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21ST CENTURY JOBS INITIATIVE Tennessee's Resource Valley Progress Report 1995

December 20, 1995

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INTRODUCTION

Tennessee's Resource Valley, a regional economic development organization, was asked to facilitate a two-year, \$750,000 grant from the Department of Energy. The grant's purpose is to make the East Tennessee region less dependent on federal funds for its economic well-being and to increase regional awareness of the advantages of proximity to the Department of Energy facilities in Oak Ridge. Tennessee's Resource Valley's mission is to market the mid-East Tennessee region's business location advantages to corporate decision makers and to facilitate regional initiatives that impact the creation of quality job opportunities. Tennessee's Resource Valley represents the following fifteen (15) counties in East Tennessee: Anderson, Blount, Campbell, Claiborne, Cocke, Grainger, Jefferson, Knox, Loudon, Monroe, Morgan, Scott, Sevier and Union.

CONSULTANT TEAM

Tennessee's Resource Valley was fortunate to have been able to attract the talents of two internationally-renown economic strategy consulting firms. Their leadership, experience, and expertise have established credibility for the 21st Century Jobs Initiative. Their recommendations, included with this report, provide sound solutions to the issue of future economic growth for East Tennessee.

The consultant team for the 21st Century Jobs Initiative was comprised of DRI/McGraw-Hill from San Francisco and the IC² Institute at the University of Texas-Austin. These two consulting firms are well-known throughout the world as economic strategy experts.

DRI/McGraw-Hill

Ted Lyman, the 21st Century Jobs Initiative Project Director, is principal of DRI/McGraw-Hill's Economic Competitiveness Group. As the lead consultant, DRI/McGraw-Hill has been involved in every phase of the planning process. DRI/McGraw-Hill has helped develop economic strategies in Austin, Jacksonville, Salt Lake City, and Wichita. State economic development projects include Iowa, Nebraska, North Dakota, and Wyoming. These projects included recommendations for developing high-tech private industry sectors and for enhancing university-driven technology transfer activities.

IC² Institute

Headed by Dr. George Kozmetsky, a co-founder of Teledyne, the IC² Institute is an international center specializing in technologically-driven economic development. The IC² Institute brought to the project their knowledge of emerging industries and new approaches to the roles of private and public institutions in economic development and technology commercialization. The IC² Institute is known around the world for its model of technology-driven economic development, using multidisciplinary teams to research and formulate problems that require creative solutions.

Work Program

The consultant team's approach consisted of three parts. Economic research formed the foundation upon which the project could build. New approaches to collaboration and networking characterized the cluster working group approach. Finally, the work of the cluster groups resulted in action initiatives or "business plans" which were formulated to address specific problems or opportunities within the region.

Tennessee's Resource Valley staff supported the work of the consultant team by providing logistical support and supplementary analysis. Staff arranged meetings, prepared followup correspondence, and developed a database of individuals and companies participating in the project. Additional staff support was provided by the University of Tennessee and Lockheed Martin Energy Systems.

ECONOMIC ANALYSIS

The fifteen county economy was analyzed using the "Cluster" approach to regional economics. Cluster-based economic development is premised on the fact that companies are less able nowadays to provide all of the inputs they need to succeed. As a result, they look for communities or regions which can provide these inputs. Where these inputs exist, companies gain a competitive advantage.

Clusters are comprised of small and large firms and the economic infrastructure that serves them. Economic infrastructure includes human resources, technology, financial resources, physical infrastructure, quality of life, and the tax and regulatory environment. By fine-tuning the economic infrastructure to meet the needs of clusters, communities and regions can create unique opportunities that will encourage businesses to expand, attract outside investment, and create jobs.

Economic clusters (employment analysis)

Using input-output analysis and export trade data, DRI/McGraw-Hill identified eight clusters of economic activity in East Tennessee:

- Agriculture and Food Products
- Apparel and Textiles
- Automotive and Transportation
- Business and Financial Services
- Forest Products
- Metals and Materials
- Technology Intensive Products and Services
- Tourism

While none of these are categorized as "significant" clusters (according to DRI/McGraw-Hill's definition), these eight clusters represent the major concentrations of economic activity within the region. Specifically, these are the industries that sell products or services outside of the region and therefore bring money into the region. Examination of our manufacturing clusters indicated that in some instances a high demand existed within the region for a product or a raw material that was not being met by suppliers within the region. These "gaps" have been identified as possible targets for industrial recruitment. Economic and employment data for each cluster can be found in Section II of the Final Report.

Economic Benchmarking

As a part of its analysis, DRI/McGraw-Hill compared the Resource Valley region to similar regions in the U.S. A report titled "Benchmarking East Tennessee's Economic Capacity" was produced which compares East Tennessee (Knoxville Metropolitan Statistical Area) to the following regions:

Albuquerque	Austin	Chattanooga
Colorado Springs	Denver	Jacksonville
Memphis	Portland	Raleigh/Durham
Orlando	Salt Lake City	San Antonio
San Jose (Silicon Valley)	Tucson	

This reference group was chosen based on the population size and employment growth. It offers a "yardstick" by which to measure East Tennessee's economic performance. Each one of these regions is attempting to capitalize on its comparative economic advantages and become advanced 21st century economies.

Economic capacity was measured in six categories of economic infrastructure: human resources, technology, financial resources, physical infrastructure, quality of life, and tax and regulation. The methodology and results are further explained in the Benchmarking study accompanying this report.

CLUSTER WORKING GROUPS

An important component of the consultant team's work plan was citizen participation in the economic strategy planning process. To get the best possible input from business and community leaders in East Tennessee, a series of three highly focused meetings were held involving each of the eight clusters. Each cluster's representatives formed a working group whose mission was to use the economic analysis on their cluster to brainstorm for strategic actions that could improve the quality of jobs created in our economy.

