

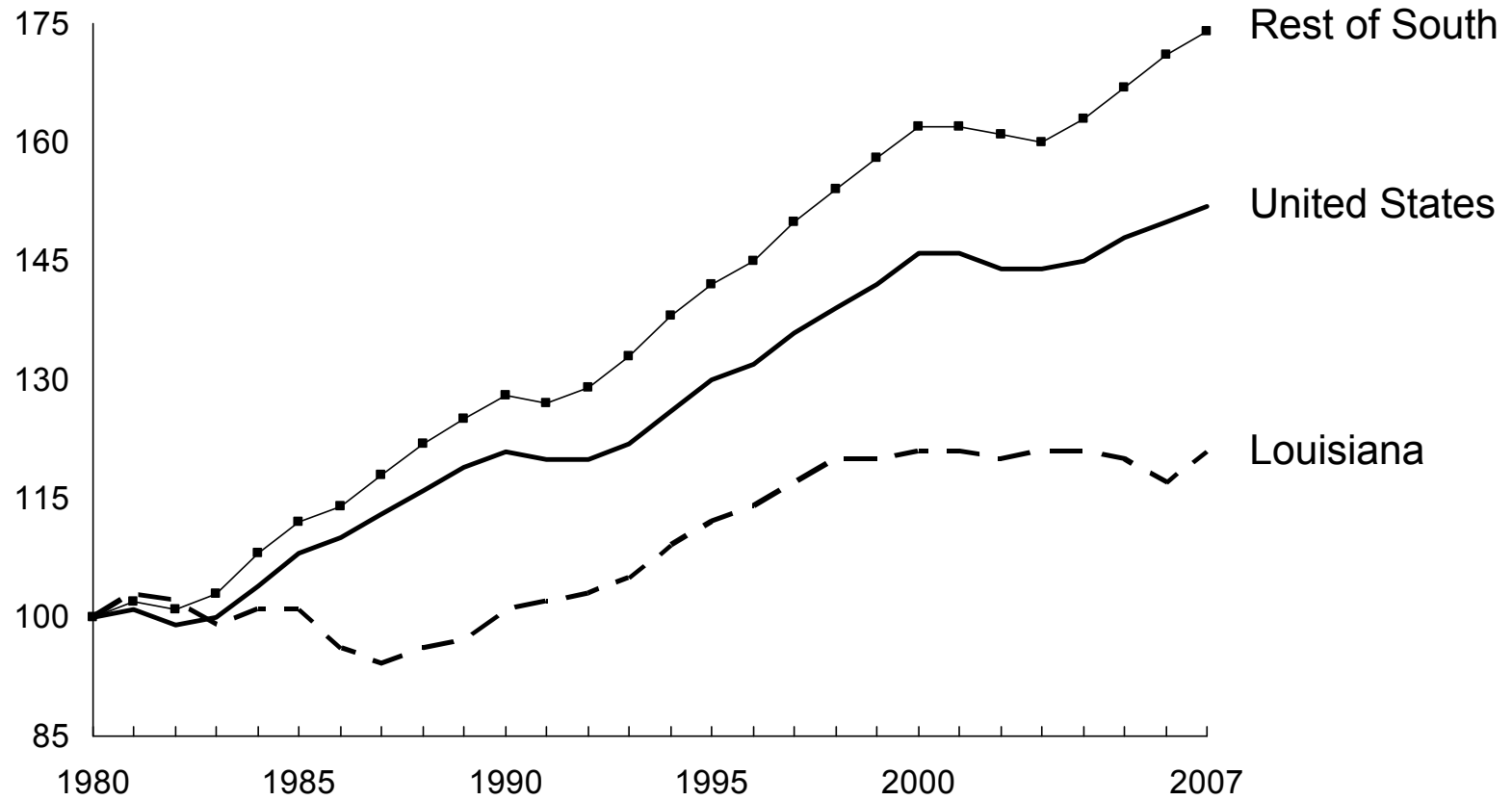


# Getting There First: Louisiana's Blue Ocean Initiative

Selected Exhibits  
March 2010

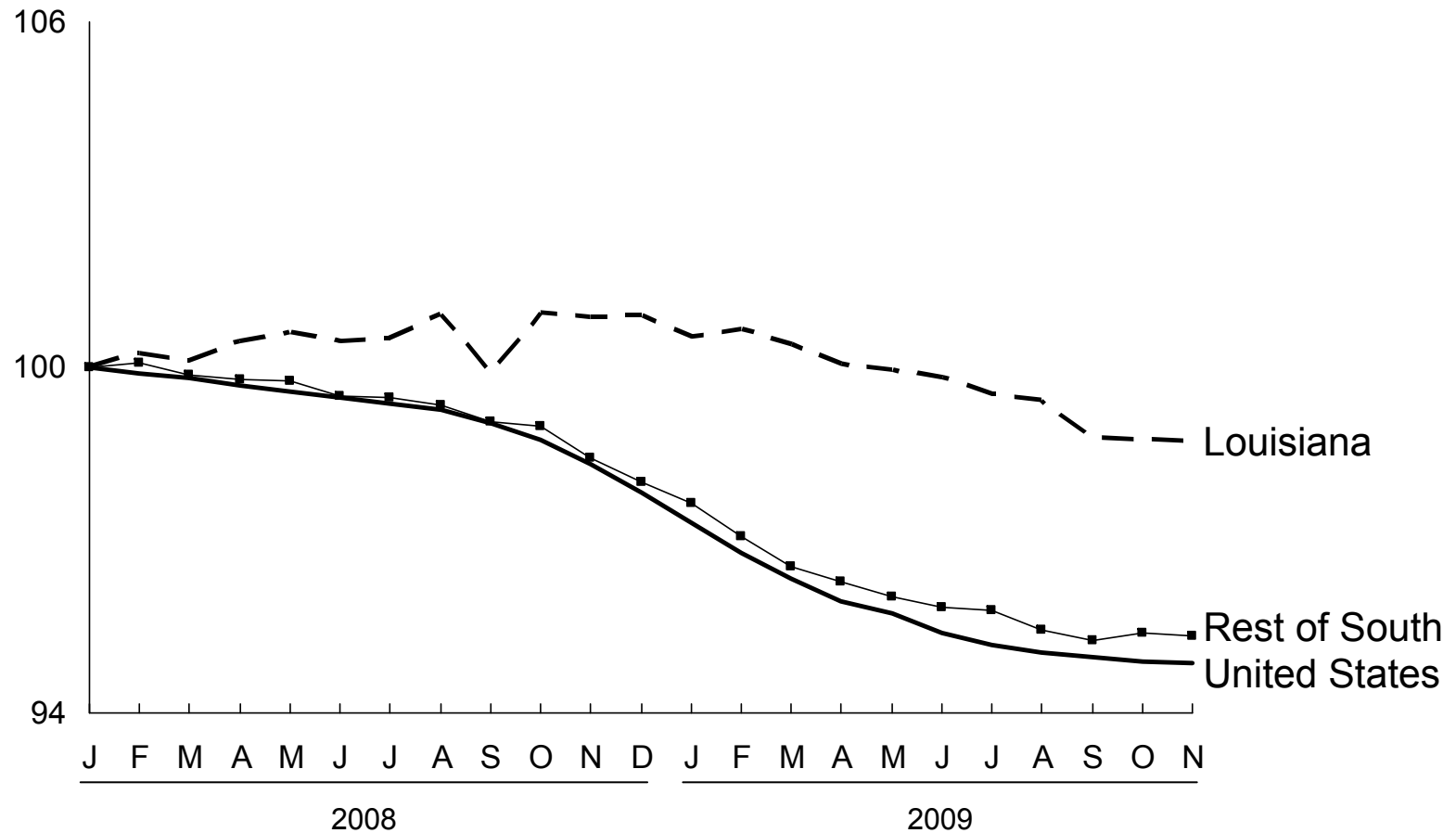
## For decades, LA's economy underperformed the South and the U.S. . . .

