

REVIVING OUR ECONOMY: THE ROLE OF HIGHER EDUCATION IN JOB GROWTH AND DEVELOPMENT

FIELD HEARINGS

BEFORE THE
COMMITTEE ON EDUCATION
AND THE WORKFORCE
U.S. HOUSE OF REPRESENTATIVES
ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

Full Committee

HEARING HELD IN WILKES BARRE, PA, MARCH 21, 2011

HEARING HELD IN UTICA, NY, MARCH 22, 2011

HEARING HELD IN COLUMBIA, TN, APRIL 21, 2011

Subcommittee on Higher Education and Workforce Training

HEARING HELD IN GREENVILLE, SC, AUGUST 16, 2011

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**REVIVING OUR ECONOMY:
THE ROLE OF HIGHER EDUCATION IN
JOB GROWTH AND DEVELOPMENT**

**Monday, March 21, 2011
U.S. House of Representatives
Committee on Education and the Workforce
Washington, DC**

The committee met, pursuant to call, at 9:00 a.m., in the Henry Student Center Ballroom of Wilkes University, Hon. John Kline [chairman of the committee] presiding.

Members present: Representatives Kline and Barletta.

Staff present: Casey Buboltz, Coalitions and Member Services Coordinator; Jimmy Hopper, Legislative Assistant; Amy Raaf Jones, Education Policy Counsel and Senior Advisor; Barrett Karr, Staff Director; and Brian Newell, Press Secretary—Workforce.

Chairman KLINE. Committee will come to order. Well, good morning. Welcome to our first field hearing of the 112th Congress. It is good to be here in Wilkes-Barre, Pennsylvania, my home State. I was born down the road here in Allentown, Pennsylvania. I was saying the other day, in doing an interview, that I am surely the only man in Minnesota whose favorite dessert is shoofly pie. In fact, I am one of the few people in Minnesota who knows what shoofly pie is.

Anyway, thank you all for coming. A special thanks to our two panels of witnesses. We appreciate you taking the time to join us today, and we look forward to your testimony.

Our Nation faces many challenges today. With unemployment still hovering around 9 percent and more than 13 million people out of work, the American people have made jobs their number one priority. Immediate solutions are required, but we must also look to the future to insure tomorrow's workers can lead in a global economy and are prepared to weather future economic downturns.

Once you scratch beneath the surface, you discover education is a jobs issue. It is no secret—our current education system is failing. We all know the statistics of high school and college dropouts and test scores that leave students unprepared to tackle the challenges they will confront both in the classroom and the workplace.

As we work to improve the Nation's education system and foster a growing economy, it is more important than ever to hear from folks on the ground about the challenges and opportunities they see in our schools and workforce. That is why we are here today. We want to learn about the policies that may be standing in the way

of job creation right here in Wilkes-Barre. We want to hear your thoughts on encouraging academic success in our classrooms and get your ideas on how we can work together on the local, state, and federal levels to reinvigorate the American spirit of innovation and prepare the students of today to succeed in the workforce of tomorrow.

Again, we are grateful to our panels for participating in today's hearing, and I am looking forward to getting this discussion underway. I also want to thank my committee colleague, Lou Barletta, for his gracious invitation to hold a field hearing here in his district. And without objection, I now yield to him for his opening remarks.

[The statement of Mr. Kline follows:]

**Prepared Statement of Hon. John Kline, Chairman, Committee on
Education and the Workforce**

Good morning, and welcome to our first field hearing of the 112th Congress. It is good to be here in Wilkes-Barre (WILKS BERRY), Pennsylvania with Representative Barletta. Thank you all for coming, and special thanks to our two panels of witnesses. We appreciate you taking the time to join us today, and we look forward to your testimony.

Our nation faces many challenges today. With unemployment still hovering around 9 percent and more than 13 million out of work, the American people have made jobs their number one priority. Immediate solutions are required, but we must also look to the future to ensure tomorrow's workers can lead in a global economy and are prepared to weather future economic downturns.

When you scratch beneath the surface, you discover education is a jobs issue. It is no secret our current education system is failing. We all know the statistics of high school and college dropouts and test scores that leave students unprepared to tackle the challenges they will confront both in the classroom and in the workplace.

As we work to improve the nation's education system and foster a growing economy, it is more important than ever to hear from folks on the ground about the challenges and opportunities they see in our schools and workforce. That's why we're here today.

We want to learn about the policies that may be standing in the way of job creation, right here in Wilkes-Barre (WILKS BERRY). We want to hear your thoughts on encouraging academic success in our classrooms, and get your ideas on how we can work together—on the local, state, and federal levels—to reinvigorate the American spirit of innovation and prepare the students of today to succeed in the workforce of tomorrow.

This is Mr. Barletta's show here today, so I want to turn it over to him for his opening remarks. Again, we are grateful to our panels for participating in today's hearing, and I'm looking forward to getting this discussion underway.

Mr. BARLETTA. Thank you, Chairman Kline. And we wanted to give you a Minnesota welcome. Again, I want to thank you for bringing the Committee on Education and the Workforce to Wilkes-Barre and for holding this important hearing today. I always appreciate the opportunity to hear from leading voices in our local community, and I am thrilled that Chairman Kline can share in this experience with us.

The committee has assembled an extraordinary panel of witnesses from our community's business and higher education sectors, and I can assure you, Chairman Kline, that you will leave here today with a very clear picture of how Northeast Pennsylvania is taking strides to reviving our economy through higher-quality higher education.

The fragile state of the economy remains a top concern for many in Pennsylvania, and the people who reside in Northeast Pennsyl-

vania understand better than most the difficulties we still face as we struggle with an unemployment rate of 9.1 percent, the highest level of unemployment in the State and higher than the current national average.

After years of tough economic times, it is clear that we need smart solutions to get our economy moving again and people back to work. That is why we are here today. There is often more common sense on the corner of Main Street, America than in all the halls of Congress. Listening to the concerns and ideas of the people we are elected to serve is a good place to begin putting the economy back on track.

We all must start with getting our fiscal house in order, here at home and in Washington, D.C. For far too long, governments have overtaxed, overspent, and over-borrowed and the time to address this crisis is long overdue. It is forcing entrepreneurs to the sidelines, undermining competence in the economy, and ultimately destroying jobs. We have to make hard but responsible choices to reign in government spending and ease the burden being placed on our children.

I have been a resident of Northeast Pennsylvania my whole life. I lived the dream of raising my children here and I am thankful that I get to see my grandson, Gabriel Lewis, raised here as well. I know that it is a dream many Pennsylvanians share. We have faced some pretty difficult challenges. But I am confident that the people of this great State will lead us back to prosperity.

Critical to that effort are our institutions of higher learning. They help ensure that students and workers have the tools they need to succeed in the workplace. Data from the United States Department of Labor documents the close relationship between higher education and employment. Today, workers with a high school diploma have a nearly one-in-ten chance of being unemployed while their colleagues with a college degree have only a 4.3 percent chance of being unemployed.

Schools like Wilkes University, Empire Beauty School, Lackawanna College, and Luzerne County Community College offer diverse training and knowledge that individuals need to compete and succeed in the workforce. Business leaders such as Diamond Manufacturing understand firsthand the importance of locating workers with various skills that can be applied to a wide range of jobs. Business leaders, local officials, and institutions of higher learning all play a leading role in shaping the success of our economy.

The people of this community and great State have a great deal to share with this committee. They will ultimately lead our economy out of these tough times. I look forward to hearing their thoughts and ideas and to ensuring policies in Washington do not stand in their way. Thank you.

[The statement of Mr. Barletta follows:]

**Prepared Statement of Hon. Lou Barletta, a Representative in Congress
From the State of Pennsylvania**

Thank you, Chairman Kline, for bringing the Committee on Education and the Workforce to Wilkes-Barre and for holding this important hearing today. I always appreciate the opportunity to hear from leading voices in our local community, and I am thrilled that Chairman Kline can share in this experience. The Committee has assembled an extraordinary panel of witnesses from our community's business and

higher education sectors, and I can assure you, Chairman Kline, that you will leave here today with a very clear picture of how Northeast, Pennsylvania is taking strides to revive our economy through quality higher education.

The fragile state of the economy remains a top concern for many in Pennsylvania, and the people who reside in Northeast, Pennsylvania understand better than most the difficulties we still face as we struggle with an unemployment rate of 9.1 percent—the highest level of unemployment in the state and higher than the current national average.

After years of tough economic times, it is clear we need smart solutions to get our economy moving again and people back to work. That is why we are here today. There is often more common sense on the corner of Main Street America than in all the halls of Congress. Listening to the concerns and ideas of the people we are elected to serve is a good place to begin putting the economy back on track.

We also must start with getting our fiscal house in order, here at home and in Washington D.C. For far too long, governments have over taxed, over spent, and over borrowed, and the time to address this crisis is long overdue. It is forcing entrepreneurs to the sidelines, undermining confidence in the economy, and ultimately destroying jobs. We have to make hard but responsible choices to rein in government spending and ease the burden being placed on our children.

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The people of this community and great state have a great deal to share with this committee. They will ultimately lead our economy out of these tough times. I look forward to hearing their thoughts and ideas, and to ensuring policies in Washington do not stand in their way.

Chairman KLINE. I thank the gentleman. Pursuant to Committee Rule 7C, all committee members will be permitted to submit written statements to be included in the permanent hearing record. And without objection, the hearing record will remain open for 14 days to allow statements, questions for the record, and other extraneous material referenced during the hearing to be submitted for the official period record.

And now it is my pleasure to introduce our first panel. We do have two panels for today's hearing. The first panel, we have Mr. James Perry, who serves as the president of the Hazleton City Council. He has served the Bloomsburg Area School District for 39 years, 32 years of volunteer chemistry teacher, and 7 years as a science department chair. Mr. Perry has also been a mentor and co-operated teacher with the Department of Secondary Education of Bloomsburg University for 23 years. He previously served as an assistant varsity swim coach with the Hazleton Area High School, a supervisor for the Hazleton City Recreation Department, and treasurer of the Hazleton Parking Authority.

Mr. Jeffrey Aleson is the vice president of Strategic Planning and Quality Assurance for Diamond Manufacturing Company, the largest perforated company in the United States. Mr. Aleson grad-

uated from Wilkes University with a bachelor of science degree in engineering management and from Marywood University with a master's in business and industrial management. Welcome to you both.

As we discussed earlier, there is a little light box there. Amy will turn on the green light when you start your testimony and will be on for 4 minutes and then it will turn yellow for a minute or so and then turn red. And we would look for you to try to wrap up your testimony shortly after the red light comes on.

Mr. Perry, you are recognized, please.

**STATEMENT OF JAMES PERRY, PRESIDENT,
HAZELTON CITY COUNCIL**

Mr. PERRY. Thank you. I would like to thank the Committee on Education and the Workforce for allowing me to offer testimony on the role of higher education and job growth and development. I am especially thankful to Bloomsburg Area School District for enabling me to be here today. As Hazleton City Council president and educator for over 30 years, I believe I have a unique perspective to offer the committee with regards to community education and job growth.

As you are aware, our city, like most cities, is struggling with lost revenue, high unemployment, limited resources from the state and federal government. We are the victims of stimulus policies not benefitting our city and reckless spending that has fallen on the backs of working-class families like those in Hazleton, Bloomsburg, and other municipalities. Our city has seen an increase in population due mainly to an influx in immigrants, which have led to an increase in violent crimes, causing a strain on our police department and an unending burden on our citizens and our city budget. Our school district and hospitals are all burdened with increased expenses and limited resources as a result of our federal government passing the buck to the States that have passed it on to the school districts and communities like ours and that buck is mere pennies now.

From a city council perspective, we need to stimulate our local economy, and that only happens when we have skilled jobs. We would like to see an increase in funding to be able to train and retrain our unemployed, especially those that need to learn English as a second language in addition to learning a skill. An example is a partnership between the Workforce Investment Board, CareerLink, who provided the grant, Luzerne County Community College, and the Manufacturers Employees Association, who provided the training, which resulted in a small graduating class that was able to be interviewed and offered jobs. This type of program must continue to be funded and expanded because it benefits the workforce as well as the community.

And a way to improve our economy is to allow our local businesses to be able to grow and develop without the many layers of regulations from the federal, state, and local levels. One local businessman told me that we are regulating ourselves out of business. He felt it was easier to provide rental space properties than start a company and employ workers.

From an educational viewpoint, we would like to see a greater focus on more efficient methods for colleges to adapt curriculum to new and emerging job fields in the natural gas industry and cyber technology industries. In talking to students at all levels, faculty, administration, and parents, there is a common thread that is evident in discussing local communities' needs from our local colleges and universities, and that is a lack of communication and a need for more collaboration. We need a triangle approach between local communities, school districts, and higher education to allow all of us to meet the needs of the students of all learning abilities in an ever-changing world.

Many schools have collaborated with local universities and colleges, which allows select students to take college courses that reduce rates for the State in paying a portion of that cost. At the present time, this dual role is not being funded. Collaboration is very inconsistent from high school to colleges. The career education and work is the 13th academic standard required by all schools in the State of Pennsylvania. It needs to be a focal point for all schools because we need to prepare all of our students to enter the workforce directly from high school or after earning a degree. We need more cooperative education opportunities for all students at high school levels, which will allow students to experience internships in a business and work environment while they are in school, earning both educational credit and a paycheck.

The recommendation from one administrator is to fund a career-in-the-workforce program for school districts, which would especially benefit those students who may not be going to college or are not enrolled in a career or vocational school. The student would earn academically an opportunity to work with industry volunteers in a job-shadowing project. It would be a benefit to everyone at all levels.

At our school, as part of the school district's required graduation project, all the 10th grade class is exposed to a career day at Penn College of Technology where they explore all the careers that a technical school has to offer. Each student is to research three careers thoroughly, including a job-shadow day, along with a formal presentation in front of family and friends. As one recent graduate told me, because of his exposure, he knew that he wanted to pursue a career as an aeronautical engineer before he graduated.

In discussion with students and staff administration, the topic always focuses on the problem that has an impact on our ability to prepare students to be lifelong learners, and that is the enormous amount of standardized assessment that all the students have to endure. Students from grades 3 to 12 are tested for nearly a month every year. Preparation time is a yearlong challenge. We want to be held accountable for our students, but we are losing valuable teaching time and the amount of stress and anxiety in all school districts is overwhelming.

In closing, students need direction and purpose to meet the challenges that lie ahead. It is our job to make sure they are prepared academically and have the skills to meet the needs of a rapidly changing job market. There is very little room for error between our communities and schools and institutions of higher learning

when it comes to our students. A skilled, prepared workforce will have a positive impact on our entire community.

[The statement of Mr. Perry follows:]

Prepared Statement of Jim Perry, President, Hazleton City Council

I would like to thank the Committee on Education and the Workforce for allowing me to offer testimony on the role of higher education in job growth and development. I am especially thankful to the Bloomsburg Area School District for enabling to be here today.

As a Hazleton City Council President and an educator for over thirty years I believe that I have a unique perspective to offer this committee with regards to communities, education, and job growth.

As you are aware our city like most cities is struggling with lost revenue, high unemployment and limited resources from the state and federal government. We are the victims of a stimulus policy that did not benefit our city and reckless spending that has fallen on the backs of working class families like those in Hazleton, Bloomsburg, and other local municipalities. Our city has seen an increase in population due mainly to an influx of immigrants which have lead to an increase in violent crimes causing a strain on our police department and an unending burden on our citizens and our city budget. Our school district and hospital are all burdened with increase expenses and limited resources. The result is that our federal government is passing the buck to the states that have passed it on to the school districts and communities like ours. That buck is mere pennies now.

From a city council perspective we need to stimulate our local economy and that only happens when we have skilled jobs. We would like to see an increase in funding to be able to train or re-train the unemployed, especially those that need to learn English as a second language in addition to learning a skill. An example is the partnership between the Workforce Investment Board, through our Career link which provided the grant, Luzerne county Community College and the Manufacturers and Employers Association who provided the training. The result was a small graduating class that was able to be interviewed and offered jobs. This type of program must continue to be funded and expanded because it benefits the workforce as well as the community. Another way to improve our economy is to allow our local businesses to be able to grow and develop without the many layers of regulations from the federal, state, and local levels. One local businessman told me that we are regulating ourselves out of business; he felt it was easier to provide rental space properties than start a company and employ workers.

From an educational view point we would like to see a greater focus on more efficient methods for colleges to adapt curriculum to new and emerging job field such as the natural gas industry and cyber technology industries. In talking to students at all levels, faculty, administration, and parents there is a common thread that is evident when discussing local communities needs from our local colleges and universities and that is a lack of communication and a need for more collaboration. We need a triangle approach between local communities, school districts, and higher education. This will allow all of us to meet the needs of the students of all learning abilities in an ever changing world. Many schools have collaboration with local universities and colleges which allows select students to take college courses at reduced rates with the state paying a portion of the cost. At the present time this dual enrollment program is not being funded. The collaboration is very inconsistent from high schools to colleges.

The Career Education and Work is the thirteenth Academic Standard required by all schools in the State of Pennsylvania. This needs to be a focal point for all school because we need to prepare all students to enter the workforce directly from high school or after earning a degree. We need more Cooperative Education opportunities for all students at the high school level, which will allow students to experience internships in the business and work environment while they are in school, earning both educational credit and a paycheck. A recommendation from one administrator is to fund a career in the workforce program for school districts which would especially benefit those students who may not be going to college or are not enrolled in a career or vocational technical school. A student would earn academically an opportunity to work with industry volunteers on a job shadowing project that would be a benefit to everyone at all levels.

At our High school, as part of a student's required graduation project all of the 10th grade class is exposed to a career day at Penn College of Technology where they explore all of the careers that a technical school has to offer. Each student is to research 3 careers thoroughly including a job shadow day along with a formal

presentation in front of family and friends. As one recent graduate told me, because of this exposure he knew that he wanted to pursue a career as an aeronautical engineer before he graduated.

In my discussion with students, staff, and administration the topic always focuses on a problem that has an impact on our ability to prepare students to be lifelong learners, that is the enormous amount of standardized assessments that all of student have to endure. Students from grade 3 through 11 are tested for nearly a month every year. The preparation time is a yearlong challenge. We want to be held accountable for our students but we are losing valuable teaching time and the amount of stress and anxiety on all school districts is overwhelming.

In closing students need direction and purpose to meet the challenge that lie ahead. It is our job to make sure they are prepared academically and have the skills to meet the needs of rapidly changing job market. There is very little room for error between our communities, schools and institutes of higher learning when it comes to our students. A skilled and prepared workforce will have a positive impact on our entire community.

Chairman KLINE. Thank you, Mr. Perry. I need to explain to both witnesses that somewhere between this spot and that light we have tripped on a wire. But you should know that you finished with 20 seconds to spare. So you can pretty much disregard that. Amy will hold up a little sign when you get down to 1 minute to go to just kind of let you know where we are. I am assured that it was working perfectly moments before I dropped the gavel, but I don't know, somewhere here between the two. Mr. Alesson, you are recognized.

STATEMENT OF JEFFREY ALESSON, VICE PRESIDENT OF STRATEGIC PLANNING AND QUALITY ASSURANCE, DIAMOND MANUFACTURING

Mr. ALESSON. Let me start by acknowledging how honored I am to be asked to offer testimony before this Committee on Education and the Workforce. I am Jeff Alesson, Vice President of Strategic Planning for Diamond Manufacturing Company. Along with performing the strategic planning duties at Diamond, my current position allows me to lead the dependable punch and fabricating divisions, as well as the engineering, quality, production control, and shipping and receiving departments.

Diamond Manufacturing Company is a manufacturer of specialty engineered perforated materials with locations in Wyoming, Pennsylvania; Michigan City, Indiana; Cedar Hill, Texas; and Charlotte, North Carolina. The facility in Wyoming houses 125,000 square foot manufacturing facility, as well as 45,000 square foot corporate offices. The Michigan City and Cedar Hill facilities add a combined 180,000 square foot of additional manufacturing. We also have 20,000 square foot distribution warehouse in Charlotte.

Diamond was founded in 1915 to service the coal industry. Today, it serves in excess of 25 different industry groups. Diamond has been a pioneer in developing new applications and expanding into markets such as power generation, petrochemical processing, agricultural processing, and highway sound barriers. It also serves as the automotive appliance and computer markets.

2011 combined sales will be in excess of 100 million this year and growing. Diamond has experienced continuous growth during the last several years. The key to maintaining this growth is our ability to react quickly to potential opportunities while having documented

yet flexible systems in place to maintain organizational stability. We have in recent years hired a number of graduates in both the technical and non-technical areas to sustain this growth. We also heavily utilized the local universities' internship programs with three currently on staff. Current growth will facilitate the hiring of personnel both at the local facility, as well as our branch plants.

I agree that higher education plays an important role in job growth and development. While it is important that today's graduates be technically competent in their field, I feel it is equally important that they be competent in the areas of communication and problem-solving. Companies in today's competitive environment live or die by their ability to communicate effectively. Efficient communication is critical both externally and, just as importantly, internally. We need the skills to be able to understand our customers' requirements and convey them accurately within the organization. Technology does allow us to communicate faster than we ever thought possible, not only the speed at which we can communicate, but the sheer amount of information that can be transferring in a millisecond is staggering.

But all these different means and increased speed have not necessarily allowed us to be more effective. It has not increased our ability to listen or to understand. One of the hardest skills to master is the art of listening and truly understanding what is being said. This often requires the ability to read between the lines. In doing so, this will help decrease any misperceptions and enhance true effective communication. Many times there is a psychology behind what is being said. It is important to understand a person's viewpoint. And the better we understand this, the better we can communicate.

In addition to effective communication, problem-solving skills allow for efficient utilization of a company's resources. Today's companies are required to be able to do more with less to remain competitive. We are always searching for continuous improvement in all our processes. Effective problem-solving skills allow companies to capitalize on new challenges as they are presented. Having employees with an understanding of how companies function and interact internally aids in the ability to problem-solve. Having the skills to find the root cause of a problem goes a long way in finding the solution or potential improvement. The goal is to look at a company as a whole, not just a sum of the individual parts. In doing so, we have the opportunity to become a lean and competitive organization on the global stage.

In conclusion, I feel the key to job growth and development is the company's ability to react to ever-changing paradigms. Our employees need the skills to react quickly and accurately. Effective communication and problem-solving skills are powerful tools to have in one's toolbox.

[The statement of Mr. Alesson follows:]

Prepared Statement of Jeff T. Alesson, Vice President of Strategic Planning, Diamond Manufacturing Co.

Let me start by acknowledging how honored I am to be asked to offer testimony before this Committee on Education and the Workforce. I am Jeff Alesson, Vice President of Strategic Planning for Diamond Manufacturing Company. Along with performing the strategic planning duties at Diamond, my current position allows me

to lead the Dependable Punch and Fabricating Divisions as well as the Engineering, Quality, Production Control and Shipping/Receiving Departments.

Diamond Manufacturing Company is a manufacturer of specially engineered perforated materials with locations in Wyoming Pennsylvania., Michigan City Indiana., Cedar Hill Texas and Charlotte North Carolina. The facility in Wyoming houses a 125,000 square foot manufacturing facility as well as the 40,000 square foot corporate offices. The Michigan City and Cedar Hill facilities add a combined 180,000 square feet of manufacturing. We also have a 20,000 square foot distribution warehouse in Charlotte. Diamond was founded in 1915 to service the coal industry. Today it serves in excess of 25 different industry groups. Diamond has been a pioneer in developing new applications and expanding into markets such as power generation, petrochemical processing, agriculture processing and highway sound barriers. It also serves the automotive, appliance and computer markets. 2011 combined sales will be in excess of 100 million dollars and growing.

Diamond has experienced continuous growth during the last several years. The key to maintaining this growth is our ability to react quickly to potential opportunities while having documented, yet flexible systems in place to maintain organizational stability. We have in recent years hired a number of graduates in both the technical and nontechnical areas to sustain this growth. We also heavily utilize the local university internship programs, with three currently on staff. Current growth will facilitate the hiring of personnel both at the local facility, as well as our branch plants.

I agree that higher education plays an important role in Job Growth and Development. While it is important that today's graduates be technically competent in their field, I feel it is equally important that they be competent in the areas of communication and problem solving.

Companies in today's competitive environment live or die by their ability to communicate effectively. Efficient communication is critical both externally and just as importantly, internally. We need the skills to be able to understand our customers' requirements and convey them accurately within the organization. Technology has allowed us to communicate faster than we ever thought possible. Not only the speed at which we can communicate but the sheer amount of information that can be transferred in a millisecond is staggering. But all these different means and increased speed have not necessarily allowed us to be more effective. It has not increased our ability to listen and to understand.

One of the hardest skills to master is the art of listening and truly understanding what is being said, this often requires the ability to read between the lines. In doing so this will help decrease any misperceptions and enhance true effective communication. Many times there is a psychology behind what is being said. It is important to understand a person's viewpoint. The better we understand this the better we can communicate.

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Having employees with an understanding of how companies function and interact internally aids in the ability to problem solve. Having the skills to find the root cause of a problem goes a long way in finding a solution or potential improvement. The goal is to look at the company as a whole, not just a sum of the individual parts. In doing so, we have the opportunity to become a lean and competitive organization on the global stage.

In conclusion, I feel the key to job growth and development is a company's ability to react to ever changing paradigms. Our employees need the skills to react quickly and accurately. Effective communication and problem solving skills are powerful tools to have in ones tools boxes.

Chairman KLINE. Excellent. Thank you very much. We are going to now move back and forth, I think. I have got a couple of questions I want to ask and then Mr. Barletta will ask a couple of questions and so forth. We will try not to let that go too long. We can get carried away up here very easily and we have another panel of witnesses we would like to hear from.

I just would like to start, Mr. Alesson, on where you finished, and you were talking about how important it is to have commu-

nications and problem-solving skills. Are the people that you are hiring now from 4-year colleges and 2-year colleges, do they have those skills?

Mr. ALESSON. To a degree they do. Problem-solving, like an engineer that we hired, problem-solving skills are there on a technical side. But as far as company-wide, there needs to be more of a cross-functionality to problem-solving. And we don't see that as much and we stress it, sometimes too quickly, to find out what the real problem is. We look at a symptom and say we found it when we really haven't. And not only what that problem is but how it interacts with all the other departments.

Chairman KLINE. So they are not arriving with those skills and you are having to develop that once you have brought them on?

Mr. ALESSON. Correct.

Chairman KLINE. I think that is a common occurrence. Mr. Perry?

Mr. PERRY. Yes.

Chairman KLINE. You said in your testimony that sometimes it seemed like we are regulating ourselves out of business. Have you got an example or is that just a sense of—

Mr. PERRY. Yeah, like I said, a businessman I was at a dinner with had mentioned that it was just the overlaying amount of regulations in terms of being able to start a business, layer upon layer, whether it is environmental or local or business or employee-related, it would seem to be a burden that took a lot of time. It wasn't an easy process. Obviously, you want to be regulated, but he thought it was too many layers. I can't give you the exact specifics but he just felt it was a layering effect.

Chairman KLINE. It seems to be a theme we have heard a lot lately. Where I was going to go—

Mr. PERRY. Sure.

Chairman KLINE.—with your line of questioning anyway, but since you brought it up, we have heard it again and again. And part of the regulatory burden seems to be the regulations that are placed on schools. And I hope that we can explore that a little bit probably in the next panel—where schools are finding that they have got so many rules and so many regulations they are adding more and more of a staff just to comply with those rules and regulations.

You also mentioned that the collaboration between high schools and colleges wasn't happening.

Mr. PERRY. It is happening but not as much. Well, one of my past graduates said he had needed five credits his senior year and didn't know what else to do. And it wasn't consistent with universities that were close by. Now, that may be—I can't say through here, this location. I work in the Bloomsburg District with Bloomsburg University. There wasn't a continuous collaboration. Maybe one school down the street got more connection than the other because of a parent working at the school. There was more connection in terms of being able to be more intertwined with the district. We don't see it as much as we should. We are right in the city with the same university. So I think it needs to be more consistent I think is what I am seeing.

I am hearing from parents that others have more opportunities than their kids did to utilize the university more so. And again, the dual enrollment program where they can do both is obviously not going to be funded, or at least on a state level. So we want to get them out there to expose them to universities as quickly as we can, especially those students at a higher end that are able to get out there quicker.

Chairman KLINE. So that they are better prepared when—

Mr. PERRY. Absolutely.

Chairman KLINE.—they go to university.

Mr. PERRY. Yeah. We do have some kids taking college courses, and that does happen and there is no question about it, but it is not on a consistent basis. That is what I am hearing from parents.

Chairman KLINE. Thank you. Mr. Barletta?

Mr. BARLETTA. Yeah, thank you, Mr. Chairman. Mr. Aleson, do you have any suggestions of how businesses and institutions of higher education could better work together?

Mr. ALESSON. We do work with internship programs but it would be nice if—like we are right in Wyoming and we never have groups over to look at our facility and to really push manufacturing. We have had some international students over but really not the local colleges. In fact, most people don't even know we are there. We are the largest perforator and people go wow, you are in Wyoming? Yes. So I think we can work together maybe enlighten some of the—not only engineering but other disciplines as well of what is here locally.

Mr. BARLETTA. Mr. Perry, you possess some unique qualifications in the fact that you have worked most of your life in the education system and you are now working on a municipal level on city council so you are seeing the connection between education and employment in a community.

In Hazleton there is a program that I want to talk about, something that I am very proud of and would like to see elsewhere. But I want your opinion, Partners in Education.

Mr. PERRY. Yes.

Mr. BARLETTA. This is a program where, you know, what we hear most often is that we are losing our young people. We educate them and they end up going somewhere else to a job and they would really like to stay at home, but they can't find those opportunities. And with Partners in Education, really what it does is we call "tie." It brings to the table local industries, the school district, and the students. And it does a number of things, and one, it allows the students to see the many opportunities that exist right here at home, some that they might not be knowledgeable of. It allows local industry to talk about basic work skills that are needed for their industries. And it brings the school district together to tie this up in teaching some of those skills, those basic work skills. And it allows industry to almost have a farm system so to speak, of possibly having an employee who has some experience or knowledge in their industry. Do you think that that program, Partners in Education, is successful, is helping the Hazleton area, and is something that should maybe be explored elsewhere?

Mr. PERRY. I believe so. It is a great opportunity. And I think it needs to be expanded to all levels. I mean, again, a lot of times

it is the hiring student that is able to do that. We need the student who may not be going to the college or may not be going to a vocational school where he is able to learn a skill but is going to go right to the workforce. And I think those students need to get that connection early on.

And like I said, as we do in the 10th grade program, these kids are exploring it and not finding out that gee, I don't even know what I can do, or getting in college and saying I don't want this. I am changing my major so many times. But they need to have that idea that maybe this is the place for me. And I think that is the partnership we are looking for on a much larger scale. And I think we need to get the communities and the businesses together to meet the needs of all those kids. And I think it is going to be a great program if we could expand that. It is not everywhere I believe.

Mr. BARLETTA. All right. That is true. How do local institutions of higher education play an important role in fostering that job growth and job creation?

Mr. PERRY. That is the key. We have prepared them to go on but I think we need to focus more on the careers that are out there so that they understand that opportunity. And like I said, in our district when those students get exposure and it is a fantastic program at the 10th grade level. So they are constantly exploring careers way back at that level and not when they are a senior. So they are learning to say hey, this is a career I like or I don't like this one. So they are exploring it and they are interviewing people; they are going out in the community. So I think that is a benefit that we would like to promote and I am sure all the districts should be doing something in that way.

And like I said, we need more career guidance. And I have heard from even graduates who say, well, there is career development in the university but not everybody takes advantage of it. So it is almost something that needs to be part of their curriculum, need to get in there, need to find out what is necessary and not graduating people with degrees that they are not employable.

Mr. BARLETTA. Thank you, Mr. Chairman.

Chairman KLINE. And thank you. Mr. Perry—

Mr. PERRY. Yes.

Chairman KLINE.—I want to explore this 10th grade thing—

Mr. PERRY. Okay.

Chairman KLINE.—a little bit here. I am a little bit confused. In the 10th grade—

Mr. PERRY. Yes.

Chairman KLINE.—there is a career day.

Mr. PERRY. Basically, as part of their graduation projects with the English department, they researched careers. They do that as part of their program and they research, right. And they research the programs. We take the whole student body out to the university like Penn College, which is a technical school for Penn State. And they explore and they put on displays of all the different careers that are possible.

Chairman KLINE. That is one day?

Mr. PERRY. Right. It is a one-day opportunity. And then after that they would then prepare a presentation and actually go out

and do a day where they basically job-shadow someone in the field they have chosen. So again, every student in 10th grade goes out in the community and then gets exposure to that career. So we found that that is very beneficial to their, again, liking or disliking or following in that particular career.

Chairman KLINE. So I think I am getting—

Mr. PERRY. Yeah.

Chairman KLINE.—that it is career day where they go out to the college—

Mr. PERRY. Yes.

Chairman KLINE.—or school and they are exposed to what—

Mr. PERRY. Right.

Chairman KLINE.—career possibilities. But this is an ongoing project where they are actually—

Mr. PERRY. Yes.

Chairman KLINE.—shadowing somebody, perhaps writing a paper—

Mr. PERRY. Yes, they do that. That is in 10th grade. Right. And it is a part of the graduation project. They can't graduate until they complete that project. So it is a requirement from every—well, every student eventually has to go through that program.

Chairman KLINE. It is an interesting way to look at this. I mean, a lot of times when we are looking at higher education, you know, we are looking for what is the connection between our higher education and the job force.

Mr. PERRY. Um-hum.

Chairman KLINE. Somebody going out to Diamond Manufacturing, and what you are talking about is making a connection from high school thinking about their career before they to go college or community—

Mr. PERRY. Right.

Chairman KLINE.—college or a career college or something like that.

Mr. PERRY. Sure.

Chairman KLINE. Great. Thank you very much.

Mr. PERRY. You are welcome.

Chairman KLINE. Mr. Alesson, you mentioned the intern program and I think you said you have right now three interns. How do you use those interns? What is the value to them and to you?

Mr. ALESSON. We use them on different levels and cross-functional. On the technical side they are really getting into engineering duties. They are setting up drawings. They are checking on how things transfer from drawings to actual equipment. We try to give them a feeling of the quality aspects of it and how our process fits in with the environment. We try to give them a well-rounded basis on what we are doing at Diamond and what they are doing in school.

Chairman KLINE. Thank you. Mr. Barletta?

Mr. BARLETTA. Mr. Alesson, in your testimony you state that the key to Diamond Manufacturing's success is the company's ability to react to opportunities in the marketplace. Can you further explain how Diamond's management and employees are able to respond to these opportunities and the significance this has on your company's overall success?

Mr. ALESSON. Sure. An example would be we will have a customer that will come to us and they may have criteria from stocking programs to technical abilities that we actually have to perform to make the part to scheduled and to shipping. And we find, you know, some of our competitors, they may not try to get all five points. They will get four out of the five. We push very strongly to figure a way to get them the complete package. We may internally many times need to change our process to do that but that is where we excel. We look at the customer's requirements and basically change ourselves to meet those requirements.

Mr. BARLETTA. And overall, I know you talked a lot about communication and problem-solving and how important it is. As a small business owner, I absolutely agree. You know, sometimes those entering the workforce may not understand the importance of some basic skills like communication and even the importance of showing up to work on time and making sure your employer has adequate notice of when you are going to be missing work, you know, some of those skills we take for granted.

In your opinion, do you feel those entering the workforce are adequately prepared?

Mr. ALESSON. I think on the technical side they are. All our recent hires have been technically fine. It is the next step that makes them fit into our culture at Diamond. And like communication, we stress verbal communication with customers. You have to develop a relationship before you switch or start texting or emailing and a lot of the younger guys want to, you know, oh, I will send him an email. Have you talked to him? No. Okay, you don't really know, then, what you need.

You know, it is okay to email and it is okay to use all the rest of the technology to do that, but you can't lose sight of the verbal communication and the relationship-building between customers and also internally. We are so fast internally of scanning something to somebody electronically or emails and a lot of times you miss really what is being said or does the person really understand what is being asked of them internally? And we have made it one of our large strategic plans at Diamond is to increase that communication because it is so critical.

Mr. BARLETTA. Thank you, Mr. Chairman.

Chairman KLINE. Thank you, Mr. Barletta. I think we will thank these two witnesses and I mean that sincerely. Thank you very much for your testimony and for answering the questions. And we will move to the next panel. And we will take a couple of minutes to see if we can do some technical repairs here to lights and microphones.

Welcome to the next panel. Before I make introductions, let me take some more technical observations if I can. You can see we have done some shuffling here. Apparently, our light box fell on the floor and may never work again. We will keep track of the time up here. You don't need to worry about it too much. Amy will hold up a little sign here and if for some reason you go on extensively, I will start tapping the gavel as gently as I can.

The smaller microphones in front of you go to the official record for the stenographer. And he assures me that all the microphones are working there. The two larger microphones I will ask you to

share them and keep them fairly close to your mouth so that we can hear you clearly and others in the room can hear you clearly. Okay, I think that ends my administrative remarks.

Now, I am please to introduce our second panel. First, Dr. Reynold Verret serves as provost of Wilkes University. And thank you very much for letting us join you here today. Prior to his tenure at Wilkes, he served as dean and professor of chemistry and biochemistry in the Misher College of Arts and Sciences at the University of the Sciences in Philadelphia. Dr. Verret also served Clark Atlanta University for eight years as associate professor, interim chair, and chair of the department of chemistry. He currently serves on the Pennsylvania Humanities Council and the Studies Sections of the National Institute of Health.

You are bringing back nightmares of organic chemistry, Doctor. I am sorry.

Mr. VERRET. I apologize.

Chairman KLINE. I am trying, but it just is the way it is.

Dr. Raymond Angeli is the president of Lackawanna College, having been named to the position December 1994. He had previously served on the college's board from 1989 through 1992. Prior to his appointment, Dr. Angeli served as a Pennsylvania Secretary to the Department of Committee Affairs under Governor Robert Casey. Before entering public service, Mr. Angeli was a career Army officer who obtained rank of lieutenant colonel.

Ms. Joan Seaman relocated to Wilkes-Barre/Scranton area as the director of the Wyoming Valley campus in 2001. She graduated from the Operators Program from Empire Beauty School in 1974 and began working at a local salon in the Hazleton area. While employed in the salon, Ms. Seaman enrolled at Empire Beauty School's Teachers Program. In 1983 Ms. Seaman opened her own salon while she continued to teach. She has now been with Empire for almost 35 years. That must be a misprint here.

Mr. Thomas Leary has been president of Luzerne County Community College since 2008. He began his career at the college 34 years ago as assistant director of admissions. He has worked in many administrative capacities at the college, including vice president of student development, the position he currently holds, along with his presidency. With the understanding of the failed light system, Dr. Verret, you are recognized.

STATEMENT OF REYNOLD VERRET, PROVOST, WILKES UNIVERSITY

Mr. VERRET. Good morning. I wish to address the committee on how we are preparing young people for the workforce and to take leading roles in developing our economy. I also wish to discuss the challenges that we must meet as educators. And I am speaking from my experience as we discuss as an educator and as a researcher in various institutional settings and also with very diverse student populations.

What I would like to say is that Wilkes offers programs in a number of areas and Wilkes began as a junior college in 1933 and eventually became a university 15 years ago. And we have five colleges offering programs in a range of areas in the arts/sciences, the health disciplines, pharmacy and nursing and also engineering and

education. Throughout all this we have offered programs and studies that lead to specific career choices such as nursing and engineering to define careers.

But the large number of our programs offer a wide range of career choice, especially in the arts and sciences and engineering, the option that students will be taking. We recognize many of our students throughout their lifetimes will be taking on many career choices and will be changing careers throughout their choices. And we provide them flexibility to face that flexible future by giving them a rich undergraduate education that gives them that option. And that is also, I think, an important piece for our—for the employees who use our students as, for example, the representative of Diamond Engineering did mention.

Very importantly, our programs emphasize practice within the specific disciplines. For example, our biology majors, it is important that they do biology, our communication majors practice biology. Just as a pianist must practice the piano and not just hear the piano. Our students do this. For example, we have a program called Zebra Communications, a student-led program, the communications department, that while students take on a number of community communications program, important programs in the community and get real-life experiences that they take into the workplace later. It is very useful to their employers.

We have an advisory board to our engineering division, which is composed of leaders of engineering firms throughout the area. And one of the things that they have told us is that when our students arrive in their workplace as employees, they bring with them real engineering skills, and that comes from the hands-on experience that they get in the laboratories. One of the things that we do have is that we also use that advisory board to actually tell us exactly what—are our laboratories keeping up to date? Are we putting on the experience that they need to have and that we have to continually meet that level of communications process in place. And that expertise, as I mentioned, is useful to future employers.

One other thing that I would like to point out is that Wilkes and also many institutions like ourselves, a large number of our students are the sons and daughters of first-generation college students. We have a survey that we offer to our undergraduates that asks questions, are either parents a graduate of a 2-year or 4-year institution? That number, roughly 35 percent of our students say no, and I don't think Wilkes is unusual in that respect.

Also on the financial side, roughly about 36 percent of our students receive Pell Grants, about 17, 18 percent SEOGs, which are indicators of financial need. And that is not changing. And it has been like this for quite some time. That is because we are an opportunity institution. We began as Bucknell Junior College serving the sons and daughters of coalminers, and we continue to serve the sons and daughters of this region and also the larger geographic area that reaches into New York and into New Jersey as well.

What I would say is that throughout the years, these sons and daughters who come to Wilkes have become leaders in industry. They have become leaders in science and engineering throughout the country. We have the leading engineer at Lockheed. We also have the recent editor of JAMA, the Journal of the American Med-

ical Association is a graduate of Wilkes. We have members of the National Academies who are Wilkes graduates, and they have come from these children of Northeast Pennsylvania.

Our purpose, I would say, is to bring all the talent to the floor to serve the community, the Nation, and also the world. A concern I would raise that has been raised before is the gulf between K-through-12 education and higher education. Too many of our high school graduates arrive ill-prepared for college. As noted journalist Tom Friedman has noted, the world is flat. And that flatness is important to us. We sense the urgency to educate fully all our young people for a multinational and changing world. We cannot afford to adequately educate a subset of our population while our international partners try to maximize the potential and talent of all their young. Our institutions are responding remarkably to enable students to succeed.

However, we must acknowledge that those students who arrived at our doors are indeed the remnants, the survivors of an inadequate K-through-12 educational system. As a Nation we must expect that all high school graduates have acquired the skill to communicate effectively, have the quantitative ability, understanding of history and culture, that they can reflect critically on complex matters, et cetera, et cetera, et cetera. That should be the case.

Another concern is STEM education in the science and technical fields. Wilkes is a destination for science and engineering. We have the only ABET-accredited engineering program. Our life science program has been recognized by the Howard Hughes Medical Institute. Still, we and other American educational systems know that we must cultivate the talents of STEM education. And the important thing that we must understand is that young scientists are not made at college. They don't begin there. They are like cellists. Cellists do not begin at the age of 20. If I can give you examples where we have asked the question in informal settings of chemists and prominent ingenious members of the National Academy, how many of you thought of becoming scientists at the college level? No hands come up. It begins at seven, eight, or nine. So we have to dig into the middle schools, into the seventh, eighth grades. We are not doing that very well.

I would quote, two days ago, the headline on NPR was "Young Brazilian scientists made their careers in the U.S. Now Brazil wants the scientists to come home to build Brazil." That can be said of China, of India, et cetera, et cetera, et cetera. If we do not build our own seed cord, we will lose. And that is not just a workforce issue. It has become a national security issue.

Lastly, I want to say something else that I think whether it is science and health, graduates of higher education are the innovators and develop ideas that translate to businesses and sometimes lead to new industries. And we have seen it happen. Our institution instills the skills that we need, the truth and capacity for discovery, for innovation, for reasoning, for planning. It is that precious skill that we have depended upon for generations to build this Nation and that we still rely upon. And we cannot neglect it. Thank you.

[The statement of Mr. Verret follows:]

Prepared Statement of C. Reynold Verret, Provost, Wilkes University

I am Reynold Verret, the Provost at Wilkes University, in Wilkes-Barre Pennsylvania, and also Professor of Chemistry and Biochemistry. I wish to address the committee on the how we are preparing young people for the workforce and to take leading roles in developing our economy and to discuss the challenges that we must meet as educators.

I speak from experience in higher education as an educator, researcher, and mentor, having worked with diverse student populations in varied institutional settings: on the faculty at Tulane and Clark Atlanta University, and as a fellow at MIT and Yale, and more recently as dean and provost at University of the Sciences in Philadelphia and Wilkes University.

Founded as Bucknell Junior College in 1933, Wilkes became a four year institution soon after the end of World War II and attained university status 15 years ago. It now consists of 5 colleges and professional schools: Arts, Humanities and Social Sciences; Science and Engineering; Business; Pharmacy and Nursing; Education; and Graduate and Professional Studies.

Our professional programs do prepare students for specific careers as nurses, pharmacists, engineers. These are much needed. Many of our students will likely have several careers over a lifetime. Thus we prepare them for a flexible and evolving future. Our major programs, especially in the arts, sciences and engineering prepare undergraduates for a wide range of career choices and also for postgraduate study, e.g. doctoral programs, medical or law school.

These major programs emphasize practice in the disciplines, through undergraduate research and capstone projects. It is important that biology majors practice biology and communications majors learn the practice of their fields. Many of our students engage in research with the faculty and publish their work. The student led Zebra Communications takes on a number of important service projects in the community and our students graduate with expertise very useful to their future employers. The advisory board for our Engineering programs, consisting of leaders of engineering firms in the region, has noted that our graduates join their firms with concrete knowledge and skill, fully prepared to function as engineers. Our students in Entrepreneurship conceptualize and operate businesses as an essential element of their education, which culminates in senior capstone. Our students work on multidisciplinary teams to develop business plans, execute projects and compete in the regional Great Valley Business Plan Competition.

We would like to note that many of our students, and those of institutions like ourselves, are first generation college students, who go on to make remarkable contributions in their fields of endeavor. To an annual survey question, whether either parents received a degree from either a 2 year or 4 year college, roughly 35% of our young people answer NO. Approximately 36% of our students receive PELL grants and 17% receive SEOG. Wilkes alumni include leaders of industry, nationally acclaimed scientists and engineers, and the recent editor of the Journal of the American Medical Association. It is our purpose of institutions like us to bring all talent to the fore in service of community, nation and world.

Unfortunately, a gulf separates K-12 education and higher education. Too many high school graduates are ill prepared to begin college work. Aware of the flatness of our world as indicated by Thomas Friedman, we also sense the urgency to educate and prepare fully all our young people for a wide range of careers and for a multinational and changing world. In this flat world, we cannot afford to adequately educate a subset of our population while our international partners strive to maximize the talents of their young. Our institutions have responded with a range of remedial programs that allow students to make the transition successfully. However, we must acknowledge that those students who arrive at our doors are indeed the remnant, survivors of an inadequate K-12 system. As a nation, we must expect that all college graduates have acquired the ability to communicate effectively orally and in writing, that they have the requisite mathematical ability, that they understand history and society, that they can reflect critically on complex matters.

We also seek to respond to adults who must develop new skill and knowledge. For the Commonwealth of Pennsylvania, the recent census shows that 22.4% of adults over 25 years of age have earned a bachelors degree, 2% below the national average. For this county, the rate is 20%. Thus, it is essential that institutions like ourselves assist adults who seek to complete the bachelors degree. This has required close work with community colleges in our region to facilitate matriculation of students to insure that they complete the baccalaureate. We have completed roadmaps for all available majors that tell students at our local community college what courses to take to smoothly transfer into a program at Wilkes University.

A current effort in the Department of Education seeks a standard definition of the “credit hour”. It is important that the definition have real flexibility. Promoting baccalaureate completion and addressing the needs of adult learners requires legitimate ways to grant academic credit for valid life experience. We and many institutions have established processes for Prior Learning Assessment. A rigid definition of the “credit hour” would preclude this valuable educational approach.

We are a destination in this region for science and engineering students. We are the only ABET accredited engineering program in our region. Howard Hughes Medical Institute recently recognized the excellence of our Biology and life sciences. Yet, we and American education in general must do more to cultivate talent in the STEM discipline among our young. In his 2006 State of the Union Address, President Bush alerted the nation to a crisis in science education. In the 2011 State of the Union, President Obama also stressed that “The quality of our math and science education lags behind many other nations”. A third or more of graduate students in the sciences are foreign nationals, who do contribute significantly to the nation. The shortage of scientifically or technologically educated Americans is not only a workforce issue; it is also a national security issue.

It is imperative that we cultivate and capture the imagination of young scientists during their early years, middle school or earlier. Like professional cellist, scientist and engineers develop their inclinations early. If not nourished they move on. It is essential that they encounter passionate and skilled teachers. I recall a gathering of professional scientists. In response to the question, “when did you discover your passion for sciences?” Most replied before their teenage years. Very few recalled deciding while in college. At Wilkes, our WEBS program (Women in Biological Sciences) brings young women into our laboratories for enriching experiences. Our efforts to cultivate the pipeline of students seeking the bachelors in the sciences and subsequent advanced degrees call for a special efforts to encourage gifted science student to enter the teaching profession. This is a critical need, here and nationally. NSF programs such as the Noyce grants to support tuition for science students seeking teaching certification are much needed. We must also support reasonable pathways to allow career professional in the STEM areas to earn teaching certificates.

Graduates of higher education contribute to the economy in an important way as innovators who renew the economy. Whether in science, finance or health, they develop ideas that translate to new businesses, in some instances that lead to entirely new industries. Our institutions instill in them broad sets of tools and capacities for discovery, planning and reasoning that prepare them for the unforeseen opportunities of tomorrow. It is this precious imagination and resilience that has built the nation thus far and on which we continue to rely.

Chairman KLINE. Thank you very much. Mr. Angeli?

**STATEMENT OF RAYMOND ANGELI, PRESIDENT,
LACKAWANNA COLLEGE**

Mr. ANGELI. Congressman Kline, Congressman Barletta, thank you very much for this opportunity to say a few words today. I am really happy to provide comments on how people can take advantage of higher education in Northeastern Pennsylvania.

Just as a summary, though, I would just say a little bit about Lackawanna College. We are a private, accredited, 2-year social degree award institution with a campus in Scranton and we have four satellite centers. We have one in Hazleton, Honesdale, the Lake Region—which is Hawley, Pennsylvania—and New Milford. We also offer continued education programs, certificate programs, and enrichment and workforce training programs. In two of our locations in both Scranton and Hazleton, we offer the Act 120 Police Program where in the Commonwealth of Pennsylvania you have to be training in, you know, a 6-month program in order to become a police officer for certification.

At each of these centers we have created a partnership with business and industry and with the local municipalities to take over buildings and areas that would be vacant if we weren't there. So

it is a partnership that we have created that works very well for us and for the local community.

Lackawanna was originally established in design to support the local industry in 1894, which was the coal industry. We provided accountants and secretaries, and that is how we got our start. Since then we have really evolved into many, many multiple programs that address the needs of the growth sectors of the workforce offering students the option of traditional education, which either leads to a four-year degree or a specialized education focused on a specific vocation. And that has been the hallmark of our growth and our success. With an enrollment of approximately 2,200 full-time and part-time students, we consider our diversity and our agility to respond to workforce needs as an educational niche in our region.

One of the unique aspects of this region is a group of college universities called NEPACU, Northeastern Pennsylvania Association of College Universities. A group of us got together and thought to really send a message down to the high school level that says whatever you need to do, whatever you want to do in your future in education, one of us has the ability to offer that to you. And getting that message down into the high school is a very difficult, difficult task. And despite the abundance of educational opportunities in Northeastern Pennsylvania, only half of the population pursues higher education, which really we need to enhance the quality of any workforce. So the challenge for NEPACU continues to put forth to the community is how do we do this? Now, I know I speak to Lackawanna's involvement in training the workforce and not because we are unique but because of what the efficient use of federal and state aid, combined with the business and community's assistance, we have been able to design programs quickly and ensure they are affordable.

Several years ago, along with the joint Chambers of Commerce of Wilkes-Barre and Scranton, we surveyed business and industry. Business and industry kept saying look at people coming out of high school and adult learners coming back in the workforce that don't have the skills that we need. So we surveyed everybody. I think we surveyed over 50 industries and businesses and said what do you want? And the answer was very simple in those days. It was, you know, math, reading, English, teamwork, and some basic computer skills. So we start to design programs to address some of those things.

And from those early beginnings, we created a joint program between Lackawanna College, the Scranton Chamber of Commerce, and Johnson College. Using workforce investment dollars, we developed a program to train electricians for Tobyhanna Army Depot. For the local defense industry we trained people in pneumatic control technicians for the skills that were basically needed. We subsequently designed programs for displaced workers and created an allied program that trains faster technicians, stenographers, cardiac sonographers, and other technicians.

Five years ago, in anticipation of the growth of the Marcellus Shale industry, we designed a gas field management program. Our first class will be graduating this May and all the people already have jobs and they have already done internships. And we just re-

cently were approved by the Department of Education to start a gas compression technology program, which will start this fall.

All of those things we have done to one thing and that is to be able to have the agility to be able to respond very quickly to the needs of business and industry and to students who want to go to college to pursue other avenues of education. And the secret to this is the agility to be able to do it and to have the federal and state aid which allows us to leverage these dollars to put these programs on the street. Thank you.

[The statement of Mr. Angeli follows:]

Prepared Statement of Raymond S. Angeli, President, Lackawanna College

I am pleased to have the opportunity to provide commentary on the issue of how constituents can take advantage of what higher education has to offer in partnership with workforce initiatives. As president of Lackawanna College for over sixteen years, I have witnessed remarkable changes in both higher education standards, and those of an evolving workforce, both nationally and in the region of Northeastern Pennsylvania.

One of the unique aspects of education in Northeastern Pennsylvania has been the establishment of NEPACU (Northeastern Pennsylvania Association of Colleges and Universities). NEPACU is the cooperative consortium of 16 Colleges and universities that work together to provide a wide array of offerings that prepare our students to work in the many fields of opportunity that are always evolving. Each of us has offerings that vary, including certificate programs, undergraduate programs, Master's and Doctoral programs.

Despite the abundance of educational opportunity available in Northeastern Pennsylvania, only approximately half of the local population pursues higher education, which irrefutably enhances the quality of any workforce. The concept of "brain drain" continues to be an issue in our region, which basically means that our own students seek education elsewhere, while our own colleges and universities attract students from other parts of the country—especially Southeastern PA, New York and New Jersey—who, in turn generally leave our region upon graduation.

So the one challenge NEPACU continues to put forth to the community of Northeast Pennsylvania is: No matter what an individual's interests are, one of our colleges or universities can meet his or her educational needs, whether one is a new high school graduate or adult learner seeking new employment or career change. Of course, I can only speak to Lackawanna College's involvement in training the workforce, not because we are unique, but because with the efficient use of federal and state aid, combined with the business community's assistance, we have been able to design programs quickly—and ensure they are affordable.

Several years ago, Lackawanna College, along with the joint Chambers of Commerce (Scranton and Wilkes-Barre) surveyed business and industry in an attempt to understand what their needs were. In the beginning, the equation was simple. Students coming out of high school, and later, adult learners returning to the workforce needed to be trained up to a simple standard: math—reading—English—teamwork. From those early beginnings, a joint program was created between Lackawanna College, the Scranton Chamber and Johnson College. Using Workforce Investment dollars, we developed a program to train electricians for Tobyhanna Depot, and pneumatic control technicians for the many defense industries who were desperately short of workers with such skills.

We subsequently designed special programs for displaced workers, and created an Allied Health Program that trains vascular technicians, sonographers, cardiac sonographers, surgical technicians, nurse aids and even paramedics to meet demands. To illustrate our success, consider that 100% of our Nurse Aid students have passed their license examinations, with 100% job placement upon completion of the program.

Most recently as 5 years ago, in anticipation of the growth in the Marcellus Shale gas opportunity, we designed a gas field management program. Our first class will graduate in May, and each of the 25 students has already served a paid internship on local drilling rigs. We have added a second class, and there is currently a waiting list of students for the following year.

Just this week, Lackawanna College was approved by the Department of Education to start a gas compressor technician program that will come on line this fall. This is another example of workforce related education, born of industry demand.

And an additional example of our ability to address local workforce opportunity is our certificate and Associate's degree programs for Entrepreneurship. As the Marcellus shale industry has taken off so rapidly, so have entrepreneurial business opportunities in order to serve the hundreds of gas and pipeline workers who have flooded the region: catering, laundry services, lodging, etc. One component we are addressing with this program includes training of veterans, both disabled and recently returning from deployment. Lackawanna College has received national recognition as a "Military Friendly College."

We have in the past taken advantage of trade relocation dollars, Appalachian Regional Control Programs, and Department of Education Programs to retrain workers who are trying to improve their skills or just need a job.

Lackawanna College is a private, accredited, two year, Associate's degree awarding institution with one main campus in Scranton, and four satellite centers in Hazleton, Towanda, New Milford and Lake Region (Hawley, PA). We also offer several continuing education programs, certificate programs and enrichment and workforce training programs. In two of our locations (Scranton and Hazleton), we maintain a Police Academy, which offers Act 120 certification and other law enforcement training.

Originally established as a business school designed to support local industry in 1894, the college has continued to play a unique role in the ever evolving needs of the regional workforce. In the last decade, enrollment has more than doubled, largely due to our establishment of multiple programs that address the needs of the growth sectors of the workforce. Offering students the option of a traditional education leading to a four year degree, or a specialized education focused on a specific vocation has been the hallmark of our growth and success. With an enrollment of approximately 2,200 full and part time students, we consider our diversity and agility to respond to workforce needs as an educational niche in our region.

In light of the recent threats on the state and federal levels to cut funding to education, I respectfully ask this committee to consider colleges similar to Lackawanna College as stellar examples of success in education, leading to tangible employment. For the majority of our students, Lackawanna College provides the foundation for a continued education, whether it is a four year degree or specialization. An example: many of our criminal justice students pursue Act 120 certification upon earning their degree, and vice versa.

Over 80% of our students are first generation college students. Lackawanna College has the most diverse student population in Lackawanna County, and with the exception of other regional community colleges, it provides the most affordable tuition available. We are committed, despite funding cuts in financial aid, to no increase in tuition for the 2011-2012 academic year. This comes at considerable expense to the college and its employees, but we remain cognizant of our mission and commitment to our own constituents—our students.

Another reason for our growth has been the improvement in our transfer credit acceptance, and our establishment of several articulation agreements with other colleges and universities, including the Pennsylvania State System of Higher Education and Misericordia University. We continue to seek additional partnerships, both with other colleges and universities, and with regional workforce agencies.

Higher education is at a palpable crossroad. The value of a two year degree is ever increasing for obvious workforce related reasons. Partnering with business has always been the strength of two year colleges, and particularly in NEPA, the hallmark of Lackawanna College. Despite the inevitable funding cuts to education, I implore this committee to judge the merits of community and private two year colleges, and the effects any cuts will have on the students themselves, and their access to viable employment.

I could go on about how much success we all have had in making Northeastern, PA a place where opportunity meets preparation but I believe if you speak to the employers of our students, they will tell you that what we are doing works effectively. Thank you for the opportunity to communicate the importance of Lackawanna College in our community.

Chairman KLINE. Thank you very much. Ms. Seaman?

**STATEMENT OF JOAN SEAMAN, EXECUTIVE DIRECTOR,
EMPIRE BEAUTY SCHOOLS**

Ms. SEAMAN. Good morning. My name is Joan Seaman, Executive Director of the Wyoming Valley Campus of Empire Education

Group located here in the 11th District in Pennsylvania. I would like to thank Representative Barletta, Chairman Kline for hosting this important hearing on how higher education can help revive the economy through job growth and development.

Today I would like to share with you my own professional journey, the role that Empire Education Group plays in helping students achieve those careers, and how the cosmetology school industry and professional beauty industry can and should be looked upon as a part of a solution to our economy recovery.

My career and the realization of my passion and dreams was made possible because of the choices and access provided to me by Empire Beauty School. I graduated from Empire Beauty School in 1974, prior to the school being eligible to administer federal student financial assistance. Upon graduation, the school director helped me find a job in a local salon. While working in the salon in 1976, I started to return to Empire, which was now accredited, and I enrolled in the teaching program with the help of Title IV funding. Upon graduation from the teaching program, I was hired as an instructor and worked in that capacity for 17 years.

The help and support I received from Empire also allowed me in 1983 to realize my lifelong dream of owning my own salon and becoming a small business owner. I am proud to say that I have been employed by Empire Beauty School for 35 years and presently serve as the executive director at the Wyoming Valley Campus. In my capacity as executive director, I am responsible for the operations of a total quality school.

I would submit to you that Empire does an outstanding job preparing students that choose to enter the professional beauty industry. At Wyoming Valley over half of my students enroll in school with prior higher education experience, and sadly enough, prior debt. And this is typical of most institutions within the cosmetology community as we estimate that 20 to 35 percent of students enroll with some prior higher education indebtedness.

Wyoming Valley has a success rate that I am proud of and they are similar to the success enjoyed across Empire's 102 campuses located in 23 states. Our graduation rate is 71 percent. Our past rate on the state-mandated licensing test is 86 percent and our placement rate is 77 percent.

The cosmetology school industry is more heavily regulated than my peers on this panel. Believe it or not, Empire views this additional level of oversight as a positive. It provides that the individual has the entry-level skill sets to enter the workforce and begin their careers. Armed with this passport, cosmetologists have entry into a world of opportunity in areas where employment is expected to grow much faster than the average for all occupations according to the United States Department of Labor.

Personal appearance workers will grow by 20 percent from 2008 to 2018, which is much faster than the average of all occupations. Employment of hairdressers, hairstylists, and cosmetologists will increase by about 20 percent, much faster than the average.

Today I would like to call to your attention three brief examples which illustrate key legislative and regulatory barriers which limit institutions from effectively enrolling, completing, and placing fu-

ture employees into our Nation's workforce: student over-borrowing, misrepresentation, and gainful employment.

In the terms of student over-borrowing, the Higher Education Act mandates that all institutions disclose to the potential borrower every type and amount to federal student financial that they are eligible to receive and prohibits an institution from limiting the amount a potential student can borrow, even if the student exceeds the funds needed to pay for tuition fees. As currently constructed, the law and regulations actually push more student aid onto the borrower than is necessary, increasing the potential that the student can and potentially will over-borrow.

Secondly, the Department of Education's October 2010 final regulations included modifications to the definition of misrepresentation, which are illogical, unrealistic, and will likely open the door to countless lawsuits based upon the expansive terms now contained in this regulation.

Lastly, what is certain is that the as-yet unpublished gainful employment regulation will limit students' access and choice. What is unknown is the degree to which the final regulation will have unintended negative impact on cosmetology schools like mine. One important issue which was not raised at last week's gainful employment hearing, which deeply concerns my institution, is the fact that the Missouri data used by the Department to access the impact of the proposed regulations failed to take into consideration any cosmetology school data. So neither the Department nor the cosmetology sector can say for sure when it passes the impact the final regulations will have on our program.

In conclusion, institutions like Empire have the ability to help meet the Nation's local as well as national job demands. However, we need targeted relief from federal restrictions and unduly harm students and the institutions they chose to attend. It is my hope that through your leadership we can and will work together to make the necessary changes to the Higher Education Act, which will enable Wyoming Valley, all of Empire, and my peers on this panel representing traditional higher education meet the local and national workforce needs and do our share to help bring about economy recovery.

[The statement of Ms. Seaman follows:]

Prepared Statement of Joan Seaman, Executive Director, Wyoming Valley Campus, Empire Education Group

Good morning. My name is Joan Seaman, Executive Director of the Wyoming Valley Campus, of Empire Education Group, located here in the 11th District of Pennsylvania. I would like to begin my testimony by thanking both Representative Lou Barletta and Chairman John Kline for hosting this important hearing on how higher education can help revive the economy through job growth and development.

I think we all agree that the path to a stronger and more competitive workforce is rooted in access to postsecondary education, and the ability and flexibility afforded to our nation's students to choose the education and training that best meets their own individual personal and professional career goals.

In the time that I have with you gentleman this morning, I would like to describe a little bit about my own professional journey, the role that Empire Education plays in helping myself and others achieve success in our chosen professions/careers, and how the Cosmetology School Industry and Professional Beauty Industry can and should be looked upon as a part of the solution to economic recovery and a broader more robust workforce.

And, I would be remiss if I didn't also share with you some of the legislative and regulatory barriers which currently exist that limit/prohibit my institution from

helping individuals and their families enroll, pursue, and complete their education, which is the “passport” to a world of “in-demand” employment, financial independence, and personal/professional growth and success.

My Professional Journey

My career, and the pursuit of my passion and dreams, were made possible because of the choice and access provided to me by Empire Beauty Schools.

I graduated from Empire in 1974 prior to the school being accredited and recognized by the U.S. Department of Education as an institution eligible to administer Federal Student Financial Assistance. Upon graduation, the school director helped me find a job in a salon.

While working in the salon, in 1976 I decided to return to Empire, which was now accredited, and I enrolled in the Teacher Training Program with the help of Title IV funding. Upon graduation from the Teacher Training Program I was hired as an instructor and worked in that capacity for 17 years. The help and support I received from Empire also allowed me, in 1983, to realize my life long dream of owning my own salon and becoming a small business owner as well.

I am proud to say that I have been employed by Empire for 35 years and presently serve as the Executive Director of the Wyoming Valley Campus. In my capacity as Executive Director I am responsible for the overall quality of the school. That includes delivery of the education, graduation and placement, community outreach, operation of the facility and anything else that needs to be done to insure our students have a positive learning environment.

Empire Education’s Role

I would submit to you that Empire Education, and the broader cosmetology school industry as well, do an outstanding job preparing students that choose to enter the Professional Beauty Industry.

At Wyoming Valley, more than half of our students enroll in school with previous higher education experience and, sadly enough, prior debt—and this is typical of most institutions within the cosmetology community, as we estimate that 20-35% of students enroll with some prior higher education indebtedness.

Many of these individuals are making a transition—whether it be from the pursuit of an education which was not the best fit for them or a new career path based upon the loss of their existing job due to the lagging economy—and are finally getting to follow their passion. Many also see the Professional Beauty Industry as a pathway to independence or are pursuing a dream that they have had since childhood, but either could not, or did not pursue previously. The one thing that they all have in common. * * * They have all chosen to attend our school and are counting on us to help them achieve their goals and dreams.

And, with some humility, I believe we deliver.

Wyoming Valley has success rates that I am proud of and they are similar to the success enjoyed across Empire’s 102 campuses in 23 states. Our graduation rate is 71%, our pass rate on the State mandated licensing test is 86% and our placement rate is 77%. I bring these rates to your attention in part because they are part of the metrics used by Empire Education Group, our accrediting agency, and other large and small cosmetology schools in our sector to determine quality of education.

The Cosmetology School & Professional Beauty Industries’ Roles

The cosmetology school industry is more heavily regulated than my peers on this panel, and this is true of cosmetology schools in every state.

Not only must cosmetology institutions meet the federal higher education laws and regulations, but we must also comply with the state regulatory guidelines and licensure testing requirements of our Cosmetology and Barbering Boards. These entities quite literally establish the length of our programs, the curriculum that is to be taught in order to meet the state’s licensure requirements, and the independently administered, state approved exams our students must pass in order to enter the profession.

Believe it or not, Empire Education and the cosmetology school industry view this additional level of oversight as a positive. It helps us educate the students and their families on what is expected of them in order to achieve entry into the profession. It enables us to validate the quality of our programs based upon our outcomes and success in preparing individuals for licensure. And, it provides the Professional Beauty Industry with a clear, bright-line indication that the individual has the entry-level skill sets to enter the workforce, and begin their careers.

Armed with this “passport” the cosmetologist has entry into a “world” of opportunity in areas where “employment is expected to grow much faster than the average for all occupations” according to the U.S. Department of Labor’s Occupational Outlook Handbook, 2010-2011.

As noted under “Job Outlook” for Barbers, Cosmetologists, and Other Personal Appearance Workers:

“Overall employment of barbers, cosmetologists, and other personal appearance workers is projected to grow much faster than the average for all occupations. Opportunities for entry-level workers should be favorable, while job candidates at high-end establishments will face keen competition.

Employment change. Personal appearance workers will grow by 20 percent from 2008 to 2018, which is much faster than the average for all occupations.

Employment trends are expected to vary among the different occupational specialties. Employment of hairdressers, hairstylists, and cosmetologists will increase by about 20 percent, much faster than average, while the number of barbers will increase by 12 percent, about as fast as average. This growth will primarily come from an increasing population, which will lead to greater demand for basic hair services. Additionally, the demand for hair coloring and other advanced hair treatments has increased in recent years, particularly among baby boomers and young people. This trend is expected to continue, leading to a favorable outlook for hairdressers, hairstylists, and cosmetologists.

