

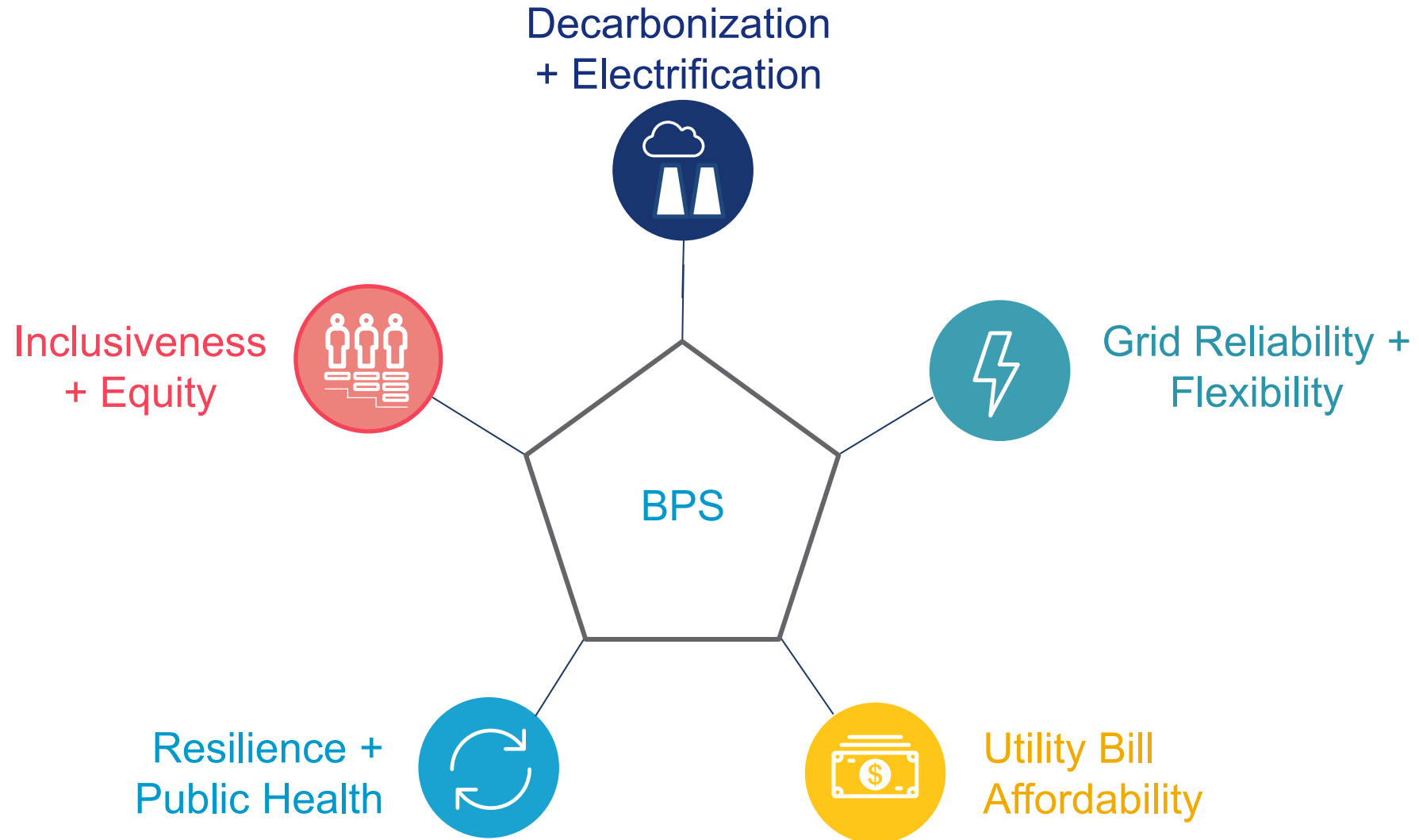
Building Performance Standards: Model Policy Overview



National Energy Codes Conference

July 22, 2021

Building Performance Standards: A Platform for Building Regulation



BPS Around the United States

	Washington, DC	New York City	WA State	St. Louis, MO	Chula Vista, CA
Year Adopted	2019	2019	2019	2020	2021
First Compliance Deadline	2026	2024	2026	2025	2028
Minimum Threshold Performance	Standards set no lower than median ENERGY STAR score	CO₂e emissions limits on a sq. ft. basis	Site EUI targets are 15% less than 2009-2018 averages	Standards set no higher than 35 th percentile site EUI	HPB based on ENERGY STAR score or site EUI
Covered Buildings	Comm & MF, Gov't > 10K sf	Comm & MF > 25K sf	Commercial > 50K sf	Comm & MF, Public/Gov't ≥ 50K sf	Comm & MF, Public/Gov't ≥ 20K sf
Compliance Cycle	5 years	Buildings must comply annually; limits get stricter every ~5 years	5 years	4 years (6 years for affordable housing and houses of worship)	5 years

Polling Question

Metric Comparison

Energy and Emissions Metrics	ENERGY STAR Score	Site EUI	Source EUI	GHGI
Compatible with Long-Term Standards?	✗	✓	✓	✓
Fully Within Control of Owner and Occupants	✗	✓	✗	✗
ESPM Normalizes for Weather	✓	✓	✓	✗
ESPM Normalizes for Business Characteristics (e.g. Density, Schedule)	✓ [★]	✗	✗	✗
Generation and Distribution Losses	✓ [★]	✗	✓ [★]	✓

★ Site-to-Source multiplier is calculated as a national average. Does not reflect local conditions

★ Available for ENERGY STAR 1-100 Score-eligible buildings



Performance Thresholds

Generally, thresholds have been based on location-specific data obtained from benchmarking ordinances

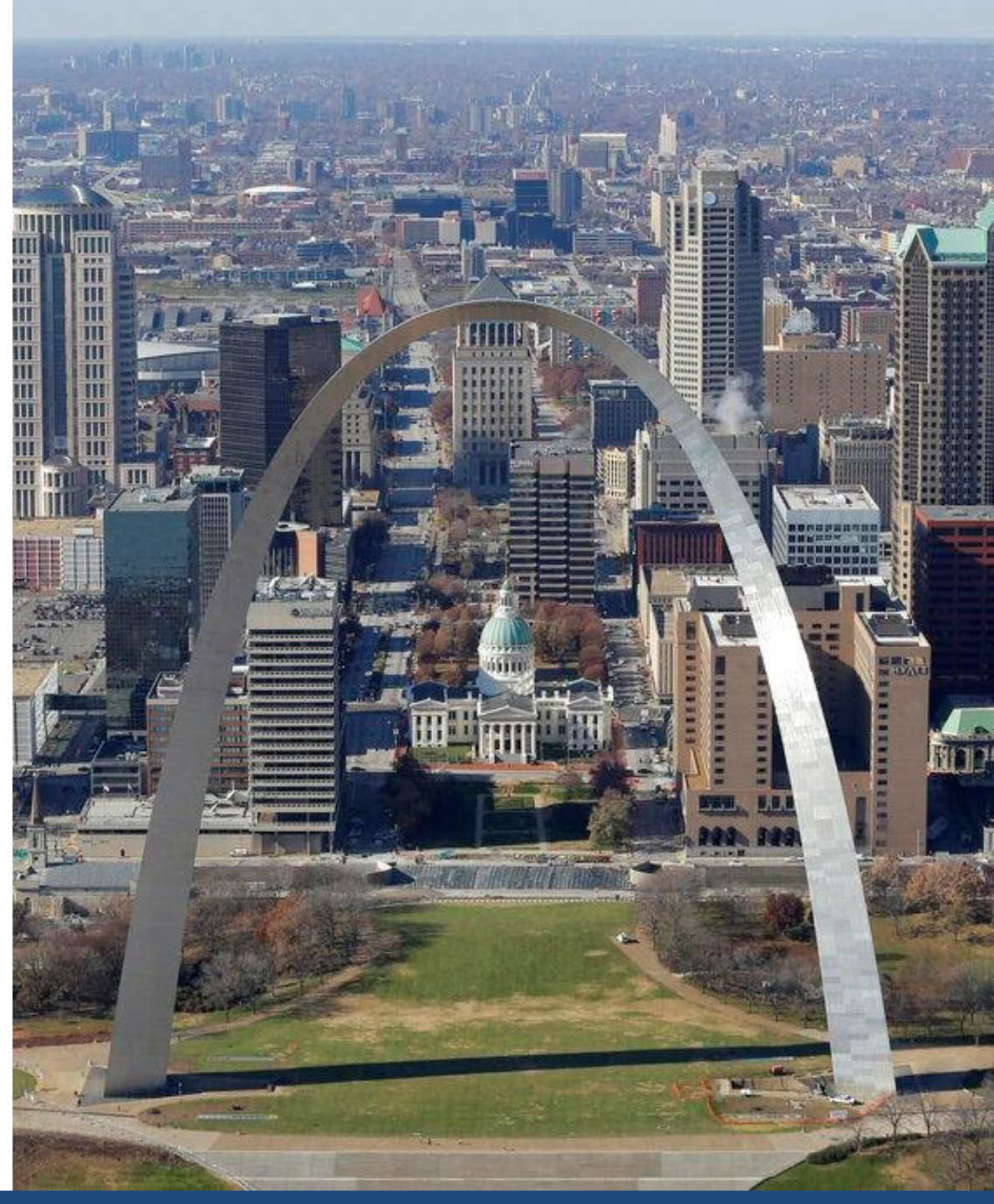
- DC requires buildings to meet at least median ENERGY STAR score (or source EUI) by peer building group
- In St. Louis, the bottom 65% of buildings in each sector (by site EUI) will be required to improve
- Washington State has established site EUI targets that are 15% less than the average building type EUI from the years 2009-2018
- NYC sets limits on CO₂e/sf to reduce emissions by 30% from a 2005 baseline by 2030

