



American Council for an Energy-Efficient Economy

Energy Savings Performance Assessment of Select U.S. Cities

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ACEEE

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The American Council for an Energy-Efficient Economy (ACEEE)

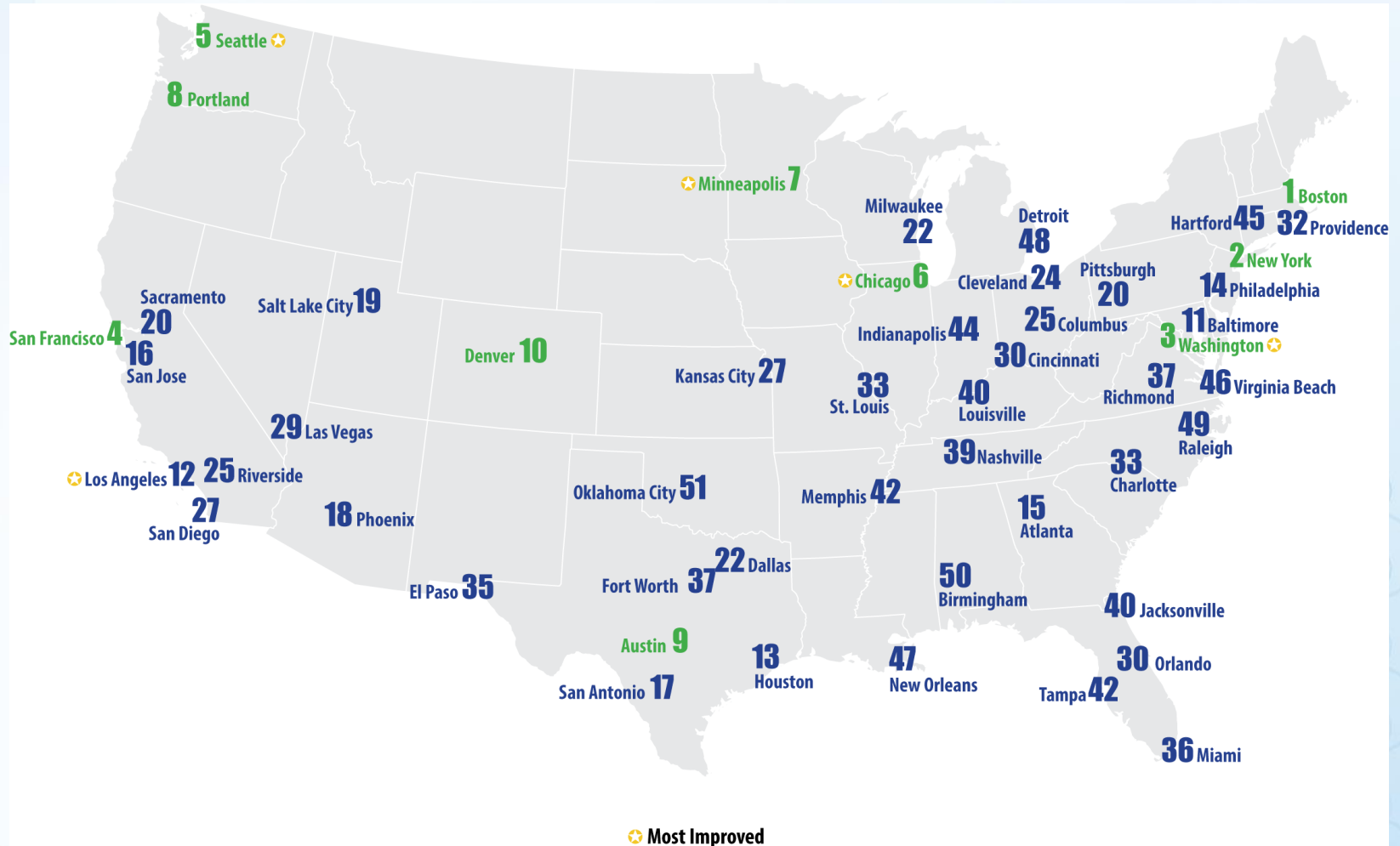
- ACEEE is a 501(c)(3) nonprofit that acts as a catalyst to advance energy efficiency policies, programs, technologies, investments, & behaviors
- 50 staff; headquarters in Washington, D.C.
- Focus on end-use efficiency in industry, buildings, & transportation
- Other research in economic analysis; behavior; energy efficiency programs; national, state, & local policy
- Funding:
 - Foundation Grants (52%)
 - Contract Work & Gov't. Grants (20%)
 - Conferences & Publications (20%)
 - Contributions & Other (8%)



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2015 City Energy Efficiency Scorecard



