

Developing a Louisiana Energy Policy

By

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HISTORICAL PERSPECTIVE

- **1901 – Oil discovered in Louisiana near Jennings by Howard Brothers Drilling**
- **More than 220,000 wells have been drilled in Louisiana to date.**
- **Fossil fuels became the energy of the future:**
 - Lamps to be lit
 - Motors to be run
 - Heat for homes



HISTORICAL PERSPECTIVE (Cont.)

- **With the development and innovation of need for fossil fuel, we now have creation of use of energy.**
- **To safeguard lands and reduce industry's environmental impact, the State legislated industry regulations.**



Regulatory Agencies & Acts

- **1908 – Louisiana Commission for the Conservation of Natural Resources**
 - Created to address problems of conservation.
- **Act 127 of 1912**
 - Required drilling permits be filed, use of surface casing and cement, and abandoned wells be plugged.



Regulatory Agencies & Acts (cont.)

- **1916 – Office of Conservation**
 - **Created with primary statutory responsibility for regulation and conservation of oil, gas, lignite and other natural resources.**



Regulatory Agencies & Acts (cont.)

- **Act 133 of 1924**
 - **Made it illegal to pollute natural waterways with salt water, oil and other substances.**
 - **First recorded environmental action taken on oil industry by legislature.**
 - **Louisiana became the first state to regulate the use of the environment.**

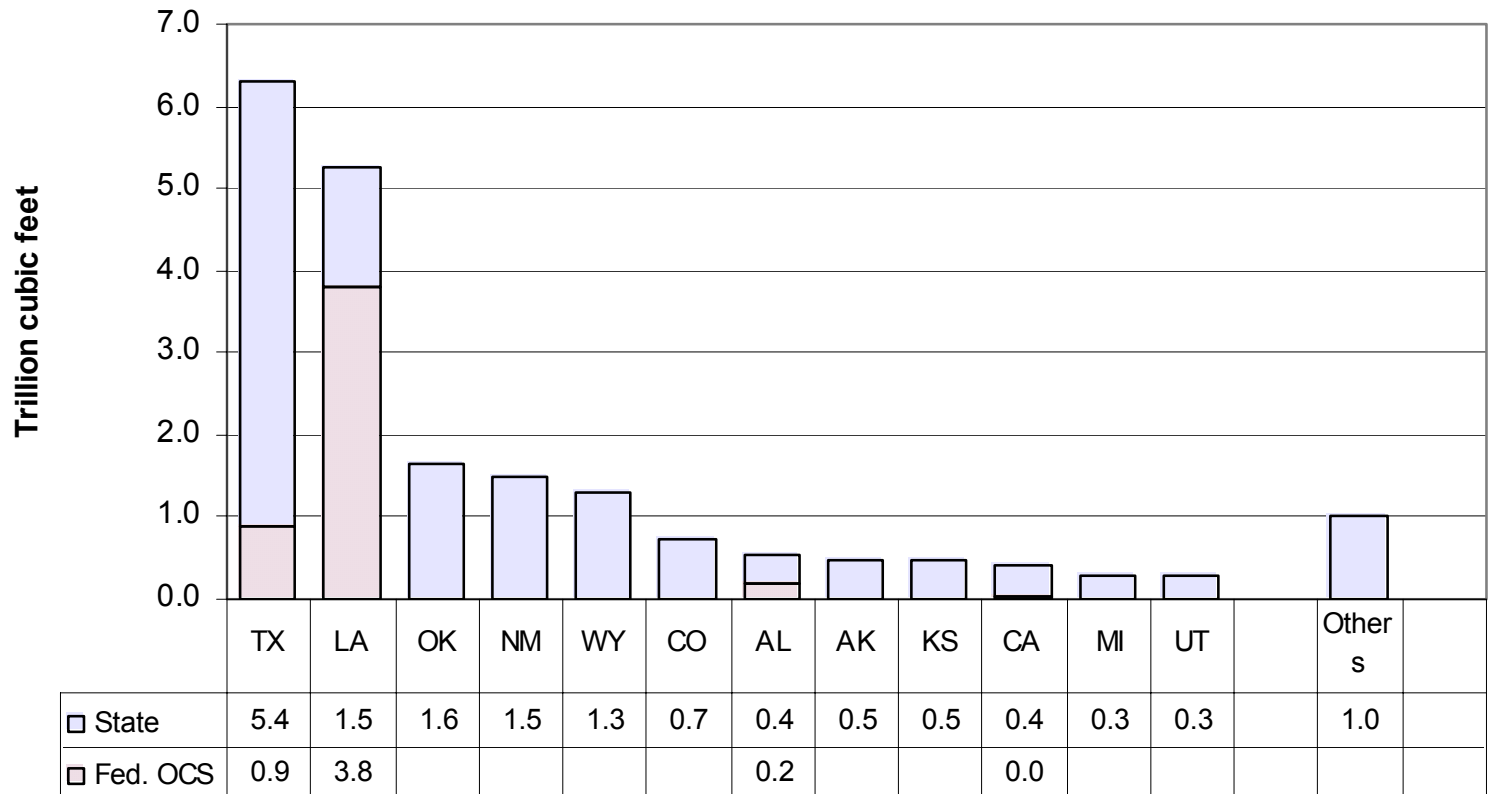


Regulatory Agencies & Acts (cont.)

- **1936 – State Mineral Board**
 - **Created and charged with leasing and administering state-owned land for development and production of minerals and liquid or gaseous hydrocarbons**



