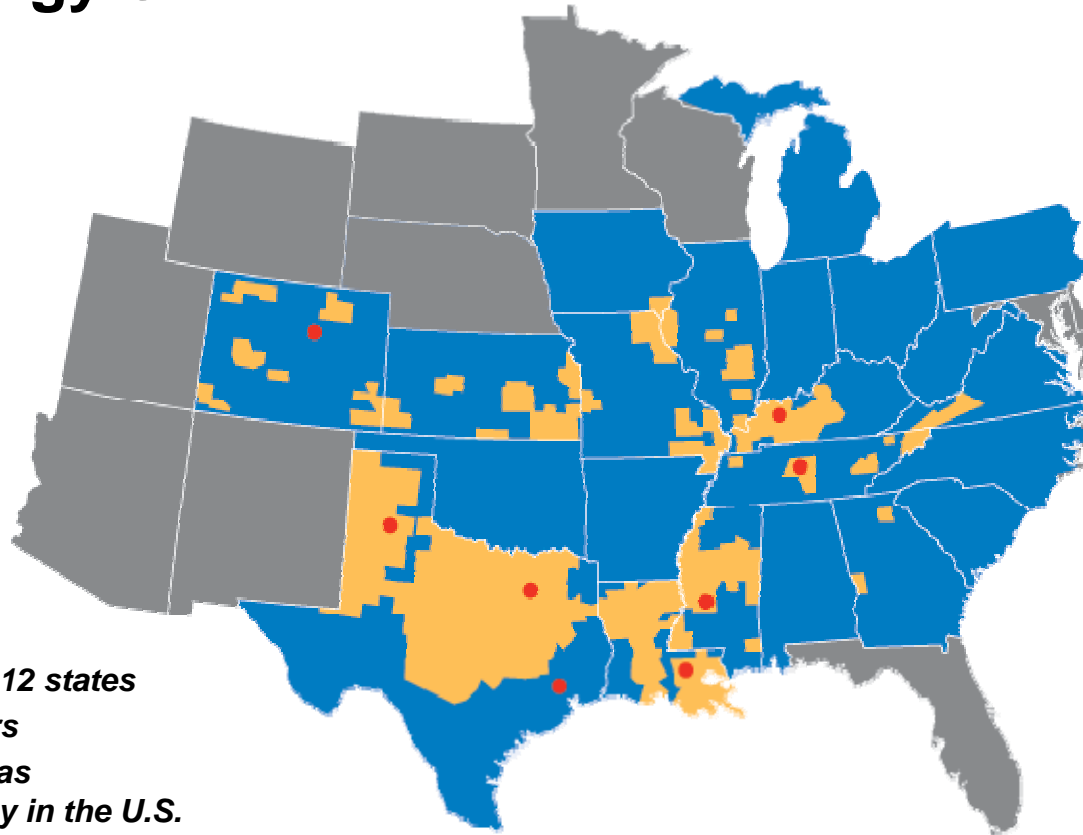


# ***Energy Efficiency and Rate Design***


Tom Hawkins

## Atmos Energy Service Area



- *Utility operations in 12 states*
- *3.2 million customers*
- *Largest all natural gas distribution company in the U.S.*

