

**Business Relations Group**

# Status Report

**Capacity Building**

**Business Solutions**

**Industry Profiles**

**Community-Based Job Training Grants**

**High Growth Job Training Initiative**

**eta**

**EMPLOYMENT AND TRAINING ADMINISTRATION**  
UNITED STATES DEPARTMENT OF LABOR

**JANUARY 2009**

# Business Relations Group

STATUS REPORT | JANUARY 2009

High Growth Job Training Initiative.....	p. 3
Community-Based Job Training Grants .....	p. 61
Business Solutions.....	p. 63
Career Awareness .....	p. 68

eta

EMPLOYMENT AND TRAINING ADMINISTRATION  
UNITED STATES DEPARTMENT OF LABOR



## Advanced Manufacturing Industry

### ETA IN ACTION

The competitiveness of U.S. manufacturers is increasingly grounded in their ability to innovate. In order to maintain their edge in innovation, U.S. manufacturers need access to a highly skilled, flexible, and creative workforce. New manufacturing process technologies, the demand for new and innovative products, and the need for manufacturers to utilize sustainable and green business practices require a manufacturing workforce with an increasingly advanced set of skills and competencies. As a result, manufacturers need effective methods to update and improve the skills of their employees.

Through investments such as the President's High Growth Job Training Initiative, the President's Community-Based Job Training Grants, and the Workforce Innovation in Regional Economic Development (WIRED) program, ETA has invested in projects that demonstrate the value of strong partnerships between manufacturing employers, education and training providers, the public workforce system, and economic development organizations. Through these partnerships, communities and regions across the nation are developing workforce solutions that respond to the needs of industry, promote sustainable economic growth, and offer replicable models that can be utilized by other communities facing similar challenges.

As part of its strategy for the advanced manufacturing industry, ETA is helping to facilitate the sharing of workforce solutions and best practices among communities and organizations that are working to educate and train the next generation of American manufacturing workers.

### WORKFORCE SOLUTION

#### Creating Career Pathways

Calhoun Community College, through a High Growth Job Training Grant to the Alabama Department of Economic and Community Development and in partnership with the Tennessee Valley WIRED region, is training the workforce in the northern Alabama region to meet industry needs in Industrial Maintenance, Machine Tool Technology, Aerospace, Process Technology and Heating, Ventilation, and Air Conditioning. Through an 18-month process involving curriculum review and revision by Industry Subject Matter Experts (SMEs), Calhoun has developed an Applied Technology curriculum to offer modularized training with multiple entry/exit points that create career pathways for both new and incumbent workers.

The SMEs also identified a "core" set of technical skills that are common across manufacturing sectors, and Calhoun offers this core curriculum to students as a common base for all of the technical specialties. A Co-Operational Program that invites industry to participate in helping to "grow their own" technically skilled employees is a vital part of this program. To learn more about this workforce solution, visit [www.workforce3one.org](http://www.workforce3one.org).

**Advanced Manufacturing Industry****Grant awards**

On October 19, 2006, U.S. Secretary of Labor Elaine L. Chao announced \$16.8 million in grants to 11 organizations in 10 states to prepare workers for careers in advanced manufacturing. The organizations were selected from among 186 applicants competing under the President's High Growth Job Training Initiative. The full press release, including a list of the grantees, is available on the Employment and Training Administration's Web site at [www.doleta.gov](http://www.doleta.gov).

**Industry engagement**

Through its work with business and industry, the public workforce system, education and training institutions, and other federal partner agencies, ETA will support efforts to: 1) utilize ETA's Workforce Innovation in Regional Economic Development (WIRED) initiative to facilitate model partnerships among manufacturers, federal labs, universities, Manufacturing Extension Partnership centers, and other stakeholders to promote technology transition and deployment; 2) identify innovative strategies and solutions that address the critical workforce challenges that confront the advanced manufacturing industry; and 3) create tools and resources that various stakeholders may use to navigate the challenges of transformation from "traditional" to "advanced" manufacturing. ETA will also continue to coordinate engagement with industry leaders to ensure that all strategies align with current industry priorities.

Over the course of the President's High Growth Job Training Initiative for advanced manufacturing, ETA learned about numerous efforts to document the skills and competencies needed for successful careers in the industry. These disconnected or competing activities caused much duplication of effort, wasted resources, and left gaps in the critical skills and competencies that workers need for the modern manufacturing environment. In response to these challenges, ETA convened a working group of industry

representatives and educators to develop the Advanced Manufacturing Competency Model. The group reviewed hundreds of existing industry standards and curricula to identify the common elements which apply across all manufacturing sectors. In this way, the framework builds on, and aligns with, the excellent work that has already been conducted by many groups, but which has never been assembled in a comprehensive model. Such a model framework allows for consistency across industries and easy updating to accommodate changing technology and business practices.

The competency model also allows for customization within specific industry sectors or professions. For example, in collaboration with the Automation Federation, ETA has worked with industry leaders to develop a comprehensive competency model for careers in automation. The model is designed to evolve along with changing skill requirements, and the Automation Federation has committed to working with its industry partners to keep the model current.

Through collaboration with WIRED regions, High Growth Job Training Initiative grantees, and other organizations engaged in manufacturing workforce development, ETA is also seeking to promote the sharing of best practices and innovative solutions among regions and institutions nationwide. Eleven of ETA's first generation WIRED regions – Coastal Maine, Upstate New York, Greater Kansas City, Mid-Michigan, North Central Indiana, Florida's Great Northwest, Piedmont Triad, Western Alabama and Eastern Mississippi, and West Michigan – are targeting the advanced manufacturing industry as a regional economic driver. Six second generation regions – Arkansas Delta, Northern New Jersey, Rio Grande Valley, Southeast Michigan, Southeast Wisconsin, and Southwestern Connecticut – are also focusing on the industry. Finally, eight third generation WIRED regions – South-Central Idaho, South-

## Advanced Manufacturing Industry

Central Kansas, Central Kentucky, Southeastern Mississippi, Southeast Missouri, North Oregon, Pacific Mountain Washington, and South Central & South West Wisconsin – are targeting the advanced manufacturing industry. The BRG is supporting these regions with its expertise on the national trends in the industry and its involvement with major industry stakeholders.

### Dissemination

ETA will maximize the investments resulting from High Growth and Community-Based Job Training Grants, as well as Workforce Innovation in Regional Economic Development (WIRED) grants by sharing valuable workforce solutions with business, education, and workforce system communities. ETA's capacity building Web site, [www.workforce3one.org](http://www.workforce3one.org), showcases these innovative solutions on a new "Workforce Solutions Tab," where users can easily search for solutions by product type, high growth industry, and state. In addition, many of our grantee solutions are featured in a Workforce3one monthly newsletter.

ETA is sharing the products widely to enable others to replicate and adapt these products and further stimulate innovation and creative responses to the nation's workforce challenges. We are currently tracking over 1,000 products across our High Growth and Community-Based investments and are currently in the process of collecting and documenting our WIRED products.

The following is a summary of our national dissemination activities to date:

- In July 2008, ETA disseminated a comprehensive catalogue to over 2,500 attendees at ETA's annual Workforce Innovations Conference. This catalogue features 180 new workforce solutions along with over 120 existing solutions. Attendees at this conference include

state and local workforce development professionals, representatives from community and faith-based organizations, community colleges, federal agencies, and business and industry.

- ETA also completed a Training Employment Notice (TEN) in July 2008 to further educate the workforce development community about our High Growth and Community-Based Workforce Solutions. The purpose of the TEN was to inform our workforce system colleagues about these solutions including what they are, how they can add value to their region's goals and priorities, and where they can be found. The TEN also provides examples for how a workforce area might replicate or adapt these solutions to further stimulate innovation and respond to our nation's workforce challenges.
- In 2008-2009 we will continue to collect solutions developed across ETA's High Growth, Community-Based and WIRED investments and make them available on Workforce3One. The focus will be on collecting high-quality materials, spotlighting best practices across industries via webinars and conference presentations, and continuing to share products with stakeholders as appropriate. We anticipate developing and disseminating a second Workforce Solutions Catalogue in July 2009 at ETA's Workforce Innovations Conference.

### Outreach

In April 2006, the U.S. Department of Labor, in partnership with McGraw Hill Construction, published *In Demand: Careers in Advanced Manufacturing*. The magazine highlights job opportunities and career paths for young people and tips on career awareness for parents, teachers, and guidance and school counselors. One million copies were sent to 18,427 high

## Advanced Manufacturing Industry

schools across the United States and it is also available online at [www.careervoyages.com/indemandmagazineadvmanufacturing.cfm](http://www.careervoyages.com/indemandmagazineadvmanufacturing.cfm).

In September 2006, the U.S. Department of Labor, in partnership with McGraw Hill Construction, published the back-to-school cross-industry issue of *In Demand: Careers in Science-Technology-Engineering- Mathematics*, featuring several high-growth industries such as biotechnology, advanced manufacturing, geospatial technology, health care, nanotechnology, construction, transportation, and homeland security. This was the fifth in the overall series and the first cross-industry issue. The magazine highlights cross-industry job opportunities and career paths for young people and tips on career awareness for parents, teachers, and guidance and school counselors. One million copies of this magazine were sent to 18,427 high schools across the United States, and it is also available online at [www.careervoyages.com/indemandmagazine-stem.cfm](http://www.careervoyages.com/indemandmagazine-stem.cfm).

Information will continue to be provided to the Career Voyages ([www.careervoyages.gov](http://www.careervoyages.gov)) Web site.

### ***Investments as of December 31, 2008: \$74,944,990 in 31 grants***

DOL has announced awards of 31 investments totaling nearly \$75 million to address the workforce needs of the advanced manufacturing industry. Through multiple forums, ETA has listened to employers, industry associations, labor-management organizations, and others in the advanced manufacturing industry regarding their efforts to identify challenges and implement effective workforce strategies. ETA has worked with the advanced manufacturing industry to identify its hiring, training, and retention challenges. For additional information on the advanced manufacturing investments, please visit [www.doleta.gov/business](http://www.doleta.gov/business).

DOL has announced awards of 31 investments totaling nearly \$75 million to address the workforce needs of the advanced manufacturing industry. Through multiple forums, ETA has listened to employers, industry associations, labor-management organizations, and others in the advanced manufacturing industry regarding their efforts to identify challenges and implement effective workforce strategies. ETA has worked with the advanced manufacturing industry to identify its hiring, training, and retention challenges. For additional information on the advanced manufacturing investments, please visit [www.doleta.gov/business](http://www.doleta.gov/business).

### **360vu Research and Education Foundation (national)**

*National Lean Enterprise Certification Program*  
Grant amount: \$2,000,322

### **Alabama Department of Economic and Community Affairs (AL)**

*Alabama's Center for Manufacturing Innovation*  
Grant amount: \$3,548,115

### **Arkansas Department of Workforce Services (AR)**

*Eastern Arkansas Advanced Manufacturing Technology Regional Training Initiative*  
Grant amount: \$5,935,402

### **Central Community College (NE)**

*Nebraska Mechatronics Education Center*  
Grant amount: \$1,639,403

### **Connecticut Business and Industry Association (CBIA) Education Foundation (CT, MA)**

*Connecticut-Western Massachusetts Advanced Manufacturing Collaborative*  
Grant amount: \$1,775,030

### **Delaware Valley Industrial Resource Center (PA)**

*The Manufacturing Education Project*  
Grant amount: \$3,000,000



## Advanced Manufacturing Industry

**Greater Peninsula Workforce Investment Board (VA)**

*The SE Virginia Advanced Manufacturing Collaborative*

Grant amount: \$1,965,000

**Henderson-Henderson County Chamber of Commerce (KY)**

*Tri-County Industrial Training Consortium*

Grant amount: \$2,991,840

**States of Illinois and Ohio-National Center for Integrated Systems Technology (IL, OH)**

*Integrated Systems Technology Training for Dislocated Workers*

Grant Amount: \$9,461,606

**Illinois State University/National Center for Integrated Systems Technology (IL, NC, OH, PA, TX, WY)**

*Expanding the Integrated Systems Technology Project*

Grant amount: \$5,774,420

**International Association of Nanotechnology (CA)**

*California Nanotechnology Workforce Training Program*

Grant amount: \$1,500,000

**Ivy Tech Community College of Indiana (IA)**

*Indiana Advanced Manufacturing Education Collaborative*

Grant amount: \$1,860,515

**Lancaster County Workforce Investment Board (PA)**

*The Pennsylvania Advanced Manufacturing Collaborative*

Grant amount: \$1,354,585

**Los Angeles Valley College (CA)**

*Advanced Manufacturing Training Institute*

Grant amount: \$1,500,000

**Lower Rio Grande Valley Workforce Development Board (TX)**

*South Texas Advanced Manufacturing Apprenticeship*

Grant amount: \$2,000,000

**Maine Department of Economic and Community Development (CT, ME, NH, MA, RI, VT)**

*Accelerated Skills Training for New England Machine Shops*

Grant amount: \$2,996,724

**National Association of Manufacturers (MO)**

*"Dream It, Do It" Career Campaign*

Grant amount: \$498,520

**National Institute for Metalworking Skills (national)**

*Competency-Based Apprenticeship System in the Metalworking Industry*

Grant amount: \$1,956,700

**National Institute for Metalworking Skills (national)**

*Flexible Training Options for Metalworking*

Grant amount: \$939,815

**North Central Texas Workforce Board (TX)**

*Supply Chain Logistics Skills Training and Certification Project*

Grant amount: \$1,562,382

**Oklahoma Department of Commerce (OK)**

*Manufacturing for Oklahoma's Vital Economic Sustainability*

Grant amount: \$1,500,000

**Oregon Manufacturing Extension Partnership (ID, NV, OR, WA)**

*Lean Manufacturing Training for Value-Added Food Processors with Training for Limited*

*English-Speaking Workers*

Grant amount: \$3,199,709



## Advanced Manufacturing Industry

**Pennsylvania Workforce Investment Board (PA)***The Pennsylvania Plastics Initiative*

Grant amount: \$3,750,000

**Philadelphia Workforce Investment Board (DE, NJ, PA)***Biotechnology Human Capital Investment Project*

Grant amount: \$1,500,000

**Rochester Institute of Technology (NY)***Advanced Food and Beverage Manufacturing Institute of Upstate New York*

Grant amount: \$1,158,983

**St. Louis Workforce Investment Board (MO)***Greater St. Louis Area Automotive Training Consortium*

Grant amount: \$1,499,998

**San Bernardino Community College District (CA)***Skills Certification Project for Southern California*

Grant amount: \$1,618,334

**Techsolve, Inc. (OH)***Automotive Lean/Six Sigma Training*

Grant amount: \$1,464,670

**Virginia Biotechnology Association (MD, VA)***Virginia Advanced Manufacturing Technical Skills Project*

Grant amount: \$1,494,369

**Western Iowa Tech Community College (IA)***Career Institute for Industrial Technologies*

Grant amount: \$1,498,548

**Workplace, Inc. (Southwestern Connecticut's Regional Workforce Development Board) (CT)***Advanced Skills for Southwest Connecticut's Manufacturers*

Grant amount: \$2,000,000

**BACKGROUND**

Over the course of five Executive Forums, ETA met with senior executives from more than 120 manufacturing firms and trade associations, representing a broad cross-section of the manufacturing industry. The research conducted over the course of this Advanced Manufacturing Initiative provides insight into what industry executives identify as their key workforce development concerns. It is clear that there is demand for new workers, recruited from new sources, trained with new skill sets, while incumbent workers need training to upgrade their skills. The following is a chronology of the advanced manufacturing forums that ETA conducted, as well as a snapshot of the workforce issues that were discussed in those forums.

For additional background information about the industry's Executive and Workforce Solutions Forums, please see the Advanced Manufacturing High Growth Industry Profile at [www.doleta.gov/brg](http://www.doleta.gov/brg).

***Advanced Manufacturing Industry Executive Forums***

- August 13, 2003, with the U.S. Department of Commerce, in Washington, D.C.
- March 18, 2004, with the National Association of Manufacturers, in Naples, FL
- March 29, 2004, with the National Association of Manufacturers Employer Group, in Miami, FL
- April 13, 2004, with the National Coalition for Advanced Manufacturing, in Chicago, IL
- May 27, 2004, with multiple manufacturing sectors, in Washington, D.C.

**Advanced Manufacturing Industry*****Advanced Manufacturing Industry Workforce Solutions Forum***

- June 7-8, 2004, in Dallas, TX

**WORKFORCE ISSUES*****Training for innovation***

- Need to up-skill the incumbent workforce for new technologies
- Need to develop training programs that fit employer needs and constraints
- Need to integrate training programs for the supply chain

***Pipeline***

- Need to improve the public image of the industry in order to generate interest in manufacturing careers
- Need to develop 21st century recruitment strategies
- Need to address demographic shifts, including the retirement of the Baby Boomers, integrating the foreign-born workforce, and utilizing displaced workers and other alternative labor pools
- Need to improve the basic employability skills of entry-level workers

***Capacity building***

- Need for qualified instructors
- Need for updated equipment for training
- Need for defined competencies, and career ladders and lattices

A Webinar for the advanced manufacturing industry and the Manufacturing Extension Partnership (MEP) was held on December 8, 2005, and can be found at [www.workforce3one.org](http://www.workforce3one.org). An industry report is available on ETA's Web site at [www.doleta.gov/brg](http://www.doleta.gov/brg).

***BRG contact***

Steve Rietzke

## Aerospace Industry

### ETA IN ACTION

On December 20, 2006, President Bush signed legislation to establish an Interagency Aerospace Revitalization Task Force that is directed to develop a strategy for aerospace workforce development. This Act appoints the Assistant Secretary of Labor for Employment and Training to serve as the chair of an eleven member Task Force, with members from the Departments of Commerce, Defense, Education, Energy, Homeland Security, Transportation, the National Science Foundation, NASA, and the White House. The Task Force is committed to answering the Congressional mandate to maximize cooperation among departments and agencies of the Federal Government; developing integrated policies to promote and monitor programs in science, technology, engineering, and mathematics (STEM); establishing the appropriate partnerships to collect and disseminate information; and coordinating appropriate agency resources. Working with key stakeholders from education, industry, and the public workforce system, the Task Force worked throughout 2008 to implement the strategies and solutions identified in the first annual report.

The Task Force is working to ensure the availability of resources, tools, and guidance developed under its leadership and direction beyond the statutory sunset established by law. An important step is the identification of key career staff at each member agency to retain the institutional knowledge of the Task Force and to aid in the transition of Task Force leadership during 2009.

