



Building Codes Intro: How Texas Compares to the Nation and Where Texas and its Cities Are Going

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Overview

- Importance of building codes
- Texas state process over last decade
- How Texas Compares
- Obama Administration and Feds
- Current State Process to Adopt New Codes
- Sierra Club position
- Where are Texas Cities?

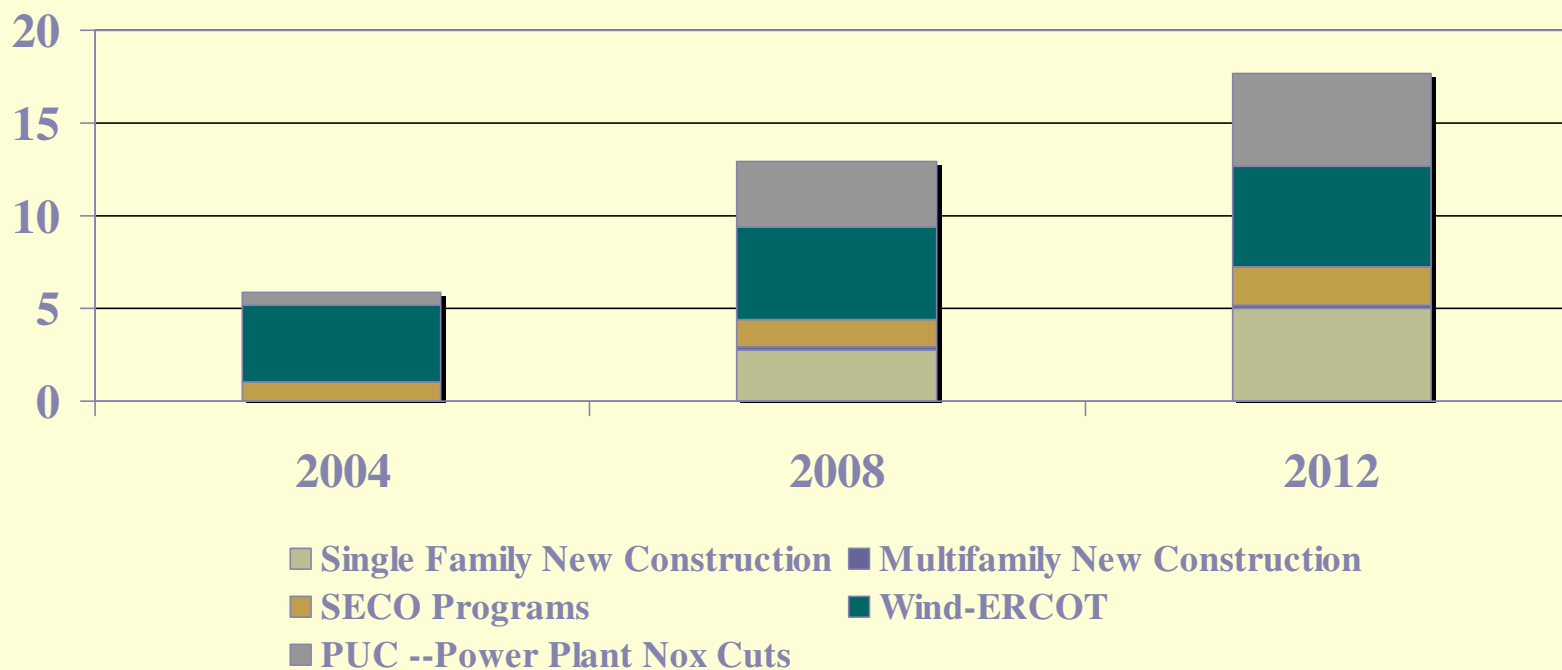


Importance of building codes, Environmental

- More efficient buildings lower ozone-forming emissions and global warming emissions
- EPA rule may require a 7-20% reduction in Nox: PPB levels dropped from 75 to 60-70
- EPA allows Nox credits for building codes
- Building codes, green building programs, PACE, and onsite renewable energy can help reduce Nox

NOX Savings Have Come from Building Codes, EE Programs and Wind

NOX Tons Per Day Savings





Importance of Building Codes, Economic Issue

- Help determine water, electrical and natural gas use and what it costs to run buildings
- Recent 2007 ACEEE study found that updating building codes plus green building programs in Dallas and Fort Worth could help meet approximately 15% of growth in demand of electricity use
- The adoption of statewide minimum energy conservation codes in 2001 led to an average of 17% decrease in electricity demand (\$245) in new homes
- Can be an economic development strategy to create local jobs
- Make a more sustainable city



