
Texas Industry Cluster Initiative Background

Industry Cluster Initiative

On October 20, 2004 Governor Rick Perry announced his vision of building the future economy of state of Texas. That vision, which focuses on building competitive advantage through six target industry clusters, continues Governor Perry's commitment to job creation and economic development. Job creation, one of Governor Perry's top priorities, is the only sure path to future prosperity and to funding the state's important priorities like education and health care. Furthermore, in 2003 the Texas Legislature passed SB 275 calling for the development of strategies to strengthen the competitiveness of key industry clusters. As a result, the state is required to identify these industry clusters, including a number of specified industries, and develop strategies to address economic growth and quality of life issues.

Introduction to the Texas Profile

The target competitive clusters are based on the 2001 Cluster Mapping project, a multiyear effort to statistically define clusters and analyze regional economies in the United States by Dr. Michael Porter of the Institute for Strategy and Competitiveness at Harvard Business School, and on the work of Dr. Ray Perryman in *Texas Our Texas*, a 2002 report on the Texas' economy. The continuing work over the past two years by the Council on Competitiveness and the Institute for Strategy and Competitiveness on the Clusters of Innovation project has clearly articulated the key strategic role that strong regional economies play in growing prosperity for a state and its citizens.

While not every industry cluster is a target cluster, other clusters link to the target clusters that drive economic growth. Defined by the products and services of the cluster rather than geography, target clusters compete across regions and tend to be the core drivers of regional economic competitiveness. Other local clusters involve activities serving almost exclusively local markets. Local clusters employ the majority of people in any regional economy, so their efficiency is critical if competitiveness in core clusters is to turn into regional prosperity. However, these local clusters cannot prosper over the long run without success in the core clusters.

Rationale

Public economic development resources are limited and must be deployed in a manner to optimize prospects for success. In both the Porter and Perryman studies of industry clusters, the process of identifying key targets involved extensive empirical analysis to determine the resources and linkages which point to probable success, and detailed industrial evaluation to identify those sectors with sufficient growth potential to merit recruitment. The six target industry clusters were selected on the basis of industry linkages and cluster analysis, occupational workforce requirements and availability, support requirements, and an evaluation of future industrial prospects. While the identified clusters are not the only areas of potential growth, they represent those clusters

that offer the best promise of success for overall economic growth and for bringing the high-paying jobs of the future to Texas.

Through building a competitive advantage in these industry clusters, Texas will be better positioned to compete nationally and internationally for jobs of the 21st century. By focusing on these clusters, Texas will be able to maximize its limited resources to monitor specific regional workforce and economic conditions and to develop plans of action to bring new jobs to Texas.

Objective

The objective of the Industry Cluster Initiative is to stimulate long-term sustained growth and focus the allocation of state resources on key industry clusters that economists say will be the engine of job creation and economic development in the 21st century.

Industry Cluster Defined

SB275, Government Code, Section 481.001 (6)

Industry cluster means a concentration of businesses and industries in a geographic region that are interconnected by the markets they serve, the products they produce, their suppliers, the trade associations to which their employees belong, and the educational institutions from which their employees or prospective employees receive training.

Requirement to Establish Strategy

SB275, Government Code, Section 481.022 (6)

The office shall establish a statewide strategy to address economic growth and quality of life issues, a component of which is based on the identification and development of industry clusters provide businesses and local communities with timely and useful research and data services.

Organization and Management

SB275, Government Code, Section 481.0295 (d)

The office shall work with target sectors, private sector organizations, key state agencies, local governments, local economic development organizations, and higher education and training institutions to develop strategies to strengthen competitiveness of industry clusters.

Requirement to Target Advanced Technology Industries

SB 275, Government Code, Section 481.0296 (a)

The office shall coordinate state efforts to attract, develop, or retain technology industries in this state in certain sectors, including:

- 1. the semiconductor industry;*
- 2. information and computer technology;*
- 3. microelectromechanical systems;*
- 4. manufactured energy systems;*
- 5. nanotechnology; and*
- 6. biotechnology.*

Competitive Assessment

Industry cluster teams were convened to guide the comprehensive competitive assessment of the cluster and to recommend the allocation of state resources. The industry cluster teams represent a broad cross-section of public and private sector stakeholders across Texas and are comprised of those individuals who best represent the core function, product and technology within the cluster. Each cluster team's industry chair led teams throughout the process and was instrumental in submitting the final competitive assessment reports and recommendations to the governor. Each assessment proposes how to allocate resources based upon existing and predicted market forces and conditions, as well as a legislative plan to address any regulatory, taxation or other business climate issues.

Cluster teams will continue to monitor the competitiveness of the industry cluster, to coordinate team activities with the state to efficiently react to opportunities and threats affecting the cluster, and to make recommendations to increase the capacity for innovation, thereby accelerating the growth of the cluster. Through their contribution to long-range planning, these teams will assist in the retention, expansion and recruitment efforts of each target cluster.

Texas' Target Industry Clusters

Advanced Technologies and Manufacturing, including four sub-clusters:

- Nanotechnology and Materials
- Micro-electromechanical Systems
- Semiconductor Manufacturing
- Automotive Manufacturing

Aerospace and Defense

Biotechnology and Life Sciences

Information and Computer Technology, including three sub-clusters:

- Communications Equipment
- Computing Equipment and Semiconductors
- Information Technology

Petroleum Refining and Chemical Products

Energy, including three sub-clusters:

- Oil and Gas Production
- Power Generation and Transmission
- Manufactured Energy Systems