★ Most Improved

Scorecard policy areas and points

Policy area and metric categories	Maximum score
Local government operations	15
Local government energy efficiency goals	4
Performance management	2.5
Procurement and construction policies	3.5
Asset management	5
Community-wide initiatives	10
Community-wide energy efficiency goals	4
Performance management	2
District energy and combined heat and power	2.5
Urban heat island mitigation	1.5
Buildings policies	29
Building energy code stringency	6
Building energy code compliance	6
Requirements and incentives for efficient buildings	9
Benchmarking, rating, and transparency	6
Comprehensive efficiency services	2
Energy and water utilities	18
Electric efficiency spending	4
Natural gas efficiency spending	2
Electric savings	2
Natural gas savings	1
Energy efficiency targets and requirements	2
Energy data provision	2
Efficiency efforts in water services	5
Transportation policies	28
Location efficiency	8
Mode shift	8
Transit	6
Efficient vehicles and vehicle behavior	3
Freight	3
Maximum total score	100

Research aims

1. While many cities have set energy and/or climate goals, how are cities actually progressing toward achieving their nearest-term goals?
2. Based on successes, what lessons do cities have for other cities seeking to achieve their goals?

Methodology

Determine if city established goals



Gather baseline energy/emissions levels and recent levels



Project future energy/emissions levels

Step 1: Calculate average annual reductions

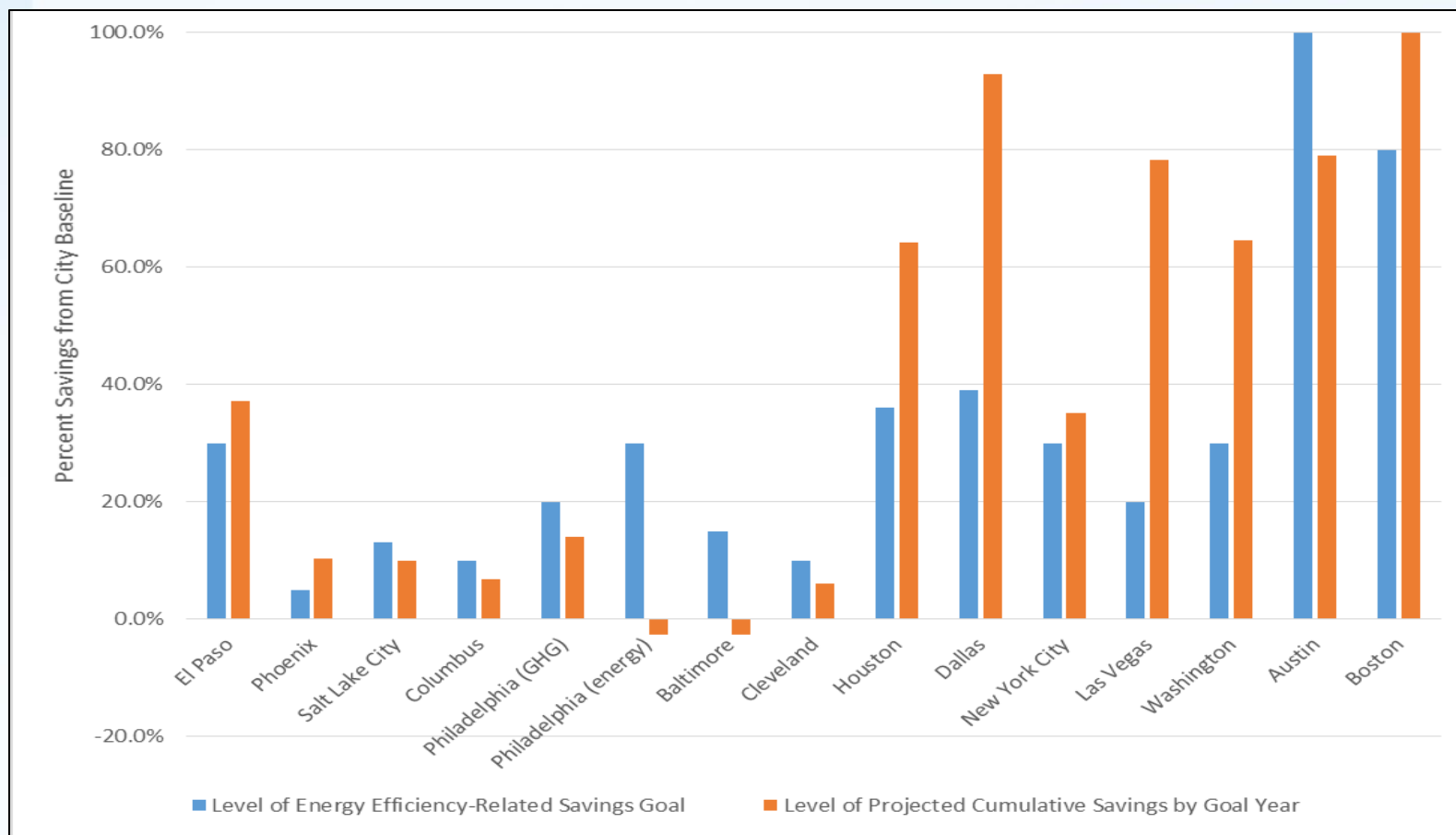
Step 2: Project savings in the goal's target year