Importance of Building Codes, Long-term

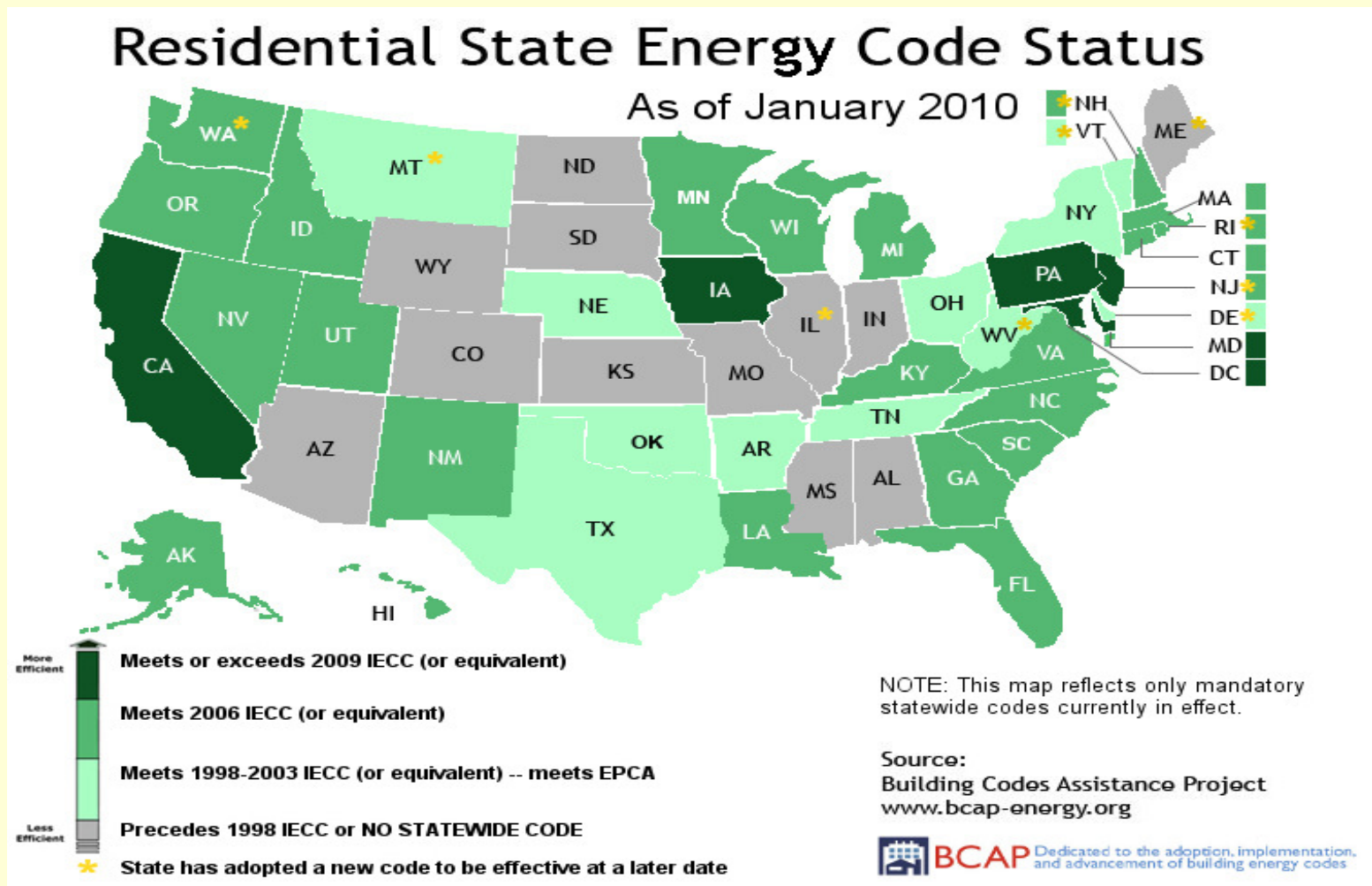
- Reduce Air Pollution
- Reduce health care costs
- Reduce Lost Days of Work
- Cost Savings
- Avoid Limits on New Businesses or Loss of Highway Funds
- Happy Homeowners
- Create Local Jobs and Industry