The Task Force is also working to identify, invest, and promote model strategies in aerospace workforce and STEM education solutions, including the provision of comprehensive technical assistance tools that provide

guidance in replicating best practices of existing aerospace employment centers. Accomplishments related to this activity include:

- Development of a skills competency model for the aerospace industry with Task Force partners serving as advocates for the model.
- Accumulation of existing public/private investments and best practices for sharing via the Task Force cyber-community.
- Accumulation of existing metrics and common measures used for program evaluation for sharing via the Task Force cyber-community.

Finally, the Task Force is working to ensure that information from its partners and other public/private sources is compiled and promoted in a consistent manner for multiple audiences. This activity includes a redesign of the aerospace web page at [www.workforce3one.org](http://www.workforce3one.org) to serve as an interim home for Task Force-developed information.

ETA is also working to finalize a competency framework for use by stakeholders that relies upon an educated and prepared workforce with skills in aerospace. This effort builds on existing standards, curricula, and certifications across multiple disciplines. The end product will be a competency model which is intended to reduce the duplication of effort involved in continually identifying and re-validating core foundational competencies for separate projects. The competency model will free up resources, time, and energy for innovative developments that can keep up with the pace of changing technology and reflect the changing requirements of specific regions or businesses. A draft model was released to aerospace stakeholders on September 17, 2008, and ETA finalized on December 20, 2008.

## Aerospace Industry

### *Industry engagement*

Three of ETA's first generation Workforce Innovation in Regional Economic Development (WIRED) regions – Florida's Great Northwest, Denver Metro, and California Innovation Corridor – are targeting the aerospace industry as a regional economic driver. In addition, three third generation regions – Southern Arizona, South-Central Kansas, and Greater Albuquerque (NM) – are also focusing on the industry. ETA is currently working to establish an Aerospace Community of Practice for these regions and others that are interested in the industry to facilitate the exchange of information via conference calls, e-mail, video conferencing, and meetings, for the discussion of best practices and information exchange related to aerospace talent development.

In addition, ETA has convened aerospace industry, education, and workforce development experts throughout the year for conversations regarding the Interagency Aerospace Revitalization Task Force to discuss the unique workforce challenges currently facing the aerospace industry.

### *Dissemination*

ETA will maximize the investments resulting from High Growth and Community-Based Job Training Grants, as well as Workforce Innovation in Regional Economic Development (WIRED) grants by sharing valuable workforce solutions with business, education, and workforce system communities. ETA's capacity building Web site, [www.workforce3one.org](http://www.workforce3one.org), showcases these innovative solutions on a new "Workforce Solutions Tab," where users can easily search for solutions by product type, high growth industry, and state. In addition, many of our grantee solutions are featured in a Workforce3one monthly newsletter.

ETA is sharing the products widely to enable others to replicate and adapt these products

and further stimulate innovation and creative responses to the nation's workforce challenges. We are currently tracking over 1,000 products across our High Growth and Community-Based investments and are currently in the process of collecting and documenting our WIRED products.

The following is a summary of our national dissemination activities to date:

- In July 2008, ETA disseminated a comprehensive catalogue to over 2,500 attendees at ETA's annual Workforce Innovations Conference. This catalogue features 180 new workforce solutions along with over 120 existing solutions. Attendees at this conference include state and local workforce development professionals, representatives from community and faith-based organizations, community colleges, federal agencies, and business and industry.
- ETA also completed a Training Employment Notice (TEN) in July 2008 to further educate the workforce development community about our High Growth and Community-Based Workforce Solutions. The purpose of the TEN was to inform our workforce system colleagues about these solutions including what they are, how they can add value to their region's goals and priorities, and where they can be found. The TEN also provides examples for how a workforce area might replicate or adapt these solutions to further stimulate innovation and respond to our nation's workforce challenges.
- In 2008-2009 we will continue to collect solutions developed across ETA's High Growth, Community-Based and WIRED investments and make them available on Workforce3One. The focus will be on collecting high-quality materials, spotlighting best practices across industries

## Aerospace Industry

via webinars and conference presentations, and continuing to share products with stakeholders as appropriate. We anticipate developing and disseminating a second Workforce Solutions Catalogue in July 2009 at ETA's Workforce Innovations Conference.

### Outreach

In September 2006, the U.S. Department of Labor, in partnership with McGraw Hill Construction, published the back-to-school cross-industry issue of *In Demand: Careers in Science-Technology-Engineering- Mathematics*, featuring several high-growth industries such as biotechnology, advanced manufacturing, geospatial technology, health care, nanotechnology, construction, transportation, and homeland security. This was the fifth in the overall series and the first cross-industry issue. The magazine highlights cross-industry job opportunities and career paths for young people and tips on career awareness for parents, teachers, and guidance and school counselors. One million copies of this magazine were sent to 18,427 high schools across the United States, and it is also available online at [www.careervoyages.com/indemand-magazine-stem.cfm](http://www.careervoyages.com/indemand-magazine-stem.cfm).

Information will continue to be provided to the Career Voyages ([www.careervoyages.gov](http://www.careervoyages.gov)) Web site.

### **Investment as of December 31, 2008: \$8,856,453 in seven grants**

Since October 2004, DOL has announced the award of 7 investments totaling nearly \$9 million to address the workforce needs of the aerospace industry. Through multiple forums, ETA has listened to employers, industry associations, and others in the aerospace industry regarding their efforts to identify challenges and implement effective workforce strategies. ETA has worked with the aerospace industry to identify its hiring, training, and reten-

tion challenges in its sectors ranging from aerospace manufacturing to launch facility operation. For additional information on the aerospace investments, please visit [www.doleta.gov/business](http://www.doleta.gov/business).

#### **Aerospace Development Center (AL)**

*Solutions Aerospace*

Grant amount: \$1,898,820

#### **Brevard Community College in partnership with American Technical Education Association (FL)**

*Cert-Tech: The National Certification Technician Program*

Grant amount: \$98,560

#### **Community Learning Center, Inc. (TX)**

*Aerospace Industry Training Project (AITP)*

Grant amount #1: \$2,860,000

Grant amount #2: \$1,168,400

#### **Edmonds Community College (WA)**

*The Triad Initiative*

Grant amount: \$1,475,045

#### **Florida Space Research Institute (FL)**

*Florida Aerospace Pilot Project*

Grant amount: \$355,628

#### **Houston-Galveston Area Council for the Gulf Coast Workforce Board (TX)**

*Houston Area Aerospace Technology Skills Training*

Grant amount: \$1,000,000

**Aerospace Industry****BACKGROUND**

The President's High Growth Job Training Initiative began by conducting baseline research of the industry's needs. The final report of the Commission on the Future of the United States Aerospace Industry, issued in November 2002, was also used as a key reference source for identifying challenges and solutions. On March 10, 2004, an Executive Forum was held in Washington, D.C., with leaders in the aerospace industry; ETA agreed to host a solutions forum that would be comprised of business, industry, education and the public workforce system to begin prioritizing challenges and developing innovative solutions.

ETA hosted the Aerospace Workforce Solutions Forum on June 9-10, 2004, in Washington, D.C. Thirty-five aerospace stakeholders representing industry, education, labor organizations, the public workforce investment system, the states and federal government participated in the Aerospace Workforce Solutions Forum. The group developed 136 solutions, twenty-one solution matrices and identified six overall priority solutions, clustered in two priority areas, the Aging Workforce and the Loss of Technical Talent. The following section gives a brief summary of these priority solutions.

The introductory Webinar for the aerospace industry was held on November 15, 2005, and can be found at [www.workforce3one.org](http://www.workforce3one.org). An industry report is available on ETA's Web site at [www.doleta.gov/brg](http://www.doleta.gov/brg). For additional background information about the industry's Executive and Workforce Solutions Forums, please see the Aerospace High Growth Industry Profile and the Aerospace Industry Report prepared for eta at [www.doleta.gov/brg](http://www.doleta.gov/brg).

***Aerospace Industry Executive Forum***

- March 10, 2004, with the Aerospace Industry Association, in Washington, D.C.

***Aerospace Industry Workforce Solutions Forum***

- June 9–10, 2004, in Washington, D.C.
- October 18, 2007, in Arlington, VA

**WORKFORCE ISSUES*****Aging workforce***

- Preparing for the demographic cliff
- Addressing the loss of institutional memory, experience, and intellectual capital
- Protecting the skills base, including improving the basic employability skills of entry level workers

***Loss of technical talent***

- Recruiting youth and diverse, nontraditional labor pools
- Reducing turnover and improving retention
- Improving the public image of the industry in order to retain talent and generate interest in aerospace careers
- Improving high tech skills

***BRG contact***

Brad Wiggins



## Automotive Services Industry

### ETA IN ACTION

ETA's investments in the automotive industry have successfully addressed challenges in both the manufacturing and service sectors. Through investments such as the President's High Growth Job Training Initiative, the President's Community-Based Job Training Grants, and the Workforce Innovation in Regional Economic Development (WIRED) program, the Employment & Training Administration has invested in projects that demonstrate the value of strong partnerships between manufacturing and service employers, education and training providers, the public workforce system, and economic development organizations. Through these partnerships, communities and regions across the nation are developing workforce solutions that respond to the needs of industry, promote sustainable economic growth, and offer replicable models that can be utilized by other communities facing similar challenges.

As part of its strategy for the automotive services industry, ETA is helping to facilitate the sharing of workforce solutions and best practices among communities and organizations that are working to educate and train automotive manufacturing and service workers. In addition, the BRG is working to better connect ETA's Office of National Response to these organizations and their solutions, so that they can provide a full complement of retraining options for trade-affected and laid-off workers in the automotive sectors.

#### *Industry engagement*

Through its work with business and industry, the public workforce system, education and training institutions, and other federal partner agencies, ETA will support efforts to: 1) utilize ETA's Workforce Innovation in Regional Economic Development (WIRED) initiative to

### WORKFORCE SOLUTION

#### **Building Partnerships to Advance Automotive Training**

Upgrading the Nation's Automotive Programs is a partnership that has brought together leaders in education, business, industry, and the workforce development system to address worker shortages and training needs within the automotive industry. Under this High Growth Job Training Grant, Gateway Technical College, its industry partners, and others have been advancing automotive training programs across the nation by providing ease of access to the National Automotive Technician Education Foundation (NATEF) certification process, through a combination of Internet technology and a national and regional outreach approach to secondary and postsecondary schools. All educational offerings and websites were created in response to industry need. To learn more about this workforce solution, visit [www.workforce3one.org](http://www.workforce3one.org).

facilitate model partnerships among manufacturers, federal labs, universities, Manufacturing Extension Partnership centers, and other stakeholders to promote technology transition and deployment; 2) identify innovative strategies and solutions that address the critical workforce challenges that confront the automotive industry; and 3) create tools and resources that various stakeholders may use to navigate the challenges of transformation from "traditional" to "advanced" manufacturing. ETA will also continue to coordinate engagement with industry leaders to ensure that all strategies align with current industry priorities.

#### *Dissemination*

ETA will maximize the investments resulting from High Growth and Community-Based



**Automotive Services Industry**

Job Training Grants, as well as Workforce Innovation in Regional Economic Development (WIRED) grants by sharing valuable workforce solutions with business, education, and workforce system communities. ETA's capacity building Web site, [www.workforce3one.org](http://www.workforce3one.org), showcases these innovative solutions on a new "Workforce Solutions Tab," where users can easily search for solutions by product type, high growth industry, and state. In addition, many of our grantee solutions are featured in a Workforce3one monthly newsletter.

ETA is sharing the products widely to enable others to replicate and adapt these products and further stimulate innovation and creative responses to the nation's workforce challenges. We are currently tracking over 1,000 products across our High Growth and Community-Based investments and are currently in the process of collecting and documenting our WIRED products.

The following is a summary of our national dissemination activities to date:

- In July 2008, ETA disseminated a comprehensive catalogue to over 2,500 attendees at ETA's annual Workforce Innovations Conference. This catalogue features 180 new workforce solutions along with over 120 existing solutions. Attendees at this conference include state and local workforce development professionals, representatives from community and faith-based organizations, community colleges, federal agencies, and business and industry.
- ETA also completed a Training Employment Notice (TEN) in July 2008 to further educate the workforce development community about our High Growth and Community-Based Workforce

Solutions. The purpose of the TEN was to inform our workforce system colleagues about these solutions including what they are, how they can add value to their region's goals and priorities, and where they can be found. The TEN also provides examples for how a workforce area might replicate or adapt these solutions to further stimulate innovation and respond to our nation's workforce challenges.

- In 2008-2009 we will continue to collect solutions developed across ETA's High Growth, Community-Based and WIRED investments and make them available on Workforce3One. The focus will be on collecting high-quality materials, spotlighting best practices across industries via webinars and conference presentations, and continuing to share products with stakeholders as appropriate. We anticipate developing and disseminating a second Workforce Solutions Catalogue in July 2009 at ETA's Workforce Innovations Conference.

**Outreach**

Information will continue to be provided to the Career Voyages ([www.careervoyages.gov](http://www.careervoyages.gov)) Web site.

**Investments as of December 31, 2008:  
\$14,395,956 in 12 grants**

Since September 2004, DOL has announced the award of 11 investments totaling nearly \$12 million to address the workforce needs of the automotive industry. Through multiple forums, ETA has listened to employers, industry associations, and others in the automotive industry regarding their efforts to identify challenges and implement effective workforce strategies. ETA has worked with the automotive industry to identify its hiring, training, and retention challenges in its sectors ranging from manufacturing

## Automotive Services Industry

skills to technician training. For additional information on the automotive investments, please see [www.doleta.gov/business](http://www.doleta.gov/business).

### **Automotive Retailing Today (VA, national)**

*Building America's Auto Dealership Workforce*  
Grant amount: \$150,000

### **Automotive Youth Educational Systems (MI, national)**

*On-Line High School Certification Program*  
Grant amount: \$600,000

### **Automotive Youth Educational Systems (MI, national)**

*Ramping Up AYES as the Exemplar Industry-Driven School to Career Learning Model*  
Grant amount: \$2,200,000

### **Downriver Community Conference (MI)**

*AutoAlliance International Vehicle Production Training*  
Grant amount: \$5,000,000

### **Eastfield College (TX)**

*Automotive Technologies Technical Education Partnership*  
Grant amount: \$837,424

### **Gateway Technical College (WI, national)**

*Upgrading the Nation's Automotive Program*  
Grant amount: \$900,000

### **Girl Scouts of the USA (NY, national)**

*"On the Road" Initiative*  
Grant amount: \$200,000

### **Kentucky Community and Technical College System (KCTCS) (KY)**

*KCTCS Advanced Manufacturing Learning Center*  
Grant amount: \$2,480,852

### **National Institute for Automotive Service Excellence (national)**

*ASE Bilingual Outreach Program*  
Grant amount: \$300,000

### **Pennsylvania Automotive Association (PA)**

*Building Business and Education Partnerships in Urban Communities to Meet High-Skill 21st Century Workforce Demands: A Model for the Automotive Industry*  
Grant amount: \$95,000

### **Shoreline Community College (WA)**

*Auto Sales and Service Training Pathways*  
Grant amount: \$1,496,680

### **United States Hispanic Chamber of Commerce Foundation (CA, FL)**

*Metro 2-Step (Service Technician Education Program)*  
Grant amount: \$136,000

## BACKGROUND

The introductory Webinar for the automotive services industry was held on May 24, 2005, and can be found at [www.workforce3one.org](http://www.workforce3one.org). An industry report is available on ETA's Web site at [www.doleta.gov/brg](http://www.doleta.gov/brg). For additional background information about the industry's Executive and Workforce Solutions Forums, please see the Automotive High Growth Industry Profile and the Automotive Industry Report prepared for ETA at [www.doleta.gov/brg](http://www.doleta.gov/brg).

### *Automotive Services Industry Executive Forum*

- October 30, 2002, with Automotive Youth Educational Systems, in Greenville, SC

### *Automotive Services Industry Workforce Solutions Forums*

- April 16, 2003, in Washington, D.C.
- April 1, 2004, in Chantilly, VA

**Automotive Services Industry****WORKFORCE ISSUES*****Image and promotion***

- Negative public perception of the industry due to stereotypes and misinformation
- Lack of awareness about viable occupations that pay well and have growth potential
- Pipeline: recruiting young people and transitioning workers

***Diversity of the workforce: recruitment and retention***

- Increasing workforce diversity
- Improving the pipeline and the demographic make-up of the workforce in areas such as race, gender, and language diversity

***Capacity and instruction***

- Need to stress basic soft skills (communications, basic reading, writing and math, problem solving, and customer service skills)
- Need for resources and curriculum to stay current with today's technology
- Recruiting more teachers and trainers and ensuring that they are industry-certified and current in their field of knowledge
- Need for continuing education for instructors

***Training and education***

- Concern about new employees and the retraining (up-skilling) of incumbent employees
- New focus on the development of standardized curriculum, importance of industry-based certification for training programs

***BRG contact***

Steve Rietzke

## Biotechnology Industry

### ETA IN ACTION

ETA has actively supported the development of an educated and prepared biotechnology workforce through its High Growth investments. Currently, the bulk of ETA's biotechnology investments are moving toward completion, and as this happens, ETA is initiating dialogue with grantees regarding sustainability and replication strategies. ETA is highlighting best practices and facilitating cross-project dialogue to encourage knowledge transfer among grantees. Also, ETA continues to support an educated and prepared biotechnology workforce through its science, technology, engineering, and mathematics (STEM) strategy.

#### *Industry engagement*

ETA has been working with Workforce Innovation in Regional Economic Development (WIRED) regions to develop and manage a community of practice for regions focused on bioscience. The WIRED Bioscience Interest Group (BIG) is actively engaged in a cross-project dialogue to link ETA's existing investments into a broad strategy for bioscience talent development. Through engagement with BIG, ETA developed a web portal at [www.bioscienceregions.net](http://www.bioscienceregions.net) to facilitate information exchange among members of the community of practice. In addition, ETA continues to facilitate a monthly conference call for BIG members that provides an additional opportunity to share information and provide technical assistance to grantees.

Sixteen of ETA's WIRED regions – Upstate New York, Western Alabama & Eastern Mississippi, Greater Kansas City, Denver Metro, Central & Eastern Montana, Delaware Valley, Northern Alabama and Southern Tennessee, Arkansas Delta, Utah's Wasatch Range, Southern Arizona, South-Central Idaho, Southeast

### WORKFORCE SOLUTION

#### **Pittsburg Life Sciences Greenhouse**

As a part of its efforts to support the growth of greater Pittsburgh life sciences companies, the Pittsburgh Life Sciences Greenhouse has provided training for new entrants in biotechnology as well as retraining for employees affected by declining industries. The curriculum and training developed through this project combine industry skills sets and vocational/academic disciplines to shape workers with a hybrid of desired capabilities. To learn more about this effort and to access training and educational materials, visit [www.workforce3one.org](http://www.workforce3one.org).

