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Regional Employment Development Policies and Programs in the United States

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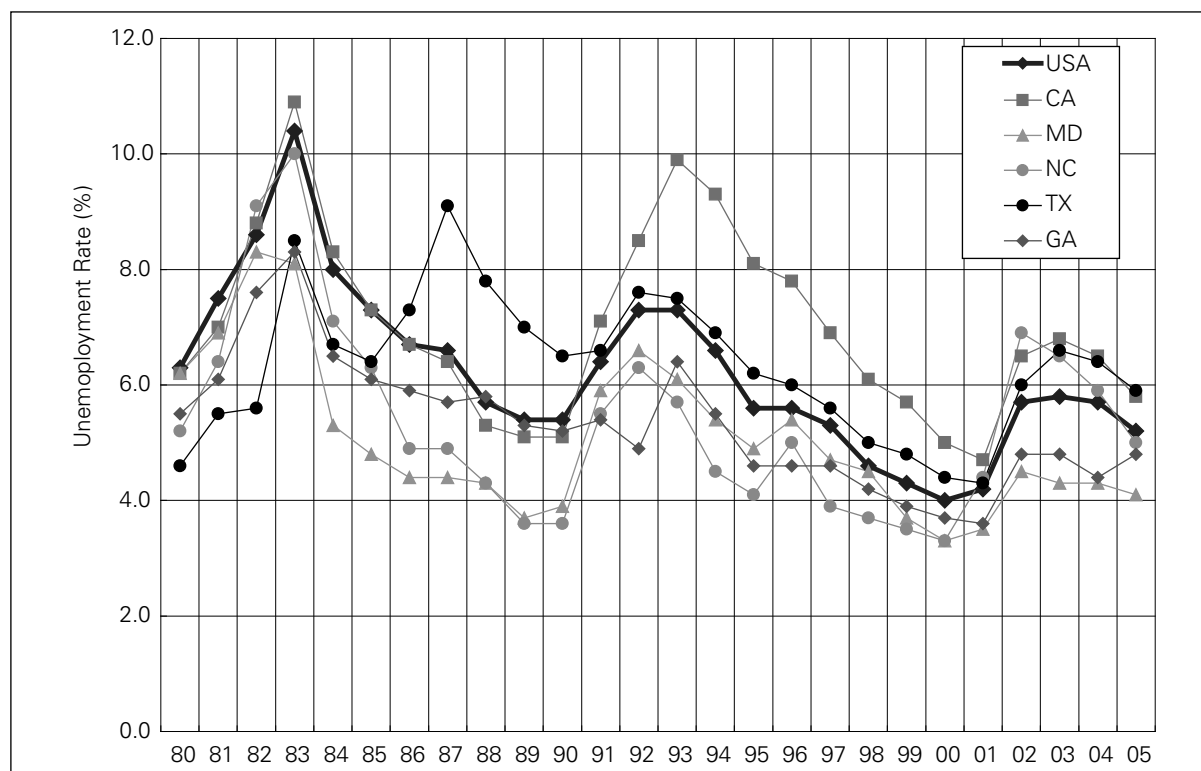
1. Background of Each State

Here is a brief introduction of the economic background of each state. The following chart shows the change in the unemployment rate in the United States and five selected states from 1980 to 2005. I would like to introduce the economic background of each state briefly by using this chart.

(1) United States

In the United States, unemployment rate fluctuations and the business climate share a close relationship. At the start of the 1980s, the economy declined and continued to decline until 1982 despite the fact that the US economy had been recovering in the late 1970s from the first Oil Crisis. This decline was caused by the second

Unemployment Rate in the US and Selected States



Source: US Department of Labor, Bureau of Labor Statistics (January in each year).

Oil Crisis, during which oil prices increased and the official interest rate increased. The unemployment rate continued to rise, reaching 10.8 percent in December 1982.

From 1982 to 1990, the unemployment rate declined. This gradual improvement in the US economy was due to the Reagan Administration's effective policies to stop inflation, including a cut in the official interest rate, tax and budget cuts, changes to the tax code, etc.

In 1987, a financial crisis known as "Black Monday" triggered a severe recession. Black Monday did not affect the whole US economy immediately. However, the policies for restructuring the financial industry and tightening the money market did begin to affect the US economy by 1990. The recession continued until 1993. At the same time, the information technology industry, including computer hardware and software, were rebounding with the popularization of the Internet. As a result, information technology saved the US economy, and the industry's prosperity continued until 2000.

However, the so-called IT bubble burst in 2000. Then, on September 11, 2001, the tragic attack on the World Trade Center occurred. Shortly thereafter, the financial scandals of Enron and World Com exploded, which were enough to make investors reluctant to invest their money in the market. As a result, the US economy grew sluggish. However, this slump continued for only a few years. After 2003, the US economy showed signs of recovery.

(2) The State of California

California's economy is the largest in the United States. The Gross State Product (GSP) in 2000 was \$1,344 billion — 13.6 percent of US Gross Domestic Product (GDP). The size of California's GSP would be ranked as the 5th largest country in the world if the state were a country. Before the 1970s, the major industries in California were tourism and manufacturing, including military and retail. California also has the largest population in the US (33.87 million or 12 percent in 2000).

In the late 1970s, many computer related industries, including software, emerged in Silicon Valley even though the state's economy was affected by the first Oil Crisis. By the end of the 1970s, the computer industries had matured. At the beginning of the 1980s, the state experienced a severe recession, which included an unemployment rate of more than ten percent. This recession

was caused by the second Oil Crisis. The computer industry suffered a decline until 1983.

In 1982, California established the Employment Training Panel (ETP) to retain and train workers of industries that were facing competition from other states or foreign countries. While the state was in recession, ETP was an important policy that helped prevent industries from relocating to competitive states or countries.

From 1983 to 1990, California's economy rebounded, and employment expanded rapidly due to the prosperity of the computer industry.

The 1990s were a pivotal and paradoxical decade for California. It began with a severe economic slump and ended with a record-breaking expansion. The end of the Cold War led to significant reductions in federal defense spending — characterized by reduced procurement and base closures. This led to a major downsizing of the state's aerospace industry and reductions in Department of Defense payrolls. These factors resulted in a much longer and far deeper recession than the rest of the nation. California's unemployment rate reached ten percent in 1993.

During the latter half of the 1990s, however, the state's economy consistently grew faster than the nation as a whole. Due to the popularization of the Internet, the computer and software industries (Information Technology or IT) prospered rapidly until 2000 when the IT bubble burst.

