



HUD's Energy Incentives and Performance Contracting

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Revenue from Decreasing Utility Bills

Revenue potential is a function of three factors:

- Consumption - therms of gas, kWh of electricity
- Cost per unit consumption - cents/therm or cents/kWh
- Who keeps the savings - HUD or the building owner/manager?





Revenue from Decreasing Utility Bills

- High consumption - decrease through conservation
- High cost - decrease through negotiating lower rates
 - Transporting gas
 - “Wheeling” electricity
- HUD has established incentives to take advantage of both of these options





HUD and Energy Costs

- Performance Funding System (PFS) dictates cash flows between HUD and housing authority - utilities are a portion of this
- Just underwent revision due to Quality Housing and Work Responsibility Act of 1998
- Negotiated Rulemaking - new Rule not out for comment yet, but we have previews of what will be proposed based on conversations with people on the committee
 - This may change! Look for proposed rule and comment period





HUD and Energy Costs

- Utilities are treated as separate components, due to:
 - Volatility of Utility Rates
 - Diversity of utility delivery system among PHAs/IHAs
 - Diversity of the types of utilities used by PHAs/IHAs
 - Lack of Standards for consumption
 - Lack of uniformity in condition of utility systems and equipment
- Impacts on Performance Contracting
 - Some savings won't show up when evaluating cost-effectiveness of package, e.g. maintenance costs paid from operating fund.





Allowable Utilities Expense Level (AUEL)

- Allowed Utility Consumption Level (AUCL)
 - 3-year Rolling Base
- Allowed Utility Expense Level (AUEL)
 - Rolling Base * Rate in effect at the time





Allowable Utilities Expense Level (AUDEL)

■ Utility Rates

- PFS uses and adjusts for 100% of rate changes
- Published rates are used; no projections are permitted, except as specifically permitted in 990.107
- HUD's rate = Total dollar cost / units of consumption, e.g. $\$/kWh = \text{Rate}$
 - Can lead to HUD defined “savings” being different from the savings the HA sees on their utility bill e.g. demand charges, stepped rates
 - Decrease in rate can lead to decrease in dollar savings to the HA.