Missouri, Minnesota Triangle, Central New Jersey, North Oregon, and South Central & South West Wisconsin are targeting the biotechnology industry as a regional economic driver. The BRG is supporting these regions with its expertise on the national trends in the industry and its involvement with major industry stakeholders.

ETA is also working to finalize a competency framework for use by stakeholders that relies upon an educated and prepared workforce with skills in bioscience. This effort builds on existing standards, curricula, and certifications across multiple disciplines. The end product will be a competency model which is intended to reduce the duplication of effort involved in continually identifying and re-validating core foundational competencies for separate projects. The competency model will free up resources, time, and energy for innovative developments that can keep up with the pace of changing technology and reflect the changing requirements of specific regions or businesses.

**Biotechnology Industry**

A draft model was released to bioscience stakeholders on November 19, 2008, and ETA anticipates finalizing it in early 2009.

**Dissemination**

ETA will maximize the investments resulting from High Growth and Community-Based Job Training Grants, as well as Workforce Innovation in Regional Economic Development (WIRED) grants by sharing valuable workforce solutions with business, education, and workforce system communities. ETA's capacity building Web site, [www.workforce3one.org](http://www.workforce3one.org), showcases these innovative solutions on a new "Workforce Solutions Tab," where users can easily search for solutions by product type, high growth industry, and state. In addition, many of our grantee solutions are featured in a Workforce3one monthly newsletter.

ETA is sharing the products widely to enable others to replicate and adapt these products and further stimulate innovation and creative responses to the nation's workforce challenges. We are currently tracking over 1,000 products across our High Growth and Community-Based investments and are currently in the process of collecting and documenting our WIRED products.

The following is a summary of our national dissemination activities to date:

- In July 2008, ETA disseminated a comprehensive catalogue to over 2,500 attendees at ETA's annual Workforce Innovations Conference. This catalogue features 180 new workforce solutions along with over 120 existing solutions. Attendees at this conference include state and local workforce development professionals, representatives from community and faith-based organizations, community colleges, federal agencies, and business and industry.
- ETA also completed a Training Employment Notice (TEN) in July 2008 to further educate the workforce development community about our High Growth and Community-Based Workforce Solutions. The purpose of the TEN was to inform our workforce system colleagues about these solutions including what they are, how they can add value to their region's goals and priorities, and where they can be found. The TEN also provides examples for how a workforce area might replicate or adapt these solutions to further stimulate innovation and respond to our nation's workforce challenges.
- In 2008-2009 we will continue to collect solutions developed across ETA's High Growth, Community-Based and WIRED investments and make them available on Workforce3One. The focus will be on collecting high-quality materials, spotlighting best practices across industries via webinars and conference presentations, and continuing to share products with stakeholders as appropriate. We anticipate developing and disseminating a second Workforce Solutions Catalogue in July 2009 at ETA's Workforce Innovations Conference.

**Outreach**

In September 2006, the U.S. Department of Labor, in partnership with McGraw Hill Construction, published the back-to-school cross-industry issue of *In Demand: Careers in Science-Technology-Engineering- Mathematics*, featuring several high-growth industries such as biotechnology, advanced manufacturing, geospatial technology, health care, nanotechnology, construction, transportation, and homeland security. This was the fifth in the overall series and the first cross-industry issue. The magazine highlights cross-industry job opportunities and career paths for young people and tips on career awareness for parents,



**Biotechnology Industry**

teachers, and guidance and school counselors. One million copies of this magazine were sent to 18,427 high schools across the United States, and it is also available online at [www.careervoyages.com/indemandmagazine-stem.cfm](http://www.careervoyages.com/indemandmagazine-stem.cfm).

Information will continue to be provided to the Career Voyages ([www.careervoyages.gov](http://www.careervoyages.gov)) Web site.

***Investments as of December 31, 2008:  
\$22,921,599 in 16 grants***

DOL awarded 16 investments totaling nearly \$23 million to address the workforce needs of the biotechnology industry. Through multiple forums, ETA has listened to employers, industry associations, and others in the biotechnology industry regarding their efforts to identify challenges and implement effective workforce strategies. ETA has worked with the biotechnology industry to identify its hiring, training, and retention challenges in its sectors ranging from laboratory training to bio-tech manufacturing.

These investments encompass grants that were awarded on June 7, 2005, as the result of a September 17, 2004, Solicitation for Grant Applications (SGA) announcing the availability of demonstration grant funds to address labor shortages, innovative training strategies, and other workforce challenges in the health care and biotechnology industries. Of the 12 grants awarded, 6 specifically focus on biotechnology workforce challenges. These grants are indicated with an asterisk below.

For additional information on the biotechnology investments, please visit [www.doleta.gov/business](http://www.doleta.gov/business).

**Alameda County Workforce Investment Board (CA)**

*Bay-Area Bio-Tech Consortium Career Pathway Project*

Grant amount: \$2,000,000

**Clafin University (SC)\***

*Orangeburg-Calhoun Area Biotechnology Consortium Project*

Grant amount: \$750,000

**Delaware Workforce Investment Board (DE)**

*Youth Biotechnology Initiative*

Grant amount: \$250,000

**Forsyth Technical Community College (NC)**

*Textiles to Technology Biotechnology Retraining Program*

Grant amount: \$754,146

**Forsyth Technical Community College (CA, IA, NC, NH, WA)**

*National Centers for the Biotech Workforce Concept Proposal*

Grant amount: \$5,000,000

**Indianapolis Private Industry Council, Inc. (IN)\***

*BioNet: Preparing Highly Skilled Workers for the Healthcare and Biotechnology Industries*

Grant amount: \$1,000,000

**Indian Hills Community College (IA)**

*Iowa Biotechnology/Bioprocessing Workforce Development Project*

Grant amount: \$996,250

**Job Path, Inc. (AZ)\***

*Arizona Biotechnology Career Ladder*

Grant amount: \$276,393

**Lakeland Community College (OH)**

*Biotechnology Workforce Development Program*

Grant amount: \$333,485

**Massachusetts Biotechnology Education Foundation (MA)**

*Massachusetts BioCareer Lab*

Grant amount: \$1,372,250

**Biotechnology Industry****Miami-Dade Community College (FL)\****Biosciences Job Growth Initiative*

Grant amount: \$1,000,000

**Orange County, California, Workforce Investment Board (CA)\****Workforce Development Partnership to Address Regional Workforce Needs in Biotechnology Occupations*

Grant amount: \$1,000,000

**Pittsburgh Life Sciences Greenhouse (PA)***Biotechnology Training: Creating a Hybrid Professional*

Grant amount: \$2,433,160

**The San Diego Workforce Partnership (CA)***A Partnership for Defining the Biotech Workforce*

Grant amount: \$2,510,117

**Temple College (TX)\****Central Texas Biotechnology Employment-to-Education Model*

Grant amount: \$920,495

**Workforce Alliance, Inc. (FL)***Florida Atlantic University (FAU) Biotech Training Program*

Grant amount: \$2,325,303

**BACKGROUND**

The \$33.6 billion biotechnology industry was selected for the President's High Growth Job Training Initiative because of the emerging nature of the industry, the need for quality workers, from technicians to Ph.D. level scientists, and the projection that the biotechnology industry will employ 814,900 individuals in the United States by 2007.

The emerging nature of the industry affords employers the opportunity to offer jobs in biotechnology that are enticing to potential job seekers. Biotechnology occupations are attrac-

tive because they are located across the nation, provide a professional work environment, and include a range of higher wage levels above many traditional occupations. Further, the biotechnology industry is creating excellent and diverse opportunities in a wide range of areas. While many jobs in the biotechnology industry are in traditional life sciences, the industry also offers careers in computer science, information technology, regulatory affairs, quality control and assurance, sales and marketing, manufacturing, and facilities and infrastructure management.

The introductory Webinar for the biotechnology industry was held on September 14, 2005, and can be found at [www.workforce3one.org](http://www.workforce3one.org). An industry report is available on ETA's Web site at [www.doleta.gov/brg](http://www.doleta.gov/brg). For additional background information about the industry's Executive and Workforce Solutions Forums, please see the Biotechnology High Growth Industry Profile and the Biotechnology Industry Report prepared for ETA at [www.doleta.gov/brg](http://www.doleta.gov/brg).

**Biotechnology Industry Executive Forums**

- May 16, 2003, with the Delaware Biotechnology Institute, in Wilmington, DE
- November 11, 2003, with BIOCUM, in San Diego, CA
- March 23, 2004, with IBIO, in Chicago, IL

**Biotechnology Industry Workforce Solutions Forum**

- March 23, 2004, in Chicago, IL

**WORKFORCE ISSUES****Pipeline**

- Recruitment
- Retention



**Biotechnology Industry***Skills, competencies, and training*

- Competencies and career ladders
- Mapping to other industries

*Image and outreach to the public*

- Data and definition
- Image

*BRG contact*

Brad Wiggins

## Construction Industry

### ETA IN ACTION

Other sectors and industries depend on the construction industry to build and maintain their facilities and infrastructure. In an effort to promote the health of the industry and provide workers with career opportunities and pathways in this growing area of the economy, ETA has worked with industry stakeholders to identify the workforce challenges facing the industry and invested in an array of innovative workforce solutions that target these needs.

The end of the housing boom during 2008 and the attendant economic turmoil have created an uncertain short-term outlook for the industry. In the long-term, the construction industry is certain to remain an important source of careers for American workers. The BRG is working with industry partners to track how their workforce needs change and chart a new course for our work going forward. We must determine when and where those in the construction industry can apply their skills to maintain or regain employment. To that end, ETA plans to engage construction industry stakeholders in a Construction Industry Workforce Strategy Session in early 2009.

Construction contractors and workers continue to play a pivotal role in the U.S. energy industry. The energy industry depends on skilled trades workers to maintain and expand the energy infrastructure, including maintaining and updating current facilities and building new facilities across the country. This is one sector where the construction industry may see job growth in the coming months and years as energy companies strive to bring new facilities online. Training programs that provide workers with the skills needed to enter careers in wind, nuclear, and other emerging energy infrastructure construction are critical.

### WORKFORCE SOLUTION

#### Learning English in the Workplace

To increase participation in trades training, the Home Builder's Institute (HBI) funds local and state Home Builder Associations in ten states to develop partnerships with community colleges, K-12 school districts, Workforce Investment Boards, Job Corps centers, and area employers.

HBI participated in the development of the Sed de Saber – Construction English language program, which helps builders address the language barriers and improve safety, quality, and communication on the job site. The fully-interactive, learn-at-your-own-pace format gives workers opportunity to learn general and residential construction-specific English in about 16 weeks. By empowering Hispanic workers to learn English, builders can cultivate a skilled, loyal workforce. To learn more about this workforce solution, visit [www.workforce3one.org](http://www.workforce3one.org).

In August 2007, ETA, in partnership with industry leaders and the Southern Governors' Association (SGA), held an Energy Skilled Trades Summit in Biloxi, Mississippi. The Summit focused on the critical workforce challenges of the energy and construction industries in the Southeastern United States and helped states develop regional strategies that address these challenges and promote economic growth.

All materials from the Energy Skilled Trades Summit are available online at [www.workforce3one.org/content/public/esummit.cfm](http://www.workforce3one.org/content/public/esummit.cfm).

## Construction Industry

### *Grant awards*

In July ETA announced the awarding of \$10 million to fund 11 projects under the President's High Growth Job Training Initiative through the Energy Industry and the Construction and Skilled Trades in the Energy Industry Solicitation for Grant Applications (SGA). The grantee's proposed training strategies will focus on skills and competencies that are in demand by the energy industry and offer participants pathways to long-term careers. Programs will result in industry-recognized degrees or licenses proving a level of competence or mastery in a given job.

### *"Skills to Build America's Future"*

"Skills to Build America's Future" is a unique initiative to promote the value of and career opportunities in skilled trades. Launched on April 6, 2004, this initiative is sponsored by the U.S. Department of Labor, the Construction Industry Round Table, National Association of Home Builders, and the National Heavy & Highway Alliance and affiliated unions. By increasing awareness of the skilled trades and the training, education, and apprenticeship opportunities that can help prepare individuals for these positions, "Skills to Build America's Future" will help ensure that youth and workers exploring new careers take advantage of employment opportunities in the construction industry. Key components of "Skills to Build America's Future" include a coordinated outreach effort with the U.S. Department of Education to schools, outreach to governors and/or state legislatures, job fairs and other events, and sponsorships with sports leagues.

### *"Gulf Coast investment support"*

On November 20, 2005, ETA launched the Pathways to Construction Employment Initiative to promote the economic recovery of Louisiana and Mississippi in the wake of Hurricanes Katrina and Rita. This initiative focuses on

helping workers in areas impacted by the hurricanes enter a career pathway in construction, while simultaneously assisting critical rebuilding efforts in the Gulf Coast region. Grants of \$5 million each were awarded to the Louisiana Community and Technical College System, working in close partnership with the Louisiana Department of Labor, and the Mississippi Department of Employment Security, working in close partnership with the Mississippi State Board for Community and Junior Colleges. In each state, the Pathways to Construction Employment Initiative has four primary components: establishment of Reconstruction Centers of Excellence, career awareness and outreach activities, assessment and access to basic skills training, and pathways to employment.

### *Industry engagement*

ETA's future activities will focus on the following areas:

- Developing stronger connections between registered apprenticeship programs and the public workforce system.
- Enhancing partnerships with leading construction industry associations with a focus on sharing workforce resources they have developed for their members and partners with the workforce system including Workforce Investment Boards (WIBs) and One-Stop Career Centers.
- Identifying two to three local areas where WIBs are involved in sectoral strategies targeted at the construction industry and working with WIBs to help them engage additional partners and implement strong regional construction collaborations.

Driven by industry demand to catalogue the skills and competencies workers need to embark on a successful career in construction, ETA developed two construction competency models. The first model was designed for Heavy/

## Construction Industry

Highway/Civil construction in conjunction with the Associated General Contractors (AGC) of America. Validated in October of 2008, the model is scheduled for public release in January of 2009. ETA also engaged a number of partners in developing a Residential Construction Competency model. This model was validated in October and November of 2008 and will be revised and prepared for public release in early 2009. These construction competency models present five basic competency levels that can be applied across the industry. This allows individual users to create occupation-specific models based on their own expertise and experience.

ETA has worked with industry leaders in the construction industry to define the career pathways in the industry. The resulting model has been used to populate industry-specific information on the Career Voyages Web site.

Two of ETA's first generation Workforce Innovation in Regional Economic Development (WIRED) regions – Mid-Michigan and Florida's Great Northwest – are targeting the construction industry as a regional economic driver. Four third generation WIRED regions – South-Central Idaho, Southeastern Mississippi, Pacific Mountain Washington, South Central & South West Wisconsin – are also focusing on the industry. The BRG is supporting these regions with its expertise on the national trends in the industry and its involvement with major industry stakeholders.

### *Dissemination*

ETA will maximize the investments resulting from High Growth and Community-Based Job Training Grants, as well as Workforce Innovation in Regional Economic Development (WIRED) grants by sharing valuable workforce solutions with business, education, and workforce system communities. ETA's capacity building Web site, [www.workforce3one.org](http://www.workforce3one.org), showcases these innovative solutions on a new

"Workforce Solutions Tab," where users can easily search for solutions by product type, high growth industry, and state. In addition, many of our grantee solutions are featured in a Workforce3one monthly newsletter.

ETA is sharing the products widely to enable others to replicate and adapt these products and further stimulate innovation and creative responses to the nation's workforce challenges. We are currently tracking over 1,000 products across our High Growth and Community-Based investments and are currently in the process of collecting and documenting our WIRED products.

The following is a summary of our national dissemination activities to date:

- In July 2008, ETA disseminated a comprehensive catalogue to over 2,500 attendees at ETA's annual Workforce Innovations Conference. This catalogue features 180 new workforce solutions along with over 120 existing solutions. Attendees at this conference include state and local workforce development professionals, representatives from community and faith-based organizations, community colleges, federal agencies, and business and industry.
- ETA also completed a Training Employment Notice (TEN) in July 2008 to further educate the workforce development community about our High Growth and Community-Based Workforce Solutions. The purpose of the TEN was to inform our workforce system colleagues about these solutions including what they are, how they can add value to their region's goals and priorities, and where they can be found. The TEN also provides examples for how a workforce area might replicate or adapt these solutions to further

## Construction Industry

stimulate innovation and respond to our nation's workforce challenges.

- In 2008-2009 we will continue to collect solutions developed across ETA's High Growth, Community-Based and WIRED investments and make them available on Workforce3One. The focus will be on collecting high-quality materials, spotlighting best practices across industries via webinars and conference presentations, and continuing to share products with stakeholders as appropriate. We anticipate developing and disseminating a second Workforce Solutions Catalogue in July 2009 at ETA's Workforce Innovations Conference.

A High Growth Grantee, The Home Builders Institute, participated in the Apprenticeship Plaza at Workforce Innovations 2007 and in the Talent Plaza at Workforce Innovations 2008.

### Outreach

In November 2005, the U.S. Department of Labor, in partnership with McGraw Hill Construction, published *In Demand: Careers in Construction*. The magazine highlights job opportunities and career paths for young people and tips on career awareness for parents, teachers, and guidance and school counselors. One million copies of this magazine were sent to 18,427 high schools across the United States, and it is also available online at [www.careervoyages.com/indemandmagazine-construction.cfm](http://www.careervoyages.com/indemandmagazine-construction.cfm).

In September 2006, the U.S. Department of Labor, in partnership with McGraw Hill Construction, published the back-to-school cross-industry issue of *In Demand: Careers in Science-Technology-Engineering- Mathematics*, featuring several high-growth industries such as biotechnology, advanced manufacturing, geospatial technology, health care, nanotechnology, construction, transportation, and

homeland security. This was the fifth in the overall series and the first cross-industry issue. The magazine highlights cross-industry job opportunities and career paths for young people and tips on career awareness for parents, teachers, and guidance and school counselors. One million copies of this magazine were sent to 18,427 high schools across the United States, and it is also available online at [www.careervoyages.com/indemandmagazine-stem.cfm](http://www.careervoyages.com/indemandmagazine-stem.cfm).

Information will continue to be provided to the Career Voyages ([www.careervoyages.gov](http://www.careervoyages.gov)) Web site.