The bubble burst hit Silicon Valley severely. The unemployment rate rose abruptly. Eventually, though, the state's economy calmed down and started to recover.

(3) The State of Maryland

The Gross State Product (GSP) in 2000 was \$186 billion — 1.88 percent of US Gross Domestic Product (GDP). The state's share of GDP is equal to its population share. Early on, the major manufacturing industries located in Baltimore led Maryland's economy. However, these industries were scaled back by the end of the 1970s.

In the 1980s and 1990s, Maryland's industries were diversified significantly. Leading manufactures included electrical and electronic machinery, primary metals, food products, missiles, transportation equipment, and chemicals. Shipping, tourism (especially along

Chesapeake Bay), biotechnology and information technology, and printing and publishing also became big industries in Maryland. The service, finance, insurance and real estate industries also started growing rapidly.

The most significant feature in Maryland is government employment in Washington D.C. According to the 2000 census, 22.3 percent of employed residents were government workers. Government employment and diversified employment have helped stabilize the state's unemployment rate. As a result, the unemployment rate in Maryland is consistently lower than the national average.

The Partnership for Workforce Quality (PWQ), which will be introduced later in this paper, was established in 1989, in the background of a diversified economy. It was the most important measure for improving the quality of the workforce as well as products in each diversified industry. PWQ made Maryland competitive with other states.

(4) The State of North Carolina

The Gross State Product (GSP) in 2000 was \$280 billion — 2.85 percent of US Gross Domestic Product (GDP). The state's share of GDP is equal to its population share (8.05 million or 2.86 percent).

North Carolina has been one of the major agricultural centers of the United States, producing cotton, tobacco, sweet potatoes, corn, peanuts, eggs, broilers, hogs, turkeys and greenhouse products. Also established in the state were related manufactures such as textiles, tobacco and food processing. Until the mid 1960s, no other industries existed. At the same time, the average wage was next to last, or 49th, in the U.S. despite the fact that the state was home to famous research universities such as Duke University, University North Carolina Chapel Hill (UNC) and North Carolina State University in Raleigh (NCU). Until the mid 1960s, graduates from these universities had to pursue jobs outside the state.

In 1956, the Research Triangle Committee was formed to explore the idea of creating a research park to be located between the three universities. In 1959, Research Triangle Park (RTP), created through a regional public private partnership, began to recruit high-tech companies. In 1965, IBM and the National Institute of Environmental Health Sciences (NIEHS) were established in the park. Since then, more than 100 research

and development facilities, including North Carolina Biotechnology Center, North Carolina Supercomputing Center have moved to the area, employing over 38,500 residents.

According to the 2000 census, almost 20 percent of the workforce in North Carolina is employed in manufacturing, including the RTP industries. North Carolina has been making efforts to change the economic structure of the state from agriculture-only to a more diversified economy that includes high-tech industries. As mentioned above, manufacturing centered on agricultural products before 1965. Now, information technology, biotechnology and the life-science industries are an important part of the state economy.

The Customized Training Program for New and Expanding Industry (NEIT), which will be introduced later in this paper, was established in 1958 — one year before RTP was created. The purpose of NEIT is to provide training and improve hiring opportunities with new or expanding companies. The training is provided at the company's request, and the NEIT has been very successful in recruiting companies.

After 1983, the economy in North Carolina remained healthy until 2000. RTP supported much of this prosperity. After the IT bubble burst in 2000, the unemployment rate rose rapidly, as some of the major resident companies such as IBM and Cisco Systems were a part of the information technology industry. Currently, the industry is beginning to rebound.

(5) The State of Texas

The size of the state economy (the Gross State Product: GSP) in 2000 was \$742 billion — 7.51 percent of US Gross Domestic Product (GDP). Texas' GSP is ranked third largest in the US. The state's GSP share in the US is slightly higher than the population share (20.85 million or 7.41 percent).

Texas' original industries included oil and related chemicals in the Houston area; agriculture and related manufactures across the State; and lumber located in the southern part of the state. These industries remain an important part of the state economy.

In the early 1960s, NASA decided to build the Lyndon B. Johnson Space Center in Houston. After that, the high-tech and computer industries cropped up around NASA — an indication that the Texas economy

was beginning to diversify. The high-tech and computer industries clustered around Houston, Austin and Dallas-Fort Worth in the 1970s and 1980s. The Austin area was called Silicon Hill, where many computer hardware companies were located.

But in the 1980s, the Austin and Dallas areas experienced a slump as many computer hardware companies moved their production centers to foreign countries. In the latter part of the 1980s, however, automobile and electronic industries were lured to Texas because of a cheap workforce, the low organized rate of labor unions and strong incentives pushed by the state. In addition, in the 1990s, Internet-related industries and cellular phone industries rapidly expanded in the Austin and Dallas-Fort Worth area. And more recently, petrochemical industries have started to invest in bioscience and life science industries, with the cooperation of regional universities. Major pharmaceutical companies have started to pay attention to southern Texas.

As mentioned above, most of the strong state incentives to recruit diverse industries began in the 1980s, when the state was experiencing a recession. Some training programs also began in the 1980s.

(6) The State of Georgia

The Gross State Product (GSP) in 2000 was \$296 billion — three percent of US Gross Domestic Product (GDP). The state's share of GDP is equal to its population share (8.19 million or 2.9 percent).

The State of Georgia has been a huge agricultural production and process center in the United States. Since the nineteenth century, cotton and textile have been major industries in the state. In the late twentieth century, the state also became a production center for peanuts, tobacco and corn even though cotton and textile were still major products. Broilers, eggs and cattle also became major products.

These agriculture-related industries remain important industries in the state. After the 1950s, however, the structure of the state economy changed drastically. In the 1950s and 1960s, major interstate highways were constructed or improved, and railroad networks were upgraded. In addition, in 1948, Hartsfield Atlanta International Airport (now Hartsfield Jackson Atlanta

International Airport) opened, and Delta Airline decided to establish a hub.

Major infrastructure expansion and improvement helped Georgia's existing industries such as agriculture and related industries expand their market to the rest of the country. And many new industries such as trade and manufacturing, which sell their products all over the country, were located in Atlanta. In addition, convention and distribution industries expanded rapidly in the 1980s; and worldwide companies such as Coca Cola, CNN, and UPS located their headquarters in the Atlanta area. Atlanta became a home base to the world.

In 1996, the Olympic Summer Games were held in Atlanta. The Olympic Games left legacies such as information and communications infrastructure and big sports facilities — important factors for fostering new industries such as information technology and sports event services. After the Olympic Games, information technology and biotechnology industries began to grow. In recent years, major automobile companies have created new production centers in the state.

