If You Don't Measure it, You Can't Manage it: The Benefits of Benchmarking and Beyond

City of Columbus
Midwest Building Energy Codes Conference – October 21, 2020

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Agenda

1. City of Columbus Climate Priorities
2. Benchmarking and Transparency
3. Ordinance Development Process
4. Implementation in Columbus

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City of Columbus Climate Priorities

Pathway to a Carbon Neutral City

- In June 2017, Mayor Ginther signed onto the **Global Covenant of Mayors for Climate & Energy,** committing us to developing a plan consistent with the Paris Climate Agreement

- In the 2020 State of the City, the Mayor further announced a goal for Columbus to become **carbon neutral by 2050**

Neighborhoods

Buildings

Transportation

Waste

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Benefits Beyond Climate

Climate Justice
Equitable distribution of benefits from climate action planning across the community

Environmental Quality
Preserves and improves **natural ecosystems** and promotes biodiversity

Human Health
Improves **public health through reduced pollutants and hazards**

Economic Prosperity
Provides opportunity for funding **revenue streams,** reduced or stable energy costs, and **job creation**

Benchmarking & Transparency is aligned with our Climate Action Plan

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American Cities Climate Challenge

REDUCE BUILDING ENERGY USE

INCREASE RENEWABLE ENERGY

ELECTRIFY BUILDINGS

REDUCE VEHICLE MILES TRAVELED

ELECTRIFY VEHICLES

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Why are Buildings Important?

Buildings represent 55% of Columbus' community-wide GHG emissions

Leading to a significant opportunity for emissions and cost savings

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Benchmarking & Climate Action

- Foundational to energy efficiency & ongoing energy management

- Fundamental to fiscal & social responsibility

2020

By 2050, emissions from commercial buildings need to be cut by 50%

50%

2050

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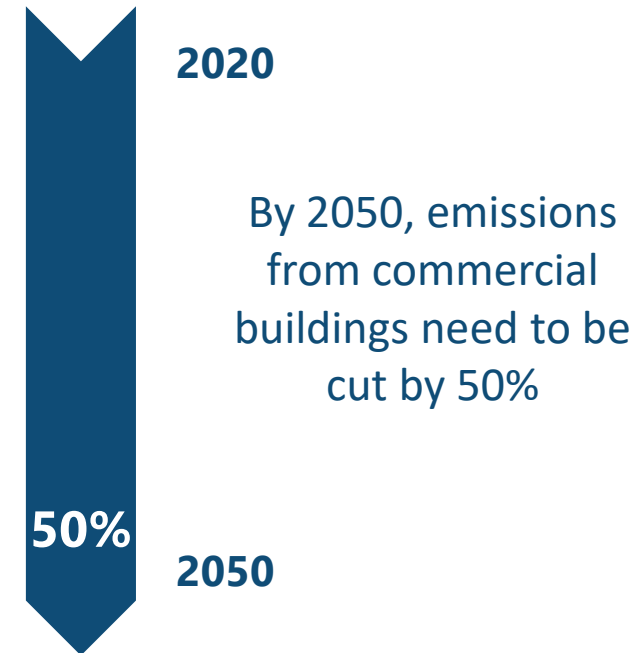
Benchmarking & Transparency

BENCHMARKING AND TRANSPARENCY IS...

Making a city more energy efficient by improving building owners' awareness of energy performance.

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BENCHMARKING is tracking energy use of our buildings and helping building owners access information to improve, compare, and track the energy use of their buildings over time. ENERGY STAR scores rank energy performance of buildings nationwide.

TRANSPARENCY is reporting that benchmarking information to the city, which is shared with the community. This fills an information gap in the market, improving consumer choice and rewarding energy efficiency in buildings.

HOSPITAL
55

OFFICE BUILDING
95

FIRE STATION
73

CITY HALL
48

SCHOOL
17

BANK
74

RETAIL STORE
91

GROCERY STORE
20

APARTMENT BUILDING
86

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HOW BENCHMARKING AND TRANSPARENCY WORKS

A building owner reports, compares, and shares performance with the city, tenants, banks, and other building owners.