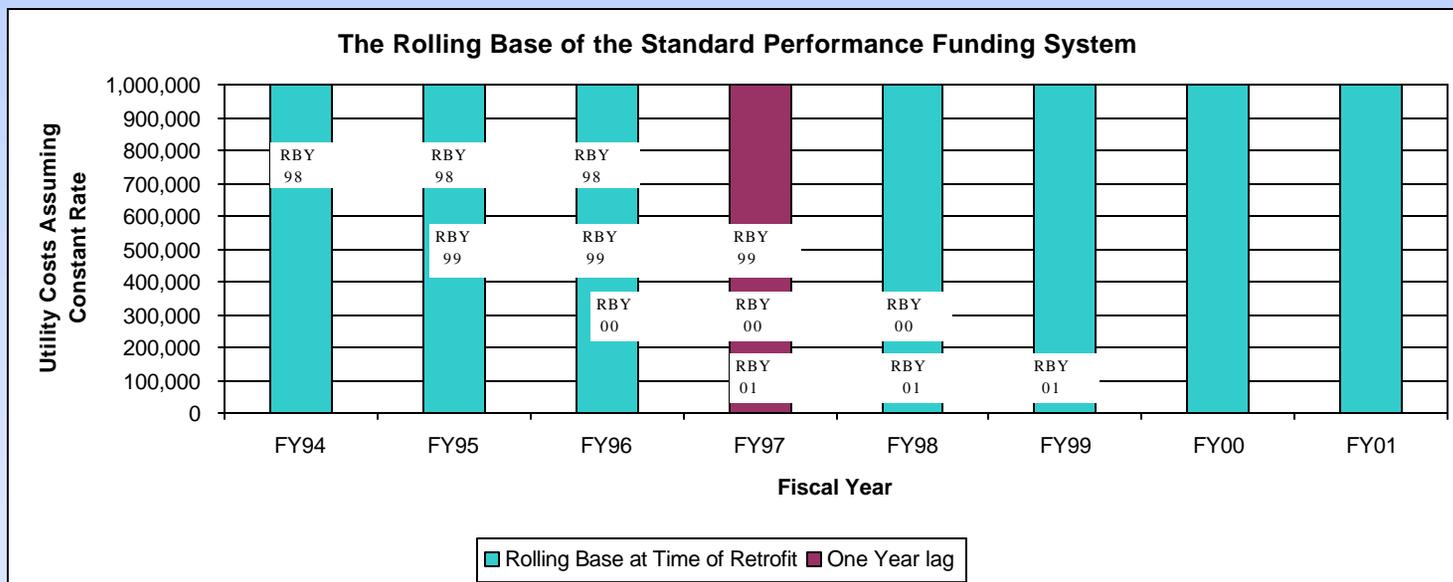




Allowed Utility Consumption Level (AUEL)

■ Rolling Base Period

- The 36-month period ending at least 12 months prior to the beginning of the requested budget year (RBY).





Mandatory Post-Year Adjustment

- Utilities used for space heat - past year
 1. Change Factor
 2. Heating Degree Day (HDD)
 3. Applied to meters used for space heating *only*
 4. Application of HDD factor to estimated Rolling Base Consumption

- Adjustment for rate and consumption - past year
 1. All PHAs/IHAs receiving subsidy *must* submit year-end adjustment
 2. Decreases/Increases in AUCL - 50/50, soon 75/25
 3. Rate: paid at 100%
 4. Equals True-up of AUCL

