



Proposed Local Building Codes/Amendments

September 21, 2010



Recommended Adoption

- 2009 International Building Code (Title 18.08)
- 2009 International Residential Code (Title 18.10)
- 2009 International Mechanical Code (Title 18.12)
- 2008 National Electrical Code (Title 18.16)
- 2009 International Plumbing Code (Title 18.20)
- 2009 International Fuel Gas Code (Title 18.24)
- 2009 International Existing Building Code (Title 18.28)
- Landscape Ordinance Amendment (Title 18.46)
- 2009 International Energy Conservation Code (Title 18.70)
- 2009 International Fire Code (Title 9.52)

Amendments to Title 18.02 of El Paso City Code

- Conditional Permits
- Repeal existing 18.02 in its entirety



Intent

- Improve and modernize public safety standards for building construction
- Maximize opportunities to maintain and/or improve current community grading/rating
 - Insurance Standards Office: *Building Code Effectiveness Grading Schedule*
 - FEMA: *Community Rating System*
- Address alignment of local and state standards
 - State adoption of 2009 International Energy Conservation Code (effective April 1, 2011)
 - Texas Department of Licensing & Regulation using 2008 National Electric Code for Electricians
- Advance consistent council direction to pursue energy conservation



Background

- City of El Paso currently operating under 2003 edition of International Code Council (ICC) family of codes
 - Currently two cycles out of date
 - Codes normally revised on a three-year cycle



Background

- *Fall 2009-June 2010-* Stakeholder meetings and staff presentations to industry groups and the community
- *June 28, 2010-* Planning & Development LRC direct staff to forward proposed ordinances to full City Council for consideration
- *July 20, 2010-* City Council directs staff to go forward with 2009 International Building Codes, provide for additional vetting and bring back to Council in three months
- *July 2010-September 2010-* Additional stakeholder meetings held
 - *Endorsed by El Paso Association of Builders on September 8, 2010*



Presentation Overview

- Texas Cities Adopting 2009 I-Code Edition
- Insurance implications (ISO-BCEGS)
- Energy Savings: Cost/Benefit Analysis specific to El Paso
- Long term affordability (30 year mortgage)
- Local options/amendments
- 18.02 Modifications (Conditional permits)
- Recommended implementation – Timelines/Next steps



Texas Cities

(adopted (or in process of adopting) 2009 Edition)

Municipality	ICC Edition	Notes
Burnet	2009	
Waco	2009	
San Antonio	2009	
Austin	2009	All 2009 except 2006 IRC
Arlington	2003	Will adopt 2009 edition early 2011
Fort Worth	2003	Will adopt 2009 edition late 2010/early 2011

**** Typical grace period of at least 90 days for implementation once adopted***



Insurance Implications

- Adoption of latest building codes critical component of Building Code Effectiveness Grading Schedule (BCEGS)
 - Evaluated by Insurance Standards Office
 - Last grading for El Paso community in 1996
 - Up-to-date building codes adopted at that time
 - However, currently, 2 cycles out of date
 - Automatic adverse effect on new grading
- As of 2009, BCEGS and FEMA's Community Rating System (CRS) now concurrent process
 - Scheduled this fall for El Paso community



