

Metro Denver **Wired** INITIATIVE

*Developing Talent for the Region's
High-Demand Jobs*



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WIRED Overview

The Metro Denver Workforce Innovation in Regional Economic Development (WIRED) Initiative is a partnership among industry, workforce, education, and economic development in the nine-county Metro Denver region (Adams, Arapahoe, Broomfield, Boulder, Denver, Douglas, Jefferson, Larimer, and Weld).

WIRED and its partners are implementing transformational and sustainable changes in our education and workforce systems to address the “Colorado Paradox,” and enhance our region’s global competitiveness.

The Challenge

The “Colorado Paradox” describes the disparity between the Metro Denver region’s thriving and diversified economy propelled by growing technology sectors and one of the most highly educated workforces in the country and the area’s low high school graduation rate and a talent development pipeline that is “leaking” at all stages, leaving local workers inadequately prepared to compete in the fast-growing, high-wage industries in the area.

WIRED is responding to this challenge by building regional partnerships to produce a workforce skilled in science, technology, engineering, and math (STEM) for some of the region’s fastest growing high-wage industries that are also experiencing labor shortages – aerospace, bioscience, energy, and information technology-software.

Funded partially by a four-year \$15 million grant from the U.S. Department of Labor, WIRED has invested in 26 programs that enhance partnerships among business, education, and the public workforce system, as well as promote STEM education in our schools. WIRED also continues to build upon existing partnerships and to leverage public and private funding to sustain its work well beyond the life of the grant.

WIRED Nationally

The Metro Denver region competed nationally with more than 100 other regions for a WIRED grant from the U.S. Department of Labor. The region was among 13 “first generation” regions awarded a \$15 million WIRED grant in early 2006. WIRED is part of our nation’s global competitiveness strategy to build strong regional economies supported by a highly skilled workforce. There have been three rounds of funding and there are now 39 WIRED regions across the United States and Puerto Rico.

Governing Structure

The Metro Denver WIRED Initiative partners include:

- The *Colorado Department of Labor and Employment* is the grant recipient and monitors for compliance with federal laws and regulations.
- The *City and County of Denver Office of Economic Development* is the local fiscal agent.
- The *Metro Denver Economic Development Corporation* (Metro Denver EDC) administers programs.

Leadership Council

The WIRED Leadership Council was formed to oversee WIRED through the end of the grant period, which ends January 31, 2010. The Leadership Council is comprised of 24 members who represent WIRED's partners in education, industry, economic development, and the public workforce system. WIRED's fiscal partners (Colorado Department of Labor and Employment, the City and County of Denver, and the Metro Denver Economic Development Corporation) are also represented on the Council.

The Council's specific responsibilities include oversight, focus on sustainability of WIRED's mission, focus on transformation, and work toward becoming a permanent structure for regional talent development.

Leadership Council members include:

Tom Looft	CDLE	Director, Workforce Development Programs
Andre Pettigrew	City and County of Denver	Executive Director of OED
Tom Clark	Metro Denver EDC	Executive Vice President
Joe Barela	Arapahoe/Douglas Works!	Division Manager
Paula Gomez-Farrell	City and County of Denver - OED	Director of OED's Division of Workforce Development
Mary Russell	Jefferson County Workforce	Acting Director
Linda Perez	Employment Services of Weld County	Director
Kyle Wilmot	Highland Technical Staffing	Recruiting Manager
Jacoline Beann	Northrop Grumman - Data Systems Operations	Senior Manager, Human Resources
Janice Rooney	National Renewable Energy Laboratory	Community Relations Manager
Gary Barbosa	Lockheed Martin Space Systems Company	Director, HR Systems, Planning and Staffing
Kevin Smith	Act Three Consulting	Consultant
Barbara Bauer	GlobalSight Partners	President
Maury Dobbie	Northern Colorado EDC	President/CEO
Sandy Steiner	Adams County Education Consortium	Executive Director
John Cody	Longmont Area Economic Council	President/CEO

John Brackney	South Metro Denver Chamber of Commerce	President/CEO
Karen Newman	Daniels College of Business - University of Denver	Professor of Management
Elaine Baker	Community College of Denver	Executive Director of Workforce Initiatives
Linda Bowman	Community College of Aurora	President
Steve Alkire	Weld County School District 6	CTE Coordinator
Kelly Leid	Colorado Legacy Foundation	Executive Director
Tim Taylor	Colorado Succeeds	President
Kelly Hupfeld	University of Colorado	Research Associate, Clinical Faculty



