

## Emerging Roles for Community and Technical Colleges in Economic Development



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The country is experiencing stubbornly high levels of unemployment, with some job sectors unlikely to rebound to their former levels soon, if at all. Despite this challenged environment, technological advancements and economic shifts have created new jobs. These industries are actually experiencing worker shortages.

Community and technical colleges play a vital role in quickly training workers to fill job demand and often work in close partnership with local employers to address employee skill mismatches. As the needs of employers and students have changed, traditional community and technical college educational models are being revisited and revamped.

Dr. Rolando Montoya, provost for Miami-Dade College, and James King, vice chancellor for the Tennessee Technology Centers, have had front row seats for the shift in student demographics and employer demands. Despite working in different states, they identified some common themes, including the growing need to foster close and innovative relationships with industry partners and the rise of both practical and highly-specialized skills as employment advantages.

In this CED Roundtable, they share their observations and innovative approaches.

### HOW HAS THE STUDENT POPULATION OF COMMUNITY AND TECHNICAL COLLEGES CHANGED?

**Dr. Rolando Montoya:** The total student population is growing very fast. During recessions, enrollment grows as it is very difficult for young high school graduates to find jobs, and then they opt to come to higher education. And those who are already enrolled find it harder to get part-time jobs and then they decide to take additional courses. In addition, many displaced workers come to college to upgrade their skills to see if they can find jobs in areas which still have openings. We are observing an increase in the number of males who are enrolling here. And another important statistical trend that we are observing is greater growth in occupational programs, career and technical programs, over general education and the liberal arts.

**James King:** About one-third of our students are what I call “traditional” students looking for their first career. But a third of our students now are retraining because the jobs that they have had for several years basically no longer exist. And then another third of our training is tied directly to industrial training in order for employees to remain current since technology is constantly changing. The most interesting trend we have seen in the last couple of years is the number of college graduates that are coming to the Technology Centers to acquire marketable skills.

### HOW HAVE YOU CHANGED THE WAY YOU ASSESS THE WORKFORCE NEEDS OF YOUR INDUSTRY PARTNERS?

**Montoya:** Probably the most important strategy is the creation of advisory committees for each one of our

workforce programs. These committees are formed by representatives of the employers or professionals in the different fields or specialties. The committees meet at least twice a year to provide information to our faculty and administration about industry trends, what are the newest skills that are needed, what are the new machines and equipment that are being used, what are some of the innovations and changes that are being observed. Our faculty can use this information to constantly adjust or enhance the curriculum.

Another important strategy has been the creation of bilateral partnerships with large employers for the development of specific workforce programs that will help them fill vacancies. For example, Miami-Dade College developed a very successful program in partnership with Florida Power and Light to graduate technicians for their nuclear plants here in South Florida. We have developed these types of partnerships with biopharmaceutical companies, television production companies, banks and other financial institutions, and area hotels.

### WHICH JOB SECTORS ARE EXPERIENCING GROWTH?

**Montoya:** Anything that has to do with health care, such as nursing, physician assistant, pharmacy technology, and related fields, are doing very, very well—more than a 90 percent rate of placement among the graduates. Also, the areas of criminal justice and public safety are doing well. The computer science fields—computer networking, computer programming, and computer applications—are doing pretty well, too.

Some areas showing lower placement than before are architecture, interior design, construction management, real estate and mortgage brokerage, and banking. Also, education, K-12 teaching has also suffered a lot in terms of placement rates because the public school system, due to budgetary constraints, has an employment freeze.

**King:** Health care-related fields continue to experience growth. Therefore, there is high demand for health care-related programs as well as high placement for graduates. The green economy has also been one of the “hot topics” in Tennessee. The Technology Center system is offering a focused approach, an integrated approach, and a “big picture” approach to training our students for jobs related to sustainable energy.

The focused approach primarily involves photovoltaic solar panel training, so that our students can install solar panels and understand the technology behind this type of business and industry. We are also working to integrate “green technology” into practically every program we offer. All aspects of business and industry are moving towards efficient and sustainable energy sources—we want to make our students knowledgeable about this for their use in the workforce, but also to apply to their everyday home life. In the “big picture,” the manufacturing of electric cars opens up a whole new opportunity for technology students. Recently, photovoltaic students at one of the Technology Centers assisted in building the Southeast’s first solar car-charging station in Pulaski, Tennessee. In addition, bio-fuels and other emerging technologies offer opportunities for technology centers to remain on the cutting-edge of workforce development.

