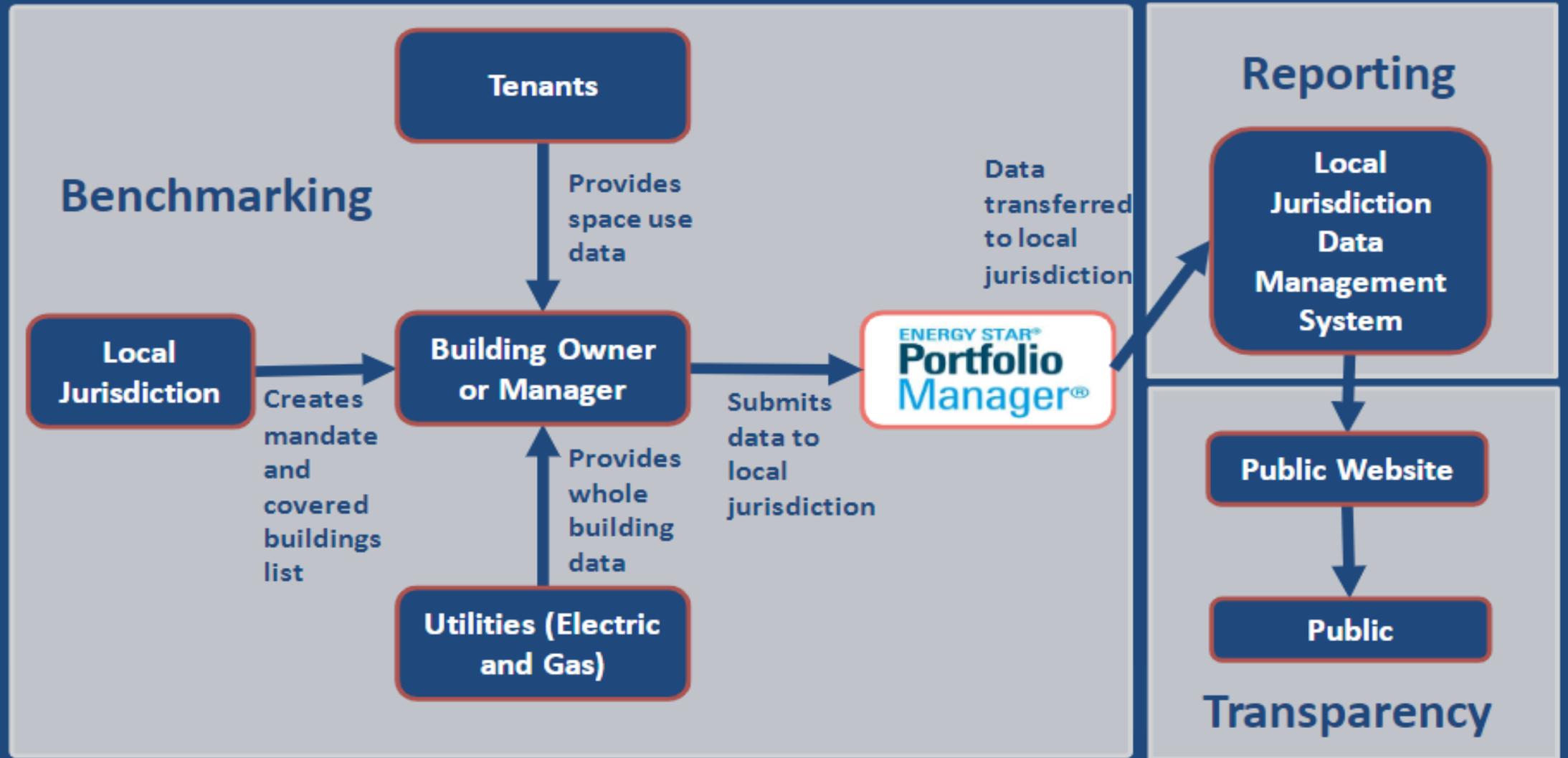
San Francisco

 **7.9%** Cumulative reduction over three years

Transparency Matters

City	Program Components	Energy Savings Benchmarked Buildings
Chicago ¹ 2013-2016	Benchmarking & Transparency	4.0% (over 3 years) \$17.6 million per year in energy savings
San Francisco ¹ 2010-2014	Benchmarking & Transparency Audits (2013)	7.9% (over 4 years) 16.9% carbon savings
New York City ² 2010 - 2013	Benchmarking & Transparency Audits (2013) Lighting Upgrades (2025)	5.7% (over 3 years) 9.9% carbon savings
Washington, D.C. ³ 2012 - 2013	Benchmarking & Transparency	3% (over 1 year)
Seattle ⁴ 2011 - 2013	Benchmarking; No Transparency	0.6% (over 2 years)