- New Rule - 1 year lag in true-up





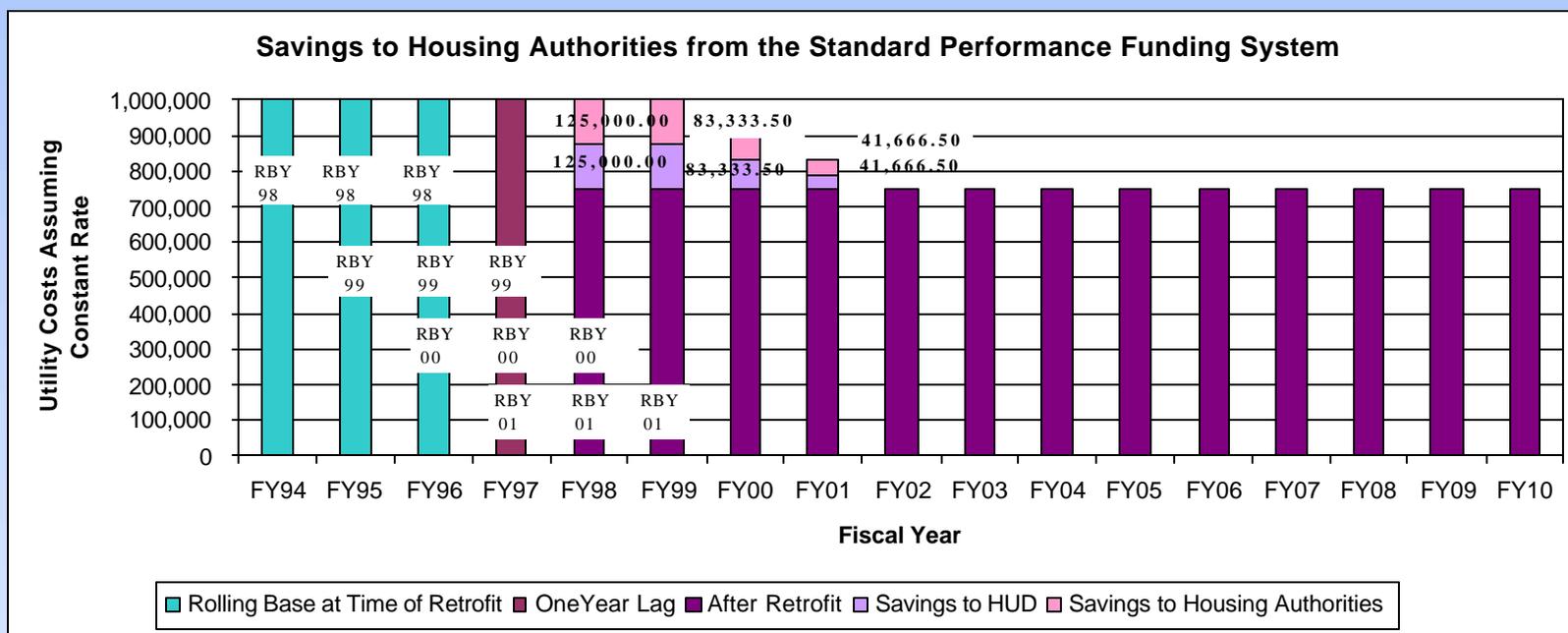
Modernization Funds

- Standard mechanism for capital improvements
- Housing authority keeps 50% of the savings (or bears 50% of the liability) until the rolling base catches up (soon to be 75/25% split).





Cash Flows from Conservation Projects Using Standard PFS Funding





Performance Funding System (PFS) and Performance Contracting

References

- Statutory Authority - Section 9 of the United States Housing Act of 1937, as amended by Section 118 of the Housing and Community Development Act of 1987
- Quality Housing and Work Responsibility Act of 1998
- Regulatory Reference - The Performance Funding System (PFS) regulations at 24 CFR 990 for Public Housing Agencies.
- Notice PIH 91-41 (PHA) - Final Rule - PFS: Energy Conservation Savings, Audit Responsibilities, Miscellaneous Revisions





Performance Funding System (PFS) and Performance Contracting (cont.)

References (continued)

- Notice PIH 94-71 (HA) - Final Rule - Annual Contributions for Operating Subsidy; Shared Savings for Utility Rate Reductions and Subsidy for Economic Self-Sufficiency and Anti-Drug Activities
- Notice PIH 95-26 (HA) - Incentives for PHAs and IHAS to Reduce the Cost of Utilities
- Handbook - The Performance Funding System Handbook
- Guidebook - Energy Performance Contracting for Public and Indian Housing - A Guide for Participants





HUD's Energy Incentives

- Frozen Base
- Additional “add-on” subsidy
- Negotiated rate reductions

Performance contracting may be used with either of the first two incentive methods





Regulatory Framework for Improving Energy Efficiency In Public Housing

- **Intent of Legislation:** To enable public housing authorities (PHAs) to use energy performance contracting as a mechanism through which non-federal funds can be used to help achieve a government objective:

THE CONSERVATION OF ENERGY





Regulatory Framework for Improving Energy Efficiency In Public Housing (cont.)

- **Our Charge:** To achieve the legislation's objective in a creative way while achieving the objectives of performance contracting.





