




CADMUS



# Standing in the Wake of the Recovery Act: Resources and Opportunities for Utility Low-Income Programs

Presented at the 2013 ACEEE National Conference on  
Energy Efficiency as a Resource

September 24, 2013



# Agenda

- Some History
- Three Case Studies
- Discussion
  - Future of LI programs
  - Barriers and Opportunities in the post-Recovery Act world
  - Lessons learned and new program designs



# Introduction

- Low-income weatherization program historical delivery
- Recovery Act
  - Additional Department of Energy funding: \$5,000,000,000
- Current DOE funding
  - \$68,000,000
- How have utility programs responded?





# Old Landscape

- Primary program architecture: DOE Weatherization Assistance Program
- Whole-house approach
  - Energy Savings (direct install, equipment, shell)
  - Health and Safety (ventilation, roof repair, electrical)
- Leveraging multiple funding sources per site (DOE, U.S. Dept. of Health and Human Services, state, utility)
- Many utility LI Wx programs delivered by agencies and tied directly to leveraged WAP dollars



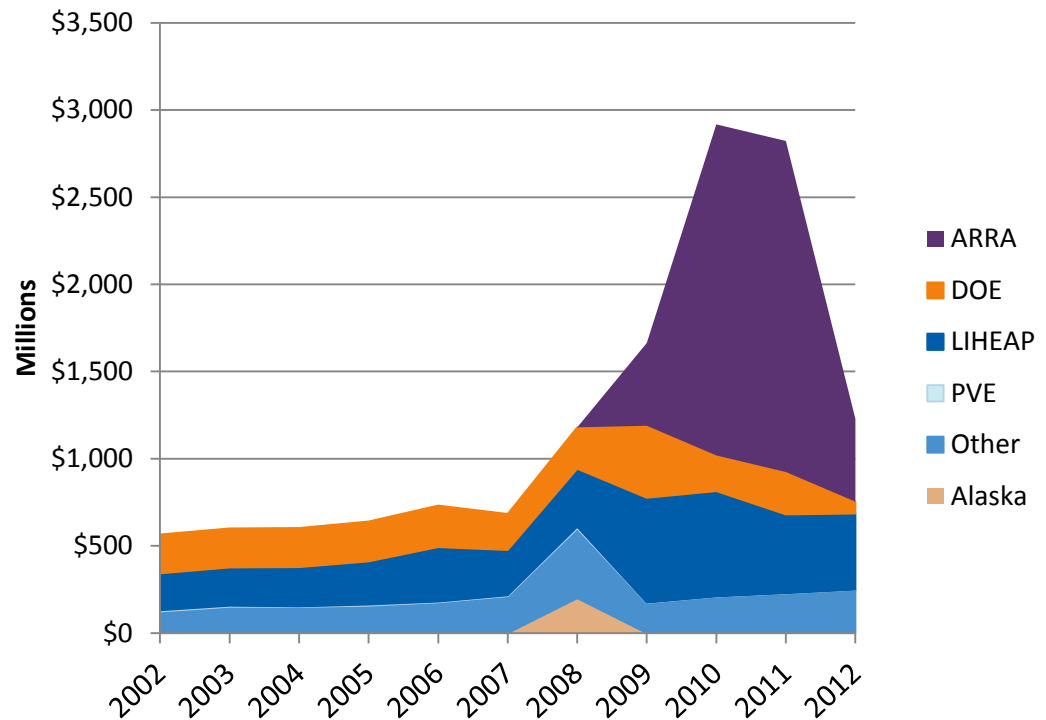
# Weatherization Assistance Program Funding

- Funding Sources

- DOE WAP
- HHS LIHEAP
- State
- Utility

- Recovery Act

- \$5,000,000,000  
2009 – 2012





# Effect of Recovery Act

- Training and technical knowledge
- Standardization of delivery and reporting
- Increased agency capacity and workforce development
- Significant increase in output
  - Over 1,000,000 homes weatherized – 4 times the output
- Difficult for agencies to leverage utility dollars and meet Recovery Act deadline



# New Landscape

Recovery Act exhausted  
and DOE funding  
decreases

In 2013, DOE  
reduces funding  
from  
pre- Recovery  
Act average of  
\$200M/year  
to \$68M

Utility programs are less  
able to leverage the  
agency delivery system

Reduced agency  
capacity

Reduced LI Wx  
funding

Utility natural gas  
DSM hampered  
by low gas prices

Increasingly  
difficultly to  
pass utility base  
CE tests





# Changes in Utility Funding

## During Recovery Act

- Some utilities instituted new LI conservation programs outside the agency delivery system.
- Some agencies were not able to use utility dollars as quickly or extensively as in the past.

## Post-Recovery Act

- Some utilities trying to help cover the gap in agency LI Wx funding with utility dollars.
- Some utilities increasing the diversity in LI program delivery.





# Thank you!!

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# *ActOnEnergy*<sup>®</sup>

Ameren Missouri  
Energy Efficiency

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September 24, 2013



# Agenda

- Pre-ARRA Plan
- Why Multifamily Income Qualified?
- Market Characterization
- Program Overview
- Post-ARRA Plan

# Pre-ARRA Plan

- Fall 2009 planned launch of Ameren Missouri's first single-family, low-income weatherization EE program.
- Integrate into the existing Weatherization Assistance Program (WAP).
- Train and educate needed weatherization and home performance contractors.
- Deliver direct installation of measures as well as comprehensive whole-house energy improvements.