Maricela from DSST

Solutions Teams

The Metro Denver WIRED Initiative formed four [Solutions Teams](#) in early 2008 to take action on findings and recommendations from WIRED research, industry, education and workforce panels, and the WIRED Leadership Council. The Solutions Teams were comprised of cross-disciplinary representation from the four WIRED industries (aerospace, bioscience, energy, and information technology-software), K-12 and higher education, and the public workforce system. Following are the four Solutions Teams and their assignments:

Connecting to Industry: Work on approaches to develop strong, long-term relationships among industry, education and the public workforce system.

Metro Denver 2010: Work on a plan to ensure that the mission and objectives of the Metro Denver WIRED Initiative have long-term sustainability after the end of the grant.

Growing Our Own: Develop strategies to address long-term industry demand for a skilled workforce through engagement of students in the K-12 pipeline.

Optimizing Today's Workforce: Work on tactics to fill immediate workforce needs through recruitment, training and placement of untapped sources of talent (e.g. veterans, "Boomers," incumbent workers, unemployed workers, ex-offenders, underrepresented populations, etc.).

Panels

Earlier in the Metro Denver WIRED Initiative, eight panels were convened, representing various stakeholder groups. These included industry panels for each of the four targeted industry clusters – Aerospace, Bioscience, Energy, and Information Technology-Software, as well as K-12 Education, Higher Education, the public Workforce System, and Small Business/Entrepreneurs panels.

Each of the industry panels conducted research into high-demand jobs – jobs that are critical and/or difficult to fill, or are filled frequently due to expansion and/or turnover. As high-demand jobs were identified, the industry panels also researched education and skills requirements, where and how employees were being recruited, and projections on future hiring needs.

Each of the eight panels developed a set of recommendations for addressing the gaps between industries' workforce needs and the regional resources available to meet those needs. These recommendations were then presented to the Leadership Council for review and prioritization to guide WIRED work through the end of the grant.

WIRED Achievements

Overview:

WIRED has . . .

- Initiated development of a sustainable and transformational regional talent development system that is producing a home-grown workforce equipped with the skills and knowledge needed for jobs in the region's fast-growing industries with high-wages.
- Provided job training and related activities for both unemployed and employed workers to gain the skills and competencies needed to obtain or upgrade career ladder employment positions in high-growth industries and economic sectors.
- Helped Metro Denver begin the transformation to become one of the best regions in the country in science, technology, engineering, and math (STEM) education.
- Benchmarked the network of innovation assets in the region – people, institutions, capital and infrastructure – to determine how best to generate growth and prosperity in the region's economy.
- Assessed the region's high-demand jobs, developed asset maps, identified competencies and competitive advantages, analyzed issues, and surveyed businesses and entrepreneurs, identifying regional opportunities and risks.
- Conducted an in-depth career attitude poll of students, parents, school counselors and workforce center participants that found that misinformation and a lack of information are discouraging students from entering specific high-growth industries. The results from the poll provided information on what shapes individuals' career attitudes, where individuals learn about careers and what is most important to them regarding a career.
- Brought other WIRED regions' "promising practices" to Colorado.
- Worked with universities and trade associations on technology transfer to help grow the region's clusters.
- Communicated the availability of high-paying jobs in high-growth sectors, the skills and education needed for these jobs, and the resources available to help local citizens attain these skills and jobs.

Partnerships:

WIRED has . . .

- Formed collaborations and partnerships among industry, the public workforce system, education, and economic development.
- Supported STEM and other related initiatives by backing the National Governors Association STEM Grant, the Governor's P-20 Council and Jobs Cabinet, COMSTEC, STEM-EC, and the Colorado Energy Coalition.
- Partnered with the Governor's Office to apply and successfully receive an NGA STEM grant.
- Partnered with Colorado Succeeds and the University of Colorado at Denver's School of Public Affairs to release a report on Career and Technical Education (CTE) in Colorado.