The public was invited to share their views on the future of their cluster and our regional economy. Resource Valley staff initially sought to recruit co-chairs for each of the clusters. In doing so, we were looking for leadership qualities that would lend credibility to the effort and also allow us to get the best possible input into the working group phase of the project. Secondly, Resource Valley staff contacted each of the 15 counties we serve to add names and diversity to each working group. In late May of 1995, Dr. Ed Boling, chairman of the 21st Century Jobs Initiative, sent an invitation letter to all of the names on our list. Additionally, the public was invited by the local media to attend the working group meetings.

The cluster working group process was facilitated by Ted Lyman and Jim Gollub, principals of DRI/McGraw-Hill's economic competitiveness group. This series of three highly-focused meetings enabled our business and community leaders to take a careful look at where our economy is heading and to formulate action plans to intervene. The objectives of the three meetings were as follows:

- Meeting 1:** • Identifying common industry needs
(mid-June) • Setting priorities for action
- Meeting 2:** • Matching regional resources with industry potential
(mid-July) • Exploring a future industry cluster vision
• Narrowing the possible action areas
- Meeting 3:** • Completing Business Plans for initiative implementation
(September)

Attendance at the working group meetings ranged from a high of 80 attending the first Technology-Intensive group meeting to a low of 8 attendees at the third Apparel and Textiles group meeting.

21ST CENTURY JOBS INITIATIVE SURVEY

A survey was undertaken in July to gather information from a more diverse array of leaders within East Tennessee. This survey involved a non-random sample of 1500 business and community leaders from East Tennessee. Non-random sampling techniques were used in order to get input from a majority of the region's business and community leaders. While a random sample was not used for this survey, every effort was made to distribute surveys to leaders in all 15 counties of the Resource Valley region. Six hundred individuals

The purpose of the survey was to discover perceptions in the region on the facilitators and inhibitors of economic growth and new business formation. A detailed discussion of the survey findings can be found in Section III of the Final Report.

Highlights from the survey findings were:

- Our region possesses a strong technological base of knowledge.
- We have competitively priced land and a pro-business environment.
- Our quality-of-life ranked highly among respondents.
- Leaders are concerned about protecting the region's natural assets and resources to maintain our quality-of-life.
- We must learn to harness the region's technology base to form new business enterprises.

FINDINGS AND ACCOMPLISHMENTS

The initial phase of the 21st Century Jobs Initiative has accomplished the region's goals and objectives. Listed below are highlights of the findings and accomplishments during the first year:

- For the first time, economic data on the fifteen county regional economy has been gathered and analyzed.
- From this analysis, eight economic clusters have been identified. These clusters form the "backbone" of our economy. While they represent 30% of all employment in the 15 counties, the other 70% of jobs in our economy depend on these eight clusters.
- Employment growth in our five traditional manufacturing clusters is forecast to remain steady or decline over the next ten years.
- Rapid increases in employment growth are expected in the Business and Financial Services cluster and the Tourism cluster.
- Supply gaps or gaps in our economic clusters have been identified. Our consultant team examined the purchasing patterns for raw materials and finished products in our region. From this analysis, they identified products and services where demand was not being met by regional suppliers. This "Supply gap analysis" will enable our economic development professionals to more effectively target business and industries.
- Unique opportunities exist in this region to infuse our traditional manufacturing processes with new technologies emerging from the Oak Ridge Complex. These opportunities have been identified and categorized by cluster.
- Issues have been articulated that are important to the vast majority of East Tennessee's business and community leaders.
- Specifically, these issues have been grouped into five "Big Ideas" for our region:
 - a) Educate and train a world-class workforce
 - b) Grow the jobs of the 21st century
 - c) Make Oak Ridge's technology more accessible

- d) Connect the Valley to the world
- e) Market East Tennessee as the place to be
- The regional leadership is now working together to implement these five "Big Ideas."
- Thirty business plans were formulated by the cluster working groups. Each one of these business plans was scored by the working groups and then given an average "readiness" score based on the perception of its readiness for implementation.
- A "blueprint" for action has been formulated by the cluster working groups drawing on the regional economic analysis.
- Tennessee's Resource Valley intends to develop a marketing plan based on the cluster approach to economic development.

PROGRESS MONITORING

Perhaps the greatest accomplishment of the 21st Century Jobs Initiative is that a framework has been created for our business and community leaders to collectively solve problems in the future. Our consultant team has assured us that communities which survive into the 21st century will be those that have learned to work together to solve today's problems and anticipate tomorrow's challenges.

Tennessee's Resource Valley will track the progress of the 21st Century Jobs Initiative by facilitating the implementation of the "Five Big Ideas" that emerged from the consultant team's recommendations. A full-time project manager, Allan Wimmer, will oversee the implementation and present a progress report on a quarterly basis to the Tennessee's Resource Valley Board of Directors and on an annual basis to the Department of Energy. Plans are also underway to produce an "Economic Report to the Region" in conjunction with the University of Tennessee Business School. The University of Tennessee School of Planning intends to assist in producing an annual update of the benchmarking report, "Benchmarking East Tennessee's Economic Capacity."

Tennessee's Resource Valley will continue to facilitate the implementation of the 21st Century Jobs Initiative by working closely with regional business and community leaders. In some cases, Tennessee's Resource Valley will take the lead role (i.e. marketing). In others, Tennessee's Resource Valley staff will provide more of a supporting role. Nevertheless, Tennessee's Resource Valley has a strong Board of Directors comprised of private and public sector leaders that will continue to work toward improving our regional economy and lessening our dependence on federal funding with the goal of increasing our economic prosperity.

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