The recent economic situation in Georgia is much better than in other states. Since 1980, unemployment rates have remained below the US average. This was not accomplished by location alone, but also by the public private partnership between the state and business groups.

Most of the state's strong incentives and partnership efforts to recruit companies, which will be introduced later in this paper, were established in the 1980s and 1990s. Those efforts helped foster the current good economic situation.

2. Training Programs for Existing and New Employees

Each state has unique training programs for existing and new employees. The main purpose of the training programs for existing employees is to keep their state's industries competitive with other states or foreign countries. The programs for new employees are mainly used as incentives for industries who intend to expand or to newly locate their company in the state. The following case studies are examples of these training programs.

(1) California — Employment Training Panel¹ (ETP)

<What is ETP?>

California's Employment Training Panel¹ (ETP), established in 1982, provides funding for retraining, new-hire training, and entrepreneurial training programs. It is the largest of the nation's customized training programs. Training projects promote the development and retention of high-wage, high-skill, and secure jobs. Since 1982, ETP has provided training for more than 600,000 employees in approximately 65,000 businesses, most of which are small firms². The program's success was validated in 2001, when ETP's sunset date was removed and it became a permanent employment development program, but ETP is faced with budget cut recently.

In the 2002-03 Fiscal Year (FY2003³), ETP approved 275 projects with an average cost of \$30,000. The smallest project was \$2,400 and the largest project cost \$6,373,302. The state spent \$82.7 million training 72,600 workers and assisting more than 2,000 employers. The average cost per trainee was \$1,138.

<Organization of ETP>

ETP is an independent agency within the state government and makes reports to the Governor through the California Employment Development Department. A governing board consisting of eight members sets the policy and allocates funds for the program; more than 100 full-time employees manage their daily operations. ETP functions as a quasi-independent state agency, even though it is legally a part of the employment development department. Since California does not have an aggressive system of workforce investment coordination as many other states', there is minimal centralized coordination.

<Process of the Grants>

Potential grantees may be individual companies or consortia representing multiple companies. They can apply directly to the program, and, once eligibility is

determined, site visits are conducted by a field officer and a development analyst for an inspection.

After consulting with these program representatives, the business or consortium submits a formal training application. ETP's executive director approves agreements of \$100,000 or less, while all others must receive approval of the governing board. Funds are reimbursed to the employer or separate training provider after the completion of all the scheduled training and the completion of a ninety-day post-training retention period.

<Employer-Driven Program>

The program is "employer-driven," and any eligible firm, training agency or consortium project may submit an application at any time, based on employers' need for training. Depending on the expressed employer demand for training, it can result in the appearance when resources are enough for demand. In its early years, ETP was criticized for not moving quickly enough to spend the resources available or to aggressively market its program to high-priority users. In recent years, the demand has been such that the panel has committed all of its fiscal-year appropriation before the year has ended.

<Funding System>

Funding is derived from an assessment on employers who pay unemployment insurance (UI) taxes. The assessment of 0.1 percent on wages subject to UI tax is paid into the Employment Training Fund. Therefore, eligible grantees must be employers who contribute to the fund. The panel targets its services to manufacturers and other industries judged as having significant economic impacts. These industries include biotechnology, telecommunications, entertainment, information technology, and wood products, as well as diversified manufacturing enterprises. Seventy-five percent of the business benefiting from ETP training in 2003 employed 250 or fewer employees. Twenty-nine percent of all businesses served employ 20 or fewer employees.

<Community Colleges Play Big Roles for ETP>

Community colleges are major providers of training

¹ <http://www.etp.ca.gov/>.

² ETP defines small businesses as companies with 250 or fewer employees, while targeting the State's smallest employers — those with 100 or fewer employees.

³ "FY 2003" means from July 2002 to June 2003 in most of the states and local governments in the United States.

in California. In fiscal FY2003, ETP approved \$7,496,000 projects for 5,408 employees with 14 community colleges. Glendale community college was approved a major contract under which 2,114 workers from several firms received training in computer-assisted design and computer-assisted manufacturing. In addition, office automation and quality control training from the college cost \$2,639,306. In the same year, several other projects were completed with community colleges, but at lower funding cost. Also that year, some of the individual firms completing ETP projects used community college personnel for specific parts of their training programs. Some of the two-year schools operate aggressive worker training programs, contracting with industry for services and delivering market-responsive programs.

<ETP's Programs>

ETP funds training programs under two categories⁴:

- 1) **Economic Development**, for job creation and re-training for business facing out-of-state competition. Ninety percent of annually available funds are spent under the Economic Development category, primarily to support re-training of incumbent workers. Re-training for employed individuals (employed for at least 90 days prior to training, either by the company doing the training, or by the company doing the training or the previous employer) in companies facing out-of-state competition who need to re-train employees to prevent potential layoffs, diversify products or services, or become a high-performance workplace. This is the largest category of program expenditure. Funds go to individual firms and to consortia of companies, sometimes organized by private training concerns or community colleges. There are minimum wage requirements for trainees who complete the training and the 90-day retention period under this category. All trainees after the completion of the training program must be full-time permanent employees working at least 35 hours per week.

About ten percent of funds in this category

are used to support training for unemployed workers (i.e. "new hires") to become re-employed. "New-hire" training programs train unemployed individuals who are currently receiving UI benefits or who have exhausted such benefits within the past two years. This training is delivered through training agencies or employer commitment to hire the trainees after the training is completed.

- 2) **Special Employment Training (SET)**, to train frontline workers in projects that does not meet the "out-of-state competition" requirement, but have characteristics that make them the priority for economic and workforce development. Up to ten percent of annually available funds go to the SET category.

Special employment training (SET) allows ETP to fund projects that might otherwise fall outside its eligibility criteria. Specifically, ETP can waive the requirement that the employer must face out-of-state competition, and it can also waive the prior unemployment requirements otherwise associated with new hires, as discussed above. SET is used to help firms that otherwise would not qualify by: (1) having relatively highly paid frontline workers needing upgrade training; (2) are in recently developing industries with new occupation and skill requirements; (3) are affected by defense industry cut-backs; (4) have not met needs in occupations with critical deficits of trained people; (5) need to train the owners of very small companies in business management and related fields; or (6) employ individuals with significant barriers to full-time employment.