- Collaborated with industry associations to instill and advance WIRED's mission: Colorado BioScience Association, Colorado Software and Internet Association, Colorado Space Coalition, and Colorado Energy Coalition.
- Provided assistance to two of the region's community colleges to apply and successfully receive a National Science Foundation (NSF) grant, with assistance from the U.S. Department of Labor/ETA.
- Provided guidance and technical assistance to WIRED subgrantees to support the implementation of successful innovative and transformational projects.
- Worked to create and sustain STEMapalooza, a multi-day event that brought an array of science, technology, engineering, and math learning opportunities to almost 6,000 student participants of all ages.

WIRED in 2009

The four WIRED Solution Teams generated many innovative ideas to help our region. Taking those ideas and existing resources into consideration, 10 items have been approved for funding and most are already underway.

1. Develop a transformational, industry-driven regional talent development model that will sustain Metro Denver WIRED's goals, mission, partnerships, and work well beyond the life of the grant.
An RFP has been released for an organization to help develop a post-WIRED Regional Talent Development Model (TDM) that will equip WIRED and its partners with strategic resources to create a structure that develops WIRED's successful talent development practices into a sustainable and transformational regional talent development model.
2. Fund Individual Training Accounts (ITA's) that provide job seekers with assistance to pursue short-term training that leads to employment.
This program will be funded in part by WIRED dollars, managed at the state level and implemented within the nine-county WIRED region.
3. Provide additional funds to existing WIRED grantees that are performing well and can train and place additional participants in jobs.
A letter was sent to all active WIRED grantees asking if they could train and place additional clients if provided with additional funds. Responses were received, and additional funds for grantees approved.
4. Produce online/print career education materials for the four WIRED target industry clusters that include average salaries, job titles, educational requirements, estimated future hiring needs, and Colorado education and training programs that can prepare job candidates for these targeted industries.
The work for this project is currently under discussion with the Colorado Department of Labor and Employment.
5. Bring existing "career academies" in the region together with other interested stakeholders to discuss the topic and to learn promising practices from local and national experts. In addition, funding will allow for the creation of an asset map describing all of the academies in the WIRED region, best practices compendium, and an action plan to upgrade existing academies and a plan developed to create additional academies.
An RFQ for a vendor to undertake this process was sent out. The responses were judged and Colorado Succeeds, an organization with experience with this subject was chosen. The Career and Themed Academies Forum will be held February 9th.
6. Help fund one or multiple career academies that focus on one of WIRED's industries and utilizes the tools and knowledge from the career academy convening.
A solicitation for letters of intent was sent out and responses will be received before the Career and Themed Academies Forum being held February 9th. Parties interested

in applying to receive funding for career academies will attend the Forum and shortly afterwards, will expand their letters of intent into a more robust RFP telling us how they could utilize the funding.

7. Fund the Colorado Department of Labor and Employment SECTRS (Strategies to Enhance Colorado's Talent through Regional Solutions) Initiative that addresses employers' needs for skilled workers, and workers' needs for good jobs.
This program will be funded in part by WIRED dollars, managed at the state level and implemented within the nine-county WIRED region.
8. Create a video for both the IT-software and aerospace industries that encourages people to go into related careers, to recommend these careers to others, and to pursue education that prepares them for these careers.
An RFQ was sent out for a vendor to create both videos, responses were received, and a vendor has been selected. The WIRED Aerospace and IT Industry Coordinators are currently working with the vendor, and individuals and organizations in each industry to determine messaging and themes for the videos. The videos should be completed in late spring.
9. Fund a lead school to educate other schools about the best ways to connect and interact with industry and the variety of educational activities that can be generated by such programs.
An RFP for this project will be issued on the week of January 26, 2009.
10. Convene STEM communications personnel to align messages across the state relative to STEM, adding credibility and strengthening the importance of STEM education.
WIRED researched the qualifications of various organizations and demonstrated experience in communications, facilitation and STEM messaging and chose the School of Public Affairs (SPA) at the University of Colorado at Denver to lead the convening and conduct the project's other work. The convening should take place in the spring of 2009.

WIRED Investments

The Metro Denver WIRED Initiative has completed the last of its three rounds of grants. The three rounds of grants are expected to:

- Prepare nearly 500 educators for instruction in WIRED industries or STEM skills;
- Impact more than 20,000 students as a result of educator training;
- Develop more than 100 education, career guidance, and work-based programs;
- Allow almost 1,400 people to attain a degree, certificate or industry certified credential;
- Place 1,400 people in jobs within WIRED targeted industries.

