Keeping America Competitive:

Addressing the Skills Gap in Manufacturing

A Manufacturing Sector Summit, sponsored by: The Society for Human Resource Management (SHRM), and the Employment and Training Administration and the Office of Disability Employment Policy of the U.S. Department of Labor

Sunday, June 24, 2012
# Keeping America Competitive: Addressing the Skills Gap in Manufacturing

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Meeting Proceedings

A Manufacturing Sector Summit, sponsored by: The Society for Human Resource Management (SHRM), and the Employment and Training Administration and the Office of Disability Employment Policy of the U.S. Department of Labor

The Published Agenda for the Summit

Keeping America Competitive: Addressing the Skills Gap in Manufacturing

Sunday, June 24, 2012

8:00am – 12:30pm (doors open at 7:30 for breakfast)
Room B401 - B402
Georgia World Congress Center

Join SHRM, the U.S. Department of Labor and leaders in the HR community for an innovative and interactive discussion of workforce challenges and solutions specifically facing the manufacturing industry. As you struggle to find and retain talent with the necessary skills, this half-day solution-oriented summit will provide you with effective practices, resources and support to combat the skills gap facing your organization.

*Attendance at this unique HR summit is free to all SHRM annual conference attendees who register for the event.*

*Please note: Sessions and speakers are subject to change.*

Session Times

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<td>8:00am – 8:15am</td>
<td>OPENING REMARKS: Welcome from SHRM and the US Department of Labor</td>
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<td>• Hank Jackson, president and CEO, SHRM, Alexandria, Va.</td>
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8:15am – 9:00am  SESSION:  
The State of the Manufacturing Skills Gap

What is the current state of American manufacturing and the search for skilled workers? What does the research say about our strengths and challenges? Join us for an overview of the industry that explores the current state of affairs in this turbulent period of our economic history. You’ll leave this session with food for thought and a clear indication of what’s next for American manufacturing.

Session introduced by Mike Aitken

- Mark Schmit, Ph.D., vice president, Research, SHRM, Alexandria, Va.
- Lynn Shotwell, executive director, American Council on International Personnel, Washington, D.C.
- James Schultz, advisor to HR VP, Chevron Corporation, San Ramon, Ca. and chair-elect, SHRM Foundation Board of Directors.

9:00am – 9:45am  SESSION:  
Tools and Resources for Employers from the Department of Labor

What does the Department of Labor have to offer to help address staffing and skills gap for the manufacturing industry? Quite a lot, they say. This panel of DOL leaders will describe some of the myriad of programs and initiatives that address these issues -- from Job Corps to Veterans training programs. You will leave this session an extensive list of resources you can put to work right away.

Presenters:

Session introduced by Carl Fillichio

- Jane Oates, assistant secretary of employment and training administration, U.S. Department of Labor, Washington, D.C.
- Kathleen Martinez, assistant secretary of labor for disability employment policy, U.S. Department of Labor, Washington, D.C.

9:45am – 10:00am  Break
10:00 am – 11:45 am

**SESSION:**
**Effective Practices and Community Solutions**

Companies large and small will share best practices that showcase community based partnerships and strategies that have yielded proven results. You’ll leave this session with practical ideas and details about solutions that you can tailor to your own community and company.

**Part I (10:00 am – 10:45 am)**

*moderated by Mike Aitken*

- Brent Weil, senior vice president, The Manufacturing Institute, Washington, D.C.
- Steve Adams, deputy director, National Fund for Workforce Solutions, Boston, Ma.
- Wayne Burton, president, North Shore Community College, Lynn Ma.

**Part II (10:45am – 11:45pm)**

*moderated by Carl Fillichio*

- Michael Pearson, president and owner, Union Packaging, LLC, Yeadon, Pa.
- Karen Stang, Operation IMPACT Program Manager, Northrup Grumman Corporation, Los Angeles, Ca.
- Sandy Nott, general manager, human resources, Toyota Motor Engineering and Manufacturing, NA, Inc., Erlanger, Ky.

