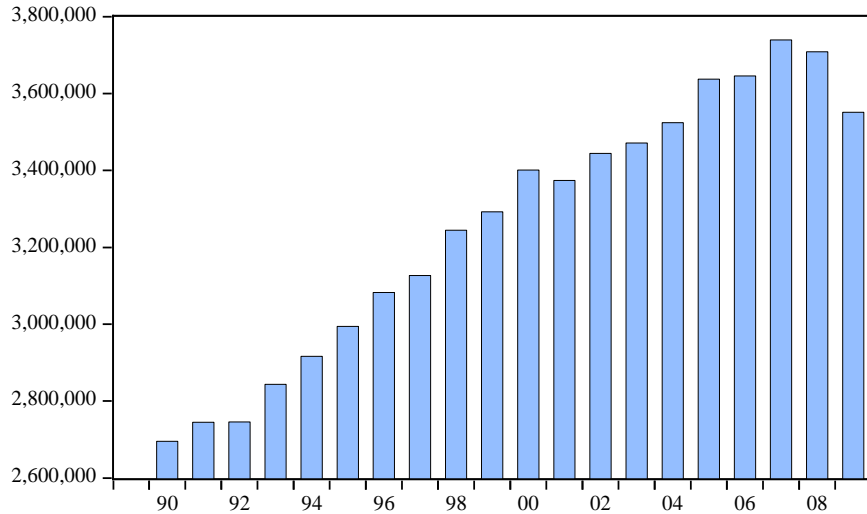


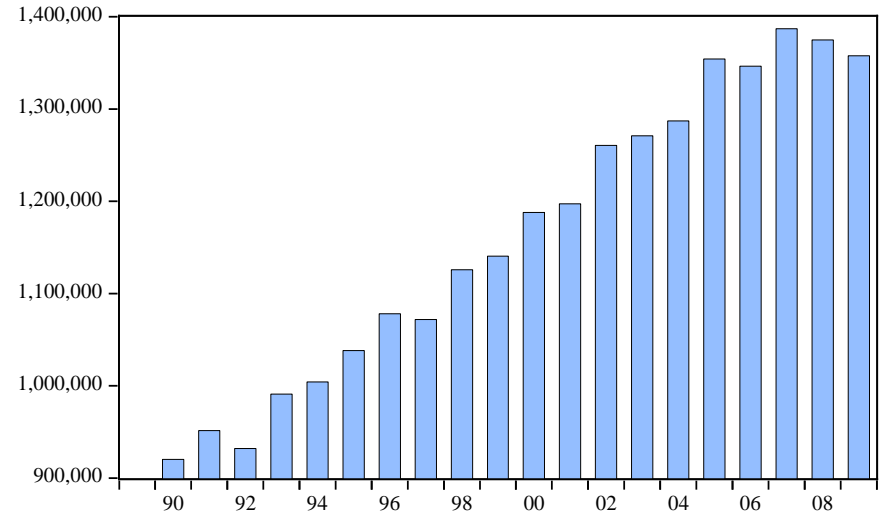
Data Needed:
National
Consumption
Metrics

Total Electricity Consumption, excl. "Other" (source: SEDS)

