



Introduction to WAP and Energy Data

The Five Minute Program Overview
Energy Prices,
Energy Expenditures,
Energy Burdens, &
Savings Estimates

2015 WAP Orientation
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NASCS



Brief History



- Legislated DOE program in 1976
- Highly decentralized service delivery network
- Developed and field-tested advances in residential energy efficiency for 30+ years
- Operates in every state, District of Columbia, among Native American tribes, U.S. Territories

How has the WAP evolved since the 1970's ?



Early Weatherization Program

- Lower cost jobs
- Similar measures on all jobs
- More focus on storm windows, exterior measures

Modern Program

- Whole House / House as a System approach
- Advanced diagnostic techniques and computerized energy audits to provide most cost effective measures
- Advanced installation techniques, such as densepack sidewall insulation and mobile home insulation
- Increased focus on health and safety



WAP Funding



DOE



Grantees
(**50 States** + DC,
Territories, 3 Tribes)



Local Providers
(predominantly CAAs)



Low-income
Americans

- DOE provides core program funding to states
- Most states also receive LIHEAP funding
- DOE rules allow leveraging to expand WAP services
- Substantial utility involvement in several states
- States contract with local agencies to deliver program services



WAP Funding



N A S C S P

- DOE funding typically defines WAP service delivery network and infrastructure
- DOE program and rules are basis for defining WAP
- Other funding sources may have some variations, limitations, or increased flexibility

WAP Network



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- Network of more than 900 agencies reach every area in every state across the nation
- Approx. 75% of local agencies are CAA's
 - Some local agencies have direct hire crews that do the work, others utilize contractors

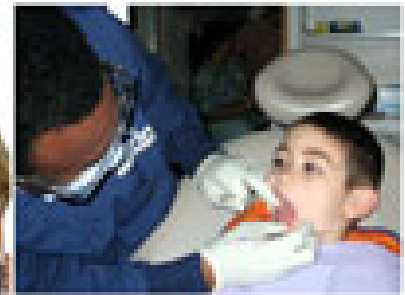


Community Action Agencies



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- Nonprofit private and public organizations established under the Economic Opportunity Act of 1964 to fight America's War on Poverty
- Because each CAA is governed locally, each provides a different mix of programs and services





Housing Stock



- Services delivered to single-family, multi-family, and mobile homes



Housing Stock Often Substandard

- Structural problems
- Wiring and plumbing problems
- Poorly maintained
- Neglected heating systems