<ETP's Success>

The key elements identified as essential to ETP's success include:

- **Performance-based contracting** — a key feature of ETP since its inception is its 100 percent performance-based contracting requirement, which ensures the training is tied to a real job. This means that a contractor earns no

⁴ ETP Annual Report FY2003 <http://www.etp.ca.gov/docs/annualreport02-03.pdf>.

funds until a trainee completes all of the training and subsequent employment retention of at least 90 days in a training-related job at a required wage.

- **A focus on customized, employer-driven training for high-wage, high-skill, secure employment.** ETP contracts promote wage increases and require employers to retain workers for specific periods to earn ETP funds.
- **Businesses that benefit from training are those firms that pay the tax, which funds the ETP program** — ETP is funded through the Employment Training Tax), which is levied on the California employers who participate in the UI system. Typically, the Panel averages \$70 - \$100 million in training funds annually.
- **Employers directly share the cost of training.** Because a commitment to training is critical for success, companies are required to match the cost of the training funded by ETP.

It is these elements that have made ETP a nationally recognized model for State-funded incumbent worker training programs. While 45 states have some type of publicly funded worker training program, ETP has the largest and most successful program in the United States. ETP's biggest contribution may be that, after employers experience the value gained from training, they are more willing to increase their own investment in these workers' training.

(2) Maryland — Partnership for Workforce Quality⁵ (PWQ)

<What is PWQ?>

The Partnership for Workforce Quality (PWQ) was established in 1989. The PWQ provides matching skill training grants and support services targeted towards small and mid-sized manufacturing and technology companies, to improve the competitive position against their competitors. PWQ grants are used to increase the skills of existing workers for new technologies and production processes, improving employee productivity

and increasing employment stability.

PWQ's responsibility is to upgrade incumbent workers' skills when such training could lead to improved business competitiveness, worker productivity, or employment stability. It could also enable workers to keep pace with emerging technologies and production processes. All workers who receive PWQ-sponsored training are already employed by the grantee; no pre-employment training is conducted. The program targets manufacturers and technology-related companies, with the majority of funds (95%) going to the manufacturers.

<Three Consortium Programs>

The PWQ provides assistance through its individual company grant program and three consortium programs. The PWQ consortium initiatives offer a comprehensive array of training and technical services to companies in the state of Maryland pursuing ISO compliance, world-class manufacturing standing and software engineering excellence.

<ISO Consortium Program>

The Maryland ISO Consortium Program is a sponsored effort by the Maryland Department of Business and Economic Development (DBED) to assist Maryland companies in implementing the ISO 9000 quality standard in their organizations. Over 325 Maryland companies have been associated with the program and approximately 30 percent of all ISO registered companies in the State have used the Maryland ISO Consortium to help them reach this goal. The program is designed for all types of organizations including manufacturing, technology, service, education and retail.

<World Class Manufacturing Consortium>

The Maryland World Class Manufacturing Consortium is a group of Maryland manufacturers that have organized into a not-for-profit organization with the support of the DBED. The Consortium is made up of more than 60 companies throughout the state. As a group, they represent more than \$3.6 billion in sales and about 20,000 employees. Its purpose is to identify and make available to members world class practitioner

⁵ <http://www.mdbusiness.state.md.us/datacenter/bizsupport/consortia/details2.asp>.

resources while developing the criteria, measurements, training and implementation assistance by which companies can become “World Class Manufacturers.” Members use this consortium to implement the pursuit of customer service and production excellence. Through dedication to continuous improvement, members supply innovative, high-value solutions that meet the customers’ needs by providing products and services that are better, faster, and cheaper than their competitors.

<Software Industry Consortium>

The Maryland Software Industry Consortium (MDSWIC) is a group of Maryland information technology and software companies seeking excellence through continuous improvements in product, service, and organizational strategies. The Consortium enables individual companies to sharpen their competitive edge through focused strategic and tactical programs tailored for specific business needs.

MDSWIC creates opportunities to enhance the competitiveness of member companies (especially small to mid-size companies), accelerates new software technology adaptation, leverages member company experience, promotes inter-corporate cooperation of member organizations, and provides training and education.

Realizing that 80 percent of new job creation comes from existing businesses, the DBED devotes considerable amount of effort and resources to the existing Maryland business base. The Software Industry Consortium is an example of that deep and continued support.

<The PWQ is Business Driven>

The PWQ is business driven, with requests for program assistance coming from employers, who undertake a guided self-assessment of business strengths and growth needs. Then, they work with Regional Managers of DBED to integrate training with other vital services that support business and economic growth.

The PWQ:

- Targets small- and medium-sized manufacturing and technology companies with 500 or fewer employees for grant awards, requiring that 60 percent of the program’s grant expendi-

tures are provided to firms of 150 or fewer employees;

- Makes grant awards to larger companies which open training and contracting opportunities to small- and medium-sized Maryland suppliers;
- Assists participating businesses in undertaking an assessment to determine growth potential and in targeting upgrade skill training to achieve progress;
- Provides guidance to companies in integrating workforce training plans with the company’s strategic business and financial plans;
- Requires participating companies to develop measurable business performance objectives, based on anticipated efforts of upgrading employee skills on gross sales, new job creation, worker productivity, capital investment and other business or economic growth indicators.

<Funding for PWQ>

This part of Maryland’s customized training program focuses on incumbent worker training. The PWQ reimburses its grantees for up to half of the costs associated with certain workforce development and training activities. In FY 2002, using \$3.6 million in funding, PWQ assisted 327 companies and provided training to 5,653 employees. The average productivity gain is \$23,976 per employee trained⁸.

All reimbursements made through PWQ are directed to the employers themselves, even though the employers may select other organizations to conduct the actual training. A minimum of 50 percent employer match is required for all funded projects.

<The Maryland Industrial Training Program (MITP) for New Employment>

Other than PWQ, MD has the Maryland Industrial Training Program (MITP) which provides training assistance to companies that are either recently locating to the state or are expanding current employment. MITP’s FY2002 allocation of \$5.5 million accounts for nearly 80 percent of the state’s customized training expenditures. \$5.5 million helped 151 businesses that commit-

⁸ DBED Annual Report 2002 <http://www.choosemaryland.org/assets/document/2002%20Annual%20Report.PDF>.

ted to creating or retaining more than 20,000 jobs.

(3) North Carolina

The North Carolina Community College (NCCC) System is the national pioneer of customized industry training for new and expanding industries, and the number one ranked worker-training program in the US. The system offers training in a variety of industries, from auto parts and electronics manufacturers to bio-tech companies and data processing centers. The 58-campus NCCC System has emerged as the third largest in the US, and is recognized as the national leader for its support of economic workforce development and training.