Total nonfarm, annual employment (100=1980)



... But Louisiana has performed relatively well since early 2008 ...

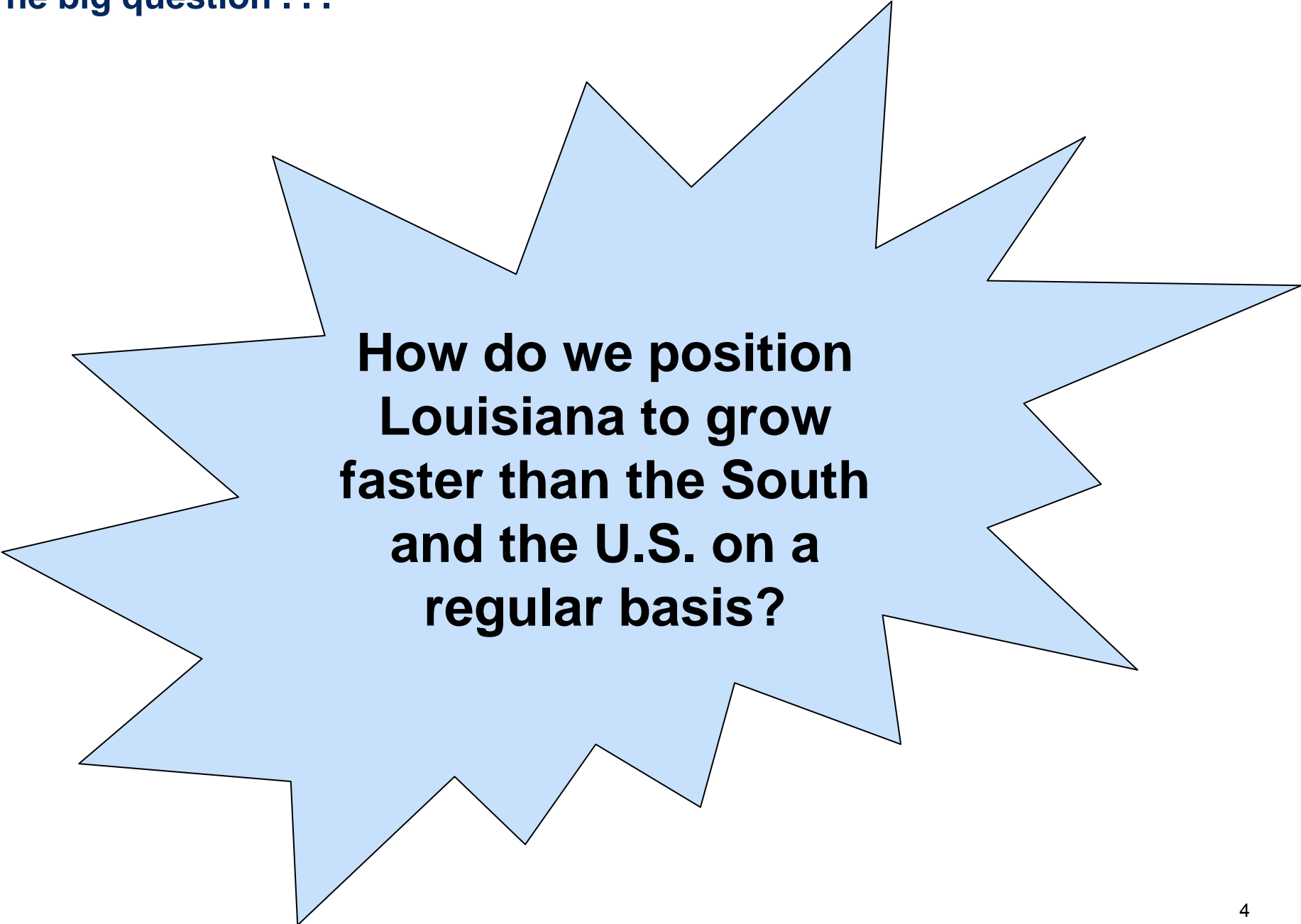
Total nonfarm, seasonally-adjusted employment (100=January 2008)



**. . . And we've been positioning our state for greater economic success**

- Workforce development reforms
- Governmental ethics reform
- Business tax reform
- Infrastructure investment
- Workers compensation reform
- National image / branding campaigns
- Targeted economic development incentives

The big question . . .