 States of operation

 Utility service area

 Headquarter cities

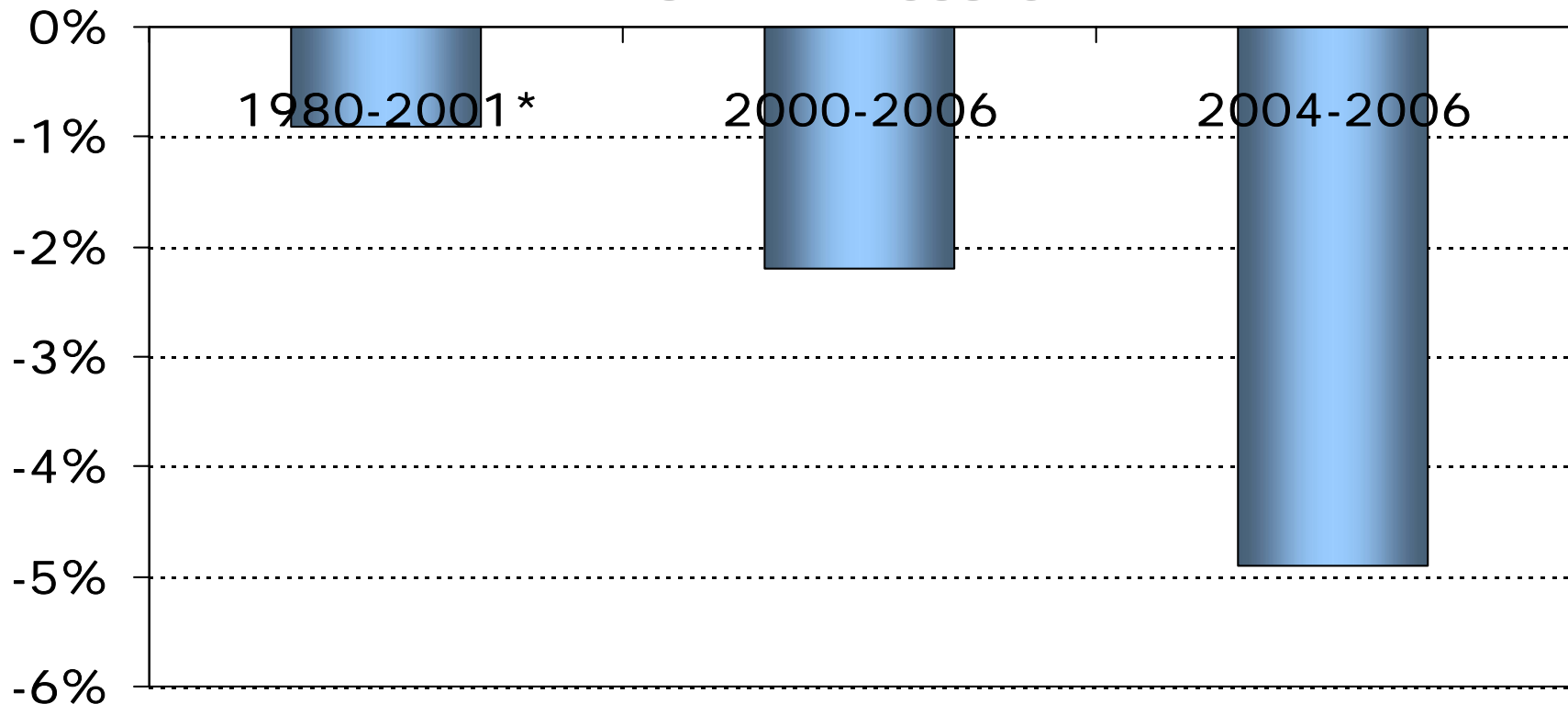
## **Declining Average Residential Usage of Natural Gas – trend in U.S.**