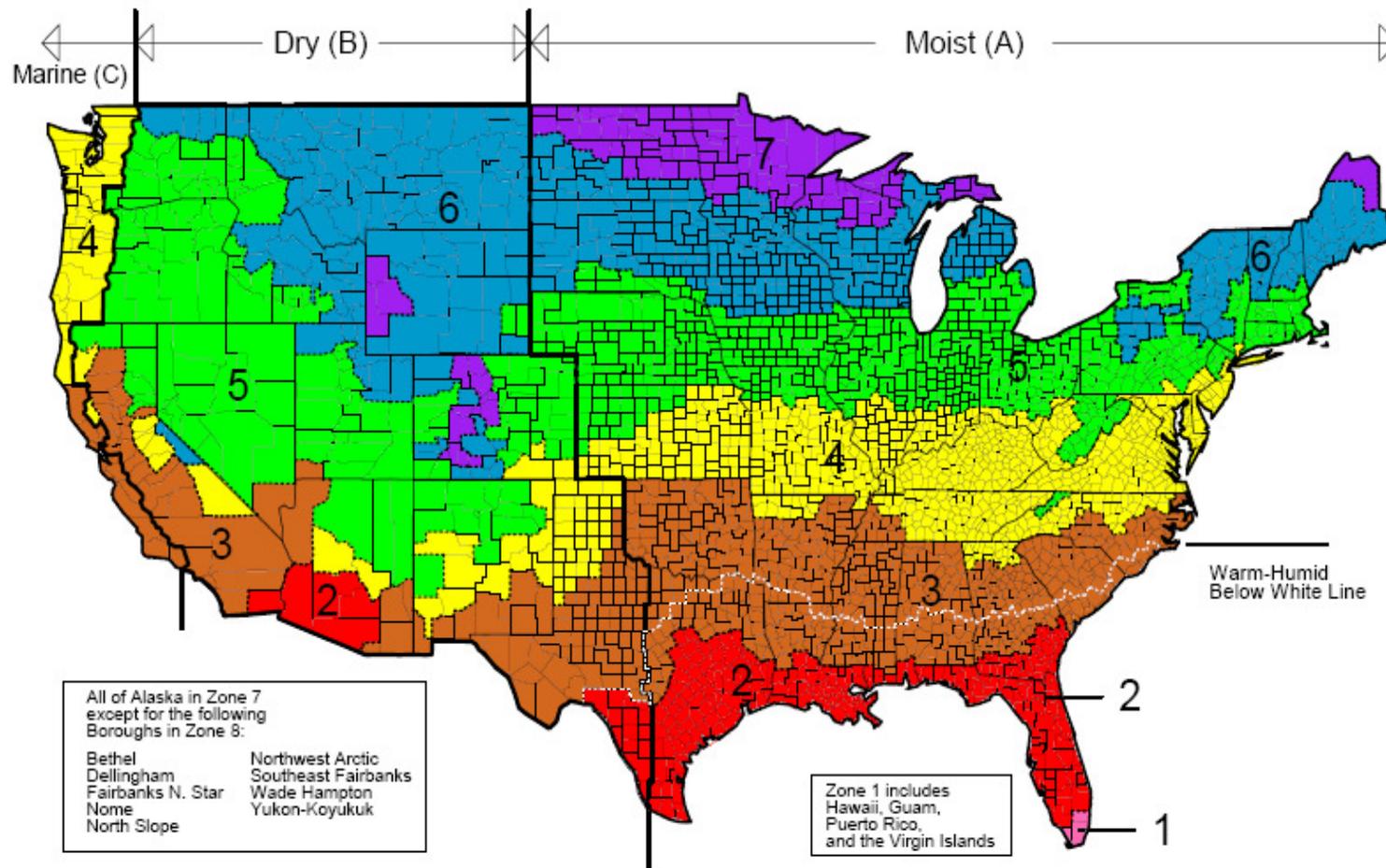
Insurance Implications

- Flood insurance premium rates discounted in 5% increments
 - Class 1 community receives 45% premium discount
 - Class 9 community receives 5% discount
- Today, El Paso has class 9 rating representing 5% discount
 - Target Rating of at least 7 would yield 15% discount
 - Adoption of up-to-date building codes key element
 - As of 3/2010 5,259 active policies
 - Would represent savings of approximately \$435,484



El Paso - Climate Zone 3

Map of DOE's Proposed Climate Zones





Percent of National Housing Starts

Climate Zone	%
1	3.26%
2	23.62%
3	24.01%
4	14.65%
5	18.98%
6	6.19%%
7	0.34%
8	0.02%



ICF International Energy Analysis

(Impact of 2009 International Energy Conservation Code
across the US)