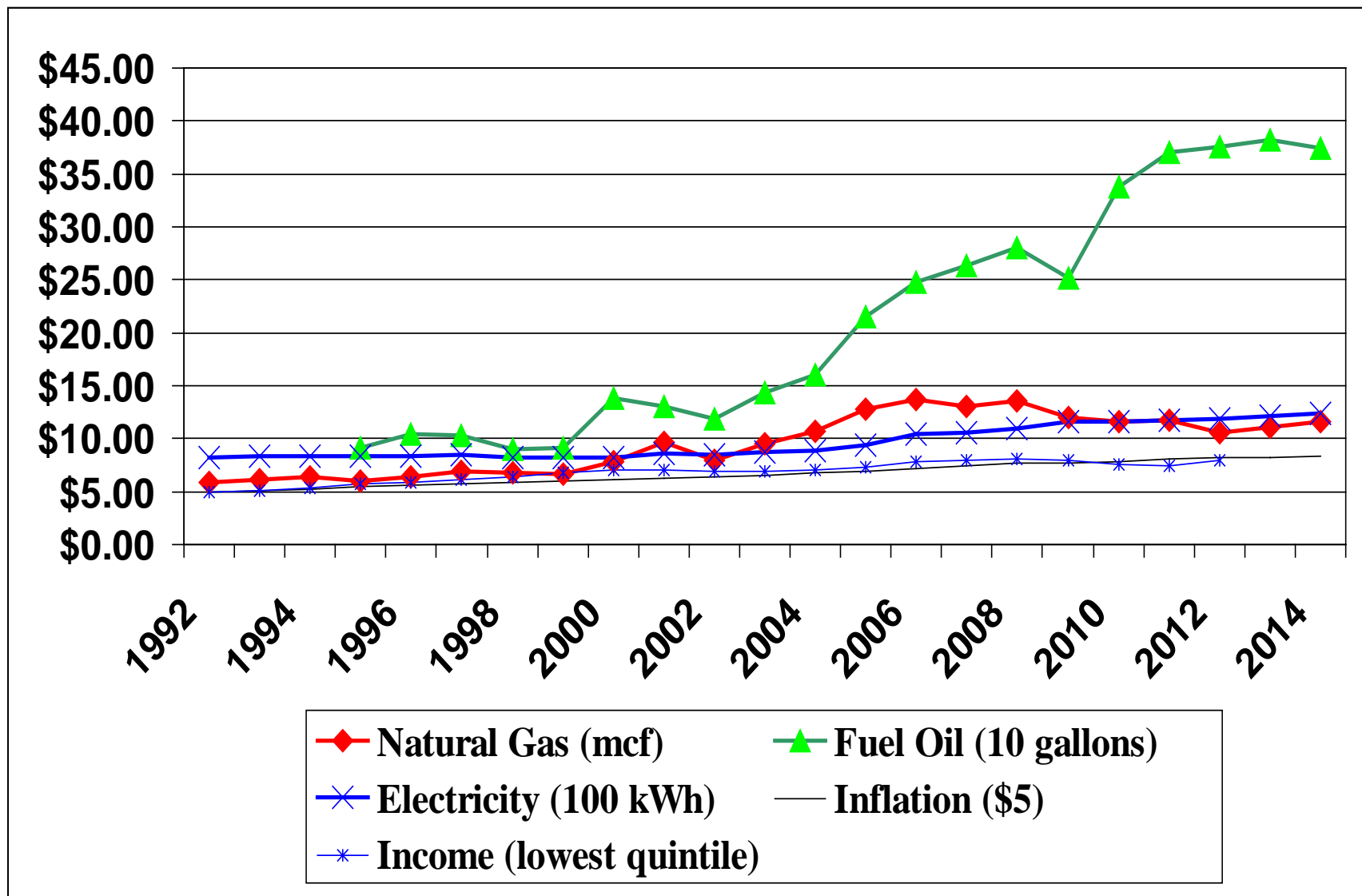
Photo: Kim MacDonald

All About the SIR

- Savings to Investment Ratio
- Cost Effectiveness or Payback
- Fuel costs are critical factor in determination

PRICES BY FUEL TYPE

Since 1992
(Nominal dollars)



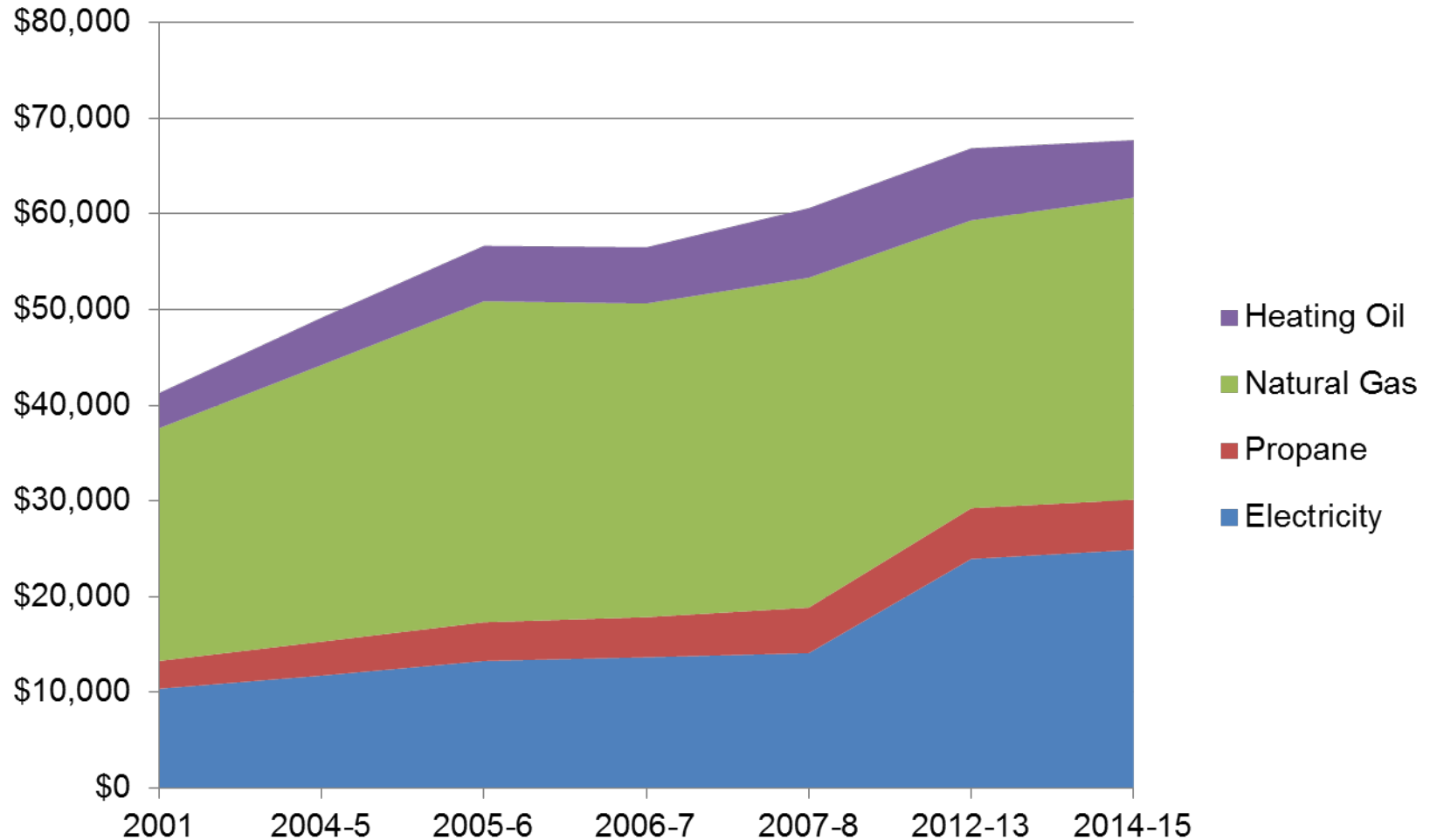


AGGREGATE RESIDENTIAL ENERGY EXPENDITURES BY LOW-INCOME HOUSEHOLDS Federally Eligible



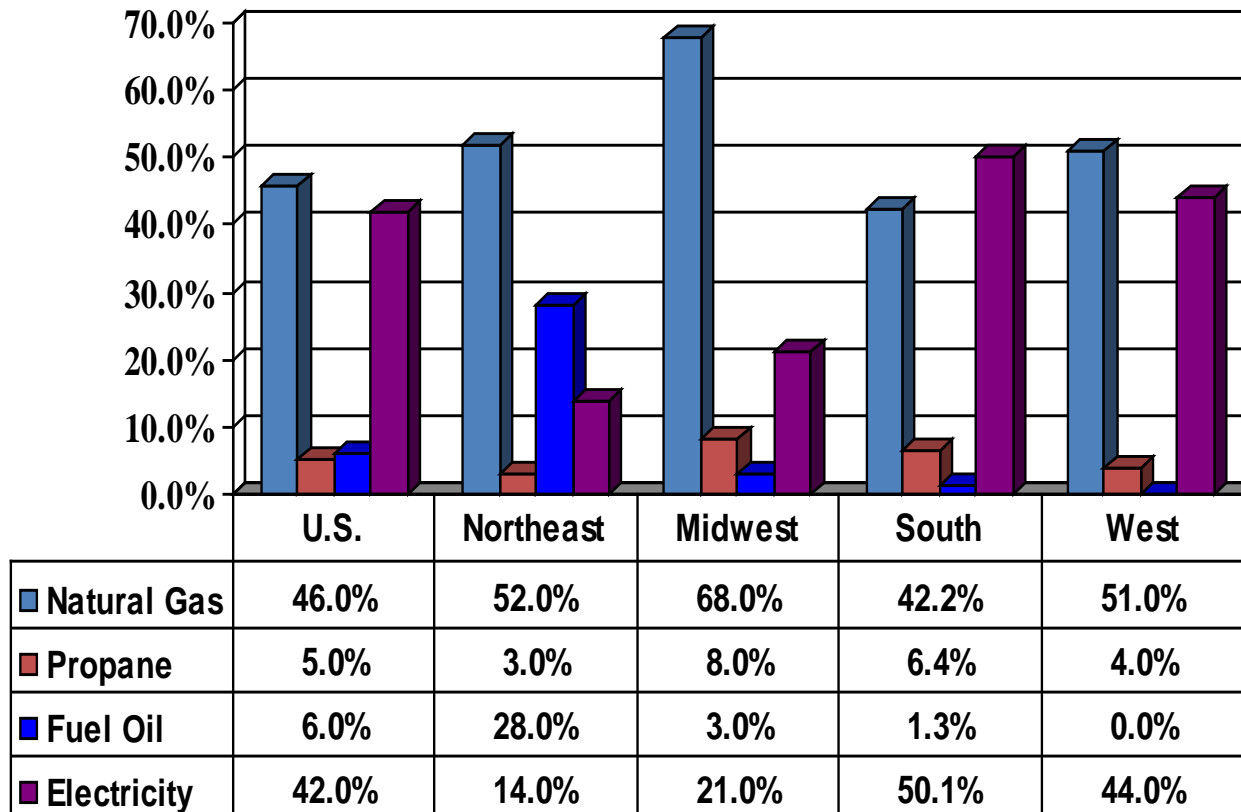
N A S C S P

Millions of dollars



PRIMARY HEATING FUEL FOR ELIGIBLE LOW-INCOME HOUSEHOLDS

Percent Of Households At Or Below 200% of Poverty By Region



WEST

MIDWEST

NORTHEAST

Pacific

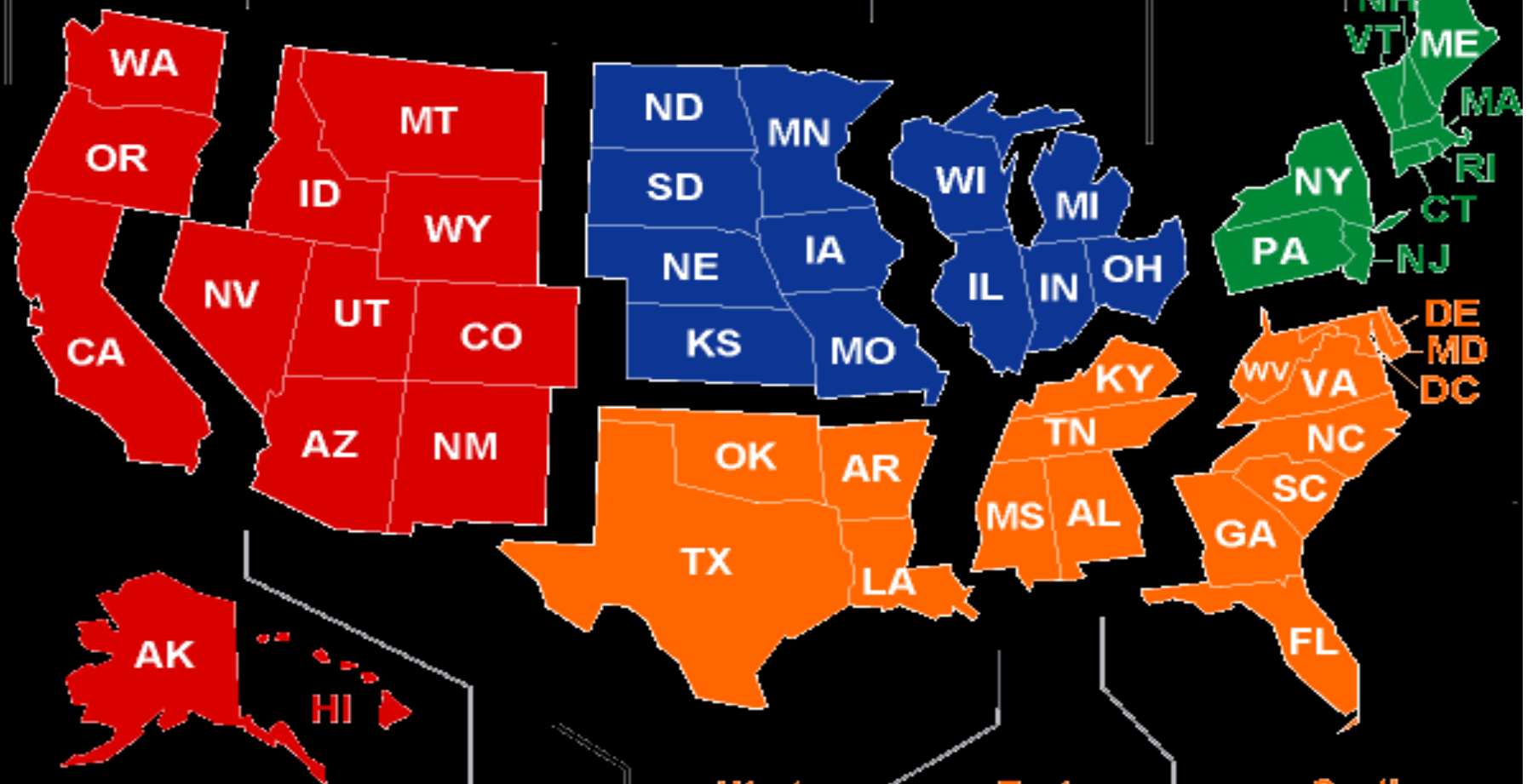
Mountain

West North Central

East North Central

Middle Atlantic

New England



West South Central

East South Central

South Atlantic

SOUTH

EXPECTED ENERGY EXPENDITURES FOR 2014-2015

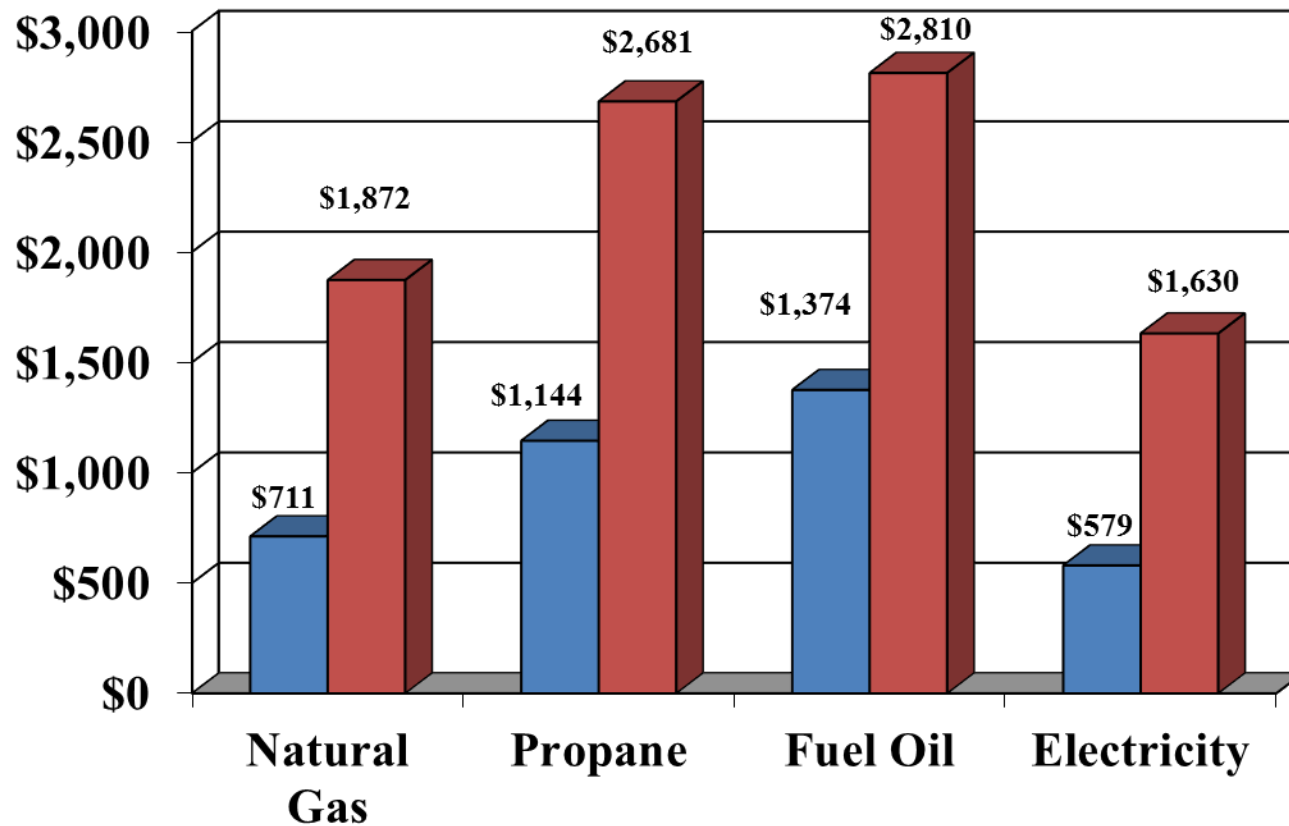
Eligible Low-Income Households



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By Primary Heating Fuel

■ Heating/Cooling ■ Total Bill

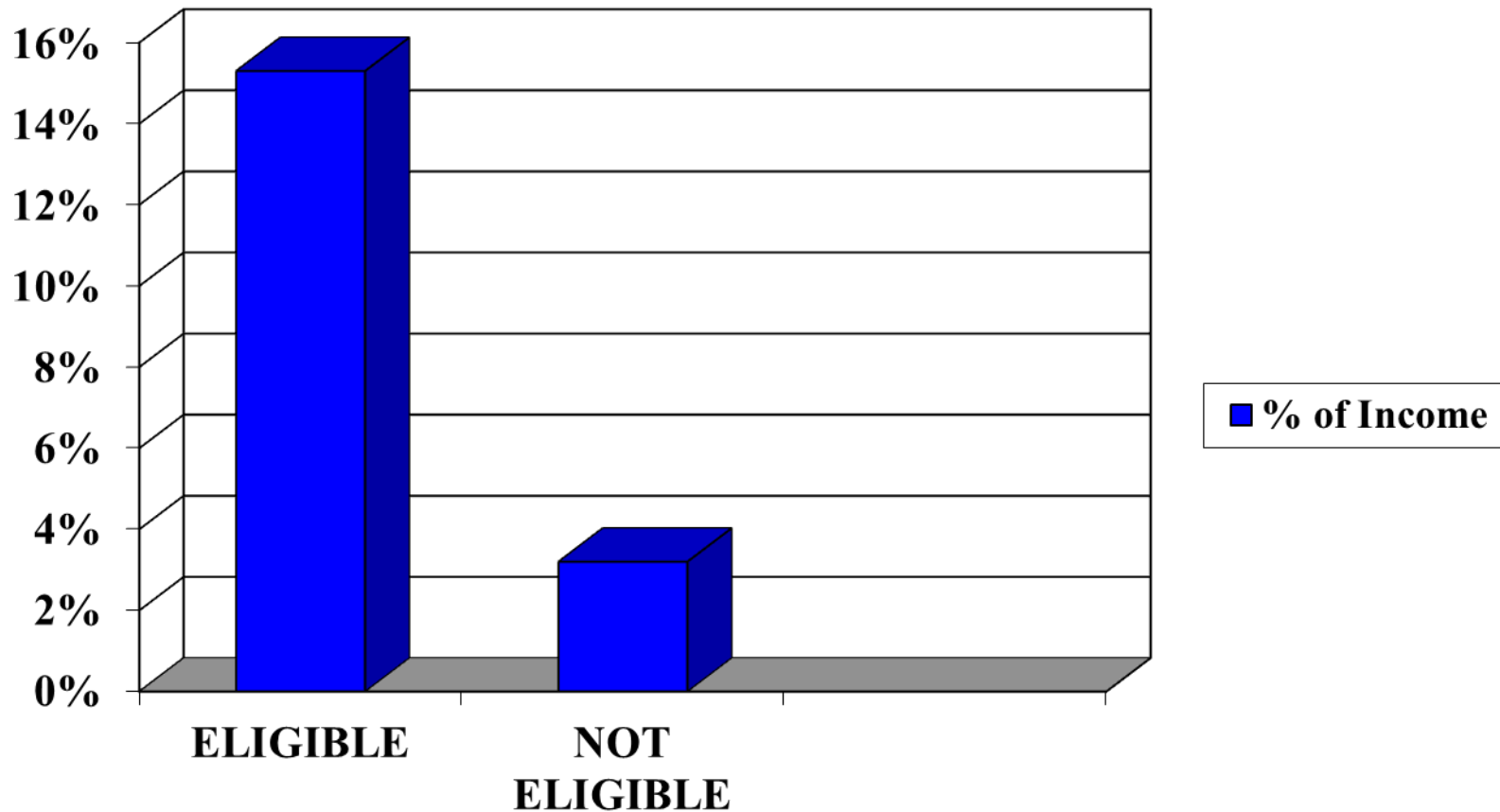


ENERGY BURDEN BY INCOME GROUP

2013-2014



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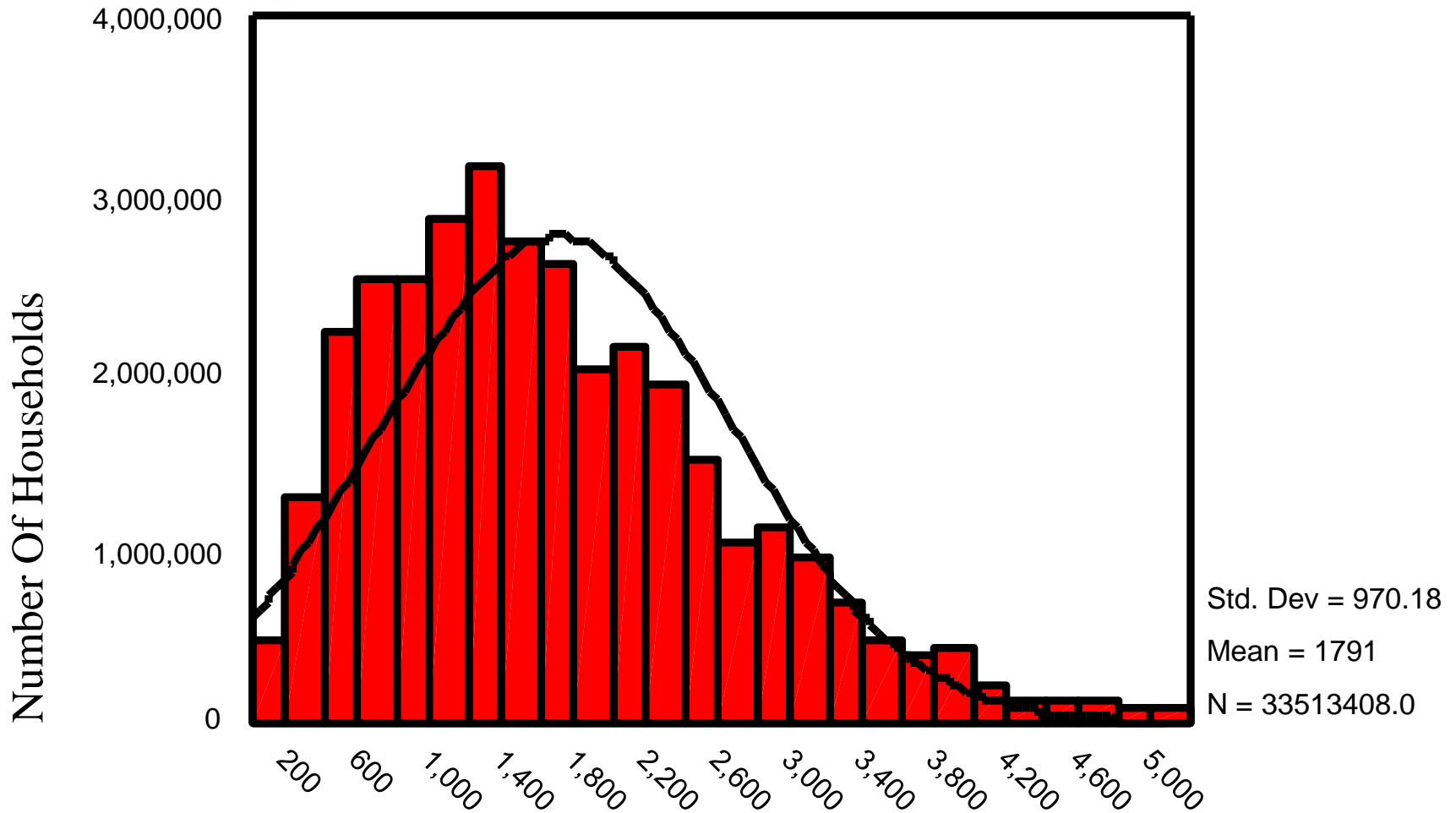


Source: Tabulation based on EIA STEO October 2013, 2009 RECS



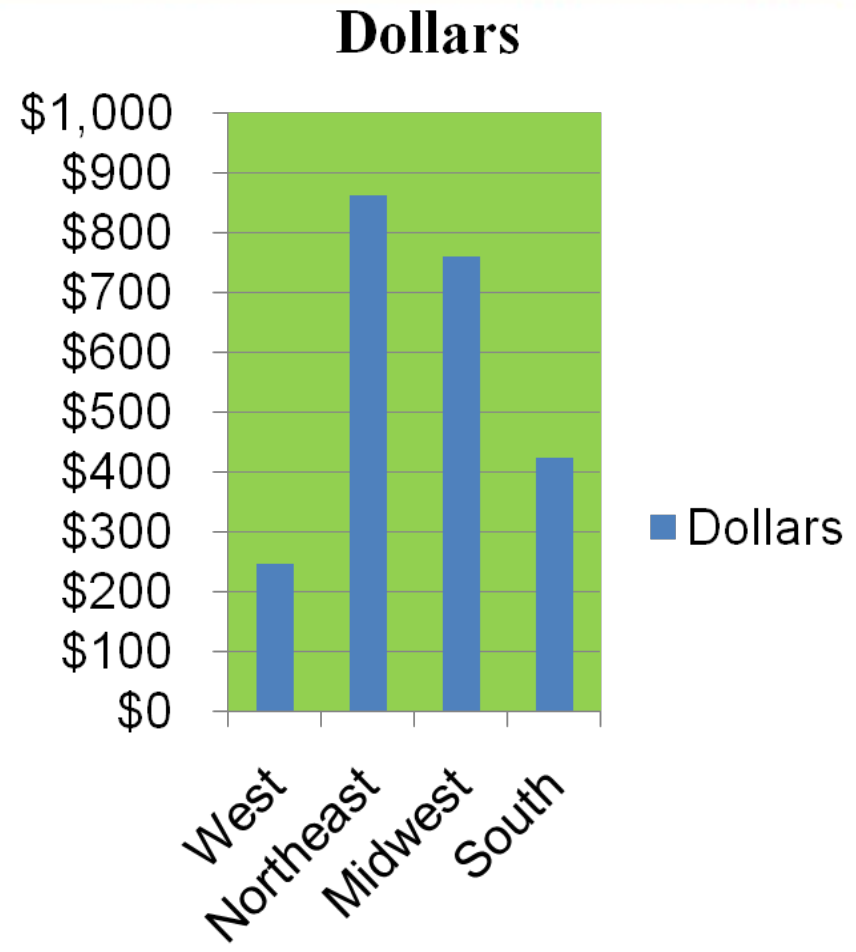
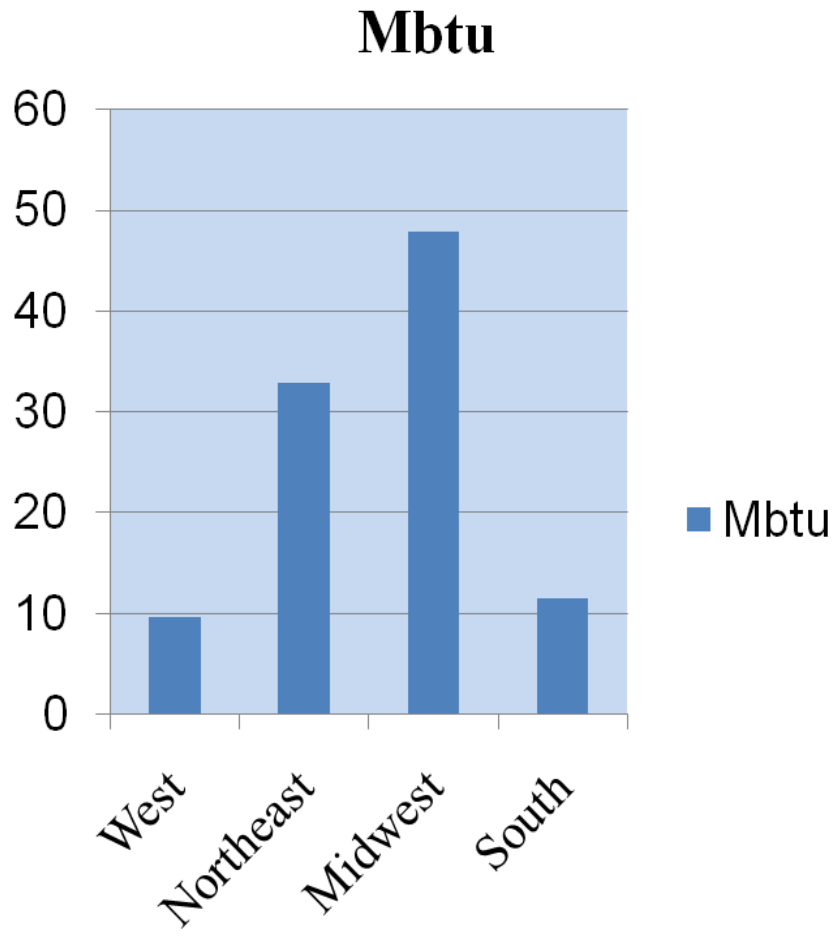
Distribution Of Low-Income Energy Bills

Estimated for FY 2008

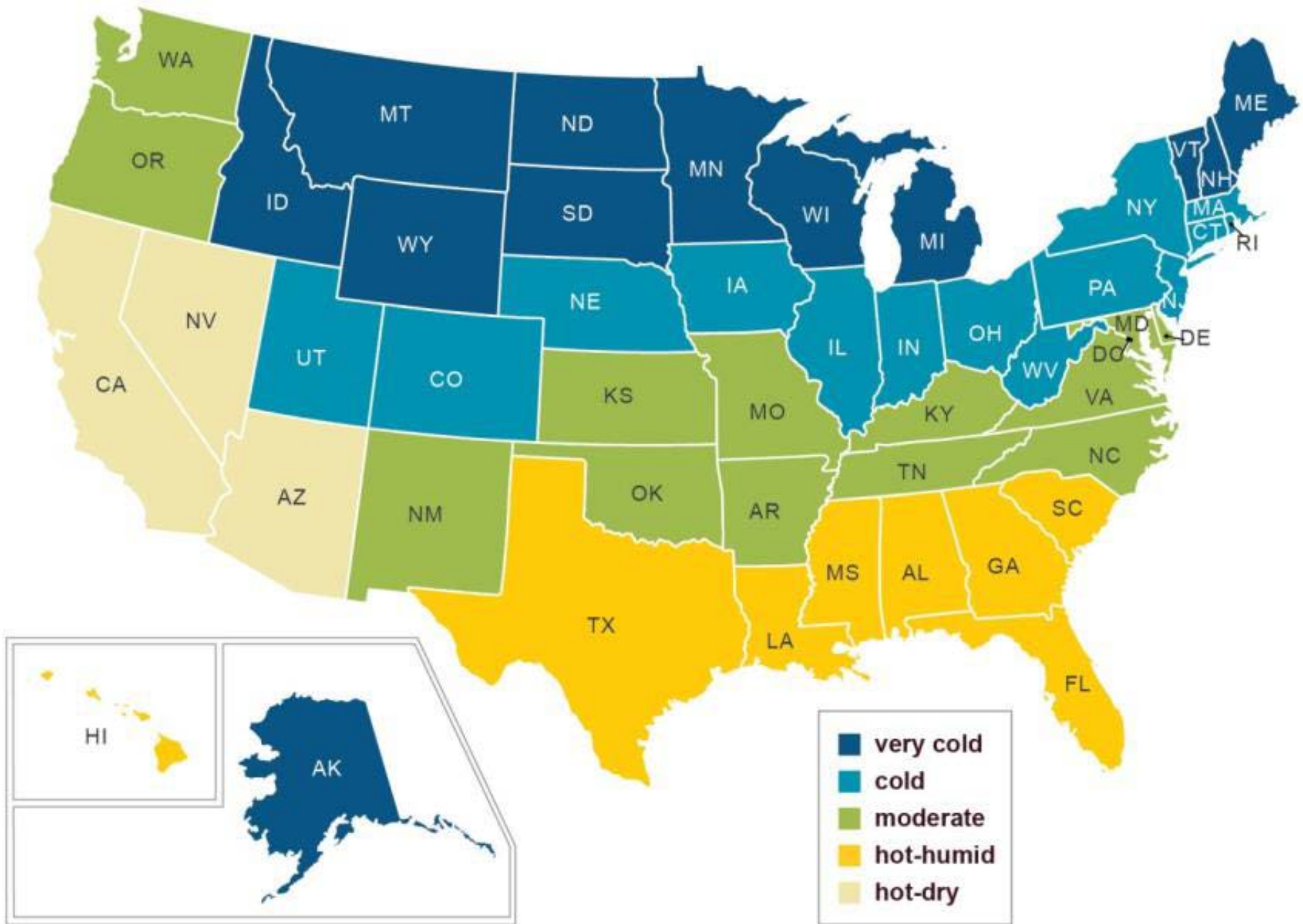


Eligible For LIHEAP With Bills Under \$5,500

VARIATIONS IN SAVINGS SELECTED STATES



Sources: ORNL Weatherization Assistant Tabulations, EIA Annual Energy Outlook 2010





SAVINGS ESTIMATION PROCEDURES



N A S C S P

- IDENTIFY YOUR REGION

- IDENTIFY YOUR BUILDING TYPES

- FIND THE APPROPRIATE BTU SAVINGS IN THE EVALUATION FOR ENVELOPE SAVINGS FOR YOUR REGION AND BUILDING TYPE

- FIND THE BASE LOAD ELECTRIC SAVINGS FOR YOUR REGION AND BUILDING TYPE

- MULTIPLY AND ADD



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Questions?