1) Customized Training Program for New and Expanding Industry¹⁰ (NEIT)

<Nation's Oldest Customized Training Program>

This training program is the nation's oldest customized training program. It was established in 1958 to attract new businesses to North Carolina, but it is now utilized by both new firms and expanding operations within existing ones. The program is administered and operated by the North Carolina State Community College System which cooperated with the North Carolina Department of Commerce.

When a company that is locating to or expanding in the state expresses the need for training, a representative of the company, the local community college's industry liaison, and one of the program managers from the New and Expanding Industry (NEI) program jointly develop a proposed training plan. NEI projects normally last several years, with a maximum duration of three years. There is no specific scoring mechanism or competitive selection process for NEI projects.

<Criteria for Approval>

Some criteria for approval include the level of investment a company has made in a community (i.e. facility and equipment investments); is the wages that the industry will offer and the industry's use of technology; and the equity issues, such as the significance of the company's work within the community where the firm

is located. The state considers higher training costs as acceptable in poorer regions of the state, hoping to result in larger projects. After a proposal is approved, the community college system disburses funds to the community college for training implementation.

Community colleges may use Customized Industry Fund which has been funded by the state to train workers employed by manufacturing and technology-intensive firms; warehousing and distribution centers; air courier services; and regional or national data processing and customer service centers. Eighty percent of NEI training projects serve for the manufacturers. There are no wage minimums or matching requirements; however, firms must create at least 12 new jobs (a requirement that is occasionally waived). Almost all trainees (90%) are newly hired individuals.

<Customized Process>

Each training program is customized by the collaboration between the company and the regional training coordinator. As a result the price can vary greatly between the different industries. For example, Biogen, a pharmaceutical company headquartered in Cambridge, MA came to North Carolina several years ago looking to create 150 new jobs. Because of the nature of the training, a temporary biotech training laboratory was constructed making the cost more expensive. For that company, the cost was \$2,500-\$3,000 per worker. This is an extreme case. Overall the average cost per trainee was \$385 at that time.

<Result of Training>

There were 10,610 people trained in FY2003 and 131 companies assisted. 79 companies were expanding companies, while 52 were new companies recruited to the state. The total number of trainees is getting smaller because of the recent economic situation.

2) Focused Industrial Training¹² (FIT)

<FIT is for Existing Workers operated by Community Colleges>

FIT was created in 1997. It is also administered by the community college system. Half of FIT's funding

¹⁰ <http://www.isoenthal.cc.nc.us/sbc/neit.htm>.

¹² <http://www.lenoir.cc.nc.us/nsite/ecodev/fit.htm>.

comes from the general state revenue; the other half comes from a Worker Training Trust Fund (WTF) that is funded by the interest earned from the state's \$200 million reserve from the unemployment insurance fund. The state statute requires the WTF money to be spent for the operation of local employment security commission (ESC) offices located across the state or for job training.

<FIT Funding is for Retraining Existing Manufacturing Workers>

FIT funding goes to re-training existing manufacturing workers, particularly those affected by technology changes in the workplace. Only production workers and production supervisors in manufacturing companies are eligible for FIT training. FIT projects are for manufacturers that cannot be served cost-effectively through the existing course, either because of their size or training intensity. FIT funding is always arranged by employers; however, it is not used for new companies moving into North Carolina. Employers pay \$35 per trainee and per course for FIT training.

<Community College System Play a Big Role on FIT>

The community college system's director of economic development describes FIT as "Training that goes above and beyond what we can do with the other programs." For example, if a company needs to train a few individuals to run a specialized machinery, the FIT money could be used for this purpose. The funds could also be used to provide intensive training to the workers in a company who need to be re-trained due to the modernization of plant equipment.

In FY2003, there were 834 companies and industries, which received benefits from the FIT projects. Training was offered to 8,438 workers. Each community college with more than 8,400 manufacturing employees in its service area has a designated FIT staff person. Each FIT college is allotted a program budget based on the number of manufacturing employees in the area it serves. Colleges not designated as a FIT college may apply to the state community college system, which maintains a separate fund for projects in less industrial regions.

<Decentralized Decision Making>

Like North Carolina's other customized training initiatives, the state does not allocate FIT money based on a competitive selection process. FIT decision-making is decentralized; each community college has the authority to use its funds, as it deems appropriate. Due to this decentralization, the state community college system does not track the number of contact hours typically involved in FIT projects. Most of this training is done at the workplace. Different kinds of training are performed through FIT, including basic prevocational skills, generic vocational and technical skills, company-specific skills, and quality assurance systems.

3) Worker Training Tax Credit¹³

North Carolina's Worker Training Tax Credit works "hand-in-glove" with the New & Expanding Industry Training Program as an added incentive to North Carolina employers to invest in worker training. Companies eligible for either the Job Creation Credit or the Machinery and Equipment Investment Credit of the William S. Lee Quality Jobs Act (WSLQJA), are in turn eligible for the Worker Training Tax Credit. The Training Tax Credit provides employers with a credit against their State Income or Franchise taxes for the wages of new employees during training, or of existing employees being trained on the new equipment. Thus, while the New & Expanding Industry Training Program provides support to new and expanding companies that help offset their direct training costs (i.e., instructors, curriculum, supplies, training facilities), the Tax Credit enables companies to take tax credits against their indirect training costs (i.e., employee wages during training).

To qualify for the WSLQJ Act and the Worker Training Tax Credit, a company must be in specific industry categories and meet an average wage standard for the county in which the facility is located. Each of North Carolina's 100 counties is classified into one of five economic tiers. Companies may take up to \$1,000 per eligible employee for trainee wages for eligible facilities located in Tier 1 counties or State-designated Enterprise Zones. Companies may take up to \$500 per

¹³ <http://www.commerce.state.nc.us/finance/incentives/tax/wttc.asp>.

http://www.ncccs.cc.nc.us/Business_and_Industry/neitaddi.htm#Worker%20Training%20Tax%20Credit.

eligible employee for eligible facilities in all other North Carolina locations.

Eligible employees to whom training tax credits may be applied are not exempt from the Fair Labor Standards Act (FLSA) and meet the definition of new employees under the Job Creation Tax Credit, or existing (FLSA) employees being trained on new equipment or machinery. Employees may not be in a production capacity simultaneous with the training time counted toward the tax credit.

This Tax Credit is not the training program itself, but a kind of tax incentive. However, this policy and training programs must work simultaneously to achieve their goal.

