



# OLR RESEARCH REPORT

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## REGIONAL TECHNOLOGY DEVELOPMENT CENTERS

By: John Rappa, Chief Analyst

You asked us to compare state laws authorizing the establishment of regional technology development centers.

### SUMMARY

Laws in at least eight states provide for the establishment of regional technology development centers, places where a region's scientists, entrepreneurs, and venture capitalists can collaborate on developing new technology, establishing businesses to manufacture it, and training people to make or apply the technology. All envision public and private organizations, including colleges and universities, joining to establish and operate the centers, but differ in how they are established and funded.

Taken together, the eight laws contain the following six components that address how centers are established and funded.

- **Centers' Purposes and Functions.** All the laws delineate the centers' purposes and functions, but the range and mix varies from state to state. For example, Indiana's centers may nurture commercially viable high technology ventures, increase venture capital flows, and expand high technology related educational opportunities. New York's centers focus mainly on providing information and technical assistance needed to develop commercially viable high technology products and techniques.

- **Eligible Operators.** Some of the laws specify the types of organizations that may establish a center. Most of these allow only nonprofit organizations to establish centers, but Texas’ allows these or for profit organizations to do so in collaboration with a public or private college or university.
- **Designated Agency.** Most of the states’ laws designate a state public or quasi-public economic development entity to approve proposed centers.
- **Center Selection Process and Criteria.** Some laws explicitly provide a mechanism and criteria for submitting and approving proposed centers, respectively.
- **Center Funding.** Most of the states’ laws authorize grants or loans for operating the centers.

Attachment 1 summarizes each state’s statutory provisions.

## OVERVIEW

Table 1 compares the types of provisions found in the states’ laws. As the table shows, New York’s law has the most. It specifies the centers’ scope of services, makes the New York State Office of Science and Technology responsible for approving centers, specifies the procedure and criteria for doing so, and authorizes grants to fund them. Massachusetts’ law has the fewest provisions. It authorizes the quasi-public Massachusetts Life Sciences Center to designate a life science center in each of five specified regions and delineates the services they must provide.

**Table 1: Comparison of Provisions in Selected States’ Regional Technology Development Center Laws**

State	Delineates Centers’ Purpose and Functions	Specifies Eligible Center Operators	Designates Agency to Approve Centers	Specifies Center Approval Process	Specifies Center Approval Criteria	Specifies Type of Funding
Indiana	Yes	No	Yes	Yes	Yes	Yes
Illinois	Yes	No	Yes	Yes	Yes	Yes
Kentucky	Yes	No	Yes	No	No	Yes
Louisiana	Yes	Yes	No*	No	No	No
Massachusetts	Yes	No	Yes	No	No	No
New York	Yes	Yes	Yes	Yes	Yes	Yes
Pennsylvania	Yes	Yes	Yes	Yes	No	Yes
Texas	Yes	Yes	Yes	No	No	Yes

\* Louisiana law allows nonprofits to establish regional research and development parks without obtaining a state agency’s approval.

## CENTERS' PURPOSES AND FUNCTIONS

As Table 2 shows, the statutory provisions specifying the centers' purposes and functions vary, but share a common goal and method to achieve it. The goal is to create new businesses and jobs by developing new, marketable technology. The method is to provide a place where scientists, entrepreneurs, venture capitalists, and others from different sectors can collaborate on creating new wealth by converting research into new technologies.

**Table 2: Comparison of Selected States Regional Technology Development Centers' Statutory Functions**

<i>Function</i>	<i>ID</i>	<i>IL</i>	<i>KY</i>	<i>LA</i>	<i>MA</i>	<i>NY</i>	<i>PA</i>	<i>TX</i>
Help scientists, entrepreneurs, venture capitalists, and others find commercial applications for research projects	X		X	X			X	X
Provide business, technical, and financial assistance to high technology businesses	X	X				X		
Identify and promote local and regional research and development capabilities				X	X		X	
Attract private venture capital for research and development projects and plug capital gaps	X	X			X		X	
Help existing businesses adopt new technologies				X	X			
Develop or expand high technology workforce	X		X	X			X	X
Foster collaborative partnerships and networks	X		X	X	X			
Maintain specific databases					X	X		
Publicize state science and technology-related research and development and education						X		
Identify property suitable for expanding life science businesses					X			
Develop business incubators								X
Identify, evaluate, and submit proposals for state funding								X

Most of the laws authorize the centers to develop and expand the region's high technology workforce. Half explicitly authorize them to attract private venture capital and foster collaborative partnerships and networks between academic and industry researchers, business managers, entrepreneurs, venture capitalists, and others interested in converting research into new products and techniques.