Continued growth in the number full-service spas and nail salons will also generate numerous job openings for manicurists, pedicurists, and skin care specialists. Estheticians and other skin care specialists will see large gains in employment, and are expected to grow almost 38 percent, much faster than average, primarily due to the popularity of skin treatments for relaxation and medical well-being. Manicurists and pedicurists meanwhile will grow by 19 percent, faster than average.

Job prospects. Job opportunities generally should be good, particularly for licensed personal appearance workers seeking entry-level positions. A large number of job openings will come about from the need to replace workers who transfer to other occupations, retire, or leave the labor force for other reasons. However, workers can expect keen competition for jobs and clients at higher paying salons, as these positions are relatively few and require applicants to compete with a large pool of licensed and experienced cosmetologists. Opportunities will generally be best for those with previous experience and for those licensed to provide a broad range of services.”

It is the Professional Beauty Industry that will afford individuals with the ability to use their passport to choose from all manner of career paths and destinations. They can pursue employment in a salon, building up a clientele—which may one day lead to the opening of their own salon just like mine. They may enter into the manufacturing and merchandising side of the industry (wholesale trade), or the customer service and retail professions (retail trade), which are again classified by the U.S. Department of Labor as areas for occupational growth at above the national average. Regardless of their choice, the options are there and so is the demand.

Legislative and Regulatory Barriers

Rep. Barletta and Chairman Kline, I believe that my campus, Empire Education Group, and the rest of the cosmetology school community can help get us back on the right track to full economic recovery, but in order to do so students and schools need your help.

You have already heard me state that my institutions and our industry does not shy away from regulation, in fact, when it is fair and balanced at both the federal and state level we embrace it. But in far too many cases, especially at the federal level, statute and regulations proposed in the name of “program integrity”, “the interests of the taxpayers”, and “the federal interest” frankly go too far.

These regulations can be unreasonable, unfair, and yes, even unjust, and often times come with unintended consequences which are far more detrimental to the students and schools than originally prescribed or intended.

Today I would like to call to your attention three brief examples which illustrate key legislative and regulatory barriers which limit/prohibit institutions from effectively enrolling, completing, and placing future employees into our nation’s workforce. They include:

- Federal statutory prohibitions on an institutions ability to limit student borrowing to only those funds needed/necessary for pursuit of their education;
- Recently promulgated Federal regulations broadly defining “misrepresentation” go well beyond reasonable interpretations of substantial misrepresentation with a clear intent to deceive; and
- Pending Federal regulations seeking to define “gainful employment in a recognized occupation.”

Student Over-Borrowing

This may seem counter-intuitive, but in an effort to promote consumer transparency and greater access to student loan information, the Higher Education Act mandates that all institutions disclose to the potential borrower every type and amount of federal student financial that they are eligible to receive and prohibits an institution from limiting the amount the potential student and/or the family can borrow—even if that amount exceeds the funds needed to pay for all tuition, fees, and direct academically-related costs (including child care, transportation, et. al.).

Student financial aid administrators do have the ability to limit student borrowing on a case-by-case basis, but are often cautious about doing so because of the potential adverse consequences if the discretion is overused.

Thus, as currently constructed, the law and regulations actually push more student aid onto the borrower than is necessary, increasing the potential that the student can, and potentially will over-borrow.

I'm certain the irony is not lost on the two of you. At a time when other Members of Congress, student rights and consumer advocates are vocally questioning college tuition increases, student debt, and the harms associated with large indebtedness, the ability to repay, and the potential for default, the fact of the matter is that the institutions are required to offer more of the taxpayers money than is actually necessary.

Compounding the problem are the pending U.S. Department of Education regulations seeking to define "gainful employment", which focus on a borrower's ability to repay their loan and the relationship of the amount borrowed to the anticipated earnings immediately after graduation. Later in my testimony I discuss the broader implications of the pending regulations, but they are relevant to this concern as well.

Several portions of the higher education community, including the for-profit and community colleges, have requested that both the Department of Education and Congress provide institutions with the ability to limit the amount a student can borrow.

Department of Education officials have repeatedly noted during Federal negotiations that the Secretary requires statutory authority to enable institutions to make such determinations.

To that end, I respectfully request that you consider granting institutions and their financial aid administrators the ability to limit the amount a student and/or their family can borrow. In doing so, you will enable institutions to prevent unneeded and unnecessary student indebtedness, while at the same time protecting the federal fiscal interest in terms of both funds attributed and the default risks associated with the over-awarding of taxpayers' dollars.

Misrepresentation

The Department of Education's October 2010 final regulations implementing a series of changes designed to promote greater program integrity included modifications to the definition of "misrepresentation" which are simply illogical, unrealistic, and will likely open the door to countless lawsuits based upon the expansive terms now contained in the regulations effective this July.

Under the law, the Program Integrity Triad—made up of state authorizers, accrediting agencies, and the U.S. Department of Education—are all responsible in one form or another to prevent institutions from providing the consumer with false or misleading information.

Specifically the HEA directs the U.S. Department of Education to make determinations regarding "misrepresentations" made by institutions of higher education to potential students and their families that are "false, erroneous or misleading statements" in relations to "descriptions of educational programs, its financial charges or employability of its graduates."

For many years, all institutions of higher education have understood and abided by this regulation, and support its intent and that of the underlying statute.

However, as part of the most recent efforts on the part of the Department to expand oversight and enhance program integrity, the Administration sought, and was successful in promulgating new regulations broadly defining "misrepresentation" in a manner that goes well beyond reasonable interpretations of substantial misrepresentation with a clear intent to deceive

The new regulations dramatically expand the definition of "misrepresentation" to include misstatements that have a "likelihood or tendency to deceive or confuse." They also enlarge the scope of actionable misrepresentations to include any statement about the institution as a whole, not the narrower description of the program, financial charges and outcomes noted above. And, not only do the new regulations

pertain to representations made to potential students and their families, but now, the new regulations open this up to misrepresentation made to the general public.

Empire Education Group, the cosmetology school industry, and the broader for-profit community all agree that this regulation is a significant over-reach on the part of the Department, one fraught with potentially unintended consequences based upon the most minor of mistakes or even human error.

I urge you to review the underlying law and the new regulations, which go well beyond what the law and Congress appear to have intended and respectfully request that you work with us to find remedies which will dial back this over-reaching and potentially very damaging new regulation.

Gainful Employment

As was clearly demonstrated throughout last Thursday's (March 17, 2011) Full Committee Hearing entitled, "Education Regulations: Roadblocks to Student Choice in Higher Education" the as yet unpublished U.S. Department of Education (Department) "gainful employment" regulations will limit student access and choice.

What is unknown is the degree to which the final regulation will have unintended but profound negative impact on cosmetology schools like mine. While last week's hearings touched on a number of important concerns, one important issue which was not raised at the hearing in Washington, which deeply concerns my institution and the cosmetology school industry, is the fact that the Missouri data used by the Department to assess the impact of their proposed regulations failed to take into consideration any cosmetology school data. So neither the Department, nor the cosmetology sector can say for sure what impact the final regulations may have on our programs—which leads me to my second concern on gainful employment.

The Department and supporters of the provision have repeatedly stated that the proposal is program specific, and that the institution does not lose eligibility, only the impacted program(s). Within the cosmetology school industry this simply isn't accurate. Wyoming Valley, like a majority of cosmetology schools across the country, offer core curriculum in the cosmetology arts and sciences and related fields. We do not offer multiple disciplines and as a result stand to be more negatively impacted by the proposed regulations—as elimination of our cosmetology programs eligibility will result in institutional ineligibility.

But perhaps my biggest concern is the fact that I, as someone who is responsible for running a total quality school, will have little, if any, control over the outcomes of the two metrics (Annual Loan Repayment Rates and Student Debt-to-Earnings) which will be used to determine my institution's, not just a program's, continued eligibility.

- *Annual Loan Repayment*

There are many problems with this metric but I will focus on several that are most evident and worrisome. First is the fact that this proposed regulation looks backward and, if implemented, will include students that attended and graduated from my school up to three years ago. I am concerned not only of the unfair nature of such a provision, but also with the precedent it may set for future retroactive regulations.

Second, as proposed, there are certain classes of performing loans that will not be recognized as such because they are loans in deferment or forbearance. Also, many income contingent options while deemed to be performing statutorily by education law, will count against the institution as not in repayment. Add to the fact that all loans are serviced by the Department of Education and it creates a dichotomy as to how the institution and the Department will work to properly counsel and ultimately service those loans, when what is in the best interest of the student is in direct conflict with the assessment of the institution's compliance with the gainful employment regulation.

Third, the calculation of median loan debt is not an accurate reflection of the proceeds of the loan debt received by the institution. Students may borrow well beyond the cost of education for living and other educationally related expenses. Institutions could actually charge zero for tuition and by law, the students could borrow up to their eligible maximum. Under the proposed regulation, the institution is held responsible for the student re-paying that debt even if the institution did not receive even a single penny from the proceeds of the loan.

- *Student Debt-to-Earnings*

Simply put, I am not sure what this metric reflects or is trying to measure. As proposed, the institution will submit a roster of social security numbers to the Department of Education who will then turn that roster over to the Social Security Administration (SSA). The SSA will in return give the Department of Education the

average earnings of the graduates on that roster so it can be compared against the median loan debt of recognized occupation(s) in that field.

First, there is no way for the institution—or any external auditor—to identify the source of the income. While this may work to the advantage of the institution, it is not reflective of the difference in the value between what was borrowed and the subsequent earning power of the student as a result of the training that student received because of the loan.

Second, there is no way to check the accuracy of the information coming back to the institution. The exclusion of a few graduates could dramatically impact the average, especially in institutions and programs with small cohorts.

Third, programs with small enrollments will have average earnings and loan values with potentially large outliers that will be more attributable to economics than the quality of education at an institution.

Based upon all of these concerns, and many more too numerous to include in my prepared or verbal testimony, Wyoming Valley, Empire Education Group, the cosmetology school industry, and the Professional Beauty industry all respectfully submit and agree with your statements Rep. Kline that these regulations should be withdrawn by the Department.

I applaud both of you gentleman for taking the lead in seeking to slow down the rush to regulate in this area. The overwhelming House vote on this issue is an important first step. I hope that the Senate will see the wisdom of including the provision in their Fiscal Year 2011 (FY11) Appropriations bill, but even if they do not, I hope you will fight to have the provision maintained in the House & Senate Conference and the final enacted FY11 funding legislation.

The Wyoming Valley Campus, Empire Education Group, the cosmetology school industry, and the Professional Beauty Industry are all committed to working with you to see this regulation at a minimum delayed, and in a perfect world never published. We support accountability, and are not adverse to oversight and regulation, but only when it is fair and balanced, and this regulation is certainly far from that.

Conclusion

Empire Education Group, the cosmetology school industry, and institutions like Wyoming Valley have the ability to help meet the nation's local, as well as national, job growth and development needs, helping to lead to a path of full economic recovery. However, to work at optimum efficiency and effectiveness we need targeted relief from federal legislative and regulatory restrictions that unduly harm students and the institutions they choose to attend.

It is my hope that through your leadership we can, and will, work together to make the necessary changes to the Higher Education Act, which will enable Wyoming Valley, Empire Education Group, the cosmetology school industry, and my peers on this panel representing traditional higher education meet the local and national workforce needs, and do our share to help spur on full economic recovery.

Chairman KLINE. Thank you, Ms. Seaman. Mr. Leary?

STATEMENT OF THOMAS P. LEARY, PRESIDENT, LUZERNE COUNTY COMMUNITY COLLEGE

Mr. LEARY. Thank you, Congressman, for this opportunity to—
Chairman KLINE. Would you share the microphone there with—
thank you.

Mr. LEARY. Yes. Thank you. Thank you. Thank you for the opportunity to present information of what we feel is extremely important with respect to the future of higher education.

Community colleges play a very important role in the future of our State and, given the shifts in the economy, have a more significant impact every day. They have always played a key role in providing the workforce with the education and skills necessary to find sustainable employment in business and industry that supports the economy, including such high-priority education, which for Pennsylvania includes such programs as nursing, surgical technology, computer information systems, architectural engineering, and early childhood education.

During the current economic climate, there are climbing numbers finding themselves unemployed. The impact of community colleges has increased dramatically as more and more individuals are looking to our institutions to train—and in many cases, retrain—them so they may gain a competitive edge in today's limited workforce market. While community colleges are supported by state and local funding, that funding is currently under a great challenge. For Luzerne County Community College, the initial proposed budget from the state level calls for a cutback of approximately \$1.2 million, which is reflected in federal stimulus funding.

Like other community colleges, we have been making adjustments along the way to address the continually decreasing cuts while ensuring that the quality of education and training is not impacted. The staff is doubling up on their responsibilities and growth and development activities are stunted as we must reallocate existing resources to meet day-to-day operational needs.

However, the areas where we can make cuts and trim the budget are nearing completion. As the budget situation continues to be challenging, community colleges face no other alternative but to increase tuition and fees. Accessibility and affordability have been the mainstay of community colleges since their inception and are the reason that so many in our community are able to gain advanced training and education to aid the economic development of this region. Increasing tuition and fees can mean the difference between going to college and not going to college for those who are just outside the range of financial aid availability. Many of those who do receive financial aid rely on that funding to cover not only their tuition and fees but also their textbooks, which at times can cost as much as our tuition.

If the Pell cuts proposed in H.R. 1 are approved, many of these students will not have adequate resources to attend college. Consider the fact that 68 percent of our first-time, full-time students at our college receive some form of financial aid. That financial aid covers not only tuition but also other expenses.

Ladies and gentlemen, I spoke to a woman last week in my office and she is approximately 30 years of age. She is in a high-demand occupation. She is pursuing the nursing program. She has a 3.8 GPA coming into this semester. She works full-time, raises two children on a salary of \$25,000 a year. Her financial aid is critical for her to continue to pursue that program, which will allow her to have a job when she graduates in our nursing profession and raise her two children.

Sufficient Pell funding is currently available and the current continuing resolution provides sufficient Pell Grant program funding to ensure \$5,550 at maximum grant level for the 2011/2012 year. However, the House passed H.R. 1 last month, a continuing resolution that cuts the maximum Pell Grant by \$845 from \$5,550 to \$4,705. Because of this Pell Grant reduction, it will have a detrimental impact on the woman that I mentioned before and several thousand other students. I urge you to consider maintaining the current level of Pell Grants.

The students affected by any cuts are the ones counting on financial aid to fulfill their responsibilities to their families by finding sustainable employment without which they must rely on govern-

ment assistance or the support of families and friends to get by, none of which enhances self-esteem or self-reliance, which can have a detrimental long-range effect on your children's ability to contribute to their economy in a meaningful way. The Pell Grant is the cornerstone of the federal student aid programs and in the academic year of 2009/2010, we had 2,836 students receive a Pell Grant of which 1,268 received a maximum Pell Grant award.

I assure you that colleges are doing our part to support our students and support the economic development of our region during these difficult times in as many ways as possible. For example, Pennsylvania community colleges, 14 community colleges have come together to submit an application to the Department of Labor for the TEACH Grant. This grant will allow our capacity to place students—adult learners who may have lost a recent job or are in need of additional skills—to upgrade their employability or meet the changing demands of the workplace.

Lifelong learning is a primary strategy for meeting the President's challenge that by 2020 America will have the highest proportion of college graduates in the world. About 40 percent of our 7,000 students are over the age of 25 and could potentially benefit from the goals and objectives of the grant that I just mentioned. The jobs requiring at least an associate degree are projected to grow twice as fast as jobs requiring no college experience. The 14 community colleges in Pennsylvania are collaborating to make certain that we meet this challenge.

The approach being taken is designed to transform and accelerate initial experiences of the TAA and TAA-like students at community colleges and to align educational programs with industry-recognized credentials and industry needs in specific focused areas leading to job placement. This is just one example of the many avenues community colleges seek to supplement funding resources.

We hope that you will seriously consider funding Pell grants at their current rate and overall eliminating any potential cuts to education funding on the national level. Thank you very much.

[The statement of Mr. Leary follows:]

**Prepared Statement of Thomas P. Leary, President,
Luzerne County Community College**

Community colleges are critical to the future of our state and, given the shifts in our economy, have a more significant impact every day.

Community colleges have always played a key role in providing the workforce with the education and skills necessary to find sustainable employment in the business and industry that supports the economy, including high priority occupations which for Pennsylvania includes such programs as nursing, dental hygiene, surgical technology, Automotive Technology, and Computer Information Systems, Architectural Engineering, and Early Childhood Education.

During the current economic climate, with record numbers finding themselves unemployed, the impact of community colleges has increased dramatically, as more and more individuals are looking to our institutions to train and, in many cases, retrain them so that they may gain a competitive edge in today's limited workforce market.

While community colleges like Luzerne County Community College are supported by state and local funding, that funding, combined with student tuition and fees, is still not sufficient to allow for the needed flexibility in programming and maintenance of state-of-the-art equipment and facilities to ensure students are fully prepared for careers and continued education in their field, including and especially the high demand occupations. As a result, federal, state and private grants and donations have become a critical piece to the community college revenue puzzle.

Unfortunately, at the same time that state and local funding has been decreasing over the past two years, LCCC and our sister community colleges across the nation have also experienced loss of some of these supplementary funding sources.

For LCCC, this situation will likely worsen dramatically if the Governor's proposed budget which calls for \$1.2 million cut (most of which is the result of a loss of federal stimulus money) is approved, as many anticipate will happen.

Like other community colleges, LCCC has been making adjustments along the way to address the continually decreasing cuts while ensuring that the quality of education and training provided is not impacted. Staff are doubling up on responsibilities, and growth and development activities are stunted as we must reallocate existing resources to day-to-day operational needs.

However, the areas where we can make cuts and trim the budget are nearing depletion.

Other ways these budget cuts impact economic development is in the loss of programs such as Pennsylvania's Dual Enrollment program, through which eligible high school students receive funding to attend college courses and gain a head start on their post-secondary education.

As the budget situation continues to worsen, community colleges face no other alternative but to increase tuition and fees. Accessibility and affordability have been the mainstay of community colleges since their inception and are the reason that so many in our community are able to gain advanced training and education and contribute to the economic development of their regions.

Increasing tuition and fees can mean the difference between going to college and not going to college for those who are just outside the range of financial aid availability. Many of those who do receive financial aid rely on that funding to cover not only their tuition but also their textbooks, which can at times cost as much as tuition. Also needed are the additional funds to cover transportation, supplies and other varied needs, such as child care.

If the Pell cuts proposed in HR 1 are approved, many of these same students will not have adequate resources to attend college.

Consider the fact that 68% of first time, full time students at LCCC receive some form of financial aid. Again, that financial aid covers not only tuition, but also the other expenses that are incurred by the student in order to attend college. Ladies and Gentlemen, we are talking here about, say, the single mother of a family of 4 earning \$25,000 a year. The fact that she can manage a full-time job and raise a family while studying and completing homework and attending classes is remarkable enough. How do we expect her to find available money in her budget to pay for her textbooks or cover the additional cost of gas to get to and from campus?

The Federal Government must provide sufficient Pell Grant funding to ensure the maximum award is not reduced in the 2011-12 academic year.

The current continuing resolution (P.L. 111-322) provides sufficient Pell Grant program funding to ensure a \$5,550 maximum grant level for the 2011-12 academic year. However, the House passed H.R. 1 last week, a continuing resolution that cuts the 2011-12 maximum Pell by \$845—reducing the maximum award from \$5,550 to \$4,705.

Because this Pell Grant reduction will have a detrimental impact on low-income students, I urge you to oppose this provision in the continuing resolution.

Any changes to Pell funding at this point could disrupt, delay, or halt low-income students and families' higher education aspirations. To prevent this, Congress must vote down any Continuing Resolution that reduces the maximum Pell Grant award.

Our students at Luzerne County Community College rely on federal aid to attend our institution. The students affected by these cuts are the neediest individuals and are the ones counting on financial aid to fulfill their responsibilities to their families by finding sustainable employment, without which they must rely on government assistance or the support of families and friends to get by, none of which enhances self-esteem or self-reliance, which can have a detrimental long-term effect on their and their children's ability to contribute to their community in a meaningful way.

We also count on the funding of the SEOG grants to our students. If they are cut as well, we would have many students unable to attend school because they could not afford books and necessary supplies.

The Pell Grant program continues to be the cornerstone of the federal student aid programs and it provides students the opportunity to attend Luzerne County Community College each year. In the academic year 2009-10, we had 2836 students receive a Pell Grant during the year of which 1268 received the maximum Pell Grant of \$2675. These students will be relying on Congress to ensure their awards are not reduced.

I assure you that the colleges are doing our part to support our students and support the economic development of our regions during these difficult times in any way possible.

For example, the PA community colleges are working together to submit an application for a TAACCCT Grant. This U.S. Dept. of Labor grant is designed to increase institutional capacity and student success for TAA-eligible students and “TAA-like” students—meaning adult learners who may have lost a recent job or are in need of additional skills to upgrade employability or meet the changing demands of their workplace.

Life-long learning is a primary strategy for meeting President Obama’s challenge that by 2020, America will have the highest proportion of college graduates in the world, and community colleges will produce an additional 5 million graduates.

About 40% of LCCC’s 7,000 students (2,800) are over the age of 25 and can potentially benefit from the goals of and objectives of this grant. If the grant is successfully funded, a number of student supports already available through the College will be optimized and customized for its adult student population.

With jobs requiring at least an associate degree projected to grow twice as fast as jobs requiring no college experience, the 14 CC’s in Pennsylvania are collaborating to submit a single grant application with a focus on student success and capacity-building to serve adults looking to re-train and upgrade their skills to compete in the 21st century workforce.

The approach being taken is designed to transform, streamline, and accelerate the initial experiences of TAA and TAA-like students at a CC and to align educational programs with industry recognized credentials and industry needs in specific focus areas ultimately leading to job placement.

The CC’s plan to invest in the intake/assessment and collaborations with other human service and workforce development organizations, as well as employers in order to support student success and the attainment of an industry-recognized credential. The 14 CC’s in Pennsylvania plan to redesign and accelerate basic skills development to help move students through the foundation skills and on to learning the specific workplace skills and competencies needed in today’s economy.

This is just one example of the many avenues community colleges seek to supplement funding resources.

We are doing our part to support a workforce prepared with the skills needed by business and industry to address the current unemployment rates and help restore our country’s financial stability.

We urge you to do the same by fully funding Pell Grants at their current rate and overall eliminating any cuts to education funding on the national level.

Chairman KLINE. Thank you, Mr. Leary. Thank the entire panel for your testimony and for bearing with us on the timing system here. You all did very, very well. Let me get my notes together here. I took so many notes I had to change pencils, ran out of pencils.

There is kind of a thread that I think we are seeing in previous hearings and in the testimony here today in sort of two pieces. One is a failure to connect between K-12 education and higher education, students are not ready. Perhaps we heard from the previous panel that the students don’t know what to expect. And the other is between institutions of higher education and the workforce. And so Dr. Verret, you mentioned that you have here at Wilkes an advisory board of employers. How does that board work? What do they do?

Mr. VERRET. They work with the director of the engineering program, the chair of the engineering division, and also the dean in evaluating basically the currency of our programs with our laboratories actually providing the experiences that are important to students to keep abreast of the changing engineering fields—

Chairman KLINE. Um-hum.

Mr. VERRET.—and also to make sure to help our students with developing internships and also connections during their edu-

cational programs as well. Many of the members of the program are involved in overseeing some of the student projects and other student projects and things like that. So the advisory programs create connections with industry. They also, for example, help us—for example, we are also taking curricula to give writing to companies. For example, with one company in Scranton we are working with to create curricula to allow people who had not completed the baccalaureate to actually complete the baccalaureate on site. So we would be providing a two-year program on site and we have done that. And we are also working toward something similar.

Chairman KLINE. So this advisory board, then, helps you make sure that your curriculum is current and relevant to the needs of the workplace and it apparently is also through internships and so forth helps place—

Mr. VERRET. It helps—

Chairman KLINE.—your graduates—do you happen to know what your placement rate is?

Mr. VERRET. I cannot give it to you offhand. I can send it to you.

Chairman KLINE. Okay. All right. Thank you. Mr. Angeli, you said I think—if I can read my own writing here—that you are trying to send a message to the high school level but it is a difficult task. Could you just sort of expand on that? What does that mean, difficult task?

Mr. ANGELI. When we first looked at the—there are jobs available at Tobyhanna Army Depot and the defense industry in the future that go unattended to because of a lack of education in those skills. When we first went down to the high school, it is very difficult to convince parents that their child isn't going to go into industry. They are all going to go on to college or do something great. So the challenge was how do we get that message? And working with Chamber of Commerce and our own educational pass code program, we said you have to go down into the middle school. You have to start sending that message at the middle school that there are all kinds of different opportunities for young people out there and go to the old Army recruiting strategy, if you have convinced the mother, you have convinced the child. And I think that is what we try to do. We try to go down there and present our programs early on at the high school level. Thanks to the Chamber of Commerce, their skills program that they put together, along with what we do with education attachments, we actually go down into the seventh, eighth, and ninth grade level to talk about opportunities.

Chairman KLINE. What does that mean when you say you go down there?

Mr. ANGELI. We have staff—

Chairman KLINE. Faculty?

Mr. ANGELI.—faculty who are in charge of different programs who go to all the high schools and—

Chairman KLINE. And you arrange with the school an opportunity—

Mr. ANGELI. Right, to go out there in a skills program. We have what is called Strive for 35. We have 35 schools in the system that we actually go out to try and get that message out. And it was slow to start. It was very slow to start but now after about 4 or 5 years now we were running people through those programs, they are get-

ting trained, they are getting jobs at the end, they are doing internships at different levels.

Like the gas industry, you know, as the job opportunity for young people right now in the Marcellus Shale area in all of our five or six counties up here is tremendous if you just train people. Again, you have to get down there to that level to discuss that with parents and with young people about what the opportunities are. You are talking about jobs \$38 to \$45,000 a year and internships with all kinds of the different employers. Same thing in the health field, vascular technology, diagnostic medical stenography, those are all 2-year technical programs that offer great jobs at the end of the 2-year program. You just have to get that message down there at that level.

Chairman KLINE. Okay. Thank you. Mr. Barletta?

Mr. BARLETTA. Yeah, Mr. Leary, I just want to say that Luzerne has a great baseball program there as well. I played there for a couple of years.

But back in Washington, our committee has been holding hearings to examine the burden that federal regulations impose on colleges and universities. Do you have some thoughts on that topic and what federal regulations are most time-consuming from your perspective?

Mr. LEARY. Well, I think some of the major challenges that we face is in completing much of the compliance requirements for grants that support about 17 percent of our total budget. And although it is reasonable to expect that you are going to have some compliance regulations, there are some costs associated with that that actually diminish, I believe, from the overall grant and what you can provide the students. So I think there is a tendency to have, if you will, a little too much regulation with respect to some of the requirements of those grants.

Mr. BARLETTA. How much of your time is spent on complying with those federal requirements?

Mr. LEARY. Well—various offices—there is a great deal of time spent in our grants office and our financial aid office in meeting those regulations, sir.

Mr. BARLETTA. Thank you. Mrs. Seaman, in your testimony on the Department of Education's proposed gainful employment role, you state that the United States Department of Education's analysts did not include data or information on cosmetology institutions. Can you please provide more detail for me on this? And it appears the Department of Education is making more program, or in your case, institutional eligibility assumptions without any information at all on your sector. Would you say that is true?

Ms. SEAMAN. Absolutely. According to my understanding that the surveys that were completed, the data that was submitted had no information concerning cosmetology schools. They had no information based on the employment of our stylists that are working out in the salons. So when our students become gainfully employed in the salons, this gainful employment regulation that is going to be implemented has no data to base their equation on. So they are trying to formulate numbers as to what the actual student should be hired at on an entry-level income and they have no information to base this on.

Mr. BARLETTA. Thank you. Dr. Verret, how often do your institutions work with local industry to reshape curriculum to adapt to the local workforce needs?

Mr. VERRET. Often, in our business and accounting programs and engineering—

Chairman KLINE. Pull up the microphone, please.

Mr. VERRET. I am sorry.

Mr. BARLETTA. Sorry.

Mr. VERRET. Our curricula and also we have both our industry linkages and also linkages to our crediting agencies in engineering and pharmacy, in nursing, we are keenly aware of industrial standards. For example, the educational standards for our nursing, we adapted our nursing standards. We established the doctor of nursing practice to advancing nursing practitioners. In engineering we have developed the skill accreditation for when the Board of Engineers and Technology comes in and also we have reshaped our curriculum. We have done some reshaping just recently. In the biological sciences, the drive for major reports in requiring the alignment of the education of life sciences by linking them more to the physical courses of sciences has caused a major reshaping of our curriculum. So we conduct periodically. And that review also comes through our accounting programs where we do periodic programming, used our programs at Wilkes as well, the individual programs.

Mr. BARLETTA. Mr. Angeli, in your testimony you mentioned the “brain drain” problem. Can you explain the impact of this problem in Northeastern Pennsylvania?

Mr. ANGELI. For us and we talked about this amongst ourselves, among the 16 college universities around here, which is that we just don't have the ability really to get the message out that two things—we do have business and industry here that can use your skills and we have the ability, one of us can meet your needs. And it goes back to being able to provide the information on education to students coming out of high school and to parents. There is no reason why students should leave here to go someplace else to work when we have business and industry actually looking for those who are educated in the very fields here.

Mr. BARLETTA. Thank you, Mr. Chairman.

Chairman KLINE. Thank you. I am going to start working my way down the table here but I am going to pick up, Mr. Angeli, where I left off. And sort of coming back to the same theme, you said in your testimony that you could design programs quickly and you also said that the secret is agility. And so I have got a couple of questions about that. What does quickly mean?

Mr. ANGELI. Well, I will use a couple examples in both our allied health programs and also our gas industry programs. We went to business and industry first and they designed our programs. And when the demand is there, they not only designed our programs, but they were able to provide us all the equipment we needed for all of our allied health programs and for all of our gas industry programs. So having the resources to be able to put programs on the street is the difficult task. Writing the curriculum and getting the Department of Education and other people to approve it is what we are used to and that is a skill we have. So being a private 2-year

school not burdened by regulations and decisions that have to go through many, many layers, we are able to make those decisions very quickly and put programs on the street.

Chairman KLINE. Okay. And you said you are working with the Scranton Chamber of Commerce and others, I assume. I mean, how are you connecting with employers?

Mr. ANGELI. Actually, through the Chamber of Commerce was really our main—we have representation on there and actually I was the president of the chamber for several years. We are able to understand that various meetings of the educational committee that meets at the chamber where they discuss the local needs for business and industry. And at that table is where we interface with business and industry as to what is needed out there. And if you see a skill that is needed, well, then, put it on the street very, very quickly. Two-year programs are a lot easier to put on the street than 4-year programs.

Chairman KLINE. Will they come to the campus?

Mr. ANGELI. Does the business industry come to campus?

Chairman KLINE. Um-hum.

Mr. ANGELI. In those fields they do. And actually, in our Milford campus they help us actually train our people, our students.

Chairman KLINE. Thank you. Ms. Seaman, you said something that I find frequently when I am talking to schools in the cosmetology industry. You said that half of your students have some higher education experience. How many of them is this a second career choice, they have already worked someplace else? Do you have any kind of numbers on that?

Ms. SEAMAN. I don't have exact numbers, but I know the majority of my students this is a second school for them. And they choose to either change careers, they found out that the traditional college setting was not for them, they are more the creative type of student, that they wanted to come show their skills, they are more people-oriented, and, you know, they have gone to school and it just wasn't for them. So now they are coming to a creative industry.

Chairman KLINE. Okay. I think it is interesting that you pointed out also that so many of them come who have gone to another school, perhaps a fine school, but didn't work out for them, they have accumulated some debt, they are bringing that debt along with them when they come to your school, which isn't free either.

Ms. SEAMAN. Right.

Chairman KLINE. Neither one of us is pretending that. Okay. Thank you very much. And now, Mr. Leary—

Mr. LEARY. Yes, sir.

Chairman KLINE.—you have indicated that you and 14 other community colleges are working together in collaborative effort to improve your success with TAA Grants and some other sources to supplement your funding resources and it makes good business sense. I suspect I would be doing that as well. Do you have any sense of—I mean, you talked about where we can cut. What does that entail? Have you reduced salaries? Have you frozen salaries? Have you fired faculty? And I ask that because one of the things we have seen is frustrating, and this is a bipartisan frustration, by the way, when you look at the costs of higher education running quite a bit ahead of inflation, about 6 percent I think the figures

show, a little under 6 percent ahead of inflation, year after year costs of tuition and fees. And so we are sort of chasing, you know, trying to get grants and Pell Grants and student loans and things like that. Can you talk a little bit about the costs and what cost-containment steps that you are taking?

Mr. LEARY. Yes, sir. That is a very good question because I think it is approximately three years ago when I assumed the presidency, and at that time, I realized that the trend was basically that funding was going to become more challenging, particularly due to the economic climate across the country. Specifically, we have cut approximately \$700,000 from our administrative budget. And we do that by combining positions. And I thought I should set the example and I continued in my position of vice president of student development and the presidency. And I particularly was able to do that because of the many talented people around me. So across the board, we have done that in the academic affairs area and other areas and we have focused on the administration.

Because at the same time that we are combining responsibilities, our college has grown by approximately 18 percent over a 3-year period. So we have more students to serve and we believe we exercised some prudent controls by evaluating exactly where we can "get by" and make sure that the quality of education is not affected. And along those lines, last year we maintained a level tuition. We did not raise our tuition. And we were one of the few colleges that was able to do that. And we continue to have small classes because many of our students who have come to the college have different challenges. We have many students who come fully prepared, as was referred to by my colleagues earlier. There are many students who come to college and need some extra support. So we want to maintain small classes where our faculty get to know our students. We want to provide them with the tutoring and special skills assistance that they need to succeed. And as a result, I think we have been successful in addressing the current challenges that we face in terms of funding.

Chairman KLINE. Thank you. I appreciate that you mentioned you were freezing tuition. I certainly don't want to get in the position where the Congress of the United States even remotely considers such a thing, but it is frustrating to us all. And I meant absolutely what I said about this bipartisan frustration. We share this discussion back and forth because it seems like we can never catch up.

You mentioned Pell Grants. I know that is a subject of great interest to everyone, a program that has also had bipartisan support. It is also a program that has tripled in cost in about 3 years and it is unsustainable at that rate. So there is no question. You mentioned previous legislation that passed in the House. That debate is going to go on. But the growth of the Pell Grant program simply can't continue the way it has been. It is shockingly expensive and it is part of the frustration as we continue to try to chase the higher tuition and fees that we can't seem to catch up with. So that is going to be an important part of the debate. I appreciate that you are engaged and concerned about it and we all are concerned about the cost of higher education and how students are going to pay for it. Mr. Barletta?

Mr. BARLETTA. Thank you, Mr. Chairman. Dr. Verret, you have a sense about whether your graduates choose to stay in the area or are they moving away to find employment elsewhere?

Mr. VERRET. It varies. It varies because—

Chairman KLINE. Can we share the microphone, please? I am sorry.

Mr. VERRET. I think also that we have a number of graduates who do stay in the area. We have graduates who invest in the companies in this area and actually have built companies in this area. We also have graduates who go farther afield. We have graduates have gone away from the area and returned.

On the issue of the brain drain, in fact, I addressed that about a year ago, I think it is both a blessing and a curse because we have students who actually develop their professional skills, go farther afield, and return and bring things back. And it is important for us that they are able to build to bring these things back to the region. So I am not always convinced that that is a loss. Sometimes they go off for graduate studies in other places and they have returned. And we have some of them in our faculty. We have some of them who have built companies in the area. But in a sense, overall, we have students—it depends on the discipline. In some disciplines, people do go away. For example, those who go away to medical school, the new medical school is only 2 years old in this area. The first class will be graduating in 2 years. So they have gone away. But the majority of physicians in this area keep throughout the medical programs. They have gone away and have come back. So we would expect more of that.

I think we also have an important thing that we are also invested in working with adult learners, the fact that we are able to put programs at sites to help educate adults. The fact that we are working with Luzerne County Community College to create a roadmap to help students continue to finish their baccalaureates so that they understand what course they need to take in their first 2 years so that they can seamlessly get their BS because we have one of the lowest baccalaureate completion rates in the state. I believe we are at 20 percent. The State is at 22 and nationally the average of adults 25 or above with baccalaureates is 24 percent. So we are low in a low State. So we have a lot of work that we have yet to do. But these people are here and these people will remain here. So I think we have a double-edged sword.

Mr. BARLETTA. And as we were discussing with the panel before you, I think it is very important that we continue to foster communications between higher education, local leaders, business leaders, and look at this as a region so that we can keep our young people here, we can educate them. We have such talented students here and we are blessed, as we can see today, with so many fine higher education opportunities. We need to always make sure we are making that connection with local industry and not so much only the ones that are here but what we are trying to act so that, you know, again, as an employer, it is very important to know that you have a workforce pool to choose from. And that helps attract other industries. So I applaud all of you for what you are doing.

Ms. Seaman, I noticed some terminology in your testimony that I wanted to learn more about. Can you explain more specifically

what Empire and Wyoming Valley mean by a “total quality school?”

Ms. SEAMAN. Part of Empire’s core value is to make sure that all of its 102 school located throughout the country are running in a total quality sense. And there are four sections on this.

The first area of concern would be the metrics. The metrics also deal with the 90/10 ratio rule. It is dealing with our compliance, and it is also dealing with outcomes assessment.

The second category would be administration. Administration is totally my responsibility. I am responsible for the entire education. I monitor the financial aid process. I am working very closely with salons with job placement, and I just want to ensure the positive learning atmosphere that Empire has to offer to each and every one of its students.

The third area would be compliance. And of course, compliance is meeting or exceeding all of the governing regulations that our accrediting body dictates to us.

And lastly would be our students’ satisfaction. We are working very closely with the students. We do a student inventory on a regular basis. We take the comments and concerns of the students very seriously. And we work with those students so we can assure that each and every student has the best possibility to graduate from Empire Beauty School and seek employment.

Mr. BARLETTA. Thank you. Mr. Angeli, you mentioned Lackawanna College’s new gas compressor technician program, which highlights your institution’s ability to adapt and develop programs on industry demand. What is the benefit of your institution and institutions like yours to adapt to industry demand?

Mr. ANGELI. Well, first, the benefit is being able to design programs that they need. I mean, for us we went down to Texas 5 years ago and we heard this was going to happen. We surveyed business and industry down there. We talked to the college universities down there and asked, what is this all about and how many people are you going to employ? When you look at their gas bill that is $\frac{1}{5}$ as large as ours and they employ directly 250,000 people, we came back to try and figure out, how do we take advantage of that? And the first thing we have to do is go back to the industry themselves and say, what are your needs?

And there is a second part of this that I think is equally important. We have established a school of entrepreneurship also because along with the business and industries that are being created in Northeastern Pennsylvania, a lot of new businesses are going to start, you know, dry cleaning, trucking, all kinds of different things that go along with it. So we also have to train young people to have the knowhow in order to get into these businesses. And actually, we geared our program to veterans, returning veterans who would like to start new programs.

But the link is going back to the industry and asking them what they need and how can they help us. And it is all about partnership. It is all partnerships with us, the four-year schools, with federal government, with State government, and with these people to be able to design things. And with their help we can build them quickly.

Mr. BARLETTA. And I agree, especially with Marcellus Shale as you are doing at Lackawanna. You know, we have only scratched the surface of what the needs and demands and job demands will be from that industry, many of which, you know, we may not be able to realize, you know, what we will need to make sure that we are supplying those jobs, because this industry will absolutely create more opportunities for people.

Mr. ANGELL. But there are different types of accounting that takes place, different type of administrative background, a different kind of mapping. All of that stuff has to take place yet. And you can design it but if you don't go to the people who are the users and ask them what they need, you are not going to design something that is going to work. So you have to start with those companies.

Mr. BARLETTA. Mr. Leary, do you have any suggestions for how businesses and institutions of higher education could better work together?

Mr. LEARY. I think there is always room, certainly, for improvement and collaboration between business and industry. And particularly in our setting at a community college, the diversity of our disciplines suggest that we need to have good rapport in terms of just high-end curriculum. If it is a short-term need rather than an associate degree need that will fill an employment basis, then that is something we need to work on immediately. And so as a result you have diploma programs which are short-term, several months.

We have certificate programs for training, associate degrees, and we have a very engaged dime print program as well to develop, which we are designing in such a way that it is seamless to go from dime print to credit so that—sometimes people don't feel comfortable. Especially if you are 35 years or 40 years of age and you lose a job and you have to get some skills, you have to acquire some skills quickly. And in that regard we need to be able to respond to someone who comes in and says I need something in six months. And we try to figure out how we can match that individual's competency and skills with the appropriate program. And our career services office, along with our workforce development department, works very hard on that to succeed in that area so that we are helping each individual student.

But there is collaboration in Northeastern Pennsylvania among the colleges and universities so we also attempt not to basically replicate other programs that are successful. Particularly in terms of business and industry, each of us has—I believe we do—advisory councils that tell us specifically what they need and how to design to the program because they are the experts. The educators provide the opportunity, provide the training and the education, but the individuals who are out there in the private sector—they provide us with keeping us updated on what is needed in the region.

Mr. BARLETTA. Thank you. Thank you, Mr. Chairman.

Chairman KLINE. Thank you, Mr. Barletta. Winding near the end here. Everybody has been patient in enduring the time at the table, but I have a couple more questions if you can just hang on for a just a minute. I want to explore a couple of things.

One, Dr. Verret, I am sort of getting over my flashback to organic chemistry. It has taken me a while to do it. I was thinking about

you have to practice. And I remember the professor when I went in with my hat in my hand and said, you know, this makes perfect sense to me when you are standing up there and you explain it to me, but I am just doing horribly on the tests. And he said almost exactly what you did. He said it is like playing the piano. You have to practice. So go get stacks of paper and learn to draw hexagons in your sleep and you will just be okay. And so I did that. And if you don't understand hexagons in organic chemistry, you have chosen a better field. Good for you.

You did mention that in order to get students interested in science and technology, engineering, mathematics that you have got to go down to the middle schools. And I am on the Board of Visitors, a sort of board of trustees if you will to the U.S. Naval Academy. And they have had an active program for some time of reaching out to schools around the country, but particularly in the Maryland area to get kids interested. And they have special summer programs where they bring kids in and start to introduce them. Is that something that you see around here, either at Wilkes or other schools where you have got this real outreach to the middle schools to get the kids engaged and, you know, building robots and that sort of thing?

Mr. VERRET. It is something that we do at Wilkes, something that there is a larger interest. We have some with the medical college where we are doing this. Two examples that we have—we have an initiative called Science in Motion, which is state-funded. And Science in Motion where our science faculty, they bring equipment and experiments or demonstrations to the schools and work with teachers in the middle and high schools to make the high schools in that region. We even have a van that takes things to the high schools. That is one issue.

The other issue is we have WEBS, which is Women in Experimental Biological Sciences. We have summer academies and weekend programs for young women to encourage young women in middle school and above to help them consider the sciences. What I would say is that we probably don't have enough because the other piece I think that is really missing is that we mean to actually give greater help to teachers and general teachers in the much lower grades, to give them the skills to actually help develop the imagination of students at that level. But I think that is a larger program because we have difficulty getting our best students in the sciences to consider teaching professions. And it is not just here. It is a national problem. Unless we help—we deal with that, I think we will have a problem. And we did that better 50 years ago.

Chairman KLINE. So I didn't mean to interrupt but I am envisioning this trip down to school, that you have got a van with presumably I will just call them toys, so to speak. It seems to spark their interest. And these are your faculty or are these your students or both?

Mr. VERRET. These are faculty. We have students working with them and also we have some staff that are attached to that program. And we have the funding to continue that. We also have the WEBS program where we do that directly with our faculty. We bring the students on campus to work with our faculty.

Chairman KLINE. Okay. Thank you. Now, just very quickly, Dr. Verret, you said you were going to give me some figures on your placement ratings. Ms. Seaman, you gave us 77 percent. Mr. Angeli, do you know a job placement rate coming out of Lackawanna?

Mr. ANGELI. About 75 percent of our students transfer to 4-year schools. But all of our other programs have a variety of figures. I will use the gas industry. It is 100 percent. Right now the vascular allied health services program, they are in the high 90th percentile. Those technical programs are in demand.

Chairman KLINE. Are you tracking those?

Mr. ANGELI. Yes, we do.

Chairman KLINE. Okay. Thank you. Mr. Leary, are you doing the same?

Mr. LEARY. Yes, sir. We are tracking it as described. It varies by program.

Chairman KLINE. Right.

Mr. LEARY. For our health sciences graduates, it is about 100 percent. So we continually look at that to make certain that our programs are up to date with respect to what the opportunities are because we are more sensitive to that in terms of 85 percent of our graduates remain in the region. So we need to know, you know, basically what the region is demanding. But it does vary by program, Congressman.

Chairman KLINE. All right. And if you have those numbers, if you could just submit them for the record.

Mr. LEARY. Yes.

Chairman KLINE. I think that is an important part as we are trying to connect higher education to the workforce, that that is literally the connection if you walk out and you get a job. And I do understand that if you go to different schools and a lot of these numbers are difficult to track, graduation rates and things, the way the government has conspired to come up with that. Did you know that in order to count as a graduation rate you have got to be a first-time student? So if you have transferred someplace, your graduation doesn't even count. So we have got some interesting problems out there.

Well, listen, thank you very much, everybody. I thank the witnesses for being with us today. Mr. Barletta, did you have any comments?

Mr. BARLETTA. Again, Chairman Kline, I want to thank you again for coming back to my home, my part of the country, and again, to thank the panels for the very informative hearing that we had today as I said earlier, which we are blessed here in Northeastern Pennsylvania to have so many quality higher education opportunities. And the information you shared with us today will be helpful as we go back to Washington and continue to make the very tough decisions that we must make to get our fiscal house in order.

But I believe we will all agree that the bottom line of what we are trying to accomplish here is job opportunities for not only the next generation but for the many Americans who have fallen out of the job market as we try to retool them. And many are now looking at other opportunities. I see so many now going back to higher

education institutions to find a new path and a new job. And today we have a very diverse panel of junior college, community college, proprietary schools, and Wilkes University. And we have many more here in Northeastern Pennsylvania and I believe the Chairman will be able to go back to the committee and report what you are doing to create more jobs. And again, thank you to them.

Chairman KLINE. Thank you, sir. Again, thank all of you here, the people in the room, witnesses from both panels. This is very helpful for us to get out of Washington, come out, and see where the people are actually living and working and providing the education and the jobs and so we very much appreciate your input. We wish you all great success in your endeavors. Again, thanks to all. There being no further business, the committee stands adjourned. [Witness responses to questions for the record.]

Additional Information Supplied for the Record From Mr. Angeli

LACKAWANNA COLLEGE GRADUATION RATES

The average graduation rate of students enrolled in Lackawanna College in the most recent four years is 29%, and this academic year, it is 30%. Being a two-year institution, however, this statistic is not necessarily an accurate reflection of how many students actually complete their college degree—Associate’s or Bachelor’s, since many of our students transfer to four year colleges without actually completing their Associate’s degree requirements. For example, if they switch their major and transfer to another college, our statistics only reflect that they attended Lackawanna College, and not that they graduated, which can significantly reduce the calculated graduation rate.

Here is a comparison of other regional 2-year institutions, based on the IPEDS (Integrated Postsecondary Education Data system) reporting for the incoming class of Fall 2006:

GRADUATION RATES
[Percentage]

School	Percentage
Lackawanna College	28%
Harcum College	22%
Northampton Co Area CC	21%
Luzerne Co. Community College	20%
Harrisburg Area CC	14%
Bucks Co CC	12%
Delaware Co CC	10%
CC of Philadelphia	08%

FINANCIAL AID

According to the numbers that we reported for College Board 1,151 of our 1,483 (77%) of all students were awarded some type of financial aid.

When you include Police Academy and students in the paramedic program, the percentage of students receiving some type of financial aid is 96.

EFFECT OF PELL GRANTS ON LACKAWANNA COLLEGE

Per government statements, the cost to fund PELL has doubled over the past three years, largely because the number of recipients has increased so much due to downturns in the economy. But providing opportunities for low-income students to attend college is exactly why the PELL grant program was created.

At Lackawanna, over the past 7 years, we have seen moderate growth in the PELL funds we award, primarily proportionate to increases in enrollment. Beginning in 2008 however, up until the present, we are seeing annual growth of over \$1 million—\$2.4 million awarded in 2008-2009 and as of today, \$4.1 million awarded for 2010-2011.

For 2010-2011, to date, we have awarded PELL funds to 1,167 students. Forty-eight percent (48%) of our students receive the maximum award. If PELL funds are cut by \$845, our students will lose over \$950,000. To date for this year, we have provided some kind of financial aid to 1627 students, including degree, Paramedic and Police Academy. So 72% of our aid recipients receive PELL.

Looking from another prospective, PELL funds alone (at their current funding levels) will cover 49% of our annual tuition for a student who has maximum PELL eligibility. This certainly helps to make Lackawanna College affordable.

OTHER FUNDING CONSIDERATION FOR LACKAWANNA COLLEGE STUDENTS:
STATE FINANCIAL AID GRANTS (PHEAA)

PHEAA state grants are limited to an amount authorized in each year's state budget. Over the past few years, due to budget constraints, PHEAA grants at Lackawanna have decreased from a high of \$4000 in 2007-2008 to the amount PHEAA is proposing for this year \$2608. Last year (2009-2010) Pennsylvania students attending Lackawanna who were fully eligible received \$3014. For 2011-12 the same students would see a \$406 decrease. We awarded PHEAA to 691 students and so the overall loss is over \$250,000 (note: this is under estimated because not all students receive the full award). Last year if a student received a full PHEAA grant, the grant covered 27% of tuition. For the upcoming year, the grant will cover 23% of the same tuition cost.

JOB PLACEMENT/EMPLOYMENT

We have not been able to successfully track employment statistics due to low post graduation participation in surveys. However, through our allied health programs, we have been able to study these figures through the program director. Here are some useful stats for employment-driven health programs:

DMS (Diagnostic Medical Sonography) completed Dec 2010 walking in graduation May 2011: 2 employed out of 7 = 28%

DMS completed Dec 2009 walking in graduation May 2010 working: 4 out of 9 = 44%

One student is furthering her education. 4 out of 8 = 50%

Vascular technology degree: Graduated 2010. 6 employed out of 11 = 54%

One student is furthering his education. 6 out of 10 = 60%

Also, our first graduating class in May 2011 in the Natural Gas Technology degree program has successfully provided 100 % placement in internships as well as post graduation employment offers.

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Additional Information Supplied for the Record From Ms. Seaman

The following numbers are directly related to Empire Beauty School's Wyoming Valley Campus, located in Moosic, Pa. As a school system, we have 102 locations in 23 states.

Graduation Rate—71%

Placement Rate—77%

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[Whereupon, at 10:41 a.m., the committee was adjourned.]

**REVIVING OUR ECONOMY:
THE ROLE OF HIGHER EDUCATION IN
JOB GROWTH AND DEVELOPMENT**

**Tuesday, March 22, 2011
U.S. House of Representatives
Committee on Education and the Workforce
Washington, DC**

The committee met, pursuant to call, at 10:00 a.m., in the Campus Center, State University of New York, Institute of Technology (SUNY IT), 100 Seymour Road, Utica, New York, Hon. John Kline [chairman of the committee] presiding.

Present: Representatives Kline and Hanna.

Staff Present: Colette Beyer, Press Secretary, Education; Casey Buboltz, Coalition and Member Services Coordinator; Daniela Garcia, Professional Staff Member; Barrett Karr, Staff Director; and Brian Melnyk, Legislative Assistant.

Chairman KLINE. A quorum being present, the committee will come to order.

Good morning, and welcome to our second field hearing of the 112th Congress. It is good to be here in Utica, New York, with Representative Hanna. Thank you all for coming, and special thanks to our witnesses. We appreciate you taking the time to join us today, and we look forward to your testimony.

These are tough times, and although our economic recovery remains uncertain, we are encouraged by recent progress and the resilience of the American people. Families, workers and small business owners from the great state of New York and across the country are leading us toward a more prosperous tomorrow.

As members of the House Committee on Education and the Workforce, we are keenly aware of how closely related education is to the strength of the workforce. A student's success in the classroom will help determine his or her success in the workplace. The evidence overwhelmingly suggests that individuals who fail to advance in their education are more likely to be unemployed and earn lower wages.

Understanding the challenges and opportunities facing local communities is critical to ensuring Washington does not stand in the way of growth and prosperity. As we work to improve the nation's education system and foster a growing economy, it is more important than ever to hear from folks on the ground about the challenges and opportunities they see in our schools and workforce. That's why we're here today.

We want to learn about the policies that may be standing in the way of job creation, right here in Utica. We want to hear your thoughts on encouraging academic success in our classrooms, and get your ideas on how we can work together—on the local, state, and federal levels—to reinvigorate the American spirit of innovation and prepare the students of today to succeed in the workforce tomorrow.

Again, we are grateful to our panelists for participating in today's hearing, and I'm looking forward to getting this discussion underway. Let me also thank my committee colleague Richard Hanna for his gracious invitation to hold a field hearing here in his district. And without objection, I now yield to him for his opening remarks.

[The statement of Chairman Kline follows:]

**Prepared Statement of Hon. John Kline, Chairman,
Committee on Education and the Workforce**

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Good morning, and welcome to our second field hearing of the 112th Congress. It is good to be here in Utica, New York with Representative Hanna. Thank you all for coming, and special thanks to our witnesses. We appreciate you taking the time to join us today, and we look forward to your testimony.

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Mr. HANNA. Good morning, and thank you to SUNY IT for hosting us here today. Thanks to our distinguished witnesses for participating and to everyone in the audience for their interest.

We are very fortunate to have a special guest joining us for this event. My colleague and friend sitting next to me is Congressman John Kline.

Congressman Kline serves as the Chairman of the Education and Workforce Committee in the House of Representatives. Chairman Kline was elected to represent Minnesota's 2nd Congressional District in 2002, and was re-elected to a fifth term in 2010. Chairman Kline is an undisputed advocate for workers and employers and a

champion for students, parents and teachers. Thank you, Chairman Kline, for joining us today.

This is an official hearing of the House Committee on Education and the Workforce. This is the committee through which reforms to the No Child Left Behind law are proposed and oversight of initiatives such as Race to the Top occurs.

Although we are living in some of the most difficult times in our history, I am of the opinion that we now have a unique opportunity and obligation to reconsider and perhaps reinvent how we educate our people.

The topic of today's hearing is Reviving our Economy: The Role of Higher Education in Job Growth and Development.

We hope to learn about the economic environment of our community. In order that we may assist employers who have the need and ability to hire, and to suggest means by which we can match skill sets, education, and potential employment. We are also interested in how local higher education institutions in Central New York are fostering job creation, growth, and building partnerships with each other and industry to achieve the goal of building the best and most talented workforce.

We all know that our part of New York State has suffered from brain drain for many years. And of course, like the rest of the country, we are still recovering from the recession. Unemployment in the Utica-Rome area remains at around 8 percent.

We can change that. We are blessed with dozens of fine colleges and universities and burgeoning 21st century industries. I hope this hearing will help shine a spotlight on some of the collaborative efforts already underway between schools and employers, and encourage more in the future.

One of my top priorities in Congress is to find a way to help keep our children here at home. I want all of our children and theirs to have the same opportunity that we did, to live, succeed, and thrive here in Central New York. That will not be possible without the dedicated and thoughtful efforts of our higher education institutions, the innovation and resourcefulness of our local companies, and the critical support of state and county agencies and public officials.

So let's get the hearing underway. We have two panels of witnesses. I would like to recognize Chairman Kline to introduce our guests on the first panel.

[The statement of Mr. Hanna follows:]

**Prepared Statement of Hon. Richard L. Hanna, a Representative in
Congress From the State of New York**

Thank you, Mr. Kline.

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Chairman KLINE. Thank you, Mr. Hanna.

Pursuant to Committee Rule 7(c), all committee members will be permitted to submit written statements to be included in the permanent hearing record. And without objection, the hearing record will remain open for 14 days to allow statements, questions for the record, and other extraneous material referenced during the hearing to be submitted in the official hearing record.

It is now my pleasure to introduce our witnesses today. We have two distinguished panels of witnesses today and I would like to start with the first panel.

Mr. Anthony Picente is the 10th Oneida County Executive and was unanimously appointed by the Oneida County Board of Legislators in 2006. During his tenure, County Executive Picente has focused his efforts on economic development, maintaining infrastructure, consolidation of services, and dealing with the numerous unfunded mandates placed on county government by New York State. He has led Oneida County through troubled economic times, and has reduced the county government by over 10 percent to help reduce the burden on taxpayers. Despite this reduction, Oneida County has still provided the quality services that residents have come to expect.

Mr. Dave Mathis has been the Director of Oneida County Office of Workforce Development for 25 years. Prior to that, he served as Deputy Director of Oneida County Office of Employment and Training. He has also served as a trustee of Mohawk Valley Community College for more than 34 years. He has served as Chair of the MVCC Board of Trustees from 1983 to 1987, the first MVCC graduate to serve as Chair. Mr. Mathis served once again as Chair from 2004 to 2006 and currently serves as Board Vice Chair.

Dr. John Bay is the Chief Scientist of Assured Information Security where he oversees their Research and Development Program. Prior to joining AIS, Dr. Bay was a member of the Air Force's Scientific and Professional Cadre of Senior Executives, and served as the Chief Scientist of the Information Directorate of the Air Force Research Laboratory in Rome, New York. Before his career in the Air Force, Dr. Bay was a Program Manager in the Information Exploitation Office of the Defense Advanced Research Projects Agency, Arlington, Virginia; a Tenured Professor of Electrical and Computer Engineering at Virginia Polytechnic Institute and State University, Blacksburg, Virginia; and an Engineering Fellow at the Raytheon Corporation.

Welcome to you all. We are using a timing device here. Let me just go over that again, one more time.

There is a little box here in front of the witnesses. When you start your testimony Daniela will start a timer, there will be a green light on for about four minutes and a yellow light for one minute, then a red light. And we would ask you to try to wrap up your testimony shortly after the red light comes on.

Okay. With that, Mr. Picente, you're recognized.

**STATEMENT OF ANTHONY J. PICENTE, JR.,
COUNTY EXECUTIVE, ONEIDA COUNTY**

Mr. PICENTE. Thank you, Chairman Kline, thank you Representative Hanna, and all who are gathered here today.

My name is Anthony J. Picente, Jr., and I have had the honor to serve this county as their County Executive since 2007. I welcome you here today and thank you for hearing our testimony and for allowing us in Herkimer and Oneida County to have our voices heard.

As County Executive since 2007, and having worked in government for three decades, I have a strong background in working with employers and our community college. And also have the distinction of being the first graduate of MVCC to become Oneida County Executive.

As Regional Administrator for the New York State Labor Department serving ten counties in the late 1990s and early part of this century, I helped lead the transformation of what was known as the Unemployment Office to the One-Stop System of Workforce Development. I've worked with CEOs across this county to understand their needs from what it takes to hire a skilled workforce and in developing financial incentive packages to help them grow.

For another five years I served as vice president and regional director for Empire State Development Corporation, the State's arm for economic development. And with Empire State Development serving six counties, my office was involved in numerous projects resulting in millions of dollars in State assistance and leading to the creation of over 3,700 new jobs and the retention of over 1,300 existing jobs—13,000, excuse me.

Successful economic development not only requires that we create shovel-ready sites, but also development of a workforce that can fill the plant the day that it opens. Our Workforce Development and Educational System must be ready to handle the challenges that are on our horizon. We cannot simply expect that the work-

force of the future will develop on its own. We need to work differently.

Let me tell you one anecdote about our region, and how we have worked collaboratively to help grow an important sector.

Several years ago, Empire Aero, an aircraft repair firm located here. As those of us at the regional level looked at the economic potential of that sector, not just the one employer, we realized that we did not need to just create a course, train a few people and hope for the best. We needed a well-developed, intentional plan so that this sector could grow to its own potential, regardless of whether we had one or ten employees in the area.

That process brought together a number of partners. These partners included Mohawk Valley EDGE, our economic development agency, the Workforce Investment Board, Oneida County Office of Workforce Development, the New York State Department of Labor, Empire State Development and Mohawk Valley Community College. The college looked at this workforce issue as an opportunity to increase our region's training capacity. MVCC went far beyond the needs of the moment by creating a full program aimed at the Airframe and Power plant credentials needed in the industry, a program that is still going strong. We all probably crossed over into one another's sphere of authority about a hundred times in the course of the process, but that is why the process worked. In the end, the entire partnership was developing the workforce for this sector, which is why even after the initial employer who started this chain of events has transitioned from the region, we still have a successful and growing sector, as well as programs that are meeting the needs of our employers.

We built something from scratch to serve the needs of our region, and we have been successful because every partner invested time and resources.

I think there is a very strong message in that, and one I wish to focus upon. I want to make sure that we are doing the same to meet the needs of employers and create a skills base that will enable us to attract new industry.

For example, our region is working hard with a tremendous show of perseverance to develop a site right near this hearing that can become a nanotechnology facility. We are up to our ears in permitting and infrastructure and all of the other pieces of a major economic development project.

At the same time, staff from our workforce system, Mohawk Valley Community College, Herkimer County Community College, Utica School of Commerce, SUNY Institute of Technology, and others, have been meeting to discuss how we can adapt current career pathway models to continually raise the bar in programs that lead towards advanced manufacturing. I think it says volumes about the commitment of our colleges and our workforce system that a partnership of staff members from both systems have been behind virtually every successful training grant project in the last few years. Not every partner gets a windfall on every project, but the partnership endures and our efforts become stronger due to all of this effort.

From Oneida County, the stakes are getting higher and the challenges are growing. We know the day we enter the nanotechnology

business there will be some very strong demands for some very high-skilled people. Whether our training programs build partnerships or try to refine ways to move training under the broad nanotechnology umbrella, the preliminary infrastructure for those training programs is being built through our workforce system and our colleges.

It's slow going because this is one more task on top of many others. I believe this represents one of the great challenges facing our community; with understandably limited resources, how does a medium-sized community such as ours embark upon the capacity building it needs to do in order to develop a workforce, development education and training, and infrastructure that keeps pace with the needs of the future? Developing quality technical and professional curriculum is neither easy nor quick; however, it is essential.

If we really want to plan for the future of our economy and build a system of postsecondary training and education that works, then we need to invest in that effort with strong federal leadership and support. One of the ways that all of us at all levels of government can address the reality that there are more needs than we can ever fully fund, is to ease regulatory burdens and mandates so that the agencies and governments on the front lines of delivering services, those who know best what is needed, can react and respond without being constrained by rules imposed with the best intentions that end up being burdens.

One of the reasons we are here in the first place is that community colleges are able to operate with maximum flexibility because the decision-making capability is close to the community. Each community faces at least one complex problem that is so unique to their region that no best practice is going to work. Let's empower communities to tackle those issues and develop the capacity to create workforce and training solutions.

We are living in revolutionary times. The Mohawk Valley economy must adapt to global economic changes and a demographic shift creating urgent needs to help upgrade workforce preparation for all segments of our population.

Educating a workforce that requires extensive postsecondary education and training will not happen overnight, but we are working overtime to be ready for the day when opportunity arrives.

We continue to look at every possible way to maximize the skills of the workers we have, the potential of those in transition and the educational achievement of those who have not yet graduated.

Workforce development is cornerstone of economic development. Just as the jobs of the Industrial Revolution grew up around natural resources such as water, the jobs of the knowledge revolution of the 21st Century will cluster in regions that can provide a diverse, trained and highly motivated workforce.

The strategies and programs we develop as part of our partnership between the workforce system and community college system will do more than shape the future of our economy; they will shape the lives of the Mohawk Valley's future generations.

[The statement of Mr. Picente follows:]

Prepared Statement of Anthony J. Picente, Jr., Oneida County Executive

Good morning. My name is Anthony J. Picente, Jr., and I have the honor to serve the people of Oneida County as their County Executive. I wish to welcome you today and thank you for hearing our testimony and allowing us in Herkimer and Oneida Counties to have our voices heard. As the County Executive since 2007, and assistant to a prior county executive for five additional years in the early 1990s, I have a strong background in working with employers and our community college.

As Regional Administrator for the New York State Labor serving ten counties in the late 1990s and early part of this century, I led the transformation of what was known as the unemployment office to the One Stop System of Workforce development. I've worked with CEOs across this county to understand their needs from what it takes to hire a skilled workforce and in developing financial incentives packages to help them grow.

For the next five years I served as Vice President and Regional Director for Empire State Development Corporation, the state's arm for economic development. With Empire State Development serving six counties my office was involved in 87 projects resulting in over \$29 million of state assistance. These projects led to the creation of over 3700 new jobs and the retention of over 13,000 existing jobs.

Successful economic development not only requires that we create shovel ready sites, but also develop and attract the work force that can fill the plant the day it opens. Our work force development and educational system must also be ready to handle the challenges that are on our horizon. We cannot simply expect that the workforce of the future will develop on its own. We need to work differently.

Several years ago, Empire Aero—an aircraft repair firm—located here. As those of us at the regional level looked at the economic potential of that sector—not just the one employer—we realized that we did not need to just create a course, train a few people and hope for the best. We needed a well-developed, intentional plan so that this sector could grow to its full potential, regardless of whether we had 1 or 10 employers in the area.

That process brought together a number of partners. These partners included Mohawk Valley EDGE, our economic development agency, the Workforce Investment Board, Oneida County Workforce Development, The New York State Department of Labor, Empire State Development and Mohawk Valley Community College. The college looked at this workforce issue as an opportunity to increase our region's training capacity. MVCC went far beyond the needs of the moment by creating a full program aimed at the Airframe and Power plant credentials needed in the industry—a program that is still going strong. We all probably crossed over into one another's sphere of authority about a hundred times in the course of the process, but that is why the process worked. In the end, the entire partnership was developing the workforce for this sector, which is why even after the initial employer who started this chain of events has transitioned from the region; we still have a successful and growing sector as well as programs that are meeting the needs of employers. We built something from scratch to serve the needs of our region, and we have been successful because every partner invested time and resources.

I think there's a very strong message in that, and one I wish to focus upon. I want to make sure that we are doing the same to meet the needs of employers and create a skills base that will enable us to attract new industry. For example, our region is working hard with a tremendous show of perseverance to develop a site right near this hearing that can become a nanotechnology facility. We are up to our ears in permitting and infrastructure and all of the other pieces of a major economic development project.

At the same time, staff from our workforce system, Mohawk Valley Community College, Herkimer County Community College, the Utica School of Commerce, SUNY Institute of Technology and others have been meeting to discuss how we can adapt current career pathway models to continually raise the bar in programs that lead towards advanced manufacturing. I think it says volumes about the commitment of our colleges and our workforce system that a partnership of staff members from both systems have been behind virtually every successful training grant project in the last few years. Not every partner gets a windfall in every project; but the partnership endures and our efforts become stronger due to all of this effort.

For Oneida County, the stakes are getting higher and the challenges are growing. We know the day we enter the nanotechnology business there will be some very strong demands for very high-skilled people. Whether our training programs build partnerships or try to refine ways to move training under the broad nanotechnology umbrella, the preliminary infrastructure for those training programs is being built through our workforce system and our colleges.

It's slow going because this is one more task on top of many others. I believe this represents one of the great challenges facing our community: with understandably limited resources, how does a medium-sized community such as ours embark on the capacity building it needs to do in order to develop a workforce development education and training infrastructure that keeps pace with the needs of the future? As our economy is requiring higher and higher skills, the capacity of our systems to deliver those skills must continue to grow.

When the One-Stop System began, one central precept was to be ready to respond to employers. Even in the short time since WIA was adopted, that has taken on new meaning. Employers are now demanding—and needing—employees who cannot be trained in days or weeks, but require months or in some cases years. I believe that efforts to help regions build the capacity to deliver high-level skills training and postsecondary education are every bit as essential as the training provided to people in need. Developing quality technical and professional curriculum is not the same as hiring a machinist to teach a course in running an old-fashioned milling machine. However, support for those kinds of efforts is not consistent. If we really want to plan for the future of our economy and build a system of postsecondary training and education that works, then we need to invest in that effort. As someone who has to live within a budget and say the word “no,” I’m not going to tell you the answer is in billions of new federal dollars. However, the way we invest resources should align with our critical priorities, and I am convinced that investments to build capacity are a critical priority to develop key growth sectors in our region, or any region.