In North Carolina, there are some other state's original employment development policies and programs other than the above, such as the Employment & Training Grant Program (by using Unemployment Insurance Fund), Small Business Center Network (small business development not including federal programs of Small Business Administration), Occupational Continuing Education (using existing college course) and Human Resources Development Program (continuing education for employees). Most of these programs also use the Community College for employment development.

3. Incubating and Fostering New Industries

Most of the states across the nation have policies for incubating and fostering emerging industries such as information technology, biotechnology and nanotechnology. Many states have incubation facilities and public venture capital to foster high-tech industries.

The following is a case study of North Carolina's incubation and fostering program, which is the most progressive example in the United States.

(1) North Carolina

<NCSU and TDA Created Centennial Venture

Partners (CVP) >

In 1998, the North Carolina State University (NCSU) partnered with a state-supported economic development agency (NC Technological Development Authority: NC TDA¹⁴), to create and manage the Centennial Venture Partners (CVP) Fund. CVP is a \$10 million venture capital seed fund focused on making early-stage investments in start-up companies affiliated with the NCSU¹⁵.

The NCSU and the TDA partnered again in 1999 to open the Entrepreneurial Development Center at NCSU, an 18,000 square foot new business incubator located on NCSU's Centennial Campus. In its first 18 months, CVP has evaluated over 125 deals and invested in 15 start-up companies affiliated with the university.

During the first nine months of operation, the Entrepreneurial Development Center at NC State has achieved full occupancy (more than 20 companies) and has seen three of its initial tenants graduate from the incubator into a corporate space. During a parallel timeframe, NCSU's technology transfer program has seen dramatic increases in participation in technology development and entrepreneurial activities among the university faculty.

During the first full year of CVP's operation, the ultimate measure of faculty participation in the technology transfer process — invention disclosures — rose more than 30 percent. At least 12 companies were created to further develop the university owned technology, and the university's stock portfolio increased from two companies to more than ten companies. CVP's investments brought in co-investing venture funds resulting in at least a 6:1 leverage of CVP's investment dollars, and the creation of 110 new jobs in 4 of the 15 portfolio companies — most of which retain strong ties to the research and educational programs of the university.

<What is Centennial Campus?>

Centennial Campus¹⁶ is a so-called Technopolis at NCSU. This "Technopolis" consists of multi-disciplinary R&D neighborhoods, with a mixing of university, corporate, and government facilities. A middle school,

¹⁴ <http://www.nctda.org/tda/overview.html> NC TDA was originally established as a state funded agency in 1983. In 1991, TDA became independent from the state agency by using investment returns.

¹⁵ http://www.northcarolina.edu/docs/aa/research/initiatives/NSFTECHINIT_NSF.pdf.

¹⁶ <http://centennial.ncsu.edu/>.

residential housing, executive conference center and hotel, golf course, town center and recreational amenities will weave themselves into the campus to establish a true interactive community. Major features of the Centennial Campus are as follows:

- A complementary mixture of university faculty, students and research centers with industry and government counterparts.
- A blend of small and large entrepreneurial businesses.
- Clusters of buildings in R&D neighborhoods with multidisciplinary themes based on the University's strengths in cutting-edge research and client-driven training programs:
 - Information & Communications Technologies
 - Biosciences and Biotechnology
 - Advanced Materials
 - Education
- Intensive partnership formation among industry professionals, government agencies and university residents in a pedestrian-scale community.
- Advanced technology infrastructure for network communications.
- A proposed transit corridor, linking Centennial Campus and NC State's adjacent main campus labs, classrooms, libraries, concerts and athletic events.
- A proposed Executive Conference Center and Hotel for meetings, training and entertaining.
- Easy, pedestrian access to community courtyards, restaurants and shops.
- Residential neighborhoods within walking distance of the R&D neighborhoods.
- Recreational amenities, including an 18-hole-championship golf course and miles of jogging and biking trails.

Currently, Centennial Campus is home to over 100 large and small companies, government agencies and NC State University research units.

<Technology Incubator at Centennial Campus>

The NCSU Technology Incubator¹⁷ is at the heart of

the Centennial Campus, offering a collaborative blend of services and resources to the innovative entrepreneur. Entrepreneurs with products as diverse as specialized mold cultures, telecommunications applications, and biotechnology breakthroughs call the Incubator their temporary home as they work toward commercializing their products and processes. Currently 21 companies reside at this location.

<NC TDA Provide Incubators and Venture Capital>

The North Carolina Technological Development Authority, Inc. (TDA) is a public benefit corporation whose mission is to create jobs and wealth throughout North Carolina using business incubation, venture capital, technology transfer and rural initiatives to commercialize promising business opportunities.

The TDA provides entrepreneurial support across the state through its small business incubator infrastructure. Since approving its first incubator project in 1985, the TDA has committed funds to assist the start-up of a total of 22 small business incubators. Incubator facilities presently house an estimated 250 tenant companies, employing more than 1,100 people.

Technology incubation and public venture capital is very popular in many states. Incubation and fostering entrepreneurs do not develop high levels of employment in several years. But once the companies are successful in developing a new technology, they could develop a company with high employment levels.

4. Recruiting and Marketing Industries with Strong Incentives

In the United States, each state is making great efforts to attract and invite industries to their states. Recruiting and marketing are more direct methods of developing employment strategies in the state than training the workforce and incubating new industries, but it must be very competitive to recruit the industries among the states and other foreign countries.

To win the competition, each state creates several incentives including new employees training, as mentioned before. Most of incentives are tax related incentives. Many states prepare incentives to deduct or

¹⁷ <http://techincubator.ncsu.edu/index.htm>.

exempt taxes to invite new companies to their states.

In addition to strong incentives, some of the states or regions are doing a very strategic marketing and recruiting, called Target Marketing (or Recruiting) system.

Here are two case studies about Texas and Georgia which have one of the strongest incentive programs in the United States to attract and invite industries.

(1) Texas

<Incentives for Economic Development>

The State of Texas has following incentives for economic development in the state¹⁸.

➤ Texas Enterprise Zone Program

The purpose of the Texas Enterprise Zone Program is to encourage job creation and capital investment in areas of economic distress. The program provides communities with an economic development tool to offer state and local incentives and program priority to new or expanding businesses in these designated areas.

Companies located in the zone will be able to receive sales tax returns or use tax return of \$2,000 per employee (up to 5 years and \$250,000 per year). In addition, the State will refund sales and use tax which is charged on machines, equipments and materials of buildings invested in the zone.

This program started in 1987 and there has been more than \$10 billion in investments and has created more than 80,000 jobs since 1987.

