Louisiana Competitiveness: Creating a State Economic Strategy

Professor Michael E. Porter
Harvard Business School

March 20, 2012

For further material on regional competitiveness and clusters: www.isc.hbs.edu/econ-clusters.htm
For state economic profiles: www.isc.hbs.edu/econ-statesregions.htm
The Economic Challenge for Governors in 2012

Achieving Fiscal Stability

Enhancing State Competitiveness
What is Competitiveness?

- Competitiveness is the **productivity** with which a state utilizes its human, capital, and natural endowments to create value.

- Productivity determines **wages, jobs,** and the **standard of living**.

- It is not **what** fields a state competes in that determines its prosperity, but **how productively** it competes.
Where Does Productivity Come From?

Businesses and government play different but interrelated roles in creating a productive economy

• Only businesses can create jobs and wealth
• States compete to offer the most productive environment for business
Agenda

1. How is your state doing? State Performance Scorecard

2. Why? Explaining your state’s performance, strengths, and weaknesses

3. Where to go from here? Action Steps
### Louisiana Performance Scorecard

**Prosperity**  
*GDP per Capita, 2000-2010*

- **Start Position**: 23
- **Trend**: 11
- **Current Position**: 21 (+2)

**Wages**  
*Average Private Wage, 1998-2009*

- **Start Position**: 32
- **Trend**: 9
- **Current Position**: 27 (+5)

**Job Creation**  

- **Start Position**: 47
- **Trend**: 2
- **Current Position**: 5 (+42)

**Labor Mobilization**  
*Proportion of Working Age Population in the Workforce, 2000-2010*

- **Start Position**: 49
- **Trend**: 12
- **Current Position**: 46 (+3)

**Labor Productivity**  
*GDP per Workforce Participant, 2000-2010*

- **Start Position**: 14
- **Trend**: 17
- **Current Position**: 10 (+4)

**New Business Formation**  

- **Start Position**: 38
- **Trend**: 5
- **Current Position**: 7 (+31)

**Innovation**  
*Patents per Employee, 2000-2010*

- **Start Position**: 37
- **Trend**: 49
- **Current Position**: 47 (-10)

**Cluster Strength**  
*Employment in Strong Clusters, 1998-2009*

- **Start Position**: 23
- **Trend**: 12
- **Current Position**: 13 (+10)

**Leading Clusters**  
*by employment size, 2009 (national rank)*

- Processed Food (5)
- Metal Manufacturing (8)
- Forest Products (1)
- Automotive (10)
- Production Technology (6)
Comparative State Prosperity Performance
2000 - 2010

Source: BEA. Notes: GDP in real 2005 dollars. Growth rate is calculated as compound annual growth rate.

High but declining versus U.S.
Low and declining versus U.S.
Low but rising versus U.S.
High and rising prosperity versus U.S.
Comparative State Labor Force Productivity Performance
2000-2010

U.S. GDP per Labor Force Participant
Real Growth: 0.803%

Delaware
Alaska
New York
Massachusetts
California
Hawaii
Virginia
Maryland

U.S. GDP per Labor Force Participant: $85,229

Highly productive and productivity rising versus U.S.

High but declining versus U.S.

Low and declining versus U.S.

Low but rising versus U.S.

Sources: BEA, BLS. Notes: GDP in real 2005 dollars. Growth rate is calculated as compound annual growth rate.
Comparative State Employee Productivity Performance
2000-2010

Highly productive and productivity rising versus U.S.

High but declining versus U.S.

U.S. GDP per Employed Worker
Real Growth: 1.42%

Low and declining versus U.S.

Low but rising versus U.S.

Sources: BEA, BLS. Notes: GDP in real 2005 dollars. Growth rate is calculated as compound annual growth rate.
Comparative State Innovation Performance

2000 - 2010

High and declining innovation

U.S. average Patents per 10,000 Employees: 7.77

High and improving innovation rate versus U.S.

Low and declining innovation

Why?
What Drives State Productivity?

1. Quality of the Overall Business Environment
2. Cluster Development
3. Policy Coordination among Multiple Levels of Geography/Government
Why?
What Drives State Productivity?