### **Investments as of December 31, 2008: \$35,134,804 in nine grants**

Since February 2003, DOL announced the award of 9 investments totaling over \$35 million to address the workforce needs of the construction industry. Through multiple forums, ETA has listened to employers, industry associations, and others in the construction industry regarding their efforts to identify challenges and implement effective workforce strategies. ETA has worked with the construction industry to identify its hiring, training, and retention challenges. For additional information on the construction investments, please visit [www.doleta.gov/business](http://www.doleta.gov/business).

**American College of the Building Arts (SC)**  
*Training the Masters of the Building Arts*  
Grant amount: \$2,750,000

**Associated General Contractors of America (AK, FL, KY, MS, NE, OR, TN, TX, WI)**  
*Construction Career Academies*  
Grant amount: \$235,500

**Chicago Women in Trades (IL)**  
*Women in Skilled Trades*  
Grant amount: \$2,092,343

## Construction Industry

### Home Builders Institute (AZ, CA, CT, FL, ID, KY, NY, PA, SC, VA)

*Building Today's Workforce for Tomorrow*

Grant amount: \$4,268,454

### Honolulu Community College (HI)

*Rebuilding the Construction Workforce in Hawaii:*

*Preparing Youth for High-Demand Careers*

Grant amount: \$1,400,000

### Louisiana Community and Technical College System (LA)

*Pathways to Construction Employment Initiative:*

*Linking Workers with Construction Career*

*Opportunities*

Grant amount: \$4,998,800

### Mississippi Department of Employment Security (MS)

*Pathways to Construction Employment Initiative:*

*Linking Workers with Construction Career*

*Opportunities*

Grant amount: \$5,000,000

### The St. Louis Carpenters Joint Apprenticeship Program (MO)

*Eastern Missouri Pathways to Careers in Advanced*

*Manufacturing and Construction Technology*

Grant amount: \$2,187,107

### YouthBuild USA (30 sites nationwide)

*Incarcerated Youth Re-entry Program*

Grant amount: \$12,202,600

## BACKGROUND

The construction industry was selected for the President's High Growth Job Training Initiative because it is projected to experience substantial employment growth, other sectors of the economy depend on the construction industry to build and maintain the facilities and infrastructure that are vital to their daily operations, and many occupations in construction (e.g. carpenters, electricians) are also integral

to other industries, so workforce solutions that target these occupations may benefit other industries as well.

ETA Assistant Secretary Emily Stover DeRocco convened five Executive Forums in Washington, D.C. with leaders in the construction industry to learn more about the industry's workforce challenges. Industry leaders informed ETA that construction is experiencing workforce challenges in four broad areas: image, recruiting, youth skill development, and entry-level and incumbent worker skill development. ETA then hosted a Construction Workforce Solutions Forum where approximately 60 industry leaders identified over 400 potential solutions to the industry's workforce challenges.

The introductory Webinar for the construction industry was held on June 14, 2005, and can be found at [www.workforce3one.org](http://www.workforce3one.org). An industry report is available on ETA's Web site at [www.doleta.gov/brg](http://www.doleta.gov/brg). For additional background information about the industry's Executive and Workforce Solutions Forums, and details on the grants, please see the Construction High Growth Industry Profile and the Construction Industry Report prepared for ETA at [www.doleta.gov/brg](http://www.doleta.gov/brg).

### *Construction Industry Executive Forums*

- April 5, 2004, on building construction, in Washington, D.C.
- April 28, 2004, with the Construction Industry Round Table, in Washington, D.C.
- April 29, 2004, on heavy construction, in Washington, D.C.
- April 30, 2004, on heavy construction, in Washington, D.C.
- June 2, 2004, with training directors, in Washington, D.C.



**Construction Industry*****Construction Industry Workforce Solutions Forum***

- June 16-17, 2004, in Irving, TX

***BRG contact***

Mike Trupo

**WORKFORCE ISSUES*****Image and outreach to the public***

- Improving the image of the industry in a variety of areas, such as skill requirements, safety, career ladders
- Enhancing the image of the industry with a variety of audiences, such as youth, parents, guidance counselors/educators

***Recruitment***

- Recruiting youth
- Recruiting from non-traditional labor pools
- Recruiting from traditional labor pools

***Skill development and education and training capacity: Youth***

- Skill levels of youth
- Capacity and capability of education and training providers
- Partnership and information sharing among key stakeholders

***Skill development and education and training capacity: Entry-level workers and incumbent workers***

- Skill levels of entry-level workers
- Leadership and management skills of incumbent workers
- Capacity and capability of education and training providers
- Partnership and information sharing among key stakeholders



## Energy Industry

### ETA IN ACTION

The energy industry is a critical driver in our nation's economic health and national security. ETA's investments in energy are currently focused on skills development training of both new and incumbent workers. Drawing upon its partnership with the energy industry to develop a recognized competency model, ETA supports the design and establishment of career ladders and lattices that will lead to lifelong learning with corresponding career advancement and the ability to apply skills learned across other economic sectors.

A key challenge for the U.S. energy industry is the availability of training programs for the next generation of energy workers. Current training programs are insufficient to meet industry needs of established energy sectors, such as oil and natural gas, mining, and nuclear, as well as those of new energy sources such as solar, wind, and geothermal. Compounding this training challenge is the rapid advancement of technology, because employers in all sectors of the industry need new workers who are more proficient in math, science, and technology than that of their predecessors.

ETA recognizes that the energy industry today is the focus of increased attention surrounding renewable or green energy. Related to this increased attention is the question: "What constitutes a 'green job'?" In December 2008, ETA hosted a meeting with industry representatives along with its Federal partners to begin a dialogue that defines "green job" as well as to effectively develop strategies to ensure a skilled workforce.

### WORKFORCE SOLUTION

#### Get into Energy

Created in part by a High Growth Job Training Initiative Grant, [www.getintoenergy.com](http://www.getintoenergy.com) is an energy industry career-oriented web site developed by the Center for Energy Workforce Development (CEWD). It is designed to build awareness among students, parents, teachers, guidance counselors, as well as working adults who are considering a career change.

"Get into Energy" provides valuable career and training tools and an inside look at opportunities in the energy field for students, parents, and educators nation-wide. To learn more about this workforce solution, visit [www.workforce3one.org](http://www.workforce3one.org).

#### Grant awards

In July 2008, ETA announced the awarding of \$10 million to fund 11 projects under the President's High Growth Job Training Initiative through the Energy Industry and the Construction and Skilled Trades in the Energy Industry Solicitation for Grant Applications (SGA). The grantee's proposed training strategies will focus on skills and competencies that are in demand by the energy industry and offer participants pathways to long-term careers. Programs will result in industry-recognized degrees or licenses proving a level of competence or mastery in a given job.

#### Workforce study

ETA is working with the National Academies to launch a comprehensive study on the energy industry workforce. The Energy Policy Act of 2005, in separate provisions, mandated studies on the availability of skilled workers for the energy industry. The Act directed that the

## Energy Industry

National Academy of Sciences should conduct a study focused on oil, gas, and mining. ETA convened a meeting last summer of federal and industry stakeholders to discuss a scope of work expanded to include electricity production and distribution, including nuclear. Industry partners agree that comprehensive quantitative and qualitative data on the industry's significant workforce challenges will be invaluable as we work with the energy industry, our Federal partners, and other stakeholders including the workforce system to ensure the continued viability of this essential industry.

### *Industry engagement*

ETA is continuing its work with leaders in the energy industry to further refine accepted competencies for the industry as a whole, as well as identify the skills and competencies required for the renewable energy sector.

In addition to its ongoing work with the traditional energy sectors, ETA has made a concerted effort to establish a dialogue with representatives from the renewable energy sector and appropriate Federal partners—U.S. Departments of Energy, Commerce, Education and Environmental Protection Agency. This effort includes discussion about anticipated workforce needs, existing standards, curricula, certifications and ways to foster skills development in the renewable energy workforce.

### *Dissemination*

ETA will maximize the investments resulting from High Growth and Community-Based Job Training Grants, as well as Workforce Innovation in Regional Economic Development (WIRED) grants by sharing valuable workforce solutions with business, education, and workforce system communities. ETA's capacity building Web site, [www.workforce3one.org](http://www.workforce3one.org), showcases these innovative solutions on a new "Workforce Solutions Tab," where users can easily search for solutions by product type,

high growth industry, and state. In addition, many of our grantee solutions are featured in a Workforce3one monthly newsletter.

ETA is sharing the products widely to enable others to replicate and adapt these products and further stimulate innovation and creative responses to the nation's workforce challenges. We are currently tracking over 1,000 products across our High Growth and Community-Based investments and are currently in the process of collecting and documenting our WIRED products.

The following is a summary of our national dissemination activities to date:

- In July 2008, ETA disseminated a comprehensive catalogue to over 2,500 attendees at ETA's annual Workforce Innovations Conference. This catalogue features 180 new workforce solutions along with over 120 existing solutions. Attendees at this conference include state and local workforce development professionals, representatives from community and faith-based organizations, community colleges, federal agencies, and business and industry.
- ETA also completed a Training Employment Notice (TEN) in July 2008 to further educate the workforce development community about our High Growth and Community-Based Workforce Solutions. The purpose of the TEN was to inform our workforce system colleagues about these solutions including what they are, how they can add value to their region's goals and priorities, and where they can be found. The TEN also provides examples for how a workforce area might replicate or adapt these solutions to further stimulate innovation and respond to our nation's workforce challenges.

## Energy Industry

**Outreach**

In January 2006, the U.S. Department of Labor, in partnership with McGraw Hill Construction, published *In Demand: Careers in Energy*. The magazine highlights job opportunities and career paths for young people and tips on career awareness for parents, teachers, and guidance and school counselors. One million copies of this magazine were sent to 18,427 high schools across the United States, and it is also available online at [www.careervoyages.com/indemand-magazine-energy.cfm](http://www.careervoyages.com/indemand-magazine-energy.cfm).

In September 2006, the U.S. Department of Labor, in partnership with McGraw Hill Construction, published the back-to-school cross-industry issue of *In Demand: Careers in Science-Technology-Engineering- Mathematics*, featuring several high-growth industries such as biotechnology, advanced manufacturing, geospatial technology, health care, nanotechnology, construction, transportation, and homeland security. This was the fifth in the overall series and the first cross-industry issue. The magazine highlights cross-industry job opportunities and career paths for young people and tips on career awareness for parents, teachers, and guidance and school counselors. One million copies of this magazine were sent to 18,427 high schools across the United States, and it is also available online at [www.careervoyages.com/indemandmagazine-stem.cfm](http://www.careervoyages.com/indemandmagazine-stem.cfm).

Information will continue to be provided to the Career Voyages ([www.careervoyages.gov](http://www.careervoyages.gov)) Web site.

**Investments as of December 31, 2008:  
\$37,093,668 in 22 grants**

Since February 2003, DOL has announced the award of 22 investments totaling more than \$37 million to address the workforce needs of the energy industry. Through multiple forums, ETA has listened to employers, industry associations, and others in the energy industry regarding their

efforts to identify challenges and implement effective workforce strategies. ETA has worked with the energy industry to identify its hiring, training, and retention challenges in its sectors ranging from oil and gas to utilities and mining. For additional information on the energy investments, please visit [www.doleta.gov/business](http://www.doleta.gov/business).

**Alaska Department of Labor and Workforce Development (AK)**

*Alaska's High Growth Job Training Initiative for the Energy Industry*

Grant amount: \$7,000,000

**Center for Energy Workforce Development (CEWD) (National)**

*Meeting the Demand for America's Energy Workforce: Get Into Energy*

Grant amount: \$98,270

**College of Eastern Utah (UT)**

*Energy Training Center*

Grant amount: \$2,737,804

**College of Southern Maryland (MD)**

*High Growth Job Training Initiative Grants for the Energy Industry and Construction and Skilled Trades in the Energy Industry*

Grant amount: \$1,000,000

**Community Action Partnership of Sonoma County (CA)**

*YouthBuild Santa Rosa*

Grant amount: \$500,000

**Gateway Community and Technical College (KY)**

*The Gateway to Energy Careers Project*

Grant amount: \$394,933

**Georgia Department of Technical and Adult Education (GA)**

*Engaged Networking Energy Regional Georgia Education Initiative*

Grant amount: \$989,995

## Energy Industry

### High Plains Technology Center (OK)

*Strengthening the Oil and Gas Industry*  
Grant amount: \$1,546,463

### Ivy Tech Community College (IN)

*Energy Industry Training Program*  
Grant amount: \$1,000,000

### Key Training Corp. dba Northwest Lineman College (TX)

*Electrical Lineworker Program*  
Grant amount: \$1,000,000

### Lakeshore Technical College (WI)

*The NEW Energy Project*  
Grant amount: \$987,904

### Louisiana Technical College (LA)

*Energy Infusion for Today and Tomorrow's High Growth Jobs*  
Grant amount: \$1,151,287

### Minnesota State Colleges and Universities (MN)

*The Minnesota Training Partnership for a Sustainable Energy Economy*  
Grant amount: \$1,000,000

### Northern Wyoming Community College District (WY)

*The Associate of Science Degree in Mining Technology (ASMT) Project*  
Grant amount: \$975,881

### Oklahoma Department of Career and Technical Education (OK)

*Strengthening the U.S. Upstream Oil and Gas Industry*  
Grant amount: \$2,363,539

### Pennsylvania State University (PA)

*Mine Training and Placement Center*  
Grant amount: \$503,210

### San Juan College Regional Training Center (NM)

*Oil and Gas Industry Training Project*  
Grant amount: \$2,113,127

### University of Missouri-Columbia (MO)

*Center of Excellence for Radiation Protection Technology*  
Grant Amount: \$2,305,995

### West Kentucky Workforce Investment Board (KY)

*Kentucky's Demand-Driven Response to the Coal Industry Workforce Crisis*  
Grant amount \$3,025,260

### West Virginia University (WV)

*Mine Training and Placement Center*  
Grant amount: \$3,000,000

### Worknet Pinellas (FL)

*The CLEAN Energy (Certification, Licensing and Education of Apprentices for the Nuclear Energy Industry) program*  
Grant amount: \$1,000,000

### Wyoming Department of Workforce Services (WY)

*Rocky Mountain Oil and Gas Training Center*  
Grant amount: \$2,400,000

## BACKGROUND

An industry report will be available on ETA's Web site at [www.doleta.gov/brg](http://www.doleta.gov/brg). For additional background information about the industry's Executive and Workforce Solutions Forums, please see the Energy High Growth Industry Profile at [www.doleta.gov/brg](http://www.doleta.gov/brg).

### *Energy Industry Executive Forums*

- July 13, 2004, with the Nuclear Energy Institute, in Washington, D.C.
- September 14, 2004, with the Edison Electric Institute and the American Gas Association, in Washington, D.C.
- September 27, 2004, with the National Mining Association, in Las Vegas, NV
- October 18, 2004, with the American Petroleum Institute, in Pasadena, CA

**Energy Industry**

- October 26–27, 2004, with the Independent Petroleum Association of America and Cooperating Associations, in Austin, TX
- March 31, 2005, with the West Virginia Coal Association, in Charleston, WV

***Energy Industry Workforce Solutions Forum***

- December 14–15, 2004, in Houston, TX
- August 27–28, 2007, in Biloxi, MS

**WORKFORCE ISSUES*****Preparing for the demographic cliff***

- Improving the energy industry's public image
- Increasing available labor pools
- Maintaining a stable labor supply

***Education and training programs***

- Developing new training programs
- Improving existing programs
- Expanding successful models

***Skill development***

- Transferring knowledge from the aging workforce
- Preparing entry-level workers
- Developing competency models and career ladders

***BRG contact***

Charles Cox

## Geospatial Technology Industry

### ETA IN ACTION

Geospatial technology remains an emerging and evolving industry. Initial engagements with the industry identified baseline workforce challenges, including supporting efforts to ensure that there are enough workers to meet the growing demand for a technical workforce. ETA has since reached out to geospatial technology grantees to dialogue on next steps for industry engagements, including the promotion of ETA's investments to Workforce Innovation in Regional Economic Development (WIRED) regions. In addition, the BRG continues to support an educated and prepared geospatial technology workforce through its science, technology, engineering, and mathematics (STEM) strategy.

#### *Industry engagement*

ETA has been working closely with grantees in an attempt to ensure broad acceptance and buy-in of industry definitions developed through ETA investments. During 2008, ETA has provided information and guidance related to our engagement with this evolving industry, specifically through presentations on ETA investments and baseline work in development of a skill competencies framework to the Management Association for Private Photogrammetric Surveyors (MAPPS).

ETA is working to develop a competency framework for use by industries that rely upon an educated and prepared workforce with skills in geospatial technology. This effort builds on existing standards, curricula, and certifications across multiple disciplines. The end product will be a competency model which is intended to reduce the duplication of effort involved in continually identifying and re-validating core foundational competencies for separate projects. The competency model will free up resources, time, and energy for

### WORKFORCE SOLUTION

#### **Institute for GIS Studies (IGISS)**

The Institute for GIS Studies (IGISS) has developed an industry-led, apprenticeship-based career advancement ladder for specialty certificates and degrees in land records management and utilities-based geospatial technical applications. To learn more about this effort and to access training and educational materials, visit [www.workforce3one.org](http://www.workforce3one.org).

innovative development that can keep up with the pace of changing technology and reflect the changing requirements of specific regions or businesses.

The BRG is also supporting WIRED regions that are targeting the geospatial technology industry as a regional economic driver, such as Upstate New York and the Arkansas Delta, by providing expertise on the national trends in the industry and facilitating dialogue with industry stakeholders.

#### *Dissemination*

ETA will maximize the investments resulting from High Growth and Community-Based Job Training Grants, as well as Workforce Innovation in Regional Economic Development (WIRED) grants by sharing valuable workforce solutions with business, education, and workforce system communities. ETA's capacity building Web site, [www.workforce3one.org](http://www.workforce3one.org), showcases these innovative solutions on a new "Workforce Solutions Tab," where users can easily search for solutions by product type, high growth industry, and state. In addition, many of our grantee solutions are featured in a Workforce3one monthly newsletter.



## Geospatial Technology Industry

ETA is sharing the products widely to enable others to replicate and adapt these products and further stimulate innovation and creative responses to the nation's workforce challenges. We are currently tracking over 1,000 products across our High Growth and Community-Based investments and are currently in the process of collecting and documenting our WIRED products.