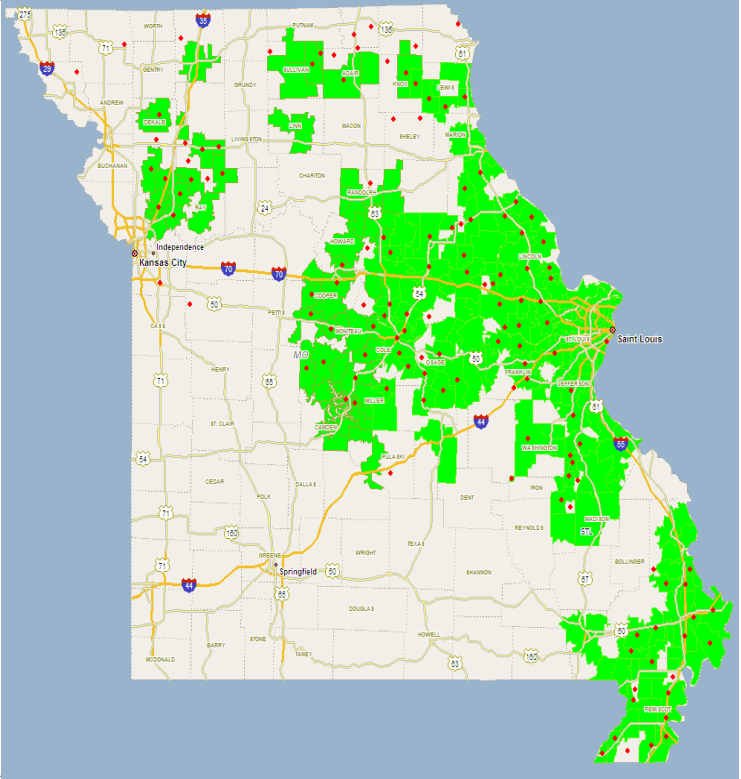
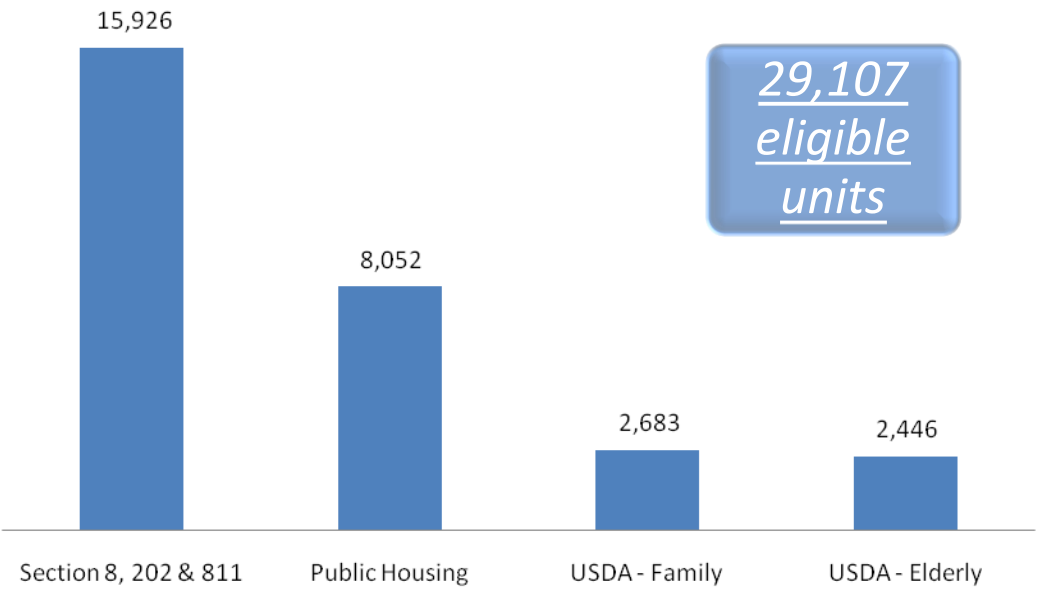
**UNTIL...** Missouri WAP Agencies received > \$130MM

# Why Multifamily?

- Roundtable discussions with WAP agencies revealed that they would now be offering similar reduction measures (CFL's, Refrigerators, etc).
- WAP had major limitations on staff needed to manage stimulus funds.
- WAP had never funded Multifamily building shell projects (stimulus funds excluded Multifamily buildings).
- Opportunity to offer benefits and education to an underserved electric consumer base.

# Market Considerations

Income Qualified Multifamily Units by Funding Category



# Residential Low Income Program

- Multifamily Income Qualified (MFIQ) model.
- Implementation vendor – Honeywell Smart Grid Solutions.
- 100% no cost - remove old items and install new upgrades.
  - CFLs &LEDs
  - Showerhead & faucet aerators
  - Smart power strip
  - Insulation jacket on electric hot water tank
  - Programmable thermostat
  - Pipe insulation on electric hot water pipe
  - Window or in-wall room air conditioner
  - Central A/C tune-up & charge adjustment
  - Refrigerator Replacement (2001 & older)
- Building owners/managers participate.
- Helping residents save at least \$125.00 annually.





# Program Metrics

- TRC 1.05
- 449 Sites; 18,275 dwelling units improved.
- 8,614 onsite individual and group education meetings provided.
- \$125 average annual consumer electric savings.
- Energy savings to date could power 1,446 average Missouri homes for a year.

# Lessons Learned

- Improve CFL options provided through the program.
- Remove obstacles for program participation.
- Read the fine print; know the hardware.
- Customers want options.

# Post-ARRA

- Include buildings with 51% of qualified tenants.
- Implement a Neighborhood Sweep Track.
  - Hire WAP agency personnel to perform work.
  - Provide weatherization referrals to WAP agencies.
  - Launch October 2013.

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*Thank  
You!*



# CONSUMERS ENERGY

## Helping Neighbors Program

*Income-Qualified Energy Efficiency Assistance*



**Chad D. Miller**  
Senior Program Manager  
9/24/2013

**Consumers Energy**  
*Count on Us*

- **Multi-tiered implementation strategy**
- **Deliver energy efficiency products, services and education**
  - No cost energy efficiency upgrades to Michigan households
    - Multifamily and single family households
  - Eligibility: At or below 200% FPL
- **CLEAResult has managed program since 2009**
- **2013 Program targets:**
  - 77,239 MCF | 1,848 MWh
  - \$7,128,221 Incentives Budget

- **HIGHLIGHTS:**

- Customers served:
  - **2009:** 3,189
  - **2010:** 14,135
  - **2011:** 12,441
  - **2012:** 21,791
  - **2013:** 9,550 *(projected)*  
creating approx. 11,773 touches
- Prescriptive approach to focus delivery of more impactful measures.
- Improved customer experience through a multi-touch approach (*energy efficiency journey*).

- **BEST PRACTICES:**

- High involvement community outreach strategy
- Developed a unique brand identity for the program





# The ARRA Era

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- **Community Action Agency (CAA) network**
  - **Well-funded**
    - Leveraged dollars
  - **Substantial energy efficiency participation**
    - Major weatherization projects
  - **Benefits of an existing trained workforce**
- **Multifamily initiatives**

- **Limited funding**
  - CAAs can no longer meet the demands of program goals
- **Meeting the needs of a changing landscape**
  - New program design
    - **HELPING NEIGHBORS**
      - ◆ Single-family initiative
      - ◆ Weatherization (HN & CAA model)
      - ◆ Multifamily initiative
  - Began expanding network of other non-profit organizations
    - Created opportunities to leverage funding categories outside ARRA

**Helping Neighbors** began as a grass roots, targeted initiative in June 2011, but over the past two years has grown tremendously into the **equitable brand** as we know it today.

