



U.S. Department of Housing and Urban Development

# Utility Allowances, Efficiency, and Affordability

***Housing California  
“Much Ado About Utility Allowances”  
April 29, 2008***



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## What Wrong With This Picture?

Program	% units w/ UA	UA \$	UA\$/Unit
Public Housing	42%	\$420.7	\$917
Housing Choice Vouchers	84%	\$2,500.3	\$1,467
Sec. 8 Mod. Rehab	52%	\$17.1	\$907
Sec. 8 New/ Sub. Rehab	62%	\$389.3	\$702
Sec. 236	78%	\$76.9	\$781
Other	38%	\$179.3	\$820
<b>Total</b>	<b>65%</b>	<b>\$3,583.5</b>	<b>\$1,173</b>

# Utility Allowance Defects

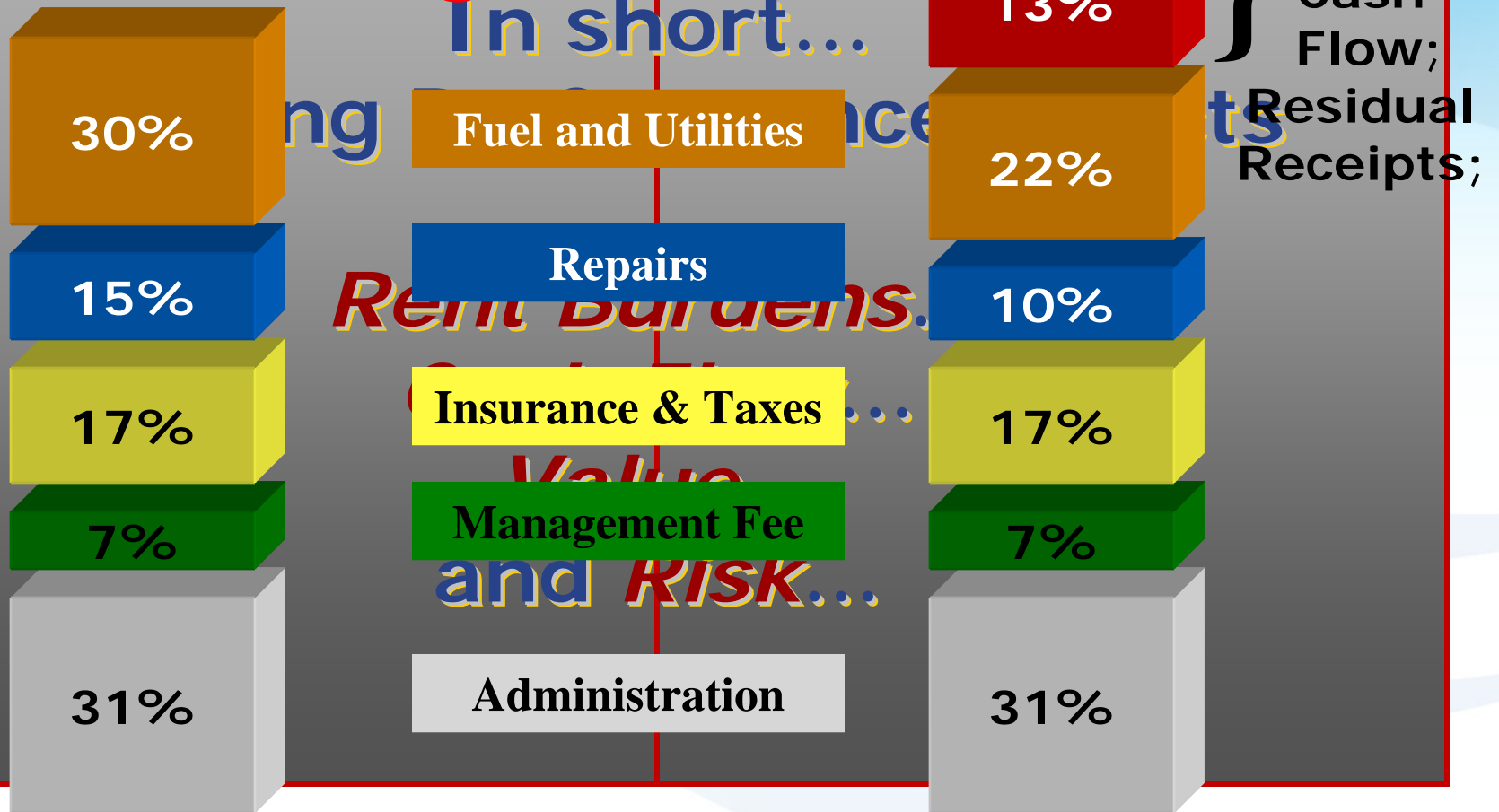
- ◆ Existing housing inventory does not reflect energy consumption profile for new construction, especially Title 24
- ◆ No adjustments for above code energy efficiency investments
- ◆ No tools or techniques for addressing *Photovoltaic* electric production