Texas State Process: Last 10 Years

- 77th Legislature adopts energy codes from 2001 IRC for Single-family and 2001 IECC for other construction as minimum state standard as part of major air pollution bill -
- Texas Emissions Reduction Plan: gives ESL and SECO leading roles to determine energy and pollution saving potential of new codes
- Energy Efficiency legislation (HB 3693) of 80th Session, further refinements and review process established;
- SECO and ESL take no action on 2003 or 2006 IECC or IRC codes though many cities in Texas do.
- 81st Legislative Session (SB 16) proposes raising standards to 2009 IRC and 2009 IECC but legislation stalls

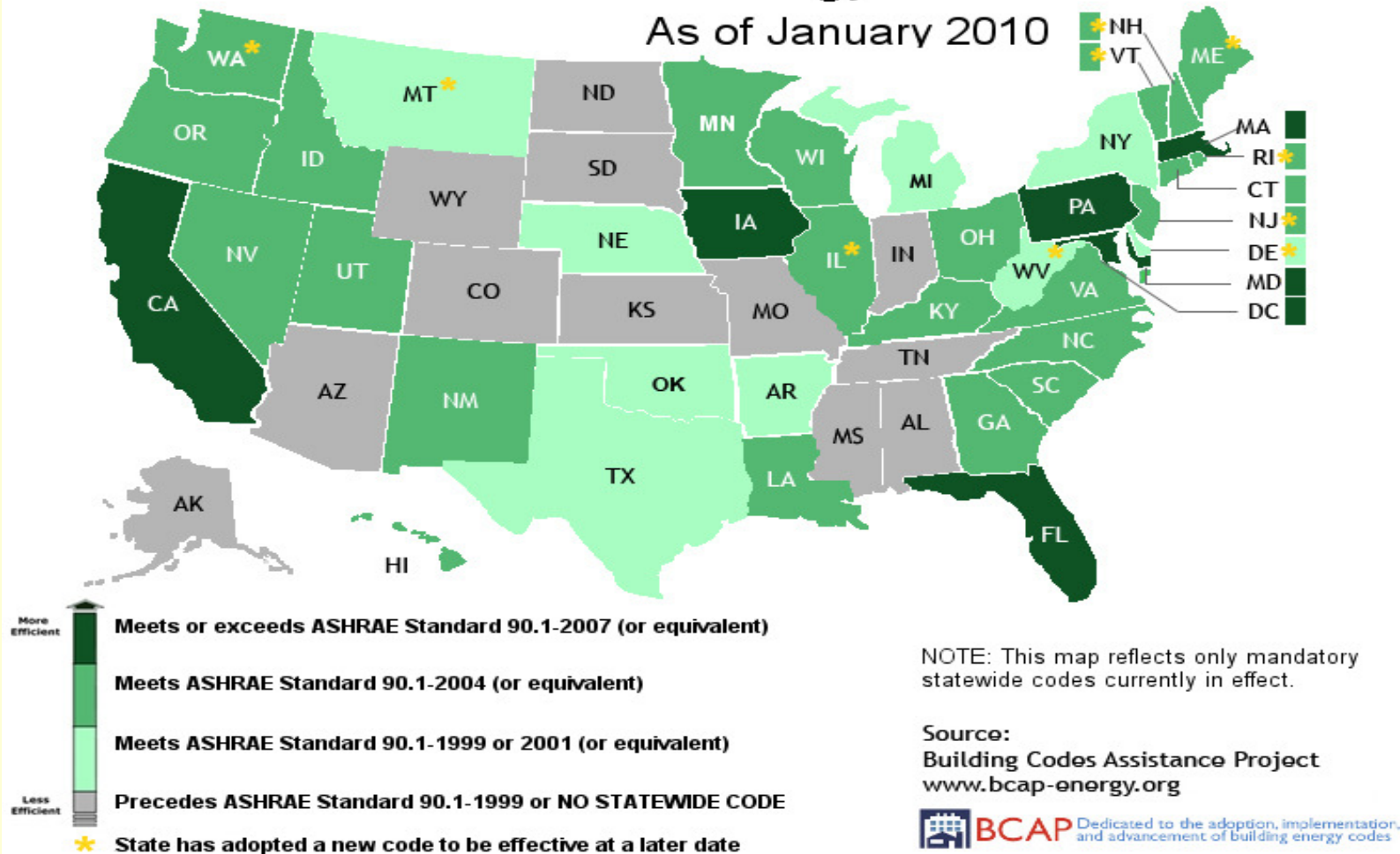
How Texas Compares: Residential



How Texas Compares: Commercial

Commercial State Energy Code Status

As of January 2010



NOTE: This map reflects only mandatory statewide codes currently in effect.