Management is the art of getting things done. We all have different styles. I commend the attention all of you must pay, when making allocations, to ensuring that there is strict accountability for the money the government spends. I’m a taxpayer. I want my money used wisely. I also know that flexibility is a vital element to success. As this committee looks at the Workforce Investment Act for refinements and updates, I strongly encourage you to provide the local Boards that make up the system with the greatest possible degree of flexibility to set needs and priorities. One of the ways that all of us at all levels of government can address the reality that there are more needs than we can ever fully fund is to ease regulatory burdens and mandates so that the agencies and governments on the front lines of delivering services—those who know best what is needed—can react and respond without being constrained by rules imposed with the best of intentions that end up being burdens. One of the reasons we are here in the first place is that community colleges are able to operate with maximum flexibility because the decision-making capability is close to the community. One of the two key partners in the workforce-college system can move fast. In a private sector world where employers move fast, all parts of the system need the flexibility to be innovative and creative. Each community faces at least one complex problem that is so unique to that region that no best practice is going to work. Let’s empower communities to tackle those issues and develop the capacity to create workforce and training solutions.

We are living in revolutionary times. The Mohawk Valley economy must adapt to global economic changes and a demographic shift creating urgent needs to upgrade workforce preparation for all segments of our population.

Educating a workforce that requires extensive postsecondary education and training will not happen overnight, but we are working overtime to be ready for the day when opportunity arrives.

We continue to look at every possible way to maximize the skills of the workers we have, the potential of those in transition and the educational achievement of those who have not yet graduated.

We will need to develop programs that learn from the past and focus on the changing demographics of our communities, so that we are not just providing one-shot training, we are engaging lifelong learners.

Workforce development is the cornerstone of economic development. Just as the jobs of the Industrial Revolution grew up around natural resources such as water, the jobs of the knowledge revolution of the 21st Century will cluster in regions that can provide a diverse, trained, highly motivated workforce.

The strategies and programs we develop as part of our partnership between the workforce system and community college system will do more than shape the future of our economy; they will shape the lives of the Mohawk Valley’s future generations.

Chairman KLINE. Mr. Mathis.

**STATEMENT OF DAVID MATHIS, DIRECTOR,
ONEIDA COUNTY WORKFORCE DEVELOPMENT**

Mr. MATHIS. Thank you for allowing me to give this testimony. I look forward to being in front of you this morning to testify. This is a unique opportunity for me and I personally thank you.

However, when you sit next to your boss, you know that you're under immense pressure not to screw up because you might get called into his office later on today. So let me get to my testimony.

Good morning. My name is David Mathis. I am director of workforce development for Oneida County. I have more than 30 years of experience in Workforce Development, and have been director of Oneida County Office of Workforce Development for 25 years. I am also a trustee of Mohawk Valley Community College, a position that I have held for over 34 years; two hats, however, does not mean two perspectives. Both the workforce system and the community college system are vital parts of Oneida County workforce partnership, and the collaboration runs so deeply that without both systems, the workforce, the present and the emerging one of the future, will be hard-pressed to succeed.

At a time when middle skills jobs in New York are projected to increase 38 percent, the highest of all skill levels, strong community college workforce linkages are essential to meet the needs of our employers and communities. Our system of One-Stop career centers is a great resource to help guide workers towards new career pathways and to help them find future employment, but the community colleges are the backbone of our public workforce system's training mission. Through our close partnerships with the community college system, we prepare our workforce for lucrative job opportunities that can lead to life-long careers in high growth and emerging industries such as healthcare, technology, and clean energy.

One of the pitfalls of discussing workforce issues is we end up in the minutia of formulas and acronyms to the extent where the point of our work is lost.

I want to start at the root of our purpose. To that end, let me share this quote from Franklin Delano Roosevelt, who was speaking at a time much like ours, its workforce system roots are in the Great Depression, so that a time much like ours, when people who lived up to their end of the bargain with society one day woke up and found the economy had changed and left their lives as collateral damage.

Roosevelt said: Not only our future economic soundness but the very soundness of our democratic institutions depends on the determination of our government to give employment to idle men.

The system was founded to connect people with work, it continues to pursue that goal, since the inception of the Workforce Investment Act, WIA.

We have One-Stops in Oneida County downtown, and in a downtown office building in Rome that serves the needs of Griffiss and western Oneida County, and one in Utica's State Office Building which serves the eastern end of the county. These centers are the major points of contact between our system and job-seekers who are looking for work. In 2009-2010 program year, more than 12,000 people were served at these centers. For a point of reference, that's

a little over 10 percent of the civilian labor force as measured by U.S. census. Let me stress that. One in 10 people in the civilian labor force of Oneida County came to a One-Stop Center, mostly due to unemployment.

It's important to know who those people are. Sixteen percent of laid off workers did not have a high school diploma. Fifty-eight percent of laid off workers had education no higher than a high school diploma or a G.E.D. Eleven percent had either an associate's degree or bachelor's degree. Twenty-eight percent will work for their employer twenty to thirty years. Forty-eight percent were between the ages of thirty and fifty. In short, the people we see are people who have more barriers to employment than the average population. That's why they are at the One-Stops. They do not have a safety net of contacts, they have us.

When they enter our One-Stops, we provide old-fashioned case management and counseling for workers who have no idea what to do with the next 20 to 30 years of their working lives, along with practical steps to find jobs. The people we serve are those who are less likely to find employment without our assistance.

The traditional role of our One-Stops is to work very closely in connecting these people with employment. We also note the employers who have done focus groups, that they need people who have skills, the levels for adults who either have lost their jobs in the past few years, or those who have never successfully held a job. Employers want new hires with some very important qualifications, strong math skills that equate to roughly the level of algebra, strong technology skills to operate precision equipment, strong I.T. skills, strong science skills, strong writing skills, and strong reading skills. And all of these areas employers are responding to the changing face of work. The only way to get the skills employers demand is to get to a postsecondary or adult training course and learn them. The message from employers is very clear, they do not want us to train for job titles, they want training to prepare their workers for learning and doing. They want what a community college that's created to provide a combination of skills and theory that will not fade away at the next technological change.

The past ten years have been a time of increased partnership between our colleges and our workforce system.

Here at SUNY IT, the workforce development board and SUNY IT staff have worked with the concept of information technology apprenticeships in a project that had a 90 percent placement rate, and has served as a pilot for other efforts focusing training on employment competencies taught in any class instead of the more traditional college classes.

In Madison County, the Renewable Energy Training Center at Morrisville State College was launched because of the partnership between the college and workforce system.

In Herkimer County, Oneida County Workforce Development staff networked with the college to include Herkimer County-based training options in the health care and technology training projects.

Mohawk Valley Community College has been a centerpiece of our college-workforce efforts. When we wanted to power the concept of training disconnected youth in green careers, MVCC created a

project that not only renovated facilities in downtown Rome and downtown Utica. We also had 70 percent of our young adults, who were ages 19 to 24, either enter employment or ended up going to college full-time. MVCC has been the home of our summer youth program for the last 15 years, where we bring disconnected youth onto the college campus to qualify for summer employment.

All of our efforts with our four colleges have been strategic; however, community colleges are ideally suited to be partners in our workforce system, they can best move our customers from either being under-qualified or outdated to the level that they need to be, whether that means short-term training, certificate programs, degree programs, transfer programs, or a combination of on-line and in-person courses. The rich texture of opportunities offered at community colleges is unrivaled.

However, we do need the support of this committee. It's about time that the Workforce Investment Act was renewed. It's been coming, and we look for support from this committee to move that effort forward. And we would like to see a strong connection to higher education in any reauthorization that occurs.

And I thank you for this opportunity to testify.

[The statement of Mr. Mathis follows:]

**Prepared Statement of David Mathis, Director of Workforce Development,
Oneida County**

Good morning. My name is David Mathis. I am the Director of Workforce Development for Oneida County. I have more than 30 years of experience in workforce development, and have been director of the Oneida County Office of Workforce Development for 25 years. I am also a trustee of Mohawk Valley Community College, a position I have held for over 34 years now. In my testimony, I will discuss the employment, training and education issues facing our region and our society wearing both hats. Two hats, however, does not mean two perspectives. It is important for me to note at the outset that both the workforce system and the community college system are vital parts of our Oneida County workforce partnership, and the collaboration runs so deeply that without both systems, the workforce of the present and the emerging one of the future will be hard-pressed to succeed. At a time when middle skills jobs in New York are projected to increase 38%—the highest of all skill levels—strong community college-workforce linkages are essential to meet the needs of our employers and communities. Our system of One-Stop Career Centers is a great resource to help guide workers towards new career pathways and to help them find future employment, but the community colleges are the backbone of our public workforce system's training mission. Through our close partnerships with the community college system, we prepare our workforce for lucrative job opportunities that can lead to life-long careers in high growth and emerging industries such as healthcare, technology and clean energy.

Oneida County Workforce Development / Background

One of the pitfalls of discussing workforce issues is that we end up in the minutiae of formulas and acronyms to the extent where the point of our work is lost. I want to start at the root of our purpose. To that end, let me share this quote from Franklin Delano Roosevelt, who was speaking at a time much like ours—when people who lived up to their end of the bargain with society one day woke up and found the economy had changed and left their lives as collateral damage.

Roosevelt said: "Not only our future economic soundness but the very soundness of our democratic institutions depends on the determination of our government to give employment to idle men."

Ronald Reagan said it with less of a flourish when he said: "I think the best possible social program is a job."

Both presidents reflect the pivotal role of the workforce system—to get people working so they can have better lives, and we can have a stronger society. That is our goal, our mission and our guiding purpose. Oneida County has four main elements to our system:

1. Our One-Stop Centers located in Utica and Rome

2. Our community-based programming
3. Education & Training Programs
4. Our youth programming

We have One-Stops in an Oneida County downtown office building, to serve the needs of Griffiss and western Oneida County, and one in Utica's State Office Building, which serves the eastern end of the county. These centers are the major points of contact between our system and job-seekers out looking for work. In the 2009-2010 Program Year, more than 12,000 people were served at these centers. For point of reference, that's a little over 10 percent of the civilian labor force as measured by the U.S. Census. Let me stress that. One in 10 people in the civilian labor force of Oneida County came to a One-Stop Center, mostly due to unemployment.

It's important to know who these people are. Let's be honest about the world of work. Networking is the most important way to get a job. Depending upon which study you read, between a third and half of all hires are made because a job-seeker knew someone who could steer them to a job, put in a good word, or otherwise open a door. The people who come to One-Stops who need help are the ones who don't have those connections. Some local data from last year helps paint a picture of who comes in our door:

- 16.3% of laid off workers did not have a high school diploma, compared with 13.4% of the state overall.
- 58% of laid off workers had education no higher than a high school diploma or GED, as opposed to 47.6% statewide.
- 11% had either an associate's or bachelor's degree, as opposed to 16% statewide.
- 28% had worked for their employer 20 to 30 years as opposed to 19% statewide;
- 48% were between the ages of 30 and 50; far higher than the statewide figure of 34%

In short, the people we see are the people who have more barriers to employment than the average population. That's why they are at the One-Stop. They do not have a Safety Net of contacts—they have us.

When they enter our One-Stops, we provide core services available to anyone who enters the door. These include assessments of knowledge, skills and abilities, job search and placement assistance. Some of what we do is old-fashioned case management and counseling for workers who have no idea what to do with the next 20 to 30 years of their working lives. We provide an array of seminars about the process of finding work—from how to write a resume to how to deal with job interview questions. Partners at the One-Stops help out with the referrals and services they provide. For example, MVCC uses the One-Stop as a prime place to recruit out-of-work men and women for training programs.

Our region operates One-Stops in Herkimer, Madison and Oneida Counties under the Working Solutions brand, with a commitment to combine the best of high-tech delivery of information and services along with personal counseling by trained experts. Working Solutions services include employment, career information, education and training, vocational rehabilitation, financial aid and scholarship assistance, information on hiring incentives and information on the latest grants to help upgrade employee skills. For employers, Working Solutions offers recruitment and screening of job applicants, computerized matching of job requirements and skills with Working Solutions' pool of thousands of applicants, information on hiring incentive programs and tax credits, resources to support the training of new hires and to upgrade the skills of existing workers, education and wage information, assistance to workers impacted by downsizing, interviewing and meeting space and more.

For job seekers, Working Solutions offers a fully equipped Resource Room to access job listings on line and in print, workshops and seminars to help improve work skills, information on quality jobs with a future, education and training resources, and the one-to-one assistance of workforce professionals to craft and individualized job search strategy.

In addition to people who have lost a job, the One-Stop Centers and One-Stop System are a vital part of the effort to find jobs for adults who may never have been employed. Let me be blunt. This population includes ex-offenders, disconnected youth and adults who may never have worked and may never have made it out of high school, as well as men and women whose lives have fallen apart along the way. The titles of two programs operated in our area say a lot: the Workforce Investment Board's "Second Chance" project for ex-offenders and my office's "Jobs and Hope" project for the homeless. These programs are not all we offer. Major efforts include:

Program	Who funds it	Who it serves	What it does
Green Careers	NY Dept. of Labor	Offenders, adults, disconnected youth aged 19-24	Training in green occupations with case management, support services.
Re-Entry Task Force	NYS Division of Criminal Justice Services	Adult state parolees, returnees from state prison, other offenders	Case management, referral, counseling, job search assistance
Life Skills Program	Federal Workforce Investment Act, County funding	County jail inmates under age 25	Teaches life skills/GED, referral to community for support services, job search
CareerLink	US Dept. of Education, Projects With Industry Grant	Young adults 16-25 with a disability, serves offenders as part of the population.	Provides skills training, job placement, job retention
Second Start	Oneida County, WIA, state grant	Older youth, 19-21, with no diploma/ GED or low basic skills	Case management, referral, counseling, job search help, education assistance.
Second Chance	NYS Department of Labor	Adult ex-offenders, with focus on those leaving County Jail.	Case management, referral, counseling, job search assistance, mentoring.
Probation Employment	Oneida County Youth Bureau	Youth 16-21 who have interacted with the juvenile justice system	Case management, counseling, job search assistance, assistance completing school.
Jobs & Hope	HUD	Homeless adults	Case management, job search
Jail-to-Community	Oneida County Youth Bureau	Youth 19-21 who have interacted with the justice system	Case management, referral, counseling, job search assistance, GED referrals.
YouthBuild	USDOL	High-risk youth 19-24	Construction skills training, placement, support services
Wheels for Work	NY Office of Temporary and Disability Assistance (OTDA)	Low-income area residents	State-funded project to connect entry-level workers with transportation
Wage Subsidy Program	OTDA	Low-income adults	Provides wage subsidy for adults entering employment
Career Pathways	OTDA	Low-income adults/older youth	Provide training, supports for Pathways Training to help adults, youth enter good-paying jobs.
Renewable Energy Task Force	USDOL/NYSOL	Adults/youth	Regional project to convene partners to support green jobs in biofuels & construction
CyberJobs (MVCC)	USDOL	Adults	Regional project to develop the IT sector

The people we serve in these community partnership programs are much less likely to come into the One-Stop, because they've interacted with government in the past—school, military, justice system, social services system, and they don't want to see it again, even if they need it. That's why our workforce system developed strong community partnerships to meet the needs of these high-needs, high-risk customers. Many, such as the young adults in the WIB's YouthBuild project, are part of our system without ever going in our centers. Our system brings its services into the community. A few years ago, we successfully were awarded a federal grant to

provide Life Skills training to offenders in the Oneida County Jail., and although funding to support this effort has all but dried up, we have maintained a small presence to start offenders on the road to employment before they ever leave the jail.

That's not the traditional role of a workforce system, but we have adapted the system to serve as the community connecting point for various systems that need employment to succeed. For example, employment is the critical factor in offender recidivism, yet until our efforts began in the past five years, there was little community outreach focused on employment. This is not just a community issue. An Urban Institute study, "Employment Dimensions of Reentry," suggested that 30% of the annual growth of the labor force is due to offenders leaving institutions and looking for work. Oneida County Workforce Development has had a unique role, along with the Workforce Investment Board, in bringing partners together to serve populations like offenders, the homeless, and young adults with minimal education and skills. We have done so through securing state and federal grants that provide an added layer of services on top of what we already provide through the One-Stop Centers. Even before declining funding required new alliances, we have been forging partnerships because the people we serve have needs that overlap traditional funding silos.

Training and education are vital parts of making anyone ready for a better job. Our workforce system has taken a broad, regional view to providing training in health care, renewable energy and technology in partnership with our local colleges, chiefly our community colleges. It's a pretty simple formula. We ask employers what they need, we ask our colleges to adapt what they do to meet those needs, and we work to secure grant funding that lets us establish creative, flexible programming that focuses on the needs our employers have expressed. Over the past 10 years, we have totaled about \$10 million in training scholarship funds alone that have helped workers acquire degrees and advanced higher certifications. This successful formula is facing some serious strains, because so much of what employers want is now getting to be costlier and require more training time. It's an accepted truth that most jobs being created in our economy require some type of postsecondary training. It's also a fact of life that the national average for community colleges is that about 23% of people who enroll (adults, traditional students, everyone) completes a degree in three years. It's also a fact of life that funding to support training and education has not kept pace with costs. This brings us to a situation where the training adults need may be too costly, take more time than they can afford to spend in training, and require developmental courses to fill holes in an academic background that might be 5 to 15 years in the past. The area of developing new, innovative, shorter term programming to move adults like those I mentioned earlier through training and education at a faster pace with a lower cost is a critical challenge to our system, because until we can do that, we cannot fully meet the needs of our employers.

Having worked in the area of workforce development for 30 years, I can say without reservation that the Summer Youth Employment Program is one of the most important programs our governments can offer. A strong Summer Youth Employment Program can help low-income, unemployed youth get their first job, and point them towards increased academic and career success. The Center for Labor Market Studies at Boston University has made it very clear, year after year, that the job market for youth is drying up, and that lines of class and race separate those who find work through family connections from those who never get jobs because they don't have those connections. Our Summer Youth Employment Program, historically financed through TANF dollars annually appropriated by the state of New York, annually gets 800 or more applications for 300 or fewer slots. This program, which serves youth below 200% of poverty, is an important part of helping young people learn the lessons that come with work. We need to have a national investment in this effort. The youth who flood our program—mostly minority, all low-income—are the backbone of the emerging workforce. We use Workforce Investment Act funding to augment this and support year-round programs that offer summer sessions. This is what two of the youth we served this past summer said back then:

"My teachers in the Upward Bound Program taught me things that I need to know and learn, and we all worked together as a team to get the job done. When I got paid, I bought things that I needed like clothes, things for school, and food for my family and me. It was very helpful to get money to buy what I need and not have to ask my parents all the time."

Rebecca Di.

"I loved this opportunity because we worked hard and got paid for it. We earned it, and that's what life is mostly about. I bought many things with the money I earned, like materials for school."

Ehle Tha.

This is what we do at Workforce Development: We provide those looking for work with the vital connections no one else can give them, and we start those looking for careers along a path that can help them succeed in life.

Employment opportunities

At this point in our regional economic cycle, ripples of the recession are still dominant. The national economic recession continued a long-established trend of contraction in the manufacturing sector, while sectoral growth was chiefly in health care and technology. Within these broad trends, there are areas—such as human services or hospitality—that have experienced growth due to growth of either a major employer or several large ones. The aviation sector had a boom with Empire Aero, a lull when that employer left, and is now growing strong with new employers in the picture.

Of greatest concern for our workforce system is the disconnect between what employers indicate through focus groups they will be needing as the recovery takes hold, and the skills levels of adults who have either lost jobs in the past few years or who have never successfully held a job.

Overall, employers want new hires with some very important qualifications:

- Strong math skills that equate to roughly the level of algebra
- Strong technology skills to operate or oversee precision equipment in a manufacturing environment.
- Strong IT skills to oversee networks, security and systems work in a service sector environment.
- Strong science skills in health care, manufacturing and renewable energy sectors.
- Strong writing skills to communicate with internal and external customers
- Strong reading skills to understand e-mails and instructions

In all of these cases, employers are responding to the changing face of work. Within my lifetime, a high school graduate was able to find a job—a good-paying job—and stay with that employer for decades. Training took place when a new machine arrived. Now, change is such a constant that only with a strong set of foundation skills can anyone ride the changes that are taking place in every sector of our economy. The only way to get the skills employers demand is to get to a postsecondary or adult training course and learn them. Community colleges have the very unique position of covering the range of skills that are so vital to the economic well-being of this region, and our country. That is why we need such strong efforts to link workforce programs with community colleges. I have tremendous respect and admiration for the adult education efforts provided locally by our Board of Cooperative Education Services (BOCES) and in other states by adult education providers. They are essential partners to bring the lowest-skills, highest-need adults to the level where they can participate in vital postsecondary programs. But the needs of our employers are such that we cannot expect success in a training continuum that stops short of a college campus. The message from employers is very clear: They do not want us to train for job titles: They want training to prepare their workers for learning and doing. They want what a community college is created to provide—a combination of skills and theory that will not fade away at the next technological change.

College partnerships

The past 10 years have been a time of increased partnerships between our colleges and the workforce system. Funding secured through grants by Oneida County Workforce Development and the Workforce Investment Board has helped us develop partnerships with a number of our local colleges.

1. Here at SUNY Institute of Technology, the WIB and SUNY IT staff worked to developed the concept of Information Technology apprenticeships in a project that had a 90 percent placement rate, and that has served as a pilot for other efforts to focus training on the employment competencies taught in any class instead of the more traditional college course catalog approach. Although most of the training efforts that are the major focus of our work take place at lower skill levels that those taught at SUNY IT, the college has remained a valuable strategic partner in all of our project development efforts, so that as we build career pathways, they can lead to the higher degrees offered at this campus.

2. Over in Madison County, the Renewable Energy Training Center at Morrisville State College was launched because of the partnership between the college and workforce system.

3. One county to the east, in Herkimer County, Oneida County Workforce Development staff have networked with the college to include Herkimer County-based training options in health care and technology training projects.

4. Mohawk Valley Community College has been the centerpiece of our college-workforce efforts. For example, our Summer Youth Employment Program is entirely based at MVCC, which means our local high school youth have exposure to a college campus just from work readiness activities that are an integral part of our program. MVCC piloted a project called Ready, Set College to increase the numbers of young people getting a college degree before seeking work. That transitioned into an Upward Bound project that now functions as part of our summer workforce youth programming. When we wanted to pilot a concept for training disconnected youth in “green careers,” MVCC converted the concept into a summer program and created a project that not only renovated facilities in downtown Rome and downtown Utica, we also had about 70 percent of our young adults (aged 19-24) either employed or going to college full-time.

5. All four of these colleges send staff to strategic planning sessions that outline how we can respond to employer needs in ways that fit the needs they see as well as the programs they offer. The dialogue has been constant for several years, and is a reason we are able to operate as a regional system. Yes, all the lines of geography are there. However, we plan regionally and act that way because employers and our customers care only about results, not turf.

6. Our private colleges, which have less a focus on workforce training, remain a part of our workforce system. Utica College works with us in its Young Scholars program, so that summer work experience goes hand in hand with year-round academic skills training for at-risk students. Utica College is linked with MVCC in its current CyberJobs effort.

Workforce / community college perspective

Community colleges are ideally suited to be partners with the workforce system. The emerging system that has been shaped by our experience is that the One-Stop Centers and its community-based outreach programs are ideally suited to assessing the skills and needs of unemployed adults and laid-off workers. One-Stop/workforce staff can understand the difference between someone who wishes he or she could have an IT career and someone who actually has the ability to find work in that sector. There are some hard calls to make, before we spend public money on training that will not work out. We’re willing to make those calls.

The many unemployed adults who need basic skills—including, in this community, refugees whose English is not sufficient to bring them up to the next level of wages—are served well by BOCES and the similar adult education providers in other states.

Community colleges fit into the mix by serving as the connection that moves our customers from being either under-qualified or outdated to the level they need to be—whether that means short-term training, certificate programs, degree programs, transfer programs, or a combination of on-line and in-person courses. The rich texture of opportunities offered at community colleges is unrivaled.

But there’s a catch. Sooner or later, everything comes down to money. We love to think outside the box, but we cannot deliver powerful programs outside of funding streams. If local boards and local community colleges are going to be unleashed to address local problems in new, creative partnerships, the workforce and community college systems must have flexibility at the local end and the capability to respond to unique regional opportunities.

Oneida County developed its strong partnership with community colleges over time. The type of partnership we enjoy is now a major workforce priority everywhere. As a recent National Skills Coalition report entitled “New York’s Forgotten Middle Skill Jobs” notes: “Middle-skill jobs—those that require more than a high school diploma but not a four-year degree—account for nearly half of all current jobs in New York, and a substantial share of future job openings. Prior to the recession New York was experiencing shortages of middle-skill workers in crucial industries, like health care and information technology. Although the state has lost jobs across most skill levels during the economic downturn, this has not fundamentally changed the structure of New York’s labor market: the majority of all jobs still require more than a high school diploma. As recovery takes hold in New York and across the nation, a large share of the new jobs created will require middle-skill credentials. With high unemployment in the state, now is precisely the time to ensure that New York is training its residents for the middle-skill job opportunities that will be critical to the state’s recovery and long-term economic success.”

If disaster tomorrow swept through this region, regardless of deficits, there would be action to help the people of this area rebuild their lives. The long-term economic contractions that have taken away job after job have been so gradual they lack the obvious impact of a disaster, but the result on the lives of those impacted has been the same. The response to this should be clear: empowering and strengthening the

workforce system and its partner, the community college system, is the most essential step that can be taken to rebuild our workforce, to rebuild our economy and to rebuild the lives of people who deserve a hand up after the economy has knocked them down.

Chairman KLINE. Thank you, Mr. Mathis.
Dr. Bay, you're recognized, sir.

**STATEMENT OF JOHN S. BAY, VICE PRESIDENT/CHIEF
SCIENTIST, ASSURED INFORMATION SECURITY, INC.**

Mr. BAY. Good morning, Chairman Kline, Mr. Hanna.

I am pleased to have this opportunity to address the role of institutions of higher education in fostering job creation and growth. I'm currently a Vice President and Chief Scientist at Assured Information Security, Inc, or AIS, in Rome, New York. I've been in this position since December of 2009. Prior to joining AIS, I served for eight years as a Senior Executive with the Department of Defense, most recently as Chief Scientist of the Air Force Research Laboratory Information Directorate.

Prior to government service, I was a professor of Electrical and Computer Engineering at Virginia Tech, and an Engineering Fellow at Raytheon Company. It is with these multiple perspectives that I offer my observations on the relationships between private employers, higher education and job growth.

AIS is a small business founded in 2001 to conduct research and development on computer network security issues and methods, national infrastructure protection, law enforcement technology support and related areas of research. Over the past ten years, AIS' national reputation for its innovative cybersecurity has repeatedly demonstrated success in the development of unique cyber capabilities, as well as the associated infrastructure, that enables effective and controlled use of cyber capabilities to achieve national objectives.

AIS, Inc. is headquartered at 245 Hill Road in the Griffiss Business and Technology Park, but we have operating locations in Chantilly, Virginia; Fairborn, Ohio; Portland, Oregon. We have 110 employees and we're proud to have sustained annual growth rates of over 25 percent in each of the past two years. This year we're now in the process of hiring 28 new scientists and engineers for the Rome location and project similar growth in the coming years.

Our primary customers are the science and technology acquisition offices of the Department of Defense, the intelligence community, and both local and national law enforcement agencies. This is a government-focused high-technology business that requires our staff to be highly-educated and cleared. Over 50 percent of our staff hold or are pursuing masters or doctorate degrees in computer sciences, engineering, mathematics, or related fields, and 85 percent hold top secret security clearances.

To maintain our growth, AIS, Inc. aggressively recruits new graduates at the bachelor's, master's, and Ph.D. levels with high academic grades. We first screen candidates for necessary academic and professional credentials, but then focus on finding within that group those individuals who exhibit a passion for technology and a drive to make a difference. We work on cutting edge problems

that may have no solution. We seek employees that can solve a problem that has never been solved before.

We recruit all over the Northeast and Mid-Atlantic regions, but we find that our highest success rate is with institutions in New York State.

Today joining SUNY IT among our most fertile recruiting grounds are Clarkson University and Binghamton University.

To a great extent the education of our employees is only beginning when they join the company. AIS strongly encourages continuing graduate education and pays 100 percent of the costs of our employees earning graduate degrees. We maximize the value of this policy by forming enduring partnerships with the institutions by which we recruit. With SUNY IT, for example, three of the senior management of AIS, including myself and Charles Green, serve on advisory boards, academic programs in cyber technology, computer science, and electrical and computer engineering, as well as for President Wolf Yeigh. Directly AIS has worked together with President Yeigh and his faculty on joint proposals for educational programs and research laboratories that serve to simultaneously educate the SUNY IT students on emerging technology problems of national importance, as well as infuse our government-funding research programs with well-prepared faculty and graduates with practical experience.

We have different but similarly motivated collaborative arrangements with Clarkson University, Binghamton University, Utica College, Syracuse University and Hamilton College, and we are now negotiating more such agreements with Cornell University and more distant institutions such as the University of Maryland and Penn State University. At some of these institutions, our staff members serve as adjunct faculty or formal advisors; at others, the collaboration is less structured. In this manner, we seek to ensure that our new graduates meet our workforce requirements by working with the universities to ensure that they do not leave school to enter the workforce, but rather that they continue their education as part of a broader research environment in the community. It is our goal and strategy to guarantee that the college graduates we hire meet our needs by being part of that education. With institutions with which we maintain this bilateral relationship, our success and satisfaction rate is higher than with institutions from which we simply just harvest the graduates. It is a formula that succeeds for us and one that we would recommend to others.

I appreciate the opportunity to address the committee and welcome your questions.

[The statement of Mr. Bay follows:]

**Prepared Statement of John S. Bay, Vice President and Chief Scientist,
Assured Information Security, Inc.**

Good morning Chairman Kline and Mr. Hanna.

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We recruit all over the Northeast and Mid-Atlantic regions, but find that our highest success rate is with institutions in New York State. Our founder and President, Charles Green, is a graduate of SUNY-IT, the institution hosting this field hearing today. Joining SUNY-IT among our most fertile recruiting grounds are Clarkson University and Binghamton University.

To a great extent, the education of our employees is only beginning when they join the company. AIS, Inc. strongly encourages continuing graduate education, and pays 100% of the costs of our employees earning graduate degrees. We maximize the value of this policy by forming enduring partnerships with the institutions from whom we recruit. With SUNY-IT, for example, three of the senior management of AIS Inc., including myself and Charles Green, serve on advisory boards for academic programs in cyber technology, computer science, and electrical and computer engineering, as well as for President Wolf Yeigh directly. AIS Inc. has worked together with President Yeigh and his faculty on joint proposals for educational programs and research laboratories that serve to simultaneously educate the SUNY-IT students on emerging technology problems of national importance, as well as infuse our government-funded research programs with well-prepared faculty and graduates with practical experience.

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I appreciate the opportunity to address this committee and welcome your questions.

Chairman KLINE. Thank you. Thank you very much. Thank you all, witnesses.

We will take now a few questions and try to get some discussion going. I'll ask a couple of questions, and Mr. Hanna will ask a couple, and we will try to provide a little bit more of what we've heard today.

It seems that all three of you are talking about improving the connection between the institution of higher education and the workforce.

Dr. Bay, this is particularly talking about community colleges and people going back and getting perhaps retrained in some cases. And, Dr. Bay, you talked about the relationship that you have established with some adjunct faculty and you being a member of the advisory board. We have heard testimony like this before, as recently as yesterday when we were in Pennsylvania.

I guess my question is how is this working; or more importantly, is there anything in the way of that process of connecting either the community or the employer with the colleges? That's open to any of you.

Mr. BAY. If I might.

You're correct in that this collaboration is a contact sport, but for the most part the relationships are made on an individual basis. These are faculty members that have come to know the individuals at the university or have met at an academic conference or a professional conference or meeting and have found some point of common interest that they later pursued.

There are relatively few programs that institutionalize that kind of collaboration.

An anecdote. When I was leaving the teaching profession from Virginia Tech, my colleagues, when they found out I was going to work in private industry at Raytheon, they said well, that's great, maybe you can get us in touch with those guys in industry; they never answer the phone, they never participate in advanced research technology, maybe you can get them to return our messages. When I arrived at Raytheon, my colleagues there said you're the old college professor, maybe you can get the guys to answer the phone and communicate with us. So it was opening the lines of communication. It was in a great way, repeating the kinds of experiences that I had had at universities.

Chairman KLINE. And so were you able to open those lines of communication having crossed from one discipline to the other?

Mr. BAY. Not entirely successfully, no.

Chairman KLINE. I didn't mean to put you on the spot, but it does seem to me to be sort of obvious, that you need that connection, and it also seems obvious to me that we have not had that connection for some time. We have turned our graduates that didn't have a fit in the workplace, in some cases didn't know what to expect, found out their degree may not be entirely applicable.

I remember when I graduated many, many, many, many years ago, I had a degree in biology, with all apologies to those of you that have studied biology, I found it not to be very useful in the workforce, except I went in the Marine Corps for a three-year stint, and stayed there for 25 years, so it became a moot point.

But I do see that we're increasingly—back to you, Mr. Picente, Mr. Mathis, people that have gone into the workplace, found out that didn't match very well, perhaps they have been laid off. I

think, Mr. Mathis, you reported that 10 percent of the workforce has come through the One-Stop system, it means they're looking for something else.

And so when they go, presumably to community college, again the question is beyond just the services the One-Stop provides, how are they being connected to potential employers in the area?

Mr. MATHIS. I think through the One-Stop system we serve the employers and we serve those that are looking for employment. I think one of the biggest problems we encounter is that employers need trained workers pretty much immediately, and through our system we're part of the—Mohawk Valley Community College is part of the State University of New York. And in some cases, by the time we get programs approved, it can take months if not years, employers cannot wait that long. We have people who are ready to go to work. We have employers who want to hire. We need to have the abilities to create training programs and certificate programs and degree programs for hiring immediately.

And part of what happens so often is that employers will look elsewhere for workers if they can't find them here. So we need to have ways to turn around our system and get them training and to employers fairly quickly.

On my side of the fence in terms of dealing with workforce, we can tie up so often in the process, we spend so much time reporting and trying to monitor what we're doing as opposed to going out and doing it.

When people come into our One-Stop Centers they want to be served, then they want to get training, they want to get a job. And what we need to do is cut down some of the barriers that keep this from happening.

Chairman KLINE. Excuse me for interrupting.

That's my question, because you and Mr. Picente, both have talked about that. I think your quote was, Mr. Picente, your quote was neither easy nor quick. And you asked that somehow they need to ease the regulatory burdens. And I'm not sure if it's the regulatory burdens in the process of developing programs in school or the regulatory burdens in the workplace or both. And so I'm trying to see, frankly, if there is something that we need to be doing in developing the Workforce Investment Act in cleaning that mess up. And it's a mess, it's 47 programs and nine agencies. It ought to be a lot simpler.

Is there something specific that you can address that's sort of getting in the way of this regulatory program?

Mr. PICENTE. I think David hit on it in terms of the ultimate measuring tool that takes place in terms of where you have an employer that needs people to work, that you're not bogged down with all of the red tape and various requirements that lead in terms of those dislocated workers to get them into a particular program. It takes lots of time. And I think in restructuring and reorganizing the Workforce Investment Act, we look at ways in which the system can respond quicker, in terms of those areas of the workforce that needs to be done in terms of training.

Mr. HANNA. Mr. Bay, do you believe that there is a lack of institutional collaboration? And it seems as though there is long times between what Dave describes as people coming in and looking for

work in the lab, because those people who may have—the work is either nonexistent or there is so much friction and so much bureaucracy that they can't match the two in the time period that saves the worker.

Do you believe that there is enough going on in this community? I can tell you I've been traveling to the 24th District now for quite a while, and I can tell you that you are a unique company in terms of what you produce, but that there are dozens of companies in this district that have needs for new workers, and observing there are people educating those workers, and it seems from where I sit that there is something missing, that this is the collaboration between the educator and those people who are hiring, that's kind of my general assumption.

Do you agree with that? Do you see ways that we can improve it? What would you envision as a way to start a path towards better collaboration and our capacity to match people to jobs?

Mr. BAY. Along those lines, one thing I might do is respond to a comment that Mr. Mathis made, and that's what we need from the workforce perspective is not so much workers who are trained as much as they are educated. I think there are opportunities being realized for guiding and counseling under prepared members of the potential workforce for high technology careers, but that there is a mismatch. There is an attempt to train them for specific roles, when what we really need are—is more of a focus on higher education, because our problems are open-ended. We hire graduates who are solving problems that have never been solved before, and it's very difficult to target that skill in a training program versus an education program.

So it may be that degrees should not be prescribed. I'm not an advocate of identifying areas where, say, there is a shortage of civil engineers, for example, but rather advocate expiration of students in their deed program to pursue higher degrees in area of interest to them. And I believe they will make their own opportunity and the workforce will make—local industry will make opportunities for them as well.

Mr. HANNA. So would you suggest that the main premise I'm laying out, is there is a disconnect in education and what you want to provide for a job? What you're suggesting to me is that a higher focus on what is commonly called scientific non-engineering and math (sic), that you would produce more generally in those subject matters and kind of turn them loose.

Mr. BAY. We would much prefer to hire graduates who have brought interest and capabilities in science and technology than to hire somebody who was lab trained in a particular sub-area, yes.

Mr. HANNA. So do you think that we're making a mistake? Is that fair to paraphrase what you're saying, we're making a mistake by pushing people in and offering courses that are so, perhaps narrow and focused, if I could perhaps paraphrase what you're saying, and generally missing the target of keeping those people here and putting them to work for you?

Mr. BAY. Programs vary in the degree to which they focus candidates on specific job skills, but those that do target a specific position, for example, do run the risk of missing that target when a position changes. If the needs of local industry are dynamic, then

we require flexibility and broader education rather than very natural technical workforce education.

Mr. MATHIS. One of the programs we run in Oneida County College boards, it's been around for 12 years and it's funded by—County Core, and it serves college juniors and seniors in college internships, that program has been quite successful over the years, because what we have done, what the county has done, is to cut out all potential barriers.

What we do is look for employers who are willing to pick up 50 percent of the \$9 an hour wage, and after that the county does all the work, the employer interviews, they hire, they put youth into internships, like the one we're talking about, this employer here or others. But it cuts out the red tape, and it lets you actually work in the field. That's so important, because so much of what I've seen, both on the workforce side and on the education side, is that there are just too many barriers to stop us from doing that.

And when the county created the College Core, they took out a lot of those barriers. That's why the program has been so successful, but it puts the connection between the employer and the college students. And for those needs that go back to what I talked about in my testimony about the program that we did in the Airframe maintenance, it was connecting the employer to look at the skills required. Before that, curriculum was just developed on the basis of this is how we develop curriculum, you go into all of these different scenarios in terms of what's required under fixing an airplane. But it's more than that, it's about processing, it's about thinking, it's about working with the employer, what directly they're looking for when that student steps out of school. And those connections are priceless.

Mr. HANNA. We have Chairman Kline. We talked about bureaucracy and unfunded mandates ad nauseam. This is an opportunity to explain about something specific if you would like. You hear about it generally every day. Do you have something that's a particular pet peeve that might originate in this committee that we can talk about?

Mr. MATHIS. All I can say, is we are constantly being monitored by the New York State Department of Labor. It seems like everybody seeks to review one program versus another, and in many ways it just gets in our way. And I think hopefully with the reauthorization of the Workforce Investment Act it's a lot easier if you consolidate to have one review, but when you're constantly being reviewed for one program versus the other, sometimes it just gets to be overwhelming.

So I'm definitely one that gets a little tired of always sitting, listening to somebody coming in reviewing a program after all these years, and in many cases coming up with contradictory recommendations from different areas.

Mr. PICENTE. Just my personal opinion. Part of it is to stop reauthorizing the employer and have an investment in education and then move it towards that focus, and, you know, the focus of putting people to work rather than keeping them out.

Mr. HANNA. Thank you, Dr. Picente. You have a relationship with Clarkson that apparently works well for you.

Mr. PICENTE. Yes.

Mr. HANNA. Dr. Bay, can you give us a brief overview of what that looks like and how we might use it in other places?

Mr. BAY. A specific example, I met a couple of professors, one in mathematics and one electrical engineering at Clarkson at—in fact, it was a meeting of high technology companies along the I90 corridor, and that meeting was held in Rochester about a year ago.

And casually we struck up conversation in the technology areas of common interest and we found that my company had hired graduates of Clarkson and, in fact, former graduate students of both of those faculty members. And so we set up a series of bilateral meetings in Potsdam, and at our company and we decided to pursue research grants with the National Science Foundation and some of the defense research organizations, as well as with the small business in the Oneida Research Program, the Office of the Secretary of Defense, and with those joint efforts, we were able to identify and monitor both upcoming undergraduate students and graduate students from Clarkson who have interests and abilities in areas that we think we could use in the future.

And so we were able to conduct the joint research effort within part government funding and faculty where they train and educate the students that we are interested in working with in the future. And when the time comes that they're ready to graduate, they're certainly first in line, and we feel that we know them well enough, that they're a very low risk potential hire for us.

And this goes in cycles. Each year we have these meetings, identify projects, similar interests and students that can help us, and we track them during their education.

Chairman KLINE. Thank you. I'm going to pick this up in just a minute. We want to move to the next panel fairly soon.

A couple of points that I've been listening to. One is, Dr. Bay, your company is very, very technical. Clearly, you're looking for highly educated—you're talking about people with bachelor's degrees and master's degrees and doctorates and continuing education and working for a higher degree.

And you need problem solving skills, you're moving into an area where people don't necessarily know the answers and so you're looking for a little bit broader problem solving, I gather from your testimony. But some cases, some of the examples that Mr. Picente talked about and Mr. Mathis, were looking for much more specific skills. You're looking at airplanes, preparing airplanes, airplane manufacturing parts, and something like that, employers sometimes want somebody that comes in the door that has a particular skill set and they don't have to spend time doing on-the-job training.

So I think the demands of the workplace can vary pretty dramatically, depending upon the kind of work that we're talking about. And the thing about this hearing and the work that this committee is—we're interested in all of this. And so we look at legislation and ways we might address some of these problems. We have to remind folks that there are many, many different requirements in the workplace and we need the abilities for education to meet those needs. And there are obviously different ways of getting about that.

Again, we've talked about the regulations that get in the way, and that's clearly something that we need to address. The Workforce Investment Act has been—I've been listening to governors now for some time, and there is nobody that tells me that this is a well-organized, well-run efficient program, not one person. It just turns out that getting to it, even in Congress, is a little bit problematic because when you have 47 programs and nine agencies you've got about nine committees in Congress that have jurisdiction so to speak, so we have a little work to do on our own part to try to sort that out so we can make it manageable for ourselves before we can make it manageable for you.

I want you to know that we're thinking about it, we're working on it, we'll be engaging in a bipartisan discussion as we try to figure out how to crack that problem.

So I want to thank you all very much for your testimony, for engaging in the conversation for the graduate work that you're doing out there trying to solve these problems.

And Congress congratulates you, Dr. Bay. Any company that's growing at that rate is an example of what it's about. So congratulations to you all.

And with that, we will thank you and we will move to the next panel.

It is my pleasure now to introduce our second distinguished panel.

Dr. Wolf Yeigh is the current president of the State University of New York, Institute of Technology. Thank you very much for hosting. This is a position Dr. Yeigh has held since 2008.

Prior to becoming president, Dr. Yeigh served as the Vice President for Academic Affairs and Dean of the Faculty of Norwich University in Northfield, Vermont and as Dean of St. Louis University's Park College of Engineering, Aviation and Technology. During his impressive career, Dr. Yeigh was responsible for launching a number of new majors and establishing international cooperation programs in several institutions around the world.

Dr. Ann Marie Murray is the third president of Herkimer County Community College, a position she has held since 2008 and has currently.

Prior to joining HCCC, she served as Vice President for Academic Affairs and was responsible for the oversight of all academic programs and academic functions of Broome Community College.

Dr. Murray also held the positions of Dean of Business and Engineering and Industrial Technologies, Associate Dean of Academic Services, and Department Chair for Mathematics and Science and Engineering Science at Hudson Valley Community College.

Dr. Judith Kirkpatrick was appointed Vice President for Academic Affairs and Dean of the Faculty at Utica College in August of 2004, and was named Provost in August 2009.

Dr. Kirkpatrick came to Utica College from Texas Wesleyan University, where she served as Dean of the School of Arts and Sciences. She also served as Dean of the School of Science and Humanities at Texas Wesleyan, Associate Dean for the Humanities and Fine and Performing Arts, College of Arts and Sciences, at the University of Alabama, tenured faculty member in the Department of Romance Languages and Classics at the University of Alabama,

and Assistant director of the Center for International Studies in Madrid, Spain.

Dr. Phil Williams was supposed to be with us, he is unable to join us today, and without objection his testimony will appear in the record.

[The statement of Mr. Williams follows:]

Prepared Statement of Phil Williams, President, Utica School of Commerce

Chairman Kline and Congressman Hanna, thank you for allowing me this opportunity to speak with you concerning the Utica School of Commerce and the innovative education we are offering students to meet this ever-changing workforce.

My name is Phil Williams, President of the Utica School of Commerce, a two-year proprietary college, founded by my great-grandfather nearly 115 years ago.

We, at USC, are proud of our history and the accomplishments that we have made, but are equally proud to be a part of today's workforce education, and are geared up for the future. USC is a member of the New York Association of Proprietary Colleges ("APC"), which represents 27 degree-granting institutions on 41 campuses throughout New York State. The APC member colleges currently enroll more than 50,000 students in more than 350 educational programs leading to associate, bachelors, masters and doctoral degrees in traditional and emerging fields.

APC represents one of the four sectors of higher education in New York; SUNY, CUNY, the independent colleges, and us. We, in New York, are fortunate to have a higher education system that is highly regulated by the Board of Regents through the New York State Education Department.

Our programs at USC are designed to be practical in nature appealing to the career-orientated student. Not only do we have associate degree programs which can be completed in as few as eighteen months, but we have credit-bearing certificate programs, for quick retraining which can be completed in as few as seven months. We stress individualized attention with an average class size of ten students, and we serve Congressman Hanna's district with campuses not only in Utica, but with branches in Canastota and Oneonta. Students may take classes during the day, the evening, or online. However, at USC, no program can be completed with more than 50% of classes online, because we believe this blend promotes the greatest likelihood of success for students at the associates degree level or below.

We are small with fewer than 500 students at our three campuses. We work with our students to ensure their success with the ultimate goal of placement or promotion. Our current placement rate, as measured from respondents, is 92% for the class of 2010. Quite good, considering the economy. Factoring in non respondents, our placement rate is 78%. Again, quite good when compared to other sectors. Actual statistics are attached with this testimony.

USC has always been a leader in the workforce development area. Today we are a part of a consortium of colleges providing cybersecurity training to residents of Oneida, Herkimer, Madison, Chenango, and Otsego counties through a federal grant administered by the local Workforce Investment Board. We changed our Medical Office Assistant certificate program to specifically meet the requests of our local WIB, and are a part of a five-college consortium providing a variety of health care training programs to 2,500 individuals through 2012.

Working with local insurance companies and agencies in the area, we have developed an approved Insurance Associate Certificate program, as well as a degree option under the Business Administration program * * * Risk Management and Claim Services. Both of these programs resulted from discussions with the insurance industry on how to improve the quality of the local workforce.

In response to the needs of local insurance agencies, our Division of Corporate and Workforce Development has created and received approval for 24 continuing education courses in Property and Casualty Insurance, as well as the Life Insurance markets.

Likewise, through flexible scheduling, we have provided insurance licensing training programs to a number of companies in central New York, including MetLife, Utica National Insurance Group and New York Central Mutual Insurance Company.

In order to meet a strong local, state and national need for licensed Public Adjusters, USC, working in conjunction with several Public Adjuster firms, developed a 40 hour, non-credit, NYS Insurance Department approved, pre-licensing training program.

Working with a major manufacturer of fiber optic supplies, materials and equipment, USC staff developed an "employee directed" evaluation system. This is now being used by over 200 employees each year.

In cooperation with the Cooperstown Chamber of Commerce, USC has developed a five part, leadership and management training program, offered bi-monthly in Cooperstown.

Yes, USC is an active and vibrant part of the workforce community, providing excellent coursework in a variety of venues.

As an employer, although we do not like our employees to leave, we are proud to be a fine training ground for successful advancement. Our current Executive Vice President of Academic Affairs took, what I call an eight year leave of absence, to become Vice President of Academic Affairs at North Country Community College. The current Vice President of Academics at Schenectady Community College came from USC, as does HCCC's Chief Fiscal Officer. MVCC and HCCC have also benefited from USC. Likewise, we have many employees from other colleges.

Again, thank you for holding this hearing and I look forward to answering any questions you may have.

Chairman KLINE. A reminder to the new panel. We have a little box there that has lights, green, yellow, and red, Daniela will control it from here. When it gets to red, please look to try to wrap up your testimony. Your entire testimony will be entered into the record.

Dr. YEIGH.

STATEMENT OF BJONG WOLF YEIGH, PRESIDENT, STATE UNIVERSITY OF NEW YORK, INSTITUTE OF TECHNOLOGY

Mr. YEIGH. Thank you, Chairman Kline, Representative Hanna, and distinguished guests. Welcome to SUNY IT.

Representative Hanna, thank you for bringing the Chairman and this hearing to the Mohawk Valley, to our campus. And thank you for this opportunity to share with you thoughts on higher education's role in job growth and economic development.

Like the nation, our region is at a crossroads. More so than many other parts of the county, this part of New York State is in transition, as our rich history gives way to a bright future. New York's economic stature has been an example for the nation and the world, but it is increasingly clear that we must maintain a shared commitment to ensure that this generation, and future generations of New Yorkers, continue to build success.

Education is key, from the K through 12 foundation laid down by our school districts to higher education and beyond. Our community college partners, and SUNY IT, as a unique representative of the State University system, have and will continue to give students the preparation they need to launch successful 21st century careers. In a global economy, opportunities for success are abundant, and those who pursue life-long education and training will thrive.

Our role as a regional workforce development engine holds great promise, especially in light of our nanotechnology partnership with U. Albany's College of Nano-scale Science Engineering, and the continuing development of the Marcy Nano-Center at SUNY IT. Thanks to the support of our elected officials, SUNY IT is making significant investments in infrastructure and expanding its economic offerings, with new programs in engineering, computer security, biology, and human services, as we look to meet the needs of current and future students.

With both broad preparation in the liberal arts and specific technical competencies, our students are well-prepared to succeed in an increasing array of careers.

At SUNY IT, we're committed to providing affordable, quality, undergraduate and graduate education, and because of our unique history, we have always stressed the importance of applied learning and its connection to students' careers success. Last week, we brought together dozens of potential employers with students preparing to graduate, our career services office and many of our faculty maintain connections with business and industry that help our graduates find jobs and launch successful careers.

To ensure that we—that what our students learn is relevant to workforce and industry needs, many of our academic programs regularly seek professional expertise through advisory boards to keep their curriculum relevant.

Throughout our history, many of our graduates have found employment and professional advancement in our region. But in other cases, graduates in certain programs moved elsewhere, and students who came to us from outside the Mohawk Valley also left the area after graduating. Through our nanotechnology partnership, SUNY IT will be a catalyst, contributing to a more robust regional economy with greater opportunities for all. This model has worked in Albany, and we know it will be successful here as well.

Affordable access to higher education is essential to workforce development, and ultimately to America's international competitive advantage. And maintaining affordability is critical to our students. More than 80 percent of SUNY IT students depend on some form of financial aid, and the federal role in keeping a college education affordable cannot be overstated. We're seeing more and more students with significant financial need. Since the economic downturn, our financial aid counselors encounter students from families in which a parent has lost a job, sometimes both parents have been laid off. Two years ago more than one third of our undergraduate students received Pell Grants, last year that figure increased to almost 40 percent.

Clearly, our students' need for Pell and other forms of financial aid is increasing. Any reduction in Pell Grant awards would be a blow to lower- and middle-income families, and would certainly keep some from beginning or continuing their college education at SUNY IT and at our higher education institutions.

Thanks to the generosity of our alumni, we continue to build our endowment so that we can offer additional support to those students who need it, but because we are a relatively young institution, founded in 1966, we are, in fact, a public college of modest means. So our students have and continue to rely heavily on federal and state aid.

We are proud to be this region's public college, and public higher education is a critical component of workforce preparation, but colleges cannot do workforce development if people cannot afford to go to college. I ask that you and your colleagues in Washington continue to support a federal role in support for higher education.

Thank you.

[The statement of Mr. Yeigh follows:]

**Prepared Statement of Bjong Wolf Yeigh, Ph.D., F. ASME, President,
State University of New York, Institute of Technology at Utica/Rome**

Chairman Kline, Congressman Hanna and other members of the committee, and distinguished guests: Welcome to SUNYIT. Congressman Hanna, thank you for bringing the Chairman and this hearing to the Mohawk Valley and to our campus. And thank you for this opportunity to share with you some thoughts on higher education's role in job growth and economic development.

Like the nation, our region is at a crossroads. More so than many other parts of the country, this part of New York State is in transition, as our rich history gives way to a bright future. New York's economic stature has been an example for the nation and the world, but it is increasingly clear that we must maintain a shared commitment to ensure that this generation, and future generations of New Yorkers, continues to build success.

Education is key, from the K-12 foundation laid down by our school districts to higher education and beyond. Our community college partners, and SUNYIT, as a unique representative of the State University System, have and will continue to give students the preparation they need to launch successful 21st century careers. In a global economy, opportunities for success are abundant—and those who pursue life-long education and training will thrive.

Our role as a regional workforce development engine holds great promise, especially in light of our nanotechnology partnership with UAlbany's College of Nanoscale Science and Engineering, and the continuing development of the Marcy NanoCenter at SUNYIT. Thanks to the support of our elected officials, SUNYIT is making significant investments in infrastructure and expanding its academic offerings—with new programs in engineering, computer security, biology, and human services—as we look to meet the needs of current and future students. With both broad preparation in the liberal arts and specific technical competencies, our students are well-prepared to succeed in an increasing array of careers.

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Clearly, our students' need for Pell and other forms of financial aid is increasing. Any reduction in Pell Grant awards would be a blow to lower and middle income families, and would certainly keep some from beginning or continuing their college education at SUNYIT. Thanks to the generosity of our alumni, we continue to build our endowment so that we can offer additional support to those students who need it—but because we are a relatively young institution, founded in 1966, we are in fact a public college of modest means. So our students have and will continue to rely heavily on Federal and state aid.

We are proud to be this region's public college—and public higher education is a critical component of workforce preparation, but colleges cannot do workforce development if people can't afford to go to college. I ask that you and your colleagues in Washington continue to support a strong Federal role in support for higher education. Thank you.

Chairman KLINE. Thank you, Dr. Yeigh.
Dr. MURRAY.

**STATEMENT OF ANN MARIE MURRAY, PRESIDENT,
HERKIMER COUNTY COMMUNITY COLLEGE**

Ms. MURRAY. Thank you for having me here. It's truly an honor for me and our college to participate in this hearing.

To do so I want to talk to you a little bit about our college. Tell you how we keep our graduates here in the area. What partnerships we have made with local businesses and our other institutions of higher learning. Tell you a little bit about future programs and how we connect to the community.

Herkimer County Community College is a unit of the State University of New York system. We are accredited by the Middle States Commission of Higher Education. Our goal is to transform lives. Our institutional learning includes skills for our students as excellent communication, critical thinking, and an appreciation for the arts.

We have a unique community college in that only 30 percent of our students come from Herkimer County, 70 percent of our students come from not only outside the county but outside the United States, 3 percent of our students come from over 26 different countries.

We offer more than 40 certificate and degree programs but we have a very strong on-line program, and over 100 of our courses and 19 of our degrees and four of our certificate degree programs are available totally on-line.

We do excel in athletics, we are very proud of that. But more importantly we have 28 national academic team of the year awards, which means that our opportunities are not only good in the fields but they're good in the classroom.

A recent economic impact study said that our college contributes \$74.9 million each year to the economy of Herkimer County or roughly about 6.3 percent of the county economy.

Our job is to keep our graduates in this area. We do this by providing local business internship experiences for our vocational majors. We also have part-time job fairs and career fairs that provide opportunities for the businesses to come in and meet directly with our students.

Our students are trained in presentations and workforce on how to apply for jobs and interview skills. We work collaboratively with the local colleges to allow employers to recruit students so that we can improve success for all of the campuses in our region.

Our emphasis is partners in businesses. We do this by maintaining those productive partnerships. These partnerships are critical parts of that activity in that they connect to our academic programming by advisory councils. Our business partners work with us to make sure that our economic programs maintain our current and industry standards. We know that connecting with partners involves person-to-person contact and we have an employer relations specialist on our staff who determines what skill sets are needed for our applicants.

Additionally, we have a part-time program at the Regional Working Solutions Office who assists area job seekers interested in improving their professional qualifications or learning new careers.

We work with our regional partners in funding support for regional training needs through grants. Right now we are involved in grants that involve cybersecurity, green technology, alternative energy, health care, and manufacturing.

Our current programs help meet the needs of our clients. We are looking at future programs that will include agra-business, alternative energies, quality assurance for manufacturing in the health field, and health information technology.

We provide a full range of non-credit professional development training for our workers in collaboration with BOCES as we move to meet the needs of community members.

We provide a variety of businesses and non-profit organizations, trainings, meetings, workshops, press conferences, and special events through the use of our facilities. Our facilities are also available for community forums such as our recent agricultural summit and an upcoming forum on the regional site for development of a nanotechnology center.

We host an executive breakfast which involves business leaders and key speakers. In May we're featuring SUNY Chancellor Dr. Nancy Zimpher.

Our college is positioned to enter the next five years with its strategic plan mapping our future.

If you need to learn more about this, our website is open and we welcome you to visit it to learn more about our strategic plan. Thank you.

[The statement of Ms. Murray follows:]

**Prepared Statement of Ann Marie Murray, President,
Herkimer County Community College**

Background on Herkimer County Community College: Founded in 1966, Herkimer County Community College (HCCC) is a unit of the State University of New York system. The College is accredited by the Middle States Commission on Higher Education, which recently reaffirmed the College's accreditation for an additional 10 year period. We are a residential campus with housing for up to 629 students. According to the Integrated Post-Secondary Educational Data System (IPEDS), enrollment at HCCC in the fall 2010 semester was 3,774 students. Students come to us from throughout New York State and the rest of the nation, as well as from 29 other countries around the world.

HCCC offers more than 40 degree and certificate programs, including a strong on-line offering of over 100 courses, 19 degree and four certificate programs. Key programs at HCCC include: Criminal Justice, Radio/Television Broadcasting and Physical Therapy Assistant. Newer programs include Music Industry, Digital Filmmaking and Gender Studies.

HCCC excels in athletics and has earned its reputation as the "home of the champions," as is reflected by our 32 national championships, 83 regional championships, and 119 conference championships. With 28 national academic team of the year awards, we are also extremely proud of the success of our student athletes in the classroom. Our athletic department also has an outstanding record of community service projects, including the highly successful "Adopt a School Program."

HCCC maintains vital partnerships with businesses and organizations in the community in order to fulfill its mission of "providing high quality, accessible educational opportunities and services in response to the needs of the local and regional communities." Collaborative initiatives include joint grant proposals for providing needed programming in the community and cooperative program implementation through shared resources.

A recent economic impact study completed by Economic Modeling Specialists, Inc. (EMSI) of Moscow, Idaho demonstrated that "the total economic impact attributable

to Herkimer County Community College amounts to \$74.9 million each year or roughly 6.3% of the entire county economy.”

Initiatives to help current students and graduates find employment in the local area:

HCCC Career Services helps prepare students to enter the workforce in a variety of ways including:

- paid internship experiences on campus for vocational majors that allow them to obtain practical experience in their fields;
- no-charge access to Optimal Resume, an on-line resume builder, and to the College Central Network, an on-line resource that allows students to research employment and internship opportunities locally and nationally;
- an annual Part-Time Job Fair and a Career Fair that provide opportunities for regional businesses to meet directly with students to discuss employment opportunities;
- individual sessions with the Career Counselor or Employer Relations Specialist to obtain guidance with job searches; and
- presentations and workshops to help students gain strength in such professional areas as cover letter and resume development, networking and interview skills, as well as in soft skill sets such as conflict resolution and business etiquette.

HCCC Career Services is also a founding member of the Central New York Recruiting Consortium, which was formed by local colleges (HCCC, MVCC, SUNY IT and Utica College) to allow employers to recruit students with improved access to all four campuses.

These initiatives are capped by a Graduate Follow-up Study to track our graduates’ progress after they complete their studies at HCCC and to obtain data that will inform how we develop our programs and services in the future.

Partnerships with local businesses, workforce development offices, and/or other institutions of higher education:

HCCC maintains productive partnerships with regional businesses. We maintain active advisory committees for connecting academic programming to the business community, and our grant-funded Employer Relations Specialist meets with regional businesses regularly to determine staffing needs and skills sets they are looking for in applicants. Additionally, a part-time Program Specialist at the regional Working Solutions office assists area job seekers interested in improving their professional qualifications or learning new careers.

The College partners with regional organizations by maintaining seats on boards including: Mohawk Valley EDGE, United Way of the Valley and Greater Utica Area and the Genesis Group. The College also maintains membership in the County Chamber of Commerce and has a seat on the board.

HCCC works with regional partners in higher education to bring in grant funding in support of regional training needs. Examples include such fields as cybersecurity, green technology and alternative energy, healthcare and manufacturing.

Current or future programs that the institution has developed to address the needs of the local community:

HCCC provides a comprehensive offering of credit-bearing degree and certificate programs that prepare students for careers in regional industries and helps fill the workforce needs of area employers. Examples of such programs not mentioned previously include a broad range of business programs, Computer Network Technician and Support Specialist programs, Travel and Tourism, Human Services, Emergency Medical Technician—Paramedic, Medical Coding/Transcriptionist and Teaching Assistant certificates.

HCCC’s Community Education Office provides a full range of non-credit professional development training opportunities and collaborates with Herkimer BOCES on delivery of programming to best meet the needs of community members.

The College provides a variety of venues for local businesses and non-profit organizations for trainings, meetings, workshops, press conferences, and special events. The Hummel Corporate Education and Training Center features meeting/conference rooms with internet access and full AV capabilities, as well as a 150-seat amphitheater and a computer lab. The Robert McLaughlin College Center provides ample lobby space for job fairs and other events, as well as a 350-seat theater. These facilities are also available for community forums, such as a recent agricultural summit organized by several county legislators or an upcoming forum on a regional site for development of a Nanotech Center.

The College hosts a series of “Executive Breakfast” presentations featuring speakers on topics of importance to the local and regional business community. The series provides opportunities for regional business, government, non-profit and educational leaders to come together to explore current issues. In May, HCCC will host an Executive Breakfast featuring SUNY Chancellor Dr. Nancy Zimpher as guest speaker.

Dr. Zimpher will speak on economic development in New York State and the role of SUNY in that process.

Chairman KLINE. Thank you very much.
Dr. KIRKPATRICK.

**STATEMENT OF JUDITH KIRKPATRICK, PROVOST,
UTICA COLLEGE**

Ms. KIRKPATRICK. Chairman Kline and Representative Hanna, it's my great honor to testify on behalf of the trustees, faculty, administration, staff, and students at Utica College.

Utica College was founded by Syracuse University in 1946 to help meet the needs of returning veterans. From its humble beginnings in makeshift buildings on Oneida Square, Utica College has grown to be a substantial, independent educational institution with a mission that focuses on career preparation. Our commitment to combining liberal and professional studies ensures that students have the knowledge and skills they will need to succeed in a rapidly changing work environment.

One of the most important ways that we do this is to require internships and other field experiences in most of our professional majors, including education, physical therapy, criminal justice, nursing, occupational therapy, journalism, public relations and construction management. These opportunities are developed through faculty or career center relationships with appropriate sites.

In addition to hosting a career fair for all students, our career center actively works with local companies and organizations to help them create an internship program if they do not yet have one and has developed a unique extended job shadow program for our students to introduce them to all aspects of a particular profession. Hands on experience has benefited students in a number of ways; on-the-job training, a chance to provide theories learned in the classroom to the actual situation, opportunities to be mentored by experienced professionals, and perhaps most importantly, the chance to network with prospective employers. Hundreds of U.C. graduates started with their current employers through internships, co-ops, practica, and other applied course work.

The college also benefits from industry-supported advisory groups that ensure that our signature programs remain not only relevant, but also innovative and forward looking.

Advisory group members keep faculty up to date on industry trends and help them develop a curriculum that better prepares students for the profession. Members often collaborate directly or indirectly with faculty and research. Students benefit from the relationship with our advisory boards through mentoring and networking opportunities, as well as internships, and, at times, scholarship support.

It's difficult to capture in five minutes all that Utica College offers in job creation and economic growth, but I would be remiss if I did not highlight U.C.'s fastest growing signature program, cybersecurity.

Concerns about the security of computer networks are escalating in both the public and private sectors. Our nation's critical infrastructures, including financial, oil and gas, water treatment, nu-

clear reactors, and air traffic control, are at risk and need to be secured. Each of these systems is run by computers and software in complex networks that need to be both reliable and secure. A successful attack on any of these systems by an adversary could have devastating effects on the U.S., its economy and way of life.

The U.S. Government has appointed a White House cybersecurity coordinator specifically to address issues of electronic terrorism and espionage. Corporations and other private sector agencies and organizations are adding departments and employees to help anticipate and fight cybercrime, which can cost them millions of dollars per day.

The field has seen a heightened demand for information technology specialists and computer and information research scientists, who can create methods of monitoring networks and devices, as well as to integrate those applications into older systems.

Each time we hear about breaches in national defense, municipal infrastructures, or financial systems, it becomes clearer how critical it is to provide training in detecting and preventing cybercrime. Our programs in cybersecurity and information assurance and cybersecurity, intelligence and forensics, economic crime management, fraud management, and the certificate in financial crimes investigations provide undergraduates, graduates, and in-the-field professionals with a unique and state-of-the-art education in one of our nation's most rapidly growing and critical technologies.

Utica College graduates are in high demand in law enforcement, government agencies, banking, finance, and homeland security. Local companies that have hired U.C. graduates or interns include ITT, AIS, NYSTEC, KPMG, Northrup Grumman, Bank of New York, Rollins, Inc., Booz Allen, and The Air Force Research Lab.

Our commitment to cybersecurity serves to underscore Utica College's ongoing relationship with the entire business community. We work closely with leaders in health care, education, law enforcement, government, journalism, public relations, not-for-profits, and other sectors that employ thousands of Utica College alumni. Our conversations focus on ensuring that U.C.'s academic programs address worker shortages and anticipate emerging employment trends. Our common goal is to educate well-prepared individuals who can compete and contribute anywhere in the world, but especially those that will want to remain in the Mohawk Valley when they graduate. Thank you.

[The statement of Ms. Kirkpatrick follows:]

Prepared Statement of Judith Kirkpatrick, Provost, Utica College

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One way we accomplish this is by requiring internships and other field experiences in most of our professional majors, including education, physical therapy, criminal justice, nursing, occupational therapy, journalism, public relations, and construction management. These opportunities are developed through faculty or Career Center relationships with appropriate sites. In addition to hosting a Career

Fair for all students, our Career Center actively works with local companies and organizations to help them create an internship program if they do not yet have one and has developed a unique extended job shadow program for our students to introduce them to all aspects of a particular profession. Hands-on experience benefits students in a number of ways: on-the-job training; a chance to apply theories learned in the classroom to the real world; opportunities to be mentored by experienced professionals; and, perhaps most importantly, the chance to network with prospective employers. Hundreds of UC graduates started with their current employers through internships, co-ops, practica, and other applied coursework.

The College also benefits from industry-supported advisory groups that ensure that our signature programs remain not only relevant, but also innovative and forward-looking. Advisory group members keep faculty up to date on industry trends and help them develop a curriculum that better prepares students for the profession. Members often collaborate directly or indirectly with faculty in research. Students benefit from the relationship with our Advisory Boards through mentoring and networking opportunities, as well as internships and, at times, scholarship support.

It is difficult to capture in five minutes all that Utica College offers in job creation and economic growth, but I would be remiss if I did not highlight one of UC's fastest-growing signature programs, cybersecurity.

Concerns about the security of computer networks are escalating in both the public and private sectors. Our nation's critical infrastructures (including financial, oil and gas, water treatment, nuclear reactors, and air traffic control) are at risk and need to be secured. Each of these systems is run by computers and software in complex networks that need to be both reliable and secure. A successful attack on any of these systems by an adversary could have devastating effects on the U.S., its economy, and way of life.

The U.S. Government has appointed a White House Cybersecurity Coordinator specifically to address issues of electronic terrorism and espionage. Corporations and other private sector agencies and organizations are adding departments and employees to help anticipate and fight cyber crime, which can cost them millions of dollars per day.

The field is seeing heightened demand for information technology specialists and computer and information research scientists who can create methods of monitoring and defending networks and devices and integrate those applications into older systems.

Each time we hear about breaches in national defense, municipal infrastructures, or financial systems, it becomes clearer how critical it is to provide training in detecting and preventing cybercrime. Our programs in Cybersecurity and Information Assurance, Cybersecurity-Intelligence and Forensics, Economic Crime Management, Fraud Management, and the certificate in Financial Crimes Investigations provide undergraduates, graduates, and in-the-field professionals with a unique and state-of-the-art education in one of our nation's most rapidly growing and critical technologies.

Utica College graduates are in high demand in law enforcement, government agencies, banking, finance, and homeland security. Local companies that have hired UC graduates or interns include:

ITT
 AIS
 NYSTEC
 KPMG
 Northrop Grumman
 Bank of New York Mellon
 Rollins, Inc.
 Booz Allen; and
 The Air Force Research Lab

Our commitment to Cybersecurity serves to underscore Utica College's ongoing relationship with the entire business community. We work closely with leaders in health care, education, law enforcement, government, journalism, public relations, not-for-profits, and other sectors that employ thousands of Utica College alumni. Our conversations focus on ensuring that UC's academic programs address worker shortages and anticipate emerging employment trends. Our common goal is to educate well-prepared individuals who can compete and contribute anywhere in the world, but especially those who will want to remain in the Mohawk Valley when they graduate.

Thank you.

Chairman KLINE. Thank you very much, Dr. Kirkpatrick, and all the panelists.

A couple points. We will move into a discussion now, as you saw from the previous panel, I've got a couple questions, and I'll try to limit my speechmaking and have more questions, and Mr. Hanna will have some questions.

I wanted to start with Dr. Yeigh, because I think you said that we need to keep college affordable and you were asking for some federal help, and the overhead plea from colleges and universities is that we need to fund Pell Grants.

Pell Grants have had pretty strong bipartisan support for years and years. You probably know by now that we have increased Pell grant expenses over threefold in just of the last four or five years, and we are, frankly, on an unsustainable path right now, where we're borrowing 42 cents on every dollar that we spend.

So unfortunately, the federal government, like the government of New York and like your own university, we're going to be in a position of making tradeoffs and we would like to keep the Pell program sustainable for the future. I'm afraid that the course it's on right now is a little bit overpromised. I think you can have some confidence that the Pell program will be there, not so much confidence that it's going to keep going like it has been going.

And I would hope that SUNY IT, and the other colleges and universities around the country, are looking to ways to lower the costs of fees and tuition. And I know you've probably read it, that the cost of college tuition and fees is growing considerably faster than the cost of living across it is country, and we can't continue to chase that every increasing tuition and fees cost with more and more federal dollars that we don't have.

So I know that leadership like this, you're looking at this and probably doing something like freezing salaries and reducing the size of the staff and looking for ways to cut your own costs so that we can see colleges and universities lowering the cost of tuition and fees, which would, indeed, help make it more affordable.

Dr. Kirkpatrick, I am so glad that you are in the cybersecurity business.

Ms. KIRKPATRICK. So are we.

Chairman KLINE. The others are thinking here now that—and also at some point everybody else is thinking that they ought to be in there, and this becoming a terrifying prospect.

I was in Estonia a couple years ago, and you know and the focus here is that that they suffered a cyber attack. And the entire country is entirely dependent upon, to broadly put it, the internet. Nobody in the entire country writes a check, that doesn't exist. There is no paper. And so such an attack was pretty devastating.

And when you think about how vulnerable we are as a nation, we have stood up in a cyber command (sic) in the Department of Defense too—so we are glad that you're turning out the students with the education and skills to address that need.

In general, this will be a question for all of you. Dr. Kirkpatrick, you spent some time talking about ways that you help students get employment when they graduate, you have—I think you have internships and co-ops and so forth. By the way, I mean, two-thirds

of your students don't come from the county, pretty amazing, plus international students and you have on-line education.

What about that, if I could ask both of you, in either order, sort of what you're doing in your college or university to help plug those graduates into employment, if you keep in mind the conversation we had with the previous panel.

Ms. KIRKPATRICK. We have a program, and as Dr. Bay of the previous panel mentioned, having those interns, and the linkages between the employer or the company and the academic institution is critical. As Dr. Bay mentioned, the company that he's with, Assured Information Security, has hired alum back in 2001, and since then, when it was a two person organization to now 100-and-some-odd and still growing at a rate of 25-some-odd percent, we have placed our graduates into that organization as interns and then they, in turn, become employees after their security clearance goes through well, and currently we are building research based program between AIS and SUNY IT.

Chairman KLINE. Can I interrupt for a minute? Those interns would be typically a senior moving towards graduation.

Mr. YEIGH. Or graduate students. We currently have undergraduate and graduate information security/information assurance program here at SUNY IT, which is founded on really if you want to call it hard sciences of computer science. So rather than looking at the macro factors, we're really going down to nuts and bolts or bits and bytes in a cyber world.

So working with these companies and also there are companies that we're working closely with in the Syracuse area, our attitude has been rather than just creating a career fair where you make the matchmaking done no those settings but rather have their graduate or undergraduate education experience be directly tied to what they're studying. I agree, barring some of the conversation that Dr. Bay started in the last panel, training versus education. I think that education where we educate our students to be critical thinkers, problem-solvers, really have those skill sets and the toolbox necessary to make them successful. I think that's how we are going to go about connecting industry and actually bringing that relevance of the field, and the field is always going to change and will continue to evolve or revolutionize, innovate, all those right words, but we want to bring that relevance into the classroom, and that's how we're going about making those linkages, through internships and practical experience into the classroom.

Chairman KLINE. Continuing?

Mr. YEIGH. Yes. We have spoken to some of our tri-partners and they talk about these entry-level positions, but the skills they talk about are life skills, get to work, get along, come back the next day. That doesn't—that requires living skills that we really work on with our students. And the majority of these jobs are held by students who some don't even have a two-year degree, and we know that the greatest growth is going to be in needing students with two-year degrees, so we bring them in and we teach them those skills; we teach them how to value showing up, we teach them how to learn critical thinking, how to compare things, how to write, how to communicate.

Those basic human skills are critically important for this nation. And I would say that numbers that are in that area, that need that kind of training are great.

One of our greatest successes is that we take them from coming in at that level and bring them to a level where we are one of the largest transfers to SUNY IT. Our cybersecurity program began five years ago with a collaboration between Utica College, it has now grown fivefold, and we are looking to serving that industry.

So we take them for where they don't think they can go to where they can go so that they can transfer to these institutions.

Chairman KLINE. Thank you very much. I'll pick this up again in a minute.

Mr. HANNA.

Mr. HANNA. I'm serious, how do you feel about K through 12, especially with what you just said to us.

Mr. YEIGH. We do a great amount of developmental work, reading, writing, and arithmetic, and that is work that should be completed before they begin college, and yet over 60 percent of our students are involved in a developmental course.

I have concerns at many levels. From an educational level, I feel that we really need to work with the curriculum so that it's seamless and so that our K through 12 partners, we develop programs that allow students to move through the curriculum from an educational standpoint.

As a taxpayer, I worry about duplication, you know, we are funded by the state, we are also funded by our local community as our K through 12 partners so we want to really maximize the use of that funding.

The plan K through 12. I think we are—If you look at our competitors in Asia, in Europe, our standards have fallen, and that's a great concern. We are trying to catch up at the higher education level, but often times that is way too late.

We don't make science and technology as fun as say M.T.V. videos or other popular culture or other things that the students are interested in, but I think there is some grass roots efforts that's taking place throughout the United States. If you haven't seen First Label League or Best Robotics competition, in fact, SUNY IT is home to the—this region's First Label League, and we will be sending our winner to the national—international First Label League, F.L.L., championship in St. Louis, Missouri next month. But those are the type of things that we need to continue to embrace, and will really make math, science, and engineering. Maybe we might need a space race or our generation space race, maybe that's what it's going to take. But, as a techie, as a resident geek of this campus, science and engineering, it's fun, they're fun, they're fun stuff.

And I think the—at the federal level continue to support those initiatives through the National Science Foundation, through Department of Education and all the other agencies they really need it if we're going to maintain our—where we have fallen a little bit to regain the edge that we've always had.

Mr. HANNA. How much remedial work in terms of K through 12, because people arrive on your campus and my assumption is

they're not as well prepared as you would like them to be. Go ahead.

Ms. KIRKPATRICK. I think I can speak for all of us, we are doing increasingly more remedial work and trying to work with the hard—we have a large education department and we are trying to work very hard with the local schools.

I'll be perfectly honest, in my position right now we are struggling with how do we—how do we transition students into college; do we give them the remedial work, do we ask that they go to the community colleges. It's a struggle for all of us.

I wanted to go back, if I could, to your original question, and illustrate with something.

I know we're stuck between how we prove accountability at all levels in our educational system. I'm terribly worried personally, and as an educator, seeing the issues with the teaching for the test all the way through K through 12. And just a quick story to illustrate that. We host at Utica College the regional science fair for middle school and high school every year, as a matter of fact it just happens to be this Saturday.

About three or four years ago I was there and there were very few students compared to what we had had—we used to have a 100-plus students, there were probably about 25, 30 students maybe in the entire science fair. And I, observing, said, what did we do wrong, are we not in touch, were we not working with the local school system? And I was told that, no, from a lot of the educators, from a number of the science educators locally, they felt that because what they were being judged on whether their students could pass those exams, they didn't feel that they needed to have science fairs anymore, they didn't feel that their time was being rewarded for working with students in science fairs. I'm not a scientist, but I can't imagine our students—I can't imagine not learning how to ask a question, how to form a hypothesis, how to experiment, and how to analyze your results; and I think this speaks to what was said earlier about not making science fun.

How can we have scientists if we're not creating that joy, that excitement in the early years. So that is one of my concerns.

And teaching to the exam is not teaching to think creatively, to think critically, to analyze, it's teaching them how to pass a test. And we're seeing that more and more in our students coming into Utica College and of their schools across the country.

Mr. HANNA. I'm going to assume for the moment that your cybersecurity, you have about 100 percent placement; is that correct?

Ms. KIRKPATRICK. I would say we're probably—Yes.

Mr. HANNA. Okay. Tit for tat.

Chairman KLINE. Thank you, Mr. Hanna. I'm not sure which direction to go here.

You brought up a couple of interesting points and, as you know, this committee is looking at reauthorizing the Elementary and Secondary Education Act, No Child Left Behind. And so I appreciate how you're going to address the accountability issues, so we appreciate your comments.

I want to go back to where we were a few minutes ago, and that is this connecting—I'm not trying to turn all colleges and universities into trade schools, let me be clear about that, but I do think

that we're missing the connection in many cases between students graduating and what we need in the workplace.

And we saw that theme in the previous panel. We were addressing this down in Pennsylvania yesterday, and it does seem to me that there are several approaches out there, internships you all mentioned, hard to imagine that all the students are able to get those internships, but I want to go back to what you talked about, Dr. Kirkpatrick. You said that you were using advisory groups, and that's a fairly common practice, particularly, I think from the career colleges and in community colleges, but in others, as well.

Who makes up the advisory group and how are they chosen?

Ms. KIRKPATRICK. Our economic crime institute is probably our largest advisory group, it's been in existence for about 20 years, and it's a combination of people that—people that the institution knows in the industry but often it's networking once you have a core group of people, it's their networking that brings other people. And we try—or example, in the economic crime institute, we try to have a good balance with people working in government agencies with private sector banking. And as I said before, it's networking, people who know other people who want to maintain a balance in all of those areas.

Chairman KLINE. So these advisory groups, and you have more than one for more than one discipline, is this a formal group; Are they named or appointed by name or assigned by name and they know they're on this advisory group for some specific term?

Ms. KIRKPATRICK. Yes, we have committees and we have to ask people to serve on these and have formal committee meetings, but that doesn't mean that we don't have individual relationships with businesses in the community; but a particular advisory board is set up.

Chairman KLINE. And who does the advisory group advise?

Ms. KIRKPATRICK. They work particularly with the faculty in those areas. As I said, they help develop curriculum.

Chairman KLINE. Sitting down with faculty.

Ms. KIRKPATRICK. Yes.

Chairman KLINE. And you're nodding, Dr. Murray, but the recorder can't see the nods. But I see that you're concurring.

Ms. MURRAY. Yes, we have formal meetings several times a year with a set agenda. And often some work groups such as, as I said we often will have a curriculum group, we will have internship work groups, and a curriculum work group, and it's a formal committee. People are named, they serve certain terms they may roll off the committee very much like a board.

Chairman KLINE. Dr. Murray, so we can get it on the record.

Ms. MURRAY. In exactly the same way, our advisory boards are assigned for each of our programs, and many of the members are actually alumni of those programs who are successful in the field, and so we have businesses, people who run businesses.

For example, in New York City in the fashion industry, to advise our fashion merchandising program. And our radio and television broadcasting programming has advisors from the Syracuse area and the Capital District in communications, so we look to our alumni. If so, a combination of not just business partners but also educational partners because so many of our programs transfer and

they meet regularly at least twice a year, they're formal meetings, and our faculty are present because we really are looking for what is the standard, what is the industry standard at this time.

Chairman KLINE. And are there portions of your program that are not current?

Ms. MURRAY. Our travel and tourism program moved into a travel tourism and has management at the behest of our advisory committee.

Chairman KLINE. So you are making adjustments to the programs themselves, perhaps adding to the program?

Ms. KIRKPATRICK. Again, the intent of the advisory board, advisory group is to make that connection with the employers. And as you say, you have educators as well, but to keep it relevant and make sure that you are turning out graduates that have the opportunity to find a place in the workplace so that their training and education is relevant, I think that is fairly common, I've just never quite understood how formal it is.

Chairman KLINE. And do you or some individuals with the college or university, do you have the power to appoint and remove these people or is there some, dare I say, bureaucratic process that is involved in that?

And, Dr. Yeigh, you're certainly included in this conversation if you also utilize such advisory groups and boards.

Mr. YEIGH. We do. In some parts of our engineering programs, for example, there are necessary ingredients, part of the assessment process for accreditation. So a path for engineering technology, usually they look at the industry board for guidance on the curriculum development and the relevancy to which the academics are offered, and that's sort of the industry that we provide our students, too.

And so—And also our advisory boards, in addition to industry input, we also have input from students from Mohawk Valley Community College because we receive our students from those institution, so it's really a formal and informal network of practitioners, and the academics in specific the fields they provide not only in the curriculum, but knock on my door for additional resources for which a program might need, and so their role is advising the academic programs faculty and the department, as well as the institution and how they—we all come to believe in supporting the academic enterprise that we have created here.

Chairman KLINE. Thank you. I'm going to pick this up in a minute, but Mr. Hanna is patiently waiting to ask some questions.

Mr. HANNA. Unfortunately, I'm interested in your prospective on for-private institutions, whatever that means to you, because certainly they're growing and mixed opinions, some mixed reviews perhaps.

Mr. YEIGH. So I'm going to be—I'll voice my personal opinion about the for-private institutions. When you're private or public institution for education, although not explicitly stated, we exist for public good.

And, to me, when the goal of making private standards is in the way of public good, often that, to me, is a conflict of interest. So that is my personal position on for-profit institutions. And that doesn't mean that we're the—the not-for-profit isn't a business, we

are a business. We're in the business of educating our students. We're in the business of creating the well-educated workforce for the future. But when the intent is to make profit, I think that gets in the way of our core and what we have to do for public good.

Ms. KIRKPATRICK. My concern is for the opportunities, because it's the financial aid and to keep our tuition down, but it's students coming from a for-profit institution with a tremendous amount of debt and really no real credential to speak for.

So I think that the students could be better served in a public institution.

Mr. YEIGH. I'm going to echo the concerns of my colleagues here; however, I'm going to perhaps add a slightly different dimension. I do agree that we need to guarantee that the students who graduate from these programs have received the education that they need. We're looking more and more at the usual forms of funding, as you said we need to keep the costs down. And yesterday schools such as Utica College and SUNY IT, who are fairly new institutions, do not have large endowments, federal funding is drying up given the economic times, fund raising is difficult, and I think unfortunately or—unfortunately I think we're going to see more and more for-profit organizations because the not-for-profits are struggling, given this environment. So I'm thinking maybe I have been watching the new legislation with a great deal of interest, and I think it's going to be a matter of accountability, but I don't think the for-profits are going to go away.

Mr. HANNA. But to quickly paraphrase and jump in, you think there is a fundamental conflict of interest between the for-profit and not-for-profit schools, the students and their ability to access resources to get themselves through school and the outcome.

Mr. YEIGH. I would say yes. And if you read the—there was a recent article in the Chronicle about education, like yesterday, concerning some for-profits using the loopholes in international student recruitment to gain tuition revenue when—and, in fact, in the State of—in the States of California and Virginia, those were the two states where there were more of those schools, maybe accountability through legislation might be a move to hold those institutions—you know, maybe under better control.

But, again, that problem didn't exist because we didn't have rules. The problem exists, at least in my mind, that if the intent and the objectives of for-profits were put higher education as to the public good it certainly would be a start.

Chairman KLINE. Thank you. Thank you, Mr. Hanna.

I did find it interesting that because it's a public good there shouldn't be profit involved, and it makes me wonder about farmers providing food which is a public good and maybe there shouldn't be for-profit grocery stores for providing food and maybe a not-for-profit in medical doctors, for doctors who are providing health. That's an ideological discussion here.

I want to go back to how students are made ready to step into the workforce. I know this sounds like we're beating it pretty heavy, but we're trying to understand to see if the federal government is in the way perhaps, or if there is something they need to do, and one of things we talked about with those advisory groups or advisory boards that work with the college or university and the

faculty to make sure that the coursework is relevant to the needs of the workplace, but if the faculty is prepared and the coursework is relevant but the students aren't involved in this, they're still not ready to do it either. By that I mean they may have come to the college or university and they're studying—I'll just pick on political science because of the relevance to us, and there is not a big demand for that in the workplace, then perhaps we're not meeting the needs of the workplace.

So I think what I'm talking about is genuinely referred to as student counseling, and it's certainly in the high school arena. Students are counseled about what jobs are available, what colleges are available.

How do you address that question of keeping the students aware of what the opportunities are, or is that not part of your role? And I just put that out.

Ms. MURRAY. It is very much part of our role because one of the main things that we have left to do is make sure the students are matched in the program of interest that is offered at our school and that that program will get them to where they want to go and that is to employment.

We have advisors, we have faculty who work with students as academic advisors, we have actual career advisement center.

Chairman KLINE. Excuse me for interrupting.

But when is the student introduced to such an advisor or career center; when they walk in the door, senior year?

Ms. MURRAY. Applications ask what is your area of interest, and we start that discussion with them immediately before they're even admitted into the institution because we would not want a student that was interested in something that we could not offer them so we make sure that their interests—trying to keep it as broad as possible because we know they're young, but at least they will be able to obtain an education in the field that is connected to that interest.

So immediately before they get here, and then as soon as they're admitted, they're assigned an economic advisor. There is a transfer counselor, a career counselor that work with the students as well.

Chairman KLINE. Dr. Kirkpatrick?

Ms. KIRKPATRICK. It's very similar. We start with the students. They have an economic advisor assigned to them as soon as they're admitted, basically. We do a number of—There are a number of activities. We have a freshman seminar program, as I imagine most of the institutions do. And part of that—the very first semester, part of that is working with career services, taking courage to take exams if they're unsure about what they want to do, for their skills and their aptitudes. Career fairs, we actually have an economic fair—in the fall we have an economic fair where they can go talk to different people about different majors and where those majors may lead, some of them may be involved with people from the community very early on. We have a program for pre-professionals where in their freshman year on they're allowed to shadow people in the community. So a variety of ways.

When student services reaches out, we have a number of advisors on campus, what we call academic coaching experts, who work with particularly the freshman in all aspects, whether it's the life

skills that they're lacking, why can't you get up and make that 8:30 class, what do you really want to do with your life.

So a small private college, such as Utica College, really tries to be hands-on, it doesn't try, we succeed at being hands-on with all our students, that's why they're there.

Mr. YEIGH. I am advising we do mentoring. I wish we would do more of that, and I wish there was more going on across our programs. There—the faculty members help students with their program development, and we try to network our students to relevant industry contacts wherever necessary. There are student life skills and sometimes behavioral support that we provide our students.

Personally, I became an engineer because of one faculty member who influenced me, and that kind of personal connection, there isn't clearly a really a regular method, you're either going to click with that person or you're not. And I wish there were more of that.

But, again, in a climate of starving resources, there are—we do more of having to just support our students so that they get from Point A to Point B. There really isn't a luxury of really giving that sort of mentoring on a regular basis, other than when you have that connection with that specific faculty member, because of either personal interest or professional interest that just clicked, but it's a good thing to do.

Chairman KLINE. I was thinking, Dr. Yeigh, that I did not become an engineer probably because of differential equations but that's entirely a different thing.

I want to thank the witnesses very much for your testimony, for your discussion, for answering the questions and for engaging. It's been very, very helpful.

On behalf of Mr. Hanna and me, I thank you and all in the room. And there will be no further business. This hearing is adjourned.

[Whereupon, at 11:52 a.m., the committee was adjourned.]

**REVIVING OUR ECONOMY:
THE ROLE OF HIGHER EDUCATION IN
JOB GROWTH AND DEVELOPMENT**

Thursday, April 21, 2011
U.S. House of Representatives
Committee on Education and the Workforce
Washington, DC

The committee met, pursuant to call, at 10:01 a.m., in the Waymon L. Hickman Building, Columbia State Community College, Columbia, Tennessee, Hon. John Kline [chairman of the committee] presiding.

Present: Representatives Kline and DesJarlais.

Staff Present: Daniela Gracia, Professional Staff Member; Jimmy Hopper, Legislative Assistant; and Alex Sollberger, Communications Director.

Chairman KLINE. A quorum being present, the Committee will come to order.

Administrative announcement—pursuant to Committee Rule 7(c), all Committee members will be permitted to submit written statements to be included in the permanent hearing record.

Without objection, the hearing record will remain open for 14 days to allow statements, questions for the record and other extraneous material referenced during the hearing to be submitted in the official hearing record.

Well, good morning. Welcome to our third field hearing of the 112th Congress. It is good to be here in Columbia, Tennessee with Scott DesJarlais. Thank you all for coming. A special thanks to our witnesses, we will have two panels today. We appreciate all of you taking the time to be here. It is just wonderful to be here in Tennessee. Vicky and I, my wife and I, are here, we came down from Minnesota. It finally stopped snowing yesterday, so we are very, very happy to be here in Tennessee where you actually have leaves on trees.

Well, these are tough times, and despite recent improvements in the national unemployment rate, our economic recovery remains uncertain. Roughly 13 million workers remain jobless, including more than 32,000 in Tennessee's Fourth District. A range of unpopular Washington initiatives enacted during the last Congress contributed to an atmosphere for business owners, causing many to shrink their workforce or curb plans for expansion. As a result, it has become even more important to ensure young adults have the tools necessary to stand out in this competitive job market.

As members of the House Committee on Education and the Workforce, we are keenly aware of how closely related education is to the strength of the workforce. A student's success in the classroom will help determine his or her success in the workplace. The evidence overwhelmingly suggests that individuals who fail to advance in their education are more likely to be unemployed and earn lower wages. In fact, today, workers with a high school diploma have a nearly one in ten chance of being unemployed, while college students have only a 4.4 percent chance of being unemployed.

As we work to foster our growing economy, hearing directly from folks who see challenges and opportunities in our schools and workplaces will help us make sure Washington does not block the road to growth and prosperity. That is why we are here today. We want to learn about the policies that may be standing in the way of job creation right here in Columbia. We want to hear your thoughts on encouraging academic success in our classrooms and get your ideas on how we can work together on the local, state and federal levels to reinvigorate the American spirit of innovation and prepare the students of today to succeed in tomorrow's workforce.

Again, we appreciate our panelists' participation in today's hearing and I am looking forward to getting this discussion underway.

Let me thank my Committee colleague and friend, Scott DesJarlais, for his gracious invitation to hold a field hearing here in his district. And without objection, I now yield to him for his opening remarks and the introduction of our first panel of witnesses.

[The statement of Mr. Kline follows:]

**Prepared Statement of Hon. John Kline, Chairman, Committee on
Education and the Workforce**

A quorum being present, the committee will come to order.

Good morning, and welcome to our third field hearing of the 112th Congress. It is good to be here in Columbia, Tennessee with Representative DesJarlais. Thank you all for coming, and special thanks to our witnesses. We appreciate you taking the time to join us today, and we look forward to your testimony.

These are tough times, and despite recent improvements in the national unemployment rate, our economic recovery remains uncertain. Roughly 13 million workers remain jobless—including more than 32,000 in Tennessee's 4th District. A range of unpopular Washington initiatives enacted during the last Congress contributed to an atmosphere of uncertainty for business owners, causing many to shrink their workforce or curb plans for expansion. As a result, it has become even more important to ensure young adults have the tools necessary to stand out in this competitive job market.

As members of the House Committee on Education and the Workforce, we are keenly aware of how closely related education is to the strength of the workforce. A student's success in the classroom will help determine his or her success in the workplace. The evidence overwhelmingly suggests that individuals who fail to advance in their education are more likely to be unemployed and earn lower wages. In fact, today, workers with a high school diploma have a nearly 1 in 10 chance of being unemployed while college graduates have only a 4.4 percent chance of being unemployed.

As we work to foster a growing economy, hearing directly from folks who see challenges and opportunities in our schools and workplaces will help us make sure Washington does not block the road to growth and prosperity. That's why we're here today.

We want to learn about the policies that may be standing in the way of job creation, right here in Columbia. We want to hear your thoughts on encouraging academic success in our classrooms, and get your ideas on how we can work together—on the local, state, and federal levels—to reinvigorate the American spirit of innovation and prepare the students of today to succeed in tomorrow's workforce.

Again, we appreciate our panelists' participation in today's hearing, and I'm looking forward to getting this discussion underway. Let me also thank my committee colleague Scott DesJarlais for his gracious invitation to hold a field hearing here in his district, and without objection, I now yield to him for his opening remarks.

Mr. DESJARLAIS. Thank you, Chairman Kline. It certainly is an honor and a privilege to have you and the Ed and Workforce team here. I think I speak on behalf of Columbia State, Columbia and District 4 when I say we are very honored and privileged to have you here and it is exciting for us to have this opportunity.

So good morning, and thank you to Columbia State College for hosting us today. Thanks also to our distinguished panel of witnesses and the audience for their interest in getting Tennessee back to work.

America is facing historically tough economic challenges and the Fourth District has been hit especially hard. In the face of these challenges, we need to rethink how we educate our workforce, especially regarding the role the federal government should play.

Through this hearing, we hope to learn about the economic needs of our business community. Employers need a workforce that is flexible, responsive and highly skilled. To this end, colleges and universities need the freedom to adapt to the ever-changing needs of local businesses.

We all know that central Tennessee has experienced the closure of many coal mines and the loss of factory jobs. And of course, like the rest of the country, we are still recovering from the recession. Unemployment in the Fourth District remains well above the national average. Here in Maury County, unemployment sits at 14.2 percent. We can and we must change this. The district is blessed with many colleges and universities that are partnering with local businesses in an effort to produce workers that meet the needs of the private sector. We must continue to encourage these sorts of partnerships. In fact, right here at Columbia State Community College, partnerships exist between the school and the private industries, including the film and medical industries. Also, Columbia State's Center for Economic and Workforce Development works with the local community and businesses to provide Tennessee workers with the type of technical skills and job training they need to excel in the 21st century economy.

One of my top priorities in Congress is to ensure that our young people and non-traditional students have access to an affordable and internationally competitive education.

I look forward to hearing from our distinguished panel of witnesses as they give their perspectives on education and workforce issues. So let us get the hearing underway.

We have two distinguished panels of witnesses today and I would like to begin by introducing the first panel.

Dr. Janet Smith was named President of Columbia State Community College in November 2007. Dr. Smith has previously served as President of Rich Mountain Community College; Dean of Academic Affairs at Hopkinsville Community College; Director of Extension Services at Dyersburg State Community College; and Instructor, Department Chair and Division Chair at Isothermal Community College. Dr. Smith is also Vice President of the Tennessee

College Association and a member of the National Advisory Board for the Higher Education Research and Development Institute.

Dr. Ted Brown has served as President of Martin Methodist College since 1998. His arrival at Martin followed 13 years as the Vice President for College Advancement at Presbyterian College in Clinton, South Carolina. During his career, Dr. Brown has served as a Research Assistant at the United Methodist Board of Higher Education and Ministry, as Assistant Dean and Director of Development at Vanderbilt Divinity School and the Director of Development at Center College.

Mr. Jim Coakley serves as President of Nashville Auto-Diesel College. Prior to his current position, he recently served as Campus Director of ITT Technical Institute in Nashville, Tennessee where he earned District Director of the Year numerous times. Mr. Coakley's background includes more than 24 years in the education industry. Mr. Coakley also serves on the Board of Directors for the Tennessee Association of Independent Colleges and Schools.

I would now like to turn the mic back over to Chairman Kline for rules of the hearing.

[The statement of Mr. DesJarlais follows:]

**Prepared Statement of Hon. Scott DesJarlais, a Representative in Congress
From the State of Tennessee**

Thank you, Mr. Kline.

Good morning and thank you to Columbia State Community College for having us today. Thanks also to our distinguished panels of witnesses and the audience for their interest in getting Tennesseans back to work.

America is facing historically tough economic challenges, and the 4th district has been hit especially hard. In the face of these challenges, we need to rethink how we educate our workforce, especially regarding the role the federal government should play.

Through this hearing, we hope to learn about the economic needs of our business community. Employers need a workforce that is flexible, responsive and highly skilled. To this end, colleges and universities need the freedom to adapt to the ever changing needs of local businesses.

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We can and we must change this. The district is blessed with many colleges and universities that are partnering with local businesses in an effort to produce workers that meet the needs of the private sector—we must continue to encourage these sorts of partnerships. In fact, right here at Columbia State Community College, partnerships exist between the school and private industries including in the film and medical industries. Also, Columbia State's Center for Economic and Workforce Development works with the local community and businesses provide Tennessee workers with the types of technical skills and job training they need to excel in the 21st century economy.

One of my top priorities in congress is to ensure that our young people and non-traditional students have access to an affordable and internationally competitive education. I look forward to hearing from our distinguished panels of witnesses as they give their local perspective on education and workforce issues.

So let's get the hearing under way.

Chairman KLINE. Thank you, Dr. DesJarlais.

We have already had a discussion with the witnesses, but for everybody's information, we conduct these hearings under what we optimistically call the five-minute rule. There is a light that is here in front of the witnesses. We are asking each of the witnesses to

try to limit their testimony to five minutes, so they have got a little device in front of them that will show a green light, a yellow light and a red light. I do not pay a lot of attention to that, but it is a kind of useful guide and then we will go into questions and try to limit our questions somewhat as well.

So I think we are ready to go and Dr. Smith, you are recognized.

**STATEMENT OF DR. JANET SMITH, PRESIDENT,
COLUMBIA STATE COMMUNITY COLLEGE**

Ms. SMITH. Thank you, Chairman Kline and Congressman DesJarlais. We welcome you to Columbia State. We are pleased that you selected our campus to hold this hearing. We are pleased that you are at a community college, because we think community colleges are the leader in terms of workforce development throughout our nation and that has been part of our role and will continue to be part of our role. So thank you for allowing us to talk about what we do and share with you what is going on in south-central Tennessee as it relates to education and workforce development.

As you may know, Columbia State is the first community college in the state of Tennessee. It has a very strong heritage and it was established out of the Higher Education Authorization Act of 1963. So we have a tie back to the federal government—overall community colleges in general do—in that you gave us our start. And that start was out to service the people of the nation and to provide educational opportunities where there was not access, and now there is access.

Columbia State has four extended campuses. One in Clifton, one in Lewisburg, Lawrenceburg and one in Williamson, as well as the campus here in Columbia. We provide credit and non-credit. Credit being transfer programs and credit being associate of applied science that allows students to begin their career opportunities immediately after completing their associate. The associate of arts and associate of science degree transfer to our universities and we have wonderful transfer agreements that allow that to occur.

We have 5600 enrollment. Our full time is around 2600, part time around 3000. The average age is 24.8. Now our average age is a little bit younger than some other community colleges throughout the nation. We have seen the average age begin to drop throughout the years, but we pull a lot of students that are first generation college students and our communities are very rural, so we are entering a lot of students straight out of high school as well as those who are coming back through our workforce initiatives. Degree-seeking first generation students is at 2308, so that gives you an example of the income level and the abilities of our students when they enter.

We service nine counties, we service Wayne, Perry, Lewis, Marshall, Giles, Hickman, Lawrence, Williamson, and Maury. And all of those counties except Williamson are in Labor Market 10. Labor Market 10 has a 14.2 percent average unemployment, and that is a very difficult thing for our communities as well as for our students. With that type of unemployment, it becomes more important that we have our outreach centers so that our students have the ability to attend class.

We link to the workforce in several ways. We have representation on various committees throughout the service area, various chambers and local government. We work very directly with our local workforce boards, both here and in Williamson, and communicate with them constantly. Some of the ways that we are out and about is through periodic meetings with clients, clients in our service area, such as Biomimetics in Franklin. We have had several meetings there looking at biotech programs, clinical lab programs. We are also working with the various health agencies throughout our communities in terms of what their needs are with health information technology and then with new programs that are dealing again with the clinical labs and so forth.

We have worked with industries such as GM and others in providing specific courses for their employees as well as those of family members.

We participate in monthly breakfast brainstorming sessions that are held by our local workforce board and these are held in different locations throughout the service area and it is a time where the community leaders come together along with providers and talk about what the needs are and what the education and training programs are.

We also have focus groups that we pull together. One such focus group was working with an industry that needed programmable logic controllers. So we pulled several industries together to see what the need was, how much training they needed and how best to go about providing that training. And in doing that, then we also worked back again with our local workforce board to see if there is any way that they can assist the industry if it falls within one of their programs at that time.

As I mentioned earlier, we participate in community organizations. We are members of the chamber of commerce, we are members of the industrial development boards, we are on various organizations throughout all of our service area. And then we come together to work in different scenarios. And one such scenario that is coming up is we have business leaders who also are very involved in our workforce area. And we have a meeting next week in Dr. Brown's campus where there is a regional group of individuals throughout south-central Tennessee coming together on how do we develop a regional initiative for workforce development. So we are very excited about that opportunity coming.

Collaboration, as I mentioned, with the workforce is also at their career center. Their career center provides opportunities for some of our students who cannot begin classes, to go there to brush up on skills as well as there is a good working relationship in what students are defining as their skill needs, their programmatic or career needs, and then referral back to the college.

Community scanning. We think scanning is very important. Everyone on this campus that is working with Columbia State is looking at what the needs are in our community, they are listening in different groups that they are in and they are providing those needs—bringing those needs back to the campus and sharing those needs with different offices, and then we begin to develop programs based upon what we find out.

Advisory committees. All of our career credit programs have an advisory committee as well as some of the non-credit, but it is primarily with the career credit. And that is professionals in the field such as our veterinarian, our nursing or whatever. We have professionals who come in, they look at our curriculum, they talk about our graduates and they advise us on changes that we need, changes that are occurring in the workforce, to keep our curriculum current.

The type of classes that we have had in the non-credit, to give you more examples, we have what we call open enrollment on-ground programs, and that is where we lay a course out and anyone can come and take that course that needs it. Many of those are through online training as well as some that are specifically here at the campus. EMT refresher is one of those and police in service, hospice. Then our onlines carry paralegal, pharmacy tech and education and many others. But we try to broaden what we can provide for our students, both through the online and in the open enrollment, based upon the needs that we ascertain from our various group meetings.

We do contract training if a business or industry has anything that they need in terms of contract training. We sit down with them, we talk about what it is that they need, we put together the course. Sometimes, they may use a course that we have that we need to refine and so forth.

And in terms of overall, I think finally I would like to say Columbia State, when it was founded, Lady Bird Johnson was here to do the dedication. And Lady Bird, in her statement, said, "There is a new beat and rhythm on our land. When a community college rises from a once-empty field, the country expands not outward but upward, forever to the service of the people and the progress of the nation."

Chairman Kline, Congressman DesJarlais, our community colleges were born out of service to provide opportunities and education for our citizens. And that is our mission, that is what we are here to do and we thank you for allowing us the opportunity to share with you.

Chairman KLINE. Thank you, Dr. Smith.

Dr. Brown, you are recognized.

[The statement of Dr. Smith follows:]

**Prepared Statement of Janet F. Smith, President,
Columbia State Community College**

Chairman Kline and Congressman DesJarlais, thank you for this opportunity to speak to the Role of Higher Education in Job Growth and Development, particularly as it relates to the mission, programs, activities, and services of Columbia State Community College. We at Columbia State are honored that you have selected our college as the location for this hearing. We believe that community colleges are central to providing the diverse educational opportunities needed to meet the growing and ever changing job demands and needs. Please accept our appreciation for your recognition of the need for continued and advanced training and education of our citizens, and your selection of a community college, our College, to solicit information for evaluation of the role of higher education in reviving our economy.

Columbia State Community College Profile

As Tennessee's first community college, Columbia State builds on its heritage of excellence through innovation in education and services to foster success and bring distinction and recognition for the quality and effectiveness of the College. The mission of Columbia State is to enhance the lives of citizens and the communities of

southern Middle Tennessee through teaching, learning and student success. That mission and vision are the guiding principles of our strategic planning process, outcomes, and community outreach.

Columbia State services nine counties (Wayne, Perry, Lewis, Marshall, Giles, Hickman, Lawrence, Williamson, and Maury) in south central Tennessee. The service area includes one of the poorest to one of the wealthiest counties in the state. All of our counties except Williamson are in Local Workforce Investment Area (LWIA) 10. The January 2011 preliminary Labor Force Estimates for Unemployment was at 14.2%, an increase of 1.2% over December 2010. We have the unfortunate distinction of having the highest unemployment rate in the State (the next closest is 12.2%). Education and training are a must for the growth and development of our service counties and citizens.

Students are provided educational opportunities through the Columbia campus and four extended campuses (Clifton, Lewisburg, Lawrenceburg, and Williamson). Classes are offered via classroom, hybrid (classroom/on-line blend) and on-line (web based). In addition, Columbia State students may receive a degree through the College's participation in the Regents On-line Degree Program.

Fall 2010 College statistics include:

Credit student enrollment	5600	Degree Seeking First Generation	2308
Full Time Equivalency	3556	Low Income Students/ FAFSA	2661
Dual Enrollment	531	Students Receiving Loans	967
Full-time	2600	Students Receiving Any Aid/Scholarship	3230
Part-time	3000		
Males	36%	Full Time Faculty	100
Females	64%	Adjunct Faculty	178
Average Age	24.8	Professional and Support Staff	149

*Partnerships with Workforce Agencies, Business, Organizations * * * for Workforce Development*

Columbia State is linked to the workforce needs of its service area through representation on various workforce boards, chambers of commerce, local government and civic organizations which inform college representatives of area education and training needs. These linkages foster communication and information necessary for community and workforce development throughout the region. A partnership for developing grants and sharing resources is another outgrowth of these linkages. The college periodically conducts town hall meetings in the counties where it has campus sites to solicit the needs, views, and desires of these community leaders relative to the types of education, training, and services that they would like to receive from their college. These meeting results are incorporated into the College's strategic plan so that new initiatives reflect the expressed needs of the communities served by the College.

The President of Columbia State serves as a Board member on the Local Workforce Investment Board. The Director of Economic Development is a participant at all meetings. Another important organization is the area P-16 Council which consists of secondary, post-secondary, government, workforce officials, and business leaders meeting to discuss needs, changes, and actions. Also, it is the role of all College employees to identify needs and forward the information obtained to the appropriate office(s) for review and follow-up. This expanded "ear to the pulse of the community," so to speak, cannot be understated.

Workforce programs are offered through both credit and non-credit programs and classes. The decision for credit or non-credit is determined by the demand and education-training needs identified. The following is an overview of each.

Partnering and Listening as Methods to Identify, Develop, and Monitor Workforce Relevant Programs

The College has a multi-level training needs assessment process for identifying and developing programs and training sessions for our businesses, industries, and citizens. The process includes:

Periodic meetings with key clients to determine training needs

Through leads or direct interaction with an industry leader, College representatives establish meetings with existing employers to develop specialized courses or to introduce the employer to on-going courses and service packages that could benefit their employees and their business.

Participation in “monthly breakfast brainstorm” sessions

The local South Central TN Workforce Alliance is integral to determining workforce and training needs. They sponsor a monthly breakfast brainstorm session that meets in a different county each month for identification of new/existing training programs, and training needs. Participation in these sessions has resulted in a number of customized training events to help our local employers/workforce.

Focus groups

The College employs the use of focus groups to gather information on training needs. Such an approach was recently used to measure the level of need for “Programmable Logic Controller” training for manufacturers in our service area.

Participation in community organizations

College administration and workforce leadership participate in area Chambers, industry and business group meetings, professional associations, and other community organizations for obtaining information on workforce and education needs, as well as to be active in community leadership. (Primary participants are the President [Chamber Board Member of Two area Chambers], Dean of Extended Campuses, Director of Economic Development, Extended Campus Directors, Executive for Advancement, and Provost) Our recent training courses in Basic and Intermediate Social Media classes were a direct outcome of this outreach process and a Strategic Planning class is under development.

Collaborations with career centers

Identification of training needs and offering of courses to meet those needs and demands is accomplished through access to DOL statistics and partnering with our local Career Centers. An example of an outcome of this process was the offering of Medical Coding and Advanced Medical Coding classes that lead to certifications. Other medical/healthcare courses are in the process of being arranged now and will be offered during our summer and fall terms. All of these courses have a certification exam as well, providing students an opportunity to prove they have the required knowledge. Another example was an identified need for Leadership classes. In response to that need, the College began offering a series of 29 Leadership classes which have been well received. We also assist employers with applying for Incumbent Worker funds and encourage them to use those funds when available to pay for the training we provide.

Community scanning

As noted in the above profile, Columbia State has four extended campuses with Directors and a Dean that are actively involved in their communities. That involvement includes activity with community leaders and businesses for the identification of workforce training and education needs. Through that identification, courses, programs, and or curriculum enhancements (credit and non-credit) are identified and offered.

Advisory committees

Professionals throughout our communities volunteer their time to serve on advisory committees for meshing curriculum with workforce and professional needs. These committees are appointed for the development of both credit and non-credit programs and for the on-going assessment of credit programs. Standing advisory committees exist for Nursing, EMT, Film Crew Technology, Respiratory Technology, Veterinary Technology, Agriculture, Radiologic Technology, Office Systems Administration, Business Administration, and Commercial Entertainment programs.

Columbia State offers a wide range of classes to employers, many in a live lecture format, and others online. In the non-credit professional development area, we provide customized program services.

They are:

- Design non-credit classes to meet the needs of employers
- Reevaluate existing non-credit training classes and customize the content to specific challenges identified by employers. Part of that customization is to develop quizzes/tests to measure learning.
- Deliver training at one of our five campuses or at an employer’s offices, depending on their preference.

Partnerships with the Local Labor Market Workforce Investment Board

Our partnership with the South Central TN Workforce Alliance has resulted in positive worker education and training programs for workforce growth and development. A prime example is the offering of Entrepreneurship training within our service area. Over 200 people have taken advantage of this training, resulting in busi-

nesses being started. In other cases, existing business owners have taken the training, and jobs have been added as a result. This training effort has also been made even more effective due to a spinoff USDA for funding of an Entrepreneurship Coaching position to help prospective/existing business owners write an effective business plan. In fact, this grant has also allowed us to offer more Entrepreneurship training in rural counties for 40 individuals. Columbia State is in concert with the area Technology Centers, and is the lead institution for education and training programs at the Northfield Center under the current direction of the local Area Workforce Board.

A service we provide to non-credit continuing education students is to help identify potential employers. An example of this is a SHOWCASE event we sponsor along with the South Central TN Workforce Alliance. We invite a number of Middle Tennessee doctor's offices and hospitals to send representatives to this event where they can meet trainees who have recently attained their Certified Professional Coder credential. The WIA office also has grant funding to provide pay to completers for the purpose of attending an internship with these employers. This contains several benefits in that it pays the completers, gives them a chance to demonstrate their skills to the employer, and gives employers an opportunity to see the recent completers in action on the job. We are very excited about this and the potential it represents.

Recently, through the WIA partnership, we began offering special non-credit classes at their request for displaced workers for re-enter into the workforce.

In regards to credit programs, the partnership between the College and the Workforce Board has resulted in student tuition assistance for Associate Degree and Certificates in Computer Science Technology, Health Information Technology, Radiologic Technology, Registered Nursing, Criminal Justice, Business Management, and Office Systems Technology. More than 55 students have been serviced during this academic year.

Many of the non-credit programs the College is introducing have a certification/testing connected with them. An example is the computer software training we are doing for an employer in our service area. We are conducting 10 classes for them, each of which contains a quiz at the end to measure knowledge. Another example is in the area of Geographic Information Systems. This class is being developed into a non-credit certificate program. That is, there are four courses in the series, and a student must take at least three and pass the exams to get the certificate. Here again, this allows trainees to prove they have the requisite knowledge in the topic, and, this program can be moved to a credit certificate if interest and need continues strong.

Programs at Columbia State that Prepare Students for the Workforce

A listing of non-credit programs by primary delivery completed between July 2010 and this writing are outlined below:

NON-CREDIT WORKFORCE TRAINING

[July 2010 to date]

Type/examples	# Programs	Enrollment
Open Enrollment—On—Ground (classroom)		
Police In-Service, Hospice Training, EMT Refresher, Leadership, Social Media, Computer, Software, Coding * * *	41	589
Open Enrollment—On Line Individualized Contract Courses		
Medical Coding, Medical Transcription, Paralegal, Pharmacy Tech, Six Sigma, Creating an Inclusive Classroom, Get Assertive, Office Software* * *	112	128
Contract Training—WIA/IWT		
Basic Computer, Entrepreneurship, Medical Coding, Customer Service, AutoCAD * * *	17	244
Spanish Training Grant—Federal Pass Through—Government Highway Safety Grant for Tennessee	17	311
GM Contract for Specialized Classes	33	254
Industry Contracts	4	28
Partnership Training Courses with Area Organizations and Businesses ACLS, Pediatric Advanced Life Support, PALS * * *	23	343
Total	247	1897

Credit programs offered by Columbia State that are career or workforce entry after completion include five credit-bearing certificate programs and eight associate in applied science degree programs. They are:

Certificates	Associate in Applied Science Degrees
Business Management Certificate	Business Information Technology
Commercial Entertainment	Option: Computer Systems
Option: Songwriting	Options: Office Systems
Option: Performance	Business Management Technology
Early Childhood Certificate	Criminal Justice Technology
EMT/Paramedic	General Technology
Film Crew Technology	Nursing (R.N.)
	Radiologic Technology
	Respiratory Care Technology
	Veterinary Technology

All of these credit programs have advisory committees comprised of professionals in the field who offer guidance to assure that the content is relevant so that graduates will complete with the skills and knowledge necessary for the current job needs. Many programs require clinical or observation experiences in the field and area employers are cooperative in allowing students to gain these experiences. Many programs have accredited status within their profession which also requires industry professionals to serve in an advisory capacity to assure industry standards are met as part of maintaining program accreditation.

Radiology Technology

The radiography program utilizes 10 clinical affiliates, including rural hospitals, regional medical centers, free standing imaging centers and orthopedic clinics. Students rotate through sites from Franklin to Dickson to Waynesboro to Shelbyville.

Program faculty periodically provides educational programs for area professionals (access to mandatory continuing education credits). Brenda Coleman, Program Director, currently serves on the Board of United Way of Maury County.

Kae Fleming, faculty/Dean, serves as a Site Visitor Chairman for the national programmatic accrediting agency, Joint Review Committee on Education in Radiologic Technology (JRCERT). Ms. Fleming also serves on the Williamson County Schools Career & Technical Education Health Sciences Advisory Committee and the Bio-Medical Advisory Committee for BioTN.

Veterinary Technology

The Vet Tech program has continuously served the veterinary medical community since initially earning accreditation in 1979 and is one of only two programs sponsored by TBR/THEC institutions in Tennessee. The program currently has affiliation agreements with 39 clinical sites. Students benefit from rotations in specialty practices including two Equine hospitals (Thompson's Station & Nolensville), two UT Dairy Educational Research Centers (Spring Hill & Lewisburg), two specialty referral practices (which include emergency facilities), an Animal Emergency clinic (Columbia), the Vanderbilt University Division of Animal Care, a Veterinary Ophthalmology practice (Nashville) and at least one mixed animal practice (Columbia). The yearlong clinical component of the educational program rotates students from Lawrenceburg to Nashville and occasionally Livingston, TN. All students are members of Columbia State's student chapter of the National Association of Veterinary Technicians in America.

Nursing

The Nursing program has established clinical relationships with more than 15 institutions ranging from small, rural hospitals to metropolitan research institutions to long term care and mental health facilities. Student learning experiences also occur in area health departments and community school systems. Students volunteer for service learning opportunities by assisting area agencies with wellness clinics and health screenings. Clinical partnerships occur across the Middle Tennessee area.

Faculty interact with the workforce through volunteer speaking, involvement with HOSA groups (including contest judges), as well as hosting both high school and LPN students on campus.

Columbia State partnered with National Healthcare (NHC) and Maury Regional Medical Center (MRMC) to deliver a contract night/weekend LPN to RN bridge program (2005/2006). In response to continued pressure for working LPNs to pursue becoming an RN—the college is exploring establishing a cohort pathway LPNs could use to complete Nursing's general education requirements. If interest is sufficient, the College will request approval from the State Board of Nursing and the accred-

iting agency (NLNAC) and attempt to recruit qualified faculty to design an LPN-RN Bridge cohort.

Area healthcare facilities are invited to utilize equipment on campus, particularly high fidelity human simulators used by hospitals to train staff (ACLS & acute care). Other applications include flu clinics with Williamson Medical Center, MRMC Hospitals, and serving on leadership of TN Clinical Placement System.

Utilizing physical resources at the Wayne County Technology Center, Columbia State will offer non-credit Certified Nurse Assistant (CNA) training in Waynesboro (Summer 2011).

EMS Education

EMS Education has clinical affiliations with approximately 20 hospitals, fire halls, and ambulance services. Students experience emergency medicine in rural settings and major research institutions (Vanderbilt University Medical Center). Clinical partnerships occur across the Middle Tennessee area. EMS lends itself to delivery of courses to meet the specific needs of a community—examples include courses we did to train displaced workers in Perry County in 2008 and 2009.

Columbia State is a regional site for “EMS Night Out”—a bi-monthly educational program for EMS professionals.

Respiratory Care

The Respiratory Care program clinical affiliations with nine institutions ranging from small, rural hospitals to metropolitan research institutions: Vanderbilt University Medical Center, St. Thomas, Baptist Hospital, Crockett Hospital, Maury Regional, Middle TN Medical Center, Williamson Medical Center and Monroe Carell Children’s (VUMC). Students also benefit from clinical experiences via Respiratory Care at Home in Nashville. Clinical partnerships occur across the Middle Tennessee area. An active advisory committee includes representation by each clinical site in addition to shared medical directorship from Maury Regional Medical Center: Jon Freels, MD, Thomas Quinn, MD, Maura Lipp, MD, and Minerva Covarubius, MD.

The program is classified as an “Advanced Practice” (Registry) program and provides the professional community with graduates eligible for all three national credentialing examinations to become registered respiratory therapists, RRT.

Program faculty members are active leaders in their profession. Roger Major, Clinical Coordinator, represents the profession on the TN Board of Respiratory Care, and is a member of the Education Committee for the TN Society. R. David Johnson, Program Director, serves as Chair of both the Education & Government Affairs Committees for the Tennessee professional society and is a member of the Health Sciences Advisory Council for Summertown High School. Both faculty members are credentialed instructors for ACLS, PALS, and/or BLS, providing certification opportunities for students, faculty/staff, and the community.

Business Administration and Information Systems Technology

Professionals in the field review curriculum and often seek students for placement. The faculty follows the placement of graduates to assure their effectiveness in meeting employer requirements. Through a partnership with Trevecca Nazarene University, an Accelerated Business Administration program is offered. Through this program, a student can obtain their Associate of Science degree and follow with their Bachelor’s degree in three years. A fourth year is available for obtaining the Master’s degree.

The Information Systems Technology students are given the tools to enter many computer fields. Many are provided opportunities for internships, special volunteer assignments, or coops where they obtain career experience or understandings. Through our information systems office, students, faculty and staff provide technology support for the Nashville Film Festival, which is held in April of each year.

Commercial Entertainment

Commercial Entertainment is a one year program that provides students with skills and knowledge for entry into the recording industry and entertainment field. Graduates from this program are working in Nashville, New York, for various cruise lines, and in plenty of other entertainment/music-focused careers. Students and faculty work with entertainers in the area to keep the curriculum up to date.

Film Crew Technology

Film Crew is one of our newer programs and involves students with hands on experience from the first class to the last. The program provides them the skills to be below-the-line gaffers, grips, camera operators, sound persons and/or other technicians. Film professionals from the Nashville area and some from Los Angeles have provided instructional support and helped mesh our curriculum with latest tech-

niques to allow outside evaluation of student skills. One goal of the program is to reinforce the state's crew base with a steady stream of trained professional technicians. This program boasts a 100% placement rate. Graduates have worked on every major production in the State of Tennessee since 2009, and several in Georgia.

The Film Crew students and faculty are involved in the Community. Each year they complete one or two community projects. Their most recent project was one for The Shalom Foundation. Two students and the instructor accompanied a group from the Shalom Foundation to Guatemala to film the experience and produce a video that provides an overview of the medical program and its importance.

The Program Director actively develops working relationships between professional production companies and the Film Crew Program. Those relationships have resulted in the placement of graduates and students on the following:

- Four music videos
- Four feature films
- Six short films
- 24 commercials
- Three EPK's (electronic press kits)
- Two PSA's (public service announcements)
- 16 industrial projects
- Two international shoots

The more this program works with outside production groups and entities, the more placements and new production work gets generated. But this may be scaled back somewhat in the future because the cost of this ongoing promotion and networking may not be able to be sustained with current program personnel (one faculty member who is director and instructor).

Criminal Justice Technology

In the offering and development of this program there is continuous interaction with our law enforcement agencies for course and curriculum relevancy. It also serves as a training program for existing law enforcement personnel who have not obtained a degree.

Of special note is the collaboration with the University of Tulsa for a Cyber Security NSF/ATE grant. Through the implementation of this grant the College is developing a Cyber Security specialty for offering. Dr. Robert Grubbs, Program Director, is actively involved with local law enforcement agencies for maintaining a current curriculum as well as involvement of law enforcement professionals in instruction.

Other Initiatives

Columbia State is collaborating with the Saint Thomas Heart Chest Pain Network and the Saint Thomas Stroke Network on a three year, \$600,000 Health Resources and Services Administration (HRSA) grant from the United States Department of Health and Human Services. This is a workforce development grant designed to increase the number of healthcare workers in rural Tennessee. Kae Fleming, Dean of Health Sciences, serves on the Advisory Board and Bob Trybalski, Instructional Technology Specialist, provides support for use of ITV resources to reach rural areas.

Two Technology Centers are located within Columbia State's service area. The College collaborates with the Centers to provide support for their program and articulation of their certificate and diploma programs. An example is a process that was established that allows a Practical Nursing student a path of entry into our registered nurse program and diploma students to continue their studies at Columbia State to obtain an Associate of Applied Science in General Technology.

The College collaborates with the Local Area Workforce Board to provide leadership for collaboration with state community colleges in the offering of programs of need that Columbia State is not currently approved to offer. This collaboration is good for the student and positively embraced by state and national organizations and leaders, but traditional evaluation of institutional success and recent movements towards evaluation and funding based on graduates does not necessarily promote this type of collaboration.

Associate of Arts and Associate of Science Degrees

The Associate of Arts and Associate of Science Degrees are sometimes not considered as part of workforce development. At Columbia State, we view students with majors that lead to one of these degrees as preparing for a career (workforce), which requires a baccalaureate for entry. As such we articulate curriculum with professionals in curriculum areas such as accounting, engineering, business, education (teaching), etc. The College, through the guidance of the University Center Office, maintains articulations agreements with four-year colleges and universities as well

as transfer assistance. Universities partner with Columbia State to offer the baccalaureate requirements for Elementary Education, Business Administration, and Human Resources Management on our campuses. In addition there are Master's degree programs as well as individual courses required for a baccalaureate offered. We have many students who complete their Associates and the Bachelor's degree on a Columbia campus.

PROGRAMS IDENTIFIED/REQUESTED BY ORGANIZATIONS/BUSINESSES FOR
EXPLORATION/OFFERING BY COLUMBIA STATE

Program	Certificate/degree
Electroneurodiagnostic (END)	Certificate—AAS in Partnership with Vanderbilt
Polysomnography (Sleep Disorders)	Certificate “add on” credential for Respiratory Therapists or standalone AAS
MRI, Computed Tomography (CT), and/or Mammography	Certificate, “add on” credentials for registered Radiologic Technologists
Equine Dentistry	Certificate, “add on” for Veterinary Technicians
Health Information Technology/Health Informatics Technician	Certificate and/or Degree track
Acute Care Paramedic	Certificate
Biomedical Instrumentation Technician	AAS Degree
Clinical Research Associate (CRA)	AAS Degree
Physical Therapy Assistant (PT-A)	AAS Degree
Logistics	AAS Degree
Green Technology	Certificates—AAS Degree
Industrial Process Control	Certificate
Advanced Manufacturing	Certificate

Student Support for Student Success

Providing educational opportunities alone is not an assurance of success. Research, and what we as educators have known, shows that student engagement in and out of the classroom is required for student retention and success. Services such as guidance, advisement, tutoring, computer access, and financial aid exist at Columbia State as with other colleges. However to engage students, enhanced services are needed. The following programs have been added to boost our connection students:

Retention Advisors

Reorganization was recently completed to transition from an advising center to retention advisors. A retention advisor will be located in each instructional area to identify students who are at risk and to work with faculty in identifying and assisting those students. This model was drafted by Columbia State and as per the information we have obtained does not exist in this form at other colleges.

Student Activities

Clubs, Student Government Association, athletics, and academic societies have existed at Columbia State since its inception. In our strategic plan for the next five years, the expectation of increasing student activities and student participation in such was set as a goal. Through this engagement we envision increased learning and student retention.

President's Leadership Society

This retention and student development project is open to all degree seeking students. The purpose is to engage the student, increase learning through life and workforce relevant workshops, to increase their awareness of art, civic, and community responsibilities, and their understanding of cultural differences. One criterion for being a member of the Society is to graduate. This program is not only one that engages and develops the student, but it is one that also provides them with skills and abilities that are important to success in their chosen career.

Student Ambassador Program

An Ambassador program exists for students to apply and participate in. The program provides students with the opportunity of working with various offices across campus and with students for showcasing the college, giving student tours, or representing the College at community events or activities.

Campus Learning Spaces

Research states that student retention and engagement are enhanced through a campus that is attractive and has spaces across it that are inviting. These spaces, including the hanging of art, are occurring across campus to promote student gatherings for discussion and a connection to the college.

Think Graduation

Think Graduation is a national movement that is championed by faculty and staff in a daylong event where they work and present to students the value of graduating. They seek to have students sign a graduation contract.

TRIO

The Columbia State Community College TRIO program was established to assist 140 first generation low-income students, or students with a disability, with support for college success and graduation. Student services provided include tutoring, academic and career counseling, transfer assistance, cultural enhancement, and study skills workshops (examples—Time Management, Financial Management, Health Care, College Study Skills, etc.). Also, Summer Bridge, a three-day intensive orientation designed to enhance the success of 40 first time Columbia State students will begin this summer.

Lyceum Events

Musical performances, cultural events, plays, films, lectures, discussions and more are held almost weekly to enhance student learning and engagement. These events are organized and run by faculty and staff.

Career Advising

A career advising center exists but personnel for manning the center has not been adequate. Through reorganization the College is moving to provide greater services. The curriculum program coordinators and faculty provide career advisement as related to the field of the faculty and sometimes staff member. Career advising is important to the student's success and workforce development.

Cultural and Diversity Activities

Through our Diversity Office, advising is provided students. A generational mentoring program composed of mentors throughout the region and designed to guide students towards successful college completion is active. Other projects include a scholarship and guidance program for adults returning to complete a degree that had previously stopped or dropped out.

Partnership Initiatives for Student Success

Many activities for student success and in support of workforce development are completed through faculty and staff working in concert with one another. These programs increase the competence of secondary and post-secondary students in understanding professions and career requirements. These activities include:

Student Leadership Conference

County high and unit school students participate in a conference held on the Columbia campus for increased understandings of workforce skills and leadership requirements. Local business owners, CFO's, attorneys, doctors are the speakers.

Summer Math Academy

Local business owners, bankers and contractors give time to fifth, sixth, and seventh graders attending a Summer Math Academy designed to improve the basic math skills of students for everyday living. The Academies are held at five different locations in our service counties.

Mule Town Family Network (system of care for youth and families with Serious Emotional Disorders)

Students and staff work cooperatively to volunteer time that provides career development with organizations such as Centerstone, TN Voices, Department of Human Services, Juvenile Justice, City of Columbia Police, Sheriff's Department, and Family Center.

ITV and Dual Enrollment Grant

The College received a grant to implement an ITV system in rural high schools to provide opportunities for dual enrollment and industry training.

Facilities Use

College facilities are made available for businesses, organizations, and industries for use in training, annual meetings, or other activities that supports their business.

COOP Program

Campus staff works with different businesses /organizations, including the City of Columbia and local businesses, to place students in COOP experiences.

Mass Communications Conference

Approximately 200 secondary and post-secondary students participate in a Mass Communication Conference on the Columbia Campus each fall. The highlight of the conference is a panel of media and marketing professionals who gives an overview of their field and then takes questions from the audience for an open discussion speakers—The panel usually features TV/Radio hosts, newspaper writers, computer web developers and even music industry marketing professionals.

Statement of Concern and Consideration

We are all concerned for the renewal and growth of our state and country's economy. We understand that education, partnerships, and development are central to that renewal and growth. Columbia State, as with other colleges across the nation, has experienced great reductions in funding, reductions that have not been recouped through the increases in tuition. We are concerned with tuition increases and how such increases tend to close the college door. Yet to continue at similar levels of access, service, and programs, the tuition increases are required in our new economic arena.

To maintain its effectiveness, Columbia state completed an in depth analysis of functions as compared to mission and eliminated functions that were not evaluated as essential to mission fulfillment. This process allowed for budget-mission alignment. Yet we are in a dilemma as to how to respond to the many requests that we have for existing and emerging programs.

The College is hindered from response due to budgetary resources for program development personnel, equipment, instructional resources, and in some instances, facilities. While we seek grants, they are difficult to obtain due to competition or grant requirements that are not fully consistent with the needs of our area. Our Colleges are now very lean and filled with people working at maximum capacity, yet we are to increase access and graduation numbers.

Most DOL grants are linked to existing labor market needs; resources are needed to provide for emerging fields such as green technology, Biotechnology, or state recruiting plans for industries that will create a labor demand that does not currently exist in the area. A possible alternative to the current grant allocation process during these difficult economic times is to provide block grant funds to community colleges for program development that requires positive student success results over a four year period or refund of the funds received.

Another possible area for consideration, that would prove beneficial, is to provide for a program development specialist at each community college. Current personnel declines and increased personnel loads create lag in desired response to the identified need. This specialist would be the leader responsible for development of and integrating industry and curriculum requirements for training, certificate, or degree programs implementation.

As you are so well aware, we have all been proud to acknowledge education as the great equalizer of the peoples of our great Nation. Yet, this fall I see the door beginning to close. There is now, in Tennessee, an ACT standard for entry into remedial and developmental programs—in applying this new standard to Fall 2010, we anticipate that 100 students who were admitted last fall would not have been, if our new standard were in effect. I do not argue with the standard especially as we move towards being primarily responsible for student success, but I am greatly concerned that the opportunity to attempt a post-secondary education may be determined by many intervening variables that occurred during a student's youth. I am also concerned that the door is closing for some as tuition increases, yet to maintain the programs and services in our economic times the tuition is needed. I believe that education is the great equalizer and that I am a product: I desire that opportunity for all.

**STATEMENT OF DR. TED BROWN, PRESIDENT,
MARTIN METHODIST COLLEGE**

Mr. BROWN. Mr. Chairman, thank you for the opportunity to speak on behalf of a topic that is important to all of us, but especially my institution, Martin Methodist College. I certainly want to say a word of thanks to our Congressman for the role that he played in my invitation to be here.

Many assume that our public colleges and universities are the most supportive of workforce initiatives because they are intrinsically closer to state government and the structures that support workforce development. But I want to make the assertion this morning that our private or independent institutions, especially those like my institution, that are enrollment driven, are at least as supportive of workforce development, because we are closer to the market. We have to be. Our livelihood depends on us being attentive to the market. Of course, I do not want to suggest that this is some kind of competition because it is very clear that the more we cooperate and collaborate together, the stronger our employment situation in the United States and in our region will be.

Martin Methodist College has always been important to our local and regional economy. We are among the largest employers in Giles County, our economic impact is approaching \$60 million per year on the local area. But more important, we attempt to serve the needs of local industry in terms of the education of prospective employees, but also in the continuing education of current employees. Many of our degree programs—I think specifically of our management information sciences, accounting, criminal justice and our new baccalaureate nursing program—were developed largely out of continuing conversation with local industry and organizations. We were among the first baccalaureate institutions in the state to develop an evening college program for working adults. Again, largely in response to the needs of local industry and business.

I want to focus in on a fairly specific issue that is of special importance to us right now because our county is very intentionally shifting away from the old model of economic development, hunting down large manufacturing organizations, to a new model that is focused on planning and growing small businesses, economic gardening, if you will. You hear a lot of talk about small business being the backbone of our economy. In Giles County, 48 percent of our businesses are one-person operations. Across the state of Tennessee, 34 percent are one-person operations. And if you go to those that are under 10 employees, 92 percent of our businesses in Giles County fit that bill. Across the state of Tennessee, 84 percent are smaller than 10-person operations. So you hear a lot of talk about small business being the backbone of the economy, but honestly, I see very little public support for movement in that direction.

The case in point that I want to raise is the Giles County Small Business Development Center. We began conversations at least four years ago, perhaps longer—the college, the Economic Development Commission in our county, the Chamber of Commerce and Pulaski Electric Service—about a center that could help establish and grow small businesses. We sought support for the concept through every state and federal resource we could identify, and in the end we came up bone dry.

Last year, almost out of desperation, I decided that Martin Methodist College was just going to move ahead with this process, and established the Giles County Small Business Development Center. We funded it internally. The program is now in place, we have a well-qualified director who was jointly appointed to a marketing position on our faculty and to the position of director of the Giles County Small Business Development Center. He has offices on campus and in our Chamber of Commerce building down on the Pulaski Square.

One of the critical elements at our college is that we bring to the table every year a significant number of students, I would say dozens, who have very imaginative small business ideas along with a wealth of energy to drive small business creation and success. And our campus is not different from most colleges and universities in that respect. What we are missing is the linkage between students and local resources that enable and encourage small business development. Our Giles County Small Business Development Center provides precisely that linkage, along with a host of resources for those in the community who want to establish and grow small businesses.

While the Giles County Small Business Development Center is a fledgling operation that is drastically underfunded—it continues to be funded almost entirely by Martin Methodist College—we have proven that this kind of public-private partnership can work and has the potential to be an economic engine for our small community. I am convinced that we have also proven that state and federal workforce resources continue to be focused on the old manufacturing model and do not take seriously the importance of establishing and growing small businesses, especially in our rural and small communities and counties.

Now I am not here to beg for resources for the Giles County Small Business Development Center, but I am pleading for those who have control of workforce development resources to take seriously what all the statistics very clearly prove, and that is that small businesses are the key to economic recovery and to our nation's future financial strength.

Thank you.

Chairman KLINE. Thank you, Dr. Brown.

Mr. Coakley, you are recognized.

[The statement of Dr. Brown follows:]

Prepared Statement of Dr. Ted Brown, President, Martin Methodist College

Mr. Chairman: Thank you for this opportunity to speak on behalf of a topic that is important to all of us, but especially to my institution, Martin Methodist College. And I want to say a word of thanks to Congressman DesJarlais for his role in this invitation as well.

Many assume that our public colleges and universities are the central educational resource for workforce initiatives because they are intrinsically closer to state government and the structures that support workforce development. But I want to make the assertion that our private or independent institutions—especially those like my institution that are enrollment driven—are at least as important to workforce development because we are closer to the market. We have to be—our livelihood depends upon. Of course, I am not suggesting that this is some sort of competition because the truth is the more we cooperate together the stronger our employment situation in the United States and in our region will be.

Martin Methodist College has always been important to our local and regional economy. We are among the largest employers in Giles County, generating more

than \$60 million in economic impact each year. At the same time, we serve the needs of local industry in terms of the education of prospective employees, as well as the continuing education of current employees. Many of our degree programs, such as Management Information Sciences, Accounting and our new baccalaureate Nursing program were developed largely out of on-going conversation with local industries and organizations about their needs. We were among the first institutions in the state to develop an evening college degree program for working adults, again largely in response to the needs of local industries and businesses.