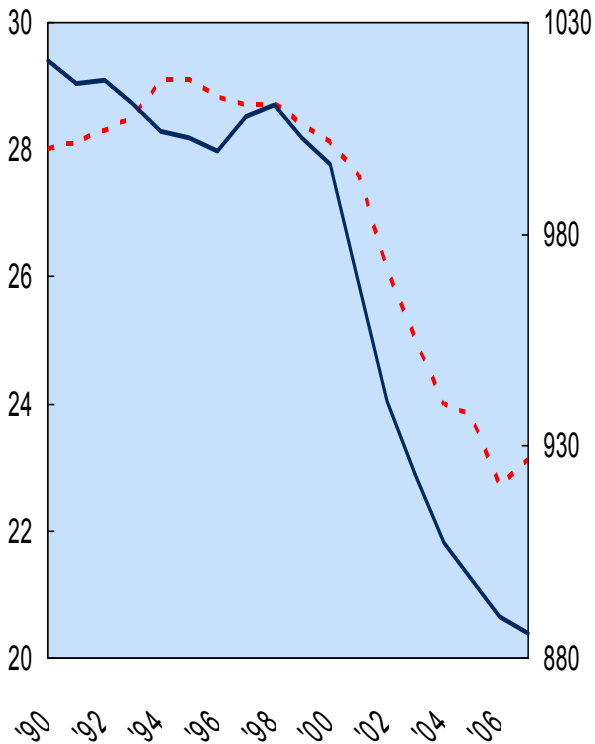


**How do we position  
Louisiana to grow  
faster than the South  
and the U.S. on a  
regular basis?**

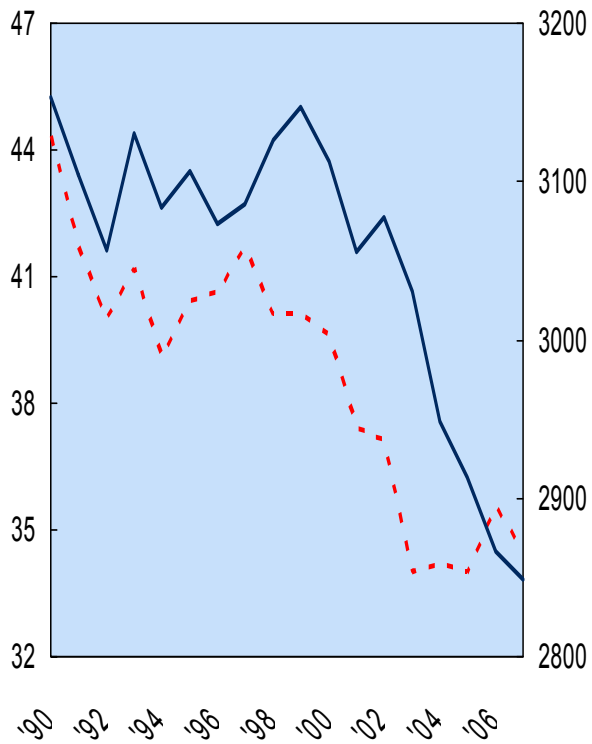
# In line with their national counterparts, several of Louisiana's primary industry sectors have been losing jobs for many years