- *Nurtured relationships*
- *Built trust within the community*
- *Positive public relations*

# THANK YOU!

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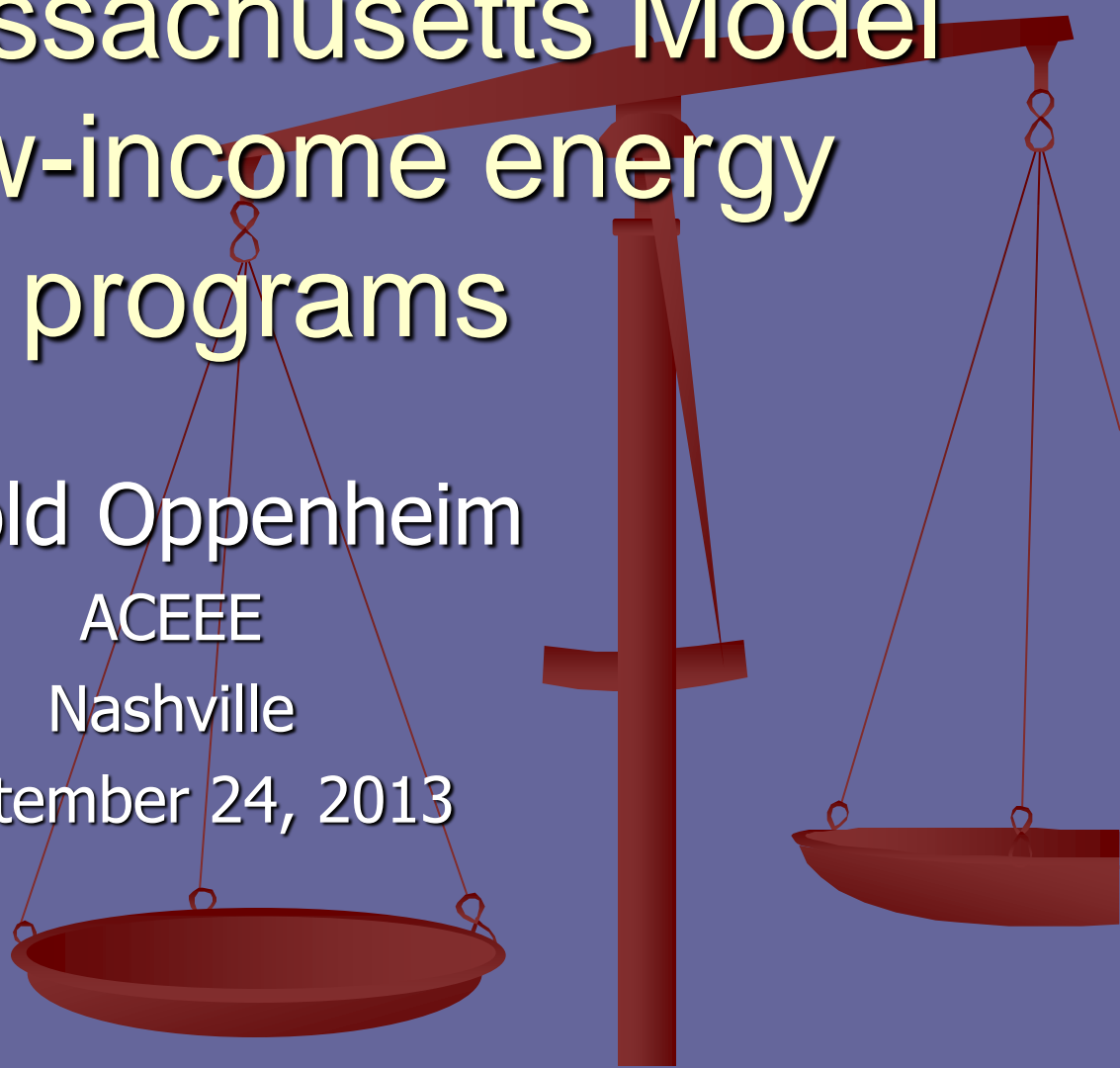
# The Massachusetts Model for low-income energy programs

Jerrold Oppenheim

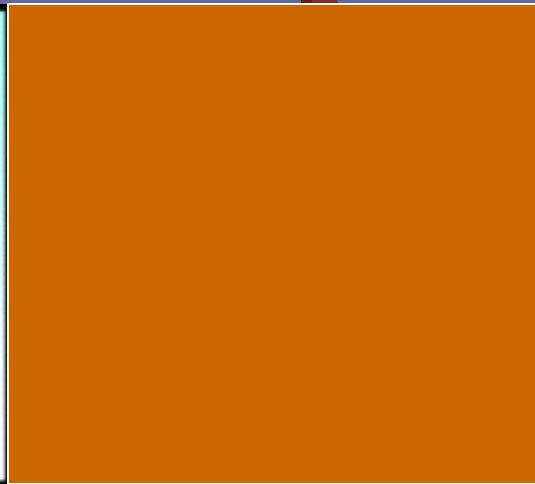
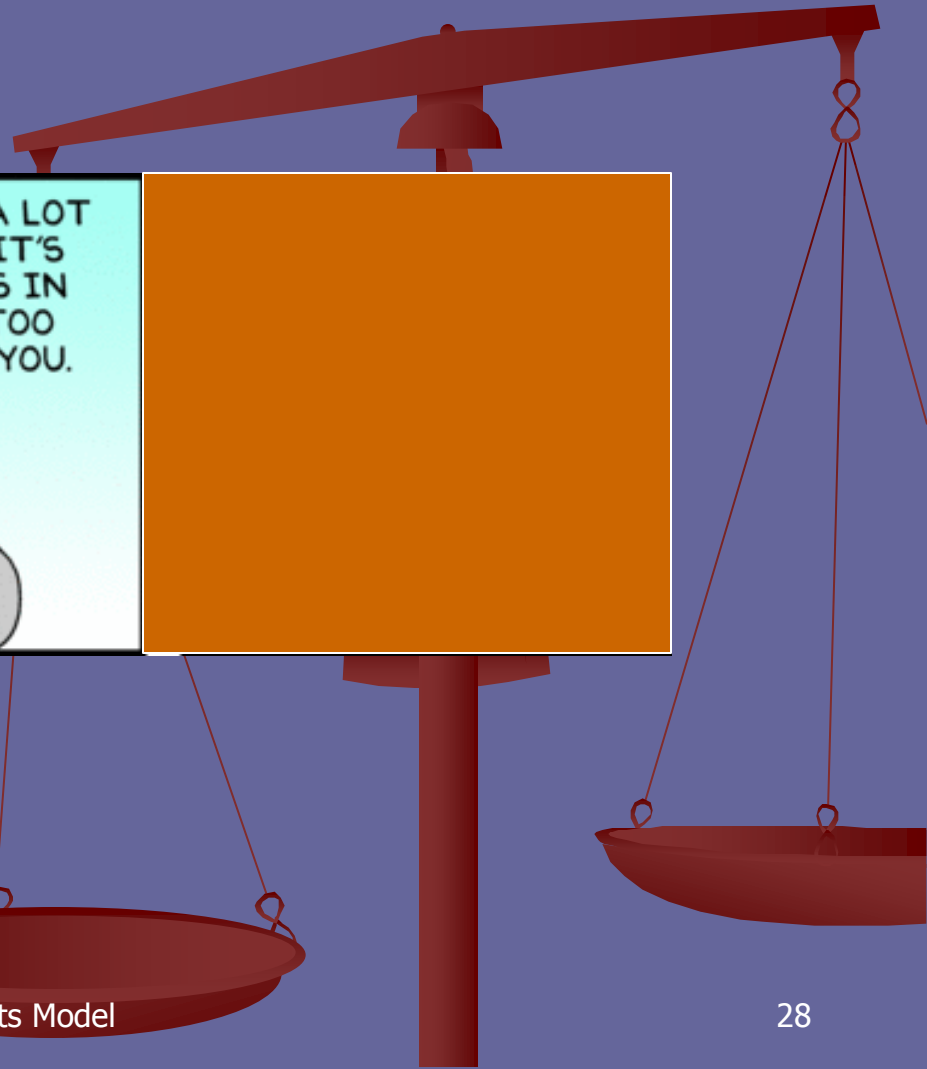
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# The Next Harvest