From 1980 to 2005--

- » 15 million new residential customers
  
- » \$96 billion in new construction
  
- » Total residential usage decreased from 4.8 Tcf to 4.7 Tcf

*Source: American Gas Association*

## AVERAGE ANNUAL DECLINE IN WEATHER-NORMAL GAS USE PER RESIDENTIAL CUSTOMER



**Total per customer consumption decreased 33 percent  
between 1980 and 2006**

Source: American Gas Association

## The Need for Non-volumetric Rate Design

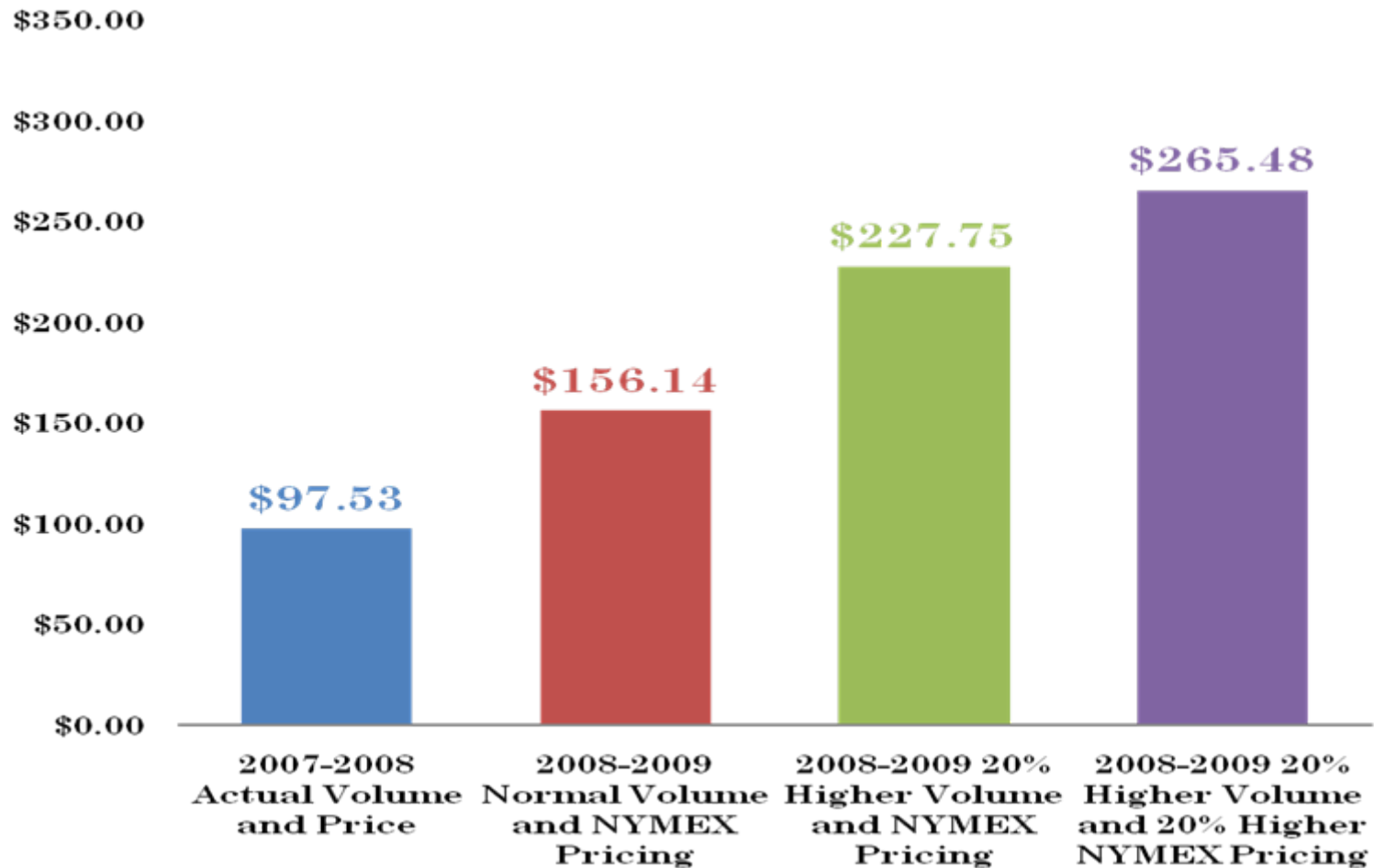
- High and volatile natural gas prices
- Global climate change
- Energy resource conservation
- Utility sponsored efficiency programs

**New Paradigm: Regulatory Goal is Shifting From Building Distribution Infrastructure to Encouraging Efficient Use of Resources**

## **Major Shortfall of Traditional Rate Design**

- Volumetric – each unit of gas is assigned a pro-rata share of distribution costs
- Utility earnings decline if customers lower consumption
- Implies distribution cost recovery only if customers don't conserve
- Increasing sales is a major objective under traditional rate design
- Contains a financial disincentive for promoting energy efficiency and natural gas conservation

## Atmos Customer January Bill Example Gas Cost Component only



## Types of Non-volumetric Rate Design

### Revenue Decoupling

### Weather Normalization (partial decoupling)

### Flat Monthly Fee and Variants

- Fixed Monthly Distribution Charge
- Two-Tier Customer Charge
- Straight Fixed Variable (Demand Rate)
- Modified Rate Blocks

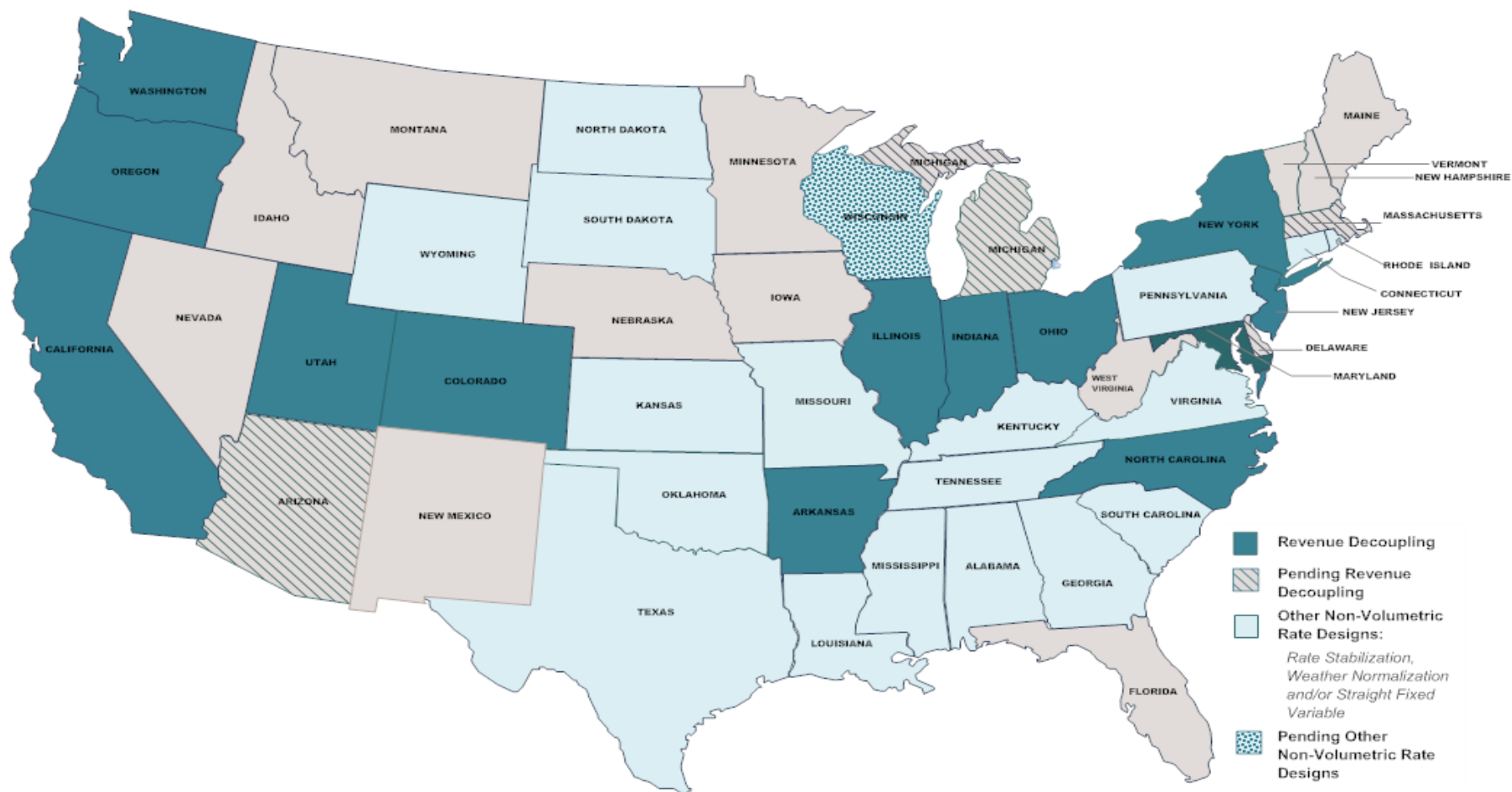
***43 million customers in being served under non-volumetric rates***

## Revenue Decoupling

- Breaks the link between distribution service cost recovery and energy usage of customers
- Symmetrical - prevents the utility from increasing revenues by increasing sales
- Standard bill components retained:
  - fixed monthly service charge
  - volumetric distribution charge
  - volumetric commodity pass-through charge
- Symmetrical tracking charge added
- *Decoupling is **NOT** incentive regulation – there is no reward or bonus for the utility*

Source: American Gas Association

## STATES WITH NON-VOLUMETRIC RATE DESIGNS FOR NATURAL GAS



Source: American Gas Association

## **Partial solutions in Atmos**

- WNA – 7 states (LA, MS, TX, GA, TN, KY, VA, KS)
- Straight-fixed variable– 1 state (MO)
- Annual Rate Adjustment mechanisms – 3 states (LA, MS, TX)

## Optimal rate solution has two components

- **Decoupling rate design** to address volume attrition... break the link between volume and revenue
  
- **Annual rate adjustment mechanisms**/ annual reviews to recover capital investment and cost of service
  - Less costly and less contentious than traditional rate cases
  - Reduces lag – encourages infrastructure improvements