



Partnerships with Real Estate Agents



**A Key to Incorporating
Energy Efficiency at
the Time of Sale**

Special Lunch Session: Tuesday 2/28/2006 12:00 – 1:30PM

Outline

- Introduction and Acknowledgements (5 minutes)
- A Brief History of Real Estate Market Programs (15 min.)
- What Do Agents Really Want? (15 min.)
- AEEREP & the Eco-Broker™ Designation (15 min.)
- Summary & Roundtable (30 min.)



Session Introduction

- Outline
- Objectives
- Session Ground Rules:
 - OK to interrupt speaker to ask brief clarifying questions
 - Save discussion questions for end of each speaker's talk
 - 30 minutes at end of session reserved for extended roundtable
- Audience Survey
 - # of HERS raters; # real estate agents/brokers; # of contractors; # of government; # of utility; # of other?

2006 RESNET Conference San Antonio, TX

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A Service of GeoPraxis

Real Estate Market Programs



A Brief History

Thomas P. Conlon – President
EnergyCheckup



Programs Grow Up

- HERS 1.0 (1993 – 1998)
- Time-of-Sale 1.0 (1999 – 2004)
- Best Practices - Residential Energy Audits (2005)
- Real Estate Agent Partnerships (2006-2008)

HERS 1.0 (1993 – 1998)

- HERS / EEM Pilots
 - Bold aspirations
 - Boundless enthusiasm
 - Generous funding
- ... but untested program theory





HERS 1.0 (1993 – 1998)

- At first, you fall down a lot





HERS Pilot States Report (NREL 2000)

- \$25M* (1993-1998)
 - 7 States
 - 69,164 Ratings
 - 8,534 FHA EEM's (12.3%)
 - 328 Raters
- Additional Training:
 - 7,038 Real estate agents
 - 1,910 Lenders
 - 73 Appraisers
 - 605 Builders & contractors
- \$360 / Rating
- \$75,919 / Rater
- Other Outputs
 - Software
 - BESTEST
 - etc.

2000, B. Farhar. Pilot Program Report: HERS & EEMS. NREL April 2000 (* Appendix A, all sources, 7 states)



HERS Pilot States Report (NREL 2000)

“...the charges for the ratings do not cover the costs of providing them

... all of the HERS provider organizations lose money each time they process a rating.”

\$5 - \$565 loss / audit



Time-of-Sale 1.0 (1998 – 2000)

- PG&E
 - Energy-Aware Housing Agent Program (EAHAP)
 - Time of Sale Energy Renovation (TOSER)
- Introduced “Snapshot”
- But focused on EEMs
 - Agents and lenders
 - Not home inspectors





TOSER: Energy "Snapshot"

- Agent and lender reported advantages*
 - Easy to understand
 - Information is valuable to the home buyer:
 - “Saves the \$200 to do a full HERS.”
 - “You have to have a starting point and the Energy Snapshot tells you if you need any upgrades.”
 - “If [buyer] can't pay for it all they still know what improvements can be done after escrow closes.”