— U.S. annual employment  
 ..... Louisiana annual employment

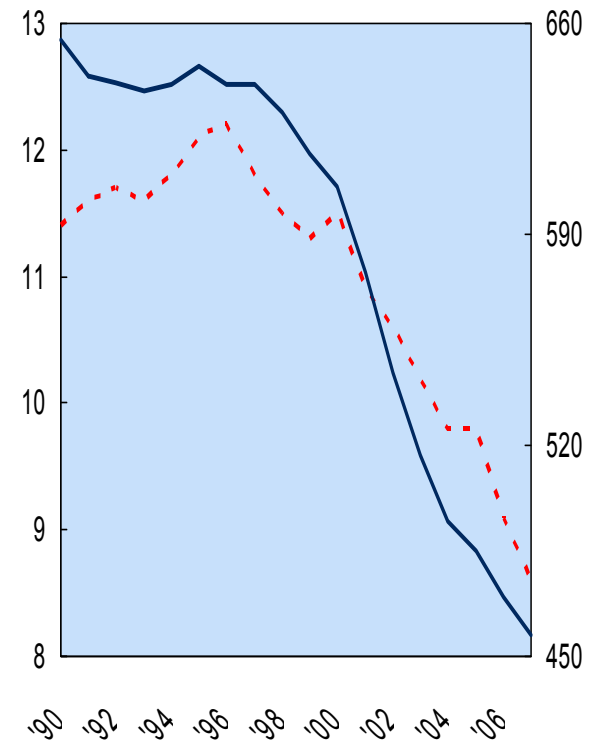
### Chemical Manufacturing



### Agriculture / farming

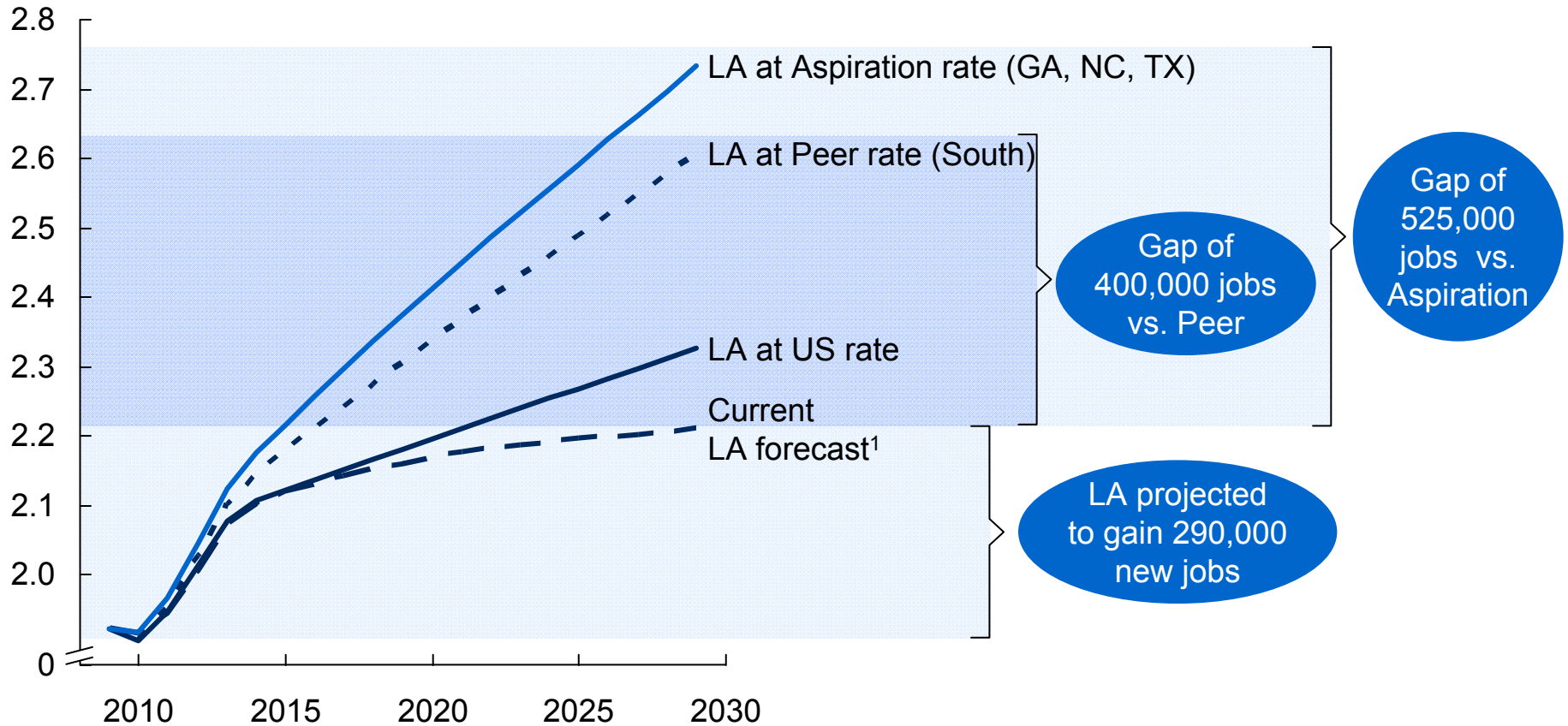


### Paper Manufacturing

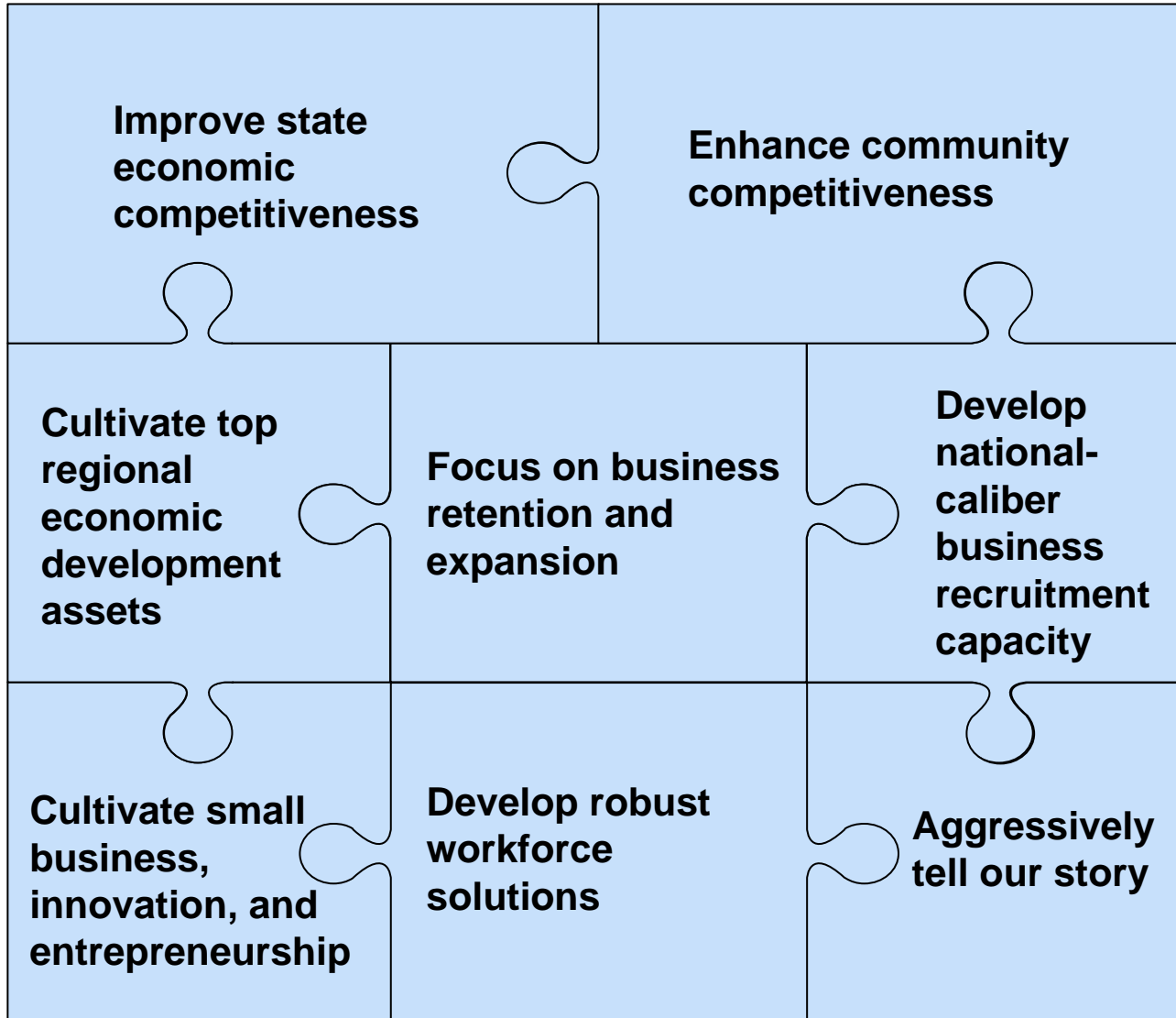


# Accordingly, some economists expect Louisiana's traditional industry mix will lead our state to underperform in job creation over the next 20 years

Cumulative state employment growth for next 20 years (millions)



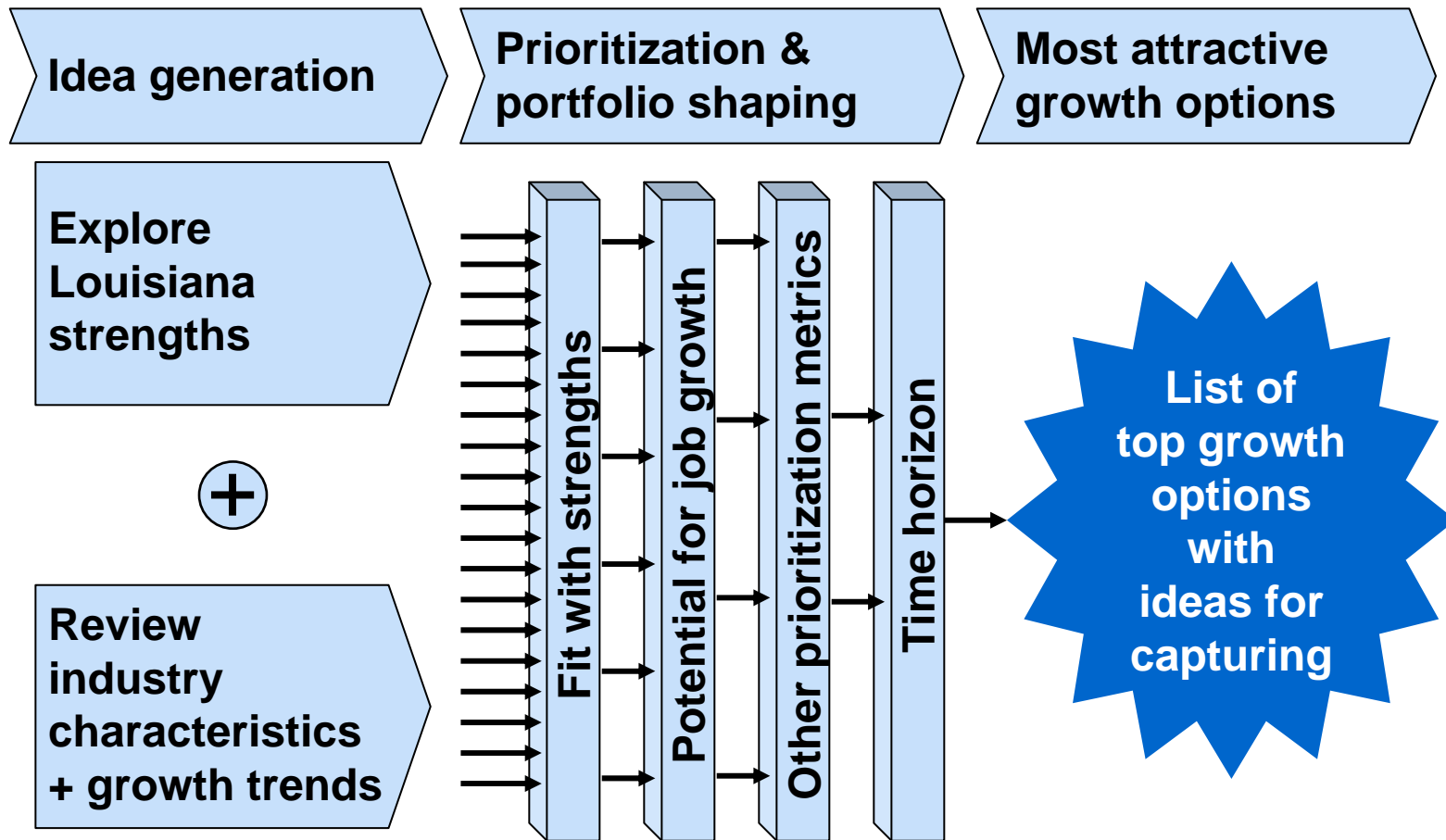
**For the last two years, we have aggressively pursued eight integrated economic development strategies**



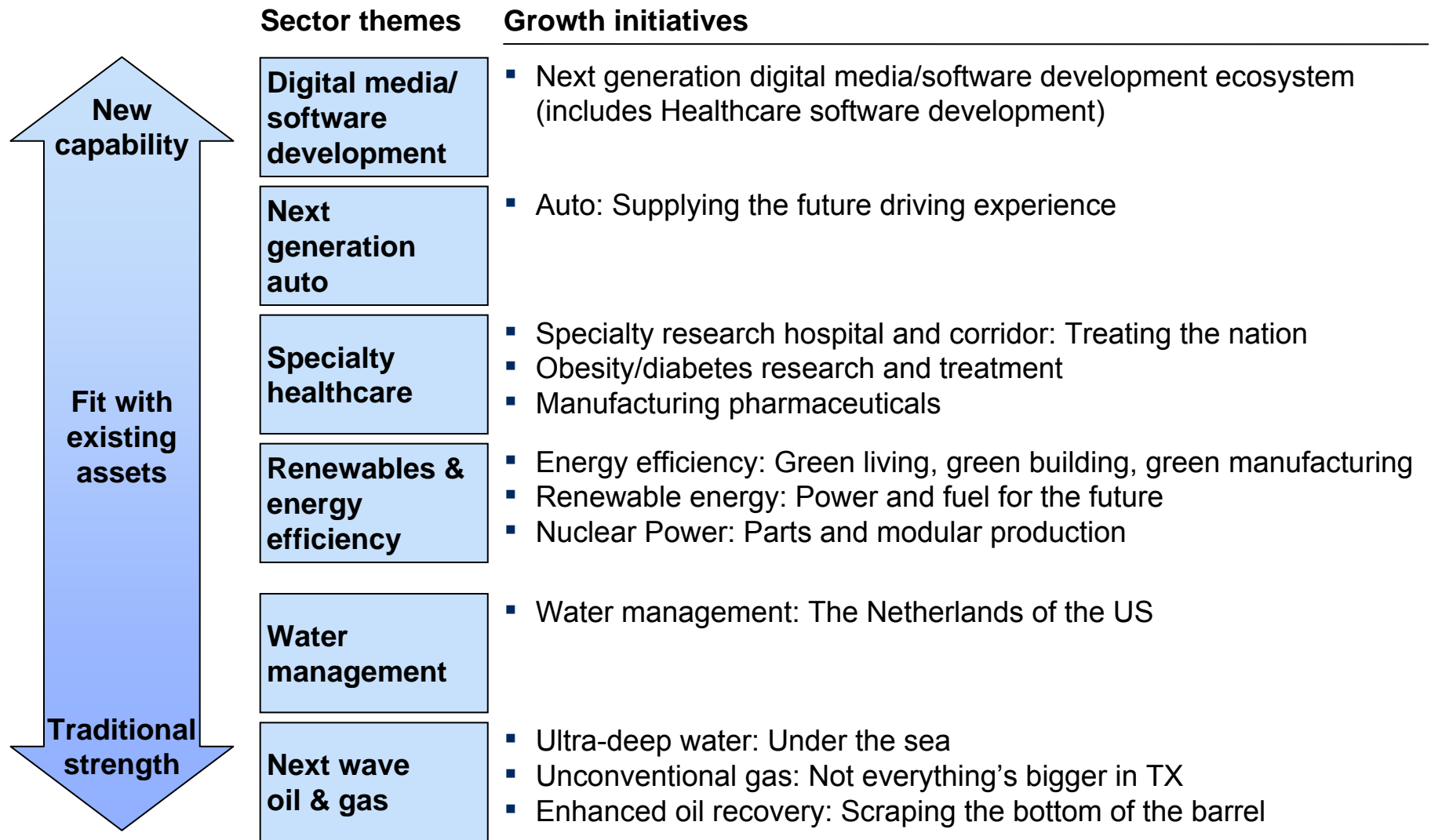
**Blue Ocean initiative will focus these strategies on high-growth industry segments**