## CENTER SELECTION METHOD AND CRITERIA

As Table 3 shows, the states' laws differ in whether they specify (1) the types of organizations that can establish centers, (2) the method and criteria for designating them, and (3) how they fund centers.

**Table 3: Comparison of Selected States Provisions for Selecting and Funding Centers**

<b>State</b>	<b>Eligible Center Operators</b>	<b>Method for Selecting Operators</b>	<b>Criteria for Selecting Operators</b>	<b>Type of Funding</b>
ID	Unspecified	Application	Specified	Grants
IL	Unspecified	Application	Specified	Grants or cost sharing
KY	Unspecified	Unspecified	Specified	Direct Appropriations
LA	Nonprofits	Not Applicable *	Not Applicable*	Not Applicable
MA	Unspecified	Unspecified **	Unspecified	Unspecified
NY	Nonprofits	Request for Proposals	Specified	Matching Grants
PA	Nonprofits	Application	Unspecified	Matching Grants
TX	Private and nonprofit entities collaborating with colleges and universities	Unspecified**	Unspecified	Loans

\* Under Louisiana law, entities may form nonprofit organizations to establish regional research and development parks without state approval

\*\* Texas law authorizes the 15-member gubernatorially appointed Emerging Technology Fund Advisory Committee to recommend funding for Regional Centers of Innovation and Commercialization.

The laws in half the states specify the types of entities eligible to establish a center. Those in Louisiana, New York, and Pennsylvania limit eligibility to nonprofit organizations. Texas' law allows private or nonprofit organizations establish centers as long as they do so in collaboration with a public or private college or university. Indiana's, Illinois', Kentucky's, and Massachusetts' laws are silent on eligible center operators, but the Kentucky's law gives the Department of Commercialization and Innovation (DCI) commissioner broad powers to address this and other issues.

The pattern is more diverse regarding procedures and criteria for designating centers.

- Indiana's, Illinois', and New York's law require organizations proposing centers to apply for state approval and specify the criteria for granting it.
- Pennsylvania's law similarly requires organizations to apply for state approval, but is silent on the selection criteria.
- Kentucky's law, on the other hand, specifies the criteria for approving centers, but not the procedure for doing so.
- Massachusetts' and Texas' laws specify neither procedures or criteria for approving centers.
- Louisiana's law allows nonprofit organizations to be formed specifically to establish regional research and development parks.

All the states' laws except Louisiana's and Massachusetts' provide funds for the regional technology development centers.

- Indiana's law provides grants and New York's and Pennsylvania's matching grants. In these cases, the grants are provided through the state entity authorized to approve proposed centers.
- Illinois' law authorizes grants or cost sharing, which are provided through the Commerce and Economic Opportunity Department.
- Kentucky's law makes the centers eligible for state appropriations.
- Texas' law makes them eligible for loans funded through the state's emerging technology fund.
- Massachusetts' and Louisiana's laws specify no funding source for the centers.