*2000 Market Effects Study of the TOSER EEM Program, XENERGY, March 2001

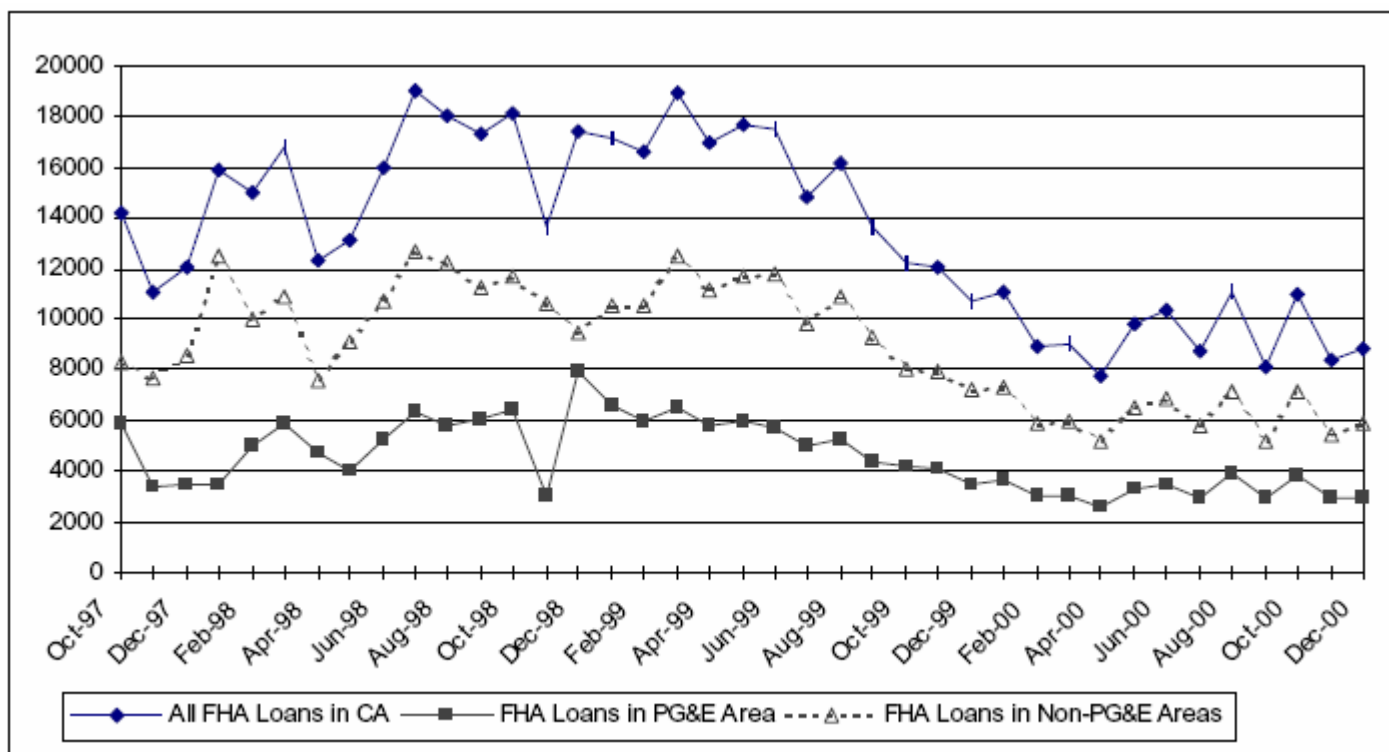


TOSER Program (1999 – 2000)

- Trained 1,821 real estate professionals
 - agents, lenders, facilitators, etc.
- FHA loan activity a bigger driver than training
 - EEM market share up slightly (2.7 – 3.2%)
 - But absolute # of FHA loans down sharply (-38%)