MY BUILDING
68

OFFICE BUILDING
24

OFFICE BUILDING
91

REPORTING
Building owners report energy usage and building characteristics.
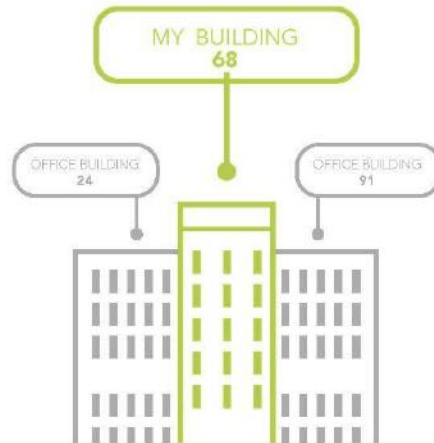
COMPARING
ENERGY STAR Portfolio Manager provides performance metrics to building owners so they can compare to similar buildings.

SHARING
Building owner submits performance metrics to the city and this data is then made available to the market.

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HOW BENCHMARKING AND TRANSPARENCY BENEFITS BUILDING OWNERS

Building owners can save money on utility bills, better project future investments, improve tenant satisfaction and retention, and demonstrate leadership in climate and sustainability.

SAVE MONEY

PLAN INVESTMENTS

RETAIN TENANTS

LEAD THE WAY

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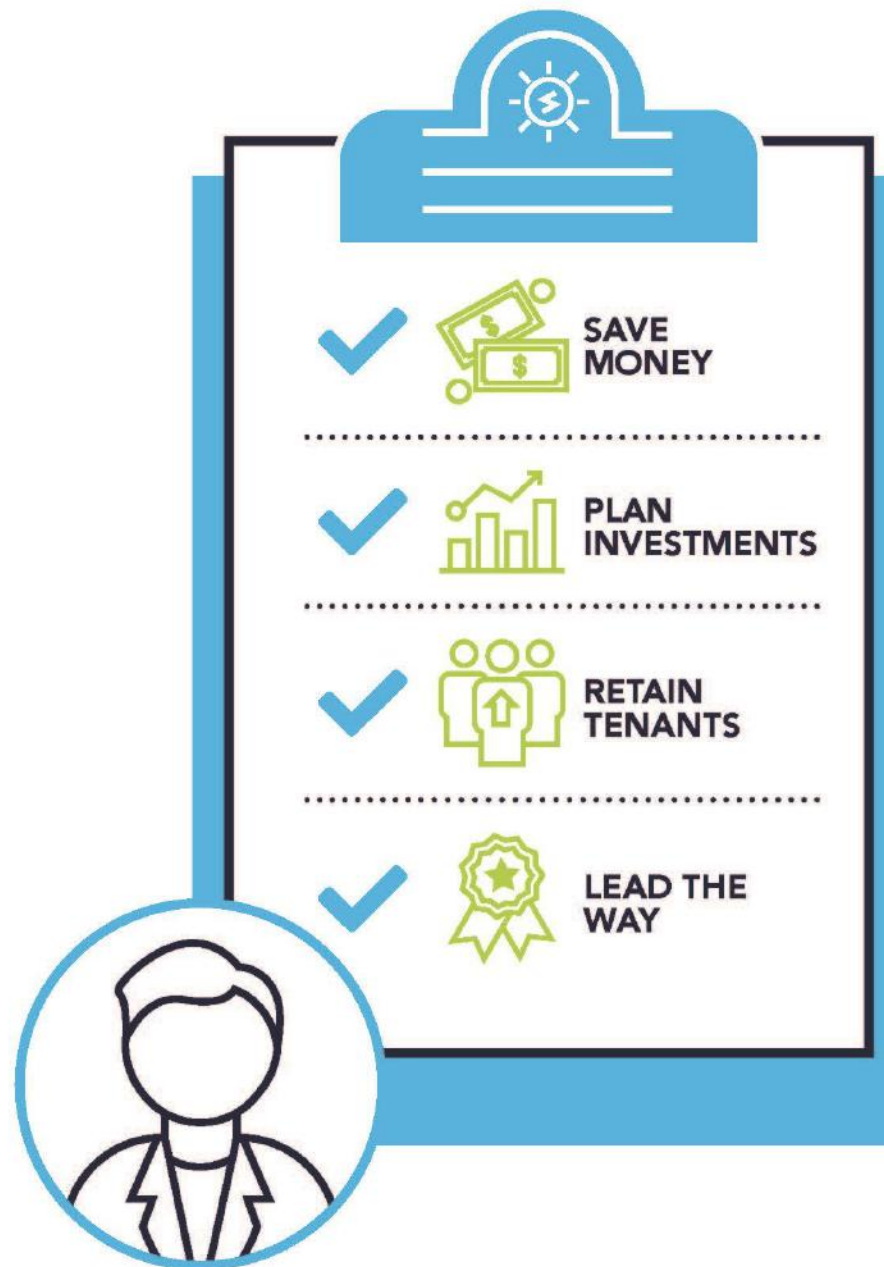
HOW BENCHMARKING AND TRANSPARENCY BENEFITS THE COMMUNITY