# Utility Allowance Threats

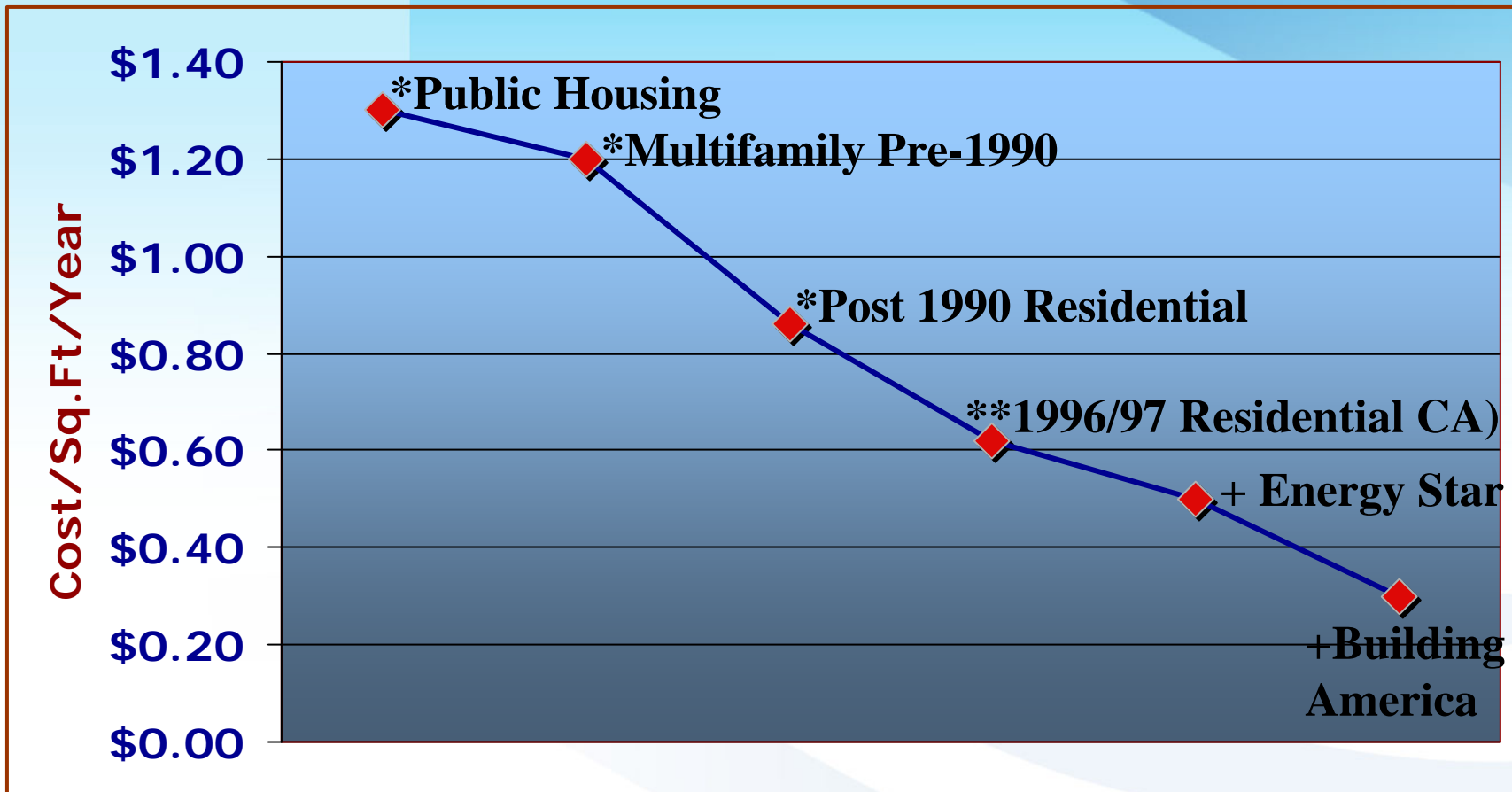
- ◆ Adversely affects financial viability of existing property
- ◆ Disincentive for investments in energy efficiency/ green building

## Inefficient Building

## Efficient Building



# Why Performance Counts?



Source: \*2006 Building Energy Data Book; DOE Representative Annual Unit Cost of Energy for 2005  
\*\* California Energy Commission ; + Derived from research studies and anecdotal information.

# Potential Financial Benefits

## Benchmark Operating Revenue and Debt Coverage Calculations

*(Assumes hypothetical 50 unit multifamily projects built  
> 15% Over Title 24)*

Utility Cost Reduction	\$25 per unit/month
Added Monthly NOI	\$ 1,250
Added Annual NOI	\$15,000
Net Available Annual Debt Service (NADS)	\$13,636
Additional Debt Leverages <i>(Assumes 6.5% interest for 15 years)</i>	\$130,450



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# Federal Actions

Are They Enough?