1. Quality of the Overall Business Environment
2. Cluster Development
3. Policy Coordination among Multiple Levels of Geography/Government
Quality of the Overall Business Environment

Context for Firm Strategy and Rivalry

Rules and incentives that encourage local competition, investment and productivity
- e.g., tax policy that encourages investment and R&D
- Flexible labor policies
- Intellectual property protection
- Antitrust enforcement

Factor (Input) Conditions

Access to high quality business inputs
- Human resources
- Capital access
- Physical infrastructure
- Administrative processes (e.g., permitting, regulatory efficiency)
- Scientific and technological infrastructure

Demand Conditions

Sophisticated and demanding local needs and customers
- e.g., Strict quality, safety, and environmental standards
- Consumer protection laws
- Government procurement of advanced technology
- Early demand for products and services

Related and Supporting Industries

Local availability of suppliers and supporting industries

- Many things matter for competitiveness
- Economic development is the process of improving the business environment to enable companies to compete in increasingly sophisticated ways
Improving the Business Environment
Common Action Items

1. Simplify and speed up regulation and permitting

2. Reduce unnecessary costs of doing business

3. Establish training programs that are aligned with the needs of the state’s businesses

4. Focus infrastructure investments on the most leveraged areas for productivity and economic growth

5. Design all policies to support emerging growth companies

6. Protect and enhance the state’s higher education and research institutions

7. Relentlessly improve the public education system, the essential foundation for productivity in the long run
Why?
What Drives State Productivity?

1. Quality of the Overall Business Environment
2. Cluster Development
3. Policy Coordination among Multiple Levels of Geography/Government
What is a Cluster?

A geographically concentrated group of interconnected companies and associated institutions in a particular field

**Traded Clusters**

- Compete to serve **national** and **international** markets
- Can locate anywhere
- 30% of employment

**Local Clusters**

- Serve almost exclusively the **local** market
- Not directly exposed to cross-regional competition
- 70% of employment
Example: Massachusetts Life Sciences Cluster

Cluster Organizations
MassMedic, MassBio, others

Specialized Business Services
Banking, Accounting, Legal

Specialized Risk Capital
VC Firms, Angel Networks

Specialized Research Service Providers
Laboratory, Clinical Testing

Analytical Instruments Cluster

Teaching and Specialized Hospitals

Biological Products

Biopharmaceutical Products

Research Organizations

Health and Beauty Products

Surgical Instruments and Suppliers

Medical Equipment

Dental Instruments and Suppliers

Ophthalmic Goods

Diagnostic Substances

Containers

Educational Institutions
Harvard, MIT, Tufts, Boston University, UMass
Example: Houston Oil and Gas Cluster

Upstream

Oil & Natural Gas Exploration & Development

Oil & Natural Gas Completion & Production

Oilfield Services/Engineering & Contracting Firms

Equipment Suppliers
(e.g., Oil Field Chemicals, Drilling Rigs, Drill Tools)

Specialized Technology Services
(e.g., Drilling Consultants, Reservoir Services, Laboratory Analysis)

Subcontractors
(e.g., Surveying, Mud Logging, Maintenance Services)

Business Services
(e.g., MIS Services, Technology Licenses, Risk Management)

Specialized Institutions
(e.g., Academic Institutions, Training Centers, Industry Associations)

Downstream

Oil Transportation

Oil Trading

Oil Refining

Oil Distribution

Oil Wholesale Marketing

Oil Retail Marketing

Gas Gathering

Gas Processing

Gas Trading

Gas Transmission

Gas Distribution

Gas Marketing

Example: Houston Oil and Gas Cluster

Oil & Natural Gas

Exploration & Development

Completion & Production

Oilfield Services/Engineering & Contracting Firms

Equipment Suppliers

(e.g., Oil Field Chemicals, Drilling Rigs, Drill Tools)

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Business Services

(e.g., MIS Services, Technology Licenses, Risk Management)

Specialized Institutions

(e.g., Academic Institutions, Training Centers, Industry Associations)
Strong Clusters Drive Regional Performance

- Specialization in **strong clusters**
- **Breadth** of industries within each cluster
- Strength in **related clusters**
- Presence of a region’s clusters in **neighboring regions**

- **Job** growth
- Higher **wages**
- Higher **patenting** rates
- Greater **new business** formation, growth and survival

*On average, cluster strength is much more important (78.1%) than cluster mix (21.9%) in driving regional performance in the U.S.*