Glen's mother and uncle 1941



Glen's mother and uncle 2009



Jerrold Oppenheim und Theo Mc Gregor zusammen mit dem Autor Gregor Ziorkewicz





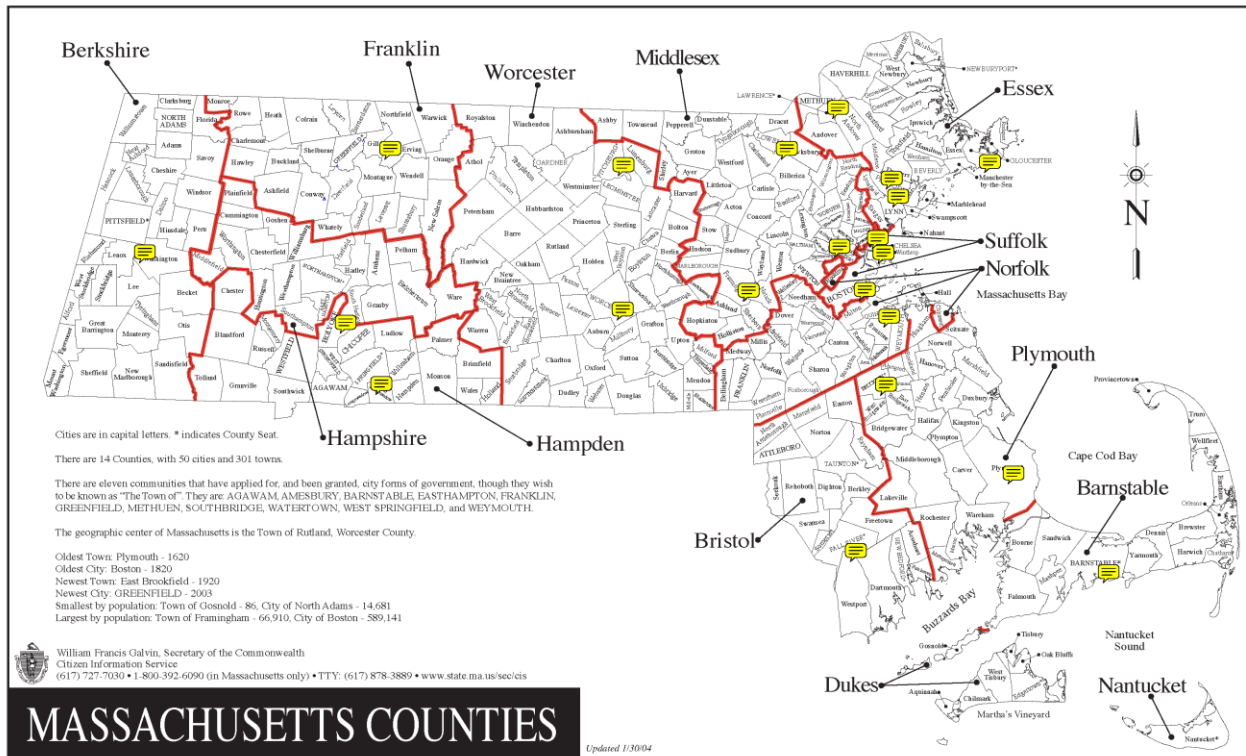
Oppenheim & MacGregor

Massachusetts Model

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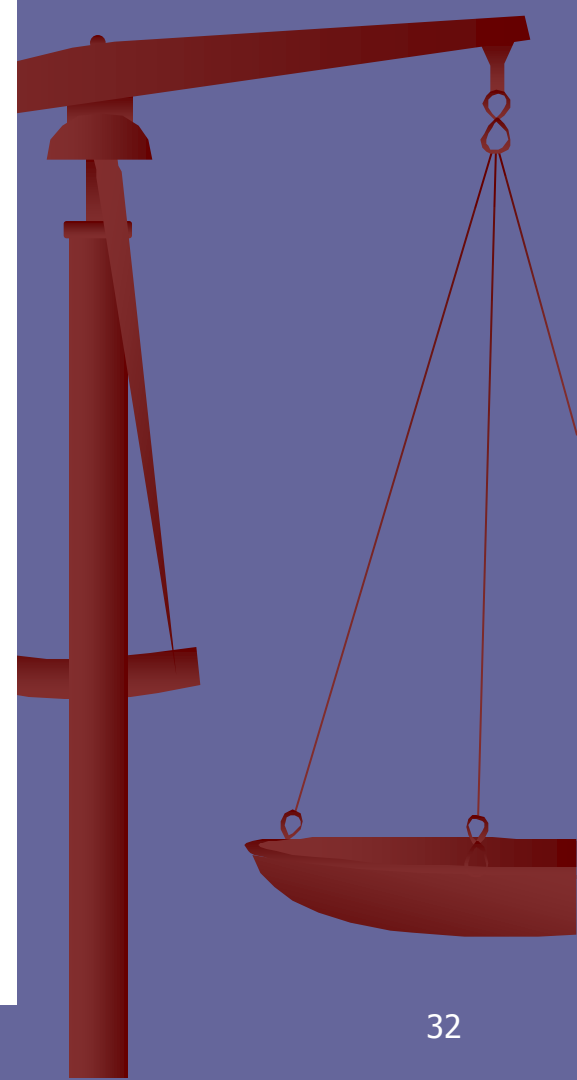
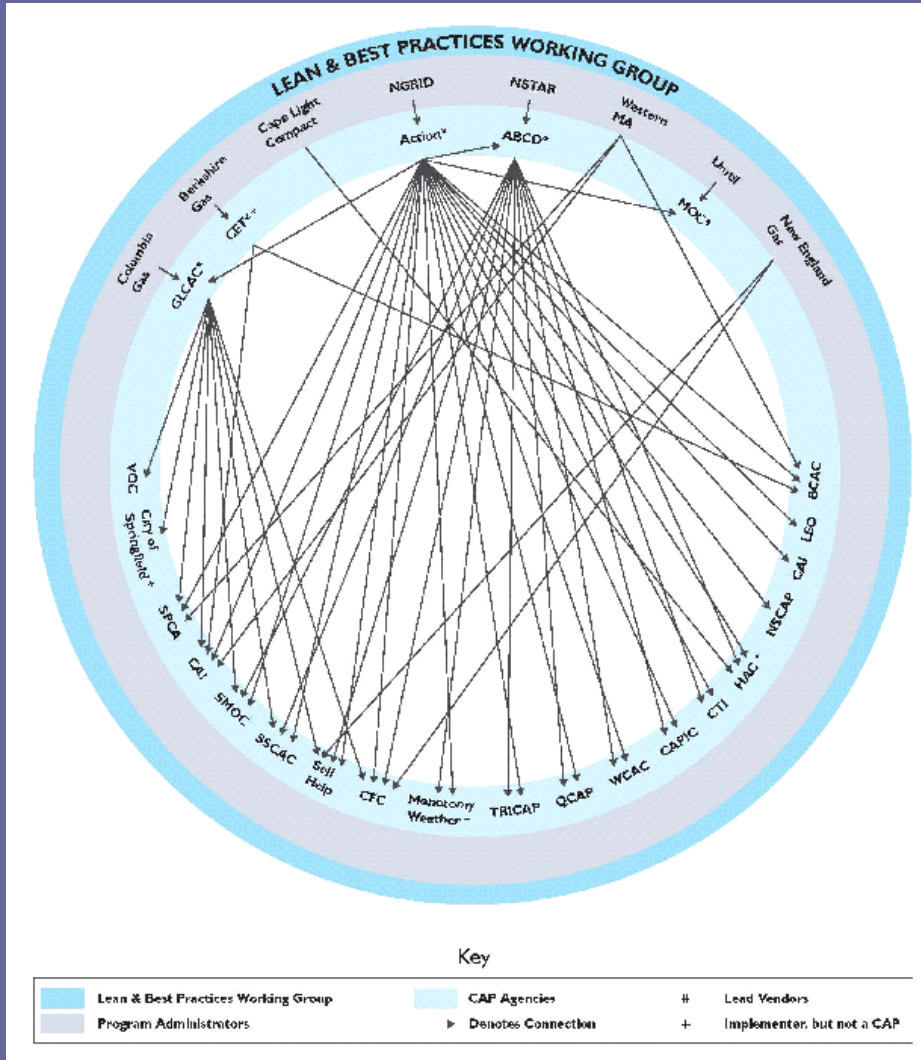


# Community organization implementation





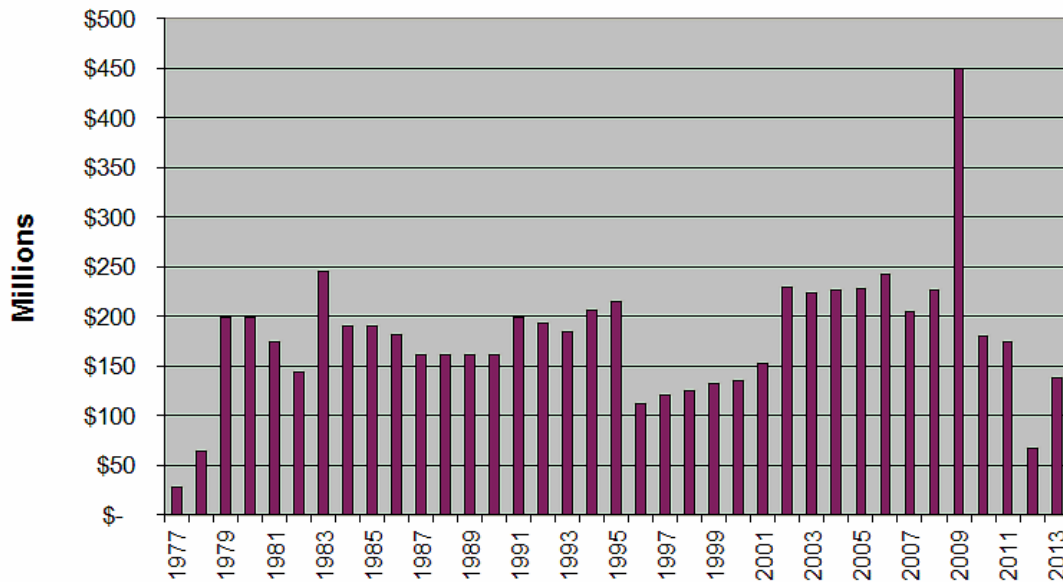
# The network



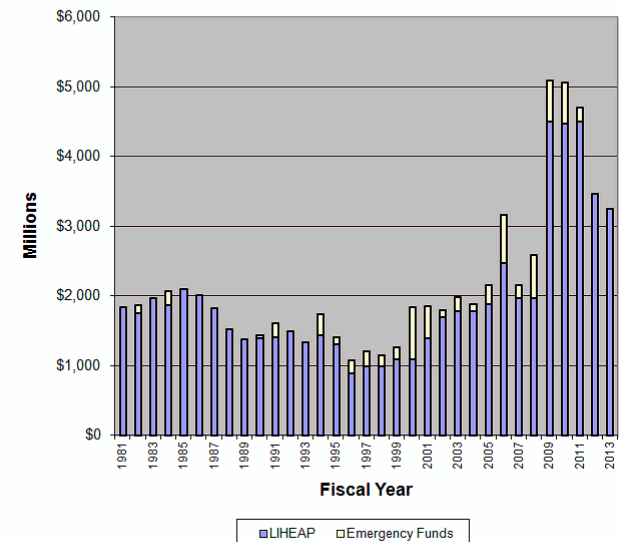


# Federal budgets with ARRA spike

## WAP Funding History



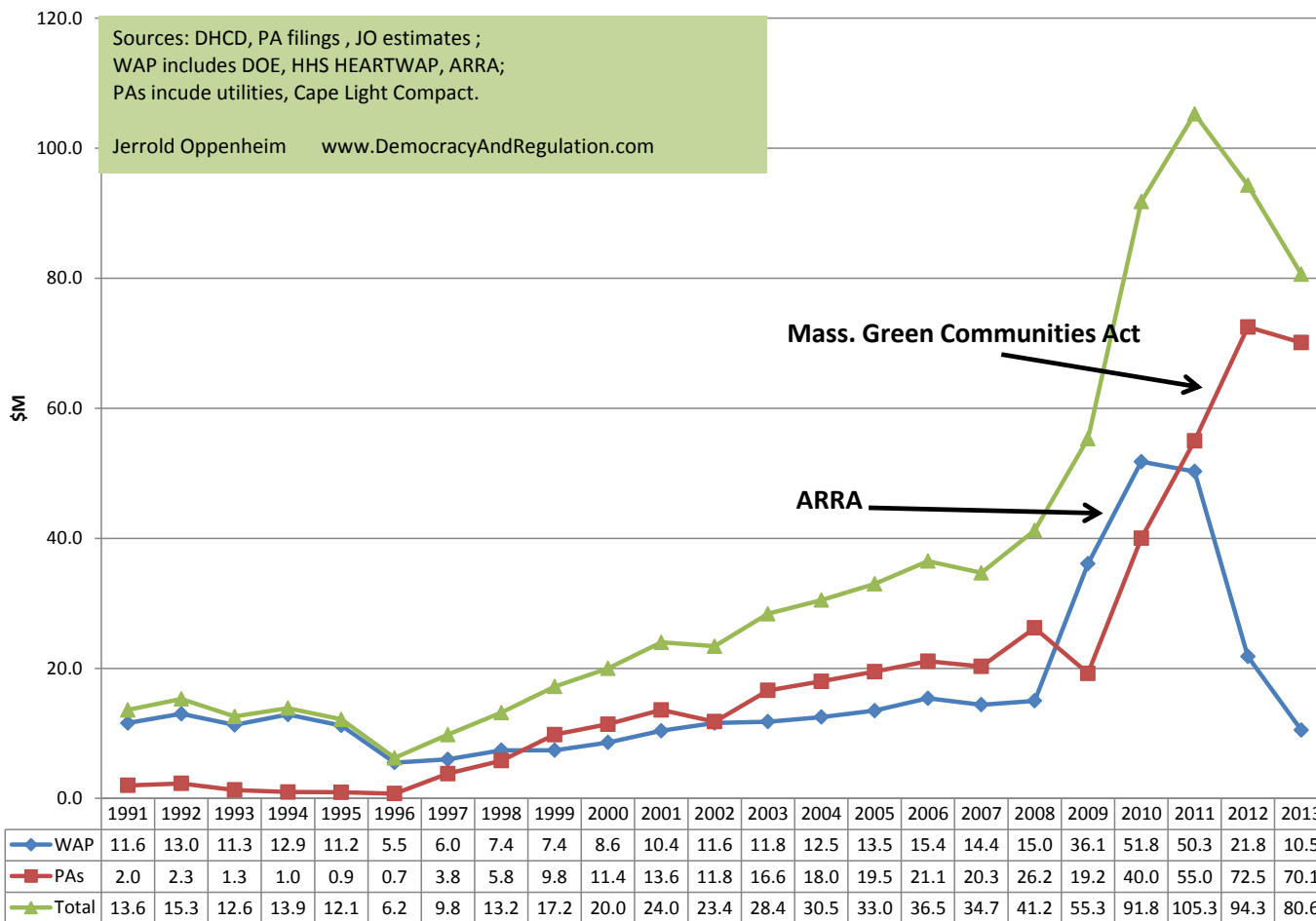
## LIHEAP Funding History





# Massachusetts budgets with strong state support

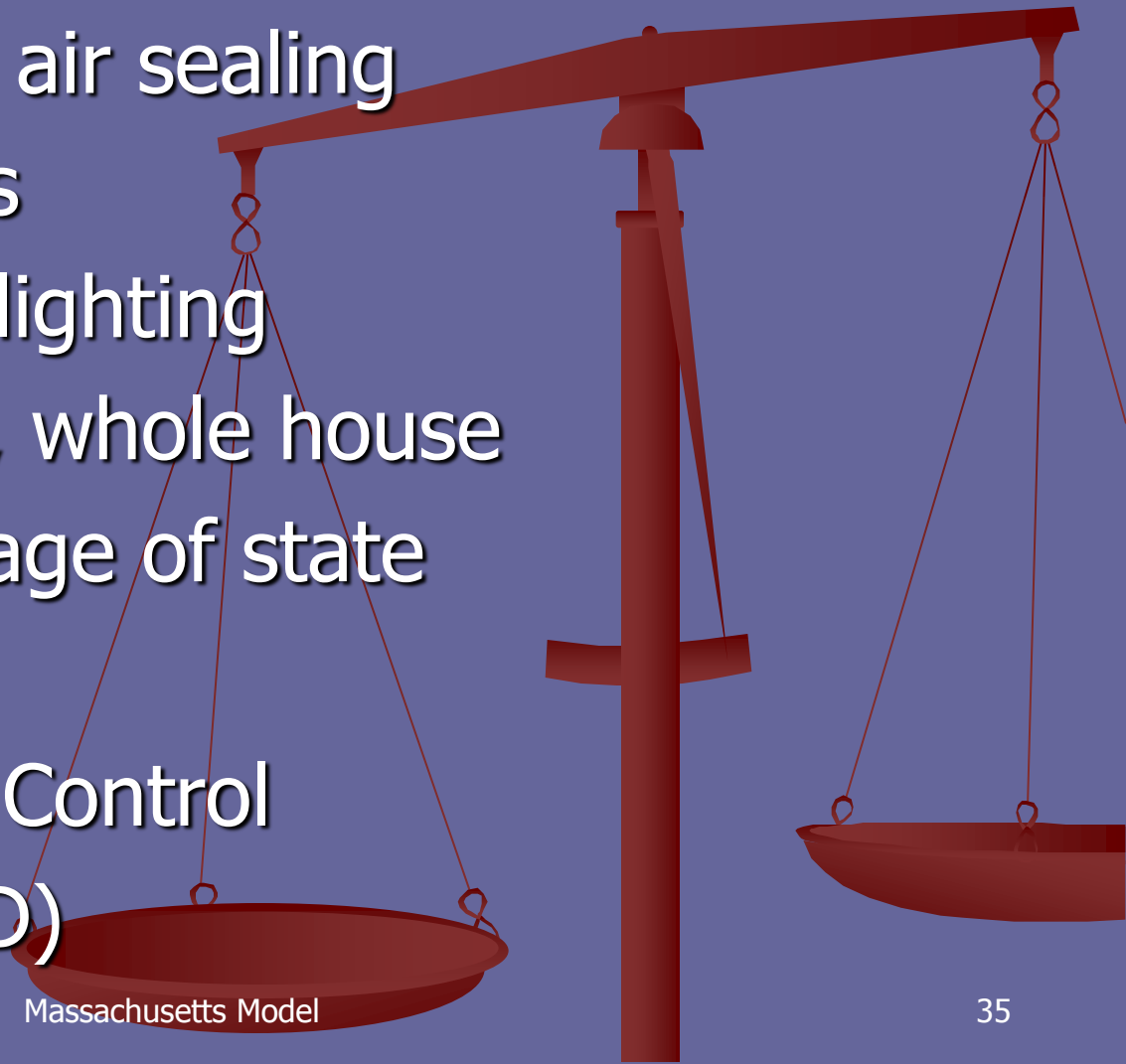
## Massachusetts Low-Income Energy Efficiency Expenditures





# Energy efficiency program

- Weatherization, air sealing
- Heating systems
- Appliances and lighting
- Comprehensive, whole house
- Equitable coverage of state
- Good jobs
- 100%+ Quality Control
- Innovation (R&D)





# Effective

## ■ Achievements

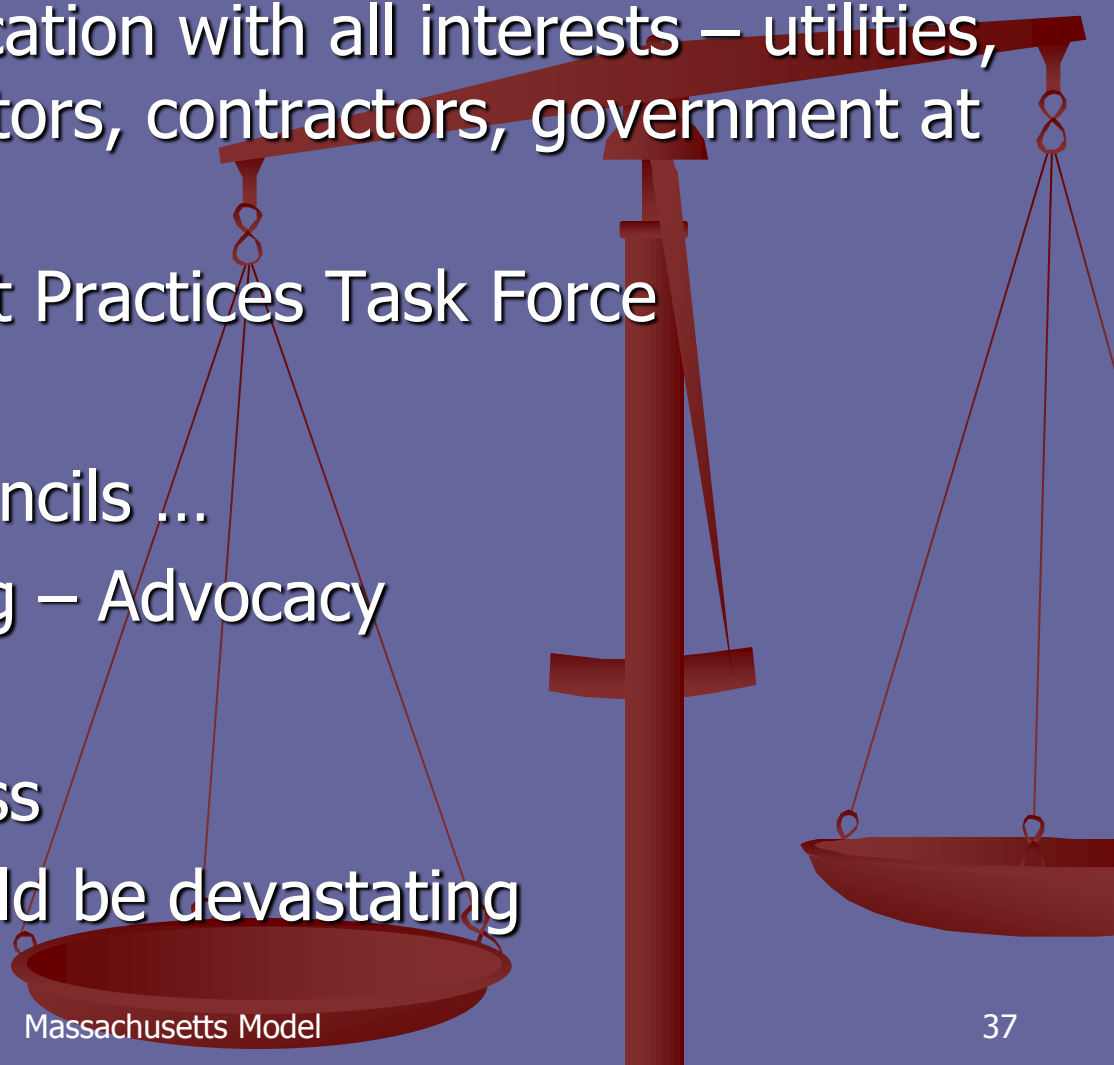
- About 100,000 homes weatherized
  - About 16,000 heating systems replaced
  - 130 contractors, 94 auditors, good wages
  - Savings 20% (air sealing), 10% (electricity), 25% (heating system)
  - Saved 1400 low-income housing units
  - Innovation: cost-effective SDHW, MCHP, LEDs
  - Constant attention to new measures, improvements
- Reaches about 40%





# Scrutiny is proportional to budget

- Constant communication with all interests – utilities, other customer sectors, contractors, government at every level
  - Low Income Best Practices Task Force
  - LEAN
  - Committees, councils ...
- Be at every meeting – Advocacy
- Strong analysis
  - Cost-effectiveness
  - Loss of TRC would be devastating