**Attachment 1: State Regional Technology Development Programs**

<b>Program Characteristic</b>	<b>Illinois: Regional Technology Enterprise Development Centers (20 ILCS § 700/3001)</b>	<b>Indiana: Regional Technology and Entrepreneurship Centers (Ind. Code § 4-12-10-4)</b>	<b>Kentucky: Innovation and Commercialization Center Program (KY Rev. Stat. Ann. § 154.12-278)</b>
Administering Agency	Department of Commerce and Economic Opportunity	Economic Development Corporation (EDC)	Department of Commercialization and Innovation (DCI)
Center Purpose and Functions	<p>Purpose:</p> <ul style="list-style-type: none"> <li>• Technical and managerial assistance to entrepreneurs, innovators, and start-up firms in high technology sectors</li> <li>• Help new ventures secure financing</li> <li>• Provide product development and marketing support to new ventures</li> </ul> <p>Functions:</p> <ul style="list-style-type: none"> <li>• General business and technical assistance, including product feasibility studies and market research for businesses developing early-stage, technology-oriented manufacturing</li> <li>• Financial services, including accessing federal funds and venture capital</li> <li>• Gap financing for commercializing new technology</li> </ul>	<p>Purpose:</p> <ul style="list-style-type: none"> <li>• Create high technology companies that help existing businesses access technology</li> <li>• Support workforce development</li> </ul> <p>Functions:</p> <ul style="list-style-type: none"> <li>• Nurture commercially viable high technology ventures</li> <li>• Increase high technology employment</li> <li>• Stimulate venture capital flows to Indiana high technology businesses</li> <li>• Expand high technology-related education and training</li> <li>• Collaborate with and locate near a public or private secondary education institution</li> <li>• Have a written agreement with Purdue University (for technical and personnel training support)</li> <li>• Establish debt free research and development facilities</li> <li>• Provide business support services</li> <li>• Match state funds for center's facilities</li> </ul>	<p>Purpose: create products, new businesses, and value-added jobs</p> <p>Functions:</p> <ul style="list-style-type: none"> <li>• Identify and link entrepreneurs, professors, scientists, venture capitalists and other involved in creating and expanding technology-based businesses</li> <li>• Establish procedures for assembling and communicating project concepts and opportunities</li> <li>• Support high quality projects through concept and development phases</li> <li>• Identify potential partners, strategic opportunities, training and education needs, and issues inhibiting growth in state's technology sectors and business clusters</li> </ul>
Eligible Center Operators	Unspecified	Unspecified	Unspecified
Selection Process	Application	Application—five centers per biennium	Unspecified, but, unless explicitly prohibited, the law gives DCI commissioner power and authority to do what is necessary to create centers
Selection Criteria	<ul style="list-style-type: none"> <li>• Compliance with previous loan and grant awards</li> <li>• Relation of project to state's economic growth</li> <li>• Organization's capacity and high technology-related expertise</li> </ul>	<p>EDC-defined criteria, that may include</p> <ul style="list-style-type: none"> <li>• Location near and partnership with post secondary education institution</li> <li>• Proposed local contributions</li> <li>• Minimum standards for center facility</li> <li>• Minimum support services</li> <li>• Guidelines for selecting center participants</li> </ul>	Unspecified, but law allows DCI commissioner to contract with science and technology organization to administer program

Table 1 (continued)

Funding	Cost sharing reimbursements or grants for subsidizing department-approved expenses, revolving funds, capital improvements and equipment purchases, and other specified costs	Grants	Appropriations
<b>Program Characteristic</b>	<b>Louisiana: Regional Research and Development Parks (<a href="#">LA Rev. Stat. § 3397.5</a>)</b>	<b>Massachusetts: Regional Technology and Innovation Centers (<a href="#">Mass. Gen. Laws Ch 23I § 11</a>)</b>	<b>New York: Regional High Technology Development Organizations (<a href="#">Pub. Auth. § 5901.1</a>)</b>
Administering Agency	Law allows nonprofit organizations to establish parks; nine-member, gubernatorially-appointed Louisiana Research and Development Council promotes parks, but does not oversee them	Quasi-public Massachusetts Life Science Center	New York State Office of Science and Technology
Center Purpose and Functions	<p>Nonprofit organizations can create parks to do any or all of the following:</p> <ul style="list-style-type: none"> <li>• Encourage existing businesses to adopt high technology and develop high technology businesses</li> <li>• Increase high technology-related employment opportunities</li> <li>• Promote research and development and its results</li> <li>• Encourage public and private sectors organizations to collaborate in research and development</li> <li>• Promote and assist counties and municipalities to increase research and development, increase job opportunities, encourage businesses to adopt technology, and attract high technology businesses</li> <li>• Attract nationally prominent scientists and researchers</li> <li>• Maximize research capabilities</li> <li>• Promote economic diversification to include technology and knowledge-based businesses</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage and facilitate collaboration between a region's life sciences related entities</li> <li>• Maintain life science industry database</li> <li>• Organize, facilitate, and implement regional workforce development initiatives</li> <li>• Provide business management and resource training</li> <li>• Facilitate public and private investment</li> <li>• Review and provide recommendations to center proposals</li> <li>• Identify property conducive to life science expansion</li> <li>• Investigate specific municipalities and regions that can be developed into life science clusters</li> <li>• Facilitate regional development</li> </ul>	<ul style="list-style-type: none"> <li>• Sponsor and conduct conferences and studies, disseminate information, and issue periodic reports on in-state science and technology related research, development and education</li> <li>• Maintain registry of science and technology facilities</li> <li>• Provide technical assistance and information to small and emerging science and technology-related businesses</li> <li>• Provide information on inventions important to inventors</li> </ul>
Eligible Center Operators	Nonprofit organizations	Life science entity identified by Massachusetts Life Science Center—one per region (five)	Nonprofit economic development organizations or corporations formed to promote, attract, stimulate, develop, or expand science and technology oriented economic activity in a specific region or one or more counties and cities