The following is a summary of our national dissemination activities to date:

- In July 2008, ETA disseminated a comprehensive catalogue to over 2,500 attendees at ETA's annual Workforce Innovations Conference. This catalogue features 180 new workforce solutions along with over 120 existing solutions. Attendees at this conference include state and local workforce development professionals, representatives from community and faith-based organizations, community colleges, federal agencies, and business and industry.
- ETA also completed a Training Employment Notice (TEN) in July 2008 to further educate the workforce development community about our High Growth and Community-Based Workforce Solutions. The purpose of the TEN was to inform our workforce system colleagues about these solutions including what they are, how they can add value to their region's goals and priorities, and where they can be found. The TEN also provides examples for how a workforce area might replicate or adapt these solutions to further stimulate innovation and respond to our nation's workforce challenges.

In 2008-2009 we will continue to collect solutions developed across ETA's High Growth, Community-Based and WIRED investments and make them available on Workforce3One.

The focus will be on collecting high-quality materials, spotlighting best practices across industries via webinars and conference presentations, and continuing to share products with stakeholders as appropriate. We anticipate developing and disseminating a second Workforce Solutions Catalogue in July 2009 at ETA's Workforce Innovations Conference.

A High Growth grantee, Kidz Online, participated in the Talent Plaza at Workforce Innovations 2006.

### *Outreach*

In September 2006, the U.S. Department of Labor, in partnership with McGraw Hill Construction, published the back-to-school cross-industry issue of *In Demand: Careers in Science-Technology-Engineering- Mathematics*, featuring several high-growth industries such as biotechnology, advanced manufacturing, geospatial technology, health care, nanotechnology, construction, transportation, and homeland security. This was the fifth in the overall series and the first cross-industry issue. The magazine highlights cross-industry job opportunities and career paths for young people and tips on career awareness for parents, teachers, and guidance and school counselors. One million copies of this magazine were sent to 18,427 high schools across the United States, and it is also available online at [www.careervoyages.com/indemandmagazine-stem.cfm](http://www.careervoyages.com/indemandmagazine-stem.cfm).

Information will continue to be provided to the Career Voyages ([www.careervoyages.gov](http://www.careervoyages.gov)) Web site.

### *Cross-industry activities*

ETA's engagement with biotechnology, geospatial technology, homeland security, information technology, and nanotechnology has led to the understanding of shared interdependencies and overlapping competencies, skill needs, and similar workforce challenges.



## Geospatial Technology Industry

These commonalities provide a unique opportunity within the context of a broader science, technology, engineering, and mathematics (STEM) strategy.

### *Investments as of December 31, 2008: \$6,438,653 in six grants*

Since September 2004, DOL has announced the award of 6 investments totaling over \$6 million to address the workforce needs of the geospatial industry. Through multiple forums, ETA has listened to employers, industry associations, and others in the geospatial industry regarding their efforts to identify challenges and implement effective workforce strategies. ETA has worked with the geospatial industry to identify its hiring, training, and retention challenges. For additional information on the geospatial investments, please visit [www.doleta.gov/business](http://www.doleta.gov/business).

#### **Geospatial & Information Technology Association (CO)**

*Defining and communicating Geospatial Industry Workforce Demand*

Grant amount: \$695,362

#### **Institute for GIS Studies (NC, TN)**

*Geospatial Business Hub Project*

Grant amount: \$2,000,000

#### **Kidz Online (CA, VA)**

*The Geo 21 Project*

Grant amount: \$1,000,000

#### **Rancho Santiago Community College District (CA, MO)**

*A Model for Connecting the Geospatial Technology Industry to Community College Workforce Development*

Grant amount: \$187,939

#### **The University of Southern Mississippi (MS)**

*Geospatial Technology Apprenticeship Program*

Grant amount: \$1,565,227

#### **W.F. Goodling Advanced Skills Center (PA)**

*Geospatial Imagery Analysis and Practical Applications*

Grant amount: \$990,125

## BACKGROUND

The geospatial technology industry has been selected as one of 14 targeted industries under the President's High Growth Job Training Initiative primarily because it currently meets many of the criteria for an emerging market sector. The worldwide market for geospatial technologies has enormous potential, with the most frequently quoted growth figures estimating the geospatial market at \$5 billion. This growth is due to many factors, including the industry's importance to national economic and security interests.

Job opportunities in geospatial technology are growing in step with the needs of the industry. General data provided by the Bureau of Labor Statistics (BLS) indicates that the architecture and engineering occupations group, including surveyors, cartographers, photogrammetrists, and surveying technicians, which represent key geospatial occupational categories, is one of the occupational groups projected to have the fastest job growth.

As an emerging industry, geospatial technology encounters a variety of issues common to such industries. There is not yet an industry-wide definition of the scope of the disciplines or the training and credentials required to work in the industry. There is no single organization tracking all relevant jobs within the geospatial industry, and there are no comprehensive job descriptions or salary information for all relevant job opportunities.

The introductory Webinar for the geospatial industry was held on February 15, 2006, and can be found at [www.workforce3one.org](http://www.workforce3one.org). An indus-

**Geospatial Technology Industry**

try report will be available on ETA's Web site at [www.doleta.gov/brg](http://www.doleta.gov/brg). For additional background information about the industry's Executive and Workforce Solutions Forums, please see the Geospatial Technology High Growth Industry Profile at [www.doleta.gov/brg](http://www.doleta.gov/brg).

***Geospatial Technology Industry Executive Forum***

- April 10, 2003, in Colorado Springs, CO

***Geospatial Technology Workforce Solutions Forums***

- July 24–25, 2003, in Washington, D.C.
- March 9, 2004, in Washington, D.C.

**WORKFORCE ISSUES*****Skills, competencies, and training***

- Aligning training with industry-developed competency models
- Developing competency models for new applications of geospatial technology
- Preparing entry-level workers with basic skills

***Image and outreach to the public***

- Data and definition
- Image

***Pipeline***

- Recruiting young workers through apprenticeship and high school/college/dual-enrollment agreements
- Tapping nontraditional labor pools to diversify the workforce

***BRG contact***

Brad Wiggins

## Health Care Industry

### ETA IN ACTION

The health care industry remains an essential driver in regional economies across the nation, and continued efforts to address the critical workforce challenges in the industry is paramount to our nation's competitiveness. ETA will continue to play a role in supporting high-impact, national and regional workforce development solutions that capitalize on industry leaders' expertise to develop scalable, systemic training solutions resulting in a steady stream of skilled nurses and long-term care workers. Specific focus will be given to supporting workforce development in the key areas highlighted by the industry: 1) regional workforce development strategies for the long-term care sector; 2) model technology-based learning strategies to build nursing education capacity; and 3) system-wide dissemination of best practices to support regional health care workforce development efforts across the country.

ETA is playing a key role in promoting innovative and regional solutions to expanding nursing education capacity. Following the success of the Nursing Summit convened in June, 2008, ETA is collaborating with the Robert Wood Johnson Foundation, AARP and the Center to Champion Nursing in America, and the U.S. Department of Health and Human Services, Health Resources Services Administration to co-sponsor an All-Country Nursing Education Capacity Summit on February 4-5, 2009. States have been invited to assemble teams of key stakeholders to develop strategies to increase education capacity. State teams will participate. Eighteen states were chosen to participate in the two-day summit designed to facilitate sharing best practices, learning about innovative strategies, and developing and refining state plans, on five focus areas: 1) Strategic Partnerships and Resource Alignment; 2) State Policy and Regulation; 3) Increasing

Faculty Capacity; 4) Education Redesign and 5) Skills Building - Asset Mapping, Funding and Grant Writing, and Tracking Enrollment. ETA is working with AARP to develop a technical assistance plan to keep the state teams engaged throughout the upcoming year, and provide ongoing assistance to help states address this critical issue.

### *Long-term Care Initiative*

Recognizing the need for ongoing workforce solution development for the health care industry, ETA is playing a leadership role in supporting regional, systemic long-term care workforce development strategies. ETA has developed a comprehensive long-term care investment strategy, which includes competitively awarded grants and targeted technical assistance for both grantees and the workforce system as a whole. On June 26, 2007, ETA announced the award of \$3 million in grants to six organizations to prepare workers for careers in long-term care. Successful applications were drawn from a pool of 77 applicants competing for awards of approximately \$500,000 each. Activities supported by the funded grants include developing a certified nursing assistant (CNA) career track and delivering on-the-job talent development programs; preparing community college students to advance up the nursing career ladder through a number of credential and certification programs; and implementing a direct care worker career pathway. These programs and others will provide talent development solutions that are industry-driven and address the long-term care sector's employment challenges. Programs developed and implemented with the help of today's awards will be part of regional efforts to create pools of qualified workers from which the long-term care industry can draw.

## Health Care Industry

### *Technology-based learning*

Limited capacity of health care training programs across the country is currently one of the nation's most pressing health care workforce challenges. For example, Nursing schools are turning away qualified applicants to baccalaureate and graduate nursing programs. More than 40,285 qualified applicants were turned away in the academic year 2007-2008, compared with fewer than 5,000 in 2002. To help address these challenges, ETA is exploring the role of technology-based learning in helping to expand both didactic and clinical training capacity, with a focus on the nursing occupations.

### *Industry engagement*

Both technology-based learning and long-term care priorities were highlighted at Workforce Innovations 2007, along with the role the apprenticeship model can play in helping health care workers advance along career pathways.

ETA is working with industry leaders in the health care industry to develop a framework for competencies for the industry as a whole. This effort builds on existing standards, curricula, and certifications in the field of health care. The end product will be a competency model which is intended to reduce the duplication of effort involved in continually identifying and re-validating core foundational competencies for separate projects. The competency model will free up resources, time, and energy for innovative development that can keep up with the pace of changing technology and reflect the changing requirements of specific regions or businesses.

Six of ETA's first generation Workforce Innovation in Regional Economic Development (WIRED) regions – Greater Kansas City, Mid-Michigan, Florida's Great Northwest, Piedmont Triad, Western Alabama and Eastern Mississippi, and West Michigan – are tar-

geting the health care industry as a regional economic driver. Two second generation regions – Northern New Jersey and Tennessee Valley – are also focusing on the industry. Four third generation regions – Central Kentucky, South Central and South West Wisconsin, South-Central Kansas, and Southeast Missouri – are targeting the health care industry. The BRG is supporting these regions with its expertise on the national trends in the industry and its involvement with major industry stakeholders.

### *Dissemination*

ETA will maximize the investments resulting from The President's High Growth and Community-based Job Training Grants by sharing valuable workforce solutions with business, education, and workforce system communities. ETA's capacity building Web site, [www.workforce3one.org](http://www.workforce3one.org), showcases these innovative solutions on a new "Workforce Solutions Tab," where users can easily search for solutions by product type, high growth industry, and state. In addition, many of our grantee solutions are featured in a Workforce3 One monthly newsletter.

ETA is sharing the products widely to enable others to replicate and adapt these products and further stimulate innovation and creative response to the nation's workforce challenges. We are currently tracking over 1,000 products across our High Growth and Community-Based investments.

The following is a summary of our national dissemination activities to date:

- In July 2008, ETA disseminated a comprehensive catalogue to over 2,500 attendees at ETA's annual Workforce Innovations Conference. This catalogue features 180 new workforce solutions along with over 120 existing solutions.

## Health Care Industry

Attendees at this conference include state and local workforce development professionals, representatives from community and faith-based organizations, community colleges, federal agencies, and business and industry.

- ETA also completed a Training Employment Notice (TEN) in July 2008 to further educate the workforce development community about our High Growth and Community-Based Workforce Solutions. The purpose of the TEN was to inform our workforce system colleagues about these solutions including what they are, how they can add value to their region's goals and priorities, and where they can be found. The TEN also provides examples for how a workforce area might replicate or adapt these solutions to further stimulate innovation and respond to our nation's workforce challenges.
- In 2008-2009 we will continue to collect solutions developed across ETA's High Growth, Community-Based and WIRED investments and make them available on Workforce3One. The focus will be on collecting high-quality materials, spotlighting best practices across industries via webinars and conference presentations, and continuing to share products with stakeholders as appropriate. We anticipate developing and disseminating a second Workforce Solutions Catalogue in July 2009 at ETA's Workforce Innovations Conference.

Two High Growth grantees, Council for Adult and Experiential Learning (CAEL) and Paraprofessional Healthcare Institute, participated in Apprenticeship Plaza at Workforce Innovations 2007.

### Outreach

In May 2006, the U.S. Department of Labor, in partnership with McGraw Hill Construction,

published *In Demand: Careers in Health Care*. The magazine highlights job opportunities and career paths for young people and tips on career awareness for parents, teachers, and guidance and school counselors. One million copies of this magazine were sent to 18,427 high schools across the United States, and it is also available on-line at [www.careervoyages.com/indemandmagazine-healthcare.cfm](http://www.careervoyages.com/indemandmagazine-healthcare.cfm).

In September 2006, the U.S. Department of Labor, in partnership with McGraw Hill Construction, published the back-to-school cross-industry issue of *In Demand: Careers in Science-Technology-Engineering- Mathematics*, featuring several high-growth industries such as biotechnology, advanced manufacturing, geospatial technology, health care, nanotechnology, construction, transportation, and homeland security. This was the fifth in the overall series and the first cross-industry issue. The magazine highlights cross-industry job opportunities and career paths for young people and tips on career awareness for parents, teachers, and guidance and school counselors. One million copies of this magazine were sent to 18,427 high schools across the United States, and it is also available online at [www.careervoyages.com/indemandmagazine-stem.cfm](http://www.careervoyages.com/indemandmagazine-stem.cfm).

Information will continue to be provided to the Career Voyages ([www.careervoyages.gov](http://www.careervoyages.gov)) Web site.

### **Investments as of December 31, 2008: \$46,244,709 in 35 grants**

Through multiple forums, ETA has listened to employers, industry associations, labor-management organizations, and others in the health care industry regarding their efforts to identify challenges and implement effective workforce strategies. ETA has worked with the health care industry to identify its hiring, training, and retention challenges in its sectors



## Health Care Industry

ranging from long-term care to allied health, to nurse training. For additional information on the health care investments, please visit [www.doleta.gov/business](http://www.doleta.gov/business).

**1199 SEIU League Grant Corporation (League 1199 SEIU Training/Upgrading Fund)**

*The Contextualized Literacy Pre-LPN Program*

Grant amount: \$192,500

**American Health Care Association Foundation (AHCA)**

*Developing Partnerships and Initiatives to Resolve Long-Term Care Workforce Challenges*

Grant amount: \$113,296

**Berger Health System**

*Three-Year University Based Associate Degree Nursing Program On Site At A Rural Community Hospital*

Grant amount: \$200,000

**Board of Regents of University of Wisconsin (State of Wisconsin)**

*State of Wisconsin Initiative to Fast Track Nurse Educators*

Grant amount: \$1,365,101

**Capital Idea**

*Efficacy of Tutoring to Reduce Health Care Occupation Bottleneck*

Grant amount: \$224,088

**Capital Workforce Partners**

*CNA Advancement Initiative*

Grant amount: \$506,836

**Catalyst Learning**

*School at Work*

Grant amount: \$3,176,000

**City of Los Angeles, Community Development Department**

*Stand and Deliver Youth HGJTI Health Care Project Out-of-School to Career*

Grant amount: \$1,196,000

**Colorado Department of Labor and Employment**

*Colorado Workforce Innovation and Technology Demonstration*

Grant amount: \$1,600,000

**Columbia Gorge Community College**

*Rural Health Care Job Training Pilot Economic Recovery Demonstration Project*

Grant amount: \$1,250,000

**Council for Adult and Experiential Learning (CAEL)**

*Health Care Career Ladder Project*

Grant amount: \$2,555,706

**CVS Regional Learning Center**

*CVS Apprenticeship Program and Incumbent Worker Advancement Initiative*

Grant amount: \$1,757,981

**Evangelical Lutheran Good Samaritan Society - Good Samaritan**

*Healthcare Career Lattice: A model for enhanced learning*

Grant amount: \$1,877,517

**Excelsior College**

*Hospice and Palliative Care Certificate*

Grant amount: \$516,154

**Florida International University School of Nursing (Board of Trustees)**

*New Americans in Nursing*

Grant amount: \$1,419,266

**HCA Cares (States: Georgia, Colorado, Texas, Florida [Agency for Workforce Innovation])**

*Health Care Retraining Partnership Initiative*

Grant amount: \$4,541,205

**HCA (Hospital Corporation of America)**

*Specialty Nurse Training*

Grant amount: \$4,000,000



## Health Care Industry

### Johns Hopkins Health System

*John Hopkins Health System's Incumbent Worker Career Acceleration Program*  
Grant amount: \$3,000,000

### Management & Training Corporation

*Meeting America's Healthcare Employment Needs: The Job Corps/Community College Solution*  
Grant amount: \$1,500,000

### Maryland Department of Labor / Governor's Workforce Investment Board

*Maryland Health Care Workforce Initiative*  
Grant amount: \$1,500,000

### Mississippi Health Association Health Research & Educational Foundation

*Mississippi Long-Term Care Initiative*  
Grant amount: \$500,000

### Neosho County Community College

*Rural Kansas R3 Project*  
Grant amount: \$495,600

### North Carolina Department of Commerce Commission on Workforce Development

*Project H.E.A.L.T.H.: Helping Employers and Labor Transition to Health Care*  
Grant amount: \$1,500,000

### Northwest Michigan Council of Governments

*Michigan Direct Care Worker Career Pathway Program*  
Grant amount: \$500,000

### Orange County Workforce Investment Board (NY)

*Hudson Valley Consortium Healthcare Initiative*  
Grant amount: \$1,048,300

### Paraprofessional Healthcare Institute

*Recruitment and Retention of Direct Care Workers*  
Grant amount: \$999,902

### Pueblo Community College

*Pueblo Project Health*  
Grant amount: \$715,402

### State of Oregon (Dept of Community Colleges & Workforce Development)

*Oregon Governor's Healthcare Workforce Initiative*  
Grant amount: \$300,000

### Tacoma/Pierce County Workforce Development Council

*Healthcare Services Business Connection*  
Grant amount: \$762,659

### United Regional Health Care System

*Innovative Solutions for Solving the Healthcare Employment Shortage: Partnership, Recruitment, and Capacity Building*  
Grant amount: \$846,325

### University of Alaska Anchorage

*Long-Term Care Apprenticeship Program*  
Grant amount: \$499,988

### University of Utah

*Clinical Faculty Associate Model*  
Grant amount: \$871,707

### Valley Initiative for Development and Advancement (VIDA)

*Growing Our Own*  
Grant amount: \$4,000,000

### Wisconsin Healthcare Workforce Network

*Healthcare Workforce Network*  
Grant amount: \$215,600

### Workforce Investment Board of Herkimer, Madison and Oneida Counties

*Long-Term Care Workforce Development Project*  
Grant amount: \$497,576

**Health Care Industry****BACKGROUND**

The health care industry remains a critical driver in regional economies across the nation, and continued efforts to address the critical workforce challenges in the industry are paramount to our nation's competitiveness. Within the health care industry, allied health, long-term care, nursing professions all face severe workforce shortages that will affect this country's ability to meet future demands. In all three sectors, these gaps are even more significant in rural America. As the largest industry in 2006, health care provided 14 million jobs, representing 7 of the 20 fastest growing occupations. The health care industry will generate 3 million new wage and salary jobs between 2006 and 2016, more than any other industry.