# Cost Effectiveness (TRC)

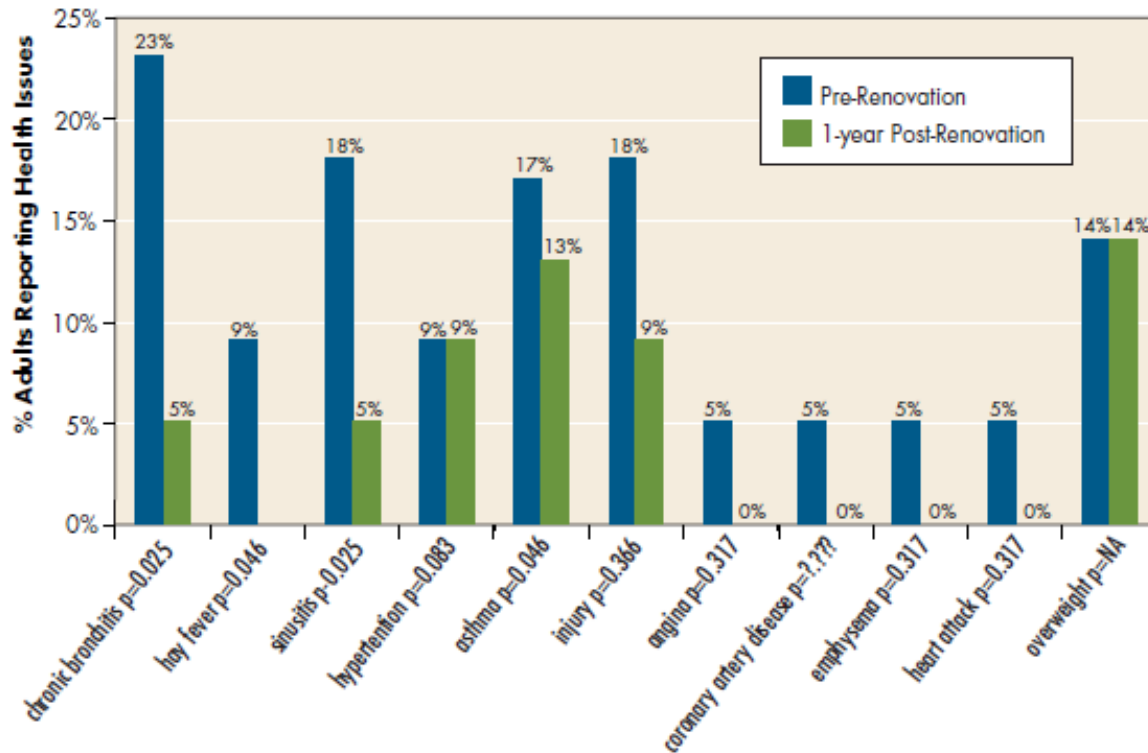
<b>LOW INCOME NON-ENERGY BENEFITS</b>				
\$ Values per participant per year (unless noted)				
Benefit	Current	Recommendations		
	PA (some variation)	NMR	LEAN	
<b>UTILITY</b>				
Arrears		2.61	3.66	
Write offs		3.74	3.74	
Termination & reconnection		0.43	3.51	
Discount		compute	compute	
Customer calls		0.58	2.06	
Notices		0.34	1.58	
Emergency calls (gas only)		8.43	7.83	
Insurance		WAP Eval.	0.08	
UTILITY SUBTOTALS (ex discount)		16.13	22.45	
<b>PARTICIPANT</b>				
Bill savings		0.00	473.00	
Comfort		101.00	205.00	
Environmental responsibility		0.00	112.00	
Quiet (Noise reduction)		30.00	132.50	
Light quality/life		0.00	103.00	
Lighting Quality		30.00	30.00	
<b>Property value (one-time)</b>		949.00	14190 \$30/\$ saved	
Buffers price incr (stability)		0.00	386.00	
<b>Forced Mobility, Homelessness</b>		0.00	50.00	
Durable homes, less maint.		35.00	146.00	
Equip. & appl. Maintenance		54.00	116.00	
<b>Health</b>		19.00	150.00	
Safety: Fire		38.67	38.67	
Safety: CO		6.38	6.38	
Product performance [refrig.]	200	200.00	200.00	
Window air conditioner	104	49.50	104.00	
Bill-related calls		0.00	4.09	
Termination & reconnection		0.00	43.48	
Transaction costs		0.00	2.50	
SUBTOTALS (annual)	307.25	363.55	2102.62	
<i>One time (property value, refrigerator)</i>	2881.34	1149.00	14390.00	
<b>LOW-INCOME RENTAL OWNERS - \$ Values per housing unit per year (unless noted)</b>				
Ease of finding renters		0.96	0.90	
Property value		17.03	see above	
Equip. maint. (HVAC)		3.91	7.81	
Lighting maintenance		66.73	97.56	





# Health

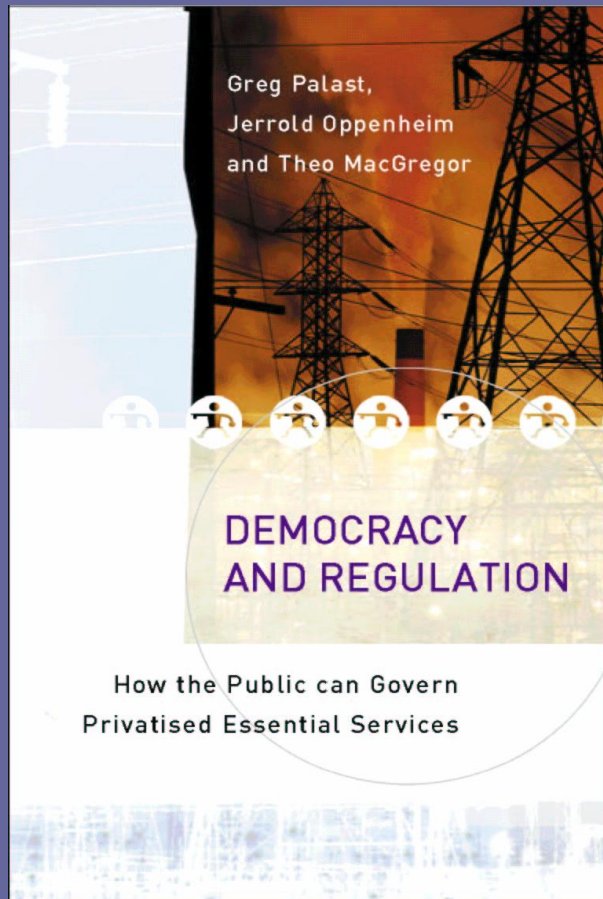
**Figure 3-3.** Changes in Reports of Specific Adult Health Issues (N=22):  
Pre-Renovation (T0) versus One-Year Post-Renovation (T2)<sup>a</sup>



<sup>a</sup> McNemar Test; NA=Not applicable



# Thank You



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Or order for \$25 at  
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