Table 1 (continued)

Selection Process	Not applicable.	Center identifies entity in consultation with its advisory board	Request for proposals describing: <ul style="list-style-type: none"> <li>organization's history, structure, mission, and governing body</li> <li>center's economic outcomes</li> <li>matching fund sources</li> <li>short- and long-range plans, including marketing strategy</li> <li>region's high technology sector, educational resources, and capacity to support high technology economic development</li> <li>challenges confronting high technology economic development</li> </ul>
Selection Criteria	Not applicable	Unspecified	<ul style="list-style-type: none"> <li>Nature, relevance, and importance of center's proposed activities to region</li> <li>Anticipated economic benefits</li> <li>Representation from region's high technology sector</li> <li>Organization's readiness to run the center</li> <li>Organization's prior experience and track record</li> </ul>
Funding	Not applicable	Unspecified	Matching grants
<b>Program Characteristic</b>	<b>Pennsylvania: Regional Biotechnology Research Centers</b> <b>(35 PA. Cons. Stat. § 5701.1703)</b>		<b>Texas: Regional Centers of Innovation and Commercialization</b> <b>(Tex. Gov't Code § 490.152)</b>
Administering Agency	Department of Economic and Community Development		Texas Emerging Technology Fund
Center Purpose and Functions	<ul style="list-style-type: none"> <li>Create or enhance research and related industries</li> <li>Develop high quality and commercially useful projects and intellectual property</li> <li>Attract venture capital investments</li> <li>Encourage training and educational programs</li> <li>Develop regional research specialties</li> <li>Implement commercial development of new research discoveries</li> </ul>	<ul style="list-style-type: none"> <li>Research and development, including initiatives intended to prove an idea's feasibility</li> <li>Commercialize results for research and development</li> <li>Incubators for new or expanding businesses engaged in research and development</li> <li>Workforce training for businesses resulting from research and development</li> </ul>	
Eligible Center Operators	<ul style="list-style-type: none"> <li>Nonprofit organizations formed to own and operate center</li> <li>Seven- to 15-member board that includes state officials and private sector representatives</li> <li>DECD commissioner appoints initial chairperson</li> </ul>	Private and nonprofit entities collaborating with colleges and universities	

Table 1 (continued)

Selection Process	<p>Application to DECD specifying:</p> <ul style="list-style-type: none"> <li>• member organizations</li> <li>• board members' names and affiliations</li> <li>• programs, activities, and research projects</li> <li>• center's local and marketing plan</li> <li>• proposed first year budget</li> <li>• anticipated health, scientific, commercial, and economic development outcomes</li> <li>• each member's contribution to center</li> </ul>	Unspecified. Committee must propose and initiate establishment of centers in specified regions.
Selection Criteria	No criteria, but total number of centers capped at three	Gubernatorially appointed 16-member committee recommends proposed center for governor's approval
Funding	Matching funds	Appropriations

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