Across the U.S., cities with benchmarking and transparency policies are maximizing opportunities and benefits for their communities by seeking out efficiency and sustainable approaches to operations and maintenance of their buildings.

INCREASED PROPERTY VALUE

ATTRACT NEW BUSINESSES

MORE JOBS

LOWER EMISSIONS

AFFORDABLE UTILITY BILLS

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Benchmarking in Practice

Monthly usage from utility bills **+** Building operating characteristics **=** Performance metrics

73 88 21

Compare your building to a **national sample** of similar buildings

Compare your buildings of a similar type to **each other**

Identify underperformers in your portfolio & set priorities for staff time & investment capital
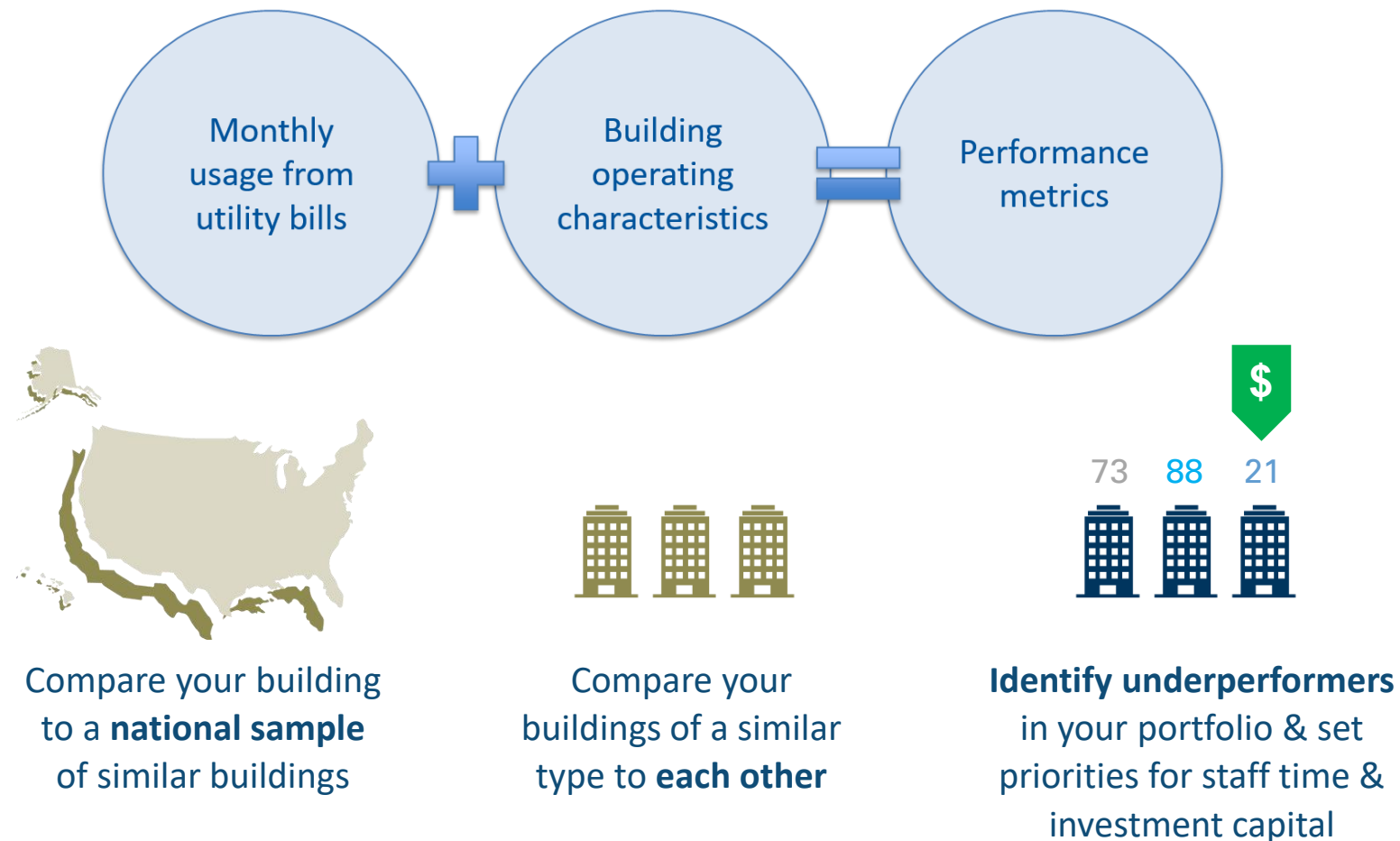
Energy Challenge → Benchmarking Policy

Voluntary		Mandatory
200 buildings		2,200 buildings
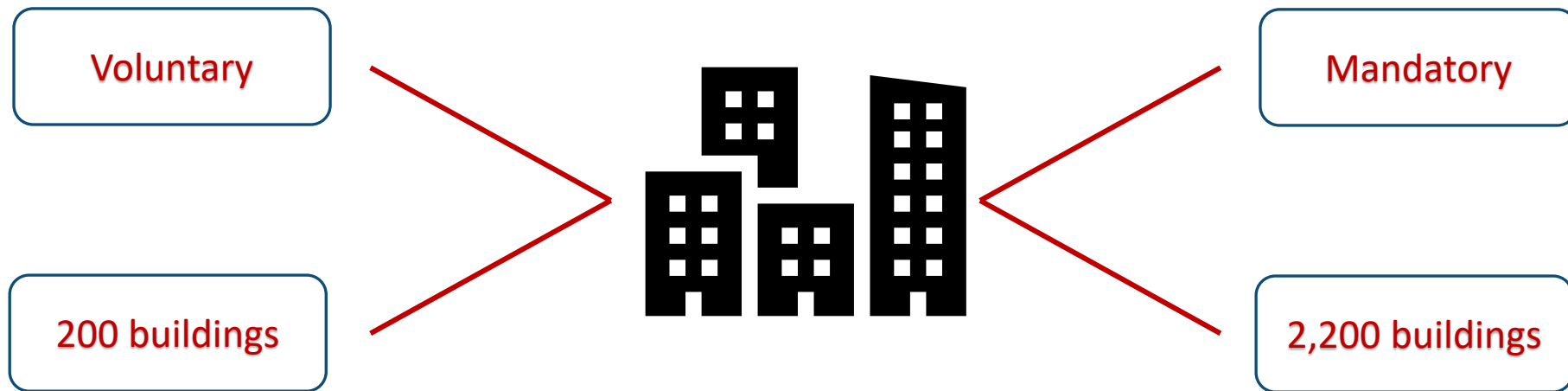
Benchmarking Ordinance Goals

1. Create structure for building owners to become aware of energy & water use

2. Provide reliable data so inefficiencies can be identified & corrected

3. Inform the market of building energy & water performance

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Ordinance Development Process