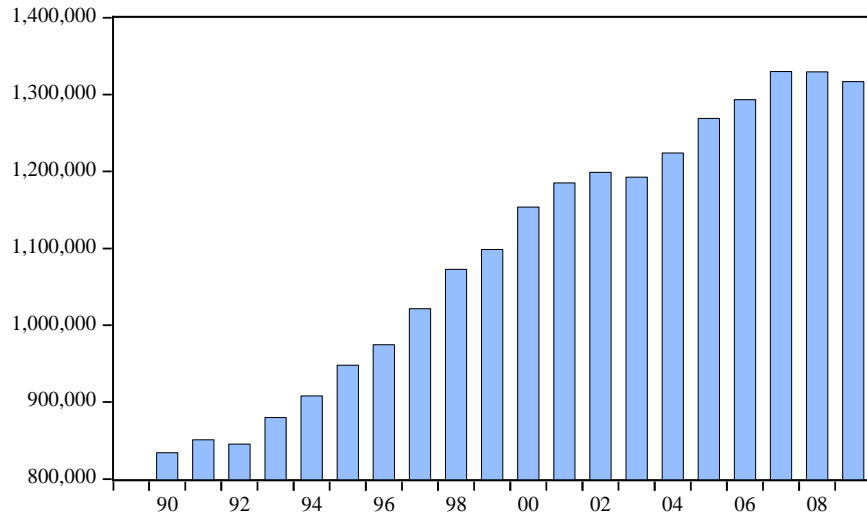
GWHTOT



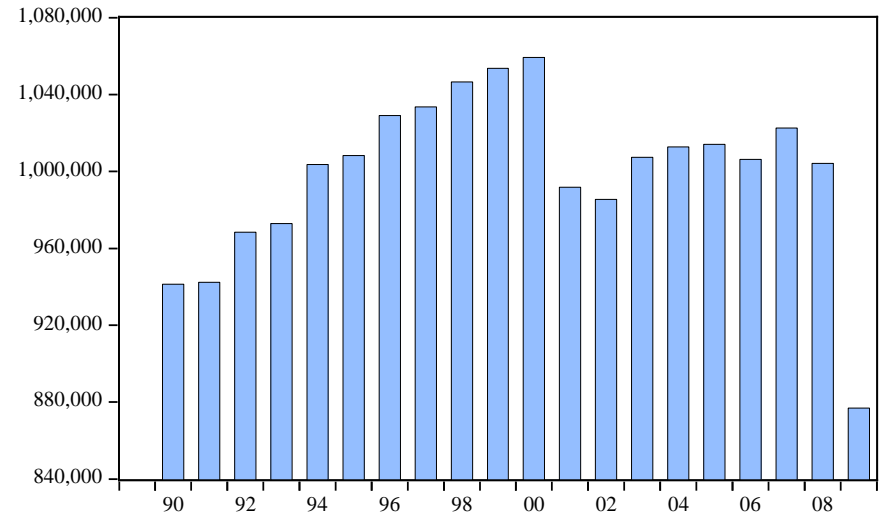
GWHRES



GWHCOM



GWHIND



Question 1:

If you were given a week, and no outside help, how would you come up with an estimate of the annual national GWH savings for every year from 1992 to 2008 due to electric utility demand side management programs?

Answer 1:

**You would download and process all
the data on from Form EIA-861**

Question 2:

What is your best estimate of the GWH savings installed in 2008 in the 48 states?

Answer 2:

10,417 GWH

(but the utilities in 8 states did not report since 2003 or so)

Question 3:

**What percentage is this of total
GWH sales in 2008?**

Answer 3:

$$10,417 / 3,708,547 = 0.3\%$$

Question 4:

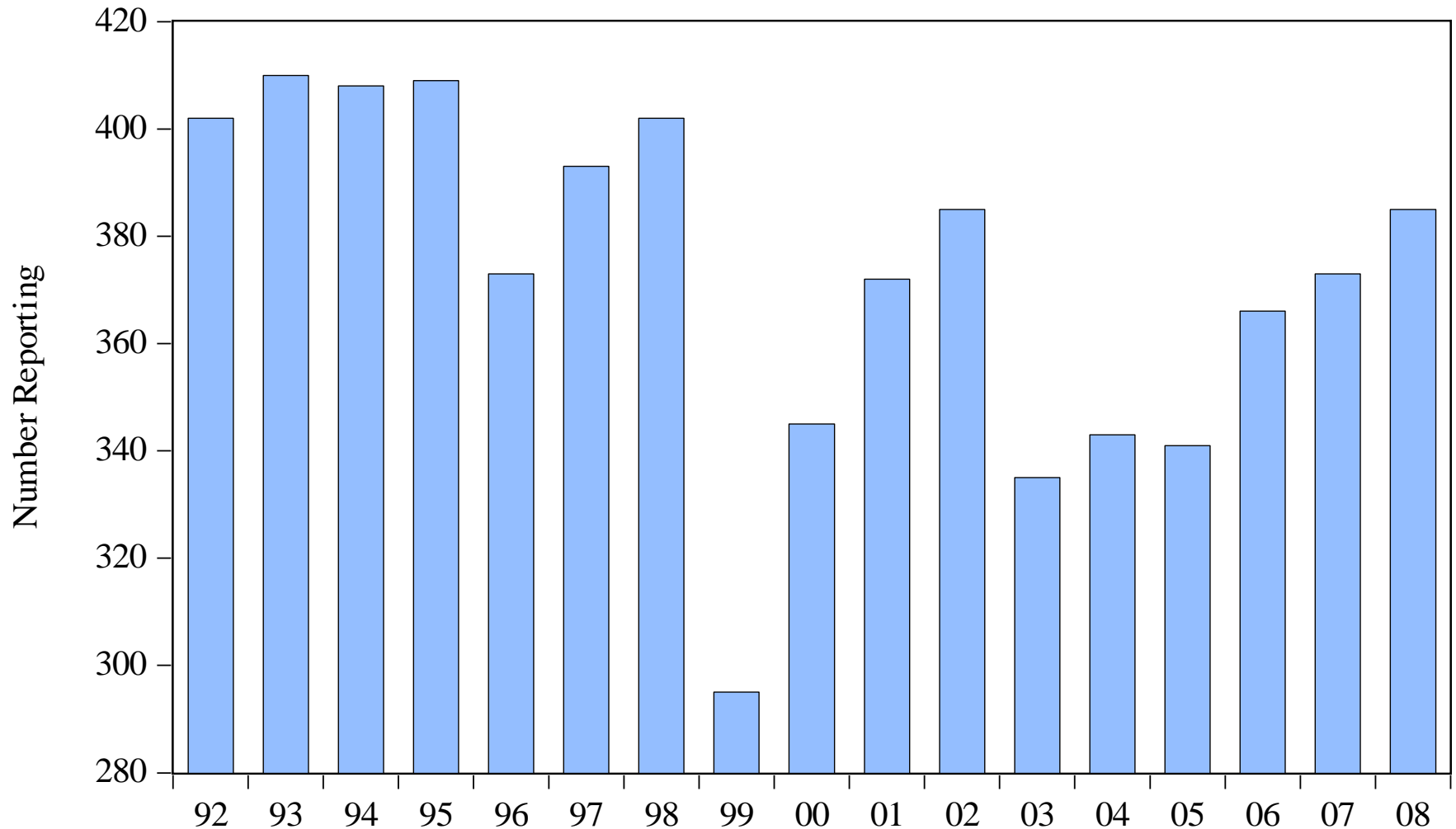
If you added up all the reported annual savings from DSM programs from 1992 to 2008, how much would that be?

Answer 4:

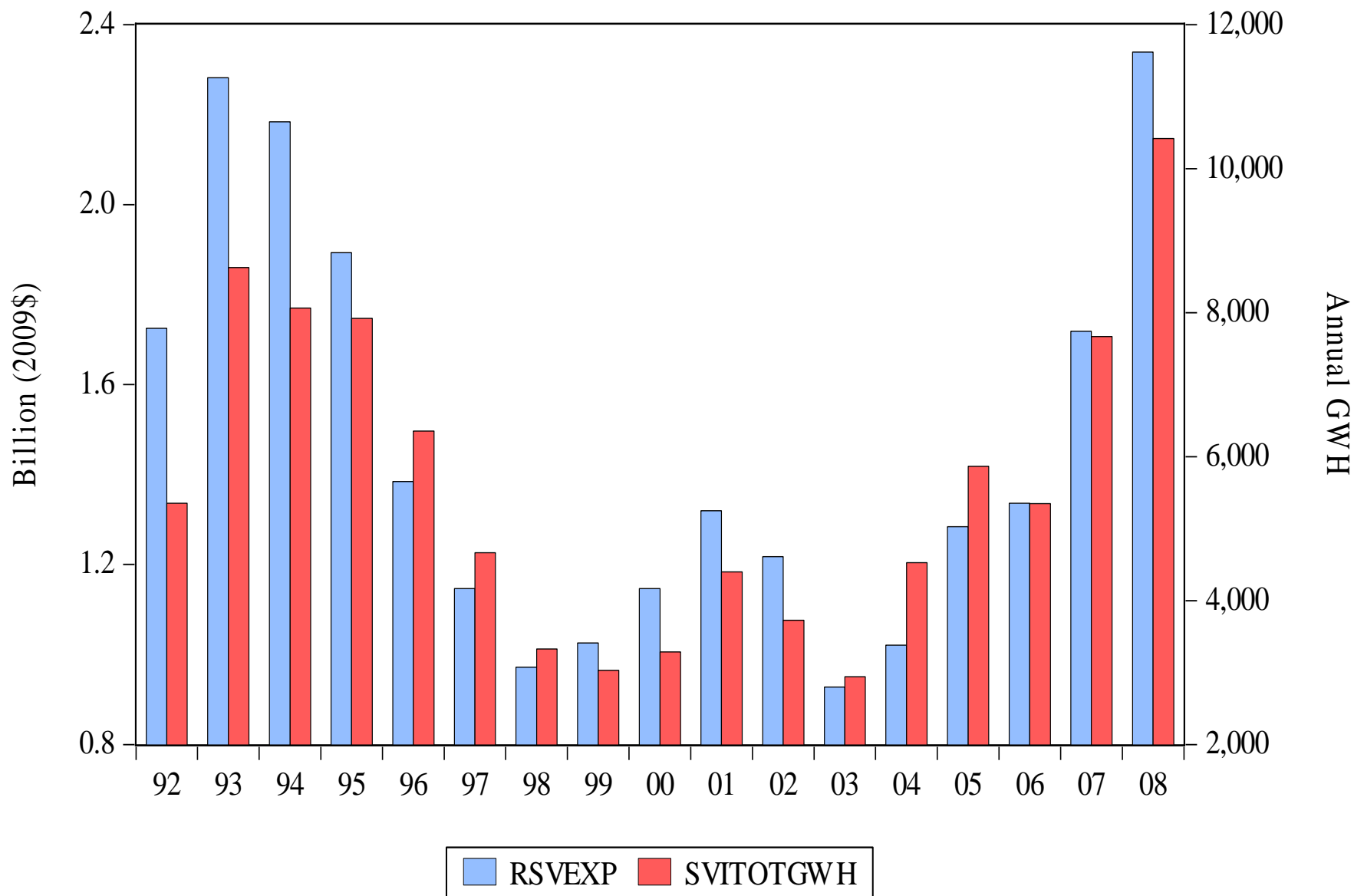
95,496 GWH

EIA-861 -- EE PROGRAM DATA (CURRENTLY SCHEDULE 6)

Utilities responding to a least one of the nine DSM questions