11:45 am – 12:15 pm

**NETWORKING & SHARING:**
**Tell Us What You Know and What You Need**

Interact with your colleagues to explore a series of themes related to your own company’s skills gap challenges and effective practices. Seize this opportunity to let the Department of Labor know what resources and supports would be most helpful to you. Reports that come out of this session will give the experts and policymakers further insight into achieving the right results.

*Session moderated by Carl Fillichio*

12:15 pm – 12:30 pm

**Closing Remarks & Call to Action**
"From SHRM’s vantage point, the Skills Gap is the one issue that presents the most immediate concern and threat to our economy. It is the barrier that is keeping our nation from employing millions of workers right now, which in turn will keep us competitive in the global marketplace."

Betty Francis
Incoming Chairman
The Society for Human Resource Management

Executive Summary
Manufacturing studies report that 90 percent of all manufacturers in the United States are experiencing a shortage of qualified workers. Despite high unemployment statistics, more than 600,000 jobs, most of them technical, are going unfilled. Manufacturers say that this "skills gap" is impacting their bottom lines, their growth potential, and in the past it has caused many to locate their facilities outside of the United States.

Today, rising labor costs overseas, higher shipping costs and concerns about safeguarding intellectual property are driving companies to step up their operations in the United States. These organizations are eager to find creative solutions to their skills needs.

On June 24, 2012, the Department of Labor’s Office of Disability Employment Policy (ODEP) and the Employment and Training Administration (ETA), under the leadership of Assistant Secretaries Kathy Martinez and Jane Oates partnered with the Society for Human Resource Management (SHRM) to explore this issue.

A Manufacturing Sector Summit: "Keeping America Competitive: Addressing the Skills Gap In Manufacturing" was convened prior to SHRM's 2012 Annual Conference and Exhibition held in Atlanta, Georgia. The half-day event drew a standing room only crowd of more than 270 participants in human resources at manufacturing companies to hear a diverse cross section of speakers from government, manufacturing, and from HR executives at leading corporations.

Session I began with an overview of "The State of the Manufacturing Skills Gap." It continued by offering "Tools and Resources for Employers from the Department of Labor" in Session II, and concluded with a presentation of "Effective Practices and Community Solutions" in Session III.

In each session key themes emerged that were thoroughly explored by the speakers. The following are key points raised in each session:

Session I: The State of the Manufacturing Skills Gap
- The manufacturing skills gap presents an immediate challenge to our economy.
• Manufacturing is leading the way out of this recession: Hiring expectations for manufacturers are on the rise, reaching levels that existed before the recession.

• The high skill technical jobs – scientific and engineering (managers and executives), skilled trades – are the ones that are most difficult to fill.

• The educational system is not providing employment-ready candidates.

• Manufacturing jobs are no longer being promoted as good careers that can provide a quality middle-class lifestyle for families.

• It will take collaboration of government policy-makers, educators, non-profits, NGOs and the manufacturing industry to help solve skills gap issues.

Session 2: Tools and Resources for Employers from the Department of Labor

• The Department of Labor’s ETA is working with manufacturers, community colleges, community-based organizations, and career and technical schools to provide training grants that specifically address the needs of employers.

• Retraining workers for new technological skills is a key innovative effort of DOL’s ETA.

• Many employers have addressed their skill needs by seeking candidates with disabilities, including returning veterans, who may have visible and invisible disabilities. DOL and ODEP provide support and tools to assist with recruiting, hiring and retaining workers with disabilities.

• Training tools that address "soft skills" and many other resources are available through DOL Web sites including www.DOL.gov/ODEP, the Job Accommodations Network at www.askJAN.org and the Employer Assistance and Resource Network at www.askEARN.org.

Session 3 – Parts I and 2: Effective Practices and Community Solutions

• A standardized skills certification system is an effective, strategic approach that can transform hiring strategies by pinpointing the most qualified candidates.

• Community foundations, United Way organizations, and workforce investment boards should pool their resources to help low-income workers get the skills they need.

• Employers should be at the table with community and educational organizations to help design the curriculum and define the required skills. They should feel comfortable talking about their concerns and needs.

• Educational training programs are most effective when student participants see a job at the end of the training. Some of these "learn and earn" strategies include registered apprenticeships and on-the-job training.

• HR managers should look in non-traditional places for skilled workers – immigrants, veterans, people with disabilities, single mothers. Many come pre-trained in the "soft skills" like dependability, team work and concern for the best interests of the company. More than 350,000 people with disabilities are enrolled in public community colleges in the United States. Resources are needed to better serve them and showcase their employability.
• Internships for younger workers are important to provide real-world experience.
• Providing retraining and new certifications for adults who have experience in showing up on time and knowing how to work in production settings will create a new workforce pipeline.
• The Department of Labor could redefine the image of manufacturing with a national conversation that clearly demonstrates that today's facility "is not your grandfather's factory."

Follow-up activities were mentioned, which could include webinars on topics pertinent to the manufacturing skills gap and hiring and retaining workers with disabilities, as well as other options.
Meeting Proceedings

"Many of our speakers today have found unique and interesting ways to address their skill needs with community-based solutions and by seeking employees that are often overlooked, such as individuals with disabilities, as well as veterans."

Mike Aiken
Vice President of Government Affairs
The Society for Human Resource Management

Welcome and Introductions

Mike Aiken, Vice President of Government Affairs for SHRM, opened the Summit, noting that this was a special session on an issue of critical importance to the HR profession. He said studies had predicted that in the next few years the U.S. would experience a manufacturing renaissance. While this is good news, he added, it comes with change. As factories rely more and more on technology and automation, the skills of the workers needed to support those factories must be more sophisticated as well, and manufacturers are facing a severe skill shortage. He said that the day's speakers from within government, manufacturing think tanks, and from the HR executives at leading corporations would address this critical issue.

He invited participants to fill out index cards provided on the tables and answer three questions:

- What are you currently doing to attract and retain skilled workers?
- What information and resources could SHRM provide that would better assist you in trying to locate, hire and retain skilled workers?
- What information and resources could the Department of Labor provide to meet that same challenge?

He then introduced Betty Francis, SHRM's incoming chair, and Kathy Martinez, the Assistant Secretary of Labor for Disability Employment Policy at the Department of Labor, to give opening remarks.

Betty Francis opened by noting that the next decade will be defined by the HR profession's ability to meet five vital challenges. They are: The skills shortage, the education gap, managing a workforce of at least four generations, the brain drain of Baby Boomers, and finally, employee engagement.

She said she put the skills shortage at the top of the list because from SHRM's vantage point, it is the one issue that presents the most immediate concern and threat to our economy. It is the barrier that currently is keeping our nation from employing millions of workers, which in turn will keep us from being competitive in the global marketplace. She reviewed the challenges facing the HR community relative to the skills gap and closed by pointing out that The Gallup Organization has estimated that
lack of employee engagement, and therefore lower productivity, costs U.S. businesses $350 billion a year, which is more than the entire annual GDP of many countries. “But that's why you're here,” she said "So you can learn from the experts and address these challenges."

Assistant Secretary of Labor Kathy Martinez acknowledged her colleagues, Jane Oates, the Assistant Secretary for the Employment and Training Administration, and Carl Fillichio, Senior Advisor for Communications and Public Affairs at the Department of Labor, who would also address the Summit.

As head of the Office of Disability Employment Policy, Secretary Martinez urged human resource managers to take disability off the "special shelf" and put it into the inclusion mix when looking for skilled employees. She noted it is estimated that between 15 and 30 percent of students in community colleges are people with disabilities, many being trained to become qualified workers in the manufacturing sector.

She said the Department of Labor has many tools, documents, and kits on its Web site to support hiring and accommodating people with disabilities, but added that the best way to learn about hiring people with a disability is “to hire a person with a disability."

"We really do have a shortage of aspiring scientists, technicians, mathematicians and engineers. If you go to Georgia Tech and look at who's coming out of the engineering programs, particularly with advanced degrees, you'll find over half of the graduates are foreign nationals. And there's huge competition for this talent in every developed country."

Lynn Shotwell
Executive Director
American Council on International Personnel

Session 1: The State of the Manufacturing Skills Gap
Presenters: Mark Schmit, Vice President of Research, SHRM; Lynn Shotwell, Executive Director of the American Council on International Personnel and James Schultz, Advisor to the Human Resources Vice President, Chevron Corporation.

Mark Schmit:
Dr. Schmit presented a series of slides with statistics that showed how manufacturing is leading the way out of the recession. He noted that the peaks and valleys on manufacturing workforce employment data charts have returned to pre-recession levels. As a result, hiring expectations and job vacancies are following the same pattern they did prior to the recession.

"The problem is we're having trouble filling those vacancies," he said. New skills and higher skill levels are required to handle technology improvements. Current workforce training is not keeping
pace with these improvements. In addition, older workers indicate that professionalism and basic work ethics are lacking among younger workers as they come into the workforce.

How are companies starting to fill the skills gap? Reports indicate that 20 to 23 percent are using foreign nationals to do the work; veterans’ employment has also grown significantly as has the employment of Americans with disabilities.

**Lynn Shotwell**

America’s immigration laws need to be more welcoming to foreign nationals who can fill the skills gaps and create the growth that manufacturing needs to produce more jobs. We have a shortage of aspiring scientists, technicians, mathematicians and engineers in the United States and we must be able to compete for these skills internationally.

The consequences are unfortunate, she noted. Often projects are delayed because of the difficulty of bringing foreign talent into the United States. Companies are making decisions to relocate the work abroad. For example, when the U.S. Government announced it was limiting the number of visas, one company decided to open a facility in Vancouver, British Columbia because they could get the workers they needed there.

She recommends a multi-pronged approach to addressing the skills gap issue, which includes having immigration laws that facilitate the transfer of talent, as well as drawing more people with disabilities and women and minorities into the workforce, and providing accommodations for people so that they can work as they age. This is a long-term and ongoing effort that requires significant government and business cooperation.

**James Schultz**

Mr. Schultz illustrated Chevron's difficulty with the skills gap in a colorful way by describing the different skills needed by oil company "roustabouts" 25 years ago and by today's technicians. "Probably the mental picture that you have in mind of roustabouts is of dirty- booted, pickup-truck-driving laborers that go from well site to well site, taking samples, reading gauges for pressures, for heat, for flow rates, and writing those down on their spreadsheets," he said.

Today, he continued, oil wells are managed from control centers "that look like NASA nerve centers, digitally enabled, with huge electronic monitors, global maps, and rows and rows of computers that monitor well sites, oil fields and reservoirs around the world." The people sitting in these nerve centers need a new set of skills.
There is a misalignment with the educational system on the skills sets that are needed, he noted. "As employers, we share responsibility. I think it's going to take collaboration of government policy-makers, educators, non-profits, NGOs and certainly us as an industry to put out employment-ready candidates."

Observation from the Audience:
"I have enough people apply, but they're just not trained. My issue is education. The guidance counselors and school system don't promote vocational jobs anymore. A four-year degree is great but it doesn't help me with my manufacturing skills gap. I need students now in junior high and high school who want to go into a vocational profession. That's not promoted anymore. It's not the college system. It's before that. We're not promoting manufacturing as a viable and truly good job that can provide for your family. I hire electricians that are making more money than my people who have four-year degrees."