### HOW HAS YOUR INSTITUTION RESPONDED TO THE UNIQUE NEEDS OF YOUR STATE’S RURAL POPULATION?

**King:** Rural communities have truly been impacted by the recent economic downturn. In Tennessee, we have been fortunate that there has been a partnership with our Department of Labor, our higher education institutions, and the state’s economic and community development leaders in providing tuition assistance to retrain dislocated workers in rural areas for emerging occupations. Remedial programs, tutoring, and individual instruction provide support for



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75% OF

TTC STUDENTS  
COMPLETED THEIR PROGRAM &

83% OF

THESE WERE PLACED IN JOBS WITHIN ONE YEAR OF GRADUATION.

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these students who haven't been in a formal classroom setting for some time. Employability skills are also provided for these individuals who have not sought a job in a number of years. This is all designed to provide these students with the confidence to re-enter the workforce and possibly seek jobs outside their particular community. We have made it a high priority in this state to work with communities that have felt the greatest impact from the economy.

### HOW MIGHT ECONOMIC DEVELOPERS AND OTHER STAKEHOLDERS ENHANCE THEIR ROLES IN THE WORKFORCE DEVELOPMENT PROCESS?

**Montoya:** In the case of Miami-Dade College, we have a very close relationship with the South Florida Workforce Investment Board. We get together to plan strategically about the areas of potential growth in our economy, and for what areas we need to establish training and educational programs, to prepare people for those changes.

South Florida Workforce also helps students by funding their education here at the college. Sometimes they do it individually, case-by-case. In other instances, they fund cohorts and they buy from the college the complete offering of a program. For example, right now they have a cohort of forty nursing students that

they are completely sponsoring. South Florida Workforce covers the education costs, Miami-Dade College teaches the courses, and then University of Miami Hospital has guaranteed employment to the 40 nurses that are going to graduate from the program. Right now, we are negotiating the funding of another cohort in biotechnology. Another area of collaboration with them is that we apply together for federal grants to develop the labor force. In terms of the future, I expect only additional and stronger relationships.

**King:** We have to get the message across to policymakers and local elected officials that technical education is higher education. Many communities take the view that if you don't have a college degree or a baccalaureate degree, you cannot be successful. This recent downturn in the economy has proven that many of the emerging careers that are in high demand do not require what we sometimes view as the traditional academic degree. I think it is the value of the training and industry certifications that may be more important in the workplace. What we have witnessed in Tennessee is that the placement rates at the Technology Centers have been quite high, even during this economic downturn. The bottom line is that we are putting people to work. Policy leaders, economic developers, and local elected officials need to recognize this and help support these institutions. ■

This article was compiled from transcripts of podcast interviews held with Montoya and King in July 2010 and October 2010, respectively. To hear their individual podcasts, visit [www.frbatlanta.org/podcasts/economicdevelopment](http://www.frbatlanta.org/podcasts/economicdevelopment).

Rolando Montoya: "Getting to Work: Community and Vocational Colleges Explore New Paradigms for Workforce Development"

James King: "A Job Today: The Role of Technical and Vocational Schools in Easing Job Skills Mismatch"





# Strengthening the Green Foundation: Research and Policy Directions for Development and Finance

March 10-11, 2011  
Tulane University,  
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## QUESTIONS?

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Tulane University's new Master of Sustainable Real Estate Development Program (a program of the Tulane School of Architecture) and the Federal Reserve Bank of Atlanta invite researchers, industry practitioners, and policymakers to participate in this conference to advance the understanding and improve the practice of green development and finance.

Green building has been the focus of considerable media attention, and current policy discussions on carbon emissions and alternative energy sources will ensure that this subject remains active. To inform this national dialogue, this conference will bring together top scholars and practitioners to investigate core issues surrounding green development and finance and assess the tools, costs, benefits, and opportunities in financing green development.

## FEATURED SPEAKERS

### Raphael Bostic

Assistant Secretary  
United States Department of Housing  
and Urban Development (HUD)

### Dana Bourland

Vice President of Green Initiatives  
Enterprise Community Partners, Inc.

## CONFERENCE SESSIONS

Green Community and Economic  
Development  
Green Measurement Criteria and  
Certification Issues  
Organizational/Industry Structure  
Portfolio Management  
Underwriting  
Valuing Green

Federal Reserve Bank of Atlanta and Tulane University Sustainable Real Estate Development