Stakeholder Engagement Overview

We proactively sought input, feedback, and decided on policy components through a variety of stakeholder engagement strategies:

One-on-one Meetings → Advisory Group Meetings → City Council Briefings → Public Comment → City Council Vote

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The Columbus Way

50+ organizations consulted through the stakeholder engagement process

Real estate developers

Environmental organizations

Industry associations

Property managers

Building owners

Non-profit organizations

Affordable housing

Other city governments

Utility companies

- 85+ **one-on-one meetings**
- 200+ hours of policy advising via **Advisory Group**
- Benchmarking **website publication**
- 30-day ordinance **public comment period**
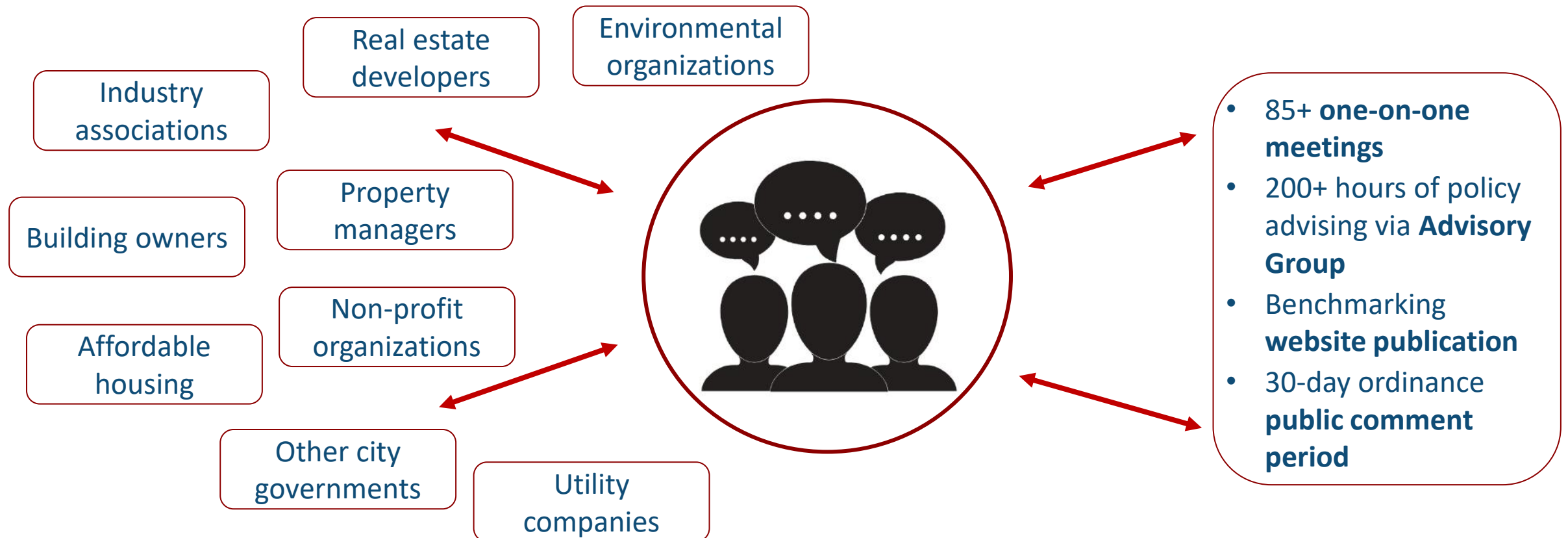
Additional Opportunities for Public Input

30-day Public Comment Period on draft policy language

City Council led Public Hearing

COLUMBUS CITY COUNCIL MEDIA ADVISORY

Contact: Lee Cole 614-645-5530

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Council to Hold Energy Benchmarking Public Hearing

Who:
Councilmember Emmanuel V. Remy
Councilmember Priscilla Tyson

When:
Thursday, March 12, 2020
10:00 am

Where:
Michael B. Coleman Government Center
111 N. Front St.
Hearing Room, Second Floor
Columbus, OH 43215

