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2003  
Report To The Legislature  
on  
**Efforts to Increase the  
Number Of High-Skilled Jobs in Targeted  
Industry Clusters**

Pursuant to Act 148  
SLH 2003

Act 148, SLH 2003, requires that *“The department of business, economic development, and tourism shall submit an annual report to the legislature on the department's efforts to increase the number of high-skilled jobs in targeted industry clusters consistent with the efforts of the workforce development council.”* The Department is pleased to submit its first report under this provision.

## **DBEDT and Workforce Development**

One of the major new initiatives by DBEDT since the beginning of 2003 has been a more intensive collaboration with the Governor’s Workforce Development Council (WDC) and other partners on workforce development. This collaboration has resulted in several initiatives that will address Act 148. First, the collaboration is developing a common framework for defining industry clusters to be targeted or addressed in some manner by the economic development, workforce development and education communities. Second, along with the identification of industry clusters, DBEDT is working with the WDC to establish a labor demand and supply matrix that will aid planning for both workforce and educational needs. Finally, DBEDT and its workforce and educational partners are pursuing a new effort with the national Governors Association to increase the by increasing the proportion of youth and working adults continuing post-secondary education degree and certificate programs. This will help increase the future flow of high skilled workers into the economy.

## **Efforts to Identify Targeted Industry Clusters**

The notion of industry “clusters” is a recent innovation in economic development practice. For many decades economic and workforce developers have viewed the economy through the traditional industry classifications of manufacturing, retailing, services, and so on. “Clustering” represents an advance in the field by helping to identify groups of firms in related industries that share markets, labor needs and similar infrastructure. Identifying clusters that are showing above average growth and which support high-skilled employment can improve the effectiveness of economic development and workforce efforts. Firms within clusters can be identified and given the opportunity to collaborate with one another on common development issues. An example might be visitor accommodations and closely related firms in Waikiki, which depend on a similar market, have similar resource needs and depend on the quality of the Waikiki infrastructure. Another example might be the high tech firms associated with the Pacific Missile Range Facility on West Kauai. Of course, economic and workforce development are aware of these clusters on an informal basis. However, the detailed data needed to understand the scope, growth and labor characteristics of the many potential clusters has yet to be developed.

That research for Hawaii is now underway. DBEDT’s economic development partner, Enterprise Honolulu, Inc. is taking the lead in gathering data on Hawaii’s industry clusters through sophisticated analysis of industry data. DBEDT is collaborating and assisting in this effort. A major goal of the effort is to classify Hawaii’s industries according to their growth and wage levels and identify common characteristics that would suggest inter-dependent clusters. At that point the clusters can be better evaluated for their economic and workforce potential and how they can be helped or can help themselves. Another important goal of this project is to develop the cluster groupings using standard industrial data that is compatible with both economic and workforce and educational research. In this way the results of the cluster analysis will be compatible with the broad range of research being conducted.

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## Labor Demand/Supply Matrix

DBEDT is also assisting in a parallel effort being undertaken by the Workforce Development Council. The goal of this effort is to establish a matrix that will cross-reference the industries in Hawaii's economy with the range of occupations or skill sets required in these industries. DBEDT's Research and Economic Analysis Division is working with the WDC Planning Committee and Department of Labor and Industrial Relations (DLIR) Research and Statistics Office to develop this tool. When complete, the demand matrix of industries and occupation can be used to forecast the need for new and replacement workers by industry and occupation under a number of economic growth scenarios. This will permit the business sector, government and educational/training agencies to understand the range of future labor demand.

An eventual extension of the demand matrix will be a labor *supply* matrix that will relate the anticipated supply of labor from various sources to industry/occupational demand. This tool will help clarify the bottlenecks and potential untapped sources of labor in the future, given economic development scenarios. This matrix will require considerable input from the educational community.

## Increasing the Educational Pipeline

With an expected tightening in the labor force as the baby boom generation begins to retire, it becomes critical to fully develop the skills of our youth and expand the skills of working adults. However, statistics show that only 37% of Hawaii's high school graduates enroll in a post-secondary education program within four years. The proportion increases somewhat for adults age 23 to 24, but plummets to just 3.6% for adults between 25 and 44. Moreover, only 44% of first-year Hawaii community college students return for their second year compared with 63% nationwide. For university students only 37% of first-year students currently earn a baccalaureate degree within six years compared with 66% nationally.

In an effort to address this problem, DBEDT has partnered with the University of Hawaii and the Workforce Development Council to sponsor State participation in a National Governors Association academy designed to help states boost the participation of working adults in post-secondary degree/certificate programs. Hawaii is one of eight states chosen competitively to participate in the project from among 25 states that applied. Under the NGA program, a cross section of public and private sector leaders will develop a strategy and recommendations for increasing working adult participation in post secondary programs. In addition, the group will look at ways to keep more youth in the educational pipeline from the completion of high school requirements through the acquisition of a post-secondary degree or certificate.

More detail on these four initiatives is available in the Workforce Development Council's annual report to the Governor for 2003.