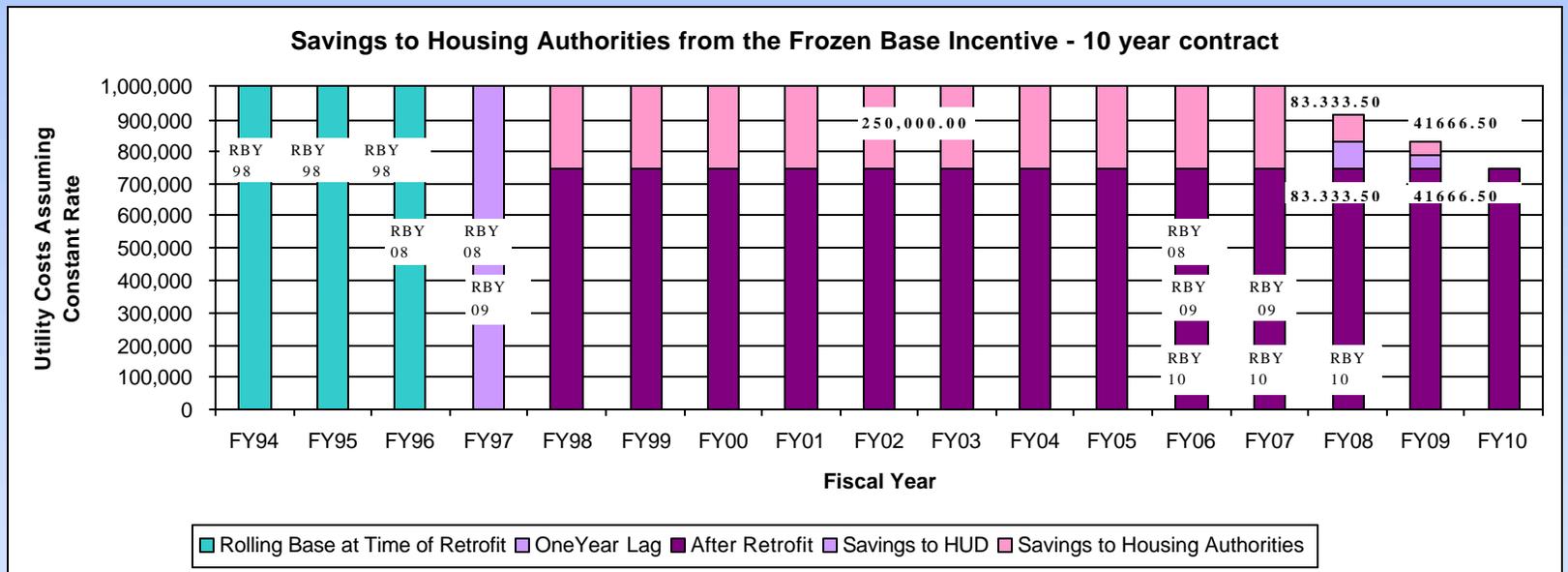
The Frozen Base Incentive

- HUD will freeze the three-year rolling base at the current consumption level
- As housing authority costs go down, the authority keeps 100% of the difference





Cash Flows from Conservation Projects Using the Frozen Base Incentive





The Frozen Base Incentive

■ Rules

- Non-HUD funding
- Obtain a savings guarantee
- At least 50% of the savings for debt service
- The HA may retain up to 50% of the savings to train employees or pay for other eligible costs (cash incentives to residents are not permitted)
- 12 years maximum contract
- Restrictions on savings calculations





The Frozen Base Incentive

- PHA is responsible for debt amortization if the projected savings do not materialize.
- ESCOs must guarantee that a shortfall in savings will not cause the PHA to default on the debt services if projected savings do not take place.





The Additional “Add-On” Subsidy Incentive

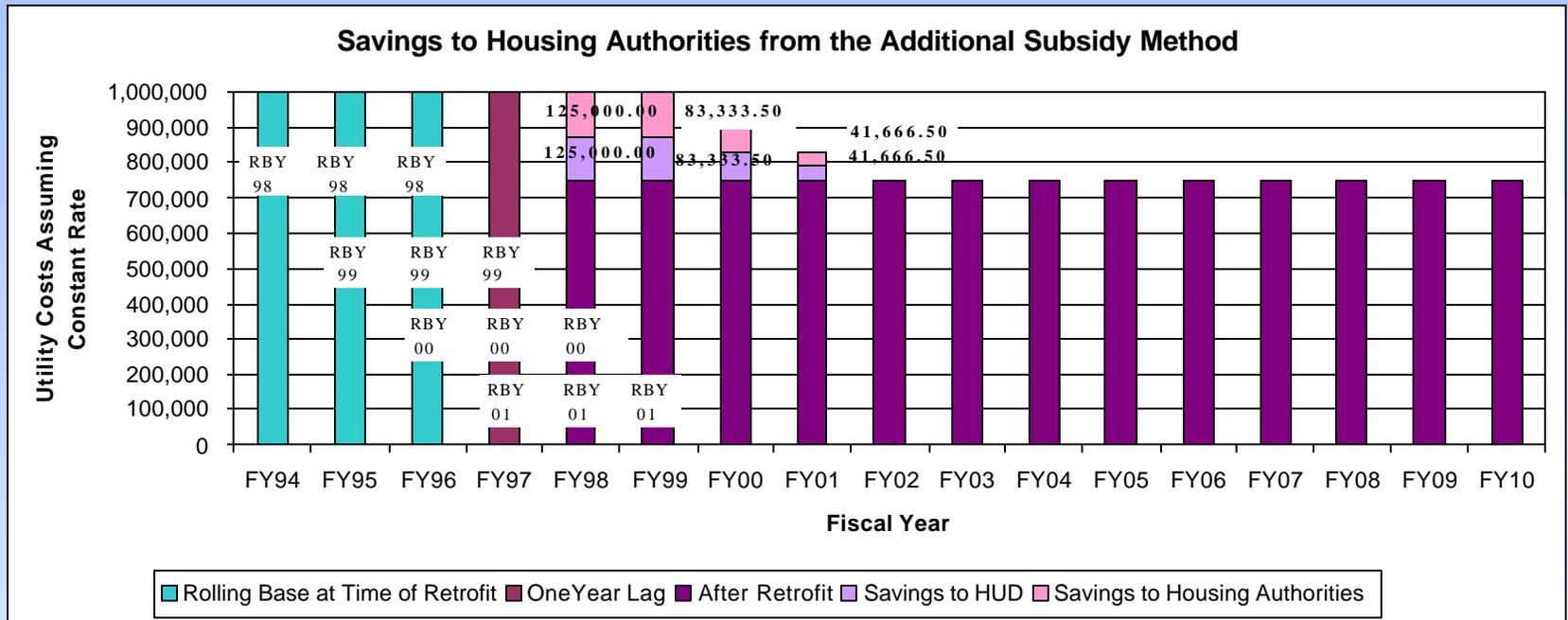
- The Additional Subsidy
 - Rolling base does not freeze, so...
 - HUD keeps most savings, but...
 - HUD increases the subsidy in the amount of the loan payment and fees

This is the “Additional Subsidy”





Cash Flows from Conservation Projects Using the Add-On Subsidy Incentive





The Additional “Add-On” Subsidy Incentive

- Rules
 - Non-HUD funding
 - No savings guarantee required, but...
 - Savings must at least equal the loan payment or next year’s operating subsidy is docked, so...
 - Savings guarantee is still a smart move
 - Loan length is limited to 12 years max
 - Standard PFS incentives apply





HUD Energy Incentives

- Both incentive methods deal with cash flows between a housing authority and HUD
- Alters how does the housing authority have the funds to pay back the loan





Performance Contracting

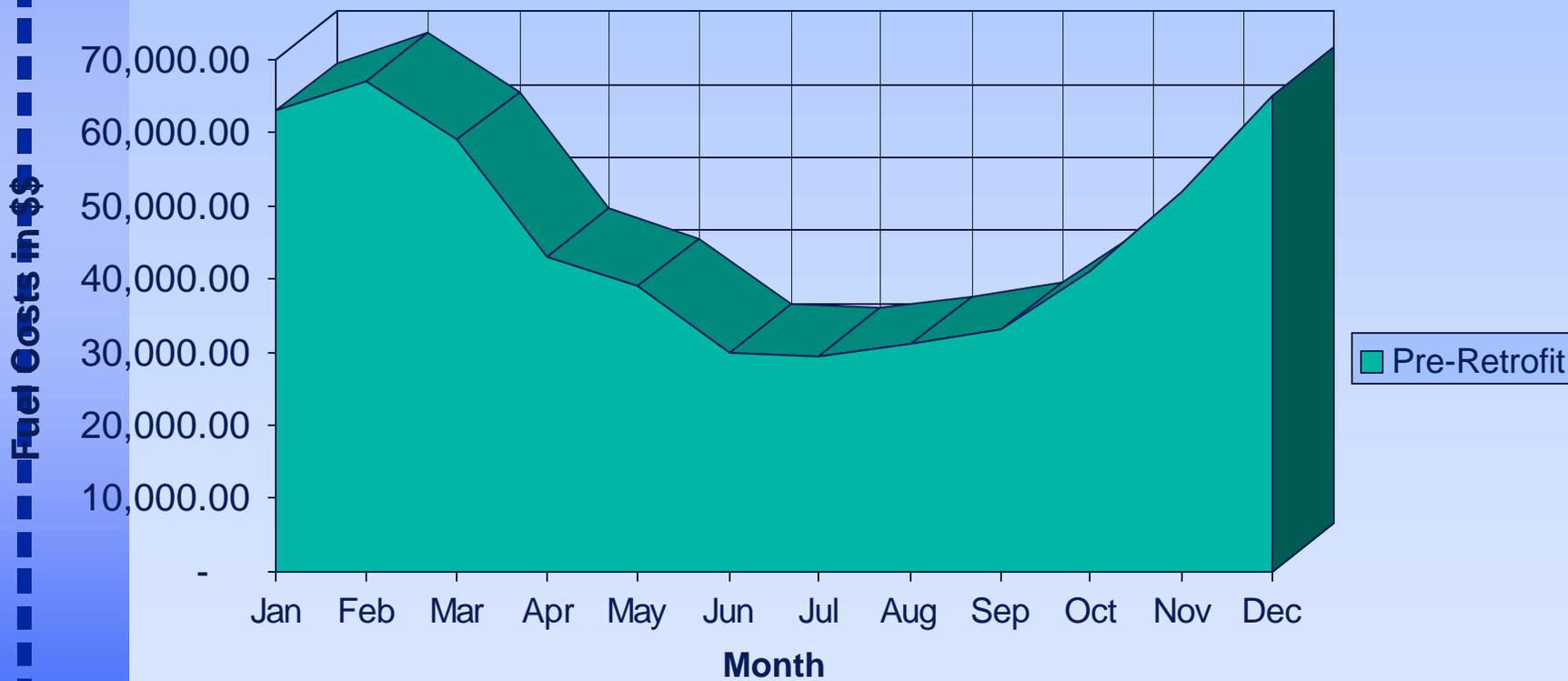
- Performance contracting is a method used to implement the projects
 - Turnkey services from audit to monitoring