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City Council Policy Passage

Benchmarking & Transparency
Ordinance unanimously adopted into
Title 41 of the Columbus Building Code
on March 16, 2020

City transitioned to planning for
implementation in 2021

U.S. City and County 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

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Implementation in Columbus

Who's Covered?
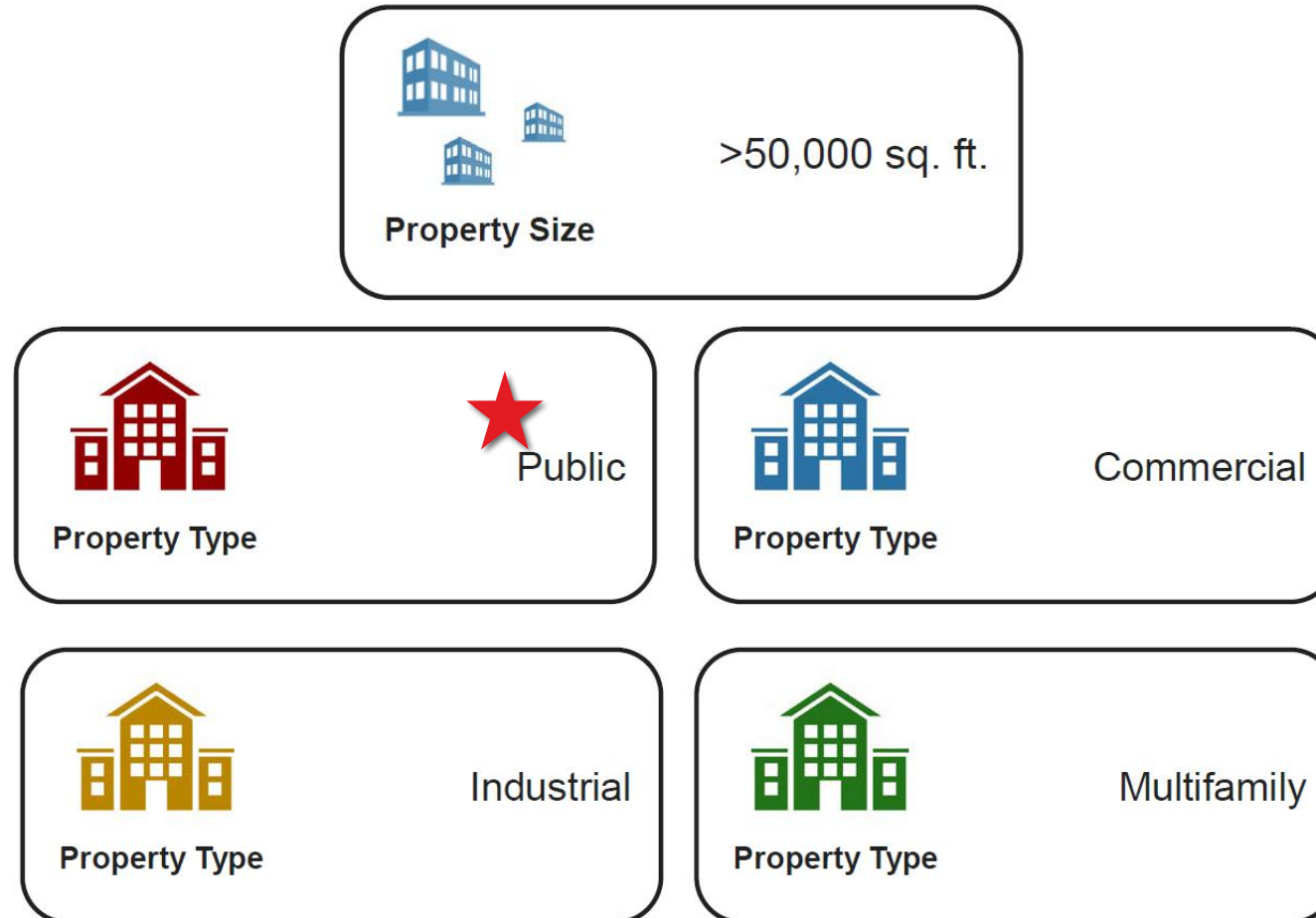
Building Owner Compliance