TOTAL ANNUAL EXPENDITURES AND SAVINGS



2008 Sum of Annual Savings

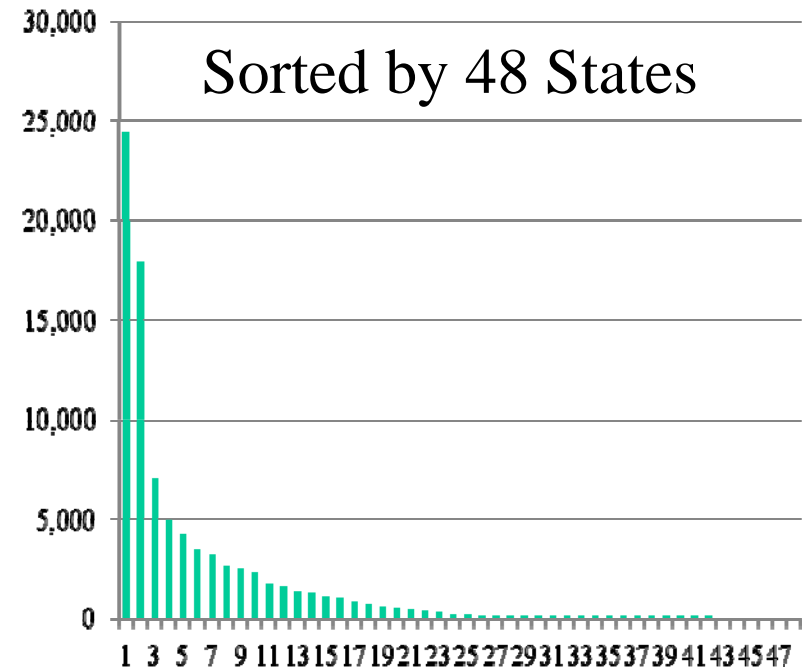
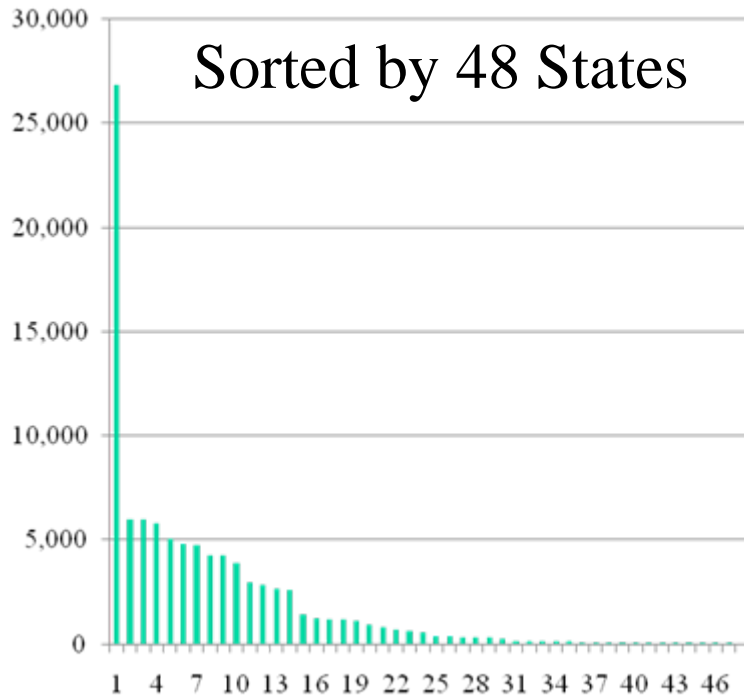
GWH