Climate Zone	Yearly Avg.	Annual Savings
1	14.1%	\$437.41
2	13.2%	\$222.73
3	13.4%	\$241.63
4	11.6%	\$238.14
5	10.0%	\$221.03
6	11.6%	\$276.30
7	13.1%	\$336.93
8	13.3%	\$419.21



ICF International - Energy Analysis

(Impact of 2009 International Energy Conservation Code)

Climate Zone 3 (Specific to El Paso area)

	Savings
Heating	9.6%
Cooling	21.5%
Hot Water	0.0%
Lighting	26.6%
Annual Avg. % Savings	13.4%
Annual Avg. Energy Savings	\$241.63



ICF International - Energy Analysis

(Impact of 2012 International Energy Conservation Code
across the US)

EECC - Energy Efficient Codes Coalition

DOE - Department of Energy

NAHB - National Association of Homebuilders

Table 1. Energy Savings Compared with the 2006 IECC³

Code Proposal	Annual Energy Cost Savings		Peak kW	AC Sizing
	National Average	Range by Climate Zone		
2009 IECC	12.9%	10.8-15.1%	7.1%	12.2%
EC25 (EECC)	30.3%	25.4-33.5%	18.6%	23.4%
EC13 (DOE)	25.4%	20-5-28.4%	12.3%	22.0%
EC16 (NAHB)	21.4%	16.0-25.3%	10.1%	19.2%



Long Term Affordability

Impacts on 30 year mortgage @ current 4.5% apr:

- Annual energy savings of \$241.63
- Decrease in monthly payment of \$20.15
- 30 Year energy savings = \$7,248.90

Cost of Improvements	Over life of loan	Increase in Monthly Payment	Monthly Energy Savings	Difference
Low \$1,000	\$ 1,800	\$5	\$ 20.15	\$15.15
High \$4,000	\$ 7,200	\$20	\$ 20.15	\$.15



Local Options/Amendments

- Deletion of required fire sprinklers in R3
- Wind speeds lowered to 90 mph (from 100)
- Structures under 200 sq. ft. do not require permits



Title 18.02 Proposed Modifications

- Amending Title 18.02 deleting requirements for city licenses (plumbers, electricians, mechanical contractors) in lieu of state requirements
- Amending Title 18.02.380 to provide for Plan Review Deposit Fees – in an effort to recover delayed/abandoned projects
- Amending Title 18.02 regarding bonds, and insurance requirements – state requirements
- Amending Title 18.02.103.2.3 Design Professional, adding language that the architect or engineer who prepares construction documents shall have full responsibility for complying with Texas Occupations Code, Chapter 1001 (Engineers) or Chapter 1051 (Architects), as applicable
- Amending Title 18.02.109.2.5, adding language regarding the TIRZ No. 5 and Neighborhood Empowerment Zone fee reductions
- Adding Section 18.02.110.1 Discarded Building Materials and Construction Site Waste
- Adding Section 18.02.7 Requirements for maintaining Third Party plan review/inspections status



Conditional Permits

Proposed Ordinance Amendment

- 1) No permits issued until subdivision improvements are complete and plat is filed
- 2) If improvements have not been completed, building official may issue conditional permit provided:
 - Developer provides financial security (pursuant to 19.08.040)
 - Fully charge fire hydrants are installed
 - Drivable surface is constructed acceptable to fire marshal and building official
- Certificates of occupancy shall only be issued for lots meeting either condition one or two
- **To be effective immediately upon City Council adoption**



Recommended Implementation

	Date
*Council Adoption	September 21,2010
2009 International Conservation Energy Code <i>(Consistent with State requirement)</i>	April 1, 2011
2008 National Electric Code	June 1, 2011
All other codes/amendments	January 1, 2011



Next Steps

- Advertise adoption/implementation dates
- Provide internal/external training opportunities
- Continue stakeholder meetings
- Address transition to new codes



Comments/Questions