Over the course of five Executive Forums, ETA met with senior executives representing a broad cross-section of the health care industry. These forums provide insight into the key workforce development concerns facing industry executives today, including a need for new strategies to recruit and retain workers from a variety of sources, new strategies to expand education capacity, and updated curriculum for new and incumbent workers to reflect today's high-tech health care systems. The following is a chronology of the health care forums that ETA conducted, as well as a snapshot of the workforce issues that were discussed in those forums.

For additional background information about the health care industry's Executive and Workforce Solutions Forums and details on the grants, please see the Health Care High Growth Industry Profile and the Health Care Industry Report prepared for ETA at [www.doleta.gov/brg](http://www.doleta.gov/brg).

***Health Care Executive Forums***

- February 24, 2003, with the American Hospital Association, in Chicago, IL
- July 8, 2003, with the National Rural Health Association, in Washington, D.C.
- August 4, 2003, with the American Health Care Association, in Albuquerque, NM
- August 18, 2003, with the American Society for Healthcare Human Resources Administration, in Denver, CO
- September 22, 2003, with the American Association of Homes and Services for the Aging, in Washington, D.C.

***Health Care Industry Workforce Solutions Forums***

- October 24, 2003, in Washington, D.C.
- October 29, 2003, in Salt Lake City, UT
- October 31, 2003, in Chicago, IL
- June 26-27, 2008, in Arlington, VA

**WORKFORCE ISSUES*****Pipeline: Recruitment and retention***

- Increasing available labor pool
- Increasing diversity and seeking workers from non-traditional labor pools
- Reducing turnover

***Skill development***

- Preparing entry-level workers
- Training incumbent workers
- Filling need for targeted and specialized areas of skills

## Health Care Industry

### *Capacity of education and training providers*

- Filling the need for academic and clinical instructors
- Filling the need for facilities and resources
- Aligning employer requirements and curricula

### *Sustainability: Infrastructure, leadership, and policy*

- Filling the need for sustainable partnerships at national, state, and local levels
- Locating opportunities to leverage funding and other resources

The introductory Webinar for the health care industry was held in March, 2005, a Webinar focused on Asset-Mapping for the All-Country Nursing Education Capacity Summit was held in November, 2008 and a Webinar on the Business Investment Calculator for the long-term care sector of the industry was held in December, 2008. All Webinars can be found at [www.workforce3one.org](http://www.workforce3one.org). An industry report is available on ETA's Web site at [www.doleta.gov/brg](http://www.doleta.gov/brg).

### *BRG contact*

Stuart Werner

## Hospitality Industry

### ETA IN ACTION

ETA recognizes the critical contribution that service industries play in developing future workers. Many workers enter employment in hospitality or another sector of the service economy. Since the industry serves as a training ground for so many sectors of the economy, it is important to articulate strong competencies as well as career ladders and lattices.

Recognizing the impact of the influx of military families in communities affected by military base realignment and closure (BRAC) activities across the country, ETA is committed to developing career pathways for military families in portable careers with transferable skills, like those found in the service sector, to enhance regional economic development. ETA is engaging hospitality industry leaders to develop strategies and is pursuing industry partnerships to explore opportunities for targeted workforce solutions.

ETA also recognizes the 24/7 nature of employment in the hospitality industry. Through the Technology Based Learning group, ETA will support efforts to offer alternative pathways to employment.

### *Industry engagement*

Over the course of the President's High Growth Job Training Initiative for hospitality, ETA learned about the need to articulate the skills and competencies needed for successful careers in the industry. In particular, ETA targeted the skills and competencies required in the hotel and lodging sector of the hospitality industry. ETA partnered with the American Hotel and Lodging Association (AH&LA) who worked with their membership and partners to validate the competency model and release the

model in April 2008. The Hospitality (Hotel and Lodging) Competency Model seeks to foster stronger communication between employers and education and training providers in the design and development of training programs in the hospitality industry and to promote the development and expansion of seamless career pathways for both America's workers and students. ETA will engage with other sectors of the hospitality industry to develop and validate competency models in those sectors. ETA and AH&LA are committed to working with industry partners to promote use of the new competency model and to spread the word about current and future skill needs in the hotel and lodging sector.

### *Dissemination*

ETA will maximize the investments resulting from High Growth and Community-Based Job Training Grants, as well as Workforce Innovation in Regional Economic Development (WIRED) grants by sharing valuable workforce solutions with business, education, and workforce system communities. ETA's capacity building Web site, [www.workforce3one.org](http://www.workforce3one.org), showcases these innovative solutions on a new "Workforce Solutions Tab," where users can easily search for solutions by product type, high growth industry, and state. In addition, many of our grantee solutions are featured in a Workforce3one monthly newsletter.

ETA is sharing the products widely to enable others to replicate and adapt these products and further stimulate innovation and creative responses to the nation's workforce challenges. We are currently tracking over 1,000 products across our High Growth and Community-Based investments and are currently in the process of collecting and documenting our WIRED products.

**Hospitality Industry**

The following is a summary of our national dissemination activities to date:

- In July 2008, ETA disseminated a comprehensive catalogue to over 2,500 attendees at ETA's annual Workforce Innovations Conference. This catalogue features 180 new workforce solutions along with over 120 existing solutions. Attendees at this conference include state and local workforce development professionals, representatives from community and faith-based organizations, community colleges, federal agencies, and business and industry.
- ETA also completed a Training Employment Notice (TEN) in July 2008 to further educate the workforce development community about our High Growth and Community-Based Workforce Solutions. The purpose of the TEN was to inform our workforce system colleagues about these solutions including what they are, how they can add value to their region's goals and priorities, and where they can be found. The TEN also provides examples for how a workforce area might replicate or adapt these solutions to further stimulate innovation and respond to our nation's workforce challenges.
- In 2008-2009 we will continue to collect solutions developed across ETA's High Growth, Community-Based and WIRED investments and make them available on Workforce3One. The focus will be on collecting high-quality materials, spotlighting best practices across industries via webinars and conference presentations, and continuing to share products with stakeholders as appropriate. We anticipate developing and disseminating a second Workforce Solutions Catalogue in July 2009 at ETA's Workforce Innovations Conference.

Two High Growth grantees, Johnson & Wales University and LaGuardia Community College, participated in the Talent Plaza at Workforce Innovations 2006. In addition, AH&LA was part of a learning lab on service industries as an engine for regional economic development.

**Outreach**

Information will continue to be provided to the Career Voyages ([www.careervoyages.gov](http://www.careervoyages.gov)) Web site.

**Investments as of December 31, 2008:  
\$4,358,544 in four grants**

Since February 2003, DOL has announced the award of four investments totaling over \$4 million to address the workforce needs of the hospitality industry. Through multiple forums, ETA has listened to employers, industry associations, and others in the hospitality industry regarding their efforts to identify challenges and implement effective workforce strategies. ETA has worked with the hospitality industry to identify its hiring, training, and retention challenges in its sectors ranging from resorts to restaurants. For additional information on the hospitality investments, please visit [www.doleta.gov/business](http://www.doleta.gov/business).

**Johnson & Wales University (national)**

*Hospitality Career Spotlight*

Grant amount: \$977,992

**LaGuardia Community College (NY)**

*Hotel TEACH*

Grant amount: \$494,386

**National Restaurant Association Educational Foundation (national)**

*Hospitality Business Alliance/ProStart*

*School-to-Career*

Grant amount: \$1,765,000

**Hospitality Industry****Southern Nevada Workforce Investment Board (NV)***Front Line Skills Certification*

Grant amount: \$1,121,166

- August 4, 2004, with the American Hotel and Lodging Association, in Washington, D.C.

**BACKGROUND**

The hospitality industry is projected to add more than 1.6 million new jobs to the economy between 2002 and 2012. It is a key entry point or “gateway” into the labor force, and many workers learn basic foundational skills, such as customer service, punctuality and responsibility, from their early work experiences in the hospitality industry.

The industry provides job seekers with a variety of career opportunities. Growth is projected for occupations throughout the sector, in occupations ranging from food service cooks to hotel desk clerks. Positions have varying education and training requirements, ranging from short term on-the-job training to associate or bachelor’s degree programs. Hospitality is truly a national industry, with job opportunities available throughout the country.

The introductory Webinar for the hospitality industry was held on August 31, 2005, and can be found at [www.workforce3one.org](http://www.workforce3one.org). An industry report will be available on ETA’s Web site at [www.doleta.gov/brg](http://www.doleta.gov/brg). For additional background information about the industry’s Executive and Workforce Solutions Forums and details on the grants, please see the Hospitality High Growth Industry Profile at [www.doleta.gov/brg](http://www.doleta.gov/brg).

***Hospitality Industry Executive Forums***

- January 10, 2004, with the National Restaurant Association, in Key Biscayne, FL

***Hospitality Industry Workforce Solutions Forum***

- September 27–28, 2004, in Las Vegas, NV

**WORKFORCE ISSUES*****Image and outreach***

- Countering the negative stereotypes
- Promoting the range of job opportunities available and career ladders and lattices

***Recruitment and retention***

- Expanding the youth labor pool
- Targeting untapped labor pools (older workers, transitioning military and their spouses, veterans, individuals with disabilities, ex-offenders, dislocated workers transitioning from other industries)
- Reducing turnover

***Training and skill needs***

- Developing consistent training models and skill certifications
- Addressing language skills in the workplace
- Improving “soft skills” of entry-level workers

***BRG contact***

Jen Troke



## Information Technology Industry

### ETA IN ACTION

ETA continues to manage the remaining information technology industry grantees who are nearing completion, encouraging sustainability strategies, and seeking new and innovative replication strategies to ensure the broad dissemination of grant products and best practices. In addition, the BRG will pursue opportunities to link existing information technology grantees and grant products to Workforce Innovation in Regional Economic Development (WIRED) regions that are seeking to develop information technology as a strategy for regional economic development.

### *Industry engagement*

ETA's engagement with the information technology industry has been focused on the continued guidance of investments made through the High Growth Job Training Initiative. At present, ETA is initiating efforts to link the small information technology community of grantees to the geospatial stakeholders from both the High Growth Job Training Initiative and Community-Based Job Training Grants, due to the commonality found within the end-user communities. The goal of this linkage is to highlight best practices and facilitate cross-project dialogue to encourage knowledge transfer among grantees.

ETA has conducted a series of forums in cooperation with the Information Technology Association of America (ITAA) to develop a competency model framework for use by industry and educators. This effort builds on existing standards, curricula, and certifications across multiple disciplines. Each forum brought together industry and education leaders in the IT field to get both their input on the model as well as to develop a community of practice (COP) to maintain the model that was developed.

### WORKFORCE SOLUTION

#### **A New Understanding of Apprenticeship**

The Computing Technology Industry Association (CompTIA) has worked to develop and implement a National Information Technology Apprenticeship System (NITAS), a competency-based apprenticeship methodology that supports consistent and flexible credentialing for the career development and advancement of IT workers.

The NITAS Skill Validation Tool, a web-based program management tool available to all employers to use in training their IT workers, provides tools for tracking on-the-job-training progress of registered apprentices, based on existing competency standards. This web site can be adapted for any "apprenticeable" occupation with competency-based on-the-job training standards. To learn more about this workforce solution, visit [www.workforce3one.org](http://www.workforce3one.org).

The competency model, now available at <http://careeronestop.org/competency-models>, is ultimately intended to reduce the duplication of effort involved in continually identifying and re-validating core foundational competencies for separate projects. The competency model will free up resources, time, and energy for innovative development that can keep up with the pace of changing technology and reflect the changing requirements of specific regions or businesses.

Currently, ETA and industry stakeholders are working on the best technology platform for hosting this COP. Existing partnerships with the major industry associations, Information Technology Association of America and CompTIA, are being leveraged to ensure close

*Information Technology Industry*

collaboration that will lead to an industry recognized model that is utilized by industry and education.

Four of ETA's first generation WIRED regions – Denver Metro, Florida's Great Northwest, Northeast Pennsylvania, and Upstate New York – are targeting the information technology industry as a regional economic driver. Two second generation regions – Appalachian Ohio and the Tennessee Valley – are targeting the industry as well, while one third generation region – Southern Arizona – is also focusing on the information technology industry. The BRG is supporting these regions with its expertise on the national trends in the industry and its involvement with major industry stakeholders.

*Dissemination*

ETA will maximize the investments resulting from High Growth and Community-Based Job Training Grants, as well as Workforce Innovation in Regional Economic Development (WIRED) grants by sharing valuable workforce solutions with business, education, and workforce system communities. ETA's capacity building Web site, [www.workforce3one.org](http://www.workforce3one.org), showcases these innovative solutions on a new "Workforce Solutions Tab," where users can easily search for solutions by product type, high growth industry, and state. In addition, many of our grantee solutions are featured in a Workforce3one monthly newsletter.

ETA is sharing the products widely to enable others to replicate and adapt these products and further stimulate innovation and creative responses to the nation's workforce challenges. We are currently tracking over 1,000 products across our High Growth and Community-Based investments and are currently in the process of collecting and documenting our WIRED products.

The following is a summary of our national dissemination activities to date:

- In July 2008, ETA disseminated a comprehensive catalogue to over 2,500 attendees at ETA's annual Workforce Innovations Conference. This catalogue features 180 new workforce solutions along with over 120 existing solutions. Attendees at this conference include state and local workforce development professionals, representatives from community and faith-based organizations, community colleges, federal agencies, and business and industry.
- ETA also completed a Training Employment Notice (TEN) in July 2008 to further educate the workforce development community about our High Growth and Community-Based Workforce Solutions. The purpose of the TEN was to inform our workforce system colleagues about these solutions including what they are, how they can add value to their region's goals and priorities, and where they can be found. The TEN also provides examples for how a workforce area might replicate or adapt these solutions to further stimulate innovation and respond to our nation's workforce challenges.

In 2008-2009 we will continue to collect solutions developed across ETA's High Growth, Community-Based and WIRED investments and make them available on Workforce3One. The focus will be on collecting high-quality materials, spotlighting best practices across industries via webinars and conference presentations, and continuing to share products with stakeholders as appropriate. We anticipate developing and disseminating a second Workforce Solutions Catalogue in July 2009 at ETA's Workforce Innovations Conference.

A High Growth grantee, the State of Arizona Department of Commerce, and its industry

## Information Technology Industry

partner IBM, participated in the Talent Plaza at Workforce Innovations 2006.

### Outreach

In September 2006, the U.S. Department of Labor, in partnership with McGraw Hill Construction, published the back-to-school cross-industry issue of *In Demand: Careers in Science-Technology-Engineering- Mathematics*, featuring several high-growth industries such as biotechnology, advanced manufacturing, geospatial technology, health care, nanotechnology, construction, transportation, and homeland security. This was the fifth in the overall series and the first cross-industry issue. The magazine highlights cross-industry job opportunities and career paths for young people and tips on career awareness for parents, teachers, and guidance and school counselors. One million copies of this magazine were sent to 18,427 high schools across the United States, and it is also available online at [www.careervoyages.com/indemandmagazine-stem.cfm](http://www.careervoyages.com/indemandmagazine-stem.cfm).

Information will continue to be provided to the Career Voyages ([www.careervoyages.gov](http://www.careervoyages.gov)) Web site.

### **Investments as of December 31, 2008: \$7,816,982 in three grants**

Since June 2003, DOL has announced the award of three investments totaling nearly \$8 million to address the workforce needs of the information technology industry. Through multiple forums, ETA has listened to employers, industry associations, and others in the information technology industry regarding their efforts to identify challenges and implement effective workforce strategies. ETA has worked with the information technology industry to identify its hiring, training, and retention challenges. For additional information on the information technology investments, please visit [www.doleta.gov/business](http://www.doleta.gov/business).

### **Computing Technology Industry Association (AZ, CA, FL, IL, KS, NJ, NY, ND, TX, WA)**

*National Information Technology Apprenticeship System (NITAS)*

Grant amount: \$2,818,795

### **State of Arizona (AZ)**

*The Arizona Information Technology Skills Training Initiative*

Grant amount: \$3,403,168.

*State of Vermont (VT)*

*Vermont Governors IT Training Initiative*

Grant amount: \$1,595,019

## BACKGROUND

According to the Bureau of Economic Analysis, information technology (IT) is not a distinct industry; rather, it is a subset of manufacturing, transportation, and business services. IT is considered a high-growth industry because the Bureau of Labor Statistics projects that 5 of the top 30 fastest-growing occupations between 2006 and 2016 are IT-related. Although there are currently regional surpluses of IT workers and the industry is experiencing a contraction, the industry as a whole will require almost 1.5 million new workers by 2016.

For additional background information about the industry's Executive and Workforce Solutions Forums, please see the Information Technology High Growth Industry Profile at [www.doleta.gov/brg](http://www.doleta.gov/brg).

### **Information Technology Industry Executive Forum**

- February 26, 2004, with CompTIA, in Oakbrook Terrace, IL

## WORKFORCE ISSUES

### *Outsourcing*

There is concern about federal, state, and local government policy proposals that may restrict overseas outsourcing where labor costs are lower. Some companies move jobs overseas to remain competitive by managing labor costs. Others are opening new markets overseas for their products and hiring local employees as an incentive and an accommodation.

### *Government resources*

Some stakeholders believe that the government can offer tax relief to small businesses for training their incumbent workers toward IT certification.

### *Role of government in industry's workforce initiatives*

Stakeholders also believe that government could serve as an honest broker for specific issues such as promotion and image, forecasting the future of the workforce and training needs. This could be a task for the public education system, where children could be introduced to the new, dynamic global workplace and learn more about the current business culture.

### *Skills and training*

Over 90 percent of IT workers are employed outside the IT industry, which makes it necessary for them to have complementary training in their respective business sectors such as health care, manufacturing, or financial services. Employers are also looking for well-developed soft skills, transferable IT skills and adaptability in their workforce. Incumbent training programs may help in this respect, as could community colleges.