95,496

2008 Sum of Cumulative Savings

GWH

85,336



Extra Credit Question 5:

By sector and in total, what percentage is total annual cumulative savings of total GWH sales in 2008?

Answer 5:

Residential Sector = 2.8%

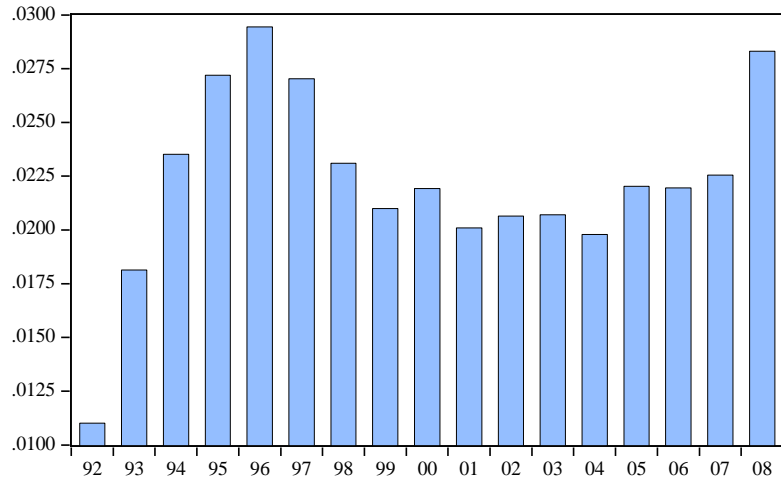
Commercial Sector = 2.5%

Industrial Sector = 1.5%

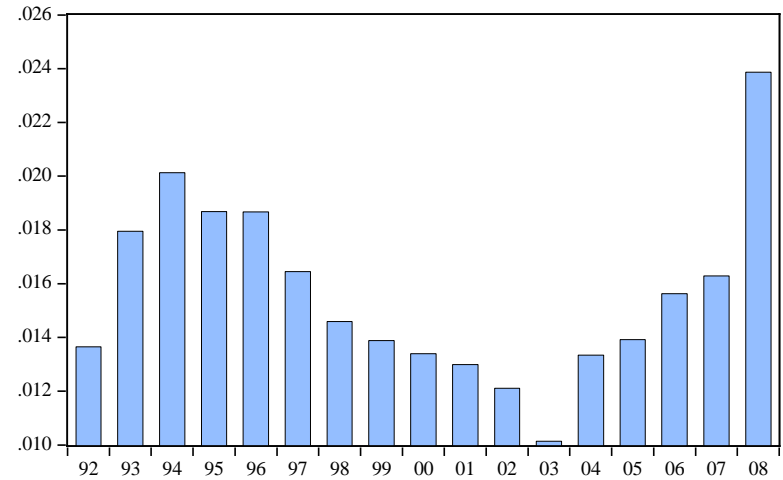
Total = 2.3%

CUMULATIVE SAVINGS AS A PERCENT OF ANNUAL DEMAND

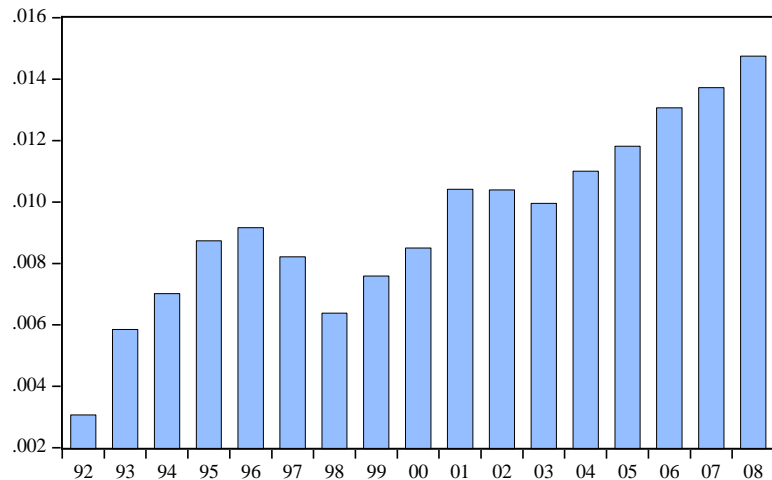
SVCCOMGWH/GWHCOM



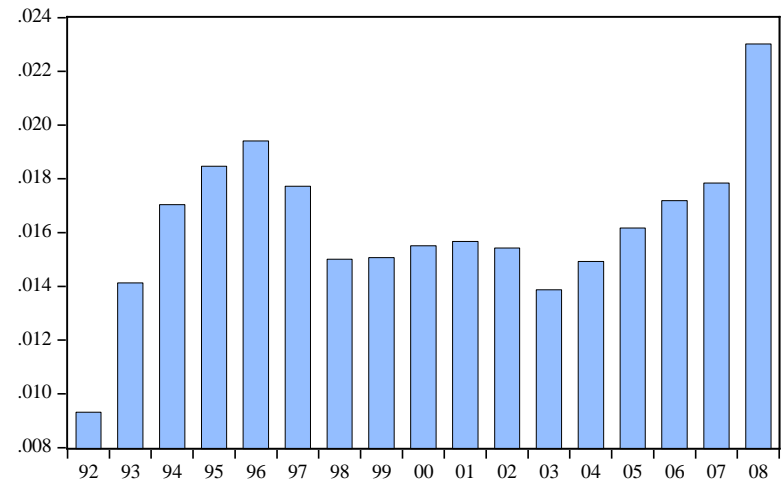
SVCRESGWH/GWHRES



SVCINDGWH/GWHIND



SVCTOTGWH/GWHTOT



INFORMATION IS NECESSARY FOR EFFECTIVE POLICYMAKING

1. Imagine where our economy would be without financial data – look at what happened with LESS THAN ADEQUATE financial intermediary information
2. Incomplete information on the long-term impacts of public programs hampers the ability to optimize energy investments
3. Program EM&V efforts are largely local. Currently, when the results are added together they do not end up being very helpful

GOING FORWARD AT THE NATIONAL POLICY LEVEL

– NCM

1. Ignore the current concept of “NET SAVINGS” for public programs – it is hopelessly flawed and measured inconsistently
2. Develop a national handbook of energy savings algorithms
3. Survey all utilities, third parties, and governments that deliver electric and natural gas energy efficiency programs
4. Consider ex-ante savings “expected savings” or “energy efficiency capacity”
5. Institute a **NATIONAL CONSUMPTION METRICS** research agenda that provides empirical estimates of medium and long-term NET ENERGY SAVINGS for well-defined geographic areas (e.g., municipalities, utility service territories, states)