# The process to generate and prioritize potential growth opportunities



## By combining employment growth, value of jobs, and LA's ability to win, six "Blue Ocean" themes and 12 growth initiatives were selected



# Overview of blue ocean targets

## Next generation digital media / software development



### Why exciting?

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- High expected employment growth in US in key areas (e.g., education IT, healthcare IT, digital gaming, cyber security, mobile apps)
- High-wage, skilled positions that are “sticky”
- “Buzz” factor that could transform image of Louisiana
- Potential to attract researchers, entrepreneurs, and investors that keep developing the “next wave”

### Why Louisiana?

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- Highly competitive and broad digital interactive media tax credit
- Creative culture that is attractive to young professionals
- Opportunity to capitalize on significant IT infrastructure investment
- Early business development wins in the sector (e.g., EA, Pixel Magic)

## Auto: Supplying the future driving experience



### Why exciting?

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- Poised for growth as U.S. shifts to more efficient and environmentally friendly automobiles
- Growth also expected in next generation composites and parts manufacturing
- Shift is global in scope, driven by market and regulatory factors
- New, disruptive entrants with new business models that need new facilities

### Why Louisiana?

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- Early win (V-Vehicle Co.) adds credibility and indicates willingness to tailor creative solutions
- Louisiana FastStart: one of the best workforce solutions in the U.S.
- Potential to capitalize on our petrochemical base to develop lightweight, durable composites

## Overview of blue ocean targets (continued)

### Energy efficiency: Green living, green building, green manu- facturing



#### Why exciting?

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- Potential to lead the South into the “green century” by attracting manufacturing operations
- Large projected investments in energy efficiency globally and domestically

#### Why Louisiana?

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- Momentum and rising demand exists in the state, particularly in hurricane-impacted areas
- Competitive, flexible labor
- Distinctive natural resources and transportation assets leading to a natural competitive advantage

### Renewable energy: Power and fuel for the future



#### Why exciting?

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- Large U.S. and international mandates and incentives anticipated
- Growing consumer demand to pursue green energy
- Long-term potential to reduce electricity costs with renewable fuel sources

#### Why Louisiana?

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- Wealth of natural resources for commercial stage technologies
  - Mississippi & Red Rivers for hydropower
  - Supply of timberland for wood-based biomass & biofuels
- Resources for renewable fuel sources (e.g., algae, switchgrass, sugarcane)
- High concentration of energy-intensive operations that would benefit from lower cost energy sources

## Overview of blue ocean targets (continued)

### Nuclear power: Parts and modular production



#### Why exciting?

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- Large international demand; 50-200 new plants expected globally as countries shift to energy sources with no CO2 emissions
- Substantial domestic demand with 5-10 new plants expected, could increase dramatically

#### Why Louisiana?

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- Early win in the manufacturing sector (Shaw Modular Solutions) provides opportunity to serve global demand
- Louisiana FastStart: one of the best workforce solutions in the U.S.
- Historical fabrication workforce strengths
- Distinctive logistics and transportation assets

### Specialty hospital and medical district: Treating the nation



#### Why exciting?

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- Healthcare projected to be one of highest growth sectors in U.S.
- Opportunity to fill Southeast's void of top ten ranked hospitals in certain areas
- Potential to become a medical destination that attracts both out-of-state patients and talent

#### Why Louisiana?

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- Wealth of assets concentrated in specific areas (e.g., Shreveport, Baton Rouge, New Orleans)
- Exciting opportunities to drive significant improvements (e.g., building of Academic Medical Center in New Orleans, Our Lady of the Lake / LSU partnership)
- Vibrant culture as a draw for medical travelers

## Overview of blue ocean targets (continued)

### Obesity / diabetes research and treatment



#### Why exciting?

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- Growing epidemic in U.S. with no end in sight
- Southeast is at the epicenter of the problem
- Large increases in national funding and research grants

#### Why Louisiana?

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- One of the highest rates of obesity and diabetes mortality rates in the US
- Costs expected to reach \$4.5 billion annually in Louisiana by 2018
- Pennington Biomedical Research Center is a leader in the study of obesity and preventative medicine

### Manufacturing pharmaceuticals



#### Why exciting?

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- Interest from international manufacturing operations to enter the U.S. market in lower-cost destinations
- High overall U.S. industry growth
- Worldwide growth driven by close to \$300 billion in branded drug sales going off patent by 2015

#### Why Louisiana?

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- Low-cost manufacturing environment (especially Northwest Louisiana)
- Access to distinctive transportation assets providing outlet to rest of the country and world
- Increasing momentum led by recent and potential wins (e.g., Dr. Reddy's)

## Overview of blue ocean targets (continued)

### Water management: “The Netherlands of the U.S.”



#### Why exciting?

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- Coastal restoration and defense becoming increasingly important to communities around the world
- Renewed attention to threat/impact of natural disasters
- Nascent industry domestically with no clear regional leader

#### Why Louisiana?

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- Will spend roughly \$3-4 billion a year on coastal restoration in next 20 years
- Initial base of 40 companies
- U.S. dependence on Louisiana's energy production may necessitate additional long-term commitments

### Unconventional gas: Not everything's bigger in Texas



#### Why exciting?

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- Shift from tight gas supply to discovery of substantial domestic resources
- Cutting edge drilling and fracking technologies to unleash full potential of natural gas reservoirs
- Cleaner alternative to other widely used fuels (e.g., coal)

#### Why Louisiana?

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- Haynesville Shale is the largest unconventional natural gas play in the U.S. (fourth largest in the world)
- Initial production has exceeded expectations and drilling remains very economically competitive
- Developed oil and gas industry with experienced and skilled workforce
- Potential to cultivate R&D operations that export technologies to other unconventional gas basins

## Overview of blue ocean targets (continued)

### Ultra-deep water: Under the sea



#### Why exciting?

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- New wave of exploration to capture oil deposits 10,000 feet beneath the ocean surface
- One avenue to decreased dependence on foreign oil
- New technologies have driven increased interest on the part of energy companies in unexplored areas

#### Why Louisiana?

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- Established oil and gas infrastructure to capture increased service operations new deepwater resources
- Better proximity to existing and new deepwater discoveries
- Developed oil and gas industry in the state with skilled workforce

### Enhanced Oil Recovery techniques: Scraping the bottom of the barrel



#### Why exciting?

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- Increases yields of existing oil resources leveraging new technologies
- Potentially very cost competitive
- If carbon capture technology develops, could be a use for carbon in traded carbon economy

#### Why Louisiana?

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- Large number of mature oil fields within the state
- Some legislative action in place incentivizing the use of CO2 EOR
- Potential to capitalize on non-CO2 EOR techniques by leveraging expertise of existing petrochem base
- Developed oil and gas industry with skilled workforce



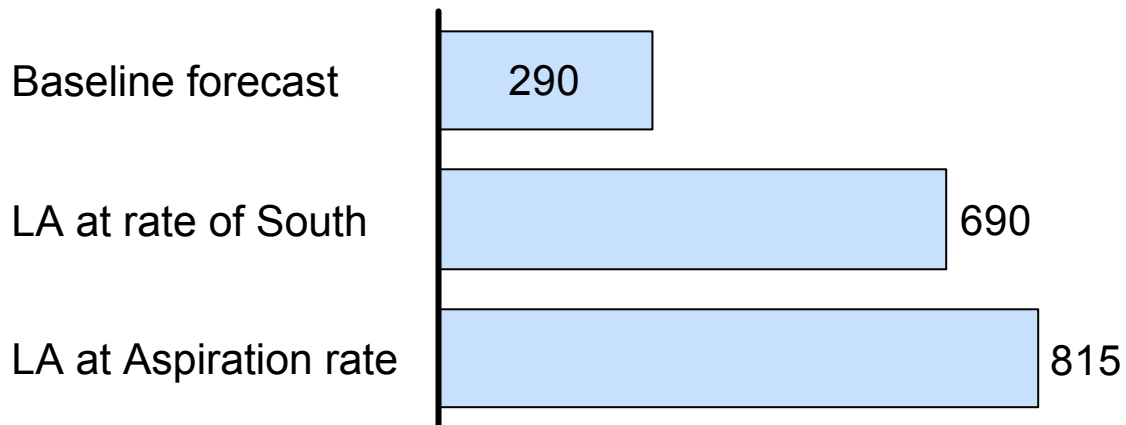
## These targets could add 225,000-400,000 extra jobs over the next 20 years

Opportunity	LA job growth 2009-29 (thousands)	
	Direct	Total
▪ Next generation digital media/software development ecosystem	▪ 11-23	▪ 25-55
▪ Water management: The Netherlands of the US	▪ 10-20	▪ 20-45
▪ Specialty research hospital and medical district: Treating the nation	▪ 10-20	▪ 20-40
▪ Ultra-deep water: Under the sea	▪ 10-15	▪ 40-55
▪ Unconventional gas: Not everything's bigger in TX	▪ 10-15	▪ 40-55
▪ Auto: Supplying the future driving experience	▪ 5-15	▪ 10-35
▪ Energy efficiency: Green building, green living, green manufacturing	▪ 5-10	▪ 10-20
▪ Renewable energy: Power and fuel for the future	▪ 8-12	▪ 20-30
▪ Enhanced Oil Recovery techniques: Scraping the bottom of the barrel	▪ 5-7	▪ 20-25
▪ Nuclear power: Parts and modular production	▪ 3-5	▪ 10-20
▪ Obesity/diabetes research and treatment	▪ 1-2	▪ 2-4
▪ Manufacturing pharmaceuticals	▪ 1-2	▪ 5-10
<b>Total</b>	<b>~80 - 145</b>	<b>~225 - 400</b>

## The blue ocean initiative can help us achieve our target growth rate while generating huge amounts of new population and tax revenues