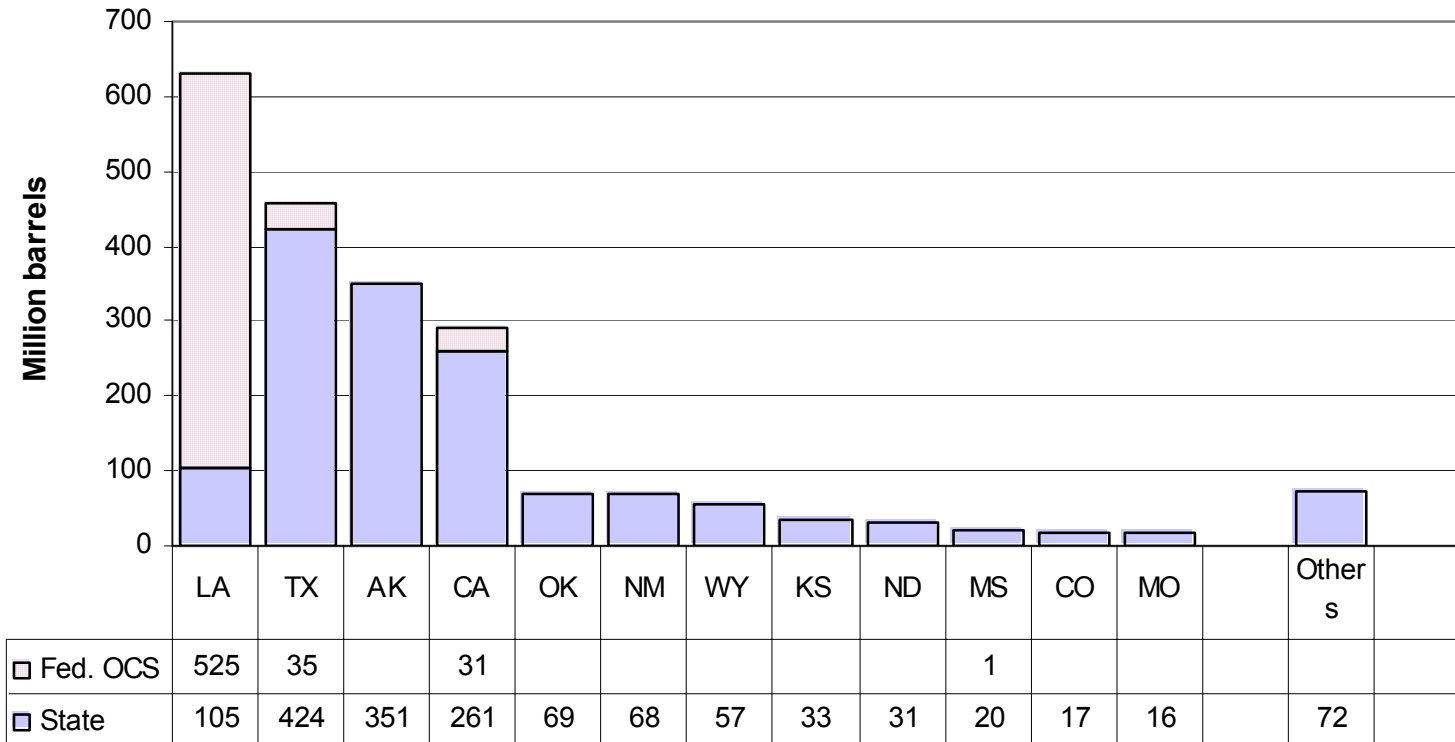
Natural Gas Production Ranking



Source: DOE-Energy Information Administration



Crude Oil Production Ranking



Source: DOE-Energy Information Administration



TWO FUNDAMENTAL ELEMENTS OF ENERGY POLICY:

- Increase supply
- Reduce Demand



INCREASE SUPPLY

- Increase supply or access to existing energy sources
- Develop and encourage use of alternative energy sources



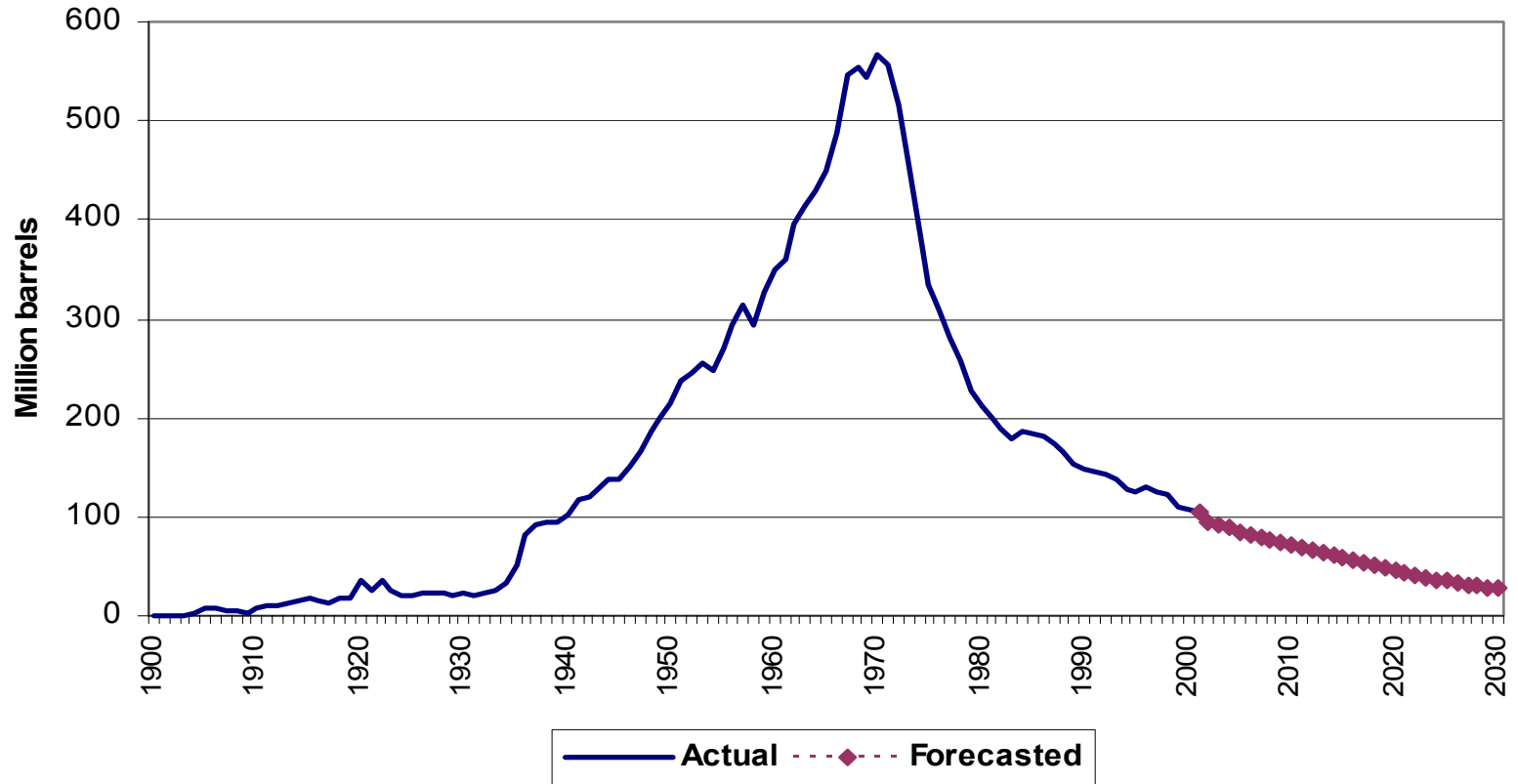
REDUCE DEMAND

- Develop and encourage energy efficiency and conservation
- Diversify economy to be less energy dependent



LOUISIANA STATE OIL PRODUCTION

Actual and Forecasted Through Year 2030

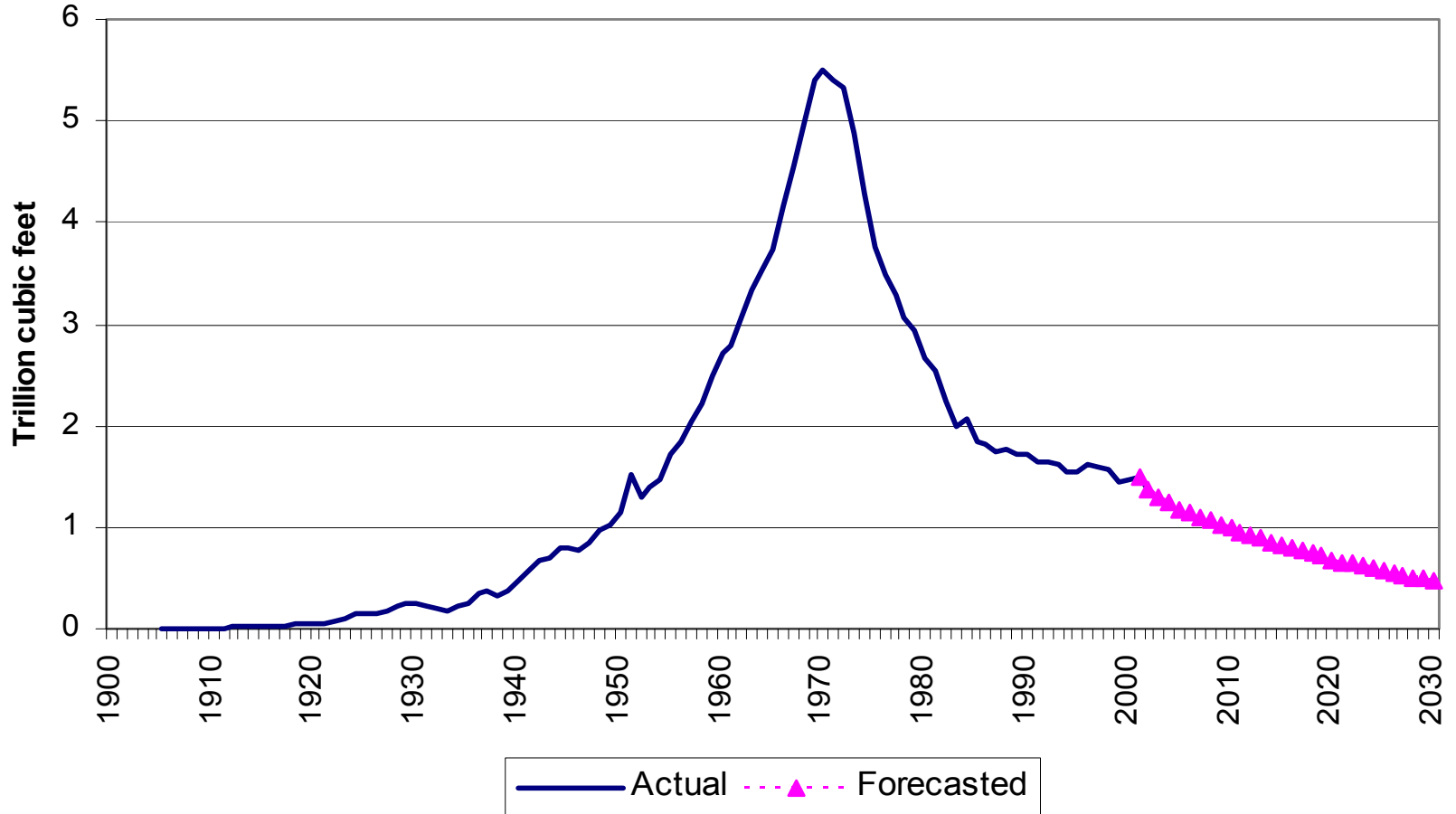


Source: Louisiana Dept. of Natural Resources-Technology Assessment Division



LOUISIANA STATE GAS PRODUCTION

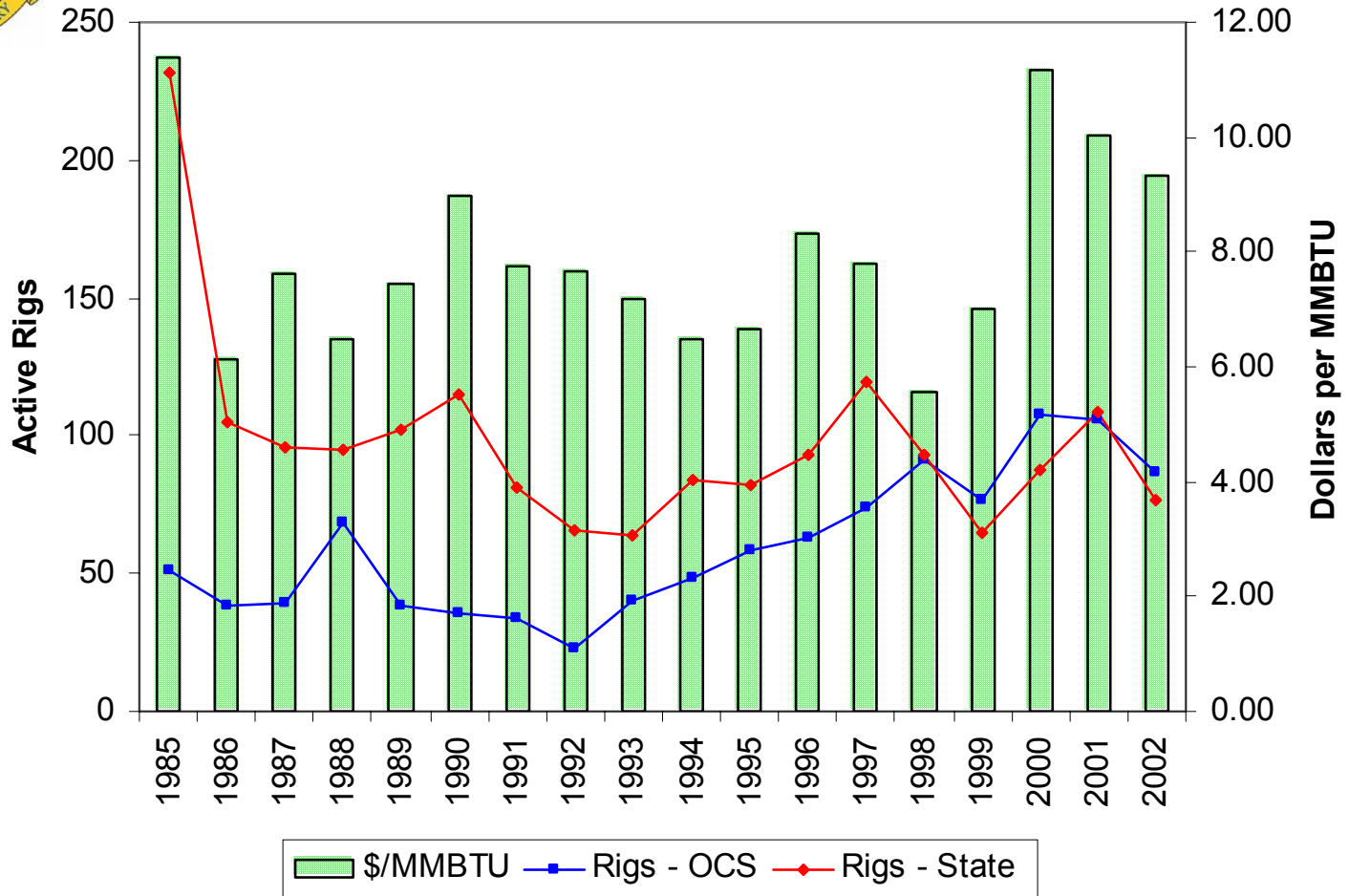
Actual and Forecasted Through Year 2030



Source: Louisiana Dept. of Natural Resources-Technology Assessment Division



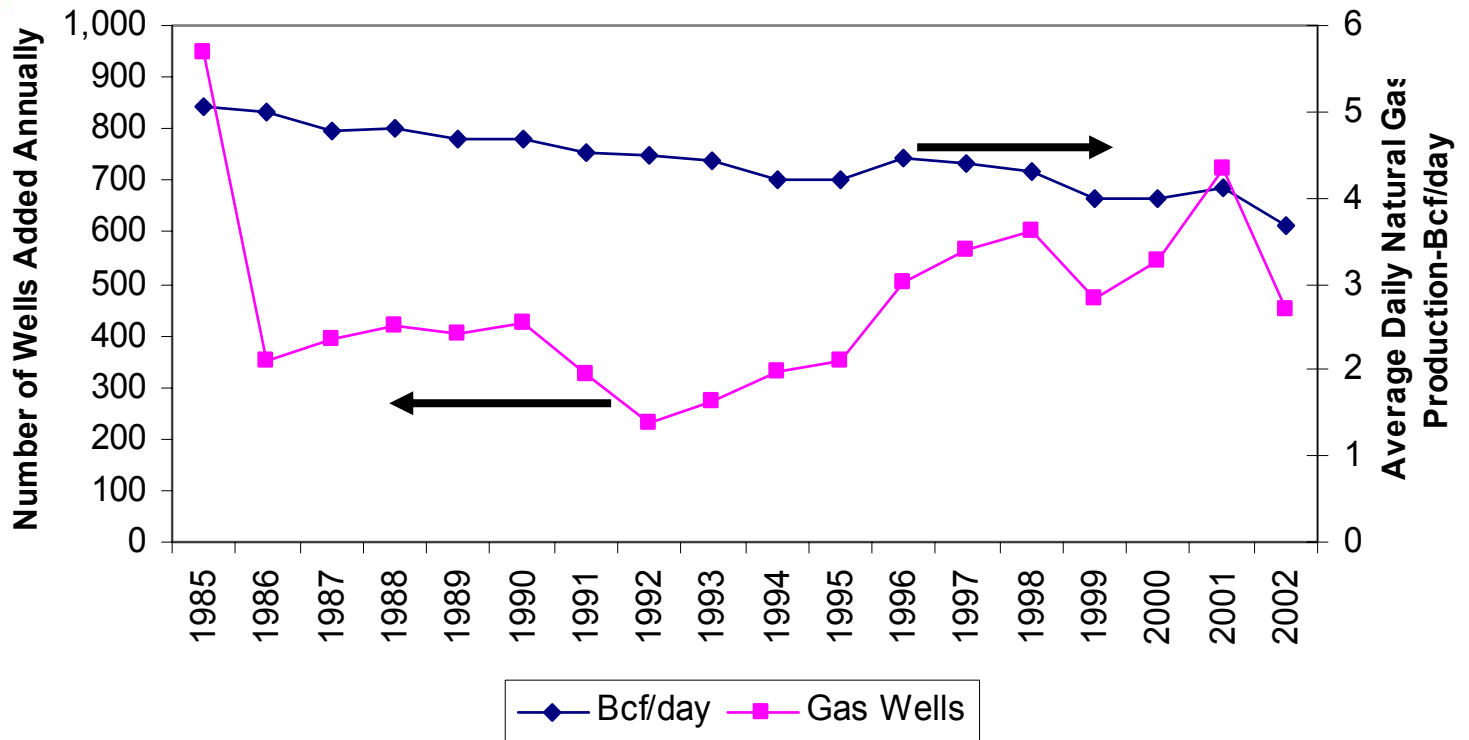
Active Rigs Versus Energy Market Price



Sources: Louisiana DNR-Technology Assessment Division



Gas Well Productivity Falling Behind



Sources: Louisiana Dept. of Natural Resources-Technology Assessment Division

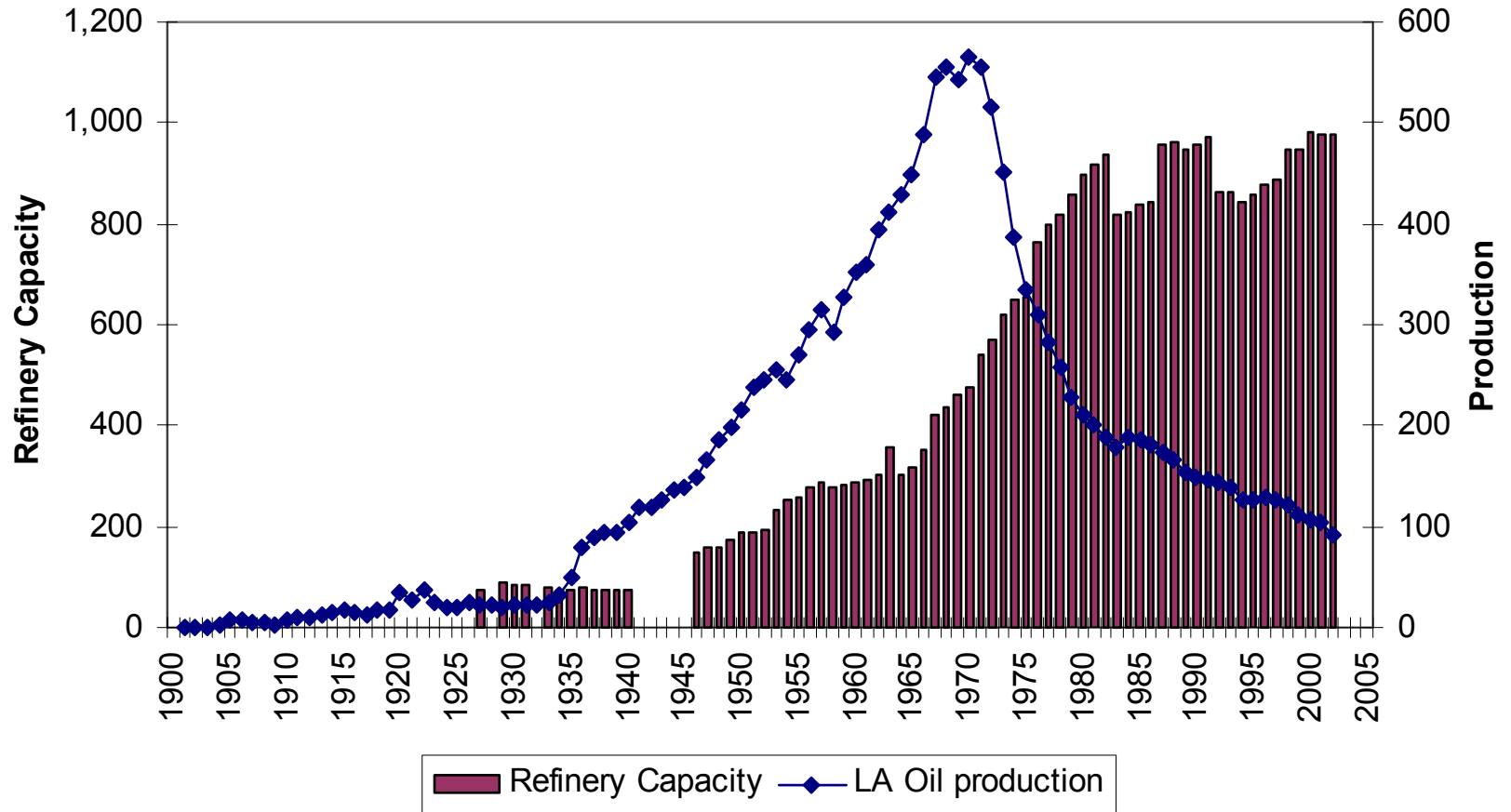


Well Completion Statistics

- An average of 620 new wells per year is needed just to maintain the current state production level.
- A 25% increase in well completions would only increase total state production by 3%.



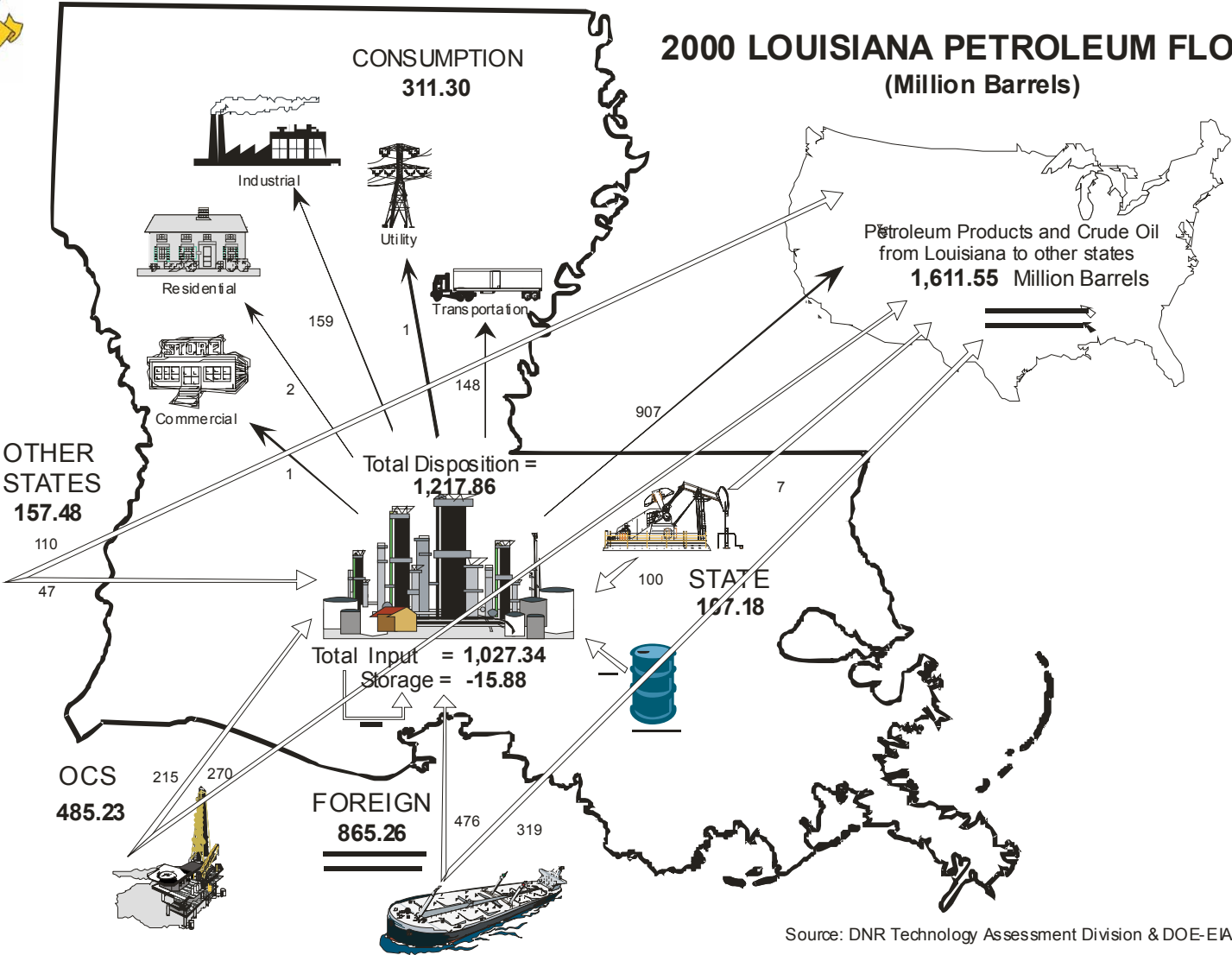
Refinery Capacity Versus State Production



Sources: Refinery Capacity, DOE-Energy Information Administration
Production, Louisiana DNR-Technology Assessment Division



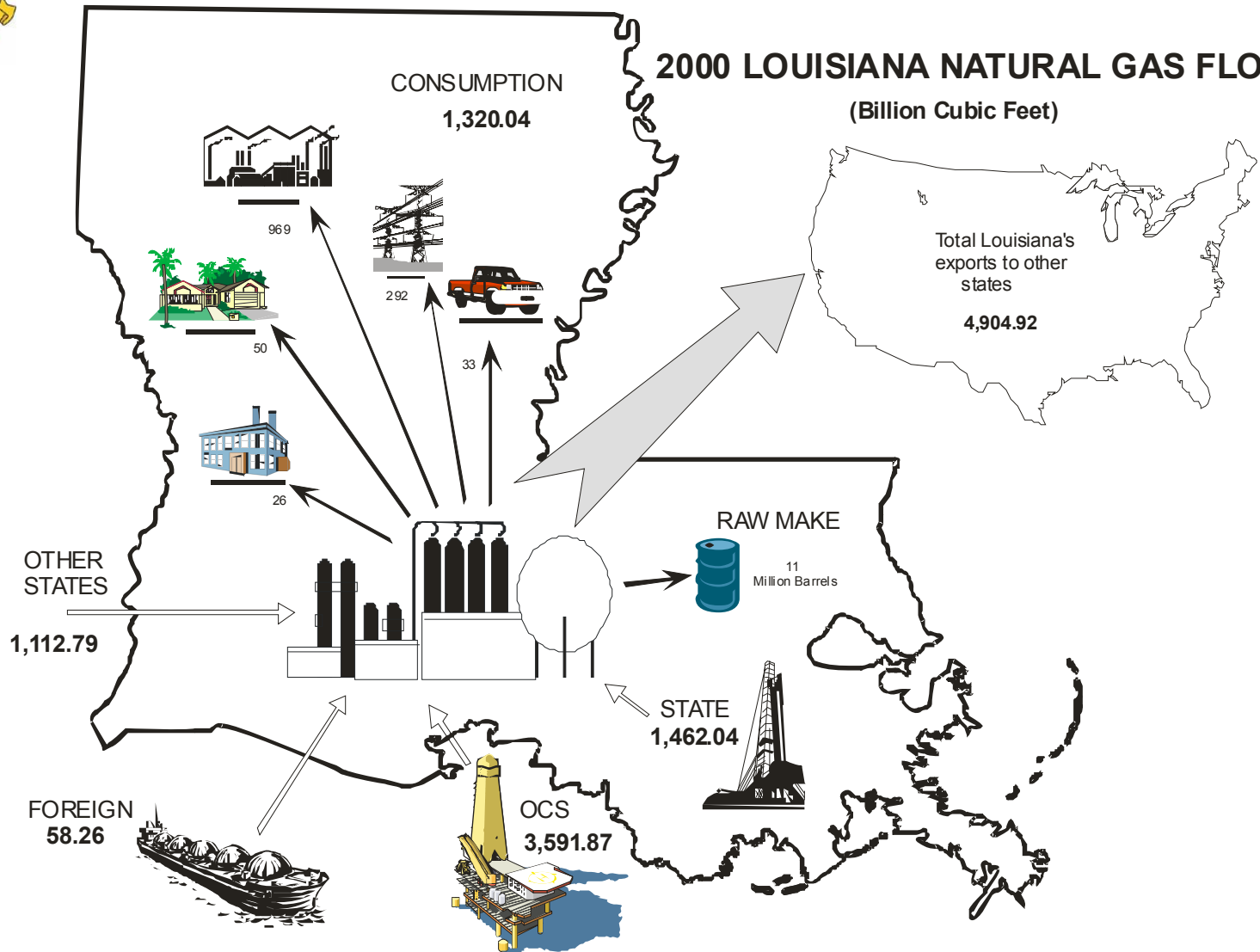
2000 LOUISIANA PETROLEUM FLOW (Million Barrels)



Source: DNR Technology Assessment Division & DOE-EIA



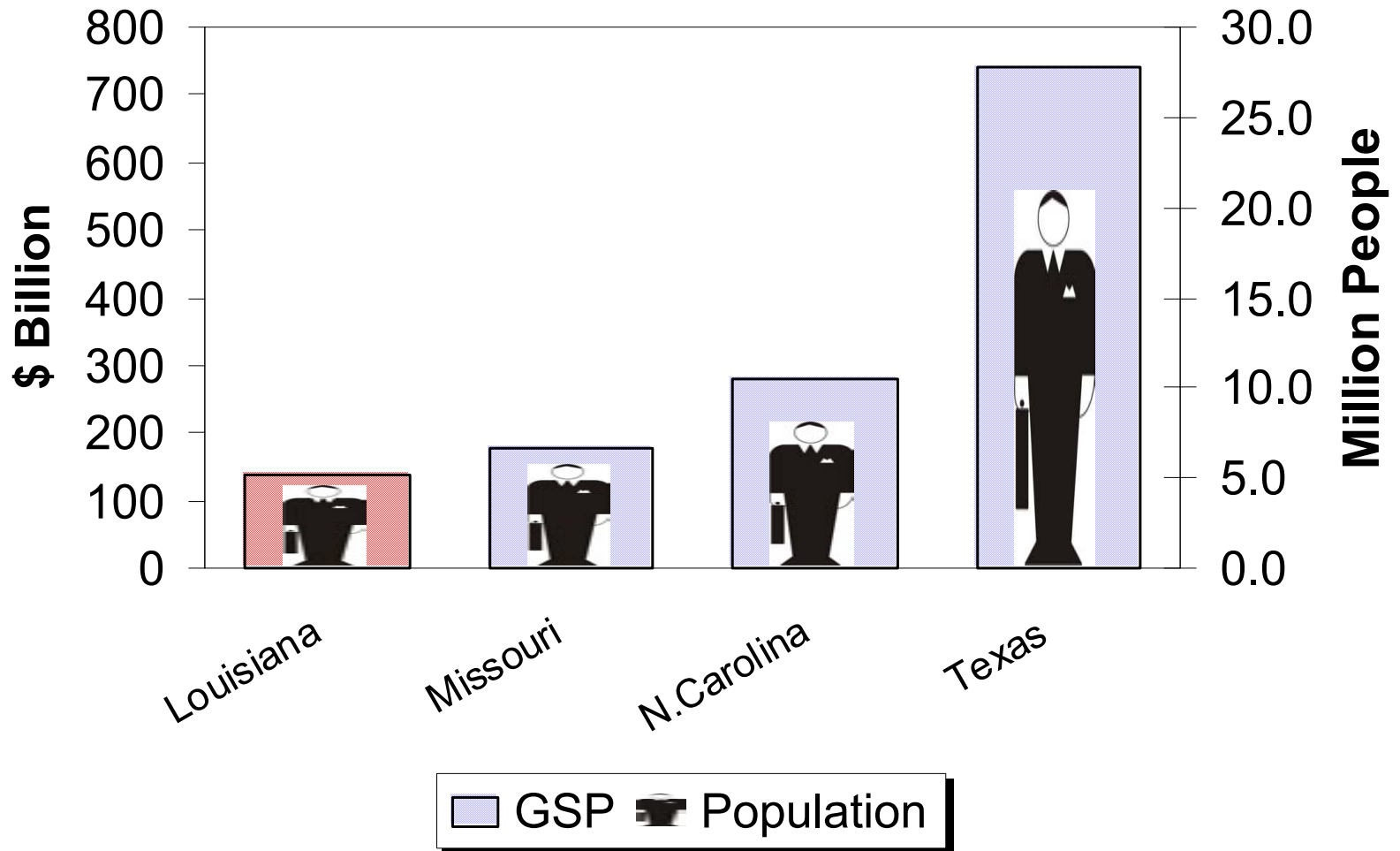
2000 LOUISIANA NATURAL GAS FLOW (Billion Cubic Feet)



SOURCE: DNR Technology Assessment Division & DOE-EIA



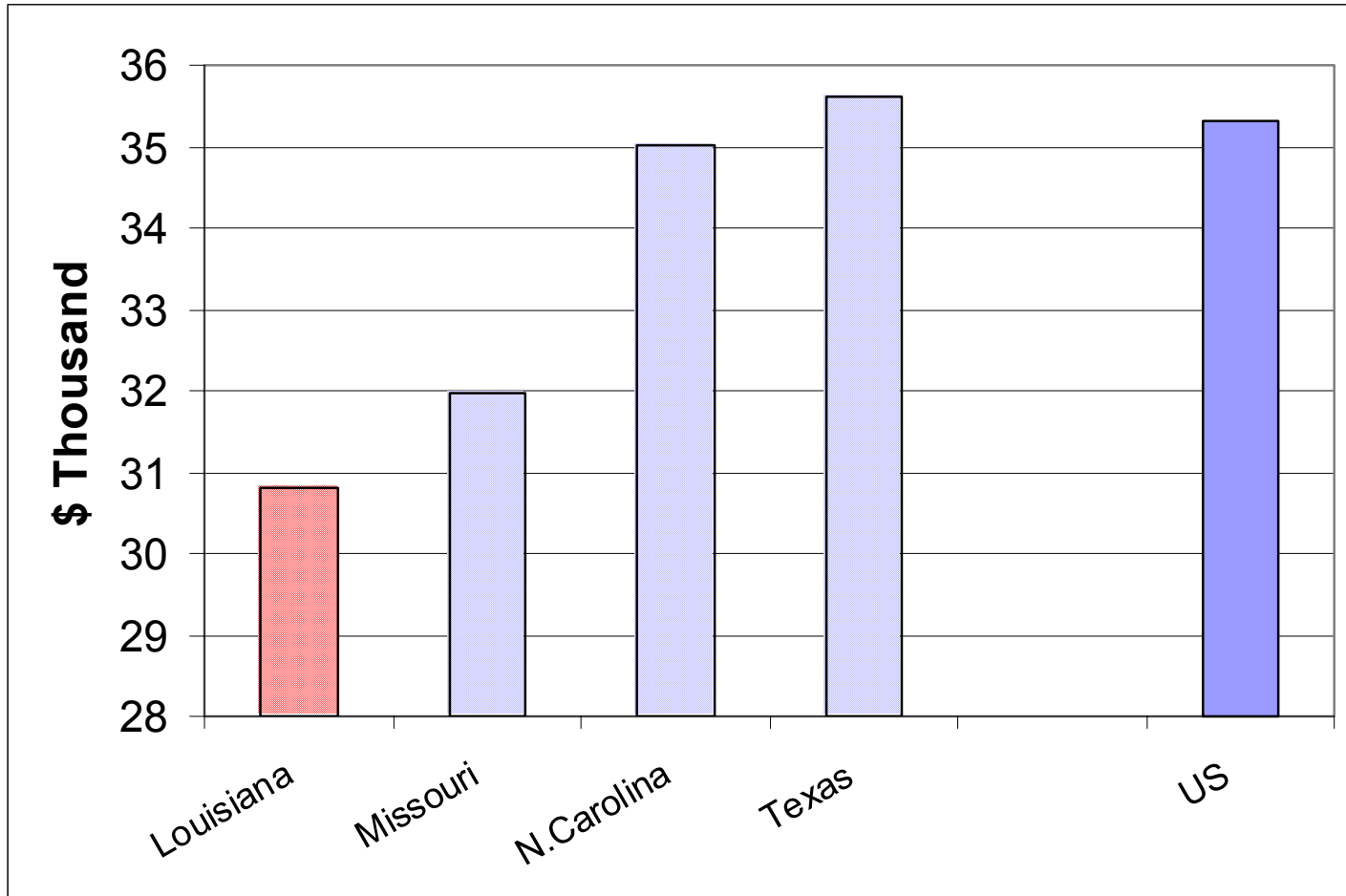
Gross State Product and Population



Sources: GSP, Department of Commerce-Bureau of Economic Analysis
Population, Northeast Midwest Institute



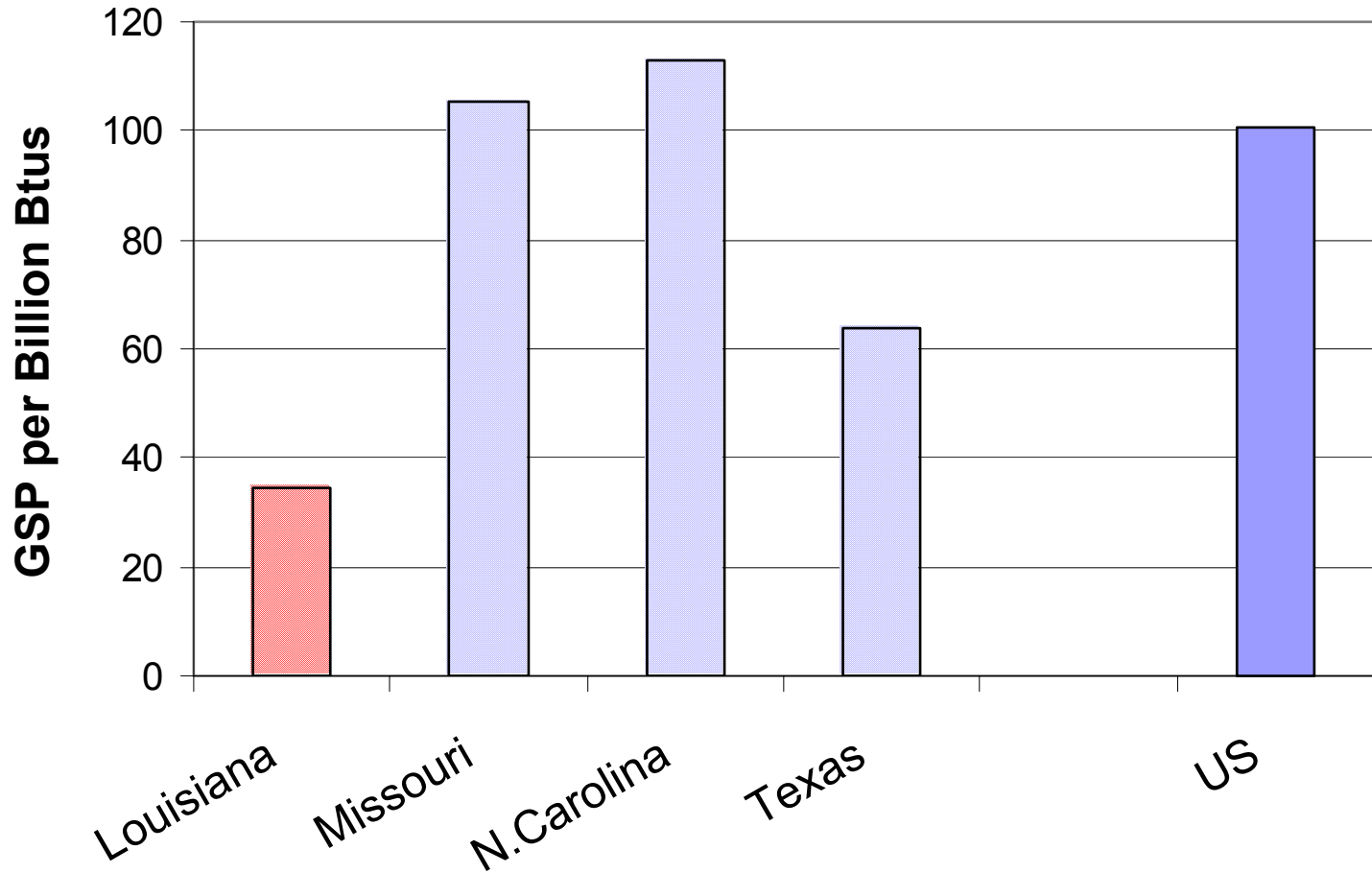
Gross State Product per Capita



Source: Department of Commerce-Bureau of Economic Analysis



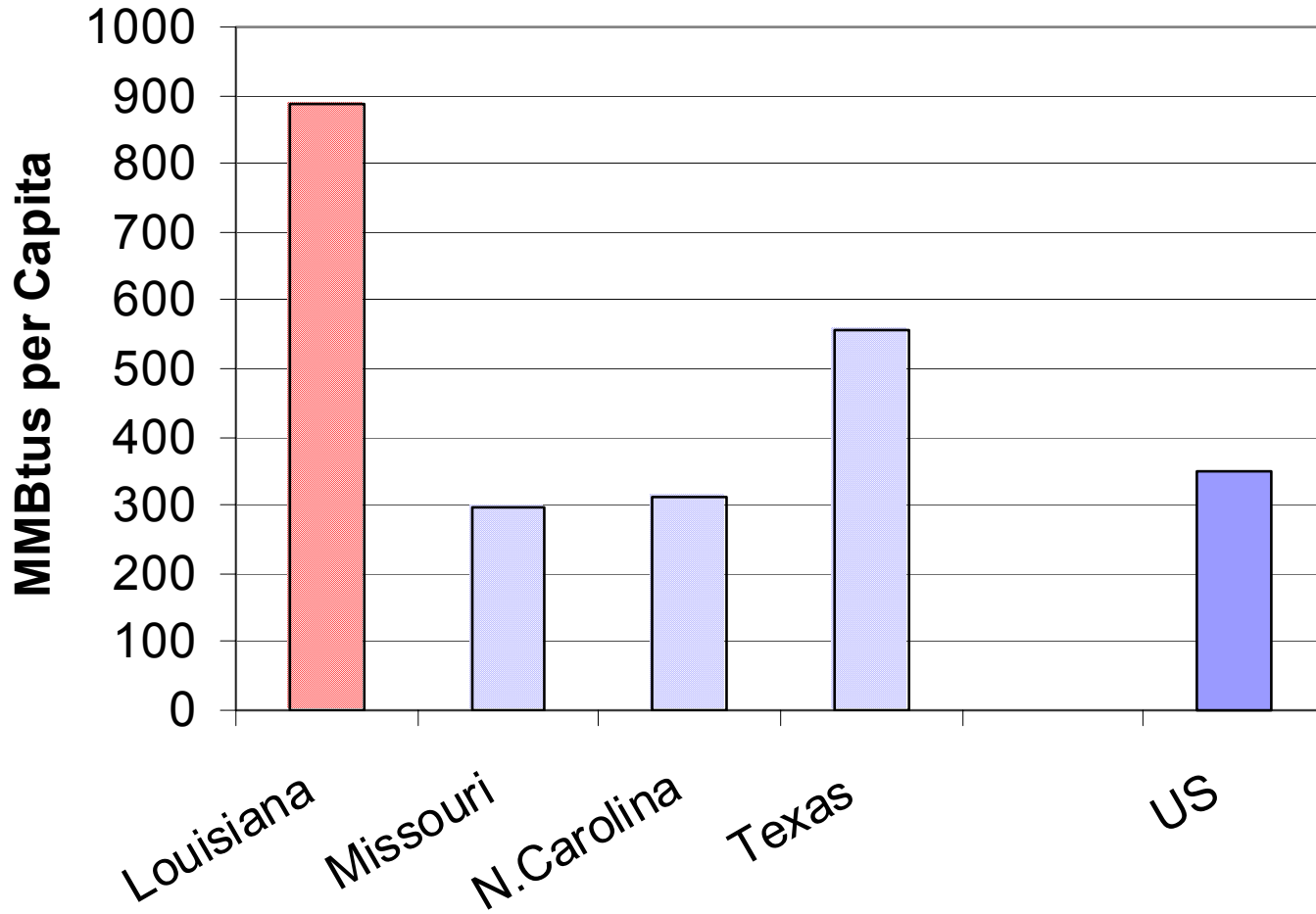
Gross State Product Per Billion BTUs



Source: Department of Commerce-Bureau of Economic Analysis



Energy Consumption per Capita

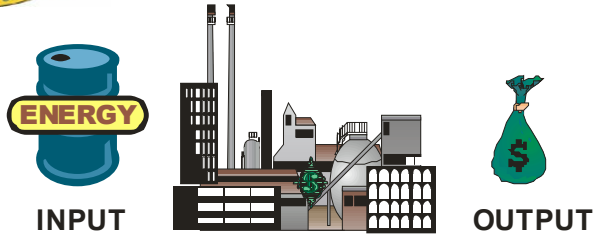


Source: Department of Energy-Energy Information Administration



State Economics Energy Dependence

Example



**ENERGY INTENSIVE INDUSTRY
OR STATE ECONOMY**

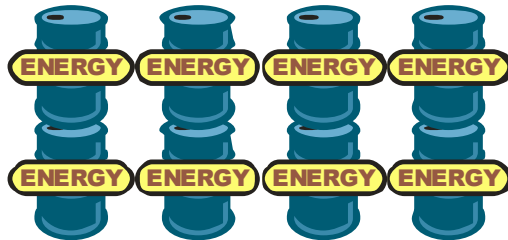


**DIVERSIFIED INDUSTRY OR
STATE ECONOMY**

**FOR SAME ECONOMIC
OUTPUT,**



Needs



Needs





Energy Issues

- Completed tasks
 - Prepared resolution supporting HB236 for reinstatement of 1994 drilling incentives for re-entry of inactive wells.
 - Prepared resolution requesting federal incentives for deep subsurface gas drilling.



Energy Issues

- Perform independent general tax structure impact study as relates to usage, efficiency, and production.
- Encourage new and expanded LNG terminals through tax exemptions and other incentives.



Energy Issues

- Develop relocation incentives for energy companies.
- Explore reforming utility regulations.



Energy Issues

- Encourage funding of Clean Power and Energy Research Consortium (CPERC) with LSU, UNO, Southern University, and possibly Nicholls State.
- Develop blueprint for university-based energy-related technology research.



Energy Issues

- Investigate streamlining permitting aspects of oil and gas operations.
- Investigate how to resolve conflicts of dual jurisdictions.
 - Redefine all parish rules and regulations; consolidate into one state permit.



Energy Issues

- Develop wholesale electricity market and merchant power plant activity.
- Encourage collaborative university-industry research efforts.
- Utilize Dept. of Natural Resources' Energy Fund for more cost-effective energy efficiency improvements.



Energy Issues

- Evaluate long-term supply, demand, price projections for electric power and natural gas.
- Evaluate power generation and transmission issues.
- Evaluate energy conservation and renewable energy issues.



Energy Issues

- Determine energy's role in state economy.
- Investigate renewable energy sources and biomass potential.
- Establish economic incentives for natural gas and crude oil production when prices drop.



Energy Issues

- Find cost-effective approach to plugging wells with potential of royalty reduction at re-entry.
- Seek legislation for reduction of ad valorem taxes for abandoned leases to be put into production.



Energy Issues

- Tax credit for production and operation in Outer Continental Shelf (OCS).
- Return depletion allowance to 27.5%.



Energy Issues

- Reduce the tangible drilling costs at a rate of 60% the first year and 40% second year.
- Create tax benefit for repair of OCS equipment (drilling rigs and supplies).



Additional Items for Consideration

1. Facilitate effective development of existing Louisiana energy resources by:
 - Prepare annual report on barriers to development.
 - Address tort reform related to environmental and class action litigation.
 - Support efforts to supply reliable, economic energy supplies to state's industries.



Additional Items for Consideration

2. Encourage investment in oil & gas and energy technology sector to create jobs by:

– Developing blueprint of funding priorities in energy related technology, including in:

Alternative fuels, biomass, cogeneration, energy efficiency, hydrogen cycle

Improved oil & gas technologies for onshore and offshore development



Additional Items for Consideration

3. Develop pro-active process for dealing with oyster leases in coastal zone.
4. Benchmark Louisiana oil & gas regulations & incentives vs. competing states.



Additional Items for Consideration

5. Prepare annual report examining barriers to energy efficiency applications including:
 - Distributed energy resources
 - Small power applications
 - Combined heat & power and cogeneration
 - Demand-side management services and peak load reduction incentives



Additional Items for Consideration

6. Develop incentive package for promoting lignite methane production.
7. Develop incentive package for promoting hydrogen technologies.
8. Develop incentive package for biomass.

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Thank You for Your Attention

**This presentation is available at the
Technology Assessment Division Website
<http://www.dnr.state.la.us/tad/data/index.html>**

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