Source:
Building Codes Assistance Project
www.bcap-energy.org

BCAP Dedicated to the adoption, implementation, and advancement of building energy codes



Obama Administration and Feds

- ARRA included a requirement that states adopt or have a process to adopt 2009 IECC or their equivalent in order to gain access to certain ARRA funds;
- DOE released report showing 2009 IECC preferable to 2009 IRC;
- Governor Perry writes letter to DOE detailing the SECO-ESL process to update codes whether or not SB 16 passes;
- Various federal legislative proposals to continually increase codes by 15% every three years with wider DOE role.

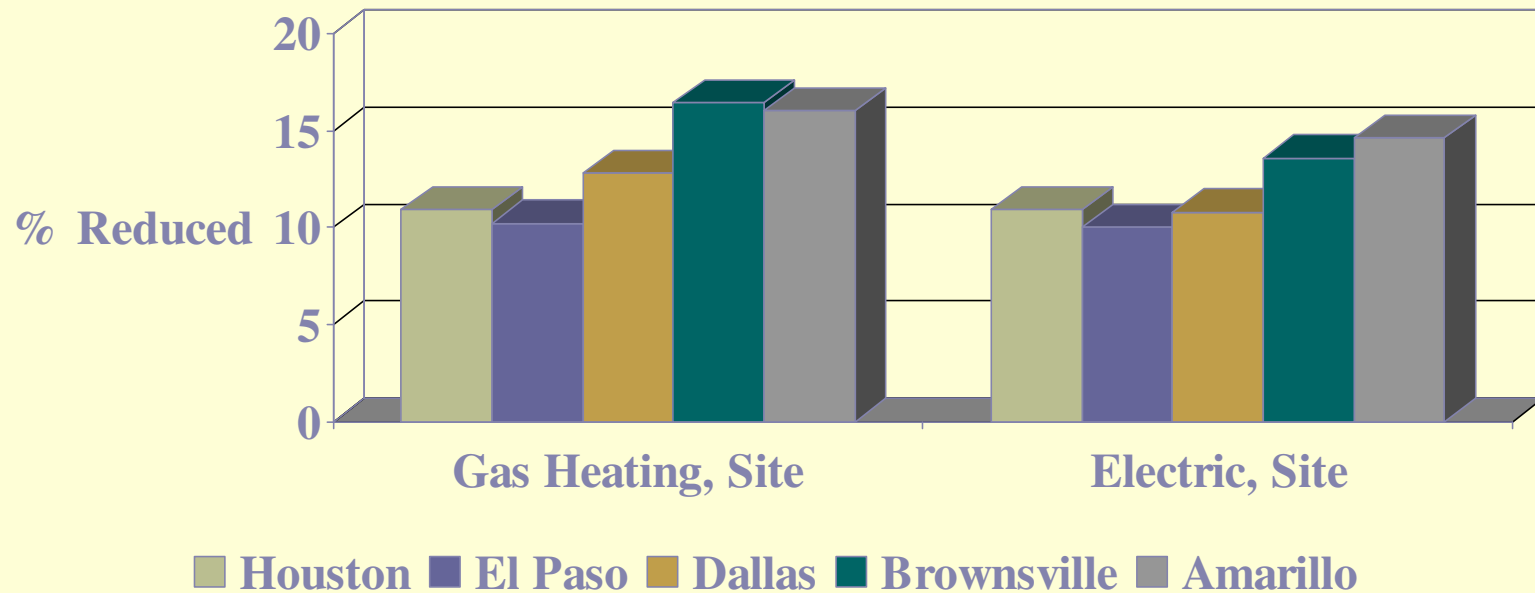


Current State Process

- Summer 2009 -- Public input process begins
- Some 700 comments: majority favoring fast implementation of 2009 IECC for all construction
- Texas Homebuilder Association favors continued bifurcated 2009 IECC and 2009 IRC with slower implementation time;
- September 2009 -- ESL recommended that both 2009 IRC and 2009 IECC were better than current code, and that in most cases, 2009 IECC offered better energy savings and pollution reduction for homes
- January 28, 2010 -- Stakeholder meeting at SECO to begin rulemaking process

An ESL Chart

Estimated Energy Reductions in 2001 IECC vs. 2009 IECC (performance path) for 2,500 Ft Home