### Total jobs added, 2009-29

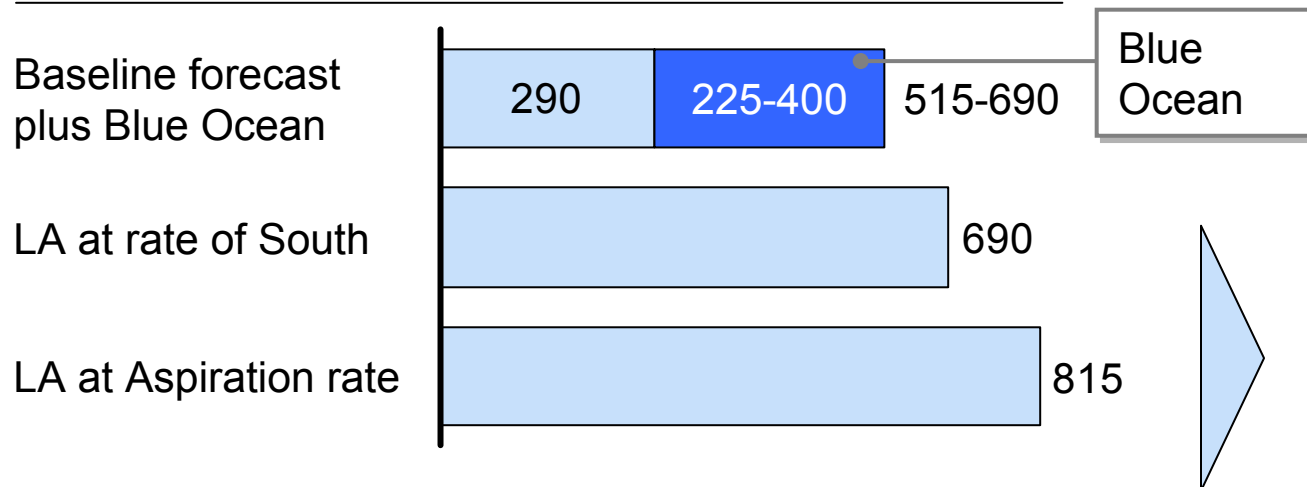
Thousands



# The blue ocean initiative can help us achieve our target growth rate while generating huge amounts of new population and tax revenues

## Total jobs added, 2009-29

Thousands



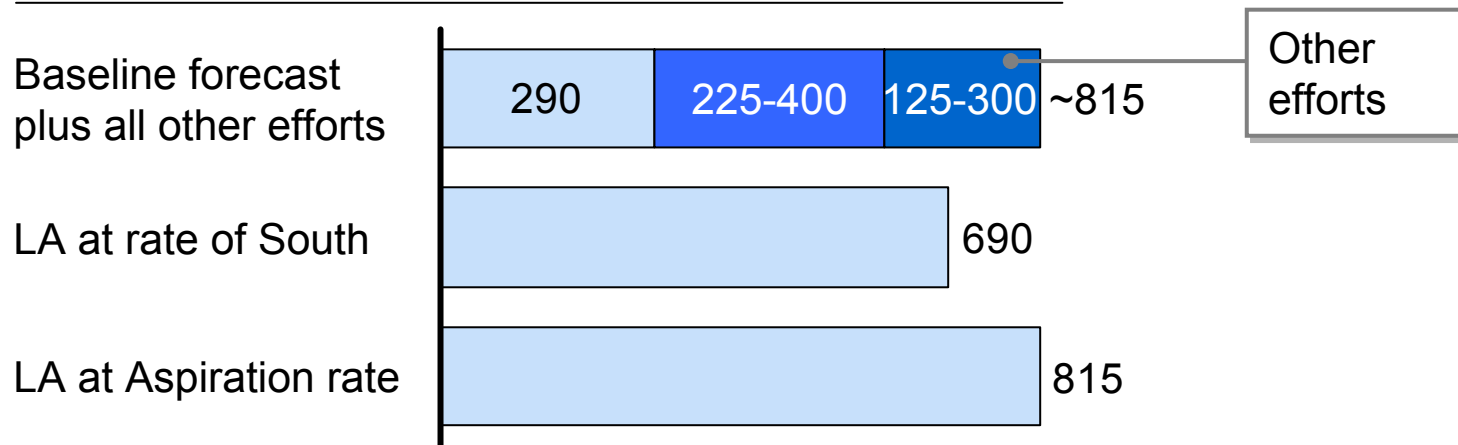
Additional economic impact over 20 years from "Blue Ocean" alone

- Billions in new State and local tax revenue
- ~515-920K in new population

# The blue ocean initiative can help us achieve our target growth rate while generating huge amounts of new population and tax revenues

## Total jobs added, 2009-29

Thousands



## We've already generated several significant wins in these target industries

	<b>Example project win</b>	<b>Significance</b>
<b>Nuclear energy manufacturing</b>	<ul style="list-style-type: none"><li>• Shaw Modular Solutions will manufacture modules for nuclear power plants in L.C.</li><li>• After manufacturing and assembly, modules will be shipped globally</li></ul>	<ul style="list-style-type: none"><li>• Opportunity for Louisiana to participate in global nuclear power renaissance with exponential growth potential</li><li>• Industry manufacturing jobs average \$50-90k; design jobs average ~\$200k</li></ul>
<b>Digital interactive media</b>	<ul style="list-style-type: none"><li>• Electronic Arts (EA) has launched global quality assurance center in Baton Rouge</li><li>• Partnership between EA, Louisiana Economic Development, and LSU</li></ul>	<ul style="list-style-type: none"><li>• Opportunity to establish competitive advantage in rapidly growing market</li><li>• Industry jobs average \$60-80k</li></ul>
<b>Advanced manufacturing</b>	<ul style="list-style-type: none"><li>• V-Vehicle announced plans to build a high-quality, fuel-efficient car in Monroe</li><li>• Plans to expand existing facility formerly owned by Guide Corp.</li></ul>	<ul style="list-style-type: none"><li>• Opportunity to participate in next generation of the U.S. auto industry</li><li>• Opportunity to build relationships with top-tier venture capital firms, including Kleiner Perkins and Google Ventures</li></ul>
<b>Pharmaceutical manufacturing</b>	<ul style="list-style-type: none"><li>• Dr. Reddy's Laboratories just announced a \$16.5MM expansion in Shreveport focused on supporting several new product lines</li></ul>	<ul style="list-style-type: none"><li>• Builds credibility of Louisiana as a competitive location for pharmaceutical manufacturing</li><li>• Could help spur trend of pharmaceutical manufacturing relocations to Louisiana from high-cost locations</li></ul>

## Where do we go from here?

- **Refine action plans through continued discussions with stakeholders and partners**
- **Establish business development teams within LED to pursue companies in target niches**
- **Align other state resources with target sectors (e.g., university research and degree programs)**
- **Coordinate implementation with the Louisiana Innovation Council and industry-based task forces**