### *BRG contact*

Justin Navarro

## Retail Trade Industry

### ETA IN ACTION

In response to discussion with industry leaders, the BRG has worked with industry to develop a retail strategy for the coming year that will promote and replicate industry-developed training and disseminate the industry-developed competency model. Industry is in a unique position to provide technical assistance to BRG in disseminating and embedding use of the products in the workforce system and its partners to meet industry demand because of the established relationships, tools, programs and commitment they possess.

ETA recognizes the critical contribution that service industries play in creating future workers. Many workers enter employment in hospitality or another sector of the service economy. Since the industry serves as a training ground for so many sectors of the economy, it is important to articulate strong competencies as well as career ladders and lattices.

### *Industry engagement*

ETA worked with industry leaders throughout 2006 to develop a framework for foundation and technical competencies in the retail industry as a whole. Industry partners, including NRF Foundation, Toys “R” Us, Saks, The Home Depot, and CVS were convened to shape and develop the model. This effort built upon existing national and state skills standards, curriculum and certifications. The final product is a framework for a competency model and is intended to reduce duplication of effort, and free up resources, time, and energy for innovative development that can keep up with the pace of changing requirements of specific regions or employers. The framework was launched in May 2007, and is available via the Competency Model Clearinghouse Web site.

ETA’s second generation Workforce Innovation in Regional Economic Development (WIRED) region in Northern New Jersey is targeting the retail industry as a regional economic driver. The BRG is supporting this region with its expertise on the national trends in the industry and its involvement with major industry stakeholders.

### *Dissemination*

ETA will maximize the investments resulting from High Growth and Community-Based Job Training Grants, as well as Workforce Innovation in Regional Economic Development (WIRED) grants by sharing valuable workforce solutions with business, education, and workforce system communities. ETA’s capacity building Web site, [www.workforce3one.org](http://www.workforce3one.org), showcases these innovative solutions on a new “Workforce Solutions Tab,” where users can easily search for solutions by product type, high growth industry, and state. In addition, many of our grantee solutions are featured in a Workforce3one monthly newsletter.

ETA is sharing the products widely to enable others to replicate and adapt these products and further stimulate innovation and creative responses to the nation’s workforce challenges. We are currently tracking over 1,000 products across our High Growth and Community-Based investments and are currently in the process of collecting and documenting our WIRED products.

The following is a summary of our national dissemination activities to date:

- In July 2008, ETA disseminated a comprehensive catalogue to over 2,500 attendees at ETA’s annual Workforce Innovations Conference. This catalogue features 180 new workforce solutions



**Retail Trade Industry**

along with over 120 existing solutions. Attendees at this conference include state and local workforce development professionals, representatives from community and faith-based organizations, community colleges, federal agencies, and business and industry.

- ETA also completed a Training Employment Notice (TEN) in July 2008 to further educate the workforce development community about our High Growth and Community-Based Workforce Solutions. The purpose of the TEN was to inform our workforce system colleagues about these solutions including what they are, how they can add value to their region's goals and priorities, and where they can be found. The TEN also provides examples for how a workforce area might replicate or adapt these solutions to further stimulate innovation and respond to our nation's workforce challenges.
- In 2008-2009 we will continue to collect solutions developed across ETA's High Growth, Community-Based and WIRED investments and make them available on Workforce3One. The focus will be on collecting high-quality materials, spotlighting best practices across industries via webinars and conference presentations, and continuing to share products with stakeholders as appropriate. We anticipate developing and disseminating a second Workforce Solutions Catalogue in July 2009 at ETA's Workforce Innovations Conference.

**Outreach**

A small grant was awarded to NRFF to develop career awareness videos about the retail industry. The videos are being prepared for posting on Career Voyages.

Additional information will continue to be provided to the Career Voyages ([www.career-voyages.gov](http://www.career-voyages.gov)) Web site.

**Investments as of December 31, 2008:  
\$5,164,900 in three grants**

Since May 2003, DOL has announced the award of three investments totaling over \$5 million to address the workforce needs of the retail industry. Through multiple forums, ETA has listened to employers, industry associations, and others in the retail industry regarding their efforts to identify challenges and implement effective workforce strategies. ETA has worked with the retail industry to identify its hiring, training, and retention challenges. For additional information on the retail investments, please visit [www.doleta.gov/business](http://www.doleta.gov/business).

**National Retail Federation Foundation  
(national)**

*Extreme Makeover: Retail Careers in the Spotlight*  
Grant amount: \$99,900

**National Retail Federation Foundation  
(national)**

*NRF Foundation Retail Demonstration*  
Grant amount: \$2,815,000

**National Retail Federation Foundation  
(national)**

*Retail Learning Leadership Initiative*  
Grant amount: \$2,250,000

**BACKGROUND**

The retail trade industry is predicted to add 2.1 million new jobs between 2002 and 2012, an increase of 14 percent. Like the hospitality industry, retail is a critical point of entry, or "gateway," into the labor force, and provides workers with foundational skills in customer service, punctuality, and responsibility. The industry offers substantial employment opportunities in part-time and temporary work,



**Retail Trade Industry**

as well as in a wide variety of formats ranging from small, independent retailers to national and multinational retail chains. Experience and education can lead to an array of retail management, store support, and corporate-level career ladders.

The introductory Webinar for the retail industry was held on April 13, 2005, and can be found at [www.workforce3one.org](http://www.workforce3one.org). For additional background information about the industry's Executive and Workforce Solutions Forums, please see the Retail High Growth Industry Profile at [www.doleta.gov/brg](http://www.doleta.gov/brg).

***Retail Trade Industry Executive Forum***

- January 14, 2003, with the National Retail Federation, in New York, NY

**WORKFORCE ISSUES*****Pipeline: Career ladders and lattices***

The retail trade industry is a dynamic field with diverse career ladders, a wide range of employee benefits, and on-the-job training that is increasingly driven by high-end technology that requires advanced skills. Employers recruit job candidates from community colleges and universities and train incumbent workers to upgrade their skills for career advancement.

***Pipeline: Recruitment and retention***

Retail trade employers struggle to attract and retain the best and brightest employees because of the misperception that jobs are low-wage and lack growth potential. In reality, today's retail trade careers are more than just cashier and sales associate positions; they encompass information technology, marketing, communications, loss prevention, finance, and merchandise sourcing.

***Pipeline: Diversity***

In an increasingly diverse society, multilingual employees are desirable. Retailers are customer service-driven and need workers to speak the languages of their customer base. Limited English Proficiency (LEP) is a problem as workers may speak the language of customers, but lack basic English language and literacy skills to perform all job functions.

***Competency Models***

The retail industry has started work on initial training models and skills certifications. ETA is developing a dissemination strategy for the competency models.

***BRG contact***

Jen Troke

## STEM Initiative

### ETA IN ACTION

On November 19, 2008, ETA announced the availability of approximately \$10 million in grant funds for the Science, Technology, Engineering, and Mathematics (STEM) Opportunities in the Workforce System Initiative (STEM Initiative). These grants were awarded through a two-phased competitive process to expand and align current and new STEM workforce education and training strategies, activities, and resources. One Stop Career Centers are a key vehicle for promoting, attracting, and preparing disadvantaged youth and dislocated workers for STEM careers, while simultaneously enhancing the competitive position of local and regional employers.

### *BRG contact*

Charles Cox

### *Investments as of December 31, 2008: \$10,000,000 in 5 grants*

#### **Central Massachusetts Regional Employment Board (MA)**

*Science-Based-Manufacturing Pathways Center*  
Grant amount: \$2,000,000

#### **Eastern Connecticut Workforce Investment Board (CT)**

*Connecticut STEM Career Partnerships*  
Grant amount: \$2,000,000

#### **Indianapolis Private Industry Council (IN)**

*STEM Works Indiana*  
Grant amount: \$1,999,946

#### **Southwest Washington Workforce Development Council (OR, WA)**

*North Willamette Valley STEM Initiative*  
Grant amount: \$2,000,000

#### **WorkFORCE Solutions of the Lower Rio Grande Valley (TX)**

*Operation Workforce*  
Grant amount: \$1,999,180

## Transportation Industry

### ETA IN ACTION

The transportation industry is projected to experience a significant long-term increase in total employment. Other sectors and industries depend on it to transport their workers, as well as the goods and materials on which they rely. In an effort to help ensure the continued health of the industry, and provide workers with career opportunities and pathways in the industry, ETA has worked with industry stakeholders to identify the workforce challenges facing the industry and invested in several innovative workforce solutions that target these needs.

Building off of these initial efforts, ETA's future activities targeted at the transportation industry will include enhancing partnerships with leading transportation industry associations with a focus on sharing workforce resources they have developed for their members and partners with the workforce system and its partners, and connecting their state chapters and members to workforce investment boards and One-Stop Career Centers. ETA will also identify and address key barriers limiting the implementation by Workforce Investment Boards of industry-supported training funds targeted at truck driver training, then exploring options for piloting a training fund in at least one locality. ETA is also seeking to address key policy and programmatic challenges that limit One-Stop Career Centers from collaborating with national trucking carriers.

#### *Industry engagement*

ETA recently launched an initiative to identify and disseminate promising technology-based learning solutions. In support of these efforts, the BRG completed comprehensive research on technology-based learning solutions that are currently being utilized in the trucking sector,

### WORKFORCE SOLUTION

#### **Training Generation Y: The Making of a UPS Driver**

The United Parcel Service of America (UPS) has worked to address the recruiting and retention challenges faced by the transportation industry, particularly in regards to the twenty-something age group. Through a High Growth Job Training Initiative Grant, UPS produced a literature review which addresses the generational differences in the contemporary workforce, justifying the need for new instructional strategies and technological innovations to accommodate generational differences.

As a result of this investment, UPS has developed a "technology-enhanced hands-on learning" pilot training center aimed specifically at young would-be drivers. This movie-set style facility features hands-on teaching tools such as a UPS package car with see-through sides, model neighborhoods, a slip-and-fall simulator, and many more. Based on the successes achieved thus far, this project will prove to be sustainable, replicable, and transportable throughout the transportation industry. To learn more about this effort and to access training and educational materials, visit [www.workforce3one.org](http://www.workforce3one.org).

as well as solutions that will be implemented in the future. This research will help inform ETA's technology-based learning solutions initiative, and helps ensure that ETA has a comprehensive understanding of some of the key technology-based learning solutions being implemented in high growth industries.

Driven by industry demand to catalogue and outline the competencies needed to embark on

## Transportation Industry

successful careers in transportation, ETA developed a Transportation, Distribution and Logistics (TDL) industry competency model. In October and November of 2008 ETA convened members of industry, community colleges and other training providers to validate the model. Using the input of these experts, ETA will revise the current model and issue a final version in February 2009. The TDL competency model presents five basic competency levels that can be applied across the industry. This allows individual users to create occupation-specific models based on their own expertise and experience.

In December 2008, ETA hosted a TDL Strategy Session Webinar. The session brought together representatives from private industry, community colleges, and the public workforce system to determine where and how resources can be leveraged and shared. The overarching goal of the session was to discuss TDL training and commit to continued collaboration moving forward.

ETA launched efforts to partner with the U.S. Department of Transportation (DOT) in support of the Workforce Innovation in Regional Economic Development (WIRED) initiative. In pursuit of these efforts, Assistant Secretary DeRocco met with DOT's Assistant Secretary for Transportation Policy to explore opportunities for partnership. Since then, ETA's federal liaisons for transportation have continued to work with DOT on exploring potential partnerships. ETA has also completed research on a wide array of DOT programs, and met with staff from DOT's Federal Highway Administration and Federal Transit Administration to explore partnership opportunities.

Two of ETA's first generation WIRED regions – The Piedmont Triangle North Carolina and Western Alabama and Eastern Mississippi – are targeting the transportation

industry as a regional economic driver. Two second generation regions, Arkansas Delta and Northern New Jersey, are also focusing on the industry. Finally, three third generation regions – Central Kentucky, Southeast Missouri, and Southeastern Virginia – are targeting the transportation industry. The BRG is supporting these regions with its expertise on the national trends in the industry and its involvement with major industry stakeholders.

In March 2008, ETA held a two-day WIRED Transportation, Distribution, and Logistics Institute in Memphis, Tennessee. The Institute was designed to offer an intensive learning environment with a focus on current and future TDL industry trends, technologies, and infrastructure requirements, and their impact on talent development in key industry areas. Attendees had an opportunity to hear from high-level industry experts as well as federal partners and WIRED regions.

### *Dissemination*

ETA will maximize the investments resulting from High Growth and Community-Based Job Training Grants, as well as Workforce Innovation in Regional Economic Development (WIRED) grants by sharing valuable workforce solutions with business, education, and workforce system communities. ETA's capacity building Web site, [www.workforce3one.org](http://www.workforce3one.org), showcases these innovative solutions on a new "Workforce Solutions Tab," where users can easily search for solutions by product type, high growth industry, and state. In addition, many of our grantee solutions are featured in a Workforce3one monthly newsletter.

ETA is sharing the products widely to enable others to replicate and adapt these products and further stimulate innovation and creative responses to the nation's workforce challenges. We are currently tracking over 1,000 products across our High Growth and Community-

**Transportation Industry**

Based investments and are currently in the process of collecting and documenting our WIRED products.

The following is a summary of our national dissemination activities to date:

- In July 2008, ETA disseminated a comprehensive catalogue to over 2,500 attendees at ETA's annual Workforce Innovations Conference. This catalogue features 180 new workforce solutions along with over 120 existing solutions. Attendees at this conference include state and local workforce development professionals, representatives from community and faith-based organizations, community colleges, federal agencies, and business and industry.
- ETA also completed a Training Employment Notice (TEN) in July 2008 to further educate the workforce development community about our High Growth and Community-Based Workforce Solutions. The purpose of the TEN was to inform our workforce system colleagues about these solutions including what they are, how they can add value to their region's goals and priorities, and where they can be found. The TEN also provides examples for how a workforce area might replicate or adapt these solutions to further stimulate innovation and respond to our nation's workforce challenges.
- In 2008-2009 we will continue to collect solutions developed across ETA's High Growth, Community-Based and WIRED investments and make them available on Workforce3One. The focus will be on collecting high-quality materials, spotlighting best practices across industries via webinars and conference presentations, and continuing to share products with stakeholders as appropriate. We anticipate developing and disseminating a second

Workforce Solutions Catalogue in July 2009 at ETA's Workforce Innovations Conference.

A High Growth grantee, UPS, participated in the Apprenticeship Plaza at Workforce Innovations 2007.

A High Growth grantee, The Paul Hall Institute, participated in the Talent Plaza at Workforce Innovations 2008.

**Outreach**

In September 2006, the U.S. Department of Labor, in partnership with McGraw Hill Construction, published the back-to-school cross-industry issue of *In Demand: Careers in Science-Technology-Engineering- Mathematics*, featuring several high-growth industries such as biotechnology, advanced manufacturing, geospatial technology, health care, nanotechnology, construction, transportation, and homeland security. This was the fifth in the overall series and the first cross-industry issue. The magazine highlights cross-industry job opportunities and career paths for young people and tips on career awareness for parents, teachers, and guidance and school counselors. One million copies of this magazine were sent to 18,427 high schools across the United States, and it is also available online at [www.career-voyages.com/indemandmagazine-stem.cfm](http://www.career-voyages.com/indemandmagazine-stem.cfm).

**Investments as of December 31, 2008: \$7,640,243 in four grants**

Since October 15, 2005, DOL has announced the award of four investments totaling over \$7.5 million to address the workforce needs of the transportation industry. Through multiple forums, ETA has listened to employers, industry associations, labor-management organizations, and others in the transportation industry regarding their efforts to identify challenges and implement effective workforce strategies. ETA has worked with the transpor-



## Transportation Industry

tation industry to identify its hiring, training, and retention challenges in its sectors from maintenance to manufacturing. For additional information on the transportation investments, please visit [www.doleta.gov/business](http://www.doleta.gov/business).

### Arkansas Department of Workforce Services (AR)

*Transportation and Logistics Career Pathway Project*  
Grant amount: \$1,350,665

### Community Transportation Development Center (CTDC) (D.C., GA, OH, MD, PA, UT)

*Building Capacity for Transit Workforce Development: Developing Standards, Models and Systems for Transit Training and Apprenticeship*  
Grant amount: \$2,000,000

### Paul Hall Institute of Human Development (AL, AK, FL, HI, LA, MD, MS, TX)

*Job Training and Maritime Retention Program*  
Grant amount: \$2,499,618

### United Parcel Service of America (UPS) (nationwide)

*Transportation Learning Methodology for "Generation X and Y" Driver Service Providers*  
Grant amount: \$1,789,970

## BACKGROUND

Transportation was one of the industries targeted through the President's High Growth Job Training Initiative because it is projected to experience substantial employment growth, and other sectors and industries depend on it to transport their goods and workers. Based on partner input, and an increasing understanding of all aspects of "Transportation", ETA has expanded its definition to include Distribution and Logistics. Together with Transportation, these sectors round out our conceptualization and definition of the TDL industry.

Based on the challenges identified by the transportation industry, DOL has made a series of investments totaling more than \$6 million to implement a range of solutions, including helping high school, technical school, and community college graduates successfully enter the transportation industry; creating industry standards, and systems for apprenticeship, training, and skill certification in the transit sector; developing comprehensive, competency-based training programs for entry-level workers; and creating models of safety simulation and gaming software that can be used to enhance the learning of younger workers. The demonstrations address the needs of the industry broadly, as well as those of specific industry sectors.

The introductory Webinar for the transportation industry was held on December 13, 2005, and can be found at [www.workforce3one.org](http://www.workforce3one.org). An industry report will be available on ETA's Web site at [www.doleta.gov/brg](http://www.doleta.gov/brg). Information will continue to be provided to the Career Voyages ([www.careervoyages.gov](http://www.careervoyages.gov)) Web site. For additional background information about the industry's Executive and Workforce Solutions Forums, please see the Transportation High Growth Industry Profile at [www.doleta.gov/brg](http://www.doleta.gov/brg).

### *Transportation Industry Executive Forums*

- September 14, 2004, on freight transportation, warehousing and logistics, in Washington, D.C.
- September 30, 2004, on transit and ground passenger transportation, in Washington, D.C.