Session II: Tools and Resources for Employers from the DOL
Speakers: Kathleen Martinez, Assistant Secretary of Labor for the Office of Disability Employment Policy (ODEP), and Jane Oates, Assistant Secretary of Labor for the Employment and Training Administration (ETA). The two Assistant Secretaries were introduced by Carl Fillichio, Senior Advisor for Public Affairs and Communications.

Jane Oates

Assistant Secretary Oates discussed a key change in government policy that has affected educational institutions seeking grants to support their programs. "We made it a requirement that the educators have a business partner to help define the end result of the grant," she said. She also noted that the ETA has been working with manufacturing organizations across the country to assist at-risk operations with shifting and updating needs in various industries.

She explained that the ETA is currently rebranding its 2,700 one-stop career centers that operate under different names throughout the country. These centers, which will be called American Job Centers and be accessible through a new Web site (www.jobcenter.usa.gov), that will consolidate information and services from across the government – access to job retraining and education opportunities, skills and career development and counseling – into a single online resource for both job seekers and businesses.

She also noted that veterans are a key priority given that the unemployment rate of returning vets is about three times the national average. On-line resources have been developed to help translate military career titles into civilian careers. ETA also is working with the Department of Defense to incorporate civilian licensing credentials into their military training. "For example, a soldier who has driven a vehicle in Afghanistan, dodged land mines, and saved lives should receive a Commercial Drivers License (CDL) while in the service," she said.
She also observed that veterans who find jobs or go into training with their GI benefits are being given six months of follow-up case management by Job Center professionals so they have help to make good choices in case the employer or the training is not the right fit.

**Kathy Martinez**

Assistant Secretary Martinez began her presentation by noting ODEP provides resources and examples of effective practices for employers, so that people with disabilities are part of the work culture and not an after-thought. The goal is to increase the employment rate of people with disabilities.

She said the reasons for the present increase of people with disabilities in the workplace are manifold, but an aging workforce is the main cause. "We know there are 10,000 people every day turning 65, many of whom do not have sufficient funds to retire, folks have to work longer." And, returning veterans with both visible and invisible injuries – like Post Traumatic Stress Disorder (PTSD) – are a key resource for employers seeking skilled workers.

She continued by emphasizing that ODEP is working closely with technology companies, developers and policy experts to ensure that the technology and the adjustments needed to accommodate workers with disabilities is accessible quickly. She suggests that industry needs to be progressive in their outlook about accommodations for workers with disabilities and see them in terms of providing tools for increased productivity. "If a worker needs an ergonomic chair, or some magnification on their computer screen or some amplification to hear their phone, it's not something special, it's just a productivity tool," she said.

A number of concrete and practical training tools have been developed by the DOL that deal with a wide range of employment issues, Martinez said. For example, there is an online curriculum called "Skills to Pay the Bills" that helps youth address critical thinking, communications, networking and work ethics.

She noted that the training tool for "soft skills" and many other tools and support products are available through DOL Web sites including www.DOL.gov/ODEP, the Job Accommodations Network at www.askJAN.org and Employer Assistance and Resource Network at www.askEARN.org. Most of the information is available in both English and Spanish.

"I want to point out that veterans come pre-trained in all of the so-called soft skills. People with disabilities come pre-trained in all of them, too, from what they've been through. They're the most reliable employees," Martinez concluded.
Observation from the Audience

"I'm a veteran and I didn't even know about it, but one of the things our company is doing is working with the State Department of Veterans Services and through the Department of Labor. We have a press operator position and a maintenance position that's been authorized through the On the Job Training (OJT) program. Doesn't cost you a thing, a little paperwork and the employee can use their educational benefits for the OJT. They get $1,000 a month from the government, their own money, their own benefits and it will make you an employer of choice. We've gotten a lot of good veteran employees that way."

Following Assistant Secretary Martinez’s remarks, participants watched a Public Service Announcement (PSA) titled “I Can,” which was created by the American Chemical Society’s Committee on Chemists with Disabilities by the ODEP-funded Campaign for Disability Employment (CDE), a collaborative of leading disability and business organizations that works to raise awareness of the skills and talents of people with disabilities. Featuring seven people with disabilities sharing what they “can do” in the workplace when given the opportunity, “I Can” works to challenge misconceptions and elevate expectations about disability employment. It is available online at www.whatcanyoudocampaign.org, along with accompanying discussion guides.

"Research shows that 80 percent of Americans say they want a manufacturing plant in their community. That it's important for America, and it's important for community economic development. However, only a third of Americans said they would want their child to get a job in manufacturing. We have to address that."

Brent Weil,
Senior Vice President
The Manufacturing Institute

Session III: Effective Practices and Community Solutions
Part I and Part II speakers included Brent Weil, Senior Vice President of The Manufacturing Institute; Steve Adams, Deputy Director of the National Fund for Workforce Solutions; Dr. Wayne Burton, President of the North Shore Community College; Michael Pearson, President of Union Packaging, LLC; Karen Stang, Operation IMPACT Program Manager for Northrup Grumman Corporation; and Sandy Nott, General Manager of Human Resources for Toyota.

Brent Weil

Mr. Weil's presentation focused on what industry recognized certifications mean for human resource managers. He spoke about national career readiness credentials offered by a wide range of National Association of Manufacturers (NAM) partners.

He identified two certifications in particular that could form the foundation of a NAM endorsed manufacturing skills certification system: A Career Readiness Certificate from ACT (formerly called
American College Testing) and a certificate from the Manufacturing Skills Standards Council (MSSC) provide a competency-based education that match the knowledge, skills, and abilities needed for today’s manufacturing jobs.

He noted that in addition to ACT and MSSC, there are more specialized certifications that may also be needed. These may include welding certifications from the American Welding Society; metalworking and machining certifications from the National Institute of Metalworking Skills and credentials from the Society for Manufacturing Engineers, for example.

"For those of you in human resources, building in and working with the education system on these kinds of credentialing means that you can lower your recruiting costs. It means you can expect greater productivity.” Weil emphasized that when the labor force has baseline skills in safety and production, less time is needed to retrain them. This ultimately improves productivity and safety.

He suggested that three steps could increase manufacturing productivity and access to skilled labor: First, HR professionals should prefer workers with certifications in their hiring process. http://www.TheManufacturingInstitute.org offers the entire suite of certifications available. Second, manufacturers should work with their local community and technical colleges. "Go to a community and technical college and say: 'We have these common skills and interests. We need to work together to make sure that people that are coming through your programs meet those expectations as certified by a third party,' " he said.

The third thing he suggests is to join efforts in the community to excite people about manufacturing and get them to understand it. The Manufacturing Institute sponsors a program called "Dream It, Do It," with statewide efforts going on in more than 20 states. The program gets manufacturers working directly with young people, guidance counselors and parents. They open their plant to tours and take part in programs such as Project Lead the Way and Skills USA, in order to get young people to understand the opportunities at a young age, he noted.

Steve Adams

The National Fund for Workforce Solutions is a consortium of national foundations, corporate foundations, public foundations, including the Social Innovation Fund and the Corporation for National and Community Services that focus on ways to get low-income individuals into career path jobs, Adams said.

The Fund works with 32 regional collaboratives. They give a small amount of money in metro areas and rural areas to help coalesce community foundations, United Way organizations, workforce investment boards, and local funders, to pool their resources to assist low-income workers and employers.

The objective is to help low-income workers get jobs that can lead to a career that can provide family-supporting wages. They also are trying to provide employers with the talent they need to succeed. "This is not a program about convincing employers to give somebody a chance. This is about bringing qualified talent into your workplace," he said.
"So we're hearing from our employers what they like about these partnerships, and basically what they like is that they're at the table. They're designing the curriculum. They're defining the skill needs. They're also at a table where it feels safe to talk about their needs," he continued.

He pointed out that in five years the organization has provided career advancement services for 30,000 people. More than 3,000 employers are involved in workforce partnerships helping to design curriculum.

**Dr. Wayne Burton**

Dr. Burton said that North Shore Community College (NSCC), based in Danvers, Massachusetts, has collaborated with local manufacturers to develop training programs that meet the needs of potential employees and the employers.

The result of the partnership has been a set of common core courses offered in a traditional classroom format on NSCC campuses. The common core courses provide a consistent body of knowledge and skills applicable to all manufacturing sectors. The courses are offered in flexible format: 6, 8, 10, and 15 weeks and online.

Company specific on-the-job training for which employees receive college credit through NSCC’s alternative credentialing options is offered. The company specific competencies allow for a concentration of study according to the specific needs of a manufacturing sector.

"We committed to General Electric for the development of a pilot," Dr. Burton said, "because they were the ones with the most significant need, and plus they had a key feature of any workforce program – the students saw a job at the end. That's part of the breaking through model – GE agreed to hire the students and put them on the GE payroll."

Dr. Burton also noted that more than 350,000 people with disabilities are enrolled in public community colleges in the United States. Resources are needed to serve them and showcase their employability, he said.

**Observation from the Audience**

"I think in some areas students have found out how much they can earn in manufacturing jobs. They've found out that it's actually clean jobs now, it's mainly computerized. And that's changing the image of manufacturing. We have high school sophomores and juniors from the inner city going through summer programs where all they're learning is STEM fields and young people are eager to sign up. I love the questions we get when employers visit the classroom. For example a lady in biotech was asked, 'what kind of a car do you drive?' She said, 'I drive a Lexus.' The student said, 'I want to be in that program.'""
**Michael Pearson**

Mr. Pearson shared his efforts to find skilled labor for his small manufacturing company (100 employees) by looking at non-traditional resources. "We're in a skill war," he said, "and as a small company I'm fearful of Toyota or Boeing scooping up that good talent, so my HR professional has to be a little bit sharper, and has to go out there and mine talent for me."

He says that he hires people with disabilities, new mothers who are coming back into the workforce, immigrants, and even people coming out of the criminal justice system. "Frankly, even though we pay pretty decent wages with medical insurance, it's hard to get that story out as a smaller company. We have to be creative."

Forming partnerships with NGOs in the community has been very successful. He noted that currently 5 percent of his workforce comes from prison re-entry programs from the Resources for Human Development; 8 percent of the workforce is people with disabilities as a result of a partnership with the Marriott Foundation for People with Disabilities, and 20 percent of his employees came from teaming up with the Welcome Center for new Pennsylvanians.

He provided a list of countries that are represented in his workforce and they include: Ethiopia, Ghana, Haiti, Jamaica, Nigeria, Russia, St. Lucia, Ukraine, and Vietnam.

**Karen Stang**

The audience was introduced to a program at Northrup Grumman for severely injured veterans called Operation IMPACT. The program has a project manager, a placement manager, an outreach ambassador who actively recruits potential employees as well as corporate partners, a health services manager who oversees the accommodation process for the employees, and a sector leader who promotes hiring and recruitment across sectors within the company.

"You're not going to find severely injured veterans at a job fair. You're not going to find many of them going online and applying for jobs. They need an additional support system," she said. "If all I do is sit with one of our candidates and help them write their résumé and show them that, yes, you might have been an infantryman, but this is what you've learned and what you've done, and this is how you fit into our company, or any other company, it makes a big difference."

The program partners with other companies across the United States to place the wounded veterans. This partnership is called "The Network of Champions."

"Northrop Grumman pays my salary," Ms. Stang said, "but I can tell you that if I help a wounded warrior get hired by Lockheed-Martin or any of our other partner companies I've done my job. We consider it a candidate centric recruiting so instead of having these job descriptions that we all post that require degrees and years of experience, we look at the candidate and what can they bring, and what training do they need to get into that position, into that workforce."
She notes that they maintain connections with the candidates once they're hired and make sure that they get professional development assistance and great accommodations.