➤ Industrial Revenue Bond

This Program allows local industrial development corporations to issue tax-exempt bonds to finance land and depreciable property for manufacturing facilities. The maximum bond amount is \$10,000,000 for tax-exempt issues, and the maturity of the bonds may extend to the lesser of 40 years or 120 percent of the depreciable life of the assets being financed. Eligible project costs include the acquisition by a business of an existing facility, acquisition of land, construction of new

facilities, machinery, tools, equipment, and a limited amount of the bond issuance costs. Industrial revenue bonds may be both taxable and tax-exempt.

➤ Skills Development Fund

The Skills Development Fund assists businesses, labor unions, and community and technical colleges by financing customized job training for new or existing jobs in local businesses. This fund successfully merges business needs and local job training opportunities into a winning formula for putting people to work.

This program is designed to help Texas public community and technical colleges and a higher education extension agency finance customized job training for their local businesses. The Fund will provide training for specific skills for workers who will be hired by the businesses.

➤ Texas Economic Development Act

This Act was passed by the State Legislature in 2001. The purposes of this Act are as follows:

- a) Encourage large-scale capital investments, especially in school districts that have an ad valorem tax base that is less than the statewide average ad valorem tax base of school districts in this state;
- b) Create new high-paying jobs;
- c) Attract new, large-scale businesses that are exploring opportunities to locate themselves in other states or other countries;
- d) Enable local government officials and economic development professionals to compete with other states by authorizing economic development incentives that meet or exceed incentives being offered to prospective employers by other states and to provide local officials with effective means to attract large-scale investments;
- e) Strengthen and improve the overall performance of the state's economy;
- f) Expand and enlarge the ad valorem property

¹⁸ <http://www.edinburgedc.com/financial-incentives.html>.

tax base of this state;

g) Enhance the economic development efforts by providing school districts with an effective local economic development option.

Depending on the specific region of Texas (i.e. more than \$100 million in metropolitan areas), if any company invests more than the ruled amount of investment, the company will receive a property tax deduction for eight years.

➤ Research & Development Tax Credits

The Program allows franchise tax credits for certain research and development expenditures.

➤ Freeport Exemption

A community may choose to offer the Freeport exemption for various types of goods that are detained in Texas for a short period of time. Freeport property includes goods, wares, merchandise, ores, and certain aircraft parts. Freeport property qualifies for an exemption from ad-valorem taxation only if it has been detained in the state for 175 days or less for the purpose of assembly, storage, manufacturing, processing, or fabricating.

➤ Economic Development Sales Tax¹⁹

The State of Texas created the Economic Development Sales Tax in 1989 to stimulate the Texas economy and provide smaller communities with an optional source of local revenue for economic development.

Voters in many Texas cities have the option of imposing a local sales and use tax to help finance their communities' economic development efforts. These cities may adopt an economic development sales tax rate of 1/8, 1/4, 3/8 or 1/2 of one percent if the new total rate of all local sales and use taxes would not exceed two percent. They also may limit the duration of the tax and the use of the funds.

In just over a decade, this tax has rapidly become the backbone of the local economic development in Texas. More than 500 cities across Texas have approved the tax, which

pumped almost \$325 million into the local economic development in 2001.

➤ State Sales and Use Tax Exemptions

The sales and use tax is the largest source of tax revenue for the Texas state government, bringing in about 55 cents of every state tax dollar. The sales tax is a tax on transactions. In general, it is imposed on final sales, rentals, leases of tangible personal property (physical goods) and on sales of some services, such as the repair of tangible personal property, entertainment, and telephone services.

The State of Texas exempts the use of the sales and use tax for economic development on the following goods and services:

- Production machine and equipments
- No dust clean room related IC chip production
- Natural Gas and Electricity for industrial production

These incentives will be used for attract and recruit industries from other states or foreign countries. Companies are able to use several incentives for their new location.

<Target Marketing and Recruiting>

To promote companies to move to new locations, the above incentives are very important. But a more important method is to market and to recruit by using these incentives. The Greater Austin Chamber of Commerce (GACC) has a unique program called "Target Marketing & Recruiting (TMR)." TMR is one of the most remarkable recruiting programs in the United States.

The Process of TMR is as follows.

- 1) The GACC asks a research consultant to look into target industries which will become or already be major industries in the near future.
- 2) After the consultant finds the target industries, the GACC and the consultant will work together to find the target area where the target industry will locate themselves, and find concrete target company names in those area. The GACC

¹⁹ http://www.window.state.tx.us/taxinfo/taxpubs/tx96_302.html.

and the consultant may have meetings with professors and specialists of those industries to focus on the target industries, target areas and target companies.

- 3) The GACC contacts the target companies to schedule a meeting for recruitment.
- 4) When the companies accept the meeting, the GACC organizes a task force team which consists of an incentive specialist from the State Department of Economic Development, a university professor who knows high-tech education related to the target industry, a developer who knows information about possible locations, an executive from a similar company, a local government officer and the GACC.
- 5) The team members go to the target company to have a recruiting meeting. The team members will answer any questions from the target company.
- 6) Most likely the recruiting process will be unsuccessful with most of the companies, but some of them will be interested in locating in the Austin Metropolitan Area.

The GACC's TMR is a very active promotion to recruit a company. The Most important thing is to find target companies via detailed marketing. Also, the organization of the task force team is important.

(2) Georgia

<Incentives for Job Creation>

The State of Georgia also has strong and various incentives for job creation:²⁰

➤ Job Tax Credits

Job tax credits are available to a business or to its headquarters engaged in any of the following six categories. Taxpayers may choose between job tax credits or investment tax credits.

- Manufacturing
- Research & Development
- Telecommunications
- Processing (data, information, software)

Warehouse Distribution Tourism

Job tax credits range from \$4,000 to \$750 (depends on location:, high in rural areas and low in urban areas) annually per job for 5 years.

Example: A taxpayer creates 50 jobs in the highest county offering a \$4,000 credit; the taxpayer receives \$1 million in tax credits over 5 years to reduce or eliminate Georgia's income tax [50 jobs x \$4,000 x 5 years = \$1 million].

➤ Investment Tax Credits

Investment tax credits generally range from 5% to 1% of the qualified capital investment. The exact credit depends on the area in the state where the investment occurs. Investment tax credits are available to existing manufacturing or telecommunications businesses that have operated facilities in Georgia for three years prior to the application for credit and invested \$50,000 or more. Higher credit levels range from 8% to 3% for investments in recycled equipment, pollution control equipment, and for the conversion of a defense plant to a plant manufacturing a new product. The recycle, pollution control, and defense conversion options are available only for manufacturing plants. Taxpayers must choose either the investment tax credit or the job tax credit.