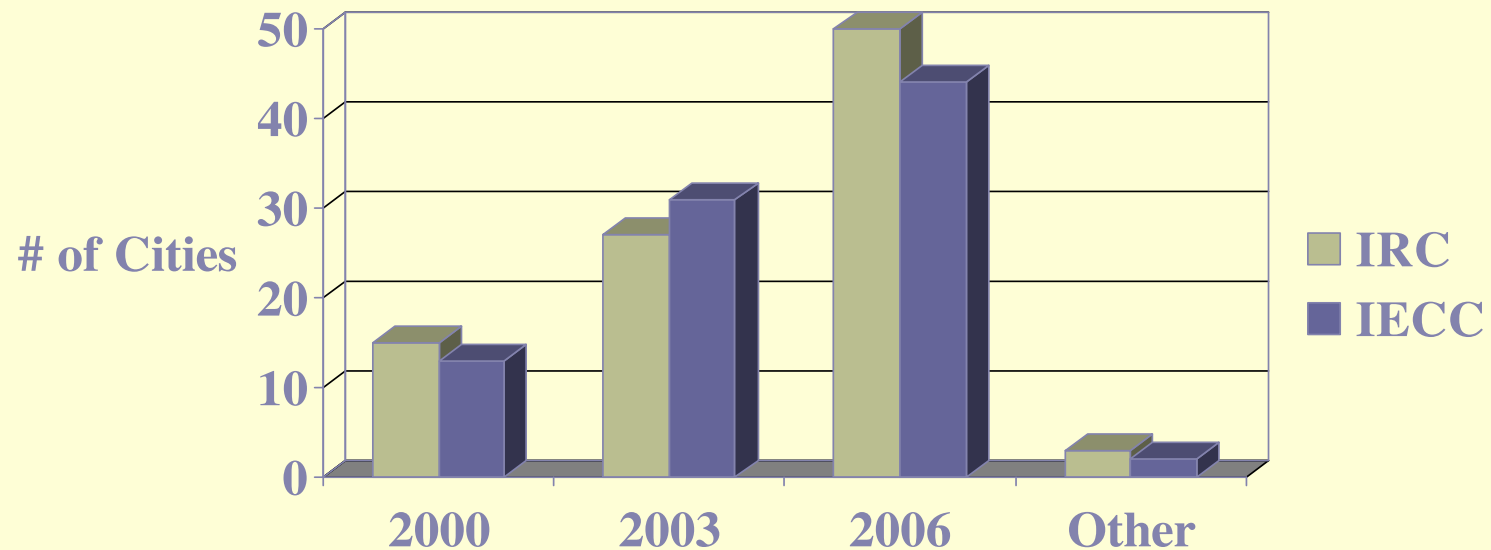


2009 IECC: Implementation Issues

- Does require additional testing and inspection -- could be an issue for some areas of state
- Extra expense for builders will be mainly in windows and added insulation
- Additional training for ductwork and blower door testing
- ESL and DOE are providing and will provide resources to cities and states adopting 2009 IECC
- Cities that move forward with 2009 adoption will create certainty in the market and lower costs overall

Which Codes have Texas Cities Already Adopted?

Energy Code Adoption in Texas Mid-Size Cities



Sierra Club reviewed Building Codes of 100 Mid-Size Cities beyond Houston, Dallas, San Antonio, Austin



Sierra Club Position

- **Which Codes to Adopt?**

- **A. The Simple Path**

- Adopt 2009 IECC as State Minimum Standard for All Residential, Building and Industrial Commercial Buildings

- **B. Another Approach**

- Adopt 2009 IRC for Single-Family Residential with Amendments to Make it as Stringent as 2009 IECC for builders choosing the prescriptive path;
 - Adopt 2009 IECC as State Minimum for All Buildings, except for single-family residential using the prescriptive path (See Above);

- **What's the Timeline?**

- A. Adopt the new minimum codes statewide with an effective date of between September 1, 2010 and January 1, 2011;
 - B. Adopt the new minimum codes in all affected counties – non-attainment or near non-attainment counties by January 1, 2011, and adopt the new minimum codes in the remainder of the state by January 1, 2012.



The Texas Leaders

- Fresno: Adopted Energy Star minimum for residential
- Plano: 15% above 2006 Residential Green Building Program
- San Antonio: Mission Verde and Adoption of 2009 IECC plus Green Building Program
- Austin: Green Building Program plus Net-Zero Home 2015 Goal -- Currently adopting provisions of 2009 IECC
- Houston: 15% Above 2006 IECC plus GreenBuilding Program
- Dallas: Up Next -- An Example for North Texas