Step 3: Compare projected reduction to target reduction



Investigate policy drivers of savings

Local government operations goals

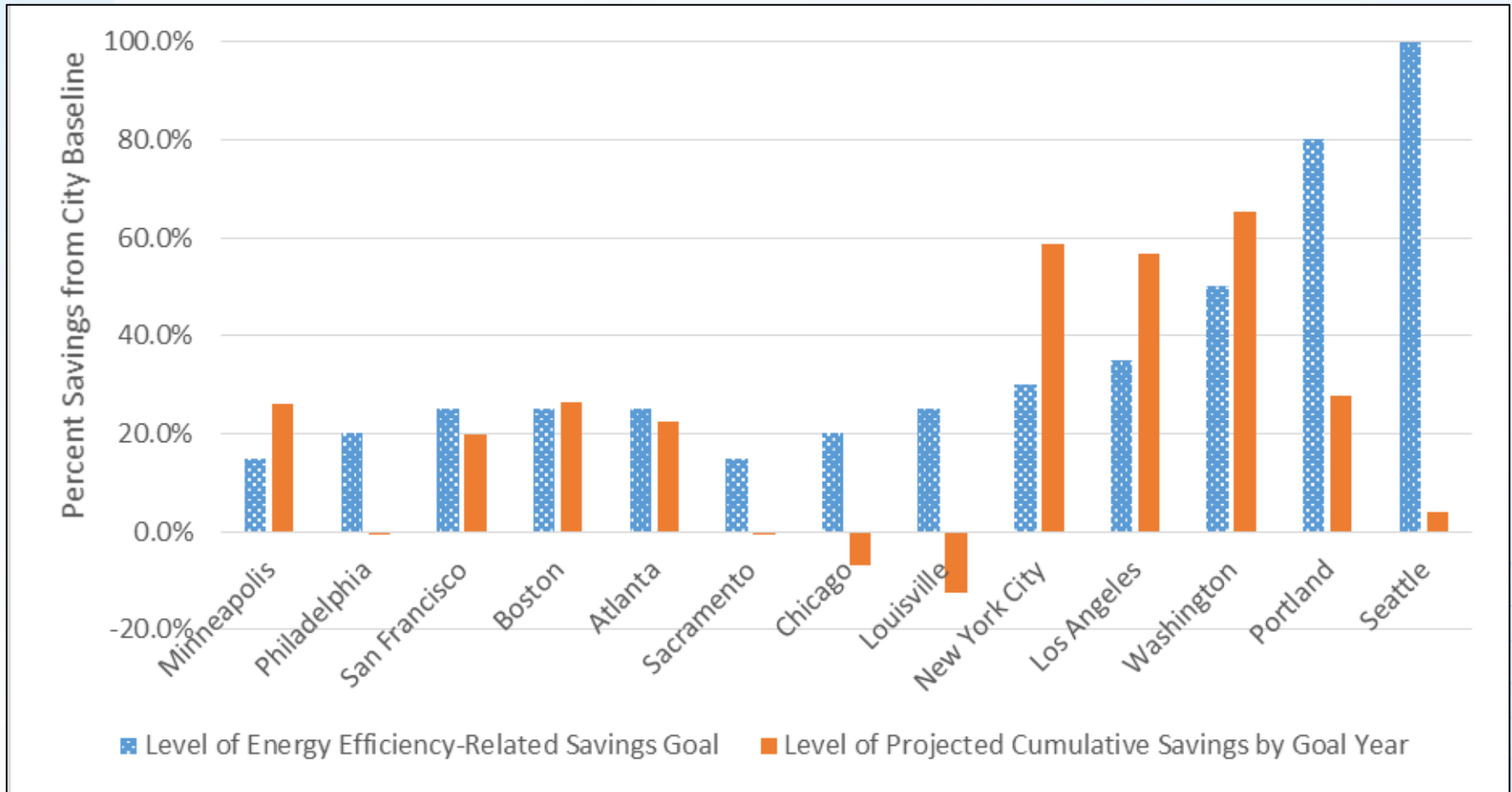


- Cities with goal: 32/51
- Cities on track for goal: 9/51 (Boston, Dallas, El Paso, Houston, Las Vegas, Minneapolis, New York, Phoenix, and Washington, DC)

Common policies among successful cities

- Comprehensive retrofit strategies for public buildings
 - Participants in U.S. Department of Energy's Better Buildings Challenge
 - Local government administered programs
 - Energy saving performance contracts

Community-wide goals



- Cities with goal: 32/51
- Cities on track for goal: 7/51 (Austin, Boston, Los Angeles, Minneapolis, New York, Riverside, and Washington, DC)

Common policies among successful cities

- Residential building benchmarking and transparency policies
- Reducing parking requirements for location-efficient development
- Location efficiency incentives
- EE savings targets for utilities and local partnerships with utilities

Conclusions

- Majority of cities are voluntarily setting energy and/or climate goals
- There is room for improvement both in performance toward goals and tracking of performance toward goals
- Opportunity for further research include
 - Analysis with additional cities included
 - Evaluation of the stringency of goals

Questions?

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