Existing Energy Use

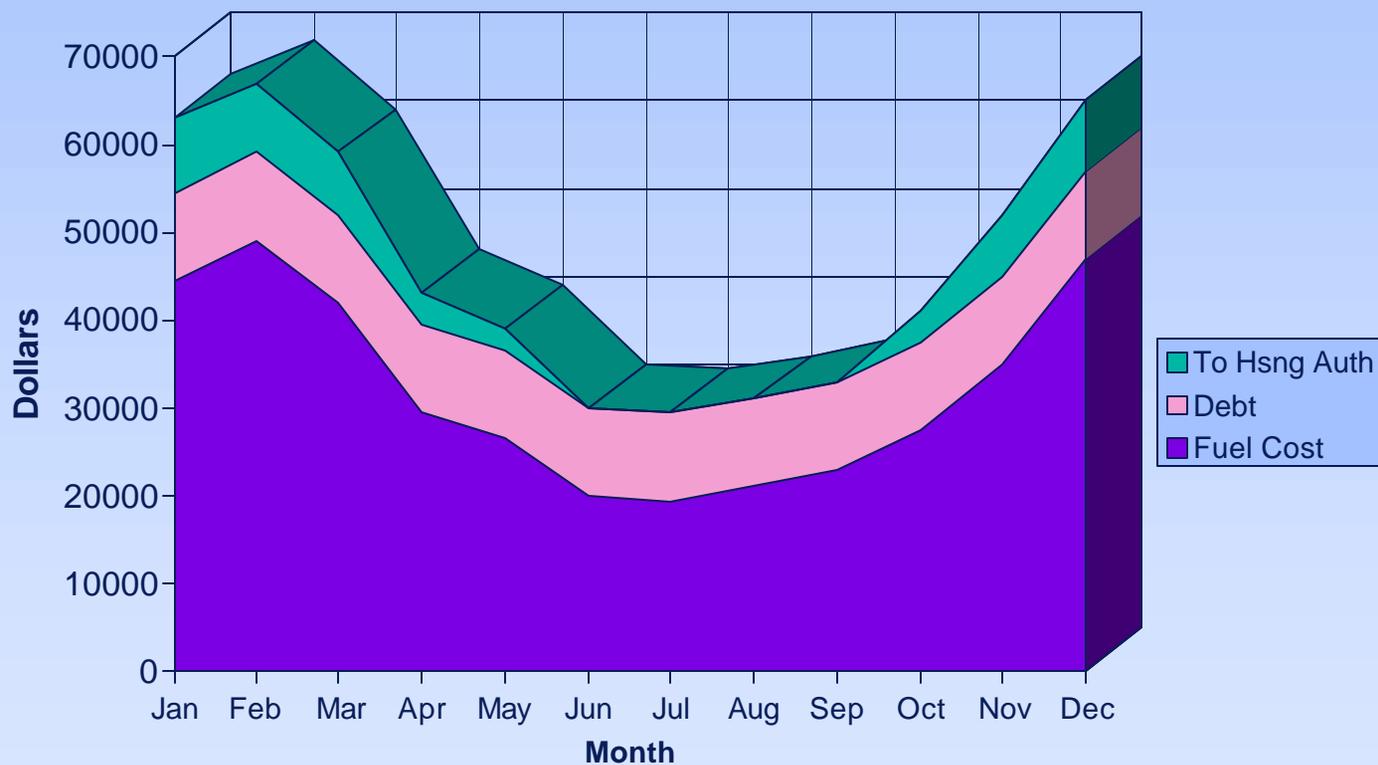
Pre-Retrofit Expenses





After Performance Contracting

Post-Retrofit Expenses





“The frozen base incentive provides money that is not available under the normal Performance Funding System. It provides a way to leverage federal construction dollars with outside dollars to get the work done.” *Russell Bubb, Energy Manager, Atlanta Housing Authority, GA*





“My recommendation to housing authority executives is that HUD’s incentive plan can be a very important part of improving housing operations. Failing to take advantage of these HUD incentives does not make any sense.” *Ken Garret, Executive Director, Hendersonville Housing Authority, NC*





“Without a performance contract, I don’t know how we would ever get the work done. We would not be able to manage the project, nor could we afford it.”

David Kaufman, Executive Director, Monticello Housing Authority, NY





“We haven’t looked back. We haven’t had second thoughts in any way!” *Don Stancil, Chief Financial Officer, Kinston Housing Authority, NC*





HUD Approval Points

- RFP
- Energy and Water Audit Agreement
- Fuel Baseline
- Energy and Water Services Agreement





Utility Restructuring and Rate Negotiations

- Natural gas industry has deregulated
- Electric industry is deregulating state by state
- Provides opportunities to purchase utilities from alternative sources and save money





Rate Reduction Incentive

■ Rate Reductions

If a PHA takes specific actions to reduce the utility rates it pays, such as through administrative appeals or legal actions, the PHA may share in the savings, on a 50/50 matching basis

- Purchasing fuel from a supplier other than your local distribution company qualifies for this incentive
 - E.g. Transporting gas or “retail wheeling” of electricity





Rate Reduction Incentive

- 50% of the decreases may be kept by the PHA; 50% must be returned as part of each PHA's post-year utility settlement.
- Actions must be specific to the PHA and must represent greater action than general participation in a rate-setting proceeding.
- PHA must monitor and document savings
- Currently, no time limit on the duration of savings kept by the housing authority





Rate Reduction Incentive

- For best price, need to track utility usage
- Many options for purchasing - simple to complex
- Options vary by state and local utility





Summary

- Allows HA to leverage private capital and expand budgets
- Allows implementation of capital projects that might not otherwise be affordable at the time
- Provides mechanism to bring extra non-capital funds to the HA
 - excess savings from a performance contract
 - savings from the rate reduction incentive
- Encourages HAs to be proactive on savings energy