➤ Optional Investment Tax Credits

The optional investment tax credit can be taken in lieu of the investment tax credit. The credits range from 10% to 6% of qualified capital investment. This credit is available to taxpayers that qualify for investment tax credits. The requirements are the same except for the minimum investment ranging from \$5 to \$20 million.

A taxpayer can use the tax credits against 100% of its tax liability for a given year. Excess credits can be carried forward for ten years.

➤ Headquarters Tax Credit

Companies establishing or relocating their headquarters to a community in Georgia are

²⁰ http://www.georgia.org/economic/incentives/01_intro.html.

eligible to receive an income tax credit of \$5,000 per job, annually for five years if the new jobs pay twice the county average wage rate. The \$5,000 credit is available in all counties regardless of the area in Georgia. A \$2,500 tax credit is available if the wages are greater than the county average.

The tax credit is available to taxpayers that (1) establish or relocate their headquarters and the headquarters of a subsidiary in Georgia, (2) create 50 or more jobs, (3) invest \$1 million, and (4) pay wages that exceed the county average wage rate. A headquarters taxpayer cannot take the job or investment tax credit.

➤ Research & Development Tax Credit

The R&D tax credit is a flat 10% of the additional R&D expense over a base amount. The base is computed from the previous three years' taxable income and research expenses.

Example: A Taxpayer has a base of \$192,000. The current year's R&D expense is \$5,192,000. The Taxpayer is eligible to receive an income tax credit of \$500,000 to reduce or eliminate the Georgia income tax liability: $[\$5,192,000 - \$192,000] \times 10\% = \$500,000$.

➤ Re-training Tax Credit

The re-training tax credit is one-half the employer's approved direct re-training cost up to \$500 per employee. The credit is available to all business categories. Before a taxpayer applies for the credit, its retraining program must be approved by the Georgia Department of Technical & Adult Education. The retraining program must be for new equipment, a new technology, or a new operating system.

The retraining tax credit can be used against 50% of taxpayer's income tax liability in a given year to reduce or eliminate the Georgia income tax liability. Unused credits can be carried forward for ten years. These credits can be combined with other tax credits.

➤ Child Care Tax Credit

Child care credits range from 100% to 75% of costs. Employers who purchase or build

qualified child care facilities are eligible to receive Georgia income tax credits equal to 100% of the cost of construction. Employers who provide or sponsor child care for employees are eligible for a credit against the Georgia income tax equal to 75% of employers' direct costs.

The credits are available to all businesses in the state. The child care program must be licensed by the state.

➤ Small Business [fast growth] Tax Credits

Georgia income tax credits are available to small businesses having a Georgia net taxable income growth of 20% or more each year for three consecutive years. The credit in year 3 is the difference in the net taxable income of year 3 and year 2. Eligible companies include the same categories that can receive the job tax credit except for processing and retail.

<Attract and Recruit from All Over the World>

The State of Georgia provides a team of experienced business professionals located in key markets around the world. These trade representatives assist Georgian companies with:

- Market assessments and entry strategies
- Locating and pre-qualifying appropriate partners and customers
- Advice on current issues, and local business practices
- Arranging appointments for overseas visits

Georgia's representatives also assist international companies with locating Georgia products and services and with establishing business or manufacturing operations in Georgia.

<Georgia Allies>²¹

Georgia Allies was created in 1997, Georgia Allies is a partnership between the state government and private corporations designed to lead marketing efforts for the members of the Georgia Corporation for Economic Development. A collaborative endeavor, Allies leverages the individual initiatives of its members into a larger, targeted program that aggressively promotes

²¹ <http://www.georgia.org/economic/index.asp?qui=4&qual=0>.

Georgia's business development.

Their principal goal is to create the most successful economic development marketing initiative in the world, with particular emphasis on building relationships amongst key decision makers. By identifying and attracting leading companies in strategic industry sectors, the partnership extends the number of quality opportunities available and drives the overall success of Georgia's business development strategies.

<Georgia Resource Center>²²

The Georgia Resource Center (GRC) is a unique high-tech facility using multi-media to showcase Georgia communities for business prospects seeking new locations. With searchable databases, computer images, GIS mapping and digital video, the resource center allows businesses to take a virtual tour of Georgia, previewing a community's quality of life, commercial and industrial sites, labor availability and other pertinent information. The center also serves as a tool for training community leaders in economic and community development processes.

The GRC provides wealthy information to domestic and international businesses considering a move or expansion in Georgia. Using an interactive database and multimedia technology, the GRC gives prospective companies the means to explore all of Georgia from a single location. Executives can gather and view information, narrowing their selection to just those communities and facilities that meet their needs.

This extensive facility features visual databases packed with information about Georgia communities, available industrial and office buildings, and industrial/business parks throughout Georgia. Additionally, a menu of forty-five digital highlight videos covers all location factors and the advantages Georgia presents to a prospective company. They are also available in five international languages to facilitate translation and better understanding.

Georgia Team members from the Department of Labor, Adult and Technical Education, Community Affairs, Industry, Trade, and Tourism, and the Board of Regents will be available to discuss various aspects of the Georgia Package.

The GRC has been operated by the Georgia Power Company and State agencies since 1991.

5. Conclusion

As classified in the introduction, three factors are important for regional employment development:

- (1) Training existing employees or new employees
- (2) Incubating and fostering new industries
- (3) Recruiting and marketing industries with strong incentives

In each of the three factors, the following points are important to think about regional employment development.

(1) Training existing employees or new employees

- Create funding systems from unemployment insurance or other funding source.
- Create direct funding systems to the private companies for customized training.
- Create industry consortiums to organize and manage training.
- Foster training organizations
- Make the best use of Colleges and Universities for customized training.
- Create tax incentives for training.

(2) Incubating and fostering new industries

- Prepare reasonable locations and facilities for entrepreneurs.
- Make the best use of Colleges and Universities.
- Create easy-use public venture capitals for start-up companies.

(3) Recruiting and marketing industries with strong incentives

- Create strong and various tax related incentives for job creation.

²² <http://www.southernco.com/gapower/grc/grc.asp>.

- Create training funds and systems for new employees.
- Use target marketing and recruiting systems by public private partnership.
- Create information networks domestically as well as internationally.
- Create a one-stop location search facility with a regional database of public private partnerships.