### *Transportation Industry Workforce Solutions Forum*

- November 16-17, 2004, in Austin, TX



**Transportation Industry****WORKFORCE ISSUES***Image, outreach, and recruitment*

- Image
- Youth pipeline
- Untapped labor pools (dislocated workers, transitioning military, veterans, individuals with disabilities)

*Retention and advancement*

- Entry-level retention
- Developing competency models and career ladders
- Management retention

*Training: Entry-level workers*

- Addressing skill needs
- Developing training models and skill certifications
- Overcoming barriers to training (cost, geographic accessibility, time for training)

*Training: Incumbent workers*

- Addressing skill needs
- Developing training models and skill certifications
- Overcoming barriers to training (cost, time for training)

*BRG contact*

Mike Trupo

## Summary of Activities

### BACKGROUND

The Community-Based Job Training Grants continue the work of the High Growth Job Training Initiative by incorporating its focus on high-growth, high-demand industries and its emphasis on the role of strategic partnerships in workforce development. The Community-Based Job Training Grants highlight the critical role community colleges play as partners in a demand-driven workforce investment system and support community efforts to link training initiatives to the skill demands of local and regional employers. As a result, activities are leading to an increased number of high-growth, high-demand firms being supported by the local or regional workforce and education systems, and more individuals being trained and employed in high-growth, high-demand sectors.

Community and technical colleges represent a critical 21st century training resource for workers needing to attain, retool, refine, and broaden their skills to meet industry demand. However, community college leaders and industry executives report that many community colleges are unable to meet their local and regional demand for training because of critical capacity constraints. These capacity constraints occur when community colleges lack sufficient resources to support training facilities and equipment, curriculum development, faculty appointments, clinical experiences, and/or other elements that are necessary to provide either the volume or quality of training that industry requires. Despite rising application rates, the reality of current state and local budgets often prevents colleges from funding the programs, faculty, and student services they need to be responsive to local and regional workforce demands. The Community-Based Job Training Grants address these critical capacity issues.

### WORKFORCE SOLUTION

#### Nursing Delivers Virtual Career Fairs

Nursing Delivers Virtual Career Fairs  
To accommodate nursing students' demanding schedules, Lake Land College has successfully developed a virtual career fair to help educate students about the opportunities available to them after graduation. With input from students, education and employers, information is now accessible on the college's virtual career fair web site: <http://www.lakeland.cc.il.us/careerservices/index.cfm>.

The web site allows students to view information from local participating employers and nursing schools on application processes, pay scale, benefits, orientation process, programs/degrees offered, admission requirements, course transfer agreements, and tuition costs. The response from both the participants and the students has been positive and the grantee hopes that this tool will help Lake Land College nursing students effectively evaluate the opportunities available to them upon graduation and facilitate the transition to their post-graduation position.

## Summary of Activities

### ETA IN ACTION

#### *Grant awards*

Secretary Chao has announced three rounds of Community-Based Job Training Grants:

- On October 19, 2005, for \$125 million to 70 community colleges
- On December 11, 2006, for \$125 million to 72 community colleges
- On March 11, 2008, for \$125 million to 69 community colleges

In these rounds of grants, 46 states now host projects: Alabama, Alaska, Arizona, Arkansas, California, Colorado, Connecticut, Delaware, Florida, Georgia, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New Mexico, New York, North Carolina, North Dakota, Ohio, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming.

For additional information on these investments, please visit [www.doleta.gov/business/Community-BasedJobTrainingGrants.cfm](http://www.doleta.gov/business/Community-BasedJobTrainingGrants.cfm).

ETA announced a fourth solicitation of Community-Based Job Training grants on October 10, 2008 and anticipates awarding grants in early 2009.

#### *Technical assistance*

ETA has actively worked with Community-Based grantees and their partners to provide technical assistance and project support. ETA provides technical assistance to these investments to ensure they successfully meet their outcomes. ETA's vision is to expand the workforce system and its partners' capacity

to respond effectively to economic needs at the local, state, and regional levels, and to develop talent to compete in our global economy.

This assistance includes new grantee orientations, peer networking group calls, fiscal and performance reporting training, and other means to share implementation, expansion, and sustainability challenges and strategies. In addition, ETA has invited Community-Based Job Training Grantees to participate in regionally-hosted ETA Performance and Reporting Summits in Dallas, TX, Atlanta, GA, and Mesa, AZ. These summits included targeted workshops to train grantees on setting up performance reporting systems, common measures reporting, and in preparing a quality narrative report.

ETA has conducted internal communications to connect Federal staff from various offices with Federal Project Officers for the Community-Based Job Training Grants. The intent is to better integrate all workforce preparation programs and expand the technical assistance resources and networking and information sharing opportunities available to all of ETA's grantees.

#### *ETA contact*

Vivian Luna

## Business Engagement Initiatives

### BRAC, VETERANS, AND MILITARY SPOUSES

ETA is committed to serving our nation's veterans and military spouses, our "heroes at home," by ensuring they have access to services and resources to help them reach the education and skill attainment they need for good jobs and career pathways in the 21st-century economy. Equally, ETA is actively working to connect veterans and military spouses to employers that offer those jobs and careers.

Many employers seek out veterans and military spouses for their unique talents and work ethic. ETA's business engagement strategy is focused on helping these businesses to find and recruit these populations as an important part of their human resources strategy. ETA has a particular focus on military spouses, who need portable skills designed to help them grow their careers in a mobile environment and also need to reenter the workforce when called upon to change locations; and veterans, particularly those who have been wounded in battle.

ETA will continue to focus on ensuring that the public workforce system is maximizing its outreach to veterans and military spouses and is fully implementing the "Key to Career Success" campaign. In addition, we are partnering with the Veterans' Employment and Training Service (VETS) and the Advisory Committee on Veterans' Employment, Training, and Employer Outreach (ACVETEO) to provide targeted resources and outreach materials for employers to access these populations.

#### *Summits and targeted events*

ETA has worked extensively to support hiring events for employers and job-seekers. For the National Veterans Employment Summit and Job Fair on November 9, 2006, ETA developed

a panel presentation for employers on One-Stop Career Centers as a resource for recruiting and hiring veterans and military spouses. Three ETA partners – CVS, The Home Depot, and Werner Enterprises – lent their expertise to the panel. In addition, the American Hotel & Lodging Association kicked off the job fair with a presentation at a ribbon-cutting ceremony. Several ETA partners had booths at the job fair and reported success in recruiting candidates for their hourly, management, and professional positions.

On January 9-11, 2007, ETA hosted a Base Realignment and Closure (BRAC) conference for the public workforce system and Department of Defense (DoD) officials. The BRG organized an industry panel session for the conference, which provided information on portable careers and training opportunities for military spouses and families. The panel included representatives from the Medical Transcription Industry Association (MTIA), RE/MAX International, and Intercontinental Hotels representing the American Hotel and Lodging Association.

A Webinar, co-hosted by ETA and DoD, was held in February 2007 to inform employers about this important source of talent and resources they can use to locate, recruit, hire, and retain military spouses. The Webinar provided information on best practices developed by Manpower and RE/MAX International. As a follow up to the Webinar, the BRG solicited information on the challenges employers are facing in hiring this population group and potential additional assistance ETA can provide.

In March, 2008, ETA hosted a Base Realignment and Closure (BRAC) conference for the public workforce system and Department of Defense (DoD) officials. The BRG organized sessions for the conference, which will provide

## Business Engagement Initiatives

information on portable careers and training opportunities for military spouses and families.

### *Partnerships*

Several of ETA's business partners have expressed an interest in recruiting military spouses. In particular, ETA and the Veterans Employment and Training Service have engaged with the American Hotel & Lodging Association about a pilot partnership for military spouses centered around a BRAC location that is gaining military personnel.

Many partners have established or expanded recruitment efforts to hire veterans. These include The Home Depot, which has hired more than 60,000 veterans through its "Operation Career Front," Werner Enterprises, which has an innovative apprenticeship program that is designed to meet the needs of returning veterans, and Manpower, through its "Injured Warrior Initiative."

ETA continues to engage the transportation industry in its consideration of veterans as a source of skilled workers. In particular, ETA has consulted with trucking companies about improving the career prospects of military service members with active-duty truck driving experience.

### **FAITH-BASED AND COMMUNITY INITIATIVES**

Faith-based and community initiatives are an important resource for employers. In many cases, they are a source of referrals to company recruitment, and they can be training partners for entry-level and incumbent workers. Frequently, when companies are interested in tapping into new populations – or when they are addressing their employees' needs for English language instruction, transportation, child care, or other critical issues – they are well served by connecting to organizations

that operate in their local communities. ETA recognizes the important functions of these organizations and is working in concert with the Office of Faith-Based and Community Initiatives (OFBCI) to help employers to leverage this network.

### *Partnerships*

OFBCI and the BRG participated in a seminar by CVS on "Achieving Business Partnerships of Excellence," specifically focusing on government, faith-based, and community organizations.

The OFBCI and ETA have shared technical assistance and support to grantees and stakeholders. ETA has shared technical assistance strategies (such as Peer Networking Group calls, Strategic Networking Group calls, and topical Webinars). The offices have also brainstormed approaches for connecting faith-based grantees to the public workforce system and to local employers.

ETA worked to support the OFBCI's efforts in working with ex-offenders returning to the Washington, D.C., area, including helping to forge connections with the public workforce system.

ETA worked with the OFBCI to develop a joint Webinar for faith-based and community organizations on partnering with the public workforce system. The purpose of the Webinar was to inform the faith-based community about the road to WIRED, as well as share promising practices for building strategic partnerships with the workforce system. In addition, participants learned more about technical assistance resources, such as Workforce3One and Career Voyages to support their work. The Webinar aired on December 1, 2006, and included over 100 participants.

## Business Engagement Initiatives

### INDIVIDUALS WITH DISABILITIES

Almost 20 percent of the population has some level of disability. In fact, the percentage of people with disabilities is larger than any single ethnic, racial, or cultural group in the county. As the population ages, more people will be likely to acquire a disability. People with disabilities constitute a qualified, largely untapped labor pool which could significantly contribute to addressing the shortage of qualified workers. Of the people with disabilities who are unemployed, two-thirds would rather be working.

Employers have recognized the value of individuals with disabilities as a key source of skilled workers. ETA is engaging with businesses that are interested in expanding their recruitment and retention for individuals with disabilities. The goal of this outreach is to foster seamless delivery of services for employers through the public workforce system, as well as to identify successful practices for tapping this untapped labor pool in regional economic development strategies. Part of the outreach includes working to ensure that Disability Program Navigators are strongly linked to industry and the ongoing business engagement activities conducted throughout the public workforce system.

#### *Partnerships*

Several of ETA's business partners have developed strategies for increasing their recruitment and retention of individuals with disabilities. ETA awarded a High Growth Job Training Initiative grant to the International Association of Jewish Vocational Services (JVS) for its national model to recruit and train individuals with disabilities. Through the grant, JVS will build the capacity of the banking sector to attract, employ, and retain workers with disabilities at three demonstration sites through pre-employment assessment, training, and mentoring.

On October 26, 2006, the Secretary awarded a New Freedom Initiative Award to CVS/pharmacy for its innovative program to create opportunities for adults with developmental disabilities by partnering with New Vision Photography in the Washington, D.C. area. Participants in the nine-week training program, which has been duplicated in other markets, learned photo skills to prepare them to intern in the photography departments of local CVS stores. At the end of the program, all participants were hired as CVS employees. CVS also partners with national organizations such as Goodwill Industries and state agencies, as well as school programs dedicated to serving persons with disabilities. In one tri-state area partnership, CVS hired 55 people with significant disabilities.

ETA has served on interoffice workgroups focused on services to businesses seeking information and assistance on hiring and retaining individuals with disabilities, including psychiatric disabilities. Furthermore, the Office of Disability Employment Policy invited the participation of ETA staff in developing the scope and potential research subjects for a study on community colleges serving individuals with disabilities.

ETA had representatives at the Rehabilitation Service Administration's National Employment Conference on August 21, 2006, who presented demand-driven activities.

### YOUTH PIPELINE

Many employers are facing an acute shortage of talent and are turning to youth as a pipeline of workers. Some industries in particular, such as advanced manufacturing and energy, are suffering from the "demographic cliff" – a large percentage of their workforce will be retiring, leaving a growing need for replacement workers and for training to help them gain the



## Business Engagement Initiatives

skills that their retiring cohorts had attained. Although employers often cite the need to develop a youth pipeline, they also often cite a number of barriers to this strategy, from soft skills such as work attitude, dress, and punctuality, to hard skills including scientific and mathematical aptitude. Through the President's High Growth Job Training Initiative and the Community-Based Job Training Grants, ETA has funded models for youth outreach, alternative pathways to education, internships, and a number of other innovative youth programs. Furthermore, Career Voyages and In Demand magazine have reached out directly to youth, parents, teachers, and guidance counselors to inform them of opportunities in high-growth careers.

ETA is working to engage with businesses to capitalize on all of these resources and models. These business solutions aim to strengthen demand-driven partnerships with the public workforce system and youth programs in particular, thereby increasing the career opportunities for young people.

### *Partnerships*

ETA met with officials from Circuit City on November 7, 2006, focusing on youth. The company is exploring the youth pipeline for workers to enter its installation and service divisions. ETA has facilitated connections between the local workforce system in Richmond, VA and Circuit City to further explore this opportunity. Subsequently, company officials are now actively connected to the one-stop system in Richmond, VA.

Multiple offices of ETA are working jointly to support the implementation of the Shared Youth Vision. In September 2006, these offices attended two Advanced Youth Forums for state teams. They provided the perspective of business and industry in the Federal meetings, and they presented the demand-driven vision

and employer engagement strategies to the state teams. The Home Builders Institute and UPS also spoke to the state teams about the expectations of employers and ways to connect.

Early in 2007, ETA offices worked together to develop a strategy to support the National Urban League, a grantee. These activities included developing strategies for leveraging local and national employer partnerships and reaching out to ETA partners that are interested in developing a pipeline of young workers.

In June 2007, DOL announced grants to assist sixteen states, working with federal agency partners, to integrate strategies for connecting at-risk youth with other educational, health and social services that support employment outcomes. ETA continues to participate in Shared Youth Vision Federal Partnership meetings, providing technical assistance and support.

In July 2007, ETA hosted a pre-conference meeting for state leaders from the Federal Youth Vision Pilot Teams and leaders from successful national youth development, education and training organizations, and businesses to convene as part of the Workforce Innovations 2007 Conference.

In May 2008, ETA hosted a business engagement forum, "Developing Youth Talent: A Business-Driven Solutions Forum," in Washington DC. Participants included employers, education, workforce, youth development leaders, and policy makers. The purpose of the forum was to identify and address challenges in developing youth talent, recognize existing solutions, and move forward the development of a youth pipeline designed to meet the needs of businesses and employers.

In November 2008, ETA hosted a second forum, "Preparing Youth for the 21st Century Global Workplace: A Collaborative Discus-

***Business Engagement Initiatives***

sion,” which convened the Departments of Labor and Education and intermediary organizations to discuss how to prepare and connect youth to the business community. This discussion was informed by the Business Solutions Forum held in May 2008 in which businesses outlined their needs and concerns regarding employment of youth workers. As a result of the discussion, the Departments of Labor and Education are working together to support pilot efforts in one state to improve coordination among Federal and state efforts to better serve disconnected youth, improve statewide portability of educational credits, and address employer hiring needs.

## Career Awareness

### CAREER VOYAGES

[www.careervoyages.gov](http://www.careervoyages.gov)

Career Voyages is a collaborative Web site of the U.S. Department of Labor and the U.S. Department of Education. It provides critical information on in-demand occupations along with the skills and education needed to attain those jobs.

The Web site seeks to:

Provide visitors with key information about the in-demand occupations such as:

- Growth rates and projected need over the next ten years;
- Wage trends;
- Key information about the industry; and,
- Typical education and training levels needed.
- Direct visitors to local training and education opportunities to prepare for these occupations
- Inform visitors of the industry-sponsored sites with important career and education information.

Career Voyages is designed with four target groups in mind:

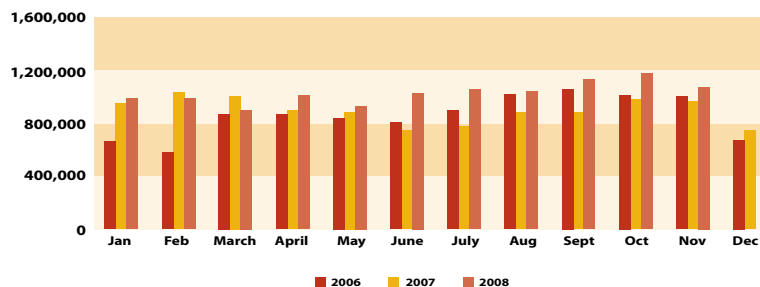
- Students: young people who are either still in high school or recent graduates
- Career changers: individuals facing a career change either due to disruptions in their field, separation from the military, etc. and who are looking to find a better job in a growing field

- Parents: parents and guardians trying to help their son or daughter make good career and/or educational choices
- Career advisors: career counselors, educators, clergy, coaches, and anyone who assists others with identifying and preparing for occupational opportunities

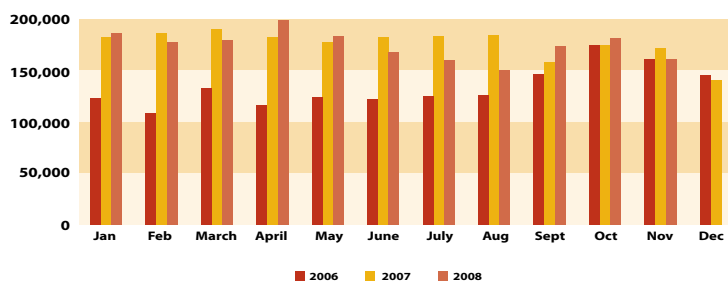
### ETA in Action

The Career Voyages Web site continues to grow, with new content from both public and private partners. As of December, 2008, the site had a healthy amount of traffic with approximately 184 million hits, just over 11 million page views, and almost 2 million visits. Several new site statistic records were set during this period in Hits, Visits, Unique Visitors,

THREE YEAR HISTORY OF PAGE VIEWS



THREE YEAR HISTORY OF VISITS



## Career Awareness

and Repeat Visitors. Year-over-year gains continue to grow for all measures.

In 2009, the content reflected through Career Voyages will continue to grow through new content acquisition, with customization for specific industries and sectors. One significant change will come in the form of a closer alignment with the U.S. Department of Education's Career Clusters. Many of the industry focus area will remain under updated titles, but portions of the site will be consolidated and it will expand to include the Career Cluster "Business, Management, and Administration." ETA is also working to customize industry information so that it is offered according to geographic regions. Data from official government sources and industry partners will make up the core of this new information.

ETA continues efforts to expand knowledge about the existence of the site, with a particular focus on the Spanish-speaking community and other audience specific groups. Industry-partners are also important to outreach efforts in terms of contributing content to the site and sharing information about the site with employer networks.

### *BRG contact*

Justin Navarro