# I. Energy Efficiency Allowance Schedules

- ◆ Permissible under current rules
  - *Recognizes high energy efficient buildings as distinctive building type*
  - *Community-wide application*
- ◆ Sets allowances based on engineering calculations and information on typical utility usage from consumption tables or local sources
  - *Approach approved/recognized by HUD*
  - *Allowances periodically recalculated to account for utility tariff changes*

# NELROD Energy Efficient Allowance Model

- ◆ Reasonable Unit Sample
  - *7-15% on units; At least one unit for each bedroom size; interior end units, floor area variations*
- ◆ Prescribed Diagnostic Tests
  - *Air Infiltration; Duct leakage*
- ◆ Prescribed RESNET Accredited Software
  - *Climate data, utility type, equipment efficiencies*
  - *Compliance with RESNET technical guidelines*
  - *Test scores  $\leq 80$*

## II. HUD Utility Schedule Model

- ◆ Facilitates calculation of utility allowances using national database climate and energy database

- ◆ Entries:

- *Location/Climate Data (downloadable HDD/CDD)*
- *Utility Tariff*



### HUD Utility Schedule Model

HUD has developed a Utility Schedule Model that enables the user to calculate utility schedules by housing type after inputting utility rate information. The IRS has proposed using this model to determine utilities for its Low Income Housing Tax Credit program.

Please review the [instructions document](#) in MS WORD, which provides a step-by-step explanation of how to use the model.

The [HUD Utility Schedule Model](#) tool provides Location and Heating Degree Data that is a required input to the model. Using a zipcode function, the data provided may be downloaded in MS EXCEL, then copied into the HUD Utility Schedule Model.

The HUD Utility Schedule Model is a spreadsheet model in MS EXCEL. Please click [here](#) to download the model.

# HUD Utility Model Calculations

- ◆ Calculation based on Residential Energy Consumption Survey (DOE)s
  - *Estimates for heating, air conditioning, cooking, water heating, other electric*
- ◆ Generates Energy Cost Information (form 52667)
  - *By building type/ unit type*

Allowances for Tenant-Furnished Utilities and Other Services		U.S. Department of Housing and Urban Development Office of Public and Indian Housing			
Locality	Age	Unit Type			
Sacramento Housing Projects Before 1980		Garden and high rise apartments			
Utility or Service		Monthly Dollar Allowances			
		0 BR	1 BR	2 BR	3 BR
Heating	a. Natural Gas	19	22	25	28
	b. Bottle Gas	10	12	13	14
	c. Electric	31	58	56	37
	d. Oil / Coal / Other	13	15	17	19
Cooking	a. Natural Gas	10	12	14	17
	b. Bottle Gas	27	28	29	30
	c. Electric	9	13	17	22
	d. Other	0	0	0	0
Other Electric		32	45	58	71
Air Conditioning		8	20	46	47
Water Heating	a. Natural Gas	9	14	20	25
	b. Bottle Gas	5	7	10	13
	c. Electric	17	27	45	78
	d. Oil / Coal / Other	19	23	27	30
Water		6	7	8	8
Sewer		0	0	0	0
Trash Collection		5	5	5	5
Range/Microwave		4	4	4	4
Refrigerator		6	6	6	6
Other - specify		0	0	0	0

## III. Utility Allowance Reforms

- ◆ IRS Notice of Proposed Rulemaking  
(June 18, 2007)
  - *Amends LIHTC Regulation 42-10*
  - *Objective: Provide more viable and accurate options for estimating tenant utility costs*
  
- ◆ Action requested and supported by NMHC, NAHB, NAA, NAHMA, NLHA, CARH...

# LIHTC New Options (*Proposed*)

## ◆ Options 1: Agency Estimates

- *Estimates must consider: Utility rate data, property type, climate conditions, property building materials and mechanical systems, taxes and fees on utility.*
- *Actual Utility Company Usage Data and Rates for building,*

## ◆ Option 2: HUD Utility Schedule Model

- *Furnish model output to agency and tenants*

# LIHTC – Other Options & Changes

- ◆ Other Potential Options:
  - *Estimates provided by certified energy professionals.*
  - *Actual consumption based on sub-metering and/or direct billing programs*
  
- ◆ Effective at end of first year or within 90 days property has achieved 90% occupancy for 90 days
  
- ◆ Annual Updates

## IV. Regulatory and Legislative Horizon

### ◆ Part 982 Changes:

- *Movement to standardize utility allowance calculations based on annual HUD publication*
- *Pending questions on how to address EE properties*

### ◆ GAO Review

### ◆ New Legislation

- *HR 3524*
- *Perlmutter Bill*

# Why Do Utility Allowances Matter?

- ◆ By providing the right price signal for investments in high performing buildings:
  - *Provide means for covering debt for investments in high efficiency equipment*
  - *Provide incentive to overcome “first cost” and “split incentive” barriers*
  - *Increase Net Operating Income*
  
- ◆ Other Benefits
  - *Increased property valuation*
  - *Lower financial risks*



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**More accurate *Utility Allowances*  
provide the market signals and  
incentives needed to build more  
efficient and sustainable housing**



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## Contact Information

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