January	→	Feb. - May	→	June
City issues notification of benchmarking requirement		Building owners benchmark for previous calendar year		Building owner submits benchmarking report to the City

Repeats annually
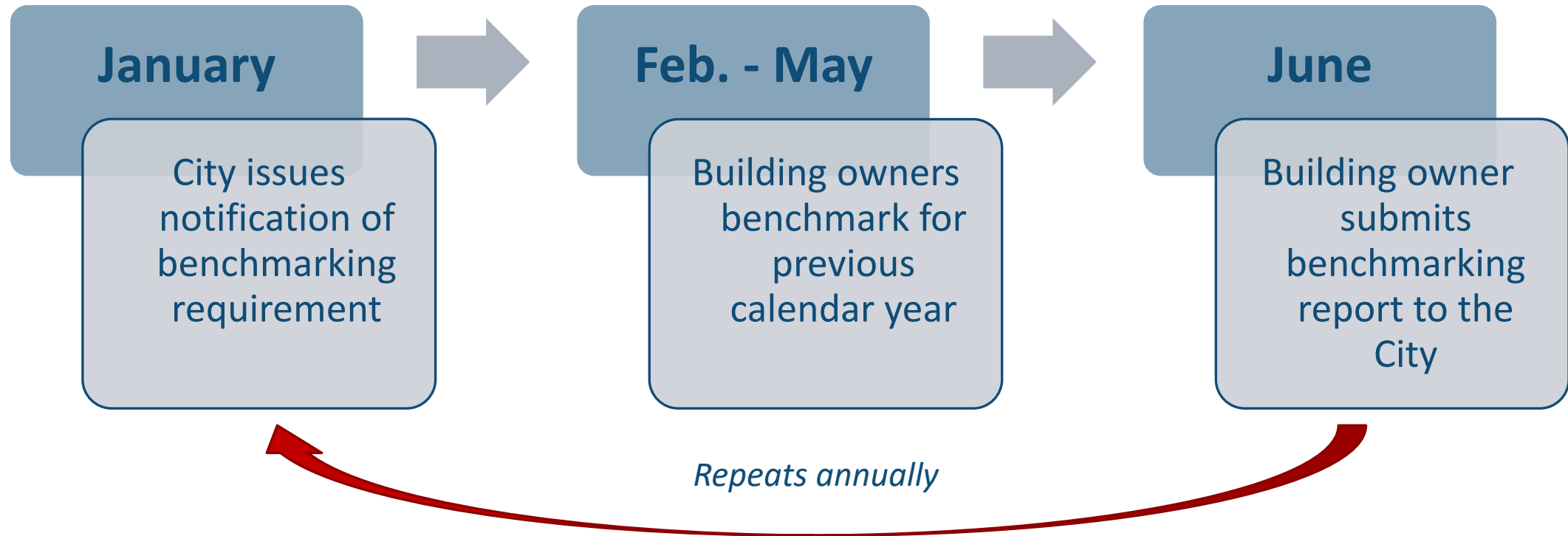
- No cost to comply
- Estimated 4-8 hours staff time per building for first compliance cycle

Resources Available

- Full-time, **dedicated** City staff
- **Automated benchmarking** for Public Utilities water & electric customers
- Dedicated technical assistance
- Hands-on training
- Educational resources
- Step-by-step **guidance** to comply

Sample Compliance Checklist from Orlando

Training & Outreach Timeline

| December | Jan/Feb | March | April | May | June |

Covered buildings list posted

Initial notification sent

Training #1

Training #2

Training #3

Compliance deadline

BZS help center launched

Data Jam #1

Data Jam #2

Data Jam #3

Letters of non-compliance issued

Conduct ongoing outreach to building owners, associations, networks

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What Comes Next: Data Transparency

Data shared with the public:

Whole-building annual metrics
- ENERGY STAR score
- Building type (i.e. office, retail)
- Building size
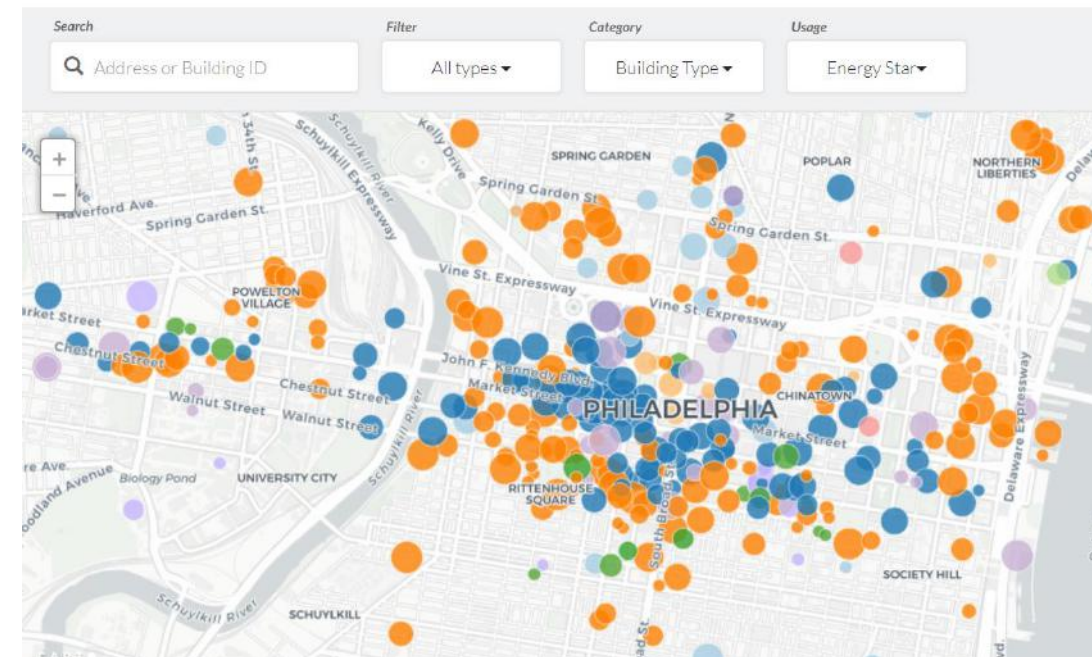- Address

Least-sensitive type of data

Data not shared with public:

Individual tenant information

Monthly consumption

First year of benchmarking data reported **will not** be made public

Whole-building annual metrics shared on clickable map:

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Compliance Timeline

| BUILDING SIZE	BENCHMARKING REPORT DUE	TRANSPARENCY OF DATA TO THE PUBLIC	NUMBER OF BUILDINGS
City-buildings > 25,000 square feet, *and* Non-City buildings > 100,000 square feet	Annually starting June 2021	Annually starting 2022	970
Buildings > 50,000 square feet	Annually starting June 2022	Annually starting 2023	2,155 (cumulative)

Expected Community-wide Benefits

MORE JOBS
Drives creation of local, high-skill jobs
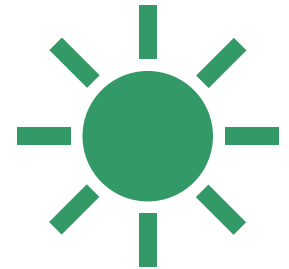
HEALTHER COMMUNITY
Improves public health & indoor air quality
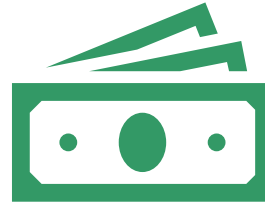
MORE AFFORDABLE
Reduces utility costs for tenants

INCREASES PROPERTY VALUE
Reduces operating costs for owners and attracts tenants

LOWERS EMISSIONS
By reducing energy needed to power a building

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Thriving, Prosperous, Healthy City

Thank You!

Visit us online at columbus.gov/sustainable/benchmarking

Email us at benchmarking@columbus.gov

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Jenna Tipaldi, jetipaldi@columbus.gov