**Sandy Nott**

Toyota has 14 manufacturing locations in North America including Mexico and Canada. They produce 12 vehicles. The company just launched its newest plant in Blue Springs, Mississippi. Their largest plant is in Georgetown, Kentucky.

With a huge need for skilled employees, Toyota has built a large and intricate system for building a consistent pipeline of trained staff. The first thing they did, Ms. Nott noted, was to partner with community colleges and technical schools in each area where they have manufacturing plants. This has resulted in the creation of an advanced manufacturing technician program for the preparation of skilled labor.

Their mission is to spread Toyota's global standards for production and maintenance throughout North America. For example, they replicated a production center headquartered in Japan and created a regional headquarters for production improvement. This facility is called North American Production Support Center (NAPSC) and is located in Georgetown, Kentucky.

The program was initiated through government grants that helped establish a model laboratory for multi-skilled maintenance training that looks and operates like a manufacturing plant. Additional grants were provided to validate and further develop the Toyota model for all industry, so they partner with the communities, with other auto companies, and with suppliers. They get the benefit of this skilled labor, as well.

Within the training programs, work behavior is also emphasized and prioritized. For example, attendance, diligence, team work, interpersonal relations and initiative are encouraged. Students attend school two days a week, eight hours a day. The other three days they work for Toyota so there's a chance for them to get real world experience.

"We created a program to support the smooth flow of manufacturing technicians for Toyota and other manufacturing companies. "We’re not thinking just about ourselves, but the industry as a whole," she said, "and, we improved our continued education programs and influenced college curriculum."

"I think there's been a lot of talk about what can government do. But we've got to do it ourselves and we've got to work with our local community colleges, our high schools, our middle schools to influence that curriculum. It is the best way to help them understand our needs," she concluded.
Audience Responses to Key Questions

The three questions posed by SHRM were answered by 70 audience members. The written responses on index cards were collected during the Summit. Some provided multiple suggestions in response to each of the questions, some did not respond to all of the questions. Many of the ideas were repetitive. Following is a summary of the responses with the number of times each idea was presented.

What are you currently doing to attract and retain skilled workers? 46 responses

- Work with local middle and high schools to support STEM programs and positive image of skilled manufacturing jobs (12)
- Form partnerships with technical schools, community colleges and universities to develop specialized training programs (11)
- Organize and promote internships, on-the-job training and apprenticeship programs (9)
- Offer competitive compensation, flexible work programs, strong benefit programs (9)
- Provide support and on-the-job training in soft skills (4)
- Have strong veterans recruitment and training program (3)
- Use ACT and Work Keys programs (2)

What information and resources could SHRM provide that would better assist you in trying to locate, hire and retain skilled workers. 31 responses

- Provide support and tools to educate middle and high school students about STEM and/or manufacturing jobs (8)
- Provide localized information on resources, funding and/or support to recruit and train workers (8)
- Influence national policy by forming partnerships with governmental and educational institutions (5)
- Provide best practices information, articles and studies on the Web site (6)
- Support local community college training programs (3)
- Provide help for local employers to recruit and hire veterans and to understand and accommodate PTSD (3)
- Provide local and national compensation information (2)
What information and resources could the Department of Labor provide to meet that same challenge? 37 responses

- Provide funding, grants or support for vocational and technical training in middle schools, high schools and/or community colleges (12)
- Develop and widely promote a positive media campaign for modern manufacturing (9)
- Provide funds/grants and/or tax credits for on-the-job training (7)
- Provide funds, grants and/or support for programs targeting the hard to employ (5)
- Provide web based information on training programs by state or region (5)
- Provide funds, grants and/or support for veteran hiring and/or training programs (3)
- Provide funds, grants and/or support for English language training programs for immigrants (2)
- Provide an easier immigration process for skilled foreign nationals (2)