I want to focus on one specific issue that is of special importance to us right now because our county is very intentionally shifting away from the old model of economic development—hunting down large manufacturing operations—and moving to a new model that is focused on planting and growing small businesses. You hear a lot of talk about small businesses being the backbone of our economy, but I frankly see very little public support for that notion. The case in point is the Giles County Small Business Development Center (GCSBDC). We began conversations more than four years ago—the College, the Economic Development Commission, the Chamber of Commerce and Pulaski Electric Service—about a center that could help establish and grow small businesses. We sought support for the concept through every state and federal resource we could identify and in the end we came up bone dry.

Last year, almost out of desperation, I decided that Martin Methodist College would move ahead with establishing the Giles County Small Business Development Center and fund it internally. The program is now in place, with a well-qualified director who is jointly appointed to a small business position on the faculty of our business school and to the position of Director of the GCSBDC, with offices both on campus and in the Chamber of Commerce building on the Pulaski Square. One of the critical elements that our college brings to this table every year is a significant number of students who have very imaginative small business ideas along with a wealth of energy to drive business creation and success. And our campus is not different from most colleges and universities in that respect. What we are missing is the linkage between students and local resources that enable and encourage small business development. Our GCSBDC provides precisely that linkage, along with a host of resources for those in the community who want to establish and grow small businesses.

While the GCSBDC is a fledging operation that is drastically underfunded (it continues to be funded almost entirely by Martin Methodist College), we have proven that this kind of public-private partnership can work and has the potential to be an economic engine for a small community and region. I am convinced that we have also proven that state and federal workforce resources continue to be focused on the old manufacturing model and do not take seriously the importance of establishing and growing small businesses, especially in our rural and small communities and counties.

I am not here to beg for resources for the GCSBDC, but I am pleading for those who have control of workforce development resources to take seriously what all the statistics clearly prove—that small businesses are the key to economic recovery and to our nation's future financial strength.

**STATEMENT OF JIM COAKLEY, PRESIDENT,
NASHVILLE AUTO-DIESEL COLLEGE**

Mr. COAKLEY. Mr. Chairman, my name is Jim Coakley and I am the President of Nashville Auto-Diesel College located in Nashville, Tennessee. I would like to thank you and Congressman DesJarlais for allowing me to testify on behalf of the students, faculty and staff of Nashville Auto-Diesel College on the role of higher education in job growth and development. I believe NADC, as well as other private career colleges in Tennessee and throughout the United States, play a vital role in today's economy, and I will provide you with information on the strengths of our college that help produce well-trained graduates that are prepared to enter the workforce and provide an immediate impact on the businesses and communities where they are employed.

NADC has trained and educated technicians to repair multiple types of motor vehicles used in the transportation industry since

1919. The school was founded by H.L. Balls and owned by the same family until 2003, when it was purchased by Lincoln Educational Services Corporation. Lincoln also has a long, storied history in training automotive technicians as it opened its first campus in 1946 in Newark, New Jersey.

NADC has trained over 53,000 technicians in every segment of the transportation repair industry. Students who enrolled at NADC during its infancy literally had to be taught how to drive a car on our property before they were able to train on how to repair said automobile. Now, almost 100 years later, our campus spans almost 300,000 square feet in 21 buildings spread over 19 acres to support our 1500 students and 269 staff and faculty, where short-term NAFEF-certified programs are offered in automotive and diesel technology and collision repair and refinishing. Upon completion of this basic training, students also have the option to continue in specialties such as high performance, heavy equipment maintenance, and undercar specialty or work toward an associate degree through our online learning delivery system.

Our mission has essentially remained consistent: offer the best educational training programs to enable graduates to take the highest level of job knowledge and skills to the marketplace. This mission is met by a dedicated group of faculty and staff that has enabled NADC to become a leader in the automotive field, not only in Tennessee, but nationwide, with students coming from over 30 different states to the Nashville area to learn this important trade.

Our college relies on some basic guiding principles that assist us in meeting our published mission. First, our faculty and training facilities remain at the core of our educational process. For example, NADC only hires instructors with workforce experience and a passion for education, in order to bring the theory to life in a laboratory environment. Furthermore, all of our instructors are ASE-certified and I am proud to tell you that over 69 percent have worked at NADC for more than five years.

Our students really demand a tremendous amount of hands-on learning and are often at their best when allowed to physically work on an automobile component or system. In order to meet their demands, NADC invests a tremendous amount in acquiring and maintaining our inventory of vehicles and components. These training aids, valued at over \$5 million, include over 40 late-model automobiles, 25 Class 8 trucks, 60 live car engines, 60 live truck engines, and over 150 training aids for component systems.

One of our key strengths is our close working relationships with industry. At NADC, we have two separate advisory committees with over 45 industry representatives from a diverse set of employers, not only from Tennessee, but from states such as California, North Carolina and Pennsylvania. These advisory boards meet at least twice per year to discuss our curriculum, facilities, equipment and outcomes. By instituting a process by which the advisory board reviews this type of information and data and actually meets at our campus, the college has the best possible perspective, knowing that we are providing college students with current and relevant instruction in automotive, truck and collision repair fields.

The process by which we hire faculty, develop curriculum and expose our students to the highest quality learning aids all ties to our

ultimate goal of assisting our graduates in finding employment. This placement process begins in the first days of orientation with the college when we bring our Career Services Department staff to discuss employment opportunities and expectations from employers. From there, Career Services provides assistance with resume writing, interviewing techniques, part time employment assistance during their enrollment.

NADC hosts two large career days annually where dozens of employers attend such as U.S. Caterpillar dealers, Covington Detroit Diesel, Conway Trucking, ABRA Auto Body and Glass and Travel Centers of America. This dedication by our Career Services Department has produced excellent results in getting our students into the workforce, whether it is in Tennessee or elsewhere in the United States. As a result of their commitment, over 75 percent of our 2010 graduates have already initiated their careers in the diesel, automotive or collision repair industries. Further, 71 of the students who graduated in 2010, and originally came from out of state, ultimately stayed right here in Tennessee.

Finally, Mr. Chairman, as you know, our sector of higher education has a tremendous amount of regulatory oversight, which provides a student with the confidence that our college provides a quality education. Currently, our college is not only regulated by the Tennessee Higher Education Commission, but also a national accreditor, the Accrediting Commission of Career Colleges and Schools and the United States Department of Education, as our college is able to participate in the federal government's student aid programs.

While we are proud of NADC's academic, employment and fiscal outcomes, including the fact that NADC has consistently published cohort default rates below 10 percent for the last 10 years, I would be remiss by not letting this Committee know that some program integrity issues finalized in the regulatory language by the U.S. Department of Education will have a negative impact on our college and thus, indirectly, on the economy of the Nashville metropolitan region at a time when our nation's automotive industry seems to be regaining its footing.

In conclusion, Mr. Chairman and Congressman DesJarlais, I hope this written testimony provides you with a perspective as to the role that NADC plays in job growth and filling a niche for those students who want to learn a skilled trade from one of the oldest and most distinguished colleges in this field.

I appreciate the opportunity to testify today, and I look forward to providing any answers to your questions, not only today, but any time in the future. Thank you.

[The statement of Mr. Coakley follows:]

**Prepared Statement of James Coakley, President,
Nashville Auto-Diesel College**

Mr. Chairman, my name is Jim Coakley and I am president of Nashville-Auto Diesel College located in Nashville, TN. I would like to thank you and Congressman DesJarlais for allowing me to testify on behalf of the students, faculty and staff of Nashville Auto-Diesel College on the role of higher education in job growth and development. I believe NADC, as well as other private career colleges in Tennessee and throughout the United States, play a vital role in today's economy and I will provide you with information on the strengths of our college that help produce well-

trained graduates that are prepared to enter the workforce and provide an immediate impact on the businesses and communities where they are employed.

Nashville Auto-Diesel College has trained and educated technicians to repair multiple types of motor vehicles used in the transportation industry since 1919. The school was founded by H.O. Balls in 1919 and owned by the same family until 2003 when it was purchased by Lincoln Educational Services Corporation. Lincoln also has a long, storied history in training automotive technicians as it opened its first campus in 1946 in Newark, New Jersey, and has grown to 45 campuses in 17 states educating approximately 30,000 students as of December 31, 2010, in multiple disciplines and employing over 4,000 staff and faculty members.

Since opening in 1919, NADC has trained over 53,000 technicians that have worked in, or are currently employed, in every segment of the transportation repair industry. Students who enrolled in NADC during its infancy literally had to be taught how to drive an automobile on our property before they were able to train on how to repair the automobile. Now, almost 100 years later, our campus spans almost 300,000 square feet in 21 buildings spread over 19 acres to support our 1,500 students and 269 staff and faculty where short-term, NATEF-certified programs are offered in automotive and diesel technology and collision repair and refinishing. Upon completion of this basic training, students also have the option to continue in specialties such as high performance, heavy equipment maintenance, and undercar specialty or work towards an associate's degree through our online learning delivery system.

While technology in the automotive field has changed significantly over the past century, our mission has essentially remained consistent: offer the best educational training programs to enable graduates to take the highest level of job knowledge and skills to the marketplace. This mission is met by a dedicated group of faculty and staff that has enabled NADC to become a leader in the automotive field not only in Tennessee, but nationwide, with students coming from over 30 different states to the Nashville area to learn this important trade.

In order to continue being a leader in the automotive training field, our college relies on some basic guiding principles that assist us in meeting our published mission. First, our faculty and training facilities remain at the core of our educational process. For example, in order to be hired as an instructor, one must have workforce experience prior to even being considered for faculty appointment. Students coming to NADC want hands-on training during their enrollment and thus our faculty need to be able to lead those students in a laboratory learning environment. Without having years of experience in the field, there would be no way for our students to gain the knowledge needed to transition into the workforce. It should also be noted these 77 ASE-certified faculty show their commitment through their certifications and longevity at the college. That being said, I am proud to tell you that over 69 percent of these instructors have worked at NADC for more than 5 years.

Our educational facilities are also a source of pride at our college and help with preparing our students for an immediate impact upon hiring. As mentioned earlier, our students really demand a tremendous amount of hands on learning and often are at their best when allowed to physically work on an automobile, component or system. In order to meet their demands, NADC invests a tremendous amount on acquiring and maintaining our inventory of vehicles and components. These training aids that we have valued at over \$5 million include over 40 late-model automobiles, 25 Class 8 trucks, 60 live car engines, 60 live truck engines, and over 150 training aids for component systems.

Many of the reasons why we have such wonderful training aids comes from the knowledge brought to us not only by the faculty, but also by our current advisory board members. At NADC, we have two separate advisory committees with over 45 persons from a diverse set of employers not only from Tennessee, but from states such as California, North Carolina, and Pennsylvania. These advisory boards meet at least twice per year to discuss our curriculum, facilities, equipment and outcomes of the program. By instituting a process by which the advisory board reviews this type of information and data, and actually meets at our campus, the college has the best possible perspective knowing that we are providing students with current and relevant instruction in the automotive, truck and collision repair fields.

The process by which we hire, develop curriculum and expose our students to the highest quality learning aids all ties into our ultimate goal of assisting our graduates in finding employment. The placement process, however, does not start at graduation for our students, but rather from their first days of orientation with the college where we bring in our career services department staff to discuss employment opportunities and the expectation of employers. From there the career services department provides assistance with resume writing, interviewing techniques, part-time employment assistance during their enrollment, hosting two large "Career

Days” where dozens of employers attend, and then ultimately establishing job opportunities by scheduling interviews with employers that NADC has long-standing relationships, such as U.S. Caterpillar Dealers, from our 90 years in existence.

The dedication by our career services department has produced excellent results in getting our students into the workforce no matter whether it is in Tennessee or elsewhere in the United States. As a result of their commitment, over 75% of our 2010 graduates have already initiated their careers in the diesel, automotive or collision repair industries. Further, 71 of the students who graduated in 2010 and originally came from out-of-state ultimately stayed right here in Tennessee when our college found them employment in their field.

In addition to providing quality training to students that attend our college, I would also like to point out that NADC plays a role in the transportation sector. Currently, NADC is a national training center for the National Alternative Fuel Training Consortium based at the University of West Virginia in Morgantown, WV. Curriculum developed by the Consortium is used in a train-the-trainer fashion to prepare instructors to train students and the local community on clean fuels. Further, on October 15, 2010, NADC hosted Odyssey 2010, a celebration of clean fuel and energy independence. This successful event included speeches on the impact that technology vehicles and clean fuels will have on transportation in the United States by local and state officials as well as business leaders from the major automotive companies.

Finally, Mr. Chairman, as you know, our sector of higher education has a tremendous amount of regulatory oversight of which provides a student with the sense that our college meets a certain threshold for quality. Currently, our college is not only regulated by the Tennessee Higher Education Commission, but also our national accreditor, the Accrediting Commission of Career Colleges and Schools, and the U.S. Department of Education as our college is able to participate in the federal government’s student aid programs. While we are proud of the college’s academic, employment, and fiscal outcomes, including the fact NADC has consistently published a cohort default rate below 10% for the last 10 years, I would be remiss by not letting this Committee know that some of the program integrity issues finalized in regulatory language by the U.S. Department of Education will have a negative impact on our college and thus indirectly on the economy of the Nashville metropolitan region at a time when our nation’s automotive industry seems to be regaining its footing.

In conclusion, Mr. Chairman and Congressman DesJarlais, I hope this written testimony provides you with a perspective as to the role NADC plays in job growth and filling a niche for those students who want to learn a skilled trade from one of the oldest and most distinguished colleges in this field. I appreciate the opportunity to testify today and I look forward to providing any answers to your questions not only today, but any time in the future.

Chairman KLINE. Thank you very much, Mr. Coakley and to all of our witnesses.

We are going to trade back and forth up here for a little while in initiating this discussion.

It seems to me that all of you touched on this at one point or another, and some of you in great length, but there are sort of two issues here I want to get at. One is what you are doing to make sure that your curriculum is relevant to the needs of the workplace—and you all touched on that—and the other is what steps you may be taking to help your graduates actually get a job, be placed. And as I say, you have touched on it, but could we just sort of go through that briefly, what you are thinking of in your institution about what you are doing to make sure it is relevant—advisory boards and so forth—and then what you are doing to help them get a job.

Dr. Smith, we will start with you.

Ms. SMITH. I touched on the advisory boards, and we also have partnerships for all of our programs with different agencies, such as nursing with the hospitals and health agencies. Through those opportunities, our students are able to learn about what is going

on in their field, as well as our faculty then can review what the hospital is employing at that time, what new technologies they have, and how that comes back into our curriculum.

In terms of career placement, we have a career center and we are in the process of upgrading that career center, it is not at the strength that we feel like it needs to be. But the faculty within the programs—and since these students stick with the programs for a number of years, the faculty work with the students in allowing them to know what job opportunities are out there, and assisting with placement. We do employ a follow-up as well as student follow-up, graduate follow-up, to see how many of our students are placed, and we are required to submit that as part of our performance funding measures. So we take that very seriously in that those career students do obtain a job and that we are following up to see where they are at. And as I said, we embrace the career center and are working to improve that center as it exists currently.

Chairman KLINE. And that career center would then be specifically working with individual students, near graduates, and with employment opportunities, to connect the two.

Ms. SMITH. Yes, and it also will work with students on the front end too, as they are trying to determine what type of career that they want or if they are in a pre-program for an associate of science, how to prep for those particular classes as well.

Chairman KLINE. Okay, thank you.

Dr. Brown.

Mr. BROWN. We also employ advisory committees in relation to our academic programs and I would point to professional development requirements on the part of the college related to faculty as an important way of connecting with basically the market in general. But we do require each of our faculty members each year to engage in professional development that hopefully will not only further their scholarly interest and development but also gives them the opportunity to connect with how their program operates in the marketplace. And I think that is also an important point, in addition to the advisory committees that we utilize.

We do as well have a career center on the campus. One new feature we added this past year in relation to our first year initiative with students is that all freshmen have to have basically a counseling session in the career center their first year, so that they are on the proper path in terms of their course development related to their chosen career. And hopefully that is something that continues, it is not just something that you use the last 40 days that you are on the campus trying to get a job, but instead it is a continuing conversation with our career development professionals.

Chairman KLINE. Thank you.

Mr. Coakley, could you touch on that again? I know you covered it in your testimony, but specifically what steps are you taking to make sure that your students are learning the right automotive techniques—I guess not a lot of work on Model T's right now—but I am really interested in what the steps are that you are taking, I think you said you have about a 75 percent placement rate. What are you doing to help those students connect with the job?

Mr. COAKLEY. Our training is set up so that our students are—I will use the term conditioned from the beginning of training with

regard to wearing a uniform that would be commensurate with what they would do out in the field once they are employed. Attendance is a very strong focus with our program. We take attendance daily, we watch that our students do not go over—our 13-month program only allows a student to have a total of six excused absences with a program that runs five days a week for 13 months. So that is a relatively stiff measure in terms of what we are looking for. But again, we are trying to mimic what an employer would look for.

Our students typically work in two to six-member teams as they are working on their laboratory settings. Just yesterday, I toured the Caterpillar facility down here in Smyrna and a gentleman that I encountered—I was toured, first of all, by a graduate from 1968, who is in charge of the service program down there, Mr. Philip Welch. And as we walked around, we engaged with a gentleman who had just come out of a meeting, one of the vice presidents, and he introduced himself to us and said that he had just come out of a high level meeting where he was strained to find technicians. He said, “I cannot believe in this day and age with 10 percent unemployment, that I am having trouble finding skilled technicians.” And when he was introduced to us, he said, “I really want your folks to understand that it is important that they can communicate well, that they are able to work in teams, and that they have the ability to grow as they get in the position.” So we take that kind of information, which we garner on a regular basis, and bring that back to Career Services, bring that back through presentations in the classroom with our instructors. And truly it is one day at a time in educating and modeling what it is we expect from our students.

Chairman KLINE. Okay, thank you. One more question before I yield to Dr. DesJarlais.

Dr. Smith, you specifically mentioned that you have credit and non-credit programs. And presumably, the non-credit programs are designed for a specific skill. Is that based on your work with some particular business or with the workforce board? Or how does that come about?

Ms. SMITH. An example is entrepreneurship training. There was a need identified for entrepreneurship training and we worked with the local workforce board to provide that particular training in one of our outreach counties. So we provide the non-credit based upon what an industry may come in, such as the programmable logic controllers, that was industry-initiated. So we work with them to identify what to offer and then we work with workforce board in terms of what they see the needs are from the data that they have within our service area, and how to provide those.

And then others, such as this broad array of online classes, we know that there are special needs out there or an individual may be interested in going into a very specific field and we cannot offer an on-ground program, but we do it online so that over a period of time, they can get that training for that. So it is a combination.

Chairman KLINE. Okay, thank you.

Dr. DesJarlais.

Mr. DESJARLAIS. Thank you, Chairman Kline.

I think I will start with kind of a general question for the panel as well and maybe let you all respond. In Washington, we spend an awful lot of time looking at how the federal government is in the way or is impeding the progress of the advancement of our colleges and universities. And I guess I would like to see what thoughts you may have on where the federal government is in the way, what is taking the most of your time in terms of burdensome regulations and how much time are you actually spending on that?

So I guess we will just start left to right, Dr. Smith, if you have any comments.

Ms. SMITH. In terms of impeding, I do not see that there is a lot, from our perspective. Now we are concerned that if we go to national standards, that that could really come to a lot of reporting and things of that nature. We are run through our regional accrediting body and our regional accrediting body then works with CHEA and federal regulations that are there. So most of ours comes through a regional perspective. So we do not feel like we have anything right now that is impeding us from moving forward.

Our biggest thing is having funds to take and initiate new programs. As I mentioned in my written testimony, I would love to see some avenue where some of the grant funds, instead of them just being everything competitive, that there is some funds that come into community colleges to be able to develop programs to meet the needs that are out there.

An issue I think I do see is all of our grants, federal grants that come in, are more in terms of what is the need today as opposed to what is the need tomorrow and what is emerging. We can train a workforce for what is here today, but we have a very difficult time of applying for grant funds or receiving them that are looking at what is going to happen tomorrow.

Mr. DESJARLAIS. Dr. Brown, are there any particular federal regulations that you find are in the way?

Mr. BROWN. I would not say anything that is a huge problem for us. I would say in the area of financial aid reporting that there is a great deal more reporting that is required now than there was when I started in my position 14 years ago. And we have actually added three financial aid professionals, I would have to say probably one and a half of those positions is dedicated purely to reporting and that has greatly increased over the last three, four, five years. And so that is a little ominous if we have to keep adding professionals who are not really providing services to students, but are simply reporting.

And I would certainly echo what my colleague has said and that is that we are concerned about funding and Pell Grant in particular for us. We are a campus of 55 percent Pell-enabled students. And the cut that has been talked about, \$845 cut to Pell, would be nearly a million dollars in our \$15 million a year budget, so we are talking about a very significant impact on our institution.

Mr. DESJARLAIS. Mr. Coakley, any comments on that topic?

Mr. COAKLEY. With regard to gainful employment, I certainly understand that there are unintended consequences with any kind of change. I would submit that our sector of higher education is probably the most highly regulated. I think today—well, I know what occurs today—if a school's outcomes are not appropriate, the ac-

crediting body requires us to stop teaching that program. I believe today that students have access to information in order for them to make an intelligent decision on where it is they want to go in terms of what it is they are seeking. Some of the proposed changes with regard to gainful employment specifically are, first of all, somewhat gray. And secondarily, I think personally that I am going to have to move away from some of the very individuals I am trying to help to maybe a wealthier level of clientele, just by virtue of the changes that are being imposed. So I am concerned about being able to continue to serve the students that I serve today as we move forward with any kind of changes beyond July 1.

Mr. DESJARLAIS. I think what I am hearing from both Dr. Brown and yourself is that—or maybe I am hearing this, let me ask specifically—are you seeing a change in the demographics of the students that are applying now versus a few years ago with the tough economic times we are facing? And I guess we will just run down the line on that as well.

Ms. SMITH. Yes, we are seeing a change. And we are also seeing a change because we are seeing standards increase. To me, the community college door is closing a little bit. Beginning this fall, we go into a new remedial and developmental standard. If we applied that standard to last fall's enrollment, there will be 100 students that would not have been able to attend. So both with standards and then as well as access from funding perspectives, both tuition cost and in transportation. Since we are a commuter college and with the gasoline increases and so forth, that is creating quite a hardship in our students. And so having the funds to go to college and the funds to live on as they go is an issue for many of our students.

Mr. BROWN. We have seen a pretty significant rise in first generation students. We have gone from about 45 percent first generation to almost 70 percent on our campus, as we have grown. And those students need special attention in a lot of different areas; but certainly from a financial perspective, Pell grant and federal resources are very important to their attendance at college.

I guess that's the primary concern.

Mr. COAKLEY. As we talk to families that are considering our type of training, we encounter more situations where either one or both parents are laid off. They may very well possess strong credit to qualify for the loan programs that are out there, but just by virtue of the fact that they have good credit, they are guarded about taking on more than they think they might be able to repay down the road. So I do have scenarios where even if the funding is there, the parents are either unable to come out of pocket for any gap in funding tuition or just guarded about the idea of taking that loan product on. So the conundrum precipitates, I guess it just continues along.

Mr. BROWN. I would add also, if I might, that we are seeing more second career and third career people on campus as well. That is not a role that we have played as much in the past, and they are mainly place-bound students, who perhaps were out of a job or who decided this is a good opportunity for them to retool, go in a different direction. And that has required us to come up with some new skills in terms of counseling students like that.

Mr. DESJARLAIS. Mr. Chairman, if I could have time for one more?

Chairman KLINE. Certainly.

Mr. DESJARLAIS. Okay. Dr. Brown, you had mentioned that, not necessarily out of frustration, but just lack of support on a federal level, you moved forward with the Giles County Small Business Development Center, something that you kind of initiated and created. We had a hearing in I guess the past two or three weeks, where we had four witnesses, one from Oklahoma and Texas I believe. And it seemed that each of them had done something similar. They got tired I guess of waiting for federal intervention and moved forward with great ideas. I think that kind of sets the stage for a great question. Do you really feel that you want more federal involvement or less in moving forward? [Laughter.]

Mr. BROWN. To be honest, we are perfectly happy with the way things stand now. I do not know how long Martin Methodist College will be able to—you know, it just so happens things are going very well on our campus and we are able to step up on this special initiative. You know, if we have a major adjustment to make related to Pell, then we may have to back off of that program and the local area will have to step up. But I think what you are saying is—and I do not disagree—that this is the way it ought to work. We ought to have local entities, private entities, stepping up to do these things when they have a good idea. And we should not expect that there is federal and state support. But I would have to say that we would have been in this business three or four years earlier if we had just had a very small—ten, fifteen thousand dollar—seed grant to help us get started with some of the basics.

But like I say, I am not begging for that program, but I am suggesting that there is a role that both state and federal government can play in moving good ideas forward more quickly.

Mr. DESJARLAIS. I am not used to having this much time, I would have been gavelled a long time ago, so I will not get greedy and I will turn it back over to Chairman Kline. [Laughter.]

Chairman KLINE. I thank the gentleman.

You know, in Washington, because there are many more members, we try to limit these questions to five minutes and it moves you pretty rapidly. And that is again one of the reasons why this is very helpful to us, because we really have a chance to have a conversation here. So I appreciate your indulgence and forbearance here.

We have got kind of a representation of the diversity in higher education sitting right at this table. And I am interested in what sort of thought you have put into why is it that students have chosen your college, your university, your type of school. What are you hearing from the people who are coming in, why they are coming to Columbia, why they are coming to Martin Methodist or whatever. Dr. Smith.

Ms. SMITH. It is a variety of reasons. Some come because we are close, it is access, it is about where they can come and get their education. Others come because we are comfortable, it is a comfortable place to start. They feel that it is not threatening to them as say a university would or some other location. Some come because they want professional programs, they want the nursing,

they want the respiratory care, the vet tech. So this is a place where they can come and obtain that. Some are here because they just want some courses to upgrade what their current occupation is. So they are coming in, taking a few courses and then they are going out, they are meeting their need. And some of here because they really do not know what else to do. This is where they come and they are trying to figure out what the next job is, where they are going. So it is an array.

Chairman KLINE. Dr. Brown.

Mr. BROWN. I would echo those comments as well. We try to differentiate our offerings in the marketplace pretty carefully and as a residential institution, you know, we are trying to sell sort of the intensiveness of living on campus and having a full time experience on a college campus. Obviously that differentiates us from Columbia State and other institutions. But no question that a pretty significant percentage of our students would come out of convenience, we are close to them, or they like the program that we have for preparing them for their career. And so they come to us for that reason.

Chairman KLINE. Mr. Coakley.

Mr. COAKLEY. I would say that my students attend our program—of course, the heritage has already been mentioned a number of times, but short-term focus, the idea that we truly work with them on a more one-on-one basis in terms of support. When they miss a class, we are literally looking for them. I too have dormitories, I have 700 students on ground, so I can literally knock on doors for some of those folks, to see where they are. I do not have a truancy officer per se, but we can run them down. [Laughter.]

But I do have a combination of commuters that go along with that and I have a number of folks that have retooled as well and are looking for—you know, a person that gets caught with a hiccup in their career, they need to retool quickly and get back out there and 13 months fits the bill oftentimes.

Chairman KLINE. Well, thank you very much.

Dr. Brown, I feel compelled to address Pell grants for just a minute, you brought it up a couple of times and I understand there is a fair amount of interest in this subject out there.

There is no question that as we are looking at ways to control federal spending, that we are looking at Pell grants. The program has had pretty strong bipartisan support and continue to have that, but it has been our observation that Pell grant money has more than tripled here in just a couple of years, from \$12 billion to over \$40 billion. And it is simply unsustainable at that rate.

So what you would expect coming forward are proposals, mostly from my side of aisle, I admit, that will put this on a stream that we think is sustainable so that everybody can count on it. What we have now is a spike that frankly was, in my judgment, horribly over-promised and so I know it is causing consternation. I do not have any magic wands here either, but that is how we are looking at this, at making the program sustainable for the long-term, and I am afraid right now the way it is, it probably is not.

Most of you have addressed the fact that you have people who are looking for career changes, I think all of you have mentioned

that. And we are seeing that, of course, all over, because the workplace is changing. You all have some non-traditional students, probably Dr. Smith and Mr. Coakley even more than you, Dr. Brown, but I appreciate the work that you are doing, I want to thank you again for your time here today and for sharing your thoughts with us and wish you great success in your institutions and for your graduates as they step out there.

So thank you very much and we will move to the next panel.

[Pause.]

Chairman KLINE. Well, it looks like we are ready for the second panel. I want to welcome the panel. I am going to yield in just a moment to Dr. DesJarlais to introduce the panel members.

You may have noticed that there is a little bit of a feedback issue with the microphones and so you may find yourself needing to adjust the range, and that seems to work. If it is starting to feed back, if you will just back up from it, it seems to be working pretty well.

So everybody is situated, I will yield now to Dr. DesJarlais to introduce our witnesses.

Mr. DESJARLAIS. Thank you, Mr. Chairman.

It is now my pleasure to introduce our second distinguished panel of witnesses.

First, the Honorable Dean Dickey. He serves as Mayor of the City of Columbia. Prior to being elected Mayor, Mr. Dickey was a member of the City Council. He spent 48 years in the retail food industry including 27 years as owner and operator of seven supermarkets in the middle Tennessee area. He held management positions for the Tennessee Department of Labor for five years and he has served as a business service manager at the Maury County Career Center. And I would like to thank Mr. Dickey, who also served in the U.S. Army during the Korean Conflict.

Our next witness is Ms. Susan Marlow, she is the founder and CEO of Smart Data Strategies. She is known and respected as a pioneer in land records management. Smart Data Strategies has used an innovative approach to the development of procedures and processes to ensure client satisfaction and has gained considerable experience by successfully completing mapping programs. Ms. Marlow also serves as Chairman of the Management Association for Private Photogrammetric Surveyors, Federal Cadastral Task Force and the Chairman of the Institute for GIS Studies.

Ms. Jan McKeel is the Executive Director of the South Central Tennessee Workforce Alliance, a non-profit that works to develop the workforce through efforts in economic development, education and employment. The company was most recently recognized as one of 24 best-of-the-best non-profits in middle Tennessee by the Nashville Business Journal. She previously worked in the soft drink industry before returning to the college classroom as a faculty member at colleges in Illinois and Kentucky.

Ms. Margaret Prater is the Executive Director of Workforce Development for Dyersburg State Community College. She has worked with employment and training programs for the past 27 years and is currently administering the Workforce Investment Act funds under the guidance of the Northwest Tennessee Workforce Board. She supervises career center operations for a seven county

rural area providing education, employment and training for youth and dislocated workers.

Chairman KLINE. Thank you, Dr. DesJarlais.

Just a reminder to the witnesses, there is a little light box there. Mayor Dickey, you will find that it is hard for you to see. I have not used the gavel yet today and do not expect to. A reminder that all of your testimony will be included in the record.

And so, Mayor Dickey, you are recognized.

**STATEMENT OF HON. DEAN DICKEY, MAYOR,
CITY OF COLUMBIA**

Mayor Dickey. Good morning, Chairman Kline and Representative DesJarlais and other in attendance today. My name is Dean Dickey, and I have the honor to serve the people of the City of Columbia as their mayor. I wish to welcome you today and thank you for hearing our testimony and allowing us in the City of Columbia and Maury County to be heard. As the Mayor since 2010, City Council member for two years prior, and former Business Service Manager at the Tennessee Career Center, I have a strong background in helping people find employment and realizing the effects that the economy plays.

As a business owner who served on the workforce board in the 1990s, I have worked with the Tennessee Department of Labor/Workforce and was involved with consolidation and relocation for the Workforce Investment Act. I have worked with employers and local elected officials across the state to understand their needs and what it takes to hire a skilled workforce. I also have been involved in developing financial incentives to help them succeed through job creation.

For eight years, I served as Employer Service Manager for the Workforce Alliance in the Workforce Area 10. The Workforce Alliance serves eight counties, and our office was involved in many projects resulting in several thousand dollars of state and federal assistance. These projects led to the creation of new jobs and retention of existing jobs.

In order for the economic development of our city and county to succeed, the workforce agencies and colleges in our area are key components in developing a workforce for our future. College students need to be aware of the expectations of the working environment as well as an obligation to meet high standards through their learning process. Columbia State Community College, as well as other colleges and universities that are attended outside of our immediate area, urges graduates to use the information provided through job placement services such as job search, job fairs, resume writing, interviewing opportunities and provide resources to help assist these students in order for them to be successful in moving into their career fields. Mentoring is also available to students who request it. However, it is the student's obligation to seek career opportunities, and as leader of the City of Columbia, I want to be instrumental in helping to meet the needs of our employers and employees. It is my desire for employees to have the needed training in order to carry out their tasks and perform well in their duties, but in order to do that, I further expect our colleges and training

facilities to meet the current expectations of the students and the employers.

Several partnerships have been developed within our local business community. One partnership that comes to mind was a new company that located in our area several years ago. Those of us on the local level looked at the economic potential when this company located in our area. We realized that we needed to develop partnerships in our area that could reach the full potential for growth, whether we had one or twenty employees in our area. The partnership developed through that process included the Workforce Investment Board, the TVA, State Department of Labor, Department of Economic Development, Columbia State, the Technology Centers and the Career Center. Columbia State Community College looked at this as an opportunity to increase our region's training capacity. The entire partnership was committed to developing the workforce in our area and we were successful because every organization spent the time and put forth the effort needed for the process.

Another important partnership that exists is our Maury Alliance, our economic development organization. In the past year, we have restructured the organization to be better equipped to attract new jobs in our area. We have just completed a partnership with the business community which included a fundraising campaign. And we received pledges of \$2.5 million that will be used for new recruiting opportunities, to update websites and other marketing opportunities specific to our area.

We have developed partnerships into positive working relationships with the business sector of the City of Columbia, City of Mount Pleasant, City of Spring Hill, Maury County government as well as the business community. The City of Columbia has a tax incentive plan that is part of the Maury County Industrial Development Board. This incentive plan was put into place to attract prospects that are interested in locating in our area and allow us to be more competitive.

At the last report from the Tennessee Department of Labor, the unemployment rate for the City of Columbia was 16 percent. That is the highest rate for cities in the state of Tennessee. The unemployment rate for Maury County, at the last report, was 14.2. These are not positive numbers and are indicative of our struggling economy. There is not an abundance of quality jobs in our local area for job seekers. Those searching for employment oftentimes end up taking a lesser paying job and therefore becoming underemployed. Others drive miles to find quality employment and even worse, leave our community permanently for employment.

We are living in revolutionary times where we know the importance of education and maximizing the skills of our workers. The Workforce Area 10 economy must adapt to global economic change and demographic shifts creating urgent needs to upgrade workforce preparation for all segments of our population. We are no longer able to be content with the skill sets of our parents and grandparents. We no longer have the luxury of training for a career with the expectations that the training will serve us a lifetime and provide adequately for our future. We no longer can remain comfortable in the belief that current businesses and industries in our area will remain viable in the future. Our future depends on our

ability to renew ourselves and retrain ourselves. Our future depends on not only retaining a current population of skilled workers, but also providing a business climate and community environment that is attractive to business and industries that may not even exist today.

I appreciate all the efforts of this Committee and understand it is not an easy task to designate funds to improve job opportunities. I also realize that the government cannot create jobs, only the private sector can accomplish this.

Thank you for allowing me to be here today.

Chairman KLINE. Thank you, Mr. Mayor.

Ms. Marlow, you are recognized.

[The statement of Mayor Dickey follows:]

Prepared Statement of Hon. Dean Dickey, Mayor, City of Columbia

Good morning, Chairman Kline, Representative DesJarlais, and all others in attendance today. My name is Dean Dickey, and I have the honor to serve the people of the City of Columbia as their Mayor. I wish to welcome you today and thank you for hearing our testimony and allowing us in the City of Columbia and Maury County to be heard. As the Mayor, since 2010, City Council Member for two years prior, and former Business Service Manager at the Tennessee Career Center, I have a strong background in helping people find employment and realizing the effects our economy plays in that role.

As a business owner who served on the workforce board in the late '90's, I have worked with the Tennessee Department of Labor/Workforce and was involved with consolidation and relocation for the Workforce Investment Act (WIA). I have worked with employers and local elected officials across the state to understand their needs and what it takes to hire skilled workforce. I have also been involved in developing financial incentives to help them succeed through this job creation.

For eight years, I served as Employer Services Manager for the Workforce Alliance in the Workforce Area 10. The Workforce Alliance serves eight counties, and our office was involved in many projects resulting in several thousand dollars of state and federal assistance. These projects led to the creation of new jobs and the retention of existing jobs.

In order for the economic development of our city and county to succeed, the workforce agencies and colleges in our area are key components in developing the workforce of our future. College students need to be aware of the expectations of the working environment as well as their obligation to meet high standards through their learning process. Columbia State Community College as well as other colleges/universities that are attended outside of our immediate area urges graduates to use the information provided through job placement services such as job search and job fairs. Students are also briefed on interviewing opportunities and provided resources to help assist these students in order for them to successfully move into their career fields. Mentoring is also available to students who request it; however, it is the students' obligation to seek career opportunities. As a leader of the City of Columbia, I want to be instrumental in helping to meet the needs of our employers and employees. It is my desire for employees to have the needed training in order to carry out their tasks and perform well in their duties, but in order to do that, I further expect our colleges and training facilities to meet the current expectations of the students and employers.

Several partnerships have developed within our local business community. One partnership that comes to mind is when Johnson's Controls located to our area several years ago. Those of us on the local level looked at the economic potential when this company located to our area. We realized that we needed to develop a partnership so that our area could reach its full potential for growth, whether we had one or twenty employers in our area. The partnership developed through that process included the Workforce Alliance, Workforce Investment Board, Tennessee Valley Authority, Tennessee State Department of Labor, Tennessee Department of Economic Development Council, Columbia State Community College, the Tennessee Technology Centers, and the Tennessee Career Center. Columbia State Community College looked at this as an opportunity to increase our region's training capacity. The entire partnership was committed to developing the workforce for our area, and we were successful, because every organization spent the time and put forth the effort needed on the process.

Another important partnership that exists is with Maury Alliance, our local economic development organization. In the past year, we have restructured the organization to be better equipped to attract new jobs into our area. We have also just completed a partnership with the business community which included a fundraising campaign. We received pledges of \$2.5 million that will be used for new recruiting opportunities and to update the website information with other marketing opportunities specific to our area.

We have developed partnerships into positive working relationships with the business sector of the City of Columbia, City of Mt. Pleasant, City of Spring Hill, and Maury County governments as well. Our local governments are unified in our efforts to create new job opportunities for our citizens. The City of Columbia has a tax incentive plan that is part of the Maury County Industrial Development Board. The incentive plan was put into place to attract prospects that are interested in locating to our area and allow us to be more competitive.

At the last report from the Tennessee Department of Labor, the unemployment rate for the City of Columbia was 16%. This is the highest rate for cities in the state of Tennessee. The unemployment rate for Maury County, at the last report, was 14.2%. These are not positive numbers and are indicative of our struggling economy. There is not an abundance of quality jobs in our local area for the job seekers. Those searching for employment often times end up taking a lesser paying job and thereby becoming underemployed. Others drive many miles to find quality employment and even worst, still leave the area permanently for employment.

We are living in revolutionary times where we know the importance of education and maximizing the skills of the workers we have. The Workforce Area 10 economy must also adapt to global economic changes and a demographic shift creating urgent needs to upgrade workforce preparation for all segments of our population. We are no longer able to be content with the skill sets of our parents and grandparents. We no longer have the luxury of training for a career with the expectations that the training will serve us a lifetime and provide adequately for our future. We no longer can remain comfortable in the belief that current businesses and industries in our area will remain viable into the future. Our future depends upon our ability to renew ourselves and retrain ourselves. Our future depends upon not only retaining a current population of skilled workers but also providing a business climate and community environment that is attractive to business and industries that may not now exist.

I appreciate all the efforts of this committee and understand it is not an easy task to designate federal funds to improve our job opportunities. I also realize that the government cannot create jobs—only the private sector can accomplish this. Thank you again for allowing us to be heard today, and I will be glad to answer any questions you might have.

**STATEMENT OF SUSAN MARLOW, PRESIDENT AND CEO,
SMART DATA STRATEGIES**

Ms. MARLOW. Thank you, Mr. Chairman, Dr. DesJarlais. My name is Susan Marlow and I am the CEO and owner of Smart Data Strategies, a small business in Franklin, Tennessee. And I am also Chairman of the Board of the Institute for GIS Studies, a 501(c)(3).

Smart Data Strategies provides a variety of geospatial software and services for state and local government, federal agencies and private sector clients. It is an honor to be here today to discuss the critical need for a coordinated strategic approach to workforce development in the geospatial procession.

The term “geospatial” refers to location-based technology, commonly referred to as mapping. This technology has experienced a rapid adoption rate, partly due to the introduction of Google Earth and Microsoft Bing Maps as well as the disasters of 9/11 and hurricane Katrina.

Today, geospatial technology provides decision-makers more complete information and a visual perspective that helps them make critical decisions. From the family planning the route to its sum-

mer vacation, to McDonald's determining the best sites for its next restaurants, to local government needing to know who owns what land and who is paying taxes and who is not, geospatial information is an exploding field. As a result of this growing demand, the geospatial community has been identified by the U.S. Department of Labor as one of the high growth workforces in the United States.

The State of Tennessee recognized the importance of geospatial data when they invested \$28 million in a base mapping program, which included statewide aerial imagery and standardized property information. Our firm performed all of the property mapping for this program. This means that geospatial data is available to every county, city and state agency throughout Tennessee. While the state has invested heavily in this data creation, we have not seen this level of investment in geospatial technology education.

There is a critical need for a strategic and inter-sector partnership approach to meeting the demand for a trained, qualified and productive workforce in this expanding field. I would like to address these challenges and offer some solutions.

First of all, I would like to point out the need for geography education at the K through 12 level. If we were able to create a totally successful inter-sector partnership at the university and college level, it will not matter unless we have a pool of students interested in this profession. In March of 2010, Tennessee was one of two states awarded Race to the Top grant money during the first phase of the competition. This announcement set the stage for Tennessee to be a national leader in raising the bar for education in the United States. Research has shown that the use of geospatial technologies in curriculum can be one of those creative new ways to connect the classroom to the real world and get students excited about learning. It allows students to see how what they are learning today is relevant to the world around them and their future within it. Most importantly, it helps get young people excited and inquisitive about geography, thus stimulating their interest in this field as a career.

Many public schools do not even teach geography, and if they do, many make it a small part of a history or social studies class. According to a 2006 National Geographic Society survey of Americans aged 18 to 24, less than four in ten can identify Iraq on a map of the Middle East; one-third of young Americans cannot calculate time zone differences. Even after hurricane Katrina, two-thirds could not find Louisiana on a U.S. map and two in ten amazingly cannot point to the Pacific Ocean on a world map. We need to have a much stronger link to education, workforce development and the private sector job market.

As Chairman of the Board for IGIS, I was heavily involved in a program that promoted geospatial education and workforce development. We were awarded a \$2 million grant that was successful in creating geospatial curriculum for Roane State Community College and Central Piedmont Community College in North Carolina. In addition, we created technology to manage a remote workforce called a Virtual Business Hub. The curriculum and the virtual business hub were both delivered to the Department of Labor as part of our grant, yet to my knowledge, the virtual business hub

technology is sitting on a shelf in Washington and the universities are no longer teaching the classes.

We spend a lot of our tax dollars on research, workforce development and education, but I question how much value we get for the money we spend. When we were working on the Department of Labor grant, I saw a lot of disconnect with the colleges, workforce development boards and the private sector. In addition, I see multiple federal and state geospatial education programs created that duplicate and overlap one another. For the sake of time, I will not address all of these, but they are included in my written testimony.

I urge the Committee to take a comprehensive look at geospatial workforce development. This growing and critically important profession can contribute immensely to the quality of life and economic wellbeing of the nation for decades to come. As we transition to a knowledge-based economy, geospatial data will become the underpinning for billions of dollars in commerce as well as efficiency in the delivery of government programs.

Lastly, I would also request that you review the section of my written testimony that deals with unfair competition from universities. We are seeing universities and community colleges entering into the private sector mapping and remote sensing by selling services in the commercial marketplace. This is unfair competition to private companies and it needs to be stopped.

I thank you very much for your time and attention.

Chairman KLINE. I thank you, Ms. Marlow.

Ms. McKeel, you are recognized.

[The statement of Ms. Marlow follows:]

Testimony of
Susan Marlow
Smart Data Strategies, Inc.
before a field hearing of the
Committee Education and the Workforce
U.S. House of Representatives
on
"Reviving our Economy: The Role of Higher Education in Job Growth and Development"
Columbia, Tennessee
April 21, 2011

Mr. Chairman, Dr. DesJarlais, I'm Susan Marlow, Chief Executive Officer of Smart Data Strategies, Inc. in Franklin, Tennessee. Smart Data Strategies provides a variety of geographic information systems (GIS) software and services that focus on Real Property Intelligence™ which is the result of combining location with information and making it readily accessible through easy to use mapping tools. Our firm helps state and local government, Federal agencies, and private sector clients manage data about their land and real property including asset inventories, rights-of-way, and land parcels.

It is my honor to be here today to discuss the critical need for a coordinated, strategic approach to workforce development in the geospatial profession. The term Geospatial refers to a location-based technology, and commonly referred to as mapping. This technology has experienced a rapid adoption rate partly due to the introduction of Google Earth and Microsoft Bing Maps as well as the disasters of 9/11 and Hurricane Katrina. Today's mapping is the collection, storage, utilization, application and analysis of geographic information. Geo-referenced or location-based data is layered on maps to give business, government and consumers information they need for thousands of decisions and applications. The geospatial profession is a practice that uses geographic information as a base to provide faster, more efficient and accurate solutions to a plethora of issues. In today's electronic world, geospatial applications offer a visual perspective to clients, users and consumers that was only previously available to a limited market, particularly engineers and the military. Geographic information systems (GIS), with their meaningful and easy to read formats, have become common in everyday life of government, the commercial sector, and the consumer. This provides decision makers more complete information that helps them make crucial decisions - such as where tax revenues are generated, the condition of the infrastructure, and how and where to spend, maintain or conserve resources - faster and more accurately. From the family planning the route for its summer vacation, to McDonalds determining the best sites for its next restaurants, to local government needing to know who owns what land, and who's paying taxes and who is not, to analyzing the relationship between chemicals at a factory with the incidence of cancer in neighboring communities, geospatial information is an exploding field. Geospatial information plays a crucial role in every sector of today's society. Recent studies estimate that up to 90% of government information has a geospatial information component and as much as 80% of the information managed by business is connected to a specific location. As a result of this growing demand for geographic information data, software, products and services, the geospatial community has been identified by the U.S. Department of Labor as one of the "High Growth" workforces in the United States.

The State of Tennessee has recognized the importance of geospatial data when they invested \$28,000,000 in the Tennessee Base Mapping Program. This program included the creation of a statewide imagery collection and standardized property information. Our firm Smart Data Strategies performed all of the property mapping for this program. What this means is that geospatial data is available to every county, city, and state agency throughout Tennessee. While the state has invested heavily in data creation, we have not seen this level of investment in geospatial technology education.

There is a critical need for a strategic and inter-sector partnership approach to meeting the demand for a trained, qualified and productive workforce in this expanding field. I'd like to address those challenges and offer some solutions.

Geography in K-12 Education

In March of 2010, Tennessee was one of two states awarded Race to the Top grant money during the first phase of the competition. This announcement set the stage for Tennessee to be a national leader in raising the bar for education in the United States. Research has shown that the use of geospatial technologies in curriculum can be one of these creative new ways to connect the classroom to the real world and get students excited about learning. (Goldstein, D. (2010). Integration of Geospatial Technologies into K-12 Curriculum: An Investigation of Teacher and Student Perceptions and Student Academic Achievement.) GIS provides educators with an innovative way to connect classroom learning with real world applications. It allows students to see how their learning today is relevant to the world around them and their future within it. In addition, GIS acts as a common operating platform for visualizing, analyzing and presenting real-world information from multiple disciplines. And, most importantly it helps get young people excited and inquisitive about geography, thus stimulating their interest in this field as a career.

Using GIS in a linked learning environment that is grounded in project-based activities enables students to use technology that allows them to do the deep thinking, analysis and problem solving that is necessary to compete in the global economy. This is especially the case in the STEM (Science, Technology, Engineering and Mathematics) disciplines which leads to the longer term benefits for students, society and the American economy. They are acquiring skills for the jobs of the future that will continue to be in high demand. While geography and geospatial sciences is clearly a STEM discipline, our profession is disappointed that the Obama Administration has failed to understand this fact and has failed to include geography in the STEM initiative. A letter from MAPPs, the association of private sector geospatial firms, of which Smart Data Strategies is a member, is attached to my testimony.

Moreover, not all states even assess or require geography education. As The Orlando Sentinel has reported in 2006, (http://www.orlandosentinel.com/news/education/orl-geographydummie07apr26_0_2336745_story) many public schools do not even teach geography, and if they do, many give it a short shrift as part of a history or social studies class. According to a 2006 National Geographic Society survey of Americans aged 18 to 24, less than four in ten can identify Iraq on a map of the Middle East; one-third of young Americans cannot calculate time-zone differences; even after Hurricane Katrina, two-thirds cannot find Louisiana on a U.S. map; almost one-third think that the United States has between 1 and 2 billion citizens; and two in ten, amazingly, cannot point to the Pacific Ocean on a world map.

The need for geography education at the K-12 level is the first step toward a long term, strategic approach to building the geospatial workforce. I have also attached a letter on this topic from February of this year signed by the 11 organizational members of the Coalition of Geospatial Organizations.

Unfair University Competition

A new form of unfair government sponsored competition is causing concern in the geospatial community. Universities, veering from the typical teaching and research most Americans associate with the Nation's leading institutions of higher learning, are entering the mapping, remote sensing and geospatial *business*, by selling services in the *commercial marketplace*. This trend of unfair competition from universities is invading the mapping community.

More than 80% of my colleagues in MAPPS, the principals, owners and partners in America's leading private sector geospatial firms, indicated in a survey that they have encountered competition in the marketplace from universities. More than 85% responded to a MAPPS membership poll that university competition was an issue that deserved public policy attention.

For example, the Broadband Mapping program funded through the American Recovery and Reinvestment Act (ARRA), commonly known as the "stimulus bill", resulted in a number of states awarding their broadband map work to universities, thus providing little private sector job creation or economic stimulus. Federal agencies regularly contract with universities for geospatial production services, requiring little or no education or research. These contracts are for typically commercial, production services readily available from scores of private firms in the "Yellow Pages". The national Science Foundation funds a National Center for Airborne Laser Mapping (NCALM) at the University of Houston and the University of California at Berkeley, to conduct research on Light Detection And Ranging (LIDAR), a geospatial data acquisition technology. LIDAR was a NASA program that was commercialized some 20 years ago. LIDAR is a proven technology and a commercial activity. Private firms are engaged, on a daily basis, in research and development of LIDAR applications for the projects in which they are engaged and are continuously developing new applications to market to their clients. Private firms provide commercial LIDAR services to clients on a regular basis. Nevertheless, a Federal agency recently awarded a commercial, production LIDAR contract to NCALM.

Congress should amend the Higher Education Act to focus universities on their core missions – education and research. Legislation should be passed to apply a "commerciality" test to all non-core university activities. Any university that receives direct federal funding, or indirect funding through tax-exempt or "non-profit" status, should be prohibited for using such institutions for the performance of commercial, tax generating activities otherwise available in the private sector.

I would also add that mapping and geospatial activities are subjected to unfair competition by government agencies, particularly at the Federal and state level. Government agencies also perform geospatial activities in-house, with government employees, which are commercially available. This duplication and competition with the private sector results in waste and inefficiency in the government, and contributes to the debt and deficit now threatening our Nation. Not only must private sector firms compete with government for work, we must also compete for workers. Economic growth in the geospatial field is being stymied by government competition. We are delighted that last week, Rep. John J. "Jimmy" Duncan, Jr. of Tennessee, with Rep. Marsha Blackburn of Tennessee as an original cosponsor, introduced the Freedom from Government Competition Act, H.R. 1474. A companion bill, S. 785, was also introduced by Senator John Thune (R-SD). This bill would make the 'Yellow Pages Test'

national policy. If an activity being performed by government is also available from private enterprise listed in the Yellow Pages, that activity should be reviewed for performance by a tax-paying, for-profit company, rather than the government entity. The Freedom from Government Competition Act would put such a process in place in the Federal government. We respectfully urge you to become cosponsors of this legislation.

Moreover insourcing - an initiative to convert work currently performed by private sector contractor firms to performance by Federal government employees - is taking place in the geospatial field. We urge Congress to impose an immediate moratorium on insourcing.

Duplication in Federal Geospatial Workforce Development Programs

As I mentioned earlier, the U.S. Department of Labor has invested more than \$8 million in the geospatial community for workforce development upon identifying geospatial as one of 14 targets in the High Growth Job Training Initiative.

However, the Department of Labor is not the only Federal agency funding workforce development activities in the geospatial profession. While the geospatial workforce has been identified as a High Growth sector of the U.S. economy, there has been an unfortunate proliferation of programs in the federal government to meet the employment demand. Several federal agencies have funded activities with no strategic objective and no coordination, resulting in waste, duplication and inefficiency. There is virtually no coordination with the employer community in the private sector. These programs are duplicative and they fail to seek the needs and meet the market demands of employers. Here are a few examples:

NASA funded the Integrated Geospatial Education and Technology and Training (IGETT) project to help faculty to develop model learning units and expand their programs to address workforce needs for employees who can use geospatial data.

NASA also funded the National Workforce Development Education and Training Initiative (NWDTEI) in an effort to develop a trained geospatial workforce and assisted the Geospatial Workforce Development Center (GeoWDC) at The University of Southern Mississippi.

The National Science Foundation (NSF) funded the National Geospatial Technology Center of Excellence (GeoTech Center) to establish national common core competencies for geographic information systems (GIS) technicians, facilitate installation of remote desktop application access technology at 10 colleges and supporting use at secondary and middle schools, increasing enrollment in geospatial technology programs at partner colleges, and update the geospatial technology skills of teachers and technicians.

NSF also provided funds for "A Plan for the National Coordination of Geospatial Technology Education from a Community College Perspective", a year-long study to document the needs and concerns of community college educators and use this information to produce recommendations for the development and operation of a National Geospatial Technology Center (NGTC).

The National Geospatial Intelligence Agency (NGA), has provided funds to the National Research Council (NRC) of the National Academy of Science to "Study on the Future US Workforce for Geospatial Intelligence". The study will examine the need for geospatial expertise in the United States and explore possible ways to ensure adequate availability of the needed expertise.

AmericaView is a USGS funded consortium of universities, begun with a Congressional earmark, to conduct K-12 and higher education, workforce development, and technology transfer in remote sensing.

Individually, these are laudable endeavors. However, they are fragmented, stovepipes that are devoid of a coordinated or strategic approach to workforce development. Many of the activities funded by these grants are duplicative while others fail to address the needs of employers. I would recommend that the Education and Workforce Committee develop a more coordinated approach to geospatial workforce development, either through a consolidation of all such federal activities, or a clearinghouse approach to avoid duplication and create a more comprehensive and considered approach that seeks and responds to private sector employers' needs.

Smart Data Strategies Experience in Workforce Development

The Institute for Geographic Information Systems Studies (IGISS), of which I am founder and Chairman of the Board, was the recipient of one of these grants. Recognizing that the geospatial technology sector is an emerging field that, like the computer and information technology industry, cuts across a host of other user and applications-focused industries, IGISS found there were no career ladders and a great disparity in curriculum and other approaches for meeting the needs of the geospatial communities. There was also a need to keep lower-skilled, but technically demanding database management jobs in the United States, rather than being off-shored, due to privacy and homeland security data sensitivity issues and to assist transitioning manufacturing-based rural economies. IGISS' proposal, entitled "The Geospatial Business Hub Project: Preparing the Nation's Geospatial Workforce," developed a career and education advancement ladder and user-focused curriculum for the land records management and utilities' geospatial technology applications.

With its \$2 million grant, IGISS established a Geospatial Business Hub model and regional infrastructure to provide training for future geospatial technology workers that was designed to reduce the practice of sending such work overseas; deployed a program to create geospatial community support for newly trained placements; and, 3) developed training to unemployed and underemployed workers in North Carolina and Tennessee in the geospatial fields of utilities services and land management using a work-study approach. As a result of this grant, the Virtual Business Hub was created which provided the platform to manage a remote workforce.

Unfortunately, the Labor Department failed to allocate funds for marketing the Virtual Business Hub. In fact, these follow-through activities were part of the original IGISS grant application, but were denied. It is regrettable that much of the work product of IGISS and the other recipients of the \$8 million in federal grant funds is sitting on shelves in the Department of Labor with no emphasis on actual implementation.

Summary and Recommendations

We urge the Committee to take a comprehensive look at geospatial workforce development. This growing and critically important profession can contribute immensely to the quality of life and economic well being of the Nation for decades to come. As we transition to a knowledge-based economy, geospatial data will become the underpinning for billions of dollars in commerce, as well as efficiency in the delivery of government programs.

Whether it is licensed professionals who have advanced degrees, or technicians who are trained in community colleges and technical schools, there is a growing demand for workers in the geospatial market.

In order for this demand to be met, a comprehensive and strategic approach to geospatial workforce development must be developed. This needs to include government and the private sector, educators at the K-12 elementary and secondary level, community colleges and 4-year degree institutions, private, for profit technical schools, and advanced degree program administrators and teachers. Such a strategy must be responsive to the needs of private sector employers. The silos in which the Federal government current funds and administers workforce development in our field must be busted, and replaced with a better coordinated approach. And the Federal government, through direct spending, as well as grants to state and local government and universities, should recognize that government is the demand for geospatial data, products, software and services, and rely on the private sector to be the supply.



November 30, 2009

The President
The White House
Washington, DC 20500

Dear Mr. President:

On behalf of the member firms in MAPP'S, I would like to commend your Administration for launching the "Educate to Innovate" campaign to improve the participation and performance of America's students in science, technology, engineering, and mathematics (STEM).

Formed in 1982, MAPP'S is the only national association exclusively comprised of private firms in the remote sensing, spatial data and geographic information systems field. Current MAPP'S memberships span the entire spectrum of the geospatial community, including Member Firms engaged in satellite and airborne remote sensing, surveying, photogrammetry, aerial photography, LIDAR, hydrography, bathymetry, charting, aerial and satellite image processing, GPS, and GIS data collection and conversion services. MAPP'S also includes Associate Member Firms, which are companies that provide hardware, software, products and services to the geospatial profession in the United States and other firms from around the world. MAPP'S provides its 180+ member firms opportunities for networking and developing business-to-business relationships, information sharing, education, public policy advocacy, market growth, and professional development and image enhancement.

On November 23, your Administration (www.whitehouse.gov/issues/education/educate-innovate) stated the following "must do" list:

- 1) Increase STEM literacy so that all students can learn deeply and think critically in science, math, engineering, and technology;
- 2) Move American students from the middle of the pack to top in the next decade; and
- 3) Expand STEM education and career opportunities for underrepresented groups, including women and girls.

Mr. President, MAPP'S stands ready and willing to work with you and your Administration to help accomplish these important goals. The STEM components serve as vital background and education for mapping and geospatial disciplines. American students are the key to our Nation's future by serving as the next wave of experts and entrepreneurs spurring innovation and leadership in geospatial activities, professions and private sector job growth.

In 2003, the Government Accountability Office testified (www.gao.gov/new.items/d03874t.pdf) before Congress:

"According to the Department of the Interior, about 80 percent of all government information has a geospatial data component, such as an address or other reference to a physical location."

John M. Palatiello, Executive Director
1856 Old Reston Avenue, Suite 205, Reston, Virginia 20190
P (703) 787-6996 F (703) 787-7550 E info@mapps.org www.mapps.org

A National Academy of Public Administration (NAPA) study (*Geographic Information for the 21st Century*, Washington, DC, January 1998) estimates that geographic information plays a role in about one-half of the economic activities of the United States.

Your Administration, via the Office of Management and Budget, has generated an increased emphasis on "place-based" (www.whitehouse.gov/omb/assets/memoranda_fy2009/m09-28.pdf) data, otherwise referred to as geospatial data. This August 11 memo entitled "Developing Effective Place-Based Policies for the Fiscal Year 2011 Budget" states:

"Between now and 2050, the expected population growth – of nearly 140 million people – will require, among other things, the construction of more than 200 billion square feet of new housing, business space, and retail development and major new investments in all forms of physical infrastructure. The new construction will constitute an estimated two thirds of all development on the ground in 2050. This provides an unprecedented opportunity to create more sustainable communities for generations to come. It will require a broad-based strategy to deal with the energy, environmental, and health repercussions of development, as well as workforce and business development demands."

It is important to consider the following financial effects that geospatial data can play for infrastructure investments and for other important projects. Geospatial activities such as aerial photography and surveys have a significant multiplier effect, leveraging additional investment and job creation. Aerial photography is 5-10% of typical mapping costs. Mapping costs are 5-15% of engineering costs. Engineering costs are 6-8% of the construction costs. And construction costs are 90% of project costs. Thus, every dollar invested in aerial photography and surveys has a multiplier of 9074. In data from an actual project, \$6,000 invested in aerial photography and surveys resulted in \$49 million total (surveying, mapping, engineering and construction) activity.

We respectfully offer to your Administration the assistance of the geospatial community on this high priority initiative.

Sincerely,



Jeff Lovin
President

Coalition of Geospatial Organizations

February 16, 2011

The Honorable John P. Holdren, PhD.
 Assistant to the President for Science and Technology
 Director, Office of Science and Technology Policy
 Executive Office of the President
 725 17th Street, Room 5228
 Washington, DC 20502

Dear Dr. Holdren:

I am writing to you on behalf of the Coalition of Geospatial Organizations (COGO), a coalition of 15 national professional and advisory organizations representing more than 35,000 individual producers and users of geospatial data and technology. The purpose of this letter is to share with you concerns that COGO has with the September 2010 PCAST report entitled "*Prepare and Inspire: K-12 Education in Science, Technology, Engineering, and Math (STEM) for America's Future*".

The members of our coalition feel strongly that the report defines STEM fields far too narrowly. The document asserts that STEM education includes only the subjects of mathematics, biology, chemistry and physics, along with the critical subjects of computer science, engineering and geology. Excluded from this list are the social, behavioral, and economic sciences, especially those core social science disciplines like geography, that have long been the catalysts for education and research in the *geospatial sciences*, which is currently ranked as one of the three top American employment fields by the U.S. Department of Labor.

The following points highlight what we see as the critical significance of including the social, behavioral and economic sciences in K-12 STEM education:

- In the White House memorandum "Developing Effective Place-Based Policies for the FY 2011 Budget" (8/11/09), guidance was provided to Federal departments for budget submissions that placed heavy emphasis on "place-based" policies and programs. The term "place-based" is synonymous with geography and geospatial. Knowledge of geospatial concepts is necessary for the implementation of effective policies and programs.
- The U.S. Department of Labor, Employment and Training Administration published "New and Emerging Occupations" (March 2006) highlighting 12 high-growth industries, one being geospatial technologies. Geospatial technologies are described as being economically critical, projected to add substantial numbers of new jobs, and are being transformed by technology and innovations. In order to provide a workforce competent in geospatial technologies, STEM education must include instruction in geospatial relevant disciplines.
- The Department of Labor, in collaboration with the geospatial technology community, adopted the Geospatial Technology Competency Model (June 2010) that identifies the knowledge and skill areas (KSAs) required for success in each of the many allied fields that rely on geospatial technologies and employ geospatial professionals. Among the core academic competencies is geography. The inclusion of this and other core academic competencies in this model necessitates that these skills be learned in K-12 curriculums.
- The Directorate of Education and Human Resources at the National Science Foundation (NSF) includes social and behavioral sciences as STEM disciplines. NSF's Social, Behavioral and Economic Sciences Directorate, which houses the Geography and Spatial Sciences program, in addition to 28 other social science based programs provided \$7 million in funding in the past 2 years for *GIScience and Technology-based research*.
- The National Geospatial Technology Center for Excellence funded in part by NSF is a collaborative effort between colleges, universities and industry to expand the geospatial workforce. While the program focuses on college curricula, it is critical that K-12 students learn the basic geographic skills that form the foundation of higher-level learning in the geospatial sciences. It is also important that we expose K-12 students to the geosciences to better inform them of future education and employment opportunities in the field.
- The PCAST Report quotes President Obama: "We must educate our children to compete in an age where knowledge is capital, and the marketplace is global." Students must be trained to think spatially and globally

Coalition of Geospatial Organizations

in order to meet this objective. These skills come from K-12 education in geography and the social, behavioral and economic sciences.

- The "Troubling Signs" section of the PCAST Report emphasizes the development of education methods to improve comprehension of STEM concepts. Geographic Information Systems, as a geospatial technology, is an integrative technology that can teach K-12 students how to apply STEM theories to real world problem solving.

All of these points highlight the significance of social, behavioral and economic sciences to geospatial technologies in both academic and workplace environments. Geospatial technologies are a high-growth career field representing significant job opportunities. As it is clearly a goal of enhanced STEM education to graduate K-12 students who are college and career-ready, it would be a critical shortcoming to exclude the foundations of geospatial learning in STEM curricula at the K-12 level.

We reiterate our position that a broader perspective of which disciplines constitutes a STEM education in the United States be adopted, and that the value of the social, behavioral and economic sciences is recognized as critical for the development of a workforce prepared for careers in geospatial technologies.

COGO stands willing to provide assistance to the Administration to clarify the importance of the geospatial science and technology in STEM education and in the Reauthorization of the ESEA.

Sincerely,



Geney Terry, GISP, MGIS
Chair, Coalition of Geospatial Organizations

cc: COGO Member Organizations

American Congress on Surveying and Mapping (ACSM)
American Society for Photogrammetry and Remote Sensing (ASPRS)
Association of American Geographers (AAG)
Cartography and Geographic Information Society (CaGIS)
Geographic Information Systems Certification Institute (GISCI)
International Association of Assessing Officers (IAAO)
Management Association for Private Photogrammetric Surveyors (MAPPS)
National States Geographic Information Council (NSGIC)
United States Geospatial Intelligence Foundation (USGIF)
University Consortium for Geographic Information Science (UCGIS)
Urban Regional Information Systems Association (URISA)



STATEMENT OF JAN McKEEL, EXECUTIVE DIRECTOR, SOUTH CENTRAL TENNESSEE WORKFORCE ALLIANCE

Ms. MCKEEL. Thank you, good morning, Chairman Kline, Representative DesJarlais and all in attendance today. Thank you on behalf of the South Central Tennessee Workforce Alliance, our corporate board of directors and Workforce Board for the honor of presenting our efforts to build a world class workforce in the middle Tennessee region.

The counties in our local workforce investment area—Maury, Giles, Lawrence, Lewis, Hickman, Marshall, Perry, and Wayne—have experienced tremendous job loss. With the highest unemploy-

ment rate in Tennessee for 36 of the past 38 months, our unemployment stands at 14.2 percent, more than 47 percent above the state rate of 9.6 percent, and almost two-thirds higher than the U.S. rate of 8.9 percent. This represents over 14,000 people in our region alone—mothers, fathers, grandparents, sons and daughters—who want to work and provide the best for their families. Through our Tennessee career centers, funded primarily through Workforce Investment Act formula funds, we partner with key organizations to leverage our funding to provide advice, guidance and resources to job seekers, whether in an effort to locate a better paying job or to simply find a job when the crisis of job loss hits close to home.

In January of 2010, when our economic crisis resulted in 17 percent unemployment regionally, our foot traffic averaged 1120 people daily in our eight counties, an increase of almost 300 percent over the previous year alone. Gratefully, we have well established career centers with talented professional staffs that serve the 700-plus that continue to visit each day, to tap the tools we and our partners offer to assist job seekers in their quest to end their personal crisis of unemployment.

Our region has excelled in manufacturing, the sector amongst the hardest hit in the economic downturn. Over two-thirds of our manufacturing jobs have been lost in the past decade. Although beginning to rebound, we are not likely to ever reach the manufacturing employment levels once experienced. In addition, the manufacturing jobs that are returning look vastly different than those of the past. Assembly type jobs have been replaced by more skilled positions, for example, robotics and electrical technicians. However, we also expect significant job growth to come from occupations outside of manufacturing, as we witness a shift to other sectors, including healthcare, information technology and business management and supervision.

Our workforce board is charged with providing oversight to the investment of local Workforce Investment Act funding. To make the best Workforce Investment decisions, a study was conducted in partnership with the Nashville Chamber of Commerce and our workforce board colleagues—the Nashville Career Advancement Center and Workforce Essentials. The study looked at jobs, the projected growth or decline in the labor market for the ten-county region surrounding Nashville. Most training programs in which we invest are taught by Columbia State Community College or the Tennessee Technology Centers and include programs such as nursing, information technology, green jobs and solar photovoltaic technology. Since July of 2010, we have provided scholarship and/or support to over 470 individuals, most being dislocated workers from closed manufacturing companies, providing them the skills needed to transition into new careers. And I might add that I am happy to say that all three institutions that were represented in the previous panel have had students that we have helped support.

Lives are changed when adults, regardless of their age or years in the workforce, gain additional education and skills. An idea to increase workforce and economic development opportunities in the region has been discussed by local business, community and education leaders for many years. A framework, driven by employers,

would allow technical training and workforce development activities to be expanded. Adults could focus on technical training without traveling almost an hour, providing a more realistic opportunity to work and train part time. Incumbent worker training would become increasingly available to employers and internships for those in training would add experiential opportunities complementing classroom training.

Now, through a \$5 million state-funded grant, the Workforce Development and Conference Center at Northfield has been established in the former Saturn corporate and training headquarters. Ten public and private partners are already participating with projects including additional training programs, business incubation, entrepreneurship training, incumbent worker training and paid internships. Dual enrollment for high school students and business mentorship programs are also planned. And now the recent award of \$8.3 million in U.S. DOL National Emergency Grant funding will support these efforts for our many dislocated workers.

In closing, I appreciate the tremendous work this Committee is charged with performing and understand the difficulty in prioritizing where federal funds are spent. However, training and education, workforce success and personal income are positively correlated. Economic landscapes will periodically change and the strength of individual sectors will come and go. Yet the strengths of our communities will remain correlated to our ability to attract, retain and grow jobs.

Please continue to recognize the importance of the public-private partnerships fostered by our workforce investment boards. We recognize our responsibility to convene business and industry, education, community-based organization and public sector agencies as our primary duty. This infrastructure designed in the Workforce Investment Act provides support, guidance, and resources to so many, both job seekers and employers and promotes the regionalism and leveraging of funds required to grow our workforce skills.

My sincerest thanks, and I will be happy to address any questions you might have.

Chairman KLINE. Thank you, Ms. McKeel.

Ms. Prater, you are recognized.

[The statement of Ms. McKeel follows:]

**Prepared Statement of Jan McKeel, Executive Director,
South Central Tennessee Workforce Alliance**

Good morning, Chairman Kline, Representative DesJarlais, and all in attendance today. On behalf of the South Central Tennessee Workforce Alliance, our Corporate Board of Directors, and Workforce Board, I thank you for the honor of presenting our efforts to build a world class workforce in the Middle Tennessee region through private and public partnerships. My focus today will be on our partnerships with those in higher education that provide the training and education needed by our workforce to succeed in obtaining jobs, maintaining jobs, and growing their careers.

As Executive Director of the South Central Tennessee Workforce Alliance since its incorporation 8 years ago as a 501c3, and for an additional 6 years prior when we were a division of Columbia State Community College, I have been privileged to witness firsthand the incredible results when adults, regardless of their age or years in the workforce, gain additional education and skills. Unfortunately, the eight counties in our Local Workforce Investment Area—Maury, Giles, Lawrence, Lewis, Hickman, Marshall, Perry, and Wayne—have experienced tremendous job loss, particularly in the last 3 years. In fact, our region has led the state with the highest regional unemployment rate for 36 of the past 38 months. According to the most recent unemployment analysis, our area unemployment stands at over 14.2%,

more than 47% above the Tennessee rate of 9.6%, and almost two thirds higher than the United State rate of 8.9%. We must always remember that this rate is actually made up of over 14,000 people in our region alone—mothers, fathers, grandparents, sons, and daughters—who want to work and provide the best for their families. And, this unemployment rate does not represent the thousands of individuals who are underemployed—either because they are working in jobs below their skill level, or because they are not working as many hours as they would like. Through our Tennessee Career Center system, with 9 located in our region and funded primarily through Workforce Investment Act formula funds, we partner with key organizations and agencies in each community to bring together the resources and personnel to provide advice, guidance and resources to those looking for new jobs, whether in an effort to locate a better paying job, or to simply find a job when the crisis of a layoff or closure hits close to home.

In early 2009, our daily foot traffic averaged just over 400 job seekers daily. In January 2010, at the height of our unemployment crisis with a rate of 17% unemployment, our foot traffic averaged 1,120 people daily—an increase of almost 300%! Gratefully we are established in each of our counties with Career Centers and talented professional staffs that serve the 700+ that continue to visit each day to tap the resources we and our partners offer to assist jobseekers in their quest to end their personal crisis of unemployment by finding jobs that maximize their skills and pay good wages.

For decades we have excelled in manufacturing, providing families an excellent source of income and ability to provide for their families. Yet, manufacturing has been amongst the hardest hit industries during the economic crisis our nation has experienced. We have lost over 14,000 jobs in manufacturing alone, and although this industry is beginning to rebound, a full economic recovery may take until 2014, and it is not likely we will ever reach the manufacturing employment levels of the 1990's. In addition, the manufacturing jobs that are returning look vastly different than those of the past. Assembly type jobs have been replaced by more skilled positions—for example robotics technicians, machinists, and electrical technicians. However, we also expect significant job growth to come from occupations outside of manufacturing. As in most areas of the United States, we are witnessing a shift from the manufacturing sector to other sectors including healthcare, information technology, and business management and supervision. The South Central Tennessee Workforce Alliance through our Workforce Board is charged with providing oversight to the investment of Workforce Investment Act dollars for this region.

To make the best decisions, we have participated in two labor market studies in the past 5 years. Most recently, in partnership with the Nashville Chamber of Commerce, and our workforce board colleagues—the Nashville Career Advancement Center and Workforce Essentials—a study, “Leveraging the Labor Force for Economic Growth”, was conducted in 2010. This study looks at jobs, the projected growth or decline and the labor market for the 10 county area surrounding Nashville, which is the economic engine of our region. This study, along with labor market information provided by the Tennessee Department of Labor & Workforce Development, is the foundation for our training investment decisions. The majority of programs in which we invest are programs taught by Columbia State Community College or the Tennessee Technology Centers, and include programs in Nursing, Health Information Technology, Computer Information Systems, Residential Wiring & Plumbing, Automotive Technology, Green Jobs Technology and Solar Photovoltaic Technology. Since July 2010, we have provided scholarship and/or support to over 470 individuals in need of skills upgrades. The majority of these individuals are dislocated workers from closed manufacturing companies, and the additional education and training will provide the skills needed to move into new careers.

For the past 7 years, an idea to bring additional training opportunities to the area has been discussed by business, community, and education leaders. The dream was to provide a framework, driven by employers, where educational providers could come and provide the desired credentialed training and skills. Area high school students would have the opportunity to dual enroll in programs and earn credit toward a post-secondary degree. Adults could focus on technical training without traveling almost an hour, providing a more realistic opportunity to work and train part time. Business and industry could assist in planning desired training for their workforce, and provide opportunities for internships for those in training to add experiential opportunities. These ideas and plans are now coming to fruition through a partnership between the Tennessee Department of Economic and Community Development, the Tennessee Department of Labor & Workforce Development, the United States Department of Labor, local city and county governments, Columbia State Community College and sister institutions, the Tennessee Technology Centers, University of Tennessee Industrial Services, Spring Hill GM Manufacturing, and the South

Central Tennessee Workforce Alliance. Through a \$5 million state funded grant through TDECD, the Workforce Development and Conference Center at Northfield has been established in the former Saturn corporate & training headquarters—a 320,000 square foot building built as a corporate office and training center.

Training provider partners at Northfield are providing training and economic development opportunities for the region. Approximately one-third of the building will be devoted to training, with fixed costs covered by the rent generated from the two-thirds of the building available for lease. The building is being marketed as a potential site for a call center or corporate support back offices, and can support approximately 700 workers. Based on our knowledge of the labor market, we are making progress in the establishment of training in at least 5 areas: 1) Healthcare; 2) Public Safety; 3) Advanced Manufacturing and Sustainable Technologies; 4) Hospitality and Culinary Arts; and 5) Information Technology. The recent award of \$8.3 million in National Emergency Grant funding through the USDOL will allow training efforts to be supported at this facility, and will provide for 1,500 individuals laid off from General Motors and its suppliers, along with others affected by these layoffs in the region.

A business incubator will allow new and start-up businesses who meet acceptance criteria to be established and nurtured with access to resources and expertise needed to strengthen and grow into larger, profitable companies who will choose to stay in our community. We are working to finalize the first company accepted into our incubator—a green technology start-up which, with a mix of funding including a grant from the Tennessee Solar Institute, will begin later this summer with an initial workforce of 10 employees, several trained through classes already completed in green technologies at Northfield. The plan is to host several more start-ups on this unique training and work campus.

In closing, I appreciate the tremendous work this Committee is charged with performing, and understand the difficulty in prioritizing where federal funds are spent. I can, however, sincerely share with you that training and education, workforce success, and personal income are positively correlated. Economic landscapes will periodically change, and the strength of individual sectors will come and go. Yet the strength of our communities, especially in more rural settings, will remain correlated to our ability to attract, retain, and grow jobs. Please continue to recognize the importance of the public private partnerships fostered by our Workforce Investment Boards, and that we take this responsibility to convene business and industry, education, community based organizations, and public sector agencies as our main duty. This infrastructure designed in the Workforce Investment Act provides support, guidance, and resources to so many, both jobseekers and employers, and promotes the regionalism and leveraging of funds required to grow our workforce skills, both immediate and in the future. My sincerest thanks, and I will be happy to address any questions you may have.

**STATEMENT OF MARGARET PRATER, EXECUTIVE DIRECTOR,
NORTHWEST TENNESSEE WORKFORCE BOARD**

Ms. PRATER. Thank you. Good morning.

On behalf of Dyersburg State Community College and the Northwest Tennessee Workforce Board, I appreciate the opportunity to speak to the role of higher education in job growth and development. My perspective is from a dual role since Dyersburg State serves as both administrative entity and a training provider for the Workforce Investment Act programs.

My primary responsibility is to convene leaders of business and industry, education, organized labor, economic development, community organizations, labor and workforce development and human services that form the Northwest Tennessee Workforce Board. Our guiding principles include being private sector driven, responsible and competitive and customer-focused through use of our Tennessee One-Stop Career Centers.

The One-Stop Career Centers in our area have seen services increase by 67 percent since 2008. More and more job seekers are attending workshops, earning skill credentials such as the National

Career Readiness Certificate and making informed career choices. But many need more than job search assistance.

Although we are a one-stop center, we are not a one-size-fits-all. Over 24 percent of adults age 25 and over in our region have less than a high school diploma. We work with our adult education partner to promote GED attainment, but have taken further steps to stop the flow of dropouts, including coordinating a very successful peer tutoring program in local high schools. Only 16 percent of individuals age 25 and over have an associate's degree or higher, as compared to almost 35 percent in the United States. These low education levels leave many of our job seekers without the necessary skills employers require. Fortunately, our community colleges have the expertise in providing training for high tech, high demand occupations. This will be vital as our economy begins to recover and employers look to hire skilled workers.

We recently received the devastating news that Goodyear Tire & Rubber—the largest manufacturer in northwest Tennessee—will be closing. In my written testimony, I ask you to imagine that on February 10 at 7:36 a.m., you received a text message stating “Goodyear is closing by year end.” I take you through various individuals who may have received that text, including a Goodyear worker, his wife, a supplier, a retail employee, two professionals, the mayor, the community college president, and finally myself, the actual recipient of the text message. I realize this may be an unorthodox way to approach this testimony; however, in order for you to understand how important your role is in this process, I need you to put yourself in their shoes. I need you to feel what those people felt on that February morning. I need you to have the passion that I and so many other workforce development professionals have.

Please understand that nearly 2,000 Goodyear workers and 1,400 more employees of local suppliers and retailers will lose their jobs. They do not have jobs to go to. How do I know this? It is pretty simple math. Our average unemployment rate is 12.9 percent. When multiplied by the labor force, that is 13,150 individuals who are unemployed in our area. This does not include the under-employed or the discouraged workers and does not include these Goodyear workers. In order for these workers to become gainfully employed, we must attract new business and industry to our area. In order to do that, we must have a world class labor force.

The National Association of State Workforce Board Chairs published a paper entitled “The Competitive Challenge: Building a World Class Workforce,” and stated, “For the United States to remain competitive in a knowledge-based global economy, it is critical that we create and maintain a world class education system that prepares our workforce with world class skills.”

Over the past few years, our board has commissioned a workforce study, a healthcare sector analysis, and an advanced manufacturing sector analysis to identify critical skill shortages. The studies concluded that there would be jobs in healthcare and manufacturing. However, they will require higher skill levels. Unfortunately, Goodyear did not practice advanced manufacturing; therefore, these workers will require retraining to fill skill gaps.

Again, community colleges have the expertise to provide the training, but due to other dislocations, classes are at capacity and funding is not available to expand offerings.

Over 1,800 surveys were completed by Goodyear workers and family members indicating their occupational needs. These were combined with skill shortage data to determine the need for 37 classes in high skilled demand occupations such as nursing and advanced manufacturing. Due to the prolonged recession and the nearly 1,500 job seekers in training this year, WIA budgets are already strained as we prepare for the recent cuts. Without approval of the national emergency grant, Goodyear workers cannot receive the education and training needed to re-enter the workforce.

In closing, I would like to ask that you also consider my written testimony regarding the following:

With regard to Pell grants, coordination can be flawed. WIA pays unmet need after Pell. If Pell is reduced, WIA costs increase, although our WIA budgets are also being reduced.

Timing is everything. A 10 percent budget cut over 12 months is manageable. The same 10 percent budget cut over three months is effectively a 40 percent cut and extremely challenging.

And third, the GAO report recognized that the current workforce system has merit. States like Tennessee could serve as a role model for the many recommendations.

I appreciate the hard choices that you have and will make to secure our future. And thank you for the opportunity to share my thoughts.

[The statement of Ms. Prater follows:]

Prepared Statement of Margaret W. Prater, Executive Director, Dyersburg State Community College—Northwest Tennessee Workforce Board

It is an honor and privilege for me to represent the American Association of Community Colleges, Dyersburg State Community College, and the Northwest Tennessee Workforce Board at this hearing on “Reviving our Economy: The Role of Higher Education and Job Growth and Development.” As the Executive Director of the Northwest Tennessee Workforce Board, I have a rather unique perspective on this topic, since I am also an employee of Dyersburg State Community College, the administrative entity for the Workforce Investment Act programs. For the past 27 years, Dyersburg State has served as administrative entity for federal workforce programs, including the Job Training Partnership Act (JTPA) and Workforce Investment Act (WIA). This public/private partnership has proven to be beneficial to both entities, but mostly to the unemployed adults, dislocated workers, and disadvantaged youth of northwest Tennessee. I consider it a privilege to have witnessed the way thousands of people have changed their lives through education and training over the years of my service. At the retirement of my predecessor last July, I presented him with a plaque stating that under his leadership we had provided education and training to over 66,000 individuals, a number large enough to fill the Titans football stadium in Nashville.

Since 2008, due to the recession, our focus has been on the dislocated worker. The seven (7) counties in Local Workforce Investment Area (LWIA) 12—Crockett, Dyer, Gibson, Lake, Lauderdale, Obion and Tipton—have lost over 3,500 “reported” jobs, mostly in manufacturing. The term “reported”, means those employers who are required to report layoffs in excess of 50 individuals. This does not include the countless number of employees who are laid off from “mom and pop shops”, small businesses that make up a significant part of the workforce. The Tennessee Department of Labor provides our LWIA with a weekly list of new claimants for unemployment insurance. Since early 2008, we have mailed 9,726 letters to new claimants advising these unemployed workers of the services available to them in the Tennessee One-Stop Career Centers and through WIA. In late 2009, one of our counties, Lauderdale, hovered at nearly 20% unemployment for months. In fact, due to this county’s statistics, a news crew from 60 Minutes spent three (3) days investigating what was

referred to as the “99ers”, those who had exhausted regular unemployment benefits and the multiple extensions equating to ninety-nine (99) weeks. Lauderdale County unemployment is now down to 15.9%, lowering our overall area unemployment rate to 12.9% which is definitely an improvement; however, this still equates to 13,150 individuals looking for work. Some of these live in Lake County, which has the 12th highest poverty rate in the nation.

My primary responsibility as Executive Director is to convene business and industry leaders, representatives of education, economic development professionals, community organization advocates, organized labor representatives and state departments of Labor and Workforce Development and Human Services to form the Northwest Tennessee Workforce Board (NTWB).

Our mission is to create a workforce system that fully utilizes the experience and innovative resources of the public sector in an efficient, responsible, integrated system that provides services to the citizens and employers of northwest Tennessee, which fosters a competitive economic environment and a high quality of life. Our guiding principles include being private sector driven, responsible and competitive, and customer focused through the use of our Tennessee One-stop Career Centers.

LWIA 12 has a Tennessee One-stop Career Center located in each of our seven (7) rural counties, where we partner with vital agencies and organizations to provide the personnel and resources needed to help job seekers find gainful employment. Since the recession began in 2008, our services have increased tremendously. In March 2008, the One-Stop Career Centers provided 52,104 in various services such as unemployment insurance, WIA, and Veteran Services. By March 2009, that number had increased by 38% to 72,003. The number of services continued to rise in March 2010, up another 21% to 82,790. As of last month, March 2011, services reached an all time high of 86,920, making a total increase since 2008 of 67%. Continuing this level of service becomes increasingly difficult from a manpower and budgetary standpoint. The prolonged recession has taken a toll on the One-stop Career Center Staff. In addition to the massive increase in the numbers of services requested daily, they deal with the hopelessness, depression and anxiety of more and more customers every day and face the reality their job performance depends on these customers getting a job in a depressed economy. One-stop Career Center staff work extra hours without extra pay, and have not had a salary increase in nearly five (5) years. They are aware of the national budget issues, and as they see what their customers are going through, they know they too may be laid off, adding to the rolls of dislocated workers.

It is important to recognize education and training services will vary by state, local area, one-stop center and even by individual. It is not “one-size fits all” system. Sometimes a customer simply needs help constructing a resume’ or to register to take the National Career Readiness Certificate (ACTs WorkKeys portable skills credential that many employers require) or be referred to a job interview. Others need more intensive services. Staff conduct various assessments to determine skill levels and assist the job seeker with using labor market information to make informed decisions on a career choice. More often than not, we find the unemployed adults and recently dislocated workers lack the job skills employers require, so training is required. Once a plan is developed, staff arrange for payment of fees, books and supportive services, such as transportation. But their job is not over. They follow the progress of the customer, developing a rapport lasting in some cases for years to come. It is not unusual for staff to meet a customer at the grocery store or a restaurant and receive an update on how their individual experience through the One-stop Career Center and WIA has changed their life. We have countless success stories.

Our area will show a particularly high incidence of skills training compared to others in the State and probably the Nation due to the lack of technical skills. Demographics for persons 25 or over in the area show that 24.4% of adults in the region have less than a high school diploma compared to 15.4% in the U.S. Only 16.2% have an Associate Degree or higher compared to 34.9% in the U.S. With employers requiring higher skills to compete in a global economy, a large percentage of the workforce is unprepared to meet their needs. Since July 1, 2010, we have funded training and/or support services so participants can attend training for 1,488 adults, dislocated workers, and youth to equip them with the skills needed to help their perspective employer better compete in a local and global economy. It is important to note that WIA funds are what we refer to as “last dollar scholarships”, only providing funding after coordination with state and federal financial aid, such as Pell Grants. We were pleased to hear that federal Pell Grants were retained at the current level, rather than being cut as originally recommended. This would have been what we refer to as a “double whammy” for workforce development since WIA only funds the customer’s unmet need after Pell Grant payments are calculated. It

would be unfortunate to take a cut in WIA funding, then also have an increase customer need due to our partners budget being cut as well. As a Board, we embraced the paper published by the National Association of State Workforce Board Chairs a few years ago entitled *The Competitive Challenge: Building a World-Class Workforce*. Excerpts from the Executive Summary are included below:

For the United States to remain competitive in the knowledge-based global economy, it is critical that we create and maintain a world-class education system that prepares our workforce with world-class skills. The workforce development system of the 21st century must be innovative, business-driven, customer-oriented, and performance-based. Ultimately, it must add value and increase the productivity of our nation's economy. To become a world-class system, it must be agile enough to adapt to rapid changes in the economy and be responsive to its customers.

The personal prosperity of our citizens and the economic security of our nation will require uniting our education, economic development, and workforce development strategies in a common effort to equip our citizens with higher skills and supply our businesses with qualified workers.

The community college, and other institutions of higher education, can provide the expertise needed to train a world-class workforce. As an employee of Dyersburg State Community College (DSCC), I am certainly an advocate for the education and training we provide the citizens of our region. But, I can also attest to this as an end-user, in more than one way. I am a product of the community college system. After graduating high school, I had no intention of attending college. Five years later, I found myself desiring to improve my skills to advance in the world of finance. By this time I was married and working full-time, so I attended at night. By the time I graduated nine (9) years later, I had two children, and actually worked for the college. My experience does not stop there. Both my daughters attended DSCC. They started their college careers while still in high school, earning enough credits to be classified as sophomores in college when they graduated from high school. One became a teacher and one a nurse. My grandchildren now attend "College for Kids" as I have started early on to impress upon them the need for lifelong learning. I have also seen firsthand the innovation and adaptability that DSCC has as a training provider for WIA. One such program is a fast-track LPN to RN program that was funded to meet the demand for Registered Nurses at local hospitals. As the Administrative Entity for WIA, DSCC has provided ample financial and personnel systems, professional development for staff and an established partnership with business and industry.

LWIA 12 has been a leader in identifying strategies for long-term growth. In 2004, the Board and partners, a local chamber of commerce, and industrial association, commissioned a study of the local workforce. Findings concluded that the "study area is largely unprepared for future growth due to the lack of a well-educated and trained workforce" and "only about 13% of jobs in short supply are available to workers with less than a high school diploma". Finding six of the ten fastest growing occupations would be in the Healthcare Industry; LWIA 12 conducted a Healthcare Sector Analysis. The analysis included building a career pathway model presented by healthcare professionals to students in middle and high school. This year, LWIA 12 along with 17 public and private partners commissioned a nineteen (19) county regional Advanced Manufacturing Sector Analysis. It identified companies, job titles, wage information, job openings, projected growth, and sectors including green jobs. A career pathway model is also available to give jobseekers insight into the knowledge, skills, and training required to have a career in Advanced Manufacturing. This work of the Board reinforces the premise that workforce development systems be locally controlled. It is vital for local areas to have the ability to adapt to economic needs and prepare to meet those needs based on local trends.

It is easy to see the Board and its partners subscribe to the "power of e-3" theory—the linkage of education, employment and economic development. This is a key component for communities developing strategies to help workers from a plant closure or mass layoff.

Consider for a moment you received the following text message at 7:36 a.m. on February 10, 2011:

"Goodyear is closing by year end."

This may seem like an unusual way to present a testimony, but I would like for you to take a moment to think about how you would feel having received this message. First, consider you are one of the 1,983 employees who work at Goodyear Tire and Rubber Company. You are likely a 44-year old, white male and a tire builder. You have been with the company for over twelve (12) years, but worked in a similar job for eleven (11) years before finally getting a job at the largest and best paying manufacturing company in northwest Tennessee. You are a member of the United Steel Workers of America. Your hourly rate of pay is \$24, although you only have

a GED. You work first shift, six (6) days a week, so you make \$65,000 annually, without working extra overtime. You have a mortgage on your home, and a truck and two car payments. You have a wife and two children, one just started college. You are considered to be rich in the eyes of your neighbors who only have an average household income of \$46,338.

Now consider that you are the wife of a Goodyear employee. You have not had to work in years, but you decided to get a part-time job for "fun" money. If your husband finds a job it will likely pay about \$12-13 per hour, roughly half of what he makes now. You will need to work full-time to make up the difference; however, you have no real skills only completing a few college courses before you married and dropped out. At best you will find a minimum wage job which will not be enough to make up the difference. Will you lose your house and vehicles? Will you have to rely on government assistance? What about health insurance? How will you pay college tuition for your child? How will you hold your family together?

Maybe the text went to the owner of the local trucking company whose sole contract is with Goodyear to move product to storage. Can you get out of your building lease? Can you sell the trucks in this economy? Will you have to claim bankruptcy? What do you tell the twelve (12) employees who will lose their jobs? What do you tell your wife and kids?

Or maybe you are a teenager, working as a cashier at the convenience store across the road from Goodyear. You work part-time and go to school. You have heard the rumors before. Everyone said if Goodyear ever closed, this store was history. Where will you get another job? How are you going to pay for school expenses?

Consider you are a school teacher or a nurse, working in two of the highest demand occupations in northwest Tennessee. You feel sorry for the people losing their job. In fact you know several. Wait, you remember some saying they would have to move away if Goodyear ever closed. If families start moving away that would mean less children in school, less people coming to the hospital. Could this affect your job?

Now consider you are the mayor or the industrial board chairman and you received this text. Everyone will blame you. Could you have done something to keep Goodyear here? How are you going to recruit a company to hire these 2,000 people? What did the study you commissioned a couple of years ago say about the impact of Goodyear in the region? Was it another 1,400 indirect jobs in addition to the direct jobs? Was it almost \$5 million in tax revenues that will be lost?

Imagine you are the local community college president. You know that a high number of adults in the area do not have a high school diploma and the percentage that have an Associate Degree or higher is less than half of the percent nationwide. With employers requiring higher skill sets to compete in a global economy, a large percentage of the workforce is unprepared to meet their needs. But, your college has grown by over 1,000 students in the last two years and your funding has remained flat for the last decade. Your only recourse has been to increase fees, but students are being hit from all sides with higher book costs, higher gas prices to get to school and now there is talk about reducing the Pell grant amount that helps low income students afford college. Your college works very hard to increase outside funds for scholarships, but the recession has affected fundraising as well. How are you going to handle the additional students when you are already near capacity? What about high demand training programs the college does not offer? Where will you get the start-up funds?

Finally, consider you are the Executive Director of the Workforce Board. You are the person responsible for bringing together partners in employment and training programs to assist dislocated workers, unemployed adults, and disadvantaged youth in the seven (7) county rural area that is home to Goodyear. Your primary focus, since the recession began in 2008, has been dislocated workers since unemployment rates have been as high as 20% for one county and currently averages 13% for all counties. This is already a total of 13,150 people without the additional 3,400 direct and indirect Goodyear affected employees. Your local One-stop Centers are offering more services than ever, up 67% since 2008. Your staff works extra hours to meet the demand without extra pay and without a raise in nearly 5 years. They see countless people everyday who are hopeless and depressed because they cannot find a job. They offer encouragement and career guidance, knowing all along that their own job may be in jeopardy due to national budget issues. You will have to pull some of these overworked staff from other counties to meet with Goodyear employees, but what can you tell them? You have one of the smallest annual allocations in the State and funds are already obligated to other dislocated workers. With the recent 800 employees laid off from World Color and the other employees affected by closure/mass layoff in your area totaling over 3,500 since 2008, the State has already provided extra funds to help. You can apply for a National Emergency Grant,

but you have heard that these may be eliminated in the budget battle. What will you do?

Although any of these individuals could have received this text and did receive a similar message by some means of communication, it was I who received this particular message from my union representative on the Workforce Board. The statistics in the examples are taken from 1,806 Needs Surveys of Goodyear employees and family members, and local demographic information.

In order to understand how important your role is in this process, I need you to put yourself in their shoes, I need you to feel what these people felt, I need you to have the passion that I and so many others in workforce development have. Please understand nearly 2,000 Goodyear workers and potentially 1,400 more with local suppliers and retailers will lose their jobs and do not have jobs to go to. The average unemployment rate for our seven (7) county rural area is 12.9%, with 13,150 individuals looking for work. There is no way current employers can accommodate this number of workers, plus those affected by Goodyear. We must attract new business and industry to the area. In order to do this, we must have a world class labor force.

With the help of many partners, we put together a National Emergency Grant application to provide employment and training services to Goodyear workers and their families from twenty-two (22) counties in Tennessee and Kentucky. The first step to retraining Goodyear employees was to conduct a Needs Survey. LWIA 12 staff worked around-the-clock shifts in the plant, distributing and collecting surveys and meeting with workers to answer their questions and hear their concerns.

Over 1,800 surveys were collected and analyzed, providing a clear picture of the Goodyear situation. Only two percent (2%) of employees indicated they did not plan to return to the workforce.

Over sixty-seven percent (67%) of employees indicated a need for job search assistance. Almost fifty-six percent (56%) indicated a need for personal assistance, such as educational financial aid. When asked "Do you believe additional training/education would help you become more employable?" 97.5% answered "yes", with over 60% indicating they would participate in either vocational training or academic training at a college. To handle the masses of employees affected by the Goodyear closing, we have secured a building rent-free to provide career and training services locally.

A crucial aspect of the survey was to match local demand occupations with customer interest. A major obstacle in meeting the long-term training needs for business expansion and high-growth occupational employment is lack of capacity within the training and education system and lack of funding to implement new programs. Thirty-seven (37) classes were identified that are either currently not offered or are already at capacity, prohibiting enrollment of Goodyear workers. Unfortunately, we have expended all FY 2009 and FY 2010 funds, with very little FY11 funds remaining unobligated. These classes cannot be offered to the Goodyear workers without approval of the National Emergency Grant application.

As the details of the FY 11 funding agreement, HR 1473, to keep the government running for the rest of the fiscal year were released I was particularly interested in the effect on WIA budgets. I viewed the final agreement of a \$307 million cut to WIA formula programs as relatively good news when compared to the House passed FY 11 CR bill, HR 1, which proposed the elimination of all WIA formula funding and included cuts to job training programs totaling \$3.6 billion.

The Northwest Tennessee Workforce Board has historically been a leader in Tennessee for tracking expenditures and obligations using our electronic State system. Because of this, we have been proactive in making adjustments before we have budget issues. We have also been able to secure additional funds from the State to serve additional customers.

Each year, it is particularly challenging to balance expenditures during the first quarter of the program year—July through September. Local areas receive approximately 22% of annual allocations the first quarter. Of course, 25% of annual operations, such as salaries, benefits, rent, etc. must be paid from this amount. The challenge comes with paying direct participant costs for education and training. For a participant attending a technology center, we must pay $\frac{1}{3}$ of their annual cost due to a trimester schedule. For a participant attending a community college or university, we must pay $\frac{1}{2}$ of their annual cost due to a semester schedule. For participants attending short-term private training, we generally pay 100%. All of this must come from 22% of annual allocation. The logical solution would be to carryover funds to meet these additional needs. This is what we try to do, but it becomes complicated. Although we have two years to spend our allocation, we must spend 70% by first year ending June 30, only leaving 30% to carryover. In order to spend the

70%, you must have a significant number of individuals in training, who may also require funds during that first quarter.

It is our understanding this July will have additional challenges as the cuts to WIA formula funds will be taken out of this same period (July—September) versus being applied to the entire year allocation. Based on our current expenditure levels as of March 31 and the projected cuts, we will be required to make additional cuts in our program to continue to serve our customers. This will include laying off several staff members at a time when we need everyone possible to meet the needs of customers and contributing to the abundance of dislocated workers currently looking for work.

I understand the budget situation for our nation is at a crisis level and I greatly appreciate Congress and the Administration for reinforcing the local workforce system as the primary delivery mechanism for workforce funding. Your job is not an easy one. I also understand that you must evaluate programs such as WIA, not from just what advocates say, but also from third party concerns.

I want to offer the following comments on the U.S. Government Accountability Office (GAO) report Opportunities to Reduce Potential Duplication in Government Programs, Save Tax Dollars, and Enhance Revenue:

First, let me say that I was pleased to see that WIA is obviously not the “smoking gun” when it comes to wasteful programs! In fact, in the first sentence, GAO states “Federally funded employment and training programs play an important role in helping job seekers obtain employment.” It goes on to talk about how some programs overlap with at least one other program in that they provide one similar service to a similar population. It states, “Even when programs overlap, they may have meaningful differences in their eligibility criteria or objectives, or they may provide similar types of services in different ways.” From my many years in the employment and training business, I can tell you this is true “one size does not fit all”.

One of the main focuses of the GAO report seems to be co-locating services. This was a surprise to me. I know Tennessee is a leader in the nation in workforce development for performance, expenditure of funds, etc. But I assumed everyone co-located workforce services since Tennessee and our local area has been doing this even before the Workforce Investment Act (WIA), under the Job Training Partnership Act (JTPA). In five (5) of our seven (7) counties, WIA is co-located in the Employment Services offices. Just as the report mentions, the only reason TANF is not also co-located is due to limited office space. In our other 2 counties, there are no Employment Services offices, so WIA facilitates this service via technology and the TANF employment and training service is co-located with us.

Another statement in the report which really rang true for us was, “Agency officials acknowledged that greater efficiencies could be achieved in delivering services through these programs, but said factors such as the number of clients that any One-stop Center can serve and One-stop Centers’ proximity to clients, particularly in rural areas, could warrant having multiple entities provide the same services.” Depending on budget cuts, I may be required to close our offices in our two smallest counties, Lake and Crockett. I would hope to “borrow” space from another agency to place a part-time staff person a couple of days a week, but we would not have the computer labs and technology to provide on-site services and facilitate the Employment Service role. I do not know where our TANF partner would go. This would be like taking two steps backwards. If budgets are cut so much that we cannot employ part-time staff, this means unemployed adults and dislocated workers would be forced to drive 25-30 miles for services. I know in some areas in Tennessee, the commute would be even greater.

The final statement I found interesting in the GAO report about Employment and Training programs was the last sentence under Actions Needed and Potential Financial or Other Benefits that states “Depending on the reduction in administrative costs associated with co-location and consolidation, these funds could be used to train potentially hundreds or thousands of additional individuals.” As previously noted, since 2008, our area has experienced reported dislocations of over 3,500 employees, and with Goodyear Tire and Rubber closing this will add another 2,000 direct and 1,400 indirect layoffs. Costs savings from co-location and consolidation could be used to provide employment and training services to this growing number.

In closing, I hope someday employers will be able to hire all the qualified workers they need; every individual who wants to work will have a job; and our tax dollars will not be needed to subsidize the effort. Unfortunately, today is not that day.

Chairman KLINE. Thank you very much. Thanks to all the witnesses.

As we did with the previous panel, Dr. DesJarlais and I will sort of take turns here and ask some questions.

Ms. Prater, I think all of us—certainly most of us—have seen the same sort of impact that you are talking about. In my district, Lockheed-Eagan is shutting down and going away, so we have almost 2000 employees there. When Northwest Airlines merged with Delta, that means the headquarters operation went away. So we are seeing that repeated many, many places. The workplace is changing. And that is part of what is behind our whole effort here in these hearings, is to get a first-hand report on what is happening in the workplace locally, and from our perspective as the Education and Workforce Committee, to see how those two pieces are coming together—education and needs of the workforce. Hence your presence here today. And thank you very much for being here.

Mayor Dickey, you said that—I am sorry, wrong page of notes here—that these institutions must meet the expectations of students and the employers—institutions being the community colleges and so forth. Without picking on anyone particularly, do you feel that that is happening?

Mayor Dickey. No, we do not see that. We have a lot of programs in place but somehow our educated job seekers do not realize the potential of that. Example, roughly 25 percent of our high school students drop out, so we have to deal with that situation. And whether it is GED or whatever it is, it is a serious problem. In the state of Tennessee, only 29 percent of the students graduate from high school.

So with that said, we need to prepare earlier, whether students want to be involved in the academic challenges that are ahead or the vocational opportunities that they might prefer themselves. When you go further with the education, you know, 50 percent of the students roughly that go to college, drop out the first semester, and in Maury County's situation, we have 17 percent of our students who have college four-year degrees.

So to me, we have talked about education, we have talked about training programs and all these things, but it seems like our efforts are stagnant and we are getting the same results over and over.

Chairman KLINE. Thank you. Boy, the high school dropout rate even nationwide is pretty staggering. It almost seems to us, and probably everybody in this room, that everybody knows that if you do not graduate from high school, you are starting way, way behind. And probably everybody in this room understands that if you do not have an associate's degree or some specialized training or a college degree that you are going to suffer. Yet, we still have these high dropout rates. Kind of another part of our job on this committee is we are looking at the Elementary and Secondary Education Act and what might be done there, but it is always a little bit distressing to me.

It is clear that here, perhaps maybe even more than other places, the workplace is changing as you are losing manufacturing jobs and moving to other areas. And Ms. Marlow, you have found such an area.

I found it interesting, Ms. Prater, that you pointed out that the community colleges are full. We did not develop that notion with the other panel. Is this principally—I am back to you right now—

is this principally, the maximum capacity issue—do you think this is mostly people looking for specific changes in careers, or is this a normal compilation of high school graduates just wanting to go to college, or is it driven by the need for a new sort of career change?

Ms. PRATER. I think it is primarily the dislocations that we have had and the high unemployment, that people recognize that there are not jobs there and so they have to prepare themselves for where the jobs are. I know that this year, Dyersburg State is graduating almost twice as many as last year. We are a very small college, but 400 students are graduating. I know we increased by over 1,000 students in like a two-year period. But I do believe that it has to do with the whole economic situation and I think we will—as jobs come back, I think we will see people leave, probably before they get their degree—part of the dropout that Mr. Dickey was referring to, of where they do not finish college. I think once they feel that they have enough skills and they can get back into the workforce, we will see that happening as well.

Chairman KLINE. Thank you. Let me ask one more question before I yield to Dr. DesJarlais.

I was struck, Ms. McKeel, you talked about providing scholarships. What is the source of that money?

Ms. MCKEEL. They are actual individual training accounts, ITAs through the Workforce Investment Act. In our area, folks did not seem to know what an ITA was, so we decided to rename that, it meant a lot more. And the other piece of that is that an ITA almost had the attitude that “I am entitled to that” where a scholarship is earned. And we very much require our scholarships to be earned. So we just sort of changed our terminology on that.

Chairman KLINE. That makes it a lot easier now, I understand what you are talking about.

Ms. PRATER. And we use the term, it is ITA.

Chairman KLINE. Good choice.

Dr. Desjarlais.

Mr. DESJARLAIS. Thank you, Mr. Chairman.

Mayor Dickey, I think I will start with you. I know the challenges you face here in the city, we have talked about these and certainly you have your work cut out for you, as do we all.

What workforce initiatives is the city office working on now?

Mayor Dickey. We have partnered with the Workforce Alliance on the programs that might be available such as the youth program. Last year, I think we employed some 16 workers from that program. And also job training dollars that are available for certain positions, police and fire, those kinds of things.

Mr. DESJARLAIS. Do you have any tax incentive plans to attract new businesses?

Mayor Dickey. We do. We have just put this in place, we have not used it as of this date, but it is there for the future, to make us more competitive in recruiting new jobs.

Mr. DESJARLAIS. Ms. McKeel, do you feel that individuals looking for employment are accessing the programs at the local institutions for training?

Ms. MCKEEL. Yes, and I think one of the things especially, I know it has certainly affected us at the career center level and I

am sure at the community college level and other institutions as well is that for a long time we felt like maybe we were a best-kept secret. And one of the things that the recession did, as I mentioned in my numbers, that just foot traffic alone had increased 300 percent over the last year. We are not a secret any more and the resources that we offer to folks are available. And included in those resources is information on the different training institutions. So again, we are in a bit of a crisis situation or have been over the last 18 months to two years and if you want to look for positive things that come from that, is that folks understand the resources and know where to go.

Mr. DESJARLAIS. Do you have any suggestions—you mentioned some—for how businesses and institutions of higher education can work a little better together?

Ms. MCKEEL. My favorite tool, and I was actually hoping you might ask that question, but my favorite tool is paid internships and that partnership. The sooner we can get individuals into a workplace—classroom is great, but the more you can get them into the workplace, that makes it relevant. I mean internships are great, paid or unpaid, but paid even takes it up a step.

Mr. DESJARLAIS. And I will direct this to you, but Mayor Dickey first, what areas are you expecting to see job growth or job creation in the next year or two in the area?

Mayor Dickey. Well, Congressman, of course, we know we are in a changing work environment. Manufacturing is vanishing, but yet our community is equipped for manufacturing jobs. So we have to try to recruit, for a quick fix, manufacturing jobs. And then somehow, we have to see the big picture and get into solar, green jobs, somewhere down the road there.

Mr. DESJARLAIS. Ms. McKeel, do you have anything to add?

Ms. MCKEEL. In fact, I was trying to jot it down so I did not leave anything out here on it.

There is basically—and I go back to the report that we coordinated on with Nashville Chamber and our Workforce Investment partners, and it looked at the 10-county area, but that is the economic engine for our entire middle Tennessee region. And then we looked at adapting a little more specifically to our southern counties, but there are basically five sectors that we are looking at growth in, they are very broad, as they should be—advanced manufacturing and green technologies, healthcare, public safety, hospitality and culinary arts, as well as information technology, which the IT piece crosses into every one of those categories. So those are the basic five that we are currently looking at, but then of course you get into logistics and distribution that fits into the manufacturing, so there are many sub-sectors of that as well.

Mr. DESJARLAIS. Thank you.

Ms. Marlow, in your testimony, I was fascinated by the growth in your industry. What do you expect will be the employment demand moving forward?

Ms. MARLOW. There is a very high demand. While it seems to be a very niche market, it is a very high demand. If you think about location-based technology, it is expected to grow and create billions of dollars in revenue and if you look at the numbers, even from the Department of Labor, they expect that it is going to grow just im-

mensely. And if you think about even the whole Google—every database that has an address has the ability to be visually seen on a map. So if you think about just enabling any kind of database to have an address, location-based technology, the growth potential is enormous.

Mr. DESJARLAIS. Are you or others in your industry working closely with the educational system to make sure that they are developing programs to help fulfill the needs of your industry?

Ms. MARLOW. We have but again, I would like to stress that K through 12 geography and the use of geospatial technology in those classrooms. Because many students—I mean some of the reasons that some of these classes are not being taught is because there is not a demand at the student level. So they are not aware of the profession. So I would again point to that K through 12 education as really important.

Mr. DESJARLAIS. I hate to use time to tell stories, but when you were talking about the lack of education in basic geography, I could not help but think of a story—and my wife Amy will probably remember this. We were talking to a substitute teacher, and I have actually talked to several younger people too, and I thought that I heard them mention the island of Alaska. [Laughter.]

And I had to stop and think a little bit, and I actually asked this substitute teacher to show me Alaska on a map and she could not because all the maps in the classroom showed the United States with Hawaii and Alaska next to it out in the ocean. And when I told her where it actually was, she said well, that makes a lot more sense because I did not understand why one was so warm and the other was so cold, if they were so close to each other. [Laughter.]

You might just test that. But it was a shock to me because—I will not say who it is in case they listen to this. But I would concur that we need to do better, based on that one story alone.

Ms. MARLOW. There you go.

Mr. DESJARLAIS. I will turn it back to the Chairman.

Chairman KLINE. You mean it is not an island? [Laughter.]

Ms. Marlow, I have sympathy certainly. It is always appalling to me when people cannot find things on a map. Probably going to be resistant to the federal government getting into the curriculum business. By law right now, the federal government is prohibited from doing that and it is probably a pretty good law, but since I am in your district, Scott, I will nevertheless fearlessly step out and encourage the people in Tennessee to put a little geography in the curriculum.

I think, Ms. Marlow, you are sort of the exact example that we are looking at here where we have got very, very high unemployment nationwide, and extremely high here. We have heard some very high percentages—12, 14, 16 percent unemployment—and you have a manufacturing base that is diminished, to say the least. And you have got a relatively new field and it is sort of a high tech field and it is a new opportunity. You talk about billions of dollars of opportunity. And absent the stirring interest in K-12, what are you doing, how are you trying to interact with the colleges that were already here before, with the workforce boards, to try to get people who are qualified to come work for you?

Ms. MARLOW. Well, actually that is the reason I founded the Institute for GIS studies, was really to try to make the connection. We have a lot of these jobs that are being sent to India, China, because they have focused on the information technology and have focused on those fields. So the way that we connect is through the chamber and things like that, as well as—I mean I am here today to connect, you know, just to try to reach out and say, look, this is something that is growing and we have data here in Tennessee, that is the thing. Even if you had somebody who had a great interest in it, you have to have data to actually interact and to make it work. So the State of Tennessee has made a huge investment so every county and every city has geospatial data available.

I just believe that that is a great field and I would like to raise the level of interest in it.

Chairman KLINE. I think you are doing that.

We talked about various mechanisms of connecting colleges and the workplace and the future workforce, and there are advisory boards, for example. I think all three of the institutions of higher education talked about advisory boards. Do you or others in your industry participate in any of those boards?

Ms. MARLOW. We do. Most of what I have been doing, quite frankly, has been at a national level just because a lot of my work is done outside of the state of Tennessee, meaning we work for a lot of other governments that are not, you know, in Tennessee. So a lot of my work has been done at the national level. But a lot of the people in our industry are very active in many different boards and advisory boards and things like that.

Chairman KLINE. Do you have interns?

Ms. MARLOW. Actually, I have two openings this summer for interns. [Laughter.]

So I thought I would mention that.

Chairman KLINE. We are trying to perform a service here.

Ms. MARLOW. Make the truth in action.

Chairman KLINE. Ms. McKeel and Ms. Prater, you both talked about increase in traffic, numbers of people coming, foot traffic—a lot of different terms, 700 each day and so forth. Are you involved in tracking what happens to those people? I mean it is one thing to measure how many people are walking in and asking for advice on how to produce a resume, it is another to see where they end up in that process. Can both of you, each of you, address that?

Ms. MCKEEL. I will start. Yes, the answer is yes. The metrics, of course, there are certain metrics that we are required to follow because of the Workforce Investment Act, but we have almost a report card. But the ones that we follow, of course, are the ones that receive more intensive services. You are right, there are 700 that walk in a day, some of them getting very basic information and going on their way. But we very much watch very closely for a year after they are finished with our services to find out—especially those that go into training—did they go to work in the field in which we trained them in, what were their wages, and are they staying on the job.

Ms. PRATER. Yes, we do the same thing. As she said, with those individuals who need additional, more intensive services, we provide scholarships. That is where I think I mentioned we have almost

1,500 individuals who are receiving scholarships or support services right now. We have monthly contact with those individuals while they are in their classes, while they are in their training or we do quite a bit of on-the-job training with employers as well. Then, once they exit the program and are employed—or if they are not immediately employed, we continue to follow up with them for at least a year to make sure—and sometimes we will find that they were employed and something has happened and they need additional services and we will bring them back in and work with them.

Ms. MCKEEL. I might add to that, especially in the training piece of it, that our workforce board looks at that every quarter as part of the reporting, to see if the monies that are invested in those training programs are resulting, first of all, in work, but specifically in work in that field in which they were trained. And decisions are made based on those results coming back, whether that should continue to be an allowable training field that folks are allowed to invest their scholarships in.

Ms. PRATER. And we also provide that information to potential students who are planning to go. And we have a report card that we let them know how many students went to Dyersburg State in business systems technology or nursing and what the graduation rate was and what the placement rate in jobs within that field were. And we use that to make decisions on funding as well.

Chairman KLINE. Great, thank you.

Dr. Desjarlais.

Mr. DESJARLAIS. Nothing further.

Chairman KLINE. Okay. We have filled up pages and pages of notes here and many questions.

Yes, Mayor Dickey, sure.

Mayor Dickey. Two categories of our workforce are not mentioned very often—the under-employed. And to me, you know, we get pages of reports, but that group is not included. And I think before we come out of this slump that we are in, that is going to have to be addressed, because those folks are going to have to get back on a level where they are qualified and earning a decent wage, rather than a survival wage, is the way I put it.

And then the other group is older folks who have had good work history, lost their job through no fault of their own. And those folks are not always retrainable. So economic development folks and their interest, somehow we have got to recruit to have jobs for those folks, because it is a long time from the middle 50s to the early 60s before you draw your social security.

Chairman KLINE. Dr. DesJarlais, do you have any further questions?

Mr. DESJARLAIS. I might just augment briefly what Mayor Dickey just mentioned. As we move forward, and if anyone has been following the budget debates, and I am sure some of you have, one of the issues facing us is the aging population, the baby boomers entering Medicare at the rate of 10,000 per day and I think you bring up a very valid point that we need to look at; is that not only people who have lost work later in life are going to be facing hardships, but the reality moving forward with the population living on average 10 years longer than they did just in the 1970s—and that is a good thing—but I think that that does point

to the fact that we are going to be working longer and in many cases beyond the age of 65.

So I would just expound upon that to say that I think that is very insightful and we definitely need to pay close attention to that because that is going to be an issue that is going to get bigger, not smaller.

Chairman KLINE. Again, I want to thank the panelists. For all of you, but particularly the ladies on the end, we will be looking at WIA, the Workforce Investment Act. Another thing we have got to look at, we are very concerned about the number of job training programs, the number of agencies that are involved. I am certainly not shocked, you may not be either, that the government sometimes does not do things efficiently and we really need a lot of work there to clean that up and make it do the job that it is supposed to do.

But thank all of you for the work that you are doing out there to help people find jobs, to create jobs. We appreciate that and thank you again for your attendance here today.

There being no further business, the committee stands adjourned.

[The statement of Mr. Miller follows:]

**Prepared Statement of Hon. George Miller, Senior Democratic Member,
Committee on Education and the Workforce**

For most Americans, a college education is the pathway to the middle class. In the current economy, this pathway can be uphill. For many, it may seem steeper than ever. But smart investments today, both nationally and locally, will ensure a strong and growing middle class tomorrow.

In communities like Columbia, just as in other communities across Tennessee and across this country, local economies rely on an educated and well-trained workforce.

A recent study warned that demand for workers with college educations will outpace supply by 300,000 per year. At this rate, by 2018, our colleges will have produced 3 million fewer graduates than are demanded.

This cannot continue. In a country as great as ours, there is no excuse for anything less than a talented and fully qualified workforce.

For years, we've heard this key complaint from business leaders: they weren't getting enough workers with the skills for their specific industries.

When Democrats took control of the Congress in 2006, we took on this challenge by making college more affordable and student loans more manageable.

We started by raising the Pell Grant award to its highest level in history. Starting in 2014, the Pell will be indexed to inflation so it does not lose value over time.

We made it easier to pay back college loans with programs like public service loan forgiveness. Now, college graduates who become teachers, nurses, public defenders or police officers can have their loans completely forgiven after 10 years of on-time payments.

We also made loan payments more affordable. Using the Income Based Repayment program, graduates only have to pay up to 15 percent of their discretionary income toward their loan payment. New borrowers beginning in 2014 will only have to pay 10 percent and after 25 years, their remaining balance is forgiven.

And we made unprecedented investments in our community colleges to build a 21st century workforce by fueling partnerships between community colleges, businesses and training programs.

We did all of this at no new expense to taxpayers by getting rid of wasteful subsidies that went to big banks and using that \$60 billion in savings to invest in students and pay down the national debt.

Our economy will be stronger if we are able to prepare more Americans, whether younger students or unemployed workers, for the jobs of the future.

In the fall of 2009, 92,226 students were enrolled at Tennessee's public community colleges, up from 80,157 in 2008. And more than 50,000 of these students relied on a Pell Grant scholarship to help them afford college.

These smart and ambitious Tennesseans are on a path forward. They know that they will have a more fiscally secure future than those with only a high school degree.

Unfortunately, Republicans in Congress are threatening the aspirations of these students by proposing to cut their Pell Grant scholarship by \$2,500, the lowest level since 1998.

This is not the time to move backwards if we want to help our workers, our students and our country get ahead.

At a hearing today in Columbia, witnesses will testify about the critical role higher education plays to help spur job growth and community colleges help accomplish this task.

Not only are community colleges providing educational opportunities, they're also meeting workforce needs by offering a range of core and training services from resume counseling to job training all afforded through the Workforce Investment Act.

But Republicans have outlined plans to cut job training programs and eliminate many of these services. Their initial proposal for this year's funding bill effectively zeroed out these vital workforce investment programs. I believe this is irresponsible, short sighted and dangerous for American families.

We have to do everything we can to continue to spur economic growth and prepare our workforce for the 21st century. We have the hardest working people in the world in this country—let's help them achieve, let's help them get on or stay on the pathway to the middle class not take away their opportunities for job training and career growth.

Together, we can rebuild our economy so that it's strong, innovative, and once again sets an example for the rest of the world.

[Whereupon, at 11:50 a.m., the committee was adjourned.]

**REVIVING OUR ECONOMY:
THE ROLE OF HIGHER EDUCATION IN
JOB GROWTH AND DEVELOPMENT**

Tuesday, August 16, 2011

U.S. House of Representatives

**Subcommittee on Higher Education and Workforce Training,
Committee on Education and the Workforce
Washington, DC**

The subcommittee met, pursuant to call, at 1:04 p.m. at Clemson University International Center for Automotive Research (CU-ICAR), 5 Research Drive, Greenville, South Carolina, Hon. Joe Wilson [member of the subcommittee] presiding.

Present: Representatives Wilson and Gowdy.

Staff Present: Jennifer Allen, Press Secretary; Amy Raaf Jones, Education Policy Counsel and Senior Advisor; Brian Melnyk, Legislative Assistant; Meredith Regine, Minority Labor Policy Associate.

Mr. WILSON. Ladies and gentlemen, a quorum being present, the subcommittee will come to order.

In the tradition of the U.S. House of Representatives, we will begin with a prayer.

Our Father, we thank Thee as educators and legislators for the privilege and opportunity to serve the people of South Carolina. We ask Thy guidance and direction as we seek to promote jobs for our younger citizens.

We are grateful for predecessors such as Armed Services Committee Chairman Floyd Spence who died 10 years ago today, setting an example of service above self.

We ask Your protection of our troops who today make it possible for us to assemble and speak freely with the inspiration of Marine Major Julian Dusenbury, Princeton Class of 1942, who was awarded the Navy Cross for his service at Okinawa; and Congressional Medal of Honor recipient, Colonel Chuck Murray of Columbia, who will be recognized tomorrow with funeral services at the First Presbyterian Church.

In the name of Jesus, amen.

Thank you for attending this important hearing on promoting the creation of jobs and the role higher education and job growth initiatives will play in creating jobs. I appreciate your efforts in conducting this hearing, and I am very happy that it is being held in our home State of South Carolina in a very dynamic part of South Carolina, the upstate.

I would also like to thank Dr. James Barker, the president of the university, for hosting us here at Clemson University's International Center for Automotive Research, CU-ICAR. We appreciate President Barker and his wife, Marsha.

I know firsthand of the excellence of the leadership at Clemson with President Jim Barker and Board Chairman David Wilkins, in that our youngest son, Hunter, received a degree here in May at Clemson in industrial engineering and another son graduated from Clemson several years ago and is now very successful in commercial real estate in Columbia, thanks to his Clemson background.

Spread across 250 acres, the CU-ICAR Center is located in a state-of-the-art \$45 million facility here in Greenville. It is a research-oriented campus that combines the best of the public and private sectors. It provides an opportunity for today's innovators to develop tools for the automotive needs of tomorrow. It has fast become a hub for the nation's automotive industry, as it is a main area to design, test, and manufacture vehicles available to the industry. It is very appropriate for it to be located in this community because Greenville County has one of the largest concentrations of over 10,000 engineers, more per capita than many communities in the world, and is now known as one of the main engineering hubs of the Southeast.

Anchored by the Carroll Campbell Graduate Engineering Center, CU-ICAR offers both a master's and Ph.D. program in automotive engineering. In addition, the Research Center is co-anchored by the BMW Information Technology Research Center and the Timkens Research Center. These partnerships with local companies provide a great sense of cross-industry collaboration. Furthermore, companies such as Michelin sponsor many events at the Center that promote innovation in the automotive industry.

I am very happy to see that both BMW and Michelin are involved with Clemson at the CU-ICAR Center. Both companies were brought to the State by previous Governors of South Carolina. The late Governor Karl Campbell was instrumental in recruiting BMW to the upcountry with the late Roger Milliken. Since opening its first manufacturing facility in Greer, South Carolina, BMW has shipped over 1 million cars made in the Palmetto State to the rest of the world.

Thousands of jobs were created by BMW and its suppliers across South Carolina, building world-class vehicles, including all X5, X6, Z3, and Z4 models in the world, with the new addition of X3. This year, the plant will produce more than 260,000 vehicles for over 130 markets around the world. Sales of the vehicles produced at the plant have met with continued high demand. In October, the plant will begin operating on a 6-day production schedule to meet this global demand. This will also create new jobs for production associates.

In addition, Governor Campbell's predecessor, Dr. Jim Edwards, played a vital role in recruiting the Michelin Tire Corporation, North American headquarters and manufacturing facilities, to South Carolina. Since 1979, Michelin has invested well over \$1 billion in its multiple South Carolina plants. Recently, Michelin announced it would be expanding operations with an additional \$200 million commitment for the plant in Lexington that will add 270

jobs. With the North American headquarters in Greenville, there are now seven manufacturing plants across South Carolina.

As you can see, CU-ICAR has become a premier site of our nation's automotive expertise. It provides students with the challenging environment that incorporates cutting-edge technology and fosters a sense of innovation and collaboration.

I look forward to hearing what you all have to say and how we can move forward to focus on creating a climate that promotes innovation and job growth.

I now recognize Mr. Gowdy for any opening remarks he may wish to make.

[The statement of Mr. Wilson follows:]

**Prepared Statement of Hon. Joe Wilson, a Representative in Congress
From the State of South Carolina**

A quorum being present, the subcommittee will come to order.

Thank you all for attending this important hearing on reviving our economy and the role higher education and job growth initiatives will play in doing so. I appreciate your efforts in conducting this hearing and am very happy it is being held in my home state of South Carolina. I would also like to thank Dr. James Barker, President of Clemson University, for hosting us here at Clemson University's International Center for Automotive Research (CU-ICAR).

Spread across 250 acres, the CU-ICAR center is located in a state of the art \$45 million facility here in Greenville. It is a research oriented campus that combines the best of the public and private sectors. It provides an opportunity for today's innovators to develop tools for the automotive needs of tomorrow. It has fast become a hub for the nation's automotive industry as it is a main area to design, test, and manufacture vehicles available to the industry.

Anchored by the Carroll Campbell Graduate Engineering Center, CU-ICAR offers both a masters and Ph. D program in Automotive Engineering. In addition, the research center is co-anchored by the BMW information technology research center and the Timkens research center. These partnerships with local companies provides a great sense of cross industry collaboration. Furthermore, companies such as Michelin sponsor many events at the center that promote innovation in the automotive industry.

I am very happy to see both BMW and Michelin involved with Clemson at the CU-ICAR center. Both companies were brought to the state by previous governors of South Carolina. Governor Carroll Campbell was instrumental in recruiting BMW to the upstate. Since opening its first U.S. manufacturing facility in Greer, South Carolina, BMW has shipped over one million cars made in the Palmetto state to the rest of the world. Thousands of jobs were created by BMW and its suppliers across South Carolina by building world class vehicles including all X3, X5, Z3, and Z4 models in the world.

In addition, Governor Campbell's predecessor, Dr. Jim Edwards played a vital role in recruiting the Michelin Tire Corporation, North American headquarters and manufacturing facilities to South Carolina. Since 1979, Michelin has invested over \$1 billion in its two South Carolina plants. Recently, Michelin announced it will be expanding operations with an additional \$200 million commitment for a plan in Lexington that will add 270 new jobs. With the North American headquarters in Greenville, there are now seven manufacturing plants across the state.

As you can see, CU-ICAR has become a premiere site of our nation's automotive expertise. Its proximity to industry leading companies provides students with a challenging environment that incorporates cutting edge technology and fosters a sense of innovation and collaboration.

I look forward to hearing what you all have to say on how we can move forward to focus on creating a climate that promotes innovation and job growth. I now recognize Mr. Gowdy for any opening remarks he wishes to make.

Mr. GOWDY. I thank my distinguished colleague.

I personally want to thank Representative Dr. Virginia Foxx for her willingness to hold this higher education subcommittee field hearing in the Fourth Congressional District of South Carolina. I

also want to thank Congressman Wilson. And I know you join me in thanking all of the members of the South Carolina delegation for helping us highlight the wonderful assets and attributes of this State.

I also want to thank Clemson University's ICAR for hosting us today. It has been a remarkable day so far, and I feel like we are just getting started. ICAR is a splendid model of how partnerships between institutions of higher education and the communities they serve can spark measurable job growth and economic development. ICAR has generated nearly \$250 million in new investments, with another \$500 million currently in development, and has announced the creation of more than 2,300 new high-wage jobs. And in an economy that is starving for jobs, that is laudable and commendable.

Finally, thank you to our distinguished panel of witnesses. I have only been there 7 months, but I can tell you, in my 7 months, each you individually would make a phenomenal panel. The fact that we have the four of you in this eclectic, wonderful amalgamation of talent and insight is really, truly a credit to the upstate of South Carolina. So I thank this panel of witnesses and the next, as well.

The Fourth District has seen a distinctive shift in the economic drivers in our area. We now boast one of the largest concentrations of high-skilled manufacturing in the country, with almost 20 percent of the employees in the district working in the manufacturing industry and more than 140 auto-related companies calling this area home.

Milliken, a specialty chemical and fabrics company headquartered in Spartanburg, holds over 2,200 patents and is also the home to the largest textile research center in the world. This region is also home to other phenomenal industries such as BMW, GE, Michelin, and Lockheed Martin, just to name a few.

As employers' needs have changed, so have the offerings of the institutions of higher learning in our district. Employers are working with our area technical schools to engage in curriculum planning and matriculation, employers like Jason Premo, co-owner of ADEX Machining.

I recently visited ADEX, a company which produces parts for the aerospace, defense, and energy power generation industries. Jason told me how he utilized South Carolina's apprenticeship system and worked with Greenville Tech's established machine tool technology program to cultivate workers with the high-level skills necessary to operate ADEX's precision machining. Because of their effective use of resources, ADEX was chosen to participate in Boeing's competitive mentor-protege program, a partnership that will potentially allow ADEX to serve as a certified supplier to Boeing.

It is this sort of leveraging that has enabled the upstate's economy to respond to changing economic demands and become a hub of domestic and international business development and technological innovation.

The many technical schools, colleges, and universities in the Fourth District serve a myriad of interests, but their reach extends beyond just high school graduates. Spartanburg Community College just received a large grant from the Timken Foundation, al-

lowing them to purchase robotic toolkits, a pilot program in which engineers and college faculty will introduce elementary and middle school in Cherokee County, which is part of Congressman Mick Mulvaney's district, to robotics.

USC Union offers a concurrent degree program for students from Union County High School and other area high schools to enroll for college credit beginning in their junior year. Through their program, students can graduate from high school with 24 hours of college credit. In a State with a 59 percent high school graduation rate, it is essential to engage students early and educate them on the opportunities available after high school careers.

By increasing the number of students seeking higher education, we can begin the process of decreasing our unacceptable, nearly 10 percent unemployment rate in this State. We are here today to examine the successful relationships between higher education and business and industry partners that have fueled job creation, with the hope of furthering these efforts and expanding their influence.

And I would be remiss if I did not mention the political and local leaders from the upstate whose foresight and courage, Representative Wilson, some of which precedes by a lot our service—most of it does. In fact, their foresight and courage allows us to tell the story of success today.

One of those leaders is with us today, Mayor Knox White. And I think he would be the first to tell you that we are a team, and we have partnered to showcase the attributes of this wonderful region. And Congressman Wilson called the names of others, and the afternoon is not long enough for me to name them all. But this is an incredible, phenomenal place that we call home.

And, Mayor White, thank you for your leadership of note, and I know that you would be the first to share that with others who have partnered with you.

The Fourth Congressional District has a depth and breadth of resources to not only be a statewide or regional leader but a national leader in economic development and job growth, and I hope to work with each of our witnesses today to make sure that comes true.

Thank you, Mr. Wilson.

[The statement of Mr. Gowdy follows:]

**Prepared Statement of Hon. Trey Gowdy, a Representative in Congress
From the State of South Carolina**

First I want to thank the Committee for holding this Higher Education and Workforce Training Subcommittee field hearing in the 4th District of South Carolina.

Thank you also to Clemson University's I-CAR for hosting us today. I-CAR is a solid model of how partnerships between institutions of higher education and the community they serve can spark tremendous job growth and economic development. I-CAR has generated nearly \$250 million in new investments, with another \$500 million currently in development, and has announced the creation of more than 2,300 new high wage jobs.

And finally, thank you to our distinguished panel of witnesses. I look forward to hearing your insights.

The Fourth District has seen a distinctive shift in the economic drivers at play in our area—now boasting one of the largest concentrations of high-skilled manufacturing in the country, with almost 20% of employees in the District working in the manufacturing industry and more than 140 auto-related companies calling our area home. Milliken, a specialty chemical and fabrics company located in Spartanburg, holds over 2200 patents and is also the home to the largest textile research center in the world. The region is also one of the top five metros in the world for engineering talent per capita. The location of industry leaders in the Upstate such as BMW,

GE, Michelin and Lockheed Martin presents wonderful employment opportunities to workers in our District—but with those opportunities also come requirements of targeted training and high-level experience.

As employers' needs have changed, so have the offerings of the institutions of higher learning in our district. Employers are working with our area technical schools to engage in curriculum planning and matriculation—employers like Jason Premo, co-owner of ADEX Machining. I recently visited ADEX, a company that produces parts for the aerospace, defense and energy-power generation industries. Jason told me how he utilized South Carolina's apprenticeship system and worked with Greenville Tech's established machine tool technology program to cultivate workers with the high-level skills necessary to operate ADEX's precision machining. Because of their effective use of resources, ADEX was chosen to participate in Boeing's competitive mentor-protége program, a partnership that will potentially allow ADEX to serve as a certified supplier to Boeing.

It is this sort of leveraging that has enabled the Upstate's economy to respond to changing economic demands and become a hub of domestic and international business development and technological innovation.

The many technical schools, colleges and universities in the 4th District serve a myriad of interest. But their reach extends beyond just high school graduates. Spartanburg Community College just received a large grant from the TIMKEN Foundation allowing them to purchase robotic tool kits and pilot a program in which engineers and college faculty will introduce elementary and middle school students in Cherokee County, part of Congressman Mick Mulvaney's district, to robotics.

USC Union offers a concurrent degree program for students from Union County High School and other area high schools to enroll for college credit, beginning in their junior year. Through their program, students can graduate from high school with 24 hours of college credit. In a state with a 59% high school graduation rate, it is essential to engage students early and educate them on the opportunities available after their high school careers. By increasing the number of students seeking higher education, we can begin the process of decreasing our unacceptable 10% unemployment rate.

We are here today to examine the successful relationships between higher ed and business and industry partners that have fueled job creation, with the hope of furthering these efforts and expanding their influence. The 4th Congressional District has the depth and breadth of resources to be not only a statewide or regional leader, but a national leader in economic development and job growth, and I hope to work with each of our witnesses today in this endeavor.

Mr. WILSON. Thank you very much, Congressman Gowdy.

Pursuant to Committee Rule 7(c), all subcommittee members are permitted to submit written statements to be included in the permanent hearing record. And, without objection, the hearing record will remain open for 14 days to allow statements, questions for the record, and other extraneous material referenced during the hearing to be submitted to the official hearing record.

[The information follows:]

**Prepared Statement of Hon. Virginia Foxx, Chairwoman,
Subcommittee on Higher Education and Workforce Training**

Good morning everyone. First, allow me to take a moment to thank our witnesses for being with us today. We recognize you all have busy schedules, and we appreciate the opportunity to hear your thoughts and learn from your experiences on the very important topic of higher education and job growth. Second, I would like to thank Clemson University and the people of Greenville, South Carolina for their hospitality and for hosting the first field hearing of the Subcommittee on Higher Education and Workforce Training.

We are here this morning to examine the mutually beneficial relationship between higher education, businesses and local communities. During tough economic times, it is especially important that businesses and institutions of higher education work together to educate interested students for the jobs needed in the local economy.

One of my favorite points to make in meetings with institutions is that all education is career education. I do not know very many individuals who are attending college and paying tuition simply to contemplate their navels. The goal of almost

every student I've ever met is to find a job—and they believe their chances of one day landing that job are improved by earning a college degree.

Today we're examining a unique program that matches Clemson University with the needs of area businesses. The International Center for Automotive Research Campus illustrates how educators can create job-creating synergy with programs where students pursue a degree that is tailor made to pair highly skilled graduates with the local businesses' need for a skilled workforce. This partnership benefits students, businesses and the city of Greenville.

As a former community college president and university administrator, I understand how important it is to forge partnerships between businesses, local communities and institutions of higher education. When I was at the community college, I worked with business and community leaders to collaborate on how we could meet area needs. These collaborative relationships ensure that local businesses have the skilled workforce they need while also providing opportunities for students to further their education.

Because I believe that local communities, institutions of higher education and businesses should be able to work together in the most beneficial way possible for all parties involved, my subcommittee remains focused on examining the federal footprint in higher education. The taxpayers of this country spend a lot of money on higher education at the federal level and the taxpayers expect and deserve accountability. We also want to ensure that the long arm of federal regulations do not hinder innovative local solutions.

It is my pleasure to be with you all today and I look forward to hearing the testimony of our distinguished witnesses. I now recognize Mr. Gowdy for any opening remarks he wishes to make.

Mr. WILSON. I also would like to introduce Ms. Amy Jones. Amy is the education policy counsel and senior advisor of the Committee on Education and the Workforce, and I am very grateful that she is going to be joining us here at the table.

And I know I want to join with Congressman Gowdy; we are very sorry that our chairwoman, Virginia Foxx, is not here. She, herself, has been a community college president in Grandfather Mountain, North Carolina. She is a dynamic lady, and I know that she was looking forward to being here with us. And I just know we will get her back here sometime because of her fondness, particularly for Congressman Gowdy at this time—who is so beloved in Washington.

At this time, I would like to yield to Representative Gowdy for the remainder of the hearing.

Representative Gowdy, if you could now take it from here and introduce our first panel of witnesses.

Mr. GOWDY [presiding]. It will be my pleasure, Representative Wilson. First, I will introduce them from my left to right, your right to left.

The Honorable Knox White has served as mayor of Greenville since December 1995. During his time serving Greenville, Mayor White has emphasized neighborhood revitalization, economic development, and many transformational projects downtown. Mayor White is a native of Greenville, graduated from Wake Forest University and University of South Carolina School of Law. He is a partner in the law firm of Hainesville, Sinker and Boyd, and is married with two children.

Mr. Werner Eikenbusch is section manager for associate development and training at BMW Manufacturing Corporation. He joined BMW Manufacturing in 1998 and has held various management positions with BMW Manufacturing, in their human resources department. Before joining BMW, Mr. Eikenbusch worked as a human resources manager for BMW North America. Mr.

Eikenbusch holds a master's degree in engineering management from New Jersey Institute of Technology.

Ms. Laura Harmon serves as project director for Greenville Works, a partnership of 12 education workforce development and economic development organizations focused on implementing long-term economic and workforce development strategies based on industry input. Ms. Harmon has over 13 years' experience in the public and private sectors and has held leadership positions in workforce development, career development, fund development, and human resources. She is also a member of the Greenville Society for Human Resource Management and serves on their strategic planning committee and workforce readiness panel.

Ms. Brenda Thames joined the Greenville Hospital System in 2007 as the vice president of academic development. Dr. Thames is responsible for providing academic strategic direction and leadership for initiatives designed to advance patient care through education and research. She also works with local colleges and universities to develop collaborative relationships that are focused on health care. Prior to joining Greenville Hospital System, Dr. Thames served as associate dean for research and graduate studies at the College of Health, Education, and Human Development at Clemson University.

Having just read your CVs, you do not need me to tell you what the green, yellow, and red lights mean. I will say this more for the benefit of Congressman Wilson and myself. Green means go. Yellow means speed up and get through the intersection as quickly as you can. No, I think yellow means you have about a minute left. And red just means, if you are on the final thought—but as I told you upstairs, you all are here as a courtesy to us, and we are here to listen to you. So if you need a little bit of extra time, I am sure that Congressman Wilson will gladly grant you that.

With that, Mayor White, we will ask you to start with your opening 5 minutes, and we will move down the dais.

**STATEMENT OF HON. KNOX WHITE, MAYOR,
CITY OF GREENVILLE**

Mr. WHITE. Okay. Thank you, Congressman Gowdy. Thank you for your opening comments, and Chairman Wilson, welcome back to Greenville and to this amazing place, CU-ICAR.

On behalf of the city of Greenville, welcome to Clemson University's International Center for Automotive Research, also known as noted as CU-ICAR. We greatly appreciate your choice in Greenville for this hearing.

Greenville is widely known as a community that builds partnerships, and we take partnerships very seriously. CU-ICAR is a remarkable example of what those partnerships can create. It all begins with a good partner. In this case, the city of Greenville had the best partner in the world in Clemson University and the visionary leadership of Dr. Jim Barker.

Thirty years ago, Greenville was a much different place. In a region historically and chiefly known for textiles, the Greenville-area leaders looked to a future and made a very intentional decision to pursue a more diversified economy. And they did this at a time when they didn't have to do it, but they began to actively recruit

other kinds of industries to this area, including giants like General Electric, Michelin, and then, a decade later, BMW. And with those kinds of diversified businesses, the whole world changed for this upstate of South Carolina.

In this decade, another layer was added to this commitment of economic diversification in which there was a greater recognition for the enhanced role that higher education could play in building a local economy. This was when Clemson University, in seeking to commercialize on important research being done there, began exploring the development of a wind tunnel with the help of a private partner.

Clemson officials approached BMW to see if they would be interested in purchasing time on a wind tunnel, but BMW said that function was already being handled in Germany. However, BMW was interested in helping build a local knowledge-based workforce that could help support its global operations while also supporting the rapidly growing automotive cluster in this area. They needed a level of engineering talent that was not currently being offered by any program in the United States.

Subsequently, Clemson embarked on a quest to build a new master's and Ph.D. program that would be part of a unique concept of a research campus built around a particular niche in the marketplace, one dedicated to transportation and mobility technology. BMW and others also funded endowed professorships for this new program, showing their full commitment to it.

What began less than 10 years ago as an initial idea of a wind tunnel on 250 wooded acres along the interstate has grown into an international campus that is driven by innovation and collaboration. We sit on the campus today that in such a short time period has already generated more than \$250 million in investment. This includes \$12 million provided by the city of Greenville, in cooperation with the South Carolina Department of Transportation, to construct roads and first-class infrastructure necessary to serve this campus. Here, more than 100 graduate students from around the world learn about automotive technology and how to implement tomorrow's ideas today. The school leads the Nation in the systems engineering approach to vehicle engineering.

CU-ICAR is founded on the idea that successful economic development and world-class academics can be enhanced by building relationships. Those relationships can be seen on this campus with the BMW Information Technology Research Center and the Koyo Bearings USA, JTEK Group research, and many others.

The campus is also home to the new Center for Emerging Technologies and Mobility in Clean Energy, or CET, the newest addition here, by the way. The CET is a 60,000-square-foot office and lab facility built in partnership with Clemson's Foundation and the Economic Development Administration of the U.S. Department of Commerce. Opening this fall, the facility is almost 100 percent pre-leased and includes the new world headquarters for Sage Automotive Interiors, along with more than a dozen other companies developing the latest technology and software.

Off campus—because there is more to ICAR than what you are seeing here—off campus, there are many more partnerships in the works. These include Proterra, a leading innovator of zero-emission

buses. Proterra is building their own EcoRide BE-35, they call it, a line of next-generation buses, with FastFill charging stations that enable 100 percent recharge in less than 10 minutes with a 30-mile range.

When Proterra was investigating relocation opportunities for this cutting-edge technology, CU-ICAR was what made the difference in choosing South Carolina for its relocation. The CU-ICAR folks said basically, "What do you need? Let us build a program around your needs to help you accelerate your technology," instead of simply saying, "This is what we do." In the future, Proterra has plans for developing its manufacturing facility on the CU campus and employing more than 1,000 people.

There are other programs as well. Also based on this campus are other exciting initiatives such as Deep Project Orange, from the ICAR campus, which allows students to learn about the wants and needs of the future customer and translate this into engineering solution and product. Working with specialists from various industry partners, students learn firsthand what it takes to deliver a mobility product to market. In so many words, they make a car and other cutting-edge technologies.

Without talent, technology, investment, and infrastructure, we as a community cannot succeed. Clemson University, along with the private sector, has proven that collaboration between universities and the private sector in today's economy can drive innovation, push young minds to look at problems differently, and can create new jobs to innovation in our communities.

Thank you.

[The statement of Mr. White follows:]

Prepared Statement of Hon. Knox White, Mayor, City of Greenville

Good afternoon, and welcome to Chairwoman Foxx from our neighboring state of North Carolina, and to Congressmen Gowdy and Wilson, both hailing from South Carolina. On behalf of the City of Greenville, welcome to Clemson University's International Center for Automotive Research, also known as CU-ICAR. We greatly appreciate your choice of Greenville for this hearing.

Greenville is known as a community that builds partnerships. CU-ICAR is a remarkable example of what those partnerships can create.

Thirty years ago, Greenville was a much different place. In a region historically and chiefly known for agriculture and textiles, Greenville area leaders looked to the future and made an intentional decision to pursue a more diversified economy, actively recruiting industry giants like GE, Michelin, and then, a decade later, BMW.

And in this decade, another layer was added to this commitment of economic diversification, in which there was a greater recognition for the enhanced role that higher education could play in building a local economy. This was when Clemson University, in seeking to commercialize on important research being conducted there, began exploring the development of a wind tunnel with the help of a private partner.

Clemson officials approached BMW to see if it would be interested in purchasing time in that wind tunnel, but BMW said that was a function already handled in Germany. However, BMW was interested in helping build a local, knowledge-based workforce that could help support its global operations while also supporting the rapidly growing automotive cluster. They needed a level of engineering talent that was not currently being offered by any program in the United States. Subsequently, Clemson embarked on a quest to build a new Masters and PHD degree program that would be part of a unique concept of a research campus built around a particular niche in the marketplace—one dedicated to transportation and mobility technology. BMW and others also funded endowed professorships in the new program.

What began less than 10 years ago as an initial idea for a wind tunnel on 250 wooded acres has grown into an international campus that is driven by innovation and collaboration. We sit on a campus today that has generated more than \$250

million in investment. This includes \$12 million provided by the City, in cooperation with the South Carolina Department of Transportation, to construct the roads and infrastructure necessary to serve this campus. Here, more than 100 graduate students from around the world, learn about automotive technology and how to implement tomorrow's ideas today. The school leads the nation in their systems engineering approach to vehicle engineering.

CU-ICAR was founded on the idea that successful economic development and world-class academics can be enhanced by building relationships. Those relationships can be seen on the campus with the BMW Information Technology Research Center and the Koyo Bearings USA, JTEK Group research and development facility. The Campus is also home to the new Center for Emerging Technologies in Mobility and Clean Energy, or CET. The CET is a 60,000-square-foot office and lab facility, built in partnership with Clemson's Foundation and the Economic Development Administration of the US Department of Commerce. Opening this Fall, the facility is almost 100 percent pre-leased and includes the new world headquarters for Sage Automotive Interiors, along with more than a dozen companies developing the latest technologies and software.

Off campus, there are many more partnerships. These include Proterra, a leading innovator of zero-emission, commercial vehicle solutions. Proterra is building the EcoRide BE-35, a line of next-generation buses with FastFill charging stations that enable 100% recharge in less than 10 minutes with a 30-mile range. When Proterra was investigating relocation opportunities, CU-ICAR was what made the difference in its choosing South Carolina for its relocation. CU-ICAR said, "What do you need? Let us build a program around your needs to help you accelerate your technology," rather than "Here is what we can do." In the future, Proterra has plans on developing its manufacturing facility on the CU-ICAR Campus, employing more than 1,000 people.

Also based out of this Campus are several other exciting programs and projects. Deep Project Orange allows students to learn about the wants and needs of their future customer and translate this into an engineering solution and product. Working with specialists from various industry partners, students learn first-hand what it takes to delivery a mobility product to market.

Another exciting project for Greenville that ties in with the City's initiatives on the Greening of Greenville is Project Green, a joint economic development initiative between CU-ICAR and the SC Technology and Aviation Center for creating unique testing and R&D capabilities for public and private in sustainable mobility and connected transportation systems.

Without talent, technology, investment and infrastructure, we as a community cannot succeed. Clemson University, along with the private sector, has proven that collaboration between universities and the private sector can drive innovation, push young minds to look at problems differently, and can create new jobs and innovation.

Mr. GOWDY. Thank you, Mr. Mayor.
Mr. WILSON. Mr. Eikenbusch?

**STATEMENT OF WERNER EIKENBUSCH, SECTION MANAGER,
ASSOCIATE DEVELOPMENT AND TRAINING, BMW MANUFACTURING CO.**

Mr. EIKENBUSCH. Thank you, Chairman Wilson, Congressman Gowdy. Good afternoon. I am pleased to be speaking with you today about BMW's workforce recruitment and higher education partnerships.

Workforce development was one of the primary factors in BMW's decision where to locate its first plant outside of Germany. A strong technical infrastructure, as well as a skilled manufacturing workforce, was essential to BMW's 1992 announcement that guaranteed originally 2,000 jobs. The upstate of South Carolina offered a workforce that had deep roots in manufacturing. While they had never built automobiles, the existing technical college system ensured that the right training could be arranged and deployed.

Now, here we are almost 2 decades and nearly 2 million vehicles later, with a workforce of more than 7,000 people and statewide education partnerships that have consistently delivered sustainable solutions. We are guaranteeing that BMW in South Carolina is well-prepared for the future.

All along the way, our partnerships with 2-year technical and 4-year engineering colleges and universities have been outstanding. In the early days, BMW was a new organization that still relied heavily on Germany for support. The plant partnered with local technical colleges for support of recruitment and onboarding training. At that time, the central process of recruiting and training production associates on automobile manufacturing fundamentals was our main priority.

While the basic need remains, we have proven ourselves as a major contributor to the worldwide BMW Group production network. We have evolved into an economic force for the automotive industry in the Southeast and find ourselves with a great opportunity to develop unique programs that integrate the academic world with workplace functions.

Currently, we are involved with several recruiting partnerships that deliver 2-year, 4-year, and graduate school employment candidates. To start with, we recently announced a brand-new partnership with Spartanburg Community College, Greenville Technical College, and Tri-County Technical College. We call it the BMW Scholars Program. For students enrolled in various 2-year career paths related to manufacturing technology, it offers the workplace benefits of a traditional apprentice program that you would find in Germany with the additional advantage of tuition and book assistance. We believe this great example of collaboration between the educational and manufacturing sector can lead to employment and far better outcomes and opportunities for our next generation.

Similarly, we have used collaboration models to partner with UTI, Universal Technical Institute, and AMTEC, Automotive Manufacturing Technical Education Collaborative. The beauty of these partnerships is that they enable us to extract the modules of their programs that most benefit our recruitment requirements. We leverage UTI for our BMW service technician program to develop the highest-quality service technicians to support our BMW centers or dealerships in North America. And we leverage AMTEC services as they deliver flexible options for additional training to support advancement of our maintenance workforce.

To summarize, programs like Scholars, UTI, and AMTEC are vital to our goal of supplementing education theory with real-world workplace application.

Of course, our most public partnership was announced in 2004 when BMW pledged \$10 million to provide endowment for professors at this facility, CU-ICAR. This program, a partnership with the State of South Carolina and Clemson University, celebrated their first automotive engineering graduates in 2009. Today, this is an active partnership with three main objectives: one, continued postgraduate curriculum development; two, collaboration and research projects; and three, recruitment of graduates.

Students from across the U.S. and from abroad are now enrolled in Clemson's graduate engineering program. BMW has hired sev-

eral of their graduates, and many of them place within our supplier network. Success for these kinds of programs requires that higher education institutions across the nation continue to receive the proper investment to enable vital research. Ensuring flexibility and curriculum development to effectively respond to the needs of the employers is equally as important.

Other successful programs include our Engineering and Operations Management Development Program. This program was formulated in conjunction with several 4-year universities to develop a pipeline to recruit the best and brightest engineering and business graduates from around the nation. The goal is to establish a pool of broadly skilled specialists beyond their specific field of study. To support the professional recruitment, we make domestic and international intern and co-op positions available to highly skilled students who have demonstrated an interest in international careers in automotive manufacturing.

Several significant opportunities exist for these programs. One, we need for our national public school system to support manufacturing as a viable career option beginning at the high school level and earlier. And, two, we must begin to invest in aspects of education that foster an international mindset in terms of culture and secondary language develop. Many qualified students find their way into our organization; however, it takes another 2 to 3 years to teach them another language and culture—in our case, German. Our objective is to build a channel to find engineering and management prospects with these qualifications within the existing marketplace of graduates.

BMW's plant here in South Carolina can look back on 20 years of experience in developing diverse solutions around sustainable recruitment and training partnerships. Other programs mentioned today are critically needed to ensure we guarantee a skilled automotive engineering manufacturing workforce now and for the future.

What we should all focus on is the importance of collaboration between academia and industry to guarantee that the course of study in terms of mindset, knowledge, and skills meets industry needs and is effectively transferred to the workplace. As our plant in South Carolina becomes an even greater contributor, these requirements become even more necessary to maintain a sustainable organization.

Thank you for taking the time to explore such an important topic for our State, our nation, and for our industry.

[The statement of Mr. Eikenbusch follows:]

**Prepared Statement of Werner Eikenbusch, Manager,
Associate Development and Training, BMW**

Ladies and Gentlemen of the Congressional Delegation, Good Afternoon.

I have been working with BMW for 23 years, 13 of which have been dedicated to HR matters at our South Carolina Plant.

I am pleased to be speaking with you today about BMW's workforce recruitment and higher education partnerships. Workforce development was one of the primary factors in BMW's decision where to locate its first plant outside of Germany. A strong, technical college infrastructure, as well as a skilled manufacturing workforce was essential to BMW's 1992 announcement that guaranteed 2,000 jobs.

The upstate of South Carolina offered a workforce that had deep roots in manufacturing. While they had never built automobiles, the existing technical college system ensured that the right training could be arranged and deployed.

Now, here we are, almost 2 decades and nearly 2 million vehicles later. With a workforce of more than 7,000 people and state-wide education partnerships that have consistently delivered sustainable solutions, we are guaranteeing that BMW in South Carolina is well-prepared for the future.

All along the way, our partnerships with 2-year technical and 4-year engineering colleges and universities have been outstanding.

In the early days, BMW Manufacturing was a new organization that still relied heavily on Germany for support. The plant partnered with local, technical colleges for support of recruitment and onboarding training. At that time, the central process of recruiting and training production associates on automobile manufacturing fundamentals was our main priority. While that basic need remains, we have proven ourselves as a major contributor to the world-wide BMW Group production network. We have evolved into an economic force for the automotive industry in the Southeast and find ourselves with a great opportunity to develop unique programs that integrate the academic world with workplace functions.

Currently, we are involved with several recruiting partnerships that deliver 2-year, 4-year and graduate school employment candidates. To start with, we recently announced a brand new partnership with Spartanburg Community College, Greenville Technical College and Tri-County Technical College. We call it the BMW Scholars program. For students enrolled in various 2 year career paths related to manufacturing technology, it offers the workplace benefits of a traditional apprentice program that you would find in Germany with the additional advantage of tuition and book assistance. We believe this is a great example of how collaboration between the educational and manufacturing sector can lead to employment and far better outcomes and opportunities for our next generation.

Similarly, we have used collaboration models to partner with UTI, Universal Technical Institute, and AMTEC, Automotive Manufacturing Technical Education Collaborative. The real beauty of these partnerships is that they enable us to extract the modules of their programs that most benefit our recruitment requirements. We leverage UTI for our BMW Service Technician Program to develop the highest-quality service technicians to support our BMW Centers or Dealerships in North America. We leverage AMTEC's services as they deliver flexible options for additional training to support advancement of our maintenance workforce. To summarize, programs like Scholars, UTI and AMTEC are vital to our goal of supplementing education theory with real-world workplace application.

Of course, our most public partnership was announced in 2004, when BMW pledged 10 million dollars to provide endowments for professors at this facility (Clemson University's International Center for Automotive Research (CU-ICAR)). This program, a partnership with the state of South Carolina and Clemson University, celebrated their first automotive engineering graduates in 2009. Today, this is an active partnership with three main objectives: continued post-graduate curriculum development, collaboration on research projects, and recruitment of graduates. Students from across the U.S. and from abroad are now enrolled in Clemson's graduate engineering program. BMW has hired several of their graduates and many have been placed within our supplier network. Success for these kinds of programs requires that higher education institutions across the nation continue to receive the proper investment to enable viable research. Ensuring flexibility in curriculum development to effectively respond to the needs of the employers is equally as important.

Other successful programs include our Engineering and Operations Management Development Program. This program was formulated in conjunction with several 4-year universities to develop a pipeline to recruit the best and brightest engineering and business graduates from around the nation. The goal is to establish a pool of broadly skilled specialists beyond their specific field of study. To support the professional recruitment, we make domestic and International Intern and Co-op positions available to highly-skilled students who have demonstrated an interest in international careers in automotive manufacturing. Several significant opportunities exist for these programs: 1) we need for our national, public school system to support manufacturing as a viable career option beginning at the high-school level and earlier, and 2) we must begin to invest in aspects of education that foster an International mindset in terms of culture and secondary language development. Many qualified students find their way into our organization; however it takes another 2-3 years to teach them another language (in our case: German). Our objective is to build a channel to find engineering and management prospects with these qualifications within the existing marketplace of graduates.

BMW's plant here in South Carolina can look back on twenty years of experience in developing diverse solutions around sustainable recruitment and training partnerships. All the programs mentioned today are critically needed to ensure we guarantee a skilled, automotive engineering and manufacturing workforce now and for the future. What we should all focus on is the importance of collaboration between academia and industry to guarantee that the course of study—in terms of mindset, knowledge and skills—meets industry needs and is effectively transferred to the workplace. As our plant in South Carolina becomes an even greater contributor to the global automotive manufacturing industry, these requirements become even more necessary to maintain a sustainable organization.

Thank you for taking the time to explore such an important topic for our state, our nation and for our industry.

Mr. GOWDY. Thank you, Mr. Eikenbusch.
Ms. Harmon?

**STATEMENT OF LAURA HARMON, PROJECT DIRECTOR,
GREENVILLE WORKS**

Ms. HARMON. Chairman Wilson, Congressman Gowdy, and distinguished members of the House Subcommittee on Higher Education and Workforce Training, thank you for inviting me to testify on behalf of Greenville Works, whose 12 members and many more partners provide a wide range of services to the business community and to Greenville County's workforce.

I want to share with you a few points we have learned through our collective experience on the ground in economic development, workforce development, and education.

Any economic development or workforce development effort that creates jobs and gets people back to work must start with a solid relationship with business. You have to understand the employer's perspective, what is important to them. You have to learn the nature of their jobs, their future outlook, and the workers' skill sets that they need to be productive. And you have to know what is important to them so that you can fully and effectively leverage the community's services. We can't afford to waste time and money on efforts that we hope will get people working.

Greenville Works operates a Business Retention and Expansion Program that calls on business in several industries, including manufacturing and headquarter operations. By going to them, Greenville Works learns through relationship-building about employers' issues and the local economic landscape. Then we coordinate our collective response through our 12 economic development, workforce development, and education members and our many other partners.

We are able to respond quickly and with quality services that help business and the local economy, as well as workers. In fact, most of the businesses that we talk to cite workforce issues as the major concern. Worker skills have not kept pace with the needs of industries critical to our region, like the increasingly technical transportation and manufacturing sector.

Now, there are several effective ways that Greenville Works has responded. Greenville Works organized industry cluster meetings between companies in similar industries. Last year, the aviation and aerospace industry cluster secured a cross-company incumbent worker training grant in blueprint reading. The resulting increase in worker skills contributed to job retention and to productivity.

Greenville Works also launched an initiative to lessen the skills gap by supporting worker attainment of the WorkKeys-based Career Readiness Certificate. Coupled by increased employer recognition of that certificate, we are now up to 80 upstate employers that officially recognize that certificate. As a result, over 20 organizations are now coordinating to assist students and job seekers in earning the WorkKeys certificate. The certificate is the first step in the National Association of Manufacturers' national skills standards system, which feeds in to some of the other programs that these educational groups are supporting.

Greenville Works operates several working groups that turn the Business Retention and Expansion Program feedback into real action. Since February, 17 organizations have worked together to produce a workforce readiness competency guide. The guide, which is going to be used by case managers and job coaches, clearly outlines the competencies that job seekers need to be ready for work.

Through the efforts of Greenville Works and the United Way of Greenville County, our area was just selected for a competitive National Fund for Workforce Solutions grant. We assembled a group of public and private organizations that contribute to a manufacturing skills program for unemployed and underemployed adults. We assembled an industry cluster of employers who define the curriculum, which, again, aligns with the National Association of Manufacturers' skilled certification system. With the support of job coaches, students will complete this training and progress to on-the-job training, additional education, apprenticeships, and/or straight to employment.

A flexible public and private funding structure allows us to provide the comprehensive, holistic approach to training that results in successful employment, retention, advancement, and productivity gains.

Now, though we have accomplished a lot in the last 4 years, we continually face challenges. Insufficient funding is a continuous threat to the Business Retention and Expansion Program operation and the systems change efforts that emerge as a result.

The second issue involves political boundaries. While our work is focused in Greenville County, industry operates across county lines. We need to be able to work across county lines to provide consistent, quality services.

The third issue is the reduction in funding for training, such as the elimination of the Incumbent Worker Training Grant and defunding of the State WorkKeys-based Career Readiness Certificate.

Workforce issues are extremely complex. Improving workforce systems involves significant changes in the behavior of students, job seekers, workers, industry, government, nonprofits, and many, many others. It involves changes in policy. It involves relationship-building and extensive collaboration. These challenges are not quick fixes that can be addressed with a few 2-year grants. These challenges require sustained levels of committed funding, effort, and leadership in order to realize long-term results.

In order to make meaningful workforce gains, we recommend supporting business calling programs. Any program or initiative that seeks to impact job creation, job retention or education, and training for jobs must include a good business calling program. We

recommend support for sector-based regional industry partnership, career pathway development, and entry-level skills programming that has local industry support. We recommend funding innovative strategies that can be replicated and expanded and that involve flexible funding and partnerships across organizations. We recommend support for backbone organizations like Greenville Works that facilitate sensible solutions tailored to the regional economy.

On behalf of the Greenville Works Board, I sincerely appreciate the opportunity to speak with you today about our work in supporting local business and the workforce.

[The statement of Ms. Harmon follows:]

Prepared Statement of Laura Harmon, Project Director, Greenville Works

My name is Laura Harmon, and I serve as the Project Director for Greenville Works in Greenville, South Carolina. Before I get started, I would like to thank Representatives Virginia Foxx and Trey Gowdy for allowing me to testify on behalf of Greenville Works before the Subcommittee on Higher Education and Workforce Training field hearing. I was asked by the Subcommittee to speak about the innovative and strategic work that we have initiated to address important workforce-related issues. I am pleased to do so. This work is led by twelve Greenville Works member organizations, which include the major economic development, workforce development, and educational institutions in our area. Through its partners, Greenville Works provides a wide range of services to the business community and to Greenville County's workforce. As a partnership, Greenville Works provides overall strategic direction for long term integration of workforce development and economic growth activities. It also involves the input of nearly twenty other organizations that have a hand in assisting youth and adults with employment. It involves the support of funders who seek to provide workforce opportunity and strengthen workforce quality through their investments. And, most critically, it involves the ongoing feedback of almost 300 businesses that employ citizens in jobs throughout Greenville County.

In addition to speaking about the accomplishments of Greenville Works and its many partners, I will also touch on the strategies that fuel our accomplishments, the challenges that we face, and the actions we recommend to support and expand this work.

Accomplishments

BREP. Greenville Works established and operates a county-wide Business Retention and Expansion Program (BREP) to establish communication with existing businesses, learn about their challenges and plans, and respond efficiently to their needs with coordinated services. Through the BREP program, Greenville Works' staff calls on the largest employers in the county down to small businesses with particular attention to the manufacturing, logistics, headquarters and administrative operations, health care, and customer service industries. Since these visits began in 2007, we have heard from businesses concerning supply chain issues, infrastructure issues, and public policy issues. But the overwhelming set of issues concerning Greenville businesses are workforce related issues. In fact, 67% of the businesses visited by Greenville Works named workforce concerns more than any other issue by a wide margin.

The dialogue we have directly with local businesses, in an ongoing fashion, is fundamental to a quick and appropriate response by Greenville Works and its partners. It allows for a better understanding of the real issues at hand. Though labor market data is important to understanding the overall economic landscape, direct contact and relationship building on a local or regional basis is a requisite to any effective workforce response. For example, if we were to rely on labor market data alone, we would believe that licensed practical nurses, or LPNs, are a growing field and that we should expand training opportunities for LPNs to meet the projected demand. Yet, through the BREP program, we found that health care organizations in our geographical area use a combination of medical assistants and registered nurses, or RNs, rather than LPNs. We might also believe that, according to labor market data, employment in manufacturing is rapidly declining. For our area of Upstate South Carolina, this is clearly not the case. Manufacturers are doing things differently than many had before the recession. For example: 1) They are relying more heavily on temporary and contingent staffing; 2) They have higher skill requirements and demand for technical skills; and 3) They require flexible workers who can handle

multiple responsibilities and solve problems “on the floor.” We know this from one-on-one conversations with local employers.

So what do we do with this knowledge? We share it with our members and partners. We review BREP findings during monthly Greenville Works board meetings and during regularly scheduled meetings with job developers and educators working on the front lines. We share it to avoid duplicate visits that confuse employers and waste time. We share it to gain a common understanding of our economic landscape. And we share it to coordinate and improve the quality of our collective response. My point is that there is no substitute for direct, regular communication with the business community. Any program or initiative that seeks to impact job creation, job retention, or education and training for jobs, must include an effective business calling program from the onset.

Industry Clusters. One of the points Greenville Works learned through the BREP was that businesses are sometimes isolated from each other, with limited communication between businesses in the same industry sector. This can impede their ability, particularly in the smaller organizations, to secure business related incentives, establish local supply chain relationships, or share best practices. So, Greenville Works organized industry cluster meetings to help facilitate cross-communication between businesses. Last year, the Aviation and Aerospace Industry Cluster came together to secure an incumbent worker training grant provided through Workforce Investment Act (WIA) funds to train workers from several businesses in blue print reading. The Life Sciences Industry Cluster did the same and provided a shared supervisory training program. The resulting increase in workers skills contributed to job retention and productivity. This type of training incentive and shared strategy can even result in the addition of new jobs. This year, the Chemicals Industry Cluster identified a shared need for Chemical Operator Training. Though South Carolina eliminated the incumbent worker training program due to WIA funding reductions, we hope to find an alternate solution so that this training need can be realized.

WorkKeys® based Career Readiness Certificate. I mentioned earlier that manufacturing businesses now require more skills than in the past. This holds true for many industries. Yet, we know from our state’s high unemployment rate, our relatively low educational attainment levels, and the local BREP employer feedback that worker skills have not kept pace. Greenville Works launched an initiative to lessen this skills gap by supporting student and adult attainment of the WorkKeys(r)-based Career Readiness Certificate, coupled by increased recognition of the Certificate by employers. This Certificate program, which is the first step in the National Association of Manufacturer (NAM) Skills Certification System, assesses work-based skill levels in applied mathematics, reading for information, and locating information (such as interpreting graphs and tables). Not only does this Certificate give employers in any industry a verified, unbiased assessment of workers’ skills in applied math, reading and graphs, it gives the students and adults who earn it a means to prove their work related skills to employers. Through this initiative, Greenville Works educates job seekers and incumbent workers on the importance of advanced preparation before taking the assessment so that they may achieve high scores. Now, in addition to free self-directed online study software provided through the State, assessment takers in Greenville County can prepare by enrolling in free or extremely low cost classes tailored to their needs. This effort to encourage existing and future workers to prepare for and take the WorkKeys-based Career Readiness Certificate involves more than twenty public, non-profit, community-based, and faith-based organizations, all of the high school career centers and three high schools, the Greenville Society for Human Resource Management, and 80 Upstate area employers who have each agreed to recognize, request, or require the Certificate within their hiring process. The buy-in and participation of employers cannot be underestimated, because the real motivator that results in job seekers preparing for and taking the WorkKeys assessment is not Greenville Works’ message that it is a smart thing to do. It is the employers who ask, “Have you earned your WorkKeys Certificate?” In fact, many companies such as Michelin, N.A. require the Certificate as part of hiring for certain positions. Because of employers’ use, backed by the education, workforce, and economic development communities’ support at the state and local level, we have seen a 30% annual increase in the number of Greenville County job seekers, students, and incumbent workers earning the Certificate. We anticipate an even higher percentage increase going forward due as prominent organizations like the United Way of Greenville County, Greenville Technical College, and Greenville County Schools expand their support for WorkKeys, and as state legislators consider measures to link the Certificate to secondary education.

Working Groups. Working groups allow Greenville Works the means to turn the BREP findings into action. The Employer Incentive Working Group produced and maintains a comprehensive guide of 29 workforce-related incentives provided by 17 different public and non-profit organizations. This past February, another set of 17 organizations collaborated in a working group to produce the soon-to-be-released Workforce Readiness Competency Guide. This guide outlines the many competencies that job seekers should develop in order to be ready for work. The guide will help front line staff of helping organizations tailor their assistance to the individual needs of their job seeking clients. The Greenville Society for Human Resource Management, through their Workforce Readiness Council, will evaluate the Guide to ensure it accurately reflects local business needs. In the words spoken just last Thursday by Quiwana James, one of SHARE LADDER employment program's most dedicated and effective case managers, "In my ten years of working with clients, I have never seen anything like [the Guide]. This will help me do my job better, [which is] to help people get back to work and be successful."

National Fund for Workforce Solutions: Advanced Manufacturing Workforce Partnership. The combined efforts of Greenville Works and the United Way of Greenville County over the last 4 years resulted in the competitive selection of our area for a National Fund for Workforce Solutions (NFWS) grant through the Social Innovation Fund. The NFWS supports innovative work in 31 communities throughout the country, with ours being the only site in South or North Carolina. Greenville Works assembled a funder collaborative of public and private organizations (including the Greenville County Workforce Investment Board) that pooled and aligned money to fund a bridge training program. The program teaches the foundational skills necessary to work and advance in the manufacturing industry. The program is provided at no cost to low and moderate income job seekers who are selected for the training. To ensure alignment with industry needs, Greenville Works assembled a Transportation Fabrication Industry Cluster comprised of several leading manufacturers. Together these employers defined the skills necessary to succeed in entry level employment with their companies. Their work formed the basis of a new manufacturing training program that is tailored to real, local employment. This group of industry partners is also comparing notes to identify the career pathways that manufacturing job seekers and workers can take to advance in manufacturing careers. And they are sharing information about their hiring processes. Educators have taken this information and developed an accelerated, contextualized job training curriculum that includes both technical and soft skills, as well as two certifications that are in line with the NAM Skills Certification System. Job coaches are preparing to identify, refer, and support unemployed or underemployed citizens that, with this training, will meet employer needs and expectations. And as the marketing takes place, interested job seekers will begin to apply for the training by taking the first step: earning the WorkKeys-based Certificate. Those that complete this bridge program will progress to on-the-job training, continued education, apprenticeships, and/or employment. What makes this project unique is the collaboration between public and private organizations to share strategic goals, align systems, and provide flexible funding. We have found that flexible public funding serves as a catalyst to attract and involve private funding. When working with lower income job seekers, flexible funding is absolutely necessary to provide the comprehensive, holistic training and support that results in high levels of successful employment, retention, advancement, and productivity gains.

Challenges

Though Greenville Works has accomplished a tremendous amount in four short years, we continually face a number of challenges. Insufficient funding is a continuous threat to the BREP operation and the systems change efforts that emerge as a result. We operate with two staff members. Funding for one staff member will expire in December. Outside of the National Fund for Workforce Solutions project, there is no funding to implement initiatives. We must have committed and ongoing financial support in order to continue our strategic work with business and the workforce. It must be noted that workforce issues are extremely complex. Improving workforce systems involves significant changes in the behavior of students, job seekers, workers, industry, government, non-profits, and many others. It involves changes in policy. It involves relationship building and extensive collaboration. These challenges are not "quick fixes" that can be addressed by a two year grant. These challenges require sustained levels of committed funding, effort, and leadership in order to realize long-term results.

The second issue involves political boundaries. While our work is focused on Greenville County, industry operates across county lines in a regional fashion to meet business needs, including the recruitment and training of workers. For exam-

ple, BMW Manufacturing Co., LLC attracts workers from a range of counties within driving distance. We hope to expand our collaboration beyond Greenville County so that the industry and workforce we serve is not deterred from receiving consistent, quality services by county lines.

The third is the reduction in funding for training programs, including training for incumbent workers and training for unemployed and underemployed workers. I mentioned earlier the elimination of the state's incumbent worker training program. Here is another example: beginning September 1st, the South Carolina Department of Employment and Workforce will no longer fund the printing and mailing of WorkKeys-based Career Readiness Certificates. This decision removes an important incentive that contributes to the quality of our workforce.

Recommended Action

Greenville Works recommends the following actions to support meaningful improvement in workforce issues:

1) Find ways to support "backbone" organizations, like Greenville Works, that leverage the collective impact of many. High performance backbone organizations facilitate solutions that make sense for the regional economy. They form lasting relationships with public and private organizations—a must for effective workforce initiatives. They find ways to leverage stakeholders' strengths and hold them accountable. They move beyond assumptions and policy constraints to accomplish real, meaningful results.

2) Support sector-based regional industry partnership development, career pathway development, and entry-level bridge programs that have strong support from local industry. Place workforce readiness and industry-recognized credentialing as high priorities when creating or refining workforce policy.

3) Fund the replication and expansion of innovative strategies that communities such as those involved with the National Fund for Workforce Solutions have developed. These strategies involve dual customers (employers and workers), flexible funding, partnerships across organizations, and backbone organizations that facilitate the process.

Conclusion

Despite our challenges and buoyed by our accomplishments, Greenville Works remains focused on implementing long-term economic and workforce development strategies in Greenville County. On behalf of the Greenville Works Board, I sincerely appreciate the opportunity to speak with you today about our work to support local business and the local workforce.

Mr. GOWDY. Thank you, Ms. Harmon.
Mr. WILSON. Dr. Thames?

STATEMENT OF BRENDA THAMES, VICE PRESIDENT OF ACADEMIC DEVELOPMENT, GREENVILLE HEALTH SYSTEM

Ms. THAMES. Good afternoon, Chairman Wilson, Congressman Gowdy. First, on behalf of the Greenville Hospital System University Medical Center, I want to thank you for this opportunity to testify this afternoon and, first and foremost, to exemplify the fact that on behalf of the GHS families, over 10,000 employees, we have a tremendous relationship with our higher education partners. And I want to share a little bit of that with you this afternoon.

Institutions that educate the nation's future health-care professionals must work together to devise innovative solutions to the myriad of challenges that we face. Education and training initiatives that successfully transform health care will have to do the following three things: number one, address health-care workforce shortages in the clinical and nonclinical setting; number two, to train and retool the practicing professionals in areas where the need exists; number three, and foremost, probably more important, is to educate and train the future workforce utilizing innovative models, not relying on what has worked in the past.

The workforce needs facing GHS and other health-care systems, we believe, are the following: physicians. There is a tremendous physician shortage but also physician extenders. These are nurse practitioners or physician assistants themselves. But, however, as we work with our educational partners, we must realize that often these areas are driven by specialty. So, again, paying attention to where in the area of health-care education and training needs to be revamped.

Registered nurses are going to be a tremendous need, particularly at the baccalaureate's and master's level. The current oversupply of nurses will not last long, as baby-boomer nurses retire and the U.S. population continues to age. As technology advances, we need highly skilled nurses.

Strong presence in other clinical areas such as pharmacy, the therapies, be it physical therapy, occupational therapy, speech therapy, will be a tremendous need. Mental health counseling and social work—social problems contribute greatly to the health status of our families and communities. Wellness, more focus on prevention, especially nutrition, smoker cessation, and exercise, all will be critical in training of the next generation of health-care professionals.

Overall, we need to prepare for an aging America. Helping individuals to stay independent by getting supportive services without necessarily being admitted to a hospital or long-term-care setting will be absolutely critical.

The key qualities that graduates need to excel in the local workforce, especially in the health field, include both hard and soft skills. Those hard skills—students need to come with strong STEM education—science, technology, engineering, and mathematics—at the undergraduate level. For positions requiring graduate education, rigorous clinical training at the undergraduate and graduate level, depending on the profession, will absolutely be critical as well.

But while hard skills are critical, soft skills are critical in health care as well. And when I say soft skills, I mean issues like conflict resolution or conflict management, critical thinking, team building, leadership, and communication. Our students must be equipped with these skills as well.

The partnerships or the pipeline programs at the Greenville Hospital System have developed with local K-12 education and with our higher-education partners. To address these workforce needs that we see for the future, we feel it absolutely critical to engage with our academic partners beginning at K-12 and continuing throughout higher education.

GHS's newest pipeline program is what we call the Medical Experience, or MedEx, Academy. I mention this to you this afternoon because we feel it is critical to create the pipeline to meet the diverse needs that we are going to need for our workforce going forth in the future.

We launched MedEx Academy last summer, summer 2010, through which GHS collaborates with our academic institutions. And our focus here is to provide clinical and nonclinical experiences for these students who are interested in a career in health care. The pipeline is absolutely critical in health care as a component of

the expanded University of South Carolina School of Medicine Greenville campus.

There are four points that I would like to make relative to the pipeline. Number one, we have through the MedEx Academy created a program, working with our K-12 institutions, to enhance student career decision-making through real-life experiences. It targets high school seniors and college undergraduates as well.

Secondly, we feel it critical as we reach out to our colleges and universities to create real pipeline partners—pipeline partners who are working with us from day one. To give an example of some of those institutions, in alphabetical order, that we are already working strongly with, they include: Anderson University; Claflin University, a historical black college and university in the lower part of the State; Clemson University is our huge partner in both education and research; ECPI College of Technology; Thurman University; Greenville Technical College; South Carolina State University, another historical black college; and University of South Carolina.

The pipeline runs broad and deep, so we also have other academic partners engaged as well. Students must realize also, or recognize, that there are opportunities for them within the health-care arena that we, as the GHS family, are looking to partner with our academic partners to give them real-life experiences.

And, finally, I will say that one of our major focuses is on educating and retaining the talents in the State of South Carolina.

Thank you for your time.

[The statement of Ms. Thames follows:]

Prepared Statement of Brenda J. Thames, Ed.D., Vice President—Academic Development, Greenville Hospital System, University Medical Center

Institutions that educate the nation's future healthcare professionals must work together to devise innovative solutions to the myriad of challenges we face.

Education and training initiatives that successfully transform health care will do the following:

- Address healthcare workforce shortages in clinical and non-clinical areas.
- Train and retool practicing professionals in areas where the need exists.
- Educate and train the future workforce utilizing innovative models.

The workforce needs facing GHS:

• Physician and physician extenders, i.e., physician assistants and nurse practitioners. Needs vary by specialty.

• Registered nurses, particularly at the baccalaureate and masters level. The current oversupply of nurses will not last long as baby boomer nurses retire and the U.S. population ages. As technology advances, we need highly skilled nurses.

• Strong programs in other clinical areas—pharmacy, therapies (physical, occupational, speech), mental health counseling and social work (social problems contribute greatly to health status), wellness (prevention)—especially nutrition, smoking cessation and exercise.

Overall, we need to prepare for an aging America—helping individuals stay independent by getting supportive services without necessarily being admitted to a hospital or long-term care setting.

The key qualities that graduates need to excel in the local workforce, especially the health field:

• “Hard skills”—strong STEM education (science, technology, engineering and mathematics) at the undergraduate level for positions requiring graduate education. Rigorous clinical training at the undergraduate or graduate level (depending on the profession).

• “Soft skills,” such as conflict management, critical thinking, team building, leadership and communication.

The partnerships/pipeline programs GHS has developed with local K-12 and institutions of higher education to address these workforce needs:

• GHS' newest pipeline program is the Medical Experience (MedEx) Academy, which launched summer 2010 and through which GHS collaborates with academic

institutions to provide clinical and non-clinical experiences for students interested in careers in health care. The pipeline is a critical component of the expanded University of South Carolina School of Medicine-Greenville campus.

- The program works with K-12 and higher education to enhance student career decision-making through “real life” experiences. It targets high school seniors and college undergraduates.

- College-level pipeline partners include but not limited to the following: Anderson University, Claflin University, Clemson University, ECPI College of Technology, Furman University, Greenville Technical College, South Carolina State University and University of South Carolina.

- The pipeline runs broad and deep; it also includes AHEC Minority Council, Boy Scouts of America, GHS Minority Council, Greenville County Schools, the Governors School for Science & Math, S.C. Alliance of Black School Educators, Upstate AHEC and Upstate Coalition.

- Student support includes potential scholarships, academic development and financial assistance

Mr. GOWDY. Thank you, Dr. Thames.

I will recognize myself now for 5 minutes of questions, and then the distinguished gentleman from South Carolina will go after me.

Mr. Mayor, I don't want you to tip your hand too much as I ask you this question, but the upstate generally, in Greenville specifically, has done a marvelous job of attracting international business. What lessons can you share with others that you haven't copyrighted or trademarked that other communities might be able to steal your ideas? What can you share with us as a formula for success, given how successful you and this area have been?

Mr. WHITE. Well, I think it still starts with some fundamentals that we all recognize and we all value, and certainly you do, and that is, having the reputation and the reality of a very pro-business climate in terms of your taxes, in terms of your open-door attitude toward business. That is still absolutely important. We sometimes take it for granted here, but it is very different from other parts of the country.

More and more beyond that, though, we see that the quality of life that we have here, again, some things we often take for granted, become very, very important. So it is not just the economics and the taxes; it is also the quality of life, to be able to move a business here, to move your executive officers here. As they come here and look around and they see a wonderful downtown that looks like something they would always enjoy, a place they would want to live, as they see the wider area in proximity to the mountains and the many amenities we have in this area.

So more and more, it is the whole package folks are looking for. And I think there is recognition on our part that we are in a competitive gain here. We are in competition with the entire rest of the country, indeed the world, and understanding these attributes we have and acknowledging them, enhancing them, building them up is still extremely important.

We show well. We check off—we help them check these things off their list, if you will, and that is why I think, more and more, we are seeing folks attracted to the upstate of South Carolina.

Mr. GOWDY. Mr. Eikenbusch, when you or BMW suppliers have needs or your needs have changed with respect to what the workforce can provide, walk us through how you would approach either the technical schools or Clemson or any of the schools of higher education and lay out for them that your needs have changed and

you need a differently educated workforce. How would that happen?

Mr. EIKENBUSCH. I can give you two examples. The first would be CU-ICAR. When we started our partnership, I was actually on a committee representing BMW's interests as we were talking with Clemson about putting together the curriculum that would be taught at CU-ICAR. So there was a lot of input and a lot of discussion about the ideas that Clemson had on the one hand, the ideas that BMW had on the other hand, to make sure that ultimately the program and undergraduates would have the skills that would meet our needs.

Elements of that, for example, was to make sure that interpersonal skills training, to what Ms. Thames just said, are part of the program because we said, not only do we need an engineer that can think technically, we also need an engineer that is competent in interpersonal interactions. That committee is still very active. We meet almost every other month, and we talk about the curriculum but also about research projects and recruiting elements.

The second example that I would give would be on the technical college side. I mentioned earlier the addition of the BMW Scholars program. This was really something that was pushed very hard by both our German colleagues and also our president here, realizing that since we didn't have a formal apprenticeship system like in Germany, we would need to create some system that would ensure a pipeline of talent that would meet our needs.

So we met with the three colleges and really saw open doors in really leveraging current curricula that they had but also adding a new curriculum that we put together that specifically was addressing high-skilled manufacturing skills that we were looking for.

So that would be the process, or the two examples.

Mr. GOWDY. Thank you.

Ms. Harmon, in terms of fiscal austerity which we find ourselves in, what recommendations would you give to government to work smaller or more efficiently in advancing worker placement, worker retraining? What can we do, given the financial circumstances that we find ourselves in, which are pretty bleak, what can we do smarter, better, more efficiently?

Ms. HARMON. I think there are a couple of things.

The first is to ensure that any training program that gets funded has, at the very lead, at the very front, that relationship with business. Don't fund a training program that isn't led by business. And that does happen, and it usually does not come out with the level of success to meet the investment.

So I would definitely say, you know, that employer involvement on the front end, most likely in an industry cluster, so that you can leverage the involvement of several like employers together, that is a really critical piece. They know what they need. They can help us to make sure that the curriculum involves all of the pieces that are important to them, and then you build your training program back from that. And that is going to be a much more—you are going to get a much more successful outcome with people getting employed and then people staying employed and able to move up, because, you know, they get their foot in the door, but they need to be able to continue to use those skills and move up.

So I think the industry piece is really important for any training program. And most of the time, workforce training programs tend to be led by the worker side: What does this person want to do with their career? How can we help them to get the education they need? And then, you know, good luck, go out there into the world, and get a job. It really needs to go the other way around, from where is your business strength and then the training follows that.

The second thing is a regional approach. I know that conversation has taken place in South Carolina about how to regionalize the investment. That is very important, and it is important because business doesn't operate within a certain county. And, you know, that is going to make us more effective.

Mr. GOWDY. Thank you.

Dr. Thames, I was talking to a physician friend of mine this morning. He is a primary care physician. And, in the interest of full disclosure, my father is, too. I used to tell everyone that I grew up poor, and then they found out my father was a doctor and they didn't believe that that was true, but it can be true.

Ms. THAMES. It can be.

Mr. GOWDY. It wasn't in my case, but it can be because they are saddled with several hundred thousand dollars' worth of debt coming out, and, for whatever reason, our culture pays specialists more than they do primary care physicians.

So, all of that as a lead-in, I believe Greenville Hospital System is starting a medical school, partnering with Medical University of South Carolina or University of South Carolina. Tell us about that and the challenges that you have seen in medicine going forward and how you think Greenville Hospital System is well-equipped to help us solve some of those challenges.

Ms. THAMES. Well, first and foremost, as I mentioned before, I think all of us would agree that there is a tremendous need for increasing that physician pool, absolutely, and definitely in the area of primary care but other areas, as well.

We also recognize that there is a huge debt that comes along with that. So we are paying very close attention to that and looking at how we can address that as we go forward with recruiting students into the medical school. One of the challenges that any medical student faces is that debt, and so we are constantly looking at how we reduce that.

The unique partnership between the Greenville Hospital System and University of South Carolina for the medical school provides us a unique revenue stream, as well. And one of the points I want to make about the medical school is that a component of that, that we have to realize, is that students who come to go into medical school, there is a tremendous amount of learning that is beyond what they may learn that you may typically think of in the medical school.

So, not to address the debt per se, Congressman Gowdy, but the reality is, how do we pay attention to that and look for other sources of funding to offset some of that cost? And coupled with that is, how do we ensure those physicians get the kind of training so that they can come out and be successful and have a revenue that will allow them to repay the debt that they have incurred?

As we go forward with the medical school, we are looking at it from a perspective—we are a huge clinical enterprise, and so we have a lot of resources already in place. But coupled with that, since this is higher education testimony here, we are looking at our academic partners, too, as to how we go forward with other components of the medical school, be it research or emergency medical training that we are working with Greenville Technical College on.

And that doesn't address the debt per se, but what we are seeing is that we know that that is an issue; that is going to be an issue as we try to attract a diverse physician pool. And so we are looking at ways that we can reduce that debt as much as we possibly can. But I don't think we can allow that issue to totally stop us in our tracks from the real problem, which is a shortage of physicians.

Mr. GOWDY. Thank you, Dr. Thames.

I would now recognize my distinguished colleague from South Carolina, Mr. Wilson.

Mr. WILSON. Thank you very much, Mr. Gowdy.

And, ladies and gentlemen, it is an honor for me to be here right on I-85. This is the I-85 corridor. I want everybody in the world to know, this is one of the great megalopolises of the world, Charlotte to Atlanta. And what extraordinary Members of Congress represent here, with Trey Gowdy right in the center, and then to the south we have Jeff Duncan; to the north, Mick Mulvaney. Both U.S. Senators of South Carolina, Lindsay Graham and Jim DeMint, live in this region. The upstate of South Carolina is one of the world's leading manufacturing, banking, and academic communities. And so the mayor is correct; it is quality of life. That is why people live here. It has been an extraordinary opportunity for me to return.

As I am here, I particularly am happy to see the mayor. I knew him in high school. I worked with him at that time. And I wasn't in high school; he was. And so I am really proud of his success, but I can remember his work ethic, his vision. And people should really visit downtown Greenville. It is a world-class city, so changed from what it used to be.

And so, Mayor, thank you.

In fact, I would be really interested in knowing what resources do you find, as you are recruiting jobs for the region, what resources have you found most effective in education?

Mr. WHITE. Well, thank you. I do remember you being much older than me, though, back in those days, Congressman.

I do want to say one thing about ICAR. I want to make the panel aware of something. 2009 was a tough year, terrible year for all of us. Our Greenville Chamber of Commerce, Upstate Alliance, all our economic groups—it was a tough year recruiting business in the depths of the recession.

For Greenville, at least, we have this amazing shining light during 2009, which was Clemson ICAR, and we all talked about it. We are all very aware of it, that somehow and another, in the depths of the worst time, we were still finding prospects showing up at our door, we were still working projects, new businesses coming to this area, new people coming to this area. And overwhelmingly, it emanated from Clemson ICAR.

It allowed us to, in effect, charge through the recession in an amazing way. And some truly, truly amazing people and amazing

businesses, automotive-related for the most part but also green technology businesses of all kind, still kept coming through in 2009 and 2010. It was a remarkable thing to see. So that is why we are such believers in this.

So this whole connection, to get to your question about connecting higher education and what higher education can do for business, especially at the time of recession, especially when businesses are looking for a way forward, if you will, was a remarkable thing to see. And we saw it here playing out again and again and again.

We used to sit around in 2009, 2010, and talk about, if we are doing this well in 2009, what is it going to be like when this recession is over? And, indeed, 2011, in this sort of in-between state we are in, has been a remarkable year. We are now seeing projects that were kind of stuck in the pipeline or slowly moving just popping out left and right, both in terms of downtown development projects as well as new businesses.

But it was our ability to work in partnership with Clemson and see this facility get up and going—thank goodness—get up and going before the recession that really got us through it and just tells us how important this is for the 21st century.

Mr. WILSON. Thank you very much.

And, Dr. Thames, I appreciate you pointing out that the Greenville Health System employs 10,000 people. I represent the midlands and the low country, and the largest employer throughout South Carolina is the health-care industry. And it is a great opportunity for young people to get jobs.

What has been your experience here in upstate, upcountry, of working with institutions of higher learning to help train people to work at Greenville Health System?

Ms. THAMES. We have had a tremendous experience with all of our academic partners, some of those that I listed in my testimony. So we have had students coming into the system far before I joined the Greenville Hospital System, or coming in for internship or shadowing or just coming in to see what was going on in the OR, different areas in the hospital.

However, what we are looking to do now is to be more strategic about that. So we have worked with Clemson University some and Greenville Tech and other academic partners to take a look at students interested in a career in health care, but, more importantly, to expose those young people to the many opportunities—many of us only know—we hear doctors, nurses, therapists, a few of the career opportunities, but there are a lot of nonclinical areas—I am a good example of that—that students don't know about. So we are on a journey to work with our academic partners to give young people more exposure, more real-life, hands-on experience. So if you think you want to be a physical therapist, come into the system and see what the day in the life of a physical therapist is really like.

What we are finding through the MedEx Academy is that some students are learning what they don't want to do. They think they want to be in health care, so we work with our academic partners, even starting, as I mentioned, at K-12. And we are deliberately piloting initiatives at MedEx Academy Tier 3 next year with Clemson

University. We get a volume of students who are interested in coming in to shadow or whatever. A lot of those students get in by who they know. And so, what we want to do is be more strategic about it and give more young people that exposure and opportunity.

And so we are working with our academic partners to say, why can't students get academic credit for this? So we are well on our way to looking at academic credits that the student experiences with us. So Tier 1, which is our K-12, students receive a half credit toward their high school graduation. We are working with Clemson and Furman to pilot Tiers 2 and 3, and we are looking at 4 credit hours.

So, again, back to the connection of the real world to their academic learning, while they are on their academic journey, we think we, as a health system, can give them a tremendous amount of exposure to not only learn what they want to do but what they don't want to do.

Mr. WILSON. Thank you very much.

And, Mr. Eikenbusch, I really believe that BMW is a model of success of where people who are hardworking in South Carolina can be very successful. I was very honored to be present with Senator Verne Smith for the groundbreaking of BMW. I was with Senator John Russell for the dedication of the building. I came back for the unveiling of the first G3 in the world. And so I am just in awe of the opportunities you provide and the jobs that you provide.

What has been your experience of working with institutions of higher education here in South Carolina? Has that been a part of your success?

Mr. EIKENBUSCH. Absolutely, yes. And as I mentioned in my statements before, really on both levels. I mean, we really need the 2-year educational system to work with us, as well as the 4-year educational system. So, in both cases, our experiences have been very good.

Examples, as I mentioned, in the original, early days, onboarding and training, these were the basics of really industrial high-tech manufacturing skills. Right now, on the 2-year level, it is like BMW Scholars program. These would be initiatives where we can leverage the theory that the technical colleges provide with hands-on experience that we provide, like you mentioned before, as well, Dr. Thames, because it is important that you merge the theory with the hands-on experience.

So very good models there, very open-minded college system that works with us in response to our needs. And the same as I mentioned before on the 4-year level.

The one thing that I would like to point out that I think is very, very important and successful is this whole idea of internships and co-op opportunities at the 4-year level. We have very good examples here with Clemson, very active, but it also goes into North Carolina. I know Dr. Foxx is not here—a very good example with NC State.

We have, at any point, probably 100 to 150 engineering and management students at BMW that spend either a summer or a full semester and come back on rotations. And it is the same kind of idea; they get an opportunity to look at the jobs to see if it is a fit

for me, and we get an opportunity to see the individual and see if it is a fit for us.

So I am really happy to say that these opportunities are really growing. More and more institutions are embracing these co-ops and internships. And from an industry perspective, I think that is a big opportunity and advantage, both for the employers but also for the students.

Mr. WILSON. Thank you.

Now, my time is up, but I do want to thank Ms. Harmon. I was going to ask you about how organizations can work together, but you answered the question before I could ask it.

I yield back to the current chairman.

Mr. GOWDY. Chairman Wilson, given the fact that we have such an amazing panel and another one coming right behind it, would you be amenable to what we call a lightning round up in Washington? Would you be willing for me to ask a couple of really quick questions.

Mr. WILSON. I am in Trey Gowdy country. I will do whatever Trey says.

Mr. GOWDY. I just wanted to maybe ask a quick question with a quick response, because you and I are not accustomed to having panels this distinguished—

Mr. WILSON. This is amazing.

Mr. GOWDY [continuing]. When we are not in recess. So with Chairman Wilson's permission, let me start with you, Mr. Eikenbusch.

If you were king for a day, and you were charged with raising educational achievement and attainment with math and science in this country, what would you do?

Mr. EIKENBUSCH. Oh, that is a difficult question. I think I would demonstrate to the student how what they are learning in theory really translates into value added in their life and in society. I think that is—I have a 17-year-old daughter who often comes to me and says, why I am learning this, and I think that is a missing gap. You are learning a lot, but you are really not learning how this will benefit you.

Mr. GOWDY. Well said.

Mayor White, same question, king for a day, you can do three things that will spur this economy with respect to job creation. What would you do? And you don't have to get it through a fractious Congress; you can just do it yourself.

Mr. WHITE. Well, I think not necessarily in the area of math and science, but just overall I think you are here for a reason at Clemson ICAR, and I do think this is an extremely helpful model. The economy is changing so quickly. It is all about higher-tech, higher-knowledge jobs and such. So I think collaborations between education at all levels, including higher education, is extremely important.

I don't see how industry can march to the same tune as it has in the past. I think you have got to tie the two together. They need the expertise that higher education can bring to them, and higher education needs the practical experience that these kind of entities offer.

Mr. GOWDY. Dr. Thames, Congressman Wilson wanted to ask this question because it is more relevant to him than it is to me, but with an aging population, with baby boomers—

Mr. WILSON. Wonderful people.

Mr. GOWDY. Yes, they are wonderful people—what would you say—if you were queen for a day, what would you say to the institutions of higher learning to help prepare for what is going to be a large number of folks hitting that age in the not-too-distant future? How would you tell them to change their curriculum to help you as a hospital system that I presume—I go to hospital systems. Medicare is probably a pretty good customer. How would you help them prepare from an educational standpoint?

Ms. THAMES. I just echo what the two gentlemen said before. I mean, I think that is huge for us, and I think we are well on our way in this State of better connecting students to the real world. I think that is absolutely critical.

Relative to the aging population, I think in those areas where you are training students to go into health care, there is going to be a tremendous need. Sometimes people are not even exposed to elderly people, much less going into a career where they are going to be working with that population or serving that population. So I think, again, better connection to what is happening in the real world with the aging population and don't think of a 70-year-old as being old because 70-year-olds, their bodies and their minds are telling them that they are still sharp, they can still run, they can do whatever they want to do.

And so I think educating young people on—when we say the aging population, let's know what that really means because I have physicians talking all the time about, Congressman Wilson, much older than you, but people coming in but really their minds are telling them they are still vibrant, they can still do these things. So they are wanting that hip replacement or they are wanting that care. So, again, I go back to, while students are in their academic learning, let's expose them to the people that they are possibly going to be serving when they get into the real world.

For us, it is a tremendous cost saving when we can get individuals ready to walk into the workplace, ready to hit the ground rolling, because so often on-the-job training is expensive, and I think that is another real value here what is going on in South Carolina about us really connecting to our higher education partners.

Mr. GOWDY. If you run into anyone else who has not met a senior citizen or someone they perceive to be old, let Congressman Wilson and I know so we can walk them to the United States Senate where they will meet lots of them.

Ms. Harmon, last question—and thank you for your indulgence, Mr. Chairman—if you were queen for a day, the model right now is to pay unemployment earnings directly to the unemployed person. Would you consider a model that paid a BMW or a Milliken or a Tietex or a Michelin the money instead of the individual, with the understanding they hired the person, the money doesn't go to the individual to look for work or stay at home; it goes to a company that can either retrain or put the person to work? Our model—I think we are to the point in our country where we prob-

ably need to kind of fundamentally look at different models. Is that one you would be willing to consider?

Ms. HARMON. I would like to explore that, but I really can't provide a response that says yes or no at this particular moment, but I would definitely like to talk about it and find out more.

Correct, the unemployment system has a lot of problems. There are people that are incentivized to stay on unemployment rather than go to work, but there is a whole—the issue is so complex that you really have to examine all of the pieces that go into that person's decision to stay on unemployment or not to find another, you know—their workforce readiness, the state of being workforce ready, is very complex. There are a lot of factors that go into it. There are housing issues. There are basic academic issues. There are the soft skills. There is knowing how to use a computer so that you can actually find a job and apply on line, and we have a lot of adults that are not work ready in that aspect and in many aspects that involve barriers like on having transportation.

So, yes, I would say let us look at unemployment and find a different way to do it that is more efficient, but I can't say right now.

Mr. GOWDY. I caught you cold. Lawyers do that. So forgive me and—

Ms. HARMON. Can I mention one other thing?

Mr. GOWDY. Sure.

Ms. HARMON. You had asked about what would I recommend for training. We have so many of the solutions already. We have so many resources that are already here. It is getting people to collaborate effectively to align their services that I think is going to be the key, especially in lean times.

So I think we can do a lot more with the funding that we have, but we need to, you know, put it in the right place and make sure that folks in the agencies are working together, and really, that is what Greenville Works is all about. We are trying to bring different types of organizations together and have them to align their services so that, you know, we can be more effective.

Mr. GOWDY. Well, on behalf of Congressman Wilson and myself, I thank our first panel for sharing your perspective, your insights, your wisdom with us. It has been a remarkable panel, and we will come thank you personally, and we will take a couple-minute recess if that is okay with Chairman Wilson.

Mr. WILSON. Whatever the current chairman says.

Mr. GOWDY. And we will prepare for the second panel. So we will be temporarily in recess. Thank you.

[Recess.]

Mr. WILSON. Ladies and gentlemen, I would like to call back to order the special subcommittee meeting of the Committee on Education and the Workforce. We will now begin with the second panel.

Before we begin, I would like to thank the staff people. I have already mentioned Amy Jones. She is our attorney and a very capable young lady who has been so helpful to the committee, and someone Congressman Gowdy and I greatly depend upon.

We are very pleased that Brian Melnyk is here from the committee, and also Melinda Walker, who is a House reporter. Melinda

has just been a really hard worker on behalf of the people of our country, and I appreciate that.

And then I do need to point out, I have a staff person here, Melissa Chandler of Greenwood, who is a graduate of another upstate college, very famous, Wofford College, and so Melissa is the Deputy Chief of Staff of the Second District of South Carolina.

And at this time, I will now defer back to Congressman Gowdy. Mr. GOWDY. Thank you, Chairman Wilson.

I want to welcome our second panel. I will be introducing you shortly, but it really is a testament to the upstate when you can have as a second panel folks of this caliber. I guess it is kind of like having Babe Ruth bat third and fourth for you. Nobody here is old enough to remember Babe Ruth, are they? I guess I should say somebody else, Congressman Wilson.

I am going to introduce you, and we will do it just like last time. You will have 5 minutes to give your opening statement, and if it lasts longer than that, that is fine, too. The lights mean what they traditionally mean.

It is my pleasure to introduce Mr. Jim Barker, who was made president of Clemson University in 1999. Since his arrival, Mr. Barker has been devoted to transforming Clemson into one of the nation's finest universities. Enrollment and student achievement at Clemson have soared during Mr. Barker's tenure, and he continues to focus on improvement for the future. In addition to his career at Clemson University, President Barker served as chair of the NCAA Division I board of directors and chair of the Commission on Colleges and the Southern Association of Colleges and Schools. And it is a pleasure to have you here. And a point of personal indulgence, President Barker, your staff and everyone connected to Clemson has been absolutely phenomenal putting this on. So, if you would give them a heartfelt thanks on behalf of Congressman Wilson and myself.

Dr. Thomas Moore began serving as chancellor of the University of South Carolina Upstate on August 1, 2011. I saw you I guess it was Monday. Welcome, again. Delighted to have you. Dr. Moore has an extensive background in higher education, knowledge of the State, and commitment to excellence as a professor and administrator. Prior to being named chancellor, Dr. Moore served as vice president for academic affairs and dean of faculty at Winthrop University, and on committees of the National Collegiate Athletic Association, the Southern Association of Colleges and Schools and the Association of Graduate Liberal Studies Programs. Welcome, Dr. Moore.

Dr. Keith Miller became the second president of Greenville Technical College in 2008. He brought experienced leadership to the position, having spent 12 years as a college president in Illinois, first for Spoon River College and later for Black Hawk College. In addition, Dr. Miller served as chairman of the board for the American Association of Community Colleges in 2008 and 2009. He currently serves on the board of directors for the American Council of Education and is chairman of the National Steering Committee for Development of the Voluntary Framework for Accountability. You have been a guest of ours in Washington, which we very much en-

joyed, and Ms. Hogue does a phenomenal job for you, as I know you are aware.

Ms. Amy Hickman was named campus president of ECPI University in Greenville, South Carolina, in March 2009. Prior to serving as campus president, Ms. Hickman served as campus provost and English instructor and an associate dean of arts and sciences at ECPI in Greenville. Ms. Hickman also taught and served as the department chair for general education at Collins College in Tempe, Arizona. Ms. Hickman holds a master's degree in creative writing from the University of Florida and a bachelor's degree from Goucher College.

With that, welcome, each of you. We will start with you, President Barker. Make your opening statement. We will go from my left to right, your right to left. President Barker.

**STATEMENT OF JAMES F. BARKER, PRESIDENT,
CLEMSON UNIVERSITY**

Mr. BARKER. Good afternoon, Chairman Wilson and Congressman Gowdy. We are very much appreciative of the opportunity to speak to you regarding the role of higher education in job growth and workforce development, and we thank you also on behalf of our faculty and staff and students at Clemson University.

This is a timely topic. Today, more than ever, higher education needs to work closely with government and private industry to ensure that our graduates are well prepared for the immediate job market, as well as their future roles as leaders in the companies and in our communities. In other words, it will be a loss to graduate such well-prepared students if there were no positions for them waiting, and it would be an equal loss if companies had the positions for our graduates, but the graduates weren't prepared to go into those positions. So simply stated, we have got to do both, and that is what these hearings are about.

Clemson University was founded in 1899 through a bequest from Thomas Green Clemson, who was a Philadelphian, an engineer and a diplomat, who married John C. Calhoun's daughter and wisely settled in South Carolina for the rest of his life. Mr. Clemson believed that the way to rebuild his adopted State's war-ravaged economy was through scientific education. So he left his home and his fortune to the State in his bequest to establish the institution that now bears his name.

His will eloquently described his twofold purpose: number one, to establish what he called a high seminary of learning; number two, to develop the material resources of the State. So we are responsible for both learning and prosperity in the State of South Carolina. So this dual responsibility has been a part of our mission directly from our founder from day one. So you are looking at CU-ICAR as the direct manifestation of both those things from the 19th century to the 21st century.