Polling Question

Applicable Buildings and Exemptions

BPS policies will not impact all buildings equally

- DC, NYC, and St. Louis policies are all aimed at commercial and multifamily, with DC having the lowest size threshold at 10,000 sf (Washington does not include multifamily)
- Exemptions vary by jurisdiction with allowances for affordable housing and certain specialty-use properties
- Additionally, some properties that do not fit into exemption categories will need ACPs or assistance in meeting targets



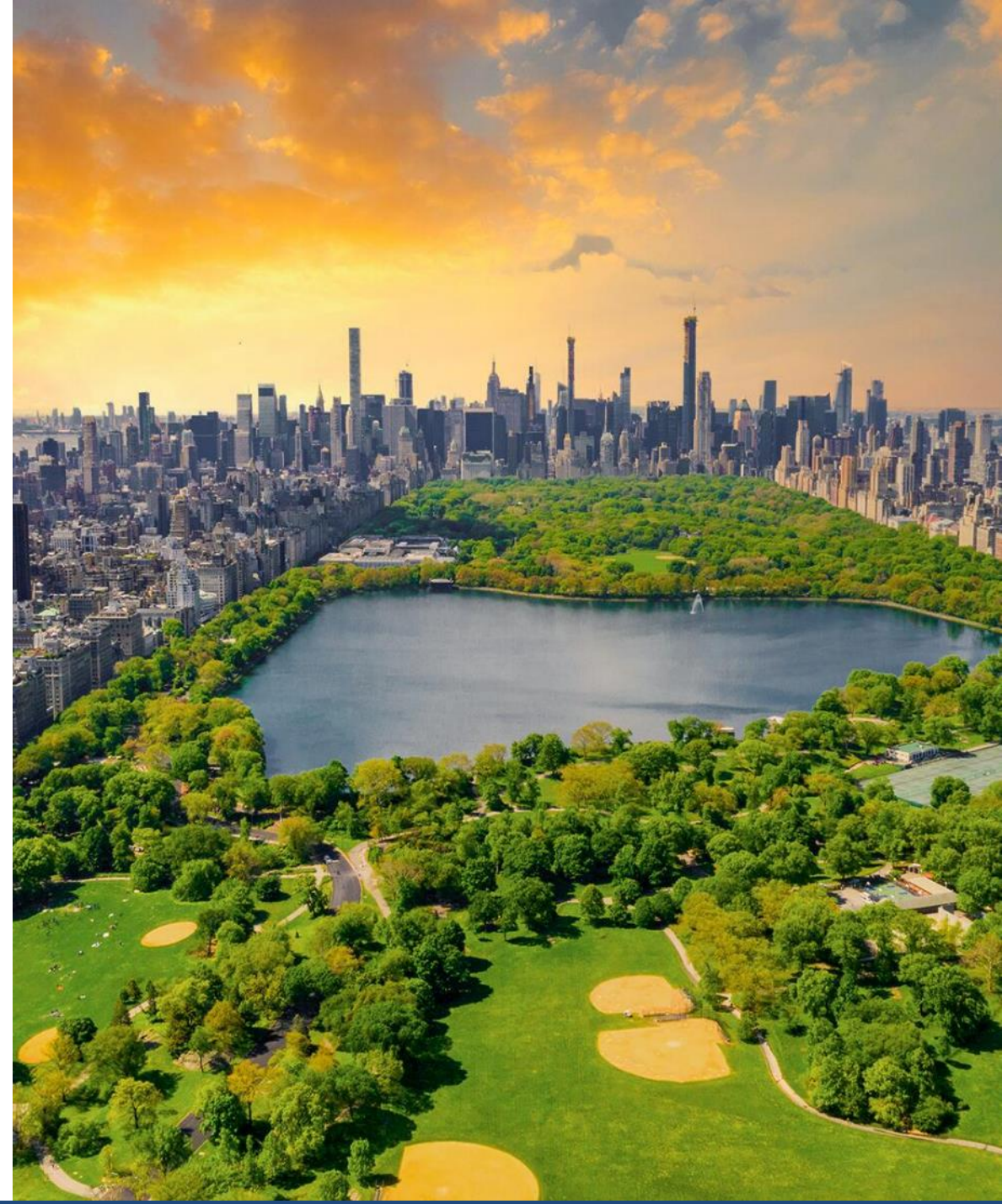


Compliance Cycle

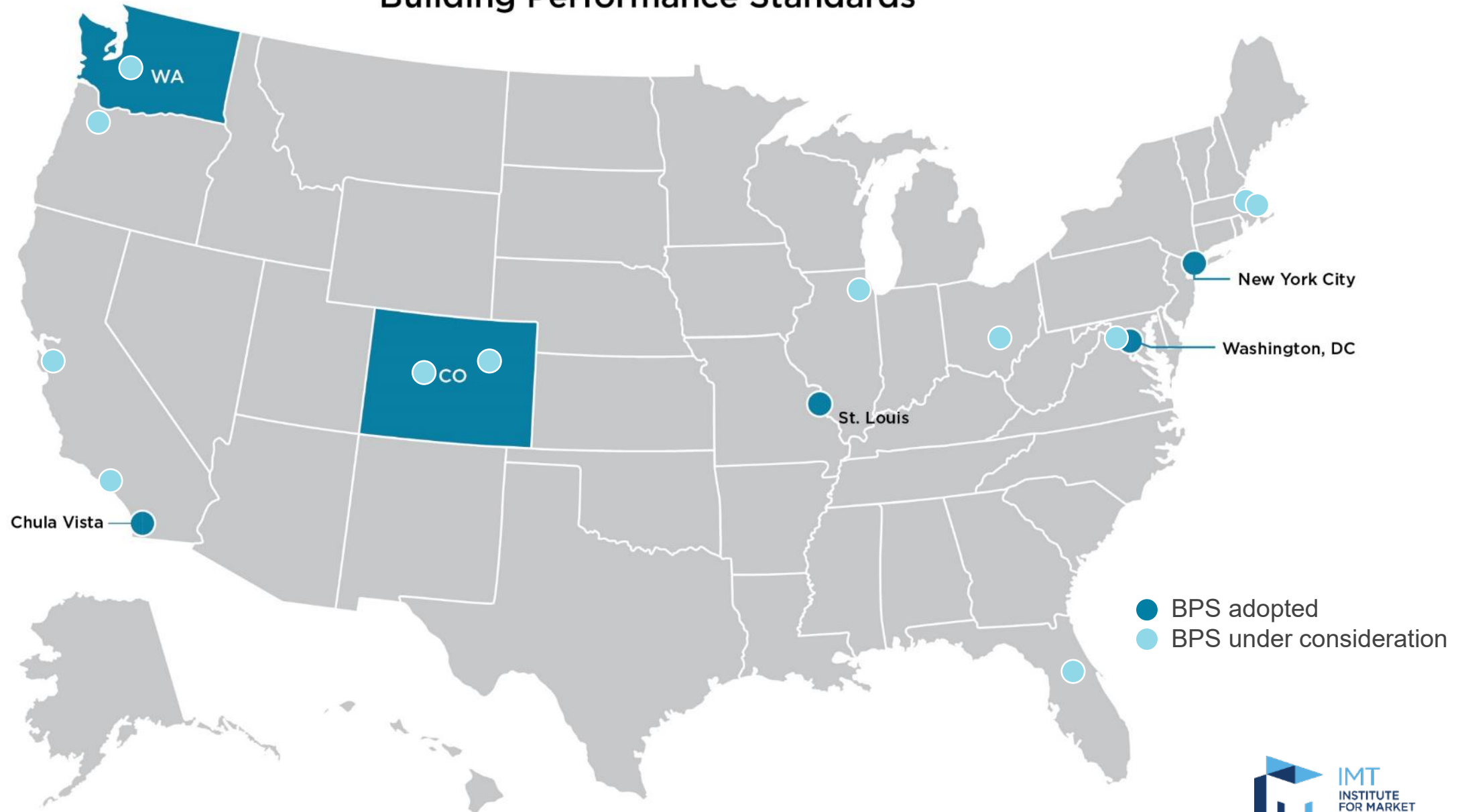
- Compliance cycles in existing BPS range from 4 to 6 years
- Targets are reset between cycles, either based on new calculation or next step in path
 - Using new data allows for more tailored approach but difficult for planning
 - Long-term targets provide stability but require more upfront planning

Implementation and Enforcement

- Unlike energy codes for new construction, most jurisdictions do not have the infrastructure for implementation and enforcement of existing building performance standards
 - In some cases, different agencies will be responsible for codes and BPS, though they are closely related
- ACPs, financial assistance, and other options will be necessary to make the most progress



U.S. City and State Policies for Existing Buildings: Building Performance Standards





Thank you!

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