Benchmarking Process – Data Flow



Building Energy Scorecards

City of Seattle



SEATTLE LARGE OFFICE 2015 ENERGY PERFORMANCE PROFILE

100 MAIN ST, SEATTLE, WA 98101 | Square Foot: 126,000 | Type: Large Office Building (100K+ SF)
Benchmarking ID: 90000 | EUI Building ID: 9000000

Thank you for benchmarking your building's energy use with the City of Seattle! This energy performance profile shows how your building is doing year to year, and how it compares to similar large office buildings in Seattle. See the backside for no- and low-cost resources and tips to help improve your building's energy performance.

YOU CURRENTLY SPEND

\$1.37 / SF
ANNUALLY ON ENERGY*
or \$189,000 per year.

Your building's EUI decreased (\$3 KBTU/SF) from 2014 to 2015.*

* The information in this report is self-reported and subject to verification. Costs and potential savings are estimated at \$0.082 per kWh using the average rate of fuel sources (electric, gas, steam) for a large office building. Average EUI is based on Seattle median EUI, not normalized for weather.



YOUR BUILDING USES
28% more energy¹ annually (16.2 KBTU/SF) than the average Seattle large office building.

SAVE UP TO **\$41,500** EACH YEAR BY REDUCING YOUR EUI TO MEET SEATTLE'S AVERAGE BUILDINGS. That's real money to put back into your building to improve your property, attract new tenants and continue reducing energy bills.

GET STARTED

10% IMPROVEMENT CAN YIELD UP TO **\$18,900** in annual energy savings (EUI of 66.9)

20% IMPROVEMENT CAN YIELD UP TO **\$37,800** in annual energy savings (EUI of 59.4)

LEARN NOW



www.seattle.gov/energybenchmarking | energybenchmarking@seattle.gov | 206.727.8484

Report prepared: 09/12/16

YOUR BUILDING'S PATH TO IMPROVEMENT

Take advantage of low and no-cost options to optimize your building's assets, increase its marketability and reduce annual energy costs.

- 1. GET A FREE ENERGY SAVINGS ASSESSMENT**
from an energy expert to identify energy saving opportunities and qualify your building for rebates on controls, HVAC and more. Rebates can cover up to 70% of the cost of upgrades.
- 2. UPGRADE TO ENERGY EFFICIENT LIGHTING**
and controls in common areas, parking garages and tenant spaces for significant cost savings. Qualifying businesses can save up to 70% on project costs through rebates.
- 3. ACCESS THE TOOL LENDING LIBRARY**
and borrow data loggers, power meters, infrared cameras & more! Tools from SDC's free lending library can help you troubleshoot problems and provide info to help fine tune your building's performance.

Seattle City Light www.seattle.gov/light/assessment | Seattle City Light www.seattle.gov/seeenergy | Smart Buildings Center www.smartbuildingscenter.org

IT ALL STARTS WITH A CALL!
Our Energy Advisors are ready to help you find the best ways to get started reducing your building's energy costs. **206.684.3800**

ENERGY STAR®

Your building's ENERGY STAR score shows you how your building is performing as a whole: its assets, its operations and the people who use it. Scores of 75 or higher may be eligible to apply for certification. Learn more at www.energystar.gov/buildingcertification

YOUR SCORE 75
Congratulations! Get certified to promote your success with customers and tenants!



ON THE HORIZON: BUILDING TUNE-UPS

Beginning in 2018, the Building Tune-Ups Ordinance will phase in by building size a periodic (every 5 years) tune-up requirement for commercial buildings 50,000 SF and larger. Tune-ups are intended to identify and correct no- and low-cost adjustments to building operations, measures that often offer a 2 to 3-year payback. Learn more about the requirement and exemptions for high performing buildings: www.seattle.gov/buildingtuneups

WE WANT YOUR FEEDBACK
Did you find the information in this Performance Profile useful? Please let us know. Take a short survey at: www.seattle.gov/energy/2016Feedback

Advisory Committee

Expectations and Protocols

Protocols

- Convene once a month for 1-2 hours
- Six months
- Report outs
- Take Surveys

Proposed Meeting Schedule

- ~~Meeting 1 – Oct 22, 2019, Tue~~
- Meeting 2 – Dec 10, 2019, Tue
- Meeting 3 – Jan 21, 2019, Tue
- Meeting 4 – Feb 20, 2019, Thr
- Meeting 5 – Mar 24, 2019, Tue
- Meeting 6 – Apr 23, 2019, Thr

Topics of Discussion

- Building stock and benchmarking tools
- Energy data access, 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