New Jersey Competitiveness: Creating a State Economic Strategy

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

Professor Michael E. Porter
Harvard Business School

August 2011
The Economic Challenge for Governors in 2011

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
# New Jersey Performance Scorecard

<table>
<thead>
<tr>
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<tr>
<td><strong>Prosperity</strong></td>
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<td>GDP per Capita, 1999-2009</td>
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<td><strong>Wages</strong></td>
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<td>Average Private Wage, 1998-2009</td>
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<tr>
<td><strong>Job Creation</strong></td>
<td>18</td>
<td>34</td>
<td>28 -10</td>
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<tr>
<td><strong>Labor Mobilization</strong></td>
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<td>11</td>
<td>22 +13</td>
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<td>Proportion of Working Age Population in the Workforce, 1999-2010</td>
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<tr>
<td><strong>Labor Productivity</strong></td>
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<td>GDP per Worker, 1999-2009</td>
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<td><strong>New Business Formation</strong></td>
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<td>39 -19</td>
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<tr>
<td><strong>Innovation</strong></td>
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<td>44</td>
<td>13 -5</td>
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<td>Patents per Employee, 1999-2009</td>
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<tr>
<td><strong>Cluster Strength</strong></td>
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<td>Employment in Strong Clusters, 1998-2009</td>
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<tr>
<td><strong>Leading Clusters</strong></td>
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<tr>
<td>by employment size, 2009</td>
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<tr>
<td>(national rank)</td>
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<tr>
<td>- Business Services (7)</td>
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<td>- Distribution Services (4)</td>
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<td>- Financial Services (8)</td>
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<tr>
<td>- Transportation and Logistics (8)</td>
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<tr>
<td>- Biopharmaceuticals (2)</td>
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</table>

*State Rank*  |
- 1-10  |
- 11-20  |
- 21-30  |
- 31-40  |
- 41-50  |

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Comparative State Prosperity Performance
1999 - 2009

Source: Bureau of Economic Analysis. Note: Growth rate is calculated as compound annual growth rate.

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Comparative State Labor Mobilization Performance

1999-2010

High but declining versus U.S.

High Labor Force Participation and Participation rising versus U.S.

Low and declining versus U.S.

Low but rising versus U.S.

Notes: Source BLS.
Comparative State Labor Productivity Performance
1999-2009

-0.5% 0.0% 0.5% 1.0% 1.5% 2.0% 2.5% 3.0% 3.5%

Highly productive and productivity rising versus U.S.

U.S. GDP per Worker
Real Growth: 1.09%

High but declining versus U.S.

Low and declining versus U.S.

Low but rising versus U.S.

Source: Bureau of Economic Analysis. Notes: Growth rate is calculated as compound annual growth rate; worker = labor force participant.

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Comparative State Innovation Performance
1999 - 2009

Patents per 10,000 Workers, 2009

Growth Rate of Patents per 10,000 Workers, 1999 to 2009

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

- **Health and Beauty Products**
- **Surgical Instruments and Suppliers**
- **Medical Equipment**
- **Dental Instruments and Suppliers**
- **Ophthalmic Goods**
- **Diagnostic Substances**
- **Containers**

- **Teaching and Specialized Hospitals**
- **Biological Products**
- **Biopharmaceutical Products**

- **Research Organizations**

- **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

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

Upstream

- Oil & Natural Gas Exploration & Development
  (e.g., Oil Field Chemicals, Drilling Rigs, Drill Tools)

- 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)

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

- 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)
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

Bioscience Research Centers

Hospitality and Tourism

Transportation and Logistics

Power Generation

Aerospace Vehicles and Defense

Communications Equipment

Analytical Instruments

Education and Knowledge Creation

Information Technology

Medical Devices

Biotech / Pharmaceuticals

New Jersey Job Creation in Traded Clusters
1998 to 2009

Net traded job creation, 1998 to 2009: -20,243

* Percent change in national benchmark times starting regional employment. Overall traded job creation in the state, if it matched national benchmarks, would be +35,273

New Jersey Wages in Traded Clusters vs. National Benchmarks

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

<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>
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<td>Oregon</td>
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<td>South Dakota</td>
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<td>-21,257</td>
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</table>

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


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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.
## New Jersey Performance Scorecard

### Prosperity
**GDP per Capita, 1999-2009**

- **Position in 1998-1999**: 5
- **Trend**: 21
- **Current Position**: 6

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

- **Position in 1998-1999**: 3
- **Trend**: 29
- **Current Position**: 4

### Job Creation

- **Position in 1998-1999**: 18
- **Trend**: 34
- **Current Position**: 28

### Labor Mobilization
**Proportion of Working Age Population in the Workforce, 1999-2010**

- **Position in 1998-1999**: 35
- **Trend**: 11
- **Current Position**: 22

### Labor Productivity
**GDP per Worker, 1999-2009**

- **Position in 1998-1999**: 5
- **Trend**: 30
- **Current Position**: 6

### New Business Formation

- **Position in 1998-1999**: 20
- **Trend**: 39
- **Current Position**: 39

### Innovation
**Patents per Employee, 1999-2009**

- **Position in 1998-1999**: 8
- **Trend**: 44
- **Current Position**: 13

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

- **Position in 1998-1999**: 4
- **Trend**: 13
- **Current Position**: 2

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

- Business Services (7)
- Distribution Services (4)
- Financial Services (8)
- Transportation and Logistics (8)
- Biopharmaceuticals (2)

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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
Clustering provides 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
- 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 New Jersey Metropolitan Areas

Average Private Wage, 2009

- New Jersey Average Private Wage: $51,426
- U.S. Average Private Wage: $42,403
- New York MSA* Growth Rate of Employment: 2.95%
- Philadelphia MSA* Growth Rate of Employment: 3.01%
- Allentown MSA*
- Ocean City MSA
- Atlantic City MSA
- Vineland MSA
- Trenton MSA

Growth Rate of Private Wages, 1998-2009

- U.S. Growth Rate of Employment: 3.01%

*New Jersey portion only
Source: Census CBP, authors’ analysis. Note: “Bubble” size in chart is proportional to employment in 2009.
Employment Performance in New Jersey Metropolitan Areas

Average Private Wage, 2009

U.S. Average Private Wage: $42,403

New Jersey Average Private Wage: $51,426

New York MSA*

Allentown MSA*

Atlantic City MSA

Ocean City MSA

Trenton MSA

Philadelphia MSA*

Vineland MSA

New Jersey Growth Rate of Wages: 0.20%

U.S. Growth Rate of Wages: 0.52%

Growth Rate of Private Wages, 1998-2009

*New Jersey portion only

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

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

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

- **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.

**Old Model**
- **Government** drives economic development through policy decisions and incentives

**New Model**
- Economic development is a **collaborative process** involving government at multiple levels, companies, teaching and research institutions, and private sector organizations
Example: Organizing for Economic Development

South Carolina Council on Competitiveness

- Chaired by a business leader and reporting to the governor
- Convenes working groups, provides direction and strength, holds working groups accountable

Executive Committee

Coordinating Staff

Cluster Committees

- Automotive
- Hydrogen / Fuel Cells
- Textiles
- Apparel
- Agriculture
- Travel and Tourism

Task Forces

- Cluster Activation
- Research / Investment
- Distressed / Disadvan. Areas
- Education / Workforce
- Start-ups / Local Firms
- Measuring Progress

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.