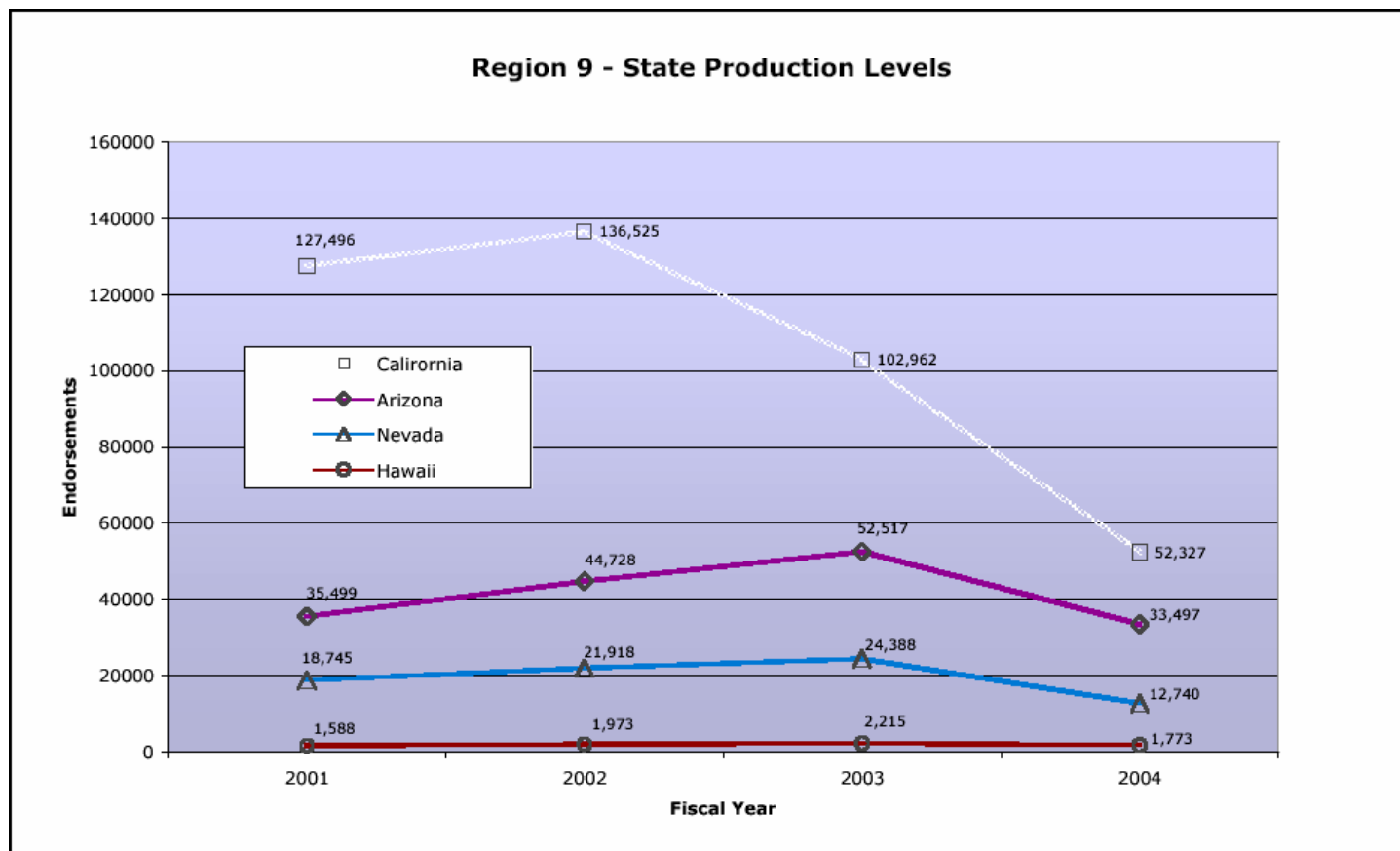


FHA Loan Activity in CA (TOSER)





FHA Loan Activity in CA (post)



HUD; W Waite
3/17/05



EnergyCheckup 1.0 (1999 – 2004)

- TOS EnergyCheckup
 - SCG/SCE (\$35 to inspector)
 - PG&E (no incentive)
- Training
 - 340 Home inspectors
 - 73 Real estate agents
- “Streamlined” Ratings
 - Dove-tails home inspection
 - 27,000+ ratings





How Much Do They Save?

Study Name	Year	PI	Savings per TOS Rating (gross)			EUL (mean)
			kWh/yr	kW	Th./yr	
Evaluation of SCE Residential Audit Programs	2002	R. Ridge	657	n/a	n/a	13.3
EM&V Report - TOS Program (180-02)	2004	R. Mowris	549	0.278	53.5	13.5
Savings Opportunities in Existing Buildings (AB549)	2004	D. Mahone	3,391	n/a	380.7	n/a
Nationwide Best Practices Study - Residential Audits	2005	M. Rufo	[Cited Ridge study estimates]			
Options for EE in Existing Buildings (AB549)	2005	P. Jacobs	535	0.156	26	n/a



Best Practices – Res. Audits (2005)

Program	Home Performance with ENERGY STAR	CA SW HEES	TOS Inspection	RCS Audit	E+ Energy Audit	SMUD Audit
kWh saved per incentive paid (kWh/\$)	0.62	*	13.53	2.71	*	*
kWh saved per non-incentive \$ (kWh/\$)	0.26	4.08	14.51	1.46	3.63	0.38
Net to Gross Ratio	1	72%	72%	1	1	1
Total Resource Cost/Societal test	NA	NA	1.27	0.61	NA	NA
Utility cost test	NA	NA	NA	0.76	NA	NA
Average measure lifetime	NA	4.6	13.3	7.7	NA	NA



CEC Report to Legislature (2005)

- Top recommendation
 - Home energy information disclosure at Time of Sale
 - Pilot Program
 - Phase 1 Implementation
 - Phase 2 Implementation



CEC Report to Legislature (2005)

Residential Annual Energy Savings Potential, Costs, and Cost-Effectiveness

Strategy	Gigawatt hours	Megawatts	Million therms	Program Cost (\$million)	Participant Benefit Cost Ratio	Total Resource Cost Benefit Cost Ratio
Home Energy Information at Time-of-Sale Disclosure						
Pilot Program	19 - 29	6 - 9	1.1 - 1.5	3.7 - 5.6	2.1	1.0
Phase 1 Implementation	164 - 174	49 - 52	9.3 - 9.9	15.1 - 16	2.0	1.0
Phase 2 Implementation	251 - 266	73 - 77	12.0 - 12.7	0 - 14.6	2.0	1.0 - 1.1



RE Agents and C-HERS 2.0 (2006)

- CEC completing HERS-2 standards
 - Drafting a mandatory energy disclosure “booklet” for agents
- Public hearings
 - REALTORS® and inspectors
 - Raters
 - Building performance contractors, etc.
- IOU training and incentive programs





More Information

- <http://www.energy.ca.gov/ab549/documents/index.html>
- www.GeoPraxis.com
- www.EnergyCheckup.com