Clusters and Economic Diversification

Note: Clusters with overlapping borders or identical shading have at least 20% overlap (by number of industries) in both directions.
The Evolution of Regional Economies
San Diego

Climate and Geography
U.S. Military

Hospitality and Tourism
Transportation and Logistics
Power Generation
Communications Equipment
Analytical Instruments
Education and Knowledge Creation

Bioscience Research Centers

Aerospace Vehicles and Defense

Sporting Equipment
Information Technology
Medical Devices
Biotech / Pharmaceuticals

Traded Cluster Composition of the Louisiana Economy

Overall change in the Louisiana Share of US Traded Employment: 0.01%

Louisiana Overall Share of US Traded Employment: 1.34%


2012 – State Competitiveness – Rich Bryden

Employees 13,000 =
Louisiana Job Creation in Traded Clusters

1998 to 2009

Net traded job creation, 1998 to 2009:
-9,797

Indicates expected job creation given national cluster growth.*

* Percent change in national benchmark times starting regional employment. Overall traded job creation in the state, if it matched national benchmarks, would be 20,866. Source: Prof. Michael E. Porter, Cluster Mapping Project, Institute for Strategy and Competitiveness, Harvard Business School; Richard Bryden, Project Director.
Louisiana Wages in Traded Clusters vs. National Benchmarks

# Productivity Depends on How a State Competes, Not What Industries It Competes In

On average, cluster strength is much more important (78.1%) than cluster mix (21.9%) in driving regional performance in the U.S.

### State Traded Wage versus National Average

<table>
<thead>
<tr>
<th>State</th>
<th>State Traded Wage versus National Average</th>
<th>Cluster Mix Effect</th>
<th>Relative Cluster Wage Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Connecticut</td>
<td>+27,171</td>
<td>7,028</td>
<td>20,142</td>
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<tr>
<td>New York</td>
<td>+24,102</td>
<td>3,628</td>
<td>20,474</td>
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<tr>
<td>Massachusetts</td>
<td>+16,169</td>
<td>4,391</td>
<td>11,778</td>
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<tr>
<td>New Jersey</td>
<td>+13,535</td>
<td>3,761</td>
<td>9,774</td>
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<tr>
<td>California</td>
<td>+9,573</td>
<td>349</td>
<td>9,224</td>
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<tr>
<td>Maryland</td>
<td>+6,651</td>
<td>2,496</td>
<td>4,155</td>
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<tr>
<td>Washington</td>
<td>+5,652</td>
<td>2,692</td>
<td>2,960</td>
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<td>Virginia</td>
<td>+5,319</td>
<td>1,617</td>
<td>3,702</td>
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<td>Illinois</td>
<td>+2,658</td>
<td>16</td>
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<td>Colorado</td>
<td>+1,662</td>
<td>2,416</td>
<td>-754</td>
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<td>Texas</td>
<td>+352</td>
<td>2,494</td>
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<td>Delaware</td>
<td>+164</td>
<td>11,060</td>
<td>-10,896</td>
</tr>
<tr>
<td>Alaska</td>
<td>-930</td>
<td>-2,417</td>
<td>1,487</td>
</tr>
<tr>
<td>Pennsylvania</td>
<td>-3,970</td>
<td>-995</td>
<td>-2,975</td>
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<tr>
<td>Louisiana</td>
<td>-4,280</td>
<td>95</td>
<td>-4,375</td>
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<td>Georgia</td>
<td>-5,322</td>
<td>1,102</td>
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<td>New Hampshire</td>
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<td>374</td>
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<td>Arizona</td>
<td>-7,021</td>
<td>1,149</td>
<td>-8,169</td>
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<td>Kansas</td>
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<td>1,149</td>
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<td>Wyoming</td>
<td>-8,057</td>
<td>2,241</td>
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<td>Michigan</td>
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<td>North Carolina</td>
<td>-9,245</td>
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<td>Ohio</td>
<td>-9,284</td>
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<td>-6,788</td>
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<tr>
<td>Rhode Island</td>
<td>-9,791</td>
<td>-2,290</td>
<td>-7,501</td>
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<tr>
<td>Oregon</td>
<td>-10,359</td>
<td>1,102</td>
<td>9,257</td>
</tr>
<tr>
<td>Missouri</td>
<td>-10,427</td>
<td>1,425</td>
<td>9,002</td>
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<tr>
<td>Alabama</td>
<td>-10,934</td>
<td>-3,563</td>
<td>-7,371</td>
</tr>
<tr>
<td>Florida</td>
<td>-11,007</td>
<td>-1,559</td>
<td>-9,448</td>
</tr>
<tr>
<td>Wisconsin</td>
<td>-11,722</td>
<td>-3,516</td>
<td>-8,206</td>
</tr>
<tr>
<td>Nebraska</td>
<td>-11,777</td>
<td>241</td>
<td>-12,018</td>
</tr>
<tr>
<td>Utah</td>
<td>-11,992</td>
<td>2,072</td>
<td>-14,064</td>
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<tr>
<td>Tennessee</td>
<td>-12,172</td>
<td>-3,156</td>
<td>-9,016</td>
</tr>
<tr>
<td>Indiana</td>
<td>-12,554</td>
<td>-4,840</td>
<td>-7,714</td>
</tr>
<tr>
<td>Vermont</td>
<td>-13,368</td>
<td>-1,572</td>
<td>-11,796</td>
</tr>
<tr>
<td>Oklahoma</td>
<td>-13,572</td>
<td>497</td>
<td>-14,069</td>
</tr>
<tr>
<td>Nevada</td>
<td>-14,277</td>
<td>-2,365</td>
<td>-11,911</td>
</tr>
<tr>
<td>North Dakota</td>
<td>-14,394</td>
<td>1,004</td>
<td>-15,397</td>
</tr>
<tr>
<td>South Carolina</td>
<td>-15,276</td>
<td>-5,067</td>
<td>-10,209</td>
</tr>
<tr>
<td>Arkansas</td>
<td>-15,378</td>
<td>-4,560</td>
<td>-10,818</td>
</tr>
<tr>
<td>Hawaii</td>
<td>-16,043</td>
<td>-12,555</td>
<td>-3,487</td>
</tr>
<tr>
<td>New Mexico</td>
<td>-16,123</td>
<td>-288</td>
<td>-15,835</td>
</tr>
<tr>
<td>Kentucky</td>
<td>-16,215</td>
<td>-5,024</td>
<td>-11,191</td>
</tr>
<tr>
<td>Maine</td>
<td>-16,379</td>
<td>-968</td>
<td>-15,412</td>
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<tr>
<td>Iowa</td>
<td>-16,606</td>
<td>-2,721</td>
<td>-13,885</td>
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<td>West Virginia</td>
<td>-16,645</td>
<td>-3,894</td>
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<tr>
<td>Idaho</td>
<td>-18,671</td>
<td>-787</td>
<td>-17,884</td>
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<tr>
<td>Mississippi</td>
<td>-19,942</td>
<td>-5,291</td>
<td>-14,651</td>
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<tr>
<td>Montana</td>
<td>-20,073</td>
<td>-2,259</td>
<td>-17,815</td>
</tr>
<tr>
<td>South Dakota</td>
<td>-20,968</td>
<td>289</td>
<td>-21,257</td>
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LQ, or Location Quotient, measures the state’s share in cluster employment relative to its overall share of U.S. employment. An LQ > 1 indicates an above average employment share in a cluster.
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<td><strong>Innovation</strong> Patents per Employee, 2000-2010</td>
<td>37</td>
<td>49</td>
<td>47, -10</td>
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<td><strong>Cluster Strength</strong> Employment in Strong Clusters, 1998-2009</td>
<td>23</td>
<td>12</td>
<td>13, +10</td>
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**Leading Clusters** by employment size, 2009 (national rank)
- Processed Food (5)
- Metal Manufacturing (8)
- Forest Products (1)
- Automotive (10)
- Production Technology (6)
Cluster Development
Common Action Items

1. Build on the state’s **existing and emerging clusters** rather than chase “hot” fields

2. Pursue economic diversification **within clusters** and **across related clusters**

3. Create a private sector-led **cluster upgrading program** with matching support for participating private sector cluster organizations
   - Government should **listen** and **remove obstacles** to cluster improvement

4. **Align** other state economic policies and programs with clusters

Clusters provide a framework for organizing the implementation of many public policies and public investments to achieve greater effectiveness.
Why?
What Drives State Productivity?

1. Quality of the Overall Business Environment
2. Cluster Development
3. Policy Coordination among Multiple Levels of Geography/Government
Geographic and Governmental Influences on Productivity

- Nation
- State
- Metropolitan Areas
- Rural Regions
- Neighboring State
- Neighboring State
The economies of states are often an aggregation of distinct economic areas with differing circumstances.
Wage Performance in Louisiana Metropolitan Areas

U.S. Average Private Wage: $42,403
Louisiana Average Private Wage: $37,452

Growth Rate of Private Wages, 1998-2009

Source: Census CBP, authors' analysis. Note: “Bubble” size in chart is proportional to employment in 2009.
Employment Performance in Louisiana Metropolitan Areas

Louisiana Growth Rate of Employment: 0.35%
U.S. Growth Rate of Employment: 0.52%

U.S. Average Private Wage: $42,403
Louisiana Average Private Wage: $37,452

New Orleans MSA
Baton Rouge MSA
Lake Charles MSA
Shreveport MSA
Monroe MSA
Alexandria MSA
Houma MSA
Rest of State
Lafayette MSA

Source: Census CBP, authors' analysis. Note: “Bubble” size in chart is proportional to employment in 2009.
Geographic and Governmental Influences on Productivity

1. **Influence and access** federal policies and programs

2. **Work with each metro area** to develop a **prioritized strategic agenda**

3. **Connect** rural regions with proximate urban areas

4. **Integrate** policies and infrastructure planning with neighbors
**Agenda**

1. How is your state doing?  
   State Performance Scorecard

2. Why?  
   Explaining your state’s performance, strengths, and weaknesses

3. Where to go from here?  
   Action Steps
Agenda

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Biggest Action Item of All
Create an Economic Strategy

- What is the **distinctive competitive position** of the state or region given its location, legacy, existing strengths, and potential strengths?
  - What unique value as a business location?
  - For what types of activities and clusters?

Define the Value Proposition

- **Develop Unique Strengths**
  - What **elements of the business environment** can be unique strengths relative to peers/neighbors?
  - What **existing and emerging clusters** represent local strengths?

- **Achieve and Maintain Parity with Peers**
  - What **weaknesses** must be addressed to remove key constraints and achieve parity with peer locations?

- Economic strategy requires **setting priorities** and **moving beyond** long lists of separate recommendations.
How Should States Compete for Investment?

**Tactical (Zero Sum Competition)**

- Focus on attracting **new** investments
- Compete for **every** plant
- Offer **generalized** tax breaks
- Provide **subsidies** to lower / offset business costs
- Every city and sub-region **for itself**
- **Government** drives investment attraction

**Strategic (Positive Sum Competition)**

- Also support greater local investment by **existing** companies
- Reinforce areas of **specialization** and emerging cluster strength
- Provide state support for training, infrastructure, and institutions with **enduring benefits**
- Improve the **efficiency of doing business**
- Harness efficiencies and coordination **across jurisdictions**, especially with neighbors
- Government and the private sector **collaborate** to build cluster strength
Harnessing the New Process of Economic Development

Competitiveness is the result of both **top-down** and **bottom-up processes** in which many companies and institutions take responsibility.

<table>
<thead>
<tr>
<th>Old Model</th>
<th>New Model</th>
</tr>
</thead>
<tbody>
<tr>
<td>• <strong>Government</strong> drives economic development through policy decisions and incentives</td>
<td>• Economic development is a <strong>collaborative process</strong> involving government at multiple levels, companies, teaching and research institutions, and private sector organizations</td>
</tr>
</tbody>
</table>
Effective economic policy also requires **coordination within government**
Summary

• The goal of economic strategy is to enhance **productivity**. This is the only way to create jobs, high income, and wealth in the long run.

• Improving **productivity** and **innovation** must be the guiding principles for every state policy choice.

• Improving productivity does not require new public resources, but **using existing resources better**.

• Improving productivity demands that governors **mobilize the private sector**, not rely on government alone.

• Economic strategy is non-partisan and about getting **results**.
Next Steps

1. Reach out to your team

2. Reach out to the business community


The prosperity of the U.S. economy will depend more on the success of states in improving competitiveness than what happens in Washington.