Jumpstart

In January 2007, funds were awarded through the JumpStart grant program, the first subgrant process of the Metro Denver WIRED Initiative. JumpStart supports collaborations among existing education, training, entrepreneurship, and other workforce or industry-specific career development partners that expand and/or replicate successful programs to serve the needs of WIRED target industries. Of the 25 applications received through a Request for Proposal process, 10 were funded to a total of \$3.7 million.

- **A Replicable Model for Higher Education to Engage and Prepare High School Faculty and Staff in Emerging Technologies
Community College of Aurora (CCA)**

Program target: 59 educators trained; 6,108 students trained

This program trained high school teachers in bioscience instruction, using traveling science equipment kits and providing bioscience career information to teachers, students and counselors. The program was designed so that a limited number of state-of-the-art science kits were easily and equitably shared by schools in several school districts.

Success Story: Castleview High School and Rock Creek High School are both working on agreements with CCA to offer their biotech program as a concurrent credit program – allowing students to earn college credit while still in high school.

- **JumpStart into Aerospace
Community College of Denver (CCD)**

Program target: 615 students trained; 163 student completers

This program leveraged an existing NASA-funded degree program in Aerospace Systems Engineering Technology that targeted underserved populations. The WIRED program worked with students at North High School, a school in the Denver Public Schools with a significant number of students in the free and reduced lunch program, which enrolled students in a pre-aerospace program at CCD, providing remediation and training to encourage students to go to CCD and Metro State College to major in aerospace-related disciplines.

Success Story: “Wow, I am speechless. This class was the best one I have ever taken. It really opened my eyes. My dream is to become an astronomer someday. I now know how to use a telescope in different ways and I owe all this to this class. I believe telescopes are the peep hole to the universe and this class taught me that.”

-- Jasmine Garcia, a JSA student

• **Light Up Your Future: Education Today, Energy Tomorrow
Council for Adult and Experiential Learning (CAEL)**

Program target: 6 educators trained; 549 students impacted

CAEL’s project, “Light Up Your Future: Education Today, Energy Tomorrow,” was an online education program for high school students to build their skill levels and industry knowledge, and connected students to high-growth career opportunities at local energy companies. CAEL partnered with Xcel Energy and several local high schools to provide an on-line education program for high school students to create a pipeline into high-growth careers at local energy companies.

Success Story: “I took the online Mathematics of Electricity course in high school. Now that I am in college, I am seeing a lot of connections from the class, to the courses I am taking now. The course made me understand all about electricity and how important it is in the world. I’m interested in electricity industry career.”

-- A quote from a female student who completed the online Virtual High School Mathematics of Electricity course during her fall semester of her senior year

• **11th Grade Internship Program
Denver School of Science and Technology (DSST)**

Program target: 143 students trained

WIRED funding allowed DSST to provide an expanded internship program and relationships with companies in aerospace, bioscience, energy and IT/software for its high school students, 60% of whom are minorities, and 40% low-income. In April of 2008, DSST proudly announced that all of its seniors have been accepted into college. WIRED has also provided assistance to the school with connections to the IT industry.

Success Story: John Spainhower and Danny Ladd interned at IP5280, a communications company, and worked on cutting-edge voice over IP installs that would normally be handled by industry experts with years of experience.

• **Jobs for America’s Graduates
JAG Colorado**

Program target: 245 low income/minority completers

WIRED funding allowed JAG Colorado to extend programs to schools in an additional four counties in the Metro Denver WIRED region, focusing on preparing high school students for careers in the aerospace, bioscience, energy, and information technology industries.

Success Story: Diana, a sixteen-year-old at Fort Lupton High School student was having trouble at home and at school. Although she had been elected to an officer position in the Career Association, in January she was missing school and talking about dropping out or attending an alternative school. Her Specialist worked closely with her to help her overcome

her difficulties, and she returned to school. This school year, she has been elected President of her Career Association.

- **Mathematics Engineering Science Achievement (MESA)
The Colorado Minority Engineering Association (CMEA) – Colorado**

Program target: 1,460 students trained

MESA's JumpStart award accelerated the successful replication of its network for delivery of after school programs for pre-collegiate and college-prep STEM competency development and career pathway mentoring programs for low-income, women and minority students.