So Clemson was specifically established to support economic development. Mr. Clemson understood that the surest path to prosperity was education. It is appropriate that we are at CU-ICAR given our mission and our collaboration that has occurred among the universities, federal and State and local government, as well as

the private sector, which has resulted in an economic transformation of our State.

Three critical ingredients in CU-ICAR's success were these: number one, a research university that was willing to listen, a key factor, and then respond to industry needs; a government investment; and a physical campus. Each ingredient was essential.

CU-ICAR evolved from conversations between Clemson and BMW, as you heard from BMW, about what the State's automotive cluster needed in order to remain competitive. They said they needed a new kind of engineer, an engineer that understood how to bring together mechanical, electrical, and computer systems in our modern automobile today.

Clemson's faculty listened. They responded and created a new curriculum focused on systems integration. Financial resources were provided through the State and legislative incentives that funded endowed chairs, research infrastructure, and innovation campuses. Often these funds required a private-sector match, which, by the way, we believe is the truest measure of accountability. If you can't find the match, then you have got no business doing the idea. City and county government helped fund infrastructure, as you heard from Mayor White, and support services and federal funds were used to help build the Center for Emerging Technologies right next door through that glass that we are seeing right beside us.

The third critical ingredient was 250 acres, enough land to develop with large companies or small start-ups and landing parties alongside the academic programs, and state-of-the-art research and testing equipment, all on the campus, deliberately designed to foster collaboration. We believe this project is so dense because economic development is a contact sport. You have got to bump into people to generate the ideas.

What distinguishes Clemson's automotive engineering program is the blend of a rigorous academic program, combined with daily interaction with industry leaders and, finally, with a structured hands-on learning opportunity which we call Deep Orange, which transforms the Campbell Graduate Engineering Center into an original automotive equipment manufacturer and supplier by building these cars. That is what we learn. Students, faculty, and industrial partners actually produce a new vehicle prototype each year, which gives students experience in vehicle design, development and production, and prepares them to be in leadership in the automotive workforce in the future.

CU-ICAR'S results speak for themselves: 19 corporate partners, 30 research partners, 500 jobs created, and another 1,700 announced, \$230 million in public and private investment, America's first doctoral degree in automotive engineering, and 100 percent employment rate for its graduates.

The CU-ICAR model works. It is one that we followed in developing two other innovation campuses, which I need to mention. First, the Clemson University Restoration Institute in North Charleston will soon house a unique wind turbine testing facility funded by a \$35 million U.S. Department of Energy grant and matched by State support and private support, and that will make South Carolina the hub of the wind energy industry. IMO, a Ger-

man manufacturer group, they produce wind tunnel components and wind turbine components, and they will locate in this facility with 190 jobs in Charleston, driven to a great extent by Clemson's presence there with this new facility. Like CU-ICAR, the campus will focus on industry collaboration. Executives from 90 percent of the world's turbine manufacturers serve on its advisory board.

The second campus, the Clemson University Advanced Materials Center in Anderson County, boasts one of the world's most advanced electron microscope facilities and a cyber infrastructure that places Clemson in the top five among all U.S. academic institutions in supercomputing. This advanced materials campus concentrates on small business that move technology innovation into the marketplace, often based on licensing of Clemson research and intellectual properties, which has generated more than \$28 million in revenues and created 15 start-up companies in the past decade. An example: Tetramer Technologies was founded in 2001 as a faculty start-up company and now is a tier one supplier to General Motors.

Each of these three research campuses is as unique as its region and as the economic cluster it serves, but each is anchored in academics, because the greatest contribution we make to economic development is a well-prepared Clemson graduate. That is why the cornerstone of our newest strategic plan is student engagement. We want to give every undergraduate and graduate student the kind of relevant, hands-on, problem-solving experience that Deep Orange has created here at CU-ICAR.

I have outlined examples of engagement programs in my written testimony, and these programs often involve interaction with industry and will give Clemson students the tools to become leaders, thinkers, and entrepreneurs as well as global citizens. In short, we believe that it will be a powerful 21st century workforce.

Let me thank you again for this opportunity on behalf of Clemson and thank you for your service to our nation.

Mr. GOWDY. Thank you, President Barker.

[The statement of Mr. Barker follows:]

Prepared Statement of James F. Barker, President, Clemson University

Good afternoon, Chairwoman Foxx and Members of the Subcommittee. My name is Jim Barker, and I am President of Clemson University. We appreciate the opportunity to host this subcommittee field hearing at our CU-ICAR campus and to testify before the subcommittee today regarding the role of higher education in job growth and workforce development.

We believe this is a timely topic given the changing landscape of higher education and the economic conditions facing our state and nation. Today more than ever, institutions of higher education need to work closely with government and private industry to ensure that our graduates are well prepared both for the immediate job market and for their future roles as leaders of our companies and our communities.

Clemson University is ready and eager to accept this challenge. In fact, it's what we were founded to do.

For those of you who are not familiar with Clemson, I'm pleased to provide some background information.

Ranked #23 among national public universities, Clemson University is a land-grant, science- and engineering-oriented research university that maintains a strong commitment to teaching and student success. Clemson is a student-centered community characterized by high academic standards, a culture of collaboration, school spirit, and a competitive drive to excel.

It has recently been ranked #9 among "up and coming" universities, and #12 among national universities—public and private—with a strong commitment to un-

dergraduate teaching, according to US News & World Report. Princeton Review rates us #1 in town-gown relations and #2 in the category of “happiest students.”

Clemson scores well above its peers on the National Survey on Student Engagement. More than 92 percent of seniors would choose Clemson again if they could start over—compared to a national average of 83 percent. Clemson also is the number one choice of Palmetto Fellows, the state’s top high school graduates, and more than half of Clemson’s incoming freshmen rank in the top 10 percent of their high school class.

The university was founded in 1889 through a bequest from Thomas Green Clemson, a Philadelphia-born, European-educated engineer, musician and artist who married John C. Calhoun’s daughter, Anna, and settled at her family estate in South Carolina. Clemson believed that the way to rebuild his adopted state’s war-ravaged economy was through scientific education, so he left his home and fortune to the state of South Carolina to create the institution that bears his name. His last will and testament eloquently described a two-fold purpose: To establish a “high seminary of learning” and to “develop the material resources of the state.”

Therefore, Clemson was specifically and purposefully established to support economic development—initially in agriculture, later adding support for manufacturing and now those industries plus a growing knowledge-based economic sector. Mr. Clemson understood that the surest path to prosperity was education. It remains so today.

Over the past decade, Clemson has substantially grown its economic development capabilities. We have followed the land-grant model of going where the industries are rather than expecting them to come to us, and we sought out best practices from research parks in neighboring states, such as North Carolina’s Research Triangle Park, Centennial Campus and the Piedmont Triad Research Park in Congresswoman Foxx’s home district.

It is appropriate that this hearing is being held at the Clemson University International Center for Automotive Research—or CU-ICAR—given the mission of this campus and the collaboration that has occurred among the university, federal, state, and local government in partnership with the private companies involved, which has resulted in an economic transformation for our state.

CU-ICAR is a 250-acre automotive and motorsports “technopolis” in Greenville that has created more than 500 jobs, with another 1,700 announced. Named the 2009 Emerging Technology Park of the Year by the Association of University Research Parks, CU-ICAR represents a new model for university research-driven economic development.

Three critical ingredients in CU-ICAR’s success were (1) a research university that was willing to listen and respond to industry needs; (2) government investment, and (3) a physical campus.

Each ingredient was essential. Back when this location was an empty field, there were conversations between Clemson and BMW about what the state’s automotive cluster needed in order to remain competitive in the 21st century. They didn’t talk about what kind of research they wanted us to do or what kind of test facilities they needed. They talked about the kind of engineers they needed to hire—a new kind of engineer who understood how all of the various mechanical, electrical and computer systems in a modern automobile work together. Clemson faculty responded and created an entirely new curriculum focused on systems integration—and they continue to meet annually with industry advisors to ensure that the program remains relevant.

Critical financial resources were provided through a series of state legislative initiatives that funded endowed chairs, research infrastructure and innovation centers at the state’s three research universities. Often, those funds required a private-sector match, which provided the ultimate measure of accountability. Our corporate partners did not invest in CU-ICAR out of a sense of philanthropy; they invested because what we are doing is relevant for their business and their future.

City and county government helped fund infrastructure and support services, and federal funds are helping build the 60,000-square-foot Center for Emerging Technologies, where dozens of emerging or established companies can expand and develop technologies that complement research of Clemson faculty and students.

The 250-acre physical campus gave us the third critical ingredient—adequate land to accommodate large companies, small start-ups and landing parties alongside academic programs and state-of-the-art research and testing equipment, all on a campus deliberately designed to foster formal and informal interaction and collaboration. Students and faculty move seamlessly from the classrooms and laboratories across the plaza to the assembly-line floor working side-by-side with BMW engineers at their plant in Greer.

What truly distinguishes Clemson's automotive engineering program is the blend of rigorous academic curriculum, daily interaction with industry leaders and a structured, hands-on learning opportunity we call Deep Orange.

Housed just across the plaza at the Carroll A. Campbell Graduate Engineering Center, Deep Orange transforms the facility into an original automotive equipment manufacturer and supplier. Students, faculty and industry partners actually produce a new vehicle prototype each year, giving students experience in vehicle design, development and production planning from their entry into the program until graduation. Through this initiative, the students will understand clearly how to innovate and develop automotive projects, which prepares them to be the leadership work force of the future.

CU-ICAR's results speak for themselves: 19 corporate partners, 30 research partners, 760,000 constructed square feet, \$230 million in public and private investment, America's first doctoral program in automotive engineering (launched in 2006), and a 100 percent employment rate for its seven Ph.D. and 25 Master's degree graduates.

The CU-ICAR model works, and it's one we are continuing to follow as we develop innovation campuses focused on restoration, conservation and energy in North Charleston, and advanced materials, optoelectronics and high-performance computing in Anderson County.

The Clemson University Restoration Institute, being developed on an 27-acre tract of land in North Charleston, promises to make South Carolina a magnet for the restoration economy. It will soon house a major wind-turbine testing facility—funded by a \$45 million U.S. Department of Energy grant—which could make South Carolina the hub of the wind energy industry. Already, IMO Group—a German manufacturer of wind-turbine components—announced that it would locate a facility, with 190 jobs, in Charleston partly because of Clemson's testing capability.

Like CU-ICAR, the campus will focus on industry collaboration. Executives from 90 percent of the world's turbine manufacturers serve on technical and industrial advisory boards. They provide input into the design of testing facilities and development of educational programs, ranging from certifications in wind energy to entirely new degree programs in power engineering. These close-hand relationships mean the university can deliver a one-of-a-kind advanced testing facility tailored to the industry's specific needs.

The Clemson University Advanced Materials Center boasts state-of-the-art equipment including one of the nation's most advanced electron microscope facilities and a high-performance computing infrastructure that places Clemson in the top five among academic institutions for supercomputing.

This campus concentrates on small businesses with an entrepreneurial spirit to move technology and innovations into the marketplace. Often these are start-up companies spun out from licensing of Clemson research and intellectual properties, which has generated more than \$28 million in revenues and created 15 start-up companies over the past decade. In the past five years, the number of technology disclosures submitted by Clemson faculty, staff, and students has doubled, with a record 124 disclosures this past fiscal year.

Tetramer Technologies in Pendleton, S.C., for example, was founded in 2001 as a faculty start-up company commercializing high value optical polymer research activities pursued at Clemson. Today, Tetramer is a thriving company with 26 employees that serves as a tier-one supplier to General Motors.

Each of these research campuses is as unique as the regions and economic clusters it serves. But each is anchored in academics, because the greatest contribution we make to economic development in South Carolina is a well-prepared Clemson graduate.

That's why the cornerstone of our new, 10-year strategic plan—the Clemson 2020 Road Map—is a goal of providing all students with engagement opportunities, which means structured, hands-on, problem-solving experiences inside and outside of the classroom. In other words, we want to give every undergraduate and graduate student the kind of relevant, creative experience that Deep Orange provides here at CU-ICAR.

The best way to illustrate how Clemson approaches student engagement is through examples of four innovative programs. Some have been around for decades, and some are just getting started. I've outline these programs in the written testimony I submitted to the Committee.

Creative Inquiry

A national publication called Creative Inquiry “a small-group learning experience for 14,000 undergraduates.” A combination of engaged learning and undergraduate research unique to Clemson, Creative Inquiry pairs small teams with a faculty men-

tor who guides them in exploring their own questions, not the teacher's. Projects typically span three to four semesters and are often interdisciplinary. In recent years, Creative Inquiry teams have focused on:

- designing a tire that allows lunar rovers to efficiently travel across the moon's surface,
- developing clean water systems for Haiti,
- designing buildings to reduce energy consumption,
- finding ways to use neural signals to control machines,
- developing a campus tour app for the iPhone
- and even writing and producing an original play and publishing a collection of slave narratives.

Immersion semester

Developed by faculty in parks, recreation and tourism management, the immersion semester enrolls all majors in a common curriculum during their sophomore year—and that curriculum rarely include lectures. Instead, students work in teams on special projects, take field trips, and attend seminars run by leaders in the field who offer first-hand insights about what is needed to succeed in the recreation and tourism industries.

One student wrote this on her year-end evaluation: “When I applied for internships (as an events planner), I explained to employers and organizations what the Immersion Semester consisted of and how we were getting hands-on experience with professionals in our field and planning and implementing an actual event. They looked at my degree with a whole new level of respect.”

Internal co-ops

Engineering students have long seen the value of cooperative education—a program that puts them at work for a full semester in a field related to their academic discipline. The experience is mutually beneficial for both the students and the employers.

We're currently developing a new “internal co-op” program in which students will help run the university machine. Like external co-op experiences, the idea is to give students practical, hands-on, professional experience—not routine office jobs—that is directly related to their academic fields.

We will have financial management majors working side by side with the CFO, graphic communication majors designing university publications, and engineering majors working on real capital improvement projects.

Residential study centers

Clemson University is a beautiful campus with many historic buildings, located in what is probably the best college town in America. However, after four years, architecture students have probably soaked up as much as they can from the physical environment, and they need to see new perspectives. The Clemson Architecture Center at Charleston and residential programs in Genoa, Italy, and Barcelona, Spain, put students in a learning environment that is squarely in the middle of some of the finest architecture in the world and gives them direct access to leading experts in architecture, urban planning and historic preservation.

These kinds of engagement opportunities, often involving direct interaction with industry experts, will give Clemson students the tools to become leaders, thinkers, entrepreneurs and global citizens—in short, to be the kind of workforce needed in the 21st century economy.

In conclusion, I'd like to once again thank the Committee for this opportunity to speak on behalf of Clemson University—and, more importantly, I want to thank you for your service to this nation.

Mr. GOWDY. Dr. Moore.

STATEMENT OF THOMAS F. MOORE, CHANCELLOR, UNIVERSITY OF SOUTH CAROLINA UPSTATE

Mr. MOORE. Thank you, Congressman Gowdy, Chairman Wilson, Ms. Jones. It is a pleasure for me to be here and represent an institution that I am learning much about at a very rapid pace and am very proud to be a part of.

USC Upstate is the senior campus of the USC University of South Carolina system. We are a metropolitan university serving

the I-85 corridor from Greenville to beyond Spartanburg. We have just under 6,000 students in 3 locations, a major 300-acre residential campus just north of Spartanburg, the George Dean Johnson College of Business and Economics in downtown Spartanburg, and we deliver degree-completion programs, open-vision courses, at the University Center in Greenville.

Our priorities in the institution are remaining accessible, affordable, and accountable for the people of our State and the country in delivering high-quality educational programs. We work closely with junior colleges, technical colleges, and community colleges. We bring in more than 800 transfer students, most from those type schools, each year, and we award a higher percentage of our studentsr degrees every year than any other institution in the State.

Fifty-one percent of degree completers, associate degree completers at Greenville Tech who go on to complete a bachelor's degree do so at USC Upstate. We have wonderful relationships with them. We have just established over the last couple of years a program we call Direct Connect with community and technical colleges where we have hard articulation agreements, automatic admissions upon completion of an associate's degree, and transfer of all of those credits toward a degree at USC Upstate. We have that with three institutions now, Greenville Tech, Spartanburg Community College, and Tri-County Technical College. We are working on such agreements with additional community and technical colleges across the State.

We have programs toward workforce development across the board. We were founded in 1967 to educate nurses in Spartanburg, South Carolina. Nursing continues to be a major part of what we do. We graduate more bachelor of science in nursing student degrees than any other institution in South Carolina. For the last 3 years, we have averaged right at 255 such degree completions, and last year we had 264 bachelor of science in nursing degrees awarded. Ninety-five percent of those BSN degree completers remain in South Carolina and go to work in health care in South Carolina.

We have strong education programs and teacher preparation across the board and a couple of master's degrees in education. Our business program, now housed in the George Dean Johnson School of Business Administration and Economics in downtown Spartanburg, is a major example of the kind of community institutional partnerships we are interested in establishing and have a record of doing so. This facility, more than \$13 million raised in private money. Not a single dollar of State appropriation or bond money went into the construction of this building. It puts our college of business administration and economics in downtown Spartanburg to build connections with students and faculty and area businesses and business leaders, to provide speakers for classes and interactions with the business community, internship and work opportunities for our students. We have segmented space devoted to business incubation and development that brings student and faculty interest and expertise to the issues of business start-up and providing that expertise, continuing education and executive education for business people in downtown Spartanburg.

And this summer we had a very successful cooperative camp with BMW for advanced science and math students in Spartanburg schools to look at the application of science and math in the industrial world, a kind of connection that the former panel spoke to across the board, and the importance of engaging people and how this applies in the world of work as you study it in school and become interested in going to college.

Another example of this collaboration is our University Readiness Center, which is the headquarters for the local National Guard unit. We built it on campus. That local Guard occupies one-fourth of that structure all the time. Their headquarters are there. The other 75 percent of the building are classrooms and multifunctional space that the university uses during the week. The Guard uses the entire facility two weekends a month for their regular scheduled drills. We house—our soccer stadium is directly behind the University Readiness Center, and some of that space is devoted to men's and women's dressing and locker rooms and training facilities. It is a wonderful collaboration of county, federal, State, and local government and an institution combining to create a multiuse facility that benefits everybody.

I have several other things. We have out of private fund-raising and industrial investment a wonderful robotics laboratory. This is used in education and research. We have a summer camp for area school students who come in, 40 per year, and get hands-on experience in this major robotics facility, more than \$500,000 worth of equipment that was all either donated by area industries, or funds were donated and we purchased that equipment.

We have an engineering technology management degree that is in its third or fourth year, very successful; associate's degrees in engineering technology, go to work at BMW or Michelin or wherever. They are in that job for a while, and they need a bachelor's degree in management training to move up and advance in that organization, they come to us and in 2 years complete an engineering technology management degree, and they are prepared with that management credential to move up in that organization, the kind of career development that we need.

We have many more programs that produce graduates across the board and work in the upstate and contribute to economic development.

Let me close by reemphasizing the metropolitan mission of USC Upstate to educate people in our part of the world for productive employment and meaningful life, and to enhance the quality of life for all citizens of this part of the world. I am grateful for this opportunity. Thank you very much.

Mr. GOWDY. Thank you, Dr. Moore.

[The statement of Mr. Moore follows:]

Prepared Statement of Tom Moore, Chancellor, USC Upstate

USC Upstate is a Metropolitan University serving the Upstate of South Carolina. The University currently consists of a main residential campus on I-85 just north of Spartanburg, a downtown campus in Spartanburg, housing the George Dean Johnson, Jr. College of Business and Economics, and a campus operation in Greenville, providing degree completion programs, primarily with Greenville Technical College transfers and working adults. With enrollment approaching 6000 students, USC Upstate has been the fastest growing public institution in South Carolina for

most of the last 10-12 years and has the fourth largest enrollment of South Carolina resident students in the State.

Enrollment consists of 92% in-State residents with 80% coming from five surrounding counties. Minorities make up 32% of enrollment and 71 different countries are represented on the campus. There are 1100 students in University-owned housing and another 1100 students in privatized housing that touches the campus boundary.

Programmatically, USC Upstate is comprised of the School of Education, the Mary Black School of Nursing, The George Dean Johnson, Jr. College of Business and Economics, and the College of Arts and Sciences. All schools and programs are fully accredited by their respective agencies.

An economic impact study completed in the last year by the Metropolitan Studies Institute demonstrates that the total economic impact attributable to USC Upstate amounts to \$240 million with 850 employees, including full and part-time employment.

Major Initiatives and Partnerships That Impact Job Growth And Development

“The George” (George Dean Johnson, Jr. College of Business and Economics) opened one year ago in the downtown business district. This project represents the pinnacle partnership achievement of the University’s “metropolitan mission,” providing a magnificent resource for the University’s continuing growth and a major investment in the economic development future of Spartanburg. Locating the business school in the heart of downtown Spartanburg will facilitate internship opportunities with downtown businesses, offer easier access to community and business leaders willing to share their knowledge and experience as guest lecturers, and provide a location for seeding and incubating entrepreneurial ideas.

The three story, 60,000 square foot building is a high-tech, modern facility with classrooms, computer labs (including a simulation stock trading room), distance education capacity, seminar rooms, and conference rooms. “The George” is truly a public/private partnership involving the University, the State of South Carolina, the City of Spartanburg, and the private business community. The City donated land for the building, a parking deck, and infrastructure surrounding the project. The private sector donated \$13 million for building construction and the State provided the University with funds to lease the building.

“The George” is rapidly becoming a centerpiece for economic development, educational opportunities, and outreach in the region. Partnership activities and programs include the following:

- Spartanburg County Economic Futures Group is the local community-wide economic development organization. The by-laws mandate that the USC Upstate Chancellor, the President of Spartanburg Community College and the Dean of the Johnson College of Business serve as board members. We are full partners and it is valued in both directions.

- Recently, a memorandum of understanding was executed between the Spartanburg Chamber, USC Upstate and Spartanburg Community College to collaborate on entrepreneurship. This program is part of a local focus on job creation and entrepreneurial success. Johnson College will be hosting a forum in the fall to bring the local support network together. The network will include mentoring for entrepreneurs and collaboration to launch Spartanburg based Venture Capital support.

- The George has allocated space where business start-ups can work with students as they develop their businesses. Undergraduate classes can work on business or marketing plans to help establish the business. This fall the first external company will move in. Student business support is also offered and the space will be fully utilized this fall.

- Johnson College hosts the BMW camp for high performing students in Math and Applied Sciences within business. This program matches emphasis on connections between sciences and careers. By jointly teaching these students there is promotion of business careers while building their understanding of applied math and science.

- Traditional internship programs are enhanced with “The George” in the central business district. There are numerous relationships with companies in the Upstate where students can develop an internship. Many turn into full time jobs.

- The George Dean Johnson, Jr. College of Business and Economics offers Executive Education programs in partnership with business and professional constituencies in the upstate metropolitan region. The programs are offered at the new business school building in downtown Spartanburg, and at the University Center Greenville. Three types of programs are offered: certificate programs, custom programs, and open enrollment programs.

1. Certificate Programs

Executive education certificate programs present the option of multiple areas of study, covering the topics that are most critical to managers. As with all programs at the Johnson College of Business and Economics, certificate programs present the chance for professionals to build their knowledge and skills in one or more areas of focus in a timely and cost-effective manner. For example, our retail management certificate program includes four sections of study to enhance managerial competence at retail: retail management, retail accounting/financial analysis, communication theory and practice, and communicative Spanish for retail personnel.

2. Custom Programs

Building upon a long-standing dedication to premium educational experiences, core strengths lie in providing timely, innovative, partner-driven learning options that are designed with the client in mind, and individualized accordingly.

3. Open Enrollment Programs

There is a broad choice of open enrollment programs, generally lasting two days. Past subjects have included "How to Export from the Upstate," and an overview of the "Six Sigma Quality Process."

"Direct Connect": Initiatives promoting accessibility, affordability and degree-completion

In 2009, a Spartanburg Chamber of Commerce committee on college attainment established the fact that only 19% of the local population over age 25 has a baccalaureate degree or higher. The local population falls far below the 24% state average and the 26% national average of baccalaureate degree attainment. High performing cities and regions have baccalaureate educated populations in the high 30% up to 50%. For our region to compete for jobs and companies we must have an educated workforce. In response to this message and because of our mission, this University has developed several programs focusing on degree completion, accessibility, and affordability of higher education.

Direct Connect is a degree completion program involving articulation agreements with several community colleges in the region. Academic personnel have worked together to establish program requirements that can be transferred automatically and seamlessly from the community college to the University. Signing up for Direct Connect insures automatic acceptance at USC Upstate (only one application) when the program curriculum is followed at the community college. We currently have these agreements with Spartanburg Community College, Greenville Technical College and Tri-County Technical College. Several more are being developed.

This program is an aid to affordability of college as the averaged four year costs are lower when taking the first two years at the lower tuition technical/community colleges. Accessibility is enhanced through the USC Upstate campus in Greenville as well as multiple sites at the two year colleges and the availability of online classes offered at the two-year programs and at USC Upstate.

Another degree-completion program is called "Track Two". This program in the new IDS (Interdisciplinary Studies) program is designed as an option for students who have accumulated many undergraduate hours but have no degree.

Other Partnerships

Various departments and offices at the University partner with many community organizations that impact and are involved with economic development/quality of life/workforce development issues. These include the following:

- City of Spartanburg
- City of Greenville
- Spartanburg County
- Spartanburg Housing Authority
- South Carolina National Guard
- Chambers of Commerce (Greenville, Spartanburg, Greer)
- Upstate Alliance
- Ten@The Top
- Urban League of the Upstate
- United Way of the Piedmont

Market Driven Programs in Response to Community Needs

USC Upstate is obligated by our Metropolitan Mission to collaborate with area businesses and industry and respond to their needs. In recent years, the University has established numerous degree programs and minors/concentrations in this response that provide jobs and economic development in the region. Included are:

- **Robotics:** Private industry has donated \$500,000 in equipment and resources to equip and establish a robotics lab on campus. Research efforts have led to 10 peer-reviewed robotics-related research articles published in Journals or Conference Proceedings since 2006. Three courses are taught in the lab: industrial robotics, artificial intelligence, and computer vision. A focus area in “Automation” in the Computer Information Systems degree was recently developed in partnership with the Business and Engineering Technology Management program. The robotics lab is also utilized for several community engagement activities. Since 2009, approximately 40 students each summer have participated in robotics summer camps where they learn how to operate and program the machines in a fun, hands-on environment.
- **Engineering Technology Management:** The Bachelor of Science degree in Engineering Technology Management (ETM), accredited by the Technology Accreditation Commission (TAC) of ABET, builds on the technical foundation of an ABET accredited Engineering Technology Associate’s Degree, which students can earn from Greenville, Spartanburg, Piedmont, York, or other technical colleges. Most ETM students are non-traditional students looking to increase opportunities by adding a Bachelor’s Degree to their Associate’s Degree in Engineering Technology. Current students and graduates work for local companies such as Avery Dennison, Baldor, BMW, CH2MHill, Fitesa Fiberweb, Fluor, Hubbell Lighting, KTM Solutions, Michelin, TieTex, and USC Upstate.
- **Child Advocacy Studies:** The Psychology Department is the home of the Child Advocacy Studies minor. This interdisciplinary minor prepares students to work with abused and neglected children. Courses in the program focus on child maltreatment, system responses to child maltreatment, and intervention strategies. An internship experience in an agency dealing with child maltreatment is available in the program. The Psychology Department also maintains an active internship program where students are placed in different agencies in the community and get direct experience with the populations that psychologists serve.
- **RN to BSN Nursing:** The Mary Black School of Nursing is the largest deliverer of BSN degrees in South Carolina. Partnering with the large hospitals, Mary Black SON offers nursing education to working RNs on their days off. This program helps the immediate need for BSN nurses in area hospitals.
- **BS in health sciences:** To meet demands of healthcare providers and jobs beyond nursing, Mary Black School of Nursing is pursuing a health sciences program. This program can prepare many students for the workforce who could not all get into the Nursing program or want to prepare for other jobs in this region.
- **MSN with a concentration in Clinical Nurse Leader:** Mary Black School of Nursing is also pursuing a Master’s Degree program. Hospitals are very desirous of Master’s level nurses and have been very helpful in the University being approved for this program. Most employed nurses cannot leave employment to go off to get this degree. There is a large demand for this offering locally.
- **Graphic Design:** Another market-driven program, it was one of the first BA degrees in the State in graphic design. It was designed 10 years ago to be the upper division for the two year graphic design program at Greenville Technical College. This popular program places graduates across the Upstate in business and industry. Recent graduates were employed at the Palladian Group, Erwin-Penland, Bounce-Greenville and Michelin.
- **Information Management and Systems:** The IM&S degree is a multi-disciplinary degree comprised of courses in computer programming, relational database design and utilization, computer networking, social networking, business informatics, business theory, information resources management, and communication. Each student completes either a minor in another domain or one of four application areas: healthcare, business, education, or communication. The IM&S program is available through USC Upstate’s Greenville campus as well as our Spartanburg campus. Students routinely transfer a significant percentage of the required 120 hours from other institutions and we have special articulation agreements with several community and technical colleges. Much of the IM&S is available online. The entire healthcare application area can be completed online. The Bachelor of Arts in Information Management & Systems/Health Information Management (IMS/HIM) is the only degree program of its kind in South Carolina.
- **Metropolitan Studies Institute:** The MSI supports research efforts between USC Upstate and the community, enhancing relationships, promoting the reciprocal flow of information and ideas, assisting community and economic development, and increasing the strategic use of the University’s scholarship and outreach capabilities.
- **Teacher-To-Teacher Partnership:** A partnership with Spartanburg District 6, this internship program recognizes the need to retain promising teachers in the profession. Through an extended supportive relationship, the partners provide ongoing

mentoring in early clinical experiences and student teaching which continue through the induction contract year.

- Evening Program in Early Childhood and Elementary: Our early childhood and elementary education program is offered in the evenings at UCG (Greenville) in order to accommodate currently employed Teacher Assistants in Greenville County Schools. These persons would otherwise not be able to attend college as they cannot afford to give up employment in order to attend school during the day. Students are able to complete their student teacher requirement in the schools where they are already employed.

- Visual Impairment Program: The School of Education offers the only Master of Education in Visual Impairment Program in South Carolina. The comprehensive and culturally responsive program of study includes a strong emphasis on braille, assistive technology, and teaching reading and mathematics skills and concepts to students with visual impairment. Throughout the coursework, candidates simultaneously participate in a variety of different clinical experiences at schools to apply what they are concurrently learning under “real life” conditions. One of the truly unique aspects of Visual Impairment Program is the collaboration with the South Carolina School for the Deaf and the Blind (SCSDB) to maximize program effectiveness.

The School of Education received a grant for \$746,956 from the U.S. Department of Education to significantly increase the number of highly qualified, certified teachers of students with visual impairments in South Carolina. We are on target to train an additional 48 teachers by the end of the grant. This is especially critical as an estimated 50 percent of certified teachers of students with visual impairments are expected to retire within the next three to five years.

- Non-Profit Management: Including churches, there are over 700 non-profit organizations in Spartanburg County alone. This program was initiated (when started it was the first program in South Carolina) from a need to enhance an educated workforce for non-profits. The curriculum is designed to help students fulfill their requirements for national certification (Nonprofit Leadership Alliance—NLA based in Kansas City). They are required to have 18 hours of nonprofit courses, and 300 hours of internship experience.

Mr. GOWDY. Dr. Miller.

**STATEMENT OF KEITH MILLER, PRESIDENT,
GREENVILLE TECHNICAL COLLEGE**

Mr. MILLER. Chairman Wilson, Congressman Gowdy, thank you very much for the opportunity to testify this afternoon.

Before I get into my formal comments, I want to point out that some of what you are going to hear me say you have already heard, and I point that out because that shows the level of integration you see in this area already, and, of course, we are working to deepen that, but it does illustrate the level of partnership that is there already. That certainly is positive.

Greenville Tech is a comprehensive 2-year college. We serve about 15,000 students a year in degree and certificate programs and another 20,000 students a year in some sort of workforce training, continuing education programs. This is across 4 campuses with 160 programs. The student body has an average age of 26, and I point that out because it illustrates who our students are, and they are not students right out of high school. They are the middle-age adult that maybe has a part-time job and family responsibilities. They are students that sometimes come back to us from the universities to change careers, to upgrade a skill. So we do have a mixture of students on campus, which provides for a unique experience for everyone.

Greenville and the upstate are fortunate to attract new firms and to see existing businesses expand. Greenville Technical College has played an important role in this success. Our job now is to work

with employers to bridge the skills gap that exists in manufacturing, health care, IT, and other industries. The revival of our economy requires a continued partnership of education and employers.

As an example, projections are that there will be several thousand jobs will be available in the advanced manufacturing sector just in the upstate of South Carolina in the next 3 to 5 years. Yet thousands of unemployed people are largely unqualified unless they get additional training and education. Greenville Tech is a part of a regional approach to address this issue by helping form and be an active partner in the Advanced Manufacturing Consortium, which is essentially colleges and the private sector coming together to address the need that is there.

And you heard an example up here during your first panel from your BMW representative when he announced the BMW Scholars program. That program takes individuals that probably would not be able to afford to quit a job to go back to school full time because of family and other responsibilities, but because of BMW's stepping up to the plate, they not only provide that scholarship while they are getting their education at Greenville Tech or Spartanburg Community College or Tri-County Tech, but then for I believe it is 20 hours a week, they are actually on site getting the hands-on experience while getting paid a salary. That program would not work just by Greenville Tech being there. It would not work just by BMW being there. But it is a perfect example of what we can do together and more of what we are working on together.

To attract the nation's best and brightest to manufacturing careers where they will fill the shoes of retiring workers, we are also part of the National Association of Manufacturers' Dream It and Do It program, essentially to help market and promote a manufacturing career to the young individual. You know, when we started the conversation with BMW in what has resulted in what is the Scholars program, my conversation with the president of BMW, he asked me, he said, how can we get more people, more young people, interested in the manufacturing sector, a career in manufacturing? The Dream It and Do It program is one of those programs. It is to enlighten us, you might say, about the high-tech environment in manufacturing, how it has changed over the years, and the wide range of careers that are available, and we are heavily involved in that program.

Greenville Tech is part of an upstate effort, which you have heard a little bit about, called the National Fund for Workforce Solutions. The purpose of this is to work with employers to reduce training and recruitment costs.

A unique program that the college has to connect the individual with education and the workforce is what we call Quick Jobs. Quick Jobs is 90 days' worth of training, and it can be in manufacturing, it can be in health care. The idea is an individual may not be able to quit their job and go back to school because they can't afford to do that. So the 90 days' worth of training gives them very basic skills, hopefully, to get an entry-level job and go back to work and earn a salary, and then start working at a certificate and a degree program.

Some of the tools that are important for us: Workforce Investment Act. This act has funded many Quick Jobs programs. Unfortunately, that number has decreased by 20 percent due to the reduction of funds in that area. As well, the Workforce Investment Act has been very supportive of Greenville Works, the consortium of economic development entities that you heard about earlier. That is certainly important.

How we make the connection with other parts of education: We work with area career centers in the K-12 system, bringing in 500 students at least a semester through our dual enrollment program.

And finally, some of the other critical federally funded federal programs that are very important to us: a TRIO program. There is a lot of staff and students from TRIO, which is a federally supported program that helps provide support for students by developing family connections and helping them overcome a number of different barriers.

And the other program that is very important is the Pell grant. Approximately 50 percent of our students benefit from Pell grants. That is over 7,400 students a year receiving over \$33 million a year. So think about how many students would not receive a higher education if it wasn't for the Pell grant. So we commend Congress for coming together with the recent debt limit extension legislation of \$17 billion over 2 years to shore up the finances of the Pell grant, because it does touch a lot of lives, and it certainly has a positive impact on this economy.

Thank you.

Mr. GOWDY. Thank you, Dr. Miller.

[The statement of Mr. Miller follows:]

**Prepared Statement of Dr. Keith Miller, President,
Greenville Technical College**

Education drives economic growth, but not just any education. When employers and colleges work together to grow a skilled workforce, the individual, the company, and the economy prosper. Greenville and Upstate South Carolina are fortunate to attract new firms and to see existing businesses expand. Greenville Technical College has played an important role in this success. Our job now is to work with employers to bridge the skills gaps that exist in manufacturing, healthcare, IT and other industries. The revival of our economy requires the continued partnership of education and employers.

Making the Jobs Connection

- A gap exists between the skills employers need and what workers bring to the table. Several thousand jobs will be available in the advanced manufacturing sector in Upstate South Carolina in the next three to five years, yet thousands of unemployed people are largely unqualified unless they get additional training and education.

- Greenville Tech is part of a regional approach addressing this issue. The Upstate Advanced Manufacturing Consortium will work to equip enough people with advanced manufacturing skills to support companies that locate and expand in the Upstate.

- The list of companies with manufacturing operations in this region reads like a who's who of industry, including BMW, BorgWarner, Bosch, General Electric, Gestamp, Milliken, Michelin, Nestle, and Timken. These companies and other provide a diverse array of manufacturing sectors with automotive, wind and gas turbines, tire and rubber, aerospace, plastics, metalworking, textiles, advanced materials, and consumer products represented.

- The transportation sector continues to grow. BMW leads the way, now the largest exporter of cars in the United States. BMW recently announced the company's new BMW Scholars program, an opportunity for Greenville Tech, Spartanburg Community College, and Tri-County Tech to help the company grow its workforce.

- To attract the nation's best and brightest to manufacturing careers where they will fill the shoes of retiring workers, Greenville Tech works with the National Association of Manufacturers on the Dream It. Do It. effort that invites young people to find and follow a passion into a manufacturing career.

- Greenville Tech is part of the Upstate effort to create an innovative workforce development project, made possible by the National Fund for Workforce Solutions. The purpose is to work with employers to reduce training and recruitment costs while helping people become qualified for higher skilled jobs that earn higher pay.

Helping People Re-enter the Workforce

- More than 230 nurses have re-entered the workforce after taking time away thanks to an online nurse re-entry option for RNs and LPNs. These are people like Diane Stewart, who completed the course in November 2010 and was sponsored by WIA through Trident Technical College. Stewart reactivated her lapsed nursing license and is now employed.

- The Quick Jobs with a Future program was developed in 2001 to give displaced workers and those going through occupational transition a way to gain relevant skills and enter the workforce in 90 days or less. Over the past ten years, Quick Jobs has helped 12,000 people. The program has been so successful that it went statewide in 2009 when the State Workforce Investment Board and State Tech partnered to use American Recovery and Reinvestment Act (ARRA) funding to support Quick Jobs training and get people back to work.

- Quick Jobs training has helped to write many success stories. For example, the woman who came to Greenville Tech when a layoff ended her 23-year career in a low-skilled manufacturing job. Sponsored by WIA, she completed the Physician Practice Health Information program and now works for a local hospital in medical records. Or the man who lost his job at a local plant when a fire closed it down. He completed a series of environmental courses, freelanced for local environmental consulting firms, and eventually became an employer himself, opening a company and hiring several people.

WIA Funding Makes a Difference

- Since many Quick Jobs programs are skill based but do not award college credit, those enrolled can't often qualify for financial aid. Workforce Investment Act (WIA) funding was critical in allowing students to use Quick Jobs to get back on their feet.

- With ARRA money exhausted and WIA funding reduced, we are now serving less than 20% of the number of the Quick Jobs clients we served with ARRA support.

- WIA funded incumbent worker training (IWT) grants have provided valuable assistance to companies to keep them and their employees viable and to reduce the risk of downsizing. Greenville Tech conducted IWT training for the life sciences and advanced manufacturing sectors last year. The chemical sector applied this year, but there is no funding for IWT at this time.

- WIA has also been very supportive of Greenville Works, a coalition of local economic development and educational groups. WIA's ability to continue to fund this strategic initiative has been diminished this year.

Making the Education Connection

- Over 500 students each semester from Greenville County Schools Career Centers earn dual credits, which count toward high school graduation and college, in programs including automotive technician, auto body, building construction, culinary arts, aircraft maintenance, AutoCAD, and welding.

- Our Early College project allows juniors and seniors to earn college credit and experience college work, saving them time and money.

- Greenville Tech works closely with all major four-year colleges and universities in the state. We have joint admission agreements, bridge programs, articulation agreements and a close collaboration with USC Upstate through Upstate Direct Connect.

- Greenville Tech is a partner in the University Center of Greenville, a consortium of higher education institutions working together to bring the people of Greenville greater access to educational opportunities.

Pell Grants are Critical

- Without Pell grants, the single mother who struggles to provide for her family, the first generation college student hoping to raise his standard of living, and the unemployed individual who needs updated technical skills to qualify for one of today's jobs would not have the means to attend Greenville Tech.

- Approximately 50% of our students benefit from Pell grants. That means 7,412 Pell grant recipients receiving \$33,457,407.66.

- Steep cuts in Pell would leave these students with a much heavier dependence on student loans, a large loan debt upon graduation, the possibility of greater dependence on Lottery Tuition Assistance that might trigger reductions in awards, and ultimately, fewer students enrolling, an effect that would impact employers who need a steady supply of well-trained workers.

We commend Congress for putting into the recent debt limit extension legislation \$17 billion over two years to shore up the finances of the Pell Grant program. This action will ensure that all eligible students can continue to receive the \$5,550 maximum grant. This support for Pell was bi-partisan and we urge Congress to continue to act to keep this critical program whole.

State Funding Has Declined Dramatically

- State funding for our students has decreased dramatically. For the 1999-2000 academic year, the state provided Greenville Tech with \$1,473 per student. By 2010-2011, that amount had been reduced to \$677.

- Tuition and fees make up a greater portion of our operating revenue than they once did. In 1990, tuition and fees were only 5.8% of the operating revenue, but in 2010, this source of funds was 52.7% of the total. When we have to raise tuition and fees to continue to meet our goals of providing high quality opportunities for learning, we impact the people who can benefit from what we offer.

Mr. GOWDY. Ms. Hickman.

**STATEMENT OF AMY HICKMAN, CAMPUS PRESIDENT,
ECPI COLLEGE OF TECHNOLOGY**

Ms. HICKMAN. Chairman Wilson, Representative Gowdy, thank you for holding this field hearing.

America and South Carolina are facing tough economic times. We have already alluded to the high unemployment rate in the United States, as well as in South Carolina. Creating jobs is imperative for the U.S. to maintain its standing in the world.

The South Carolina upstate, home to ECPI's Greenville campus, has a long history of tailoring education to the needs of local industry, which we have heard a lot about today. That once meant textiles. Now it means high-tech manufacturing and a diverse industry driven by population growth.

ECPI University is a strong part of the community of public and private institutions that train the local workforce. Accredited by the Southern Association of Colleges and Schools, its 13 campuses offer programs focused on skill-based, employer-driven education. Our 3 South Carolina campuses, Greenville, Columbia, and Charleston, employ 160 South Carolinians. In 2010, ECPI generated over \$15 million in taxable revenue to the State. This is a public-private partnership that yields positive results, workforce training, and revenue for local government.

Established in 2000, the Greenville campus has an annual enrollment of over 500. We offer a variety of programs from diploma to bachelor's degrees in nursing, allied health, technology, and business. Our associate's degree can be completed in 18 months, a bachelor's degree in 30. Adult students know that completing a program that quickly with a convenient schedule has value as they can enter the job market with new skills faster.

As the upstate job market has changed, the quality of jobs and incomes have risen. For example, Concentrix is able to provide high-level technical customer service from a hub in Greenville because they can recruit students such as those from our network se-

curity program. Colleges like ECPI also play an important role in retraining workers displaced by the recent recession. My written testimony contains examples of our graduates' successes, as well as our strong graduation and placement rates.

Our graduates play a vital role in meeting the changing health care needs of the region. The Greenville campus has doubled our practical nursing program in the last 2 years to nearly 100 current students. Many graduates staff the growing number of assisted-living facilities in the areas that serve our aging population.

It is not by accident that we provide the skills that employers most need. Twice a year employers examine our programs to evaluate whether they address the changing trends in their industries, and we revise and refocus our curriculum based on their recommendations.

Our attendance at events sponsored by organizations like InnoVenture, sometimes on this campus, helps us remain in tune with trends and developments in the business community. For every program that we launch, we survey employers to determine their needs and to seek externship sites, which all of our students are required to complete.

Based on their recommendations, last year we launched programs in database programming and health care administration. We are now looking to address the needs of an increasingly mechanized manufacturing industry and a quickly digitizing health care system.

Employers who relocate to the upstate have said repeatedly that a skilled workforce is a key factor in their decision. Even so, I have yet to hear from any that they have a surplus of highly qualified applicants.

The vision for Greenville's future will make us a model of environmentally sound community planning and technological breakthroughs, requiring an increasingly skilled pool of labor. To satisfy that need, it is vital that students have a wide range of educational choices available, and ECPI offers a strong option among those choices.

Our career services department works directly with employers to match graduates to their particular needs, which is why companies like Draexlmaier and Windstream return to us again and again. Our strong reputation and quality of education are equipping graduates with the skills to succeed in the workforce and to help companies grow.

I hope the subcommittee has learned new information from us about the vital connection between higher education and filling jobs, and I look forward to your questions on how higher education plays a critical role in getting America back to work.

Mr. GOWDY. Thank you, Ms. Hickman.

[The statement of Ms. Hickman follows:]

**Prepared Statement of Amy Hickman, Campus President,
ECPI Greenville, South Carolina Campus**

Chairwoman Foxx, Representative Gowdy, and other distinguished Subcommittee Members, my name is Amy Hickman and I am the Campus Director for ECPI University's Greenville, South Carolina Campus. Thank you for holding this field hearing and for the opportunity to share my thoughts with you on the topic of "Reviving our Economy: The Role of Higher Education in Job Growth and Development."

America and South Carolina are facing tough economic times. The national unemployment level is 9.1 percent and South Carolina's unemployment rate is over 10 percent. Creating jobs is imperative for the United States to maintain its standing in the world. I commend you on holding this hearing and exploring the essential role of higher education in a national job creation agenda.

The region we call the South Carolina "Upstate," home to ECPI's Greenville campus, has a long history of providing education tailored to the needs of local industry. That once meant textiles, now it more often means high-tech automotive manufacturing and the diverse technology-focused support industries driven by the population growth we have been fortunate to see over the last two decades. The Greenville area has become a popular relocation destination for retirees, but also for working families looking for a strong job market and a relatively low cost of living. ECPI University is a strong part of the Upstate higher education community of public and private institutions that train students who become part of the local workforce. ECPI's 13-campus system offers programs that focus on skills-based, employer-driven education and includes three South Carolina campuses: Greenville, Columbia, and Charleston. Currently, ECPI employs 160 South Carolinians, all whom are dedicated to ensuring our students succeed. As a tax-paying corporation, ECPI generated over \$15 million in taxable revenue in 2010 to both the federal government and the State of South Carolina. This is a public-private partnership that yields positive results: workforce training, jobs filled, employer demands met, and revenue for the local government.

Established in 2000, the Greenville campus has an annual enrollment of over 500. Many of these students came to us after having attended other colleges but found that they fit at ECPI because of its career-readiness focus and condensed, flexible programs. We offer a variety of programs at our Greenville campus. Our School of Technology offers an associate's program in Electronics Engineering Technology and bachelor's programs in Network Security, Web Development, and Database Programming. We also offer Business Administration programs with a unique technology focus. At our School of Health Sciences on campus, we offer programs in Medical Assisting, Medical Administration, Practical Nursing and Healthcare Administration and we plan to increase the programs we offer in the health fields on our campus.

A real advantage for ECPI students is that our associate's degree can be completed in 18 months and a bachelor's degree in 30 months. Adult students know that completing a program quickly with a convenient schedule has value in their lives as they can get into the job market with new skills faster. The typical student at ECPI is "non-traditional"—adult, independent, working, and often a parent and/or first-generation college student. At ECPI Greenville, we have an overall cohort graduation rate of 61%, which is well above the graduation rate at other colleges serving a similar student population. ECPI's selective admissions process, smaller class sizes, and work-like environment allow our students to succeed at high rates. We attribute our students' graduation success not only to our academic advising and tutoring, but also to our mandatory attendance policy and proactive approach to student success, which allows many to excel when they had struggled before. ECPI also has successful employment rates: our 2010 graduates range from over 70% placement to nearly 100% in some programs, with an overall average of 80% placement.

The programs ECPI offers are purposely focused on the technology and health care fields where there is consistent and growing demand for skilled workers in the Upstate region. As the Upstate job market has changed, the quality of jobs and incomes have risen. For example, companies like Concentrix provide high-level technical customer service. They are able to operate a major hub in Greenville because they can recruit students such as those from our Network Security Management program. Over the last eight years in Greenville, we have graduated 775 students with degrees in computer science, as part of a University system that is second in the nation in the number of computer science associates degrees awarded last year, according to Community College Week. The fact that our students apply the knowledge they learn, both in the classroom and on externship, means they enter the workforce highly prepared. As an example of that, an Electronics Engineering Technology graduate from ECPI recently hired by Kemet, a global high-tech company based in Greenville, South Carolina, was told by Kemet that they typically keep employees on contract for over a year before making a permanent hire. Our graduate, however, spent only two months as a contractor before being permanently hired. Her success has been truly life-changing: she attended school under the GI bill and persisted despite mounting medical bills from a child's sickness and a divorce. Her success story demonstrates ECPI's ability to offer quality, flexible education that prepares workers and meets employers' needs for qualified workers in the region.

Colleges like ECPI also play an important role in retraining workers displaced by the recent recession and in need of career re-direction and re-training. As an example, one student came to us after having been laid off from Timken and believed attending ECPI was his best option for obtaining higher education. He is now about to graduate with a degree in Electronics Engineering Technology and has been rehired by Timken and promoted into their engineering department.

Our graduates also play a vital role in meeting the changing healthcare needs of Greenville's population. One of our graduates entered our medical assisting program after having moved from job to job for years with little stability. Shortly after graduation, she began working in a doctor's office. Once she became certified as an RMA, she was hired, like many of our graduates, by the Greenville Hospital System and now has a stable career. It is important to note that as other schools that are dependent on public funds have limited or closed their practical nursing programs, ECPI has doubled our nursing program in the last two years to nearly a hundred current students. Most often, our graduates staff the increasing number of assisted living facilities in the area that will meet the needs of a growing population of retirees. With over 23% of our population age 55 or older, these graduates will be crucial to providing the care needed for our aging population, particularly as Greenville continues as a popular retirement destination.

It has not been by accident that we provide the skills our employers most need. Twice a year, our employers examine our programs to evaluate whether they address the changing trends in their industries. We revise and refocus our curriculum based on the recommendations of those in the industry for which our students are preparing. We look to design programs the Upstate will need as we move into a future that requires more technical and health-focused skills from its workforce. For example, to meet demand we recently applied for and the Southern Association of Colleges and Schools recently approved our request to offer a master's degree in computer science, which we hope to offer in the near future. Our attendance at events sponsored by organizations such as InnoVenture and the Greenville-Spartanburg-Anderson Technology Council helps us remain in tune with trends and developments in the business community. For every program that we launch, we survey employers to determine their needs and seek externship sites. Employers are eager for our students to serve as externs, both as a way to complete projects and as a testing ground for future employees. Based on employer recommendations, in the last year we have launched new programs in database programming and healthcare administration. We are currently planning programs that will address the needs of an increasingly mechanized manufacturing industry and a quickly digitizing healthcare system. We hear again and again from employers who relocate to the Upstate that a skilled workforce is a key factor in their decision. Even so, I have yet to hear from any of them that they have a surplus of highly qualified applicants. The vision for Greenville's future will make us a model of environmentally sound community planning and technological breakthroughs, requiring an increasingly skilled pool of labor. To satisfy that need, it is vital that students have a wide range of educational choices available, and ECPI offers a strong alternative choice.

Finally, our training is not limited to technical skills our graduates need for a career field. Our focus on attendance and a required professional dress day are an additional important part of how we provide students with the soft skills employers increasingly seek. Our general education courses focus on communication skills and critical thinking, areas employers generally find lacking in many other college graduates. No matter the program, our students are well prepared for a paperless workplace, having been instructed in a virtually paperless classroom. We train students on resume-building and interview skills. And we don't stop assessing how well our students are prepared when they graduate: when our students are hired, we survey our employers for additional feedback as to their performance.

Our customer service surveys consistently reflect the good job we are doing, with 95% of our students indicating they would recommend the school to a friend and 21% of enrollments referred to ECPI by students and graduates. Historically, our graduates progress quickly in their careers and frequently become employers of future graduates. Our career services department routinely works directly with employers to match our graduates to their particular needs, which is why companies like Draexlmaier and Windstream return to us again and again to fill their openings in information technology. Even graduates who relocate maintain their ties with us and generate referrals, for instance, an alumnus working as a systems architect consultant for the FBI who has directed recruiters our way. Our strong reputation and quality of education are equipping graduates with the skills they need to succeed in the workforce at a time when these skills are most needed to help companies grow. I hope the Subcommittee has learned new information from us about the vital

connection between higher education and filling jobs. I look forward to your questions on how higher education plays a critical role in getting America back to work.

Mr. GOWDY. I will recognize myself and then recognize the distinguished gentleman from the Midlands, who also is a subcommittee chairman on Armed Services and serves in Congress with great distinction, and it is a pleasure to serve with.

President Barker, you indicated in your statement Clemson has developed several initiatives with regard to student engagement, as I underlined that phraseology a couple of different times. Can you elaborate on that and why you think that is so important?

Mr. BARKER. Yes. Let me mention two programs and give a couple of quick examples. The first would be what we call internal co-ops. We want our students to have co-op opportunities off campus with BMW and Michelin and GE in the typical co-op, but we also believe we have the opportunity to create internal co-ops, and our goal is 500 of those co-ops in which students not only—we teach architecture, and we also build buildings. We teach finance, and we also do finance projects to make things happen. Why not bridge the two together? Instead of having one thing that is in the classroom and one thing that is in the administration, if you would, why not bridge them together? So we have created the opportunity for that to happen, and our target is 500 engaged students in that layer of depth in their education.

The second is creative inquiry. This is a 3- to 4-semester experience when students in groups of about 10 tackle a project that the students themselves are particularly interested in. It has resulted in some examples that I would illustrate: designing a tire that allows lunar rovers to efficiently travel across the nation's surface. We did that with Michelin. It gave us an opportunity to engage again in that level. Developing a clean water system for the country of Haiti. Designing buildings to reduce energy consumption. Developing a campus tour app for iPhone so you can travel across our campus from an app on your iPhone. And writing and producing an original play. And publishing a collection of slave narratives as a book publication. Gives you an idea of two ways in which we engage students outside the traditional learning environment, oftentimes engaging with industry and others outside of campus that creates a richer environment for students.

Mr. GOWDY. Thank you, Mr. President.

Dr. Moore, I noted in your opening statement you used “accessible, affordable, accountable.” You also mentioned transfers. Can you tell us a little bit about the demographics of your school and how that may or may not impact curriculum, and connect it up with higher education, if you can.

Mr. MOORE. As I said, we are educating the population of this part of the State of South Carolina, and our demographics reflect that almost exactly. We are right at 60 percent Caucasian, 26 percent African American, and a mix—the rest of the students are a mix of Hispanic and Asian and other ethnicities. It makes for a vibrant educational community.

I am convinced out of some reading—there is a good bit of research—that meaningful education experiences demand frequent and ongoing encounter with the different. It is when we encounter

something that is fundamentally different from the way we have known things to be or understand things, and that ethnic diversity creates a kind of environment where you have very different backgrounds, very different perspectives, a rich and vital educational environment for this part of the people of South Carolina, and that is the world they will be living and working in the rest of their lives. So they are encountering that where they are, and it really does enrich our community and our educational experience.

Mr. GOWDY. Thank you, Dr. Moore.

Dr. Miller, you may study Antigone. You may spend some time with the musings of the Danish existentialist Soren Kierkegaard. That probably is not going to help you get a job this day and age; although it is fascinating to read. How do you see the balance between that critical thinking that would come from reading either/or or Antigone and the practicalities of the modern-day workforce?

Mr. MILLER. I will answer that with an example. Fifteen years ago, an employer would say to me, I need people trained to be able to do something technical, and that was the end of it. And today what I hear from employers is, I need somebody trained to do this thing that is something with electronics, but they need to be able to think for themselves and work as a team. And that is a significant difference.

And so I guess what I am saying is while Greenville Tech provides a lot of the occupational training education, what you have seen over the years at the 2-year level is we have also incorporated the liberal arts education, and that is where even a strong partnership between the 2-year colleges and the universities is absolutely critical because we can provide a lot of that hands-on occupational education, and, of course, the universities can take that a step further, but in addition the liberal part of that, to provide the critical thinking skills and so on.

So, equally as important, I think the first panel referred to it as soft skills. Same thing; be able to think for yourself and work as a team is critical.

Mr. GOWDY. Thank you, Dr. Miller.

Ms. Hickman, you mentioned surveys that are sent out, I imagine, before you make changes in your curriculum. I also noted that you receive feedback on a consistent basis from employers who hire your graduates. What are you hearing in both your surveys and your feedback that others could benefit from?

Ms. HICKMAN. Well, probably the most common remark and one that we like the best is how many more just like that can you send us and—

Mr. GOWDY. Neither of us hear that very often. Can you say that again? Never heard it before.

Ms. HICKMAN. They ask us, if you had 10 more just like that, we would take every one of them. And, in fact, we have—of late, some of our employers are not even waiting until our students graduate, so that we have students who are hired with the understanding that they will, for instance, pass a CCNA certification. It does sometimes mean we lose them from our in-seat classes, and they have to complete their degree on line, which they are able to do depending on their work schedule.

But overwhelmingly the feedback from our employers is positive, and I think a lot of that is because we do take great care to match the graduate to the position. We don't send out blanket groups of resumes every time there is a job opening from one of our employers. We look at the skill set of each individual student, we look at what that student's ultimate career goals are, and we look at the needs of that employer, and we really try to send candidates to each employer who are going to be a good fit for that particular job.

Mr. GOWDY. Thank you.

I will now recognize my distinguished colleague Congressman Wilson.

Mr. WILSON. Thank you, Congressman Gowdy.

And President Barker, I want to thank you, First Lady Marsha Barker for your service. You have helped elevate Clemson to be one of the finest universities in the United States.

I also am grateful for Clemson, one of your graduates, Senator Strom Thurmond. I had the privilege of being an intern in his office several years ago. My wife Roxanne was an intern. Our two oldest sons were interns in his office. And he taught us that every person that we represent is important, and I am sure that he learned that as being a cadet at Clemson College.

With that, tens of millions of people drive by every year the International Center for Automotive Research, ICAR. When they look at this, I want them to think of what we are doing today, which is promoting job development. Can you tell us, again, some specific examples of how, due to the research here, that jobs have been created across our country?

Mr. BARKER. Well, if you think about the automobile, it is an extremely sophisticated platform of technology. In it, we deal with energy conservation. We deal with power train engines, drive trains. We deal with aesthetic issues of all types, you know, what color, what style, all those kinds of things. And so you have in an automobile some of the most sophisticated computer equipment, some of the most sophisticated seats. Just a seat in an automobile, how many times it moves back and forth, what it does to your back, whether it is heated or cooled or both, and that is a powerful piece of technology that is every day having options not just for the automobile, but the discoveries that are happening regarding energy conservation or power trains or, for that matter, furniture.

So it is an extremely effective piece of technology, and the bits and pieces apply a lot of different parts of our economy. And it benefits from technical advances in terms of tier one suppliers, for example, which we work with, too, people that produce and manufacture some of the component parts that get assembled at BMW, and that is an important component of it as well.

Mr. WILSON. And actually I saw that firsthand in visiting BMW a number of years ago. I was startled to find out that the paint on the vehicles is water-based, environmentally sound. I would have never imagined that it would be environmentally sound, water-based paint on vehicles.

And, Dr. Miller, South Carolina has been a pioneer in technical and community colleges. Actually it was a committee like this that met 50 years ago with U.S. Senator Fritz Hollings and Congressman Floyd Spence, and they came up with the early pioneering

view of creating institutions that would help train persons to be able to work immediately in manufacturing. Can you tell us how that is being done today?

Mr. MILLER. Certainly. And actually, the 50th anniversary of Greenville Tech is September 2012. So we are coming up on that anniversary, but how we do that, of course, has changed over the years dramatically, and there is not one way that it happens, which is important, because the needs of manufacturers tend to vary. There are a lot of similarities, but a lot of differences, too.

But I will point out the most important component, which I believe that representatives of BMW also pointed out, too, and that is the apprenticeship model, the hands-on model. We certainly know from years of experience in higher education that what happens in the classroom is absolutely critical, but we now know that for that student to retain that, it has to be applied, and that is the importance of the apprenticeship model and the applied model, which is essentially the same.

So we see that evolving not just with large manufacturers, such as BMW or Michelin, but even small businesses that we are about trying to set up consortia of small businesses where that same applied approach can be addressed. And I believe President Barker addressed that a little bit, too, because that is a critical aspect that helps with that retention of what happens in the classroom.

Mr. WILSON. It just provides such opportunities for the people of our State, young people in particular.

And, Dr. Moore, I am very grateful for the original campuses of USC. I represent Aiken, Buford, Salkehatchie, and so I know how important your regional campuses are. And can you tell—have any suggestions on how businesses and institutions can work better together to develop jobs?

Mr. MOORE. Oh, goodness. It is the whole subject of the hearing here, and it takes a partnership. It takes communication. It takes sitting at the table together and looking at the skills you need, and as Dr. Miller pointed out, those—what someone referred to as soft skills, being able to work in teams, critical thinking, analytical thinking, ability to solve problems in a way that is not more complex than historically has been the need, and identifying that; and the business people communicating directly with faculty and not just chancellors and presidents about what they need those people to have when they come out and go to work. We need more connection between the on-the-ground work of the institution, the classroom and laboratory education of students, and the business and industrial community.

Mr. WILSON. And I know what you have done to provide an entry for young people to be able to begin higher education.

I want to conclude. Ms. Hickman, the strong diversity of American higher education is one of our nation's greatest assets. Do you have any sense from your students how they selected your institution?

Ms. HICKMAN. I think that probably the majority of them have been looking for something that they didn't find at more traditional institutions, and oftentimes for them that is a personal connection, a personal touch that keeps them connected to every faculty member, every staff person, every administrator that they encounter.

Some of the students in our education system that we fail, we fail because they don't feel cared about, and they get shuffled away and lost. And so institutions like ours make a great effort to cater to those students who had previously perhaps been lost and to find that connection that is going to keep them coming to class where previously they might have given up and just stayed home.

Mr. WILSON. You, again, provide a great opportunity. Thank you very much, and I return to the current chairman.

Mr. GOWDY. Congressman Wilson, would you be amenable to me doing what I did last time, which is asking—

Mr. WILSON. Actually, hey, I am so grateful to be in Trey Gowdy's district. Listen, I truly want to defer back, and, again, I am just so proud of you.

Mr. GOWDY. Can I interpret that as a yes, that you would allow me a lightning round understanding—

Mr. WILSON. Yes, please.

Mr. GOWDY. Dr. Barker, I remember the first time you came to Congress because you did not ask for a single solitary thing, which puts you in a very small group of people, and I kept waiting the entire time, the entire time, what is he going to ask for, what he is going to ask for. And then 30 minutes after you had gone, it finally dawned on me he really is not going to ask for anything, and you didn't.

So let me ask you, what does government do well, what does it do poorly, how can we do a better job at the federal level? Acknowledging there is a robust debate over where the responsibility for education lies, how can we do a better job?

Mr. BARKER. Let me make one suggestion here that may seem odd, but one thing you can do is measure the return on investment, measure the amount of tuition paid by a student with what their salary turns out to be 4 years out of school, 5 years out of school, whatever your ratio you want to use. I think that kind of question about return on investment is one which I have seen some analysis done recently, and I wouldn't suggest this if Clemson didn't figure pretty well in it. We were number 6 in the United States ahead of all the Ivy League schools, I might mention, in terms of return on investment. That is a suggestion I would make.

Mr. GOWDY. Thank you.

Dr. Moore, you mentioned that University of South Carolina Upstate had its origins in nursing. I think you also mentioned in your testimony the number of your graduates that tend to stay in the area.

Mr. MOORE. Correct.

Mr. GOWDY. Given the health challenges that we have in this country and the need for more physicians and presumably more nurses, what are you doing to meet that, and how can we help?

Mr. MOORE. Nursing education is very expensive. It is a very small student-to-faculty ratio, which is required by the accrediting bodies. We are up for accreditation this fall. We will have a site visit. Nursing is an area where I think the acknowledgment that higher education is a public good, not just a private good, is important. There are areas of life where the absence of people educated in certain ways are a huge detriment to that part of the world.

So as we think about how we think about funding higher education, particularly in certain areas, to keep before us the fact that this education really is a public good and a necessity for the well-being in that community; being accessible and affordable; remaining affordable in nursing education; enabling people of less than great means to pursue a career in health care, a very meaningful career, and pursuing it; Pell grants, need-based aid, ways for those people to be able to afford the high cost, public and private, individual and collective, of educating in those particularly high-demand, high-needs, high-tech areas. It matters.

Mr. GOWDY. Thank you.

I am going to ask the same question of Dr. Miller and Ms. Hickman. Can you give us an example of perhaps a well-intended regulation in the educational realm that wound up having an unwittingly pernicious impact on education? I know how Pell grants would impact the various institutions, but are there other regulations, because from time to time they get proposed to us on E&W. Is there one that leaps to your head, I know what you all were thinking, but if you had been thinking right, you never would have done this?

Mr. MILLER. Certainly. I mentioned briefly the Workforce Investment Act, and that, as I saw, when that first came to the surface some years ago, the intent was to bring together the private sector and higher education partnership, which absolutely needs to happen, but I think over the years, and as it flowed through the federal government, through the State governments, we lost focus on that. And actually the most critical part now in how do those partners come together and identify the training and deliver the training almost seems secondary, and the primary thing is how do we function with the system, a lot of overhead and that type of thing.

So I think the concept is still good, and the intent is still good, but I think we need to step back and readdress that a little bit.

And then if I could mention one more thing. This isn't a regulation per se. There might be some regulations that prevent this, but I think if there was one big thing that the federal government could do to help promote more of what we are doing, and that is the economic development, the workforce training.

When we think of education, we think of the K-12 sector. Then we have the 2-year colleges and 4-year colleges and universities, public and private, all along that sector. But quite often in this country, we think of them as three different components. I think what is more workable today is that we look at them as one total component, and I am not saying get rid of one of those components. I am just saying bring them together, reduce the gaps in between. So, if the federal government could ever incentivize us to that. There are wonderful partnerships here that exist already, but to incentivize that and take that a step further, I think we would see a lot of positive results out of that.

Mr. GOWDY. Yes, sir.

Ms. Hickman.

Ms. HICKMAN. Well, as Mr. Barker alluded to legislation that might measure return on investment, and there certainly is legislation that has attempted to do that. Unfortunately, it has only been applied to one sector of the educational spectrum, and I think that

any legislation that reduces the range of educational choices that are available to students is poor legislation. Certainly we do want our students to get their money's worth when they are paying tuition, but if we are going to set that as a standard for measuring an institution, we should measure all institutions that way.

Mr. GOWDY. On behalf of Congressman Wilson and myself; and Chairman John Kline from Minnesota, who I hope each of you will have an opportunity to meet, a delightful Congressman, former Marine if I am not mistaken; Representative Wilson; Virginia Foxx from North Carolina, very grateful to them for allowing us to have—yes, sir.

Mr. WILSON. And one bit of history you need to be aware. This subcommittee meeting today is the only subcommittee meeting on the issue of jobs this week, possibly this month, and so it is a real testament to Congressman Gowdy, to this community, our country certainly. We have 14 million Americans without jobs, and so we need to be focused on this issue, and I would just want to thank, as you have already done, our Chairman John Kline for authorizing this. Chairwoman Virginia Foxx. We have got people like Trey Gowdy who are sincerely interested in trying to help people get jobs.

I know that next week—I am looking forward—every year I do a bus tour, week-long bus tour, around the district that I represent to thank educators, employers for helping create jobs, and, again, I am grateful to be here today, and thank you for your leadership, Congressman Gowdy.

Mr. GOWDY. Thank you, Congressman Wilson, and I want to echo your words of thanks for the E&W Committee, who—I always smile when I see on television that we are on vacation this month. Let the record reflect there is at least 1 day where they got a little bit of work out of us. But for the folks who don't live in this area who traveled to help us put this hearing on, and especially the folks at CU-ICAR for their hospitality, and everything could not have been better handled and better run.

And our panel of witnesses, again, I know I said it with the first panel. You are each worthy of a panel of your own. So thank you for sharing your perspective and visiting with us.

With that, I am going to thank you personally and try to be a good steward of your time, and, Congressman Wilson, I look forward to seeing you very soon. And with that, I believe we are in recess.

[Whereupon, at 3:22 p.m., the subcommittee was adjourned.]