Success Story: The MESA High School Science and Engineering Jamboree at Colorado School of Mines attracted over 370 students from all over the nine-county WIRED area. Students demonstrated their problem-solving abilities in math and engineering projects ranging from trebuchet design and operation to Web site design.

- **Energizing Metro Denver's Workforce: Building and Sustaining a Pipeline of Process and Maintenance Technicians
Red Rocks Community College (RRCC)**

Program target: 240 students trained; 28 student completers

WIRED funding allowed RRCC to train process and maintenance technicians for the energy industry and manufacturing. The program started at several local high schools where students received college credit toward the Process Technology program taught at RRCC. Industry partners in the project included Suncor, Xcel Energy, and Coors Brewing Company.

Success Story: Through the WIRED grant, there has been an introduction of three new year-long science credit courses and an energy industry-related math credit course at local area high schools. The courses provide students with "real world" industry-based classroom work in both the traditional and renewable energy areas while addressing established science and math learning objectives.

- **Business and IT Management (BITM)/Bilingual JumpStart Initiative
Regis University**

Program target: 9 curricula developed

WIRED funding allowed Regis to provide a novel "hybrid" degree program in business and IT management with a focus on underrepresented students, and offering the degree and services in a bilingual format. One of the major findings of WIRED's 2007 business survey was a need for individuals who had both technical and business skills.

Success Story: Reyna Gutierrez received a Daniel's Foundation Scholarship from Regis University due to the WIRED Jumpstart Grant funding. She's 31 years old, a mother of four, works during the day and goes to Regis University at night. Reyna said, "I thought Regis was unattainable at one time." With the scholarship, she can complete her degree in the near future.

- **Sustaining Transformation Through STEM
Thompson School District**

Program target: 283 educators trained; 10,000 students impacted

Thompson School District'S WIRED program increased STEM course options and the number of underrepresented students successfully completing higher-level science and mathematics courses to increase the number of its graduates pursuing STEM careers through post-secondary certification programs, associate degrees, and four-year university/college degrees.

Success Story: One of the greatest successes is the number of minority students and females that are enrolled in or have taken higher-level science and math courses. Our local newspaper, the *Loveland Reporter-Herald*, has featured several articles about the project at Loveland High School where the combination of math and CTE courses made possible the building of a cabin that was sold.

• **Innovative Partnership for Educating Colorado's Aerospace & Bioscience Workforce**
University of Denver

Program target: 23 educators trained; 418 students trained

The WIRED project combined teacher training, summer camp, and high school classes to develop engineering skills relevant to aerospace engineering and bioengineering. The Making of an Engineer summer camp (residential) used the theme of Engineering in Extreme Sports to introduce participants to engineering concepts common to both aerospace engineering and bioengineering, such as material science and robotics.

Success Story: "One of the campers, Jenni Rystrom, had expressed to me early on in the camp that the only reason she was there was that her parents had insisted that she participate. All of her friends made fun of her for going to a "geek" camp. I recall how excited she was when she and her partner, Cameron, finished their robot. When school started, she endured a long wait to change her schedule so that she could now take Chemistry from Roger. Last week, she approached him to ask if he would sponsor an Engineering Club at the school. She had already asked the administration if it could be done, and had been told to line up other interested students and find a sponsor. At Back-to-School-Night this past week, Jenni dragged her mother in to meet Roger where she revealed that the camp was the best experience she had ever had. When he suggested to her that it must have been gratifying to tackle a challenge you think is outside of your realm of ability and find that you actually CAN do it, she replied eagerly, "That's EXACTLY it!"

-- Corinne Lengsfeld, Associate Professor, Department of Mechanical and Materials Engineering, University of Denver

Workforce Innovation Grant I

The WIRED Workforce Innovation Grant program seeks to address specific industry needs by funding innovative workforce development, training, entrepreneurship, and other industry-specific education and training partnership projects. Specifically, it focuses on employment or employee advancement in WIRED's four target industry clusters. In March 2008, 10 projects were approved for funding in the first of two rounds of Workforce Innovation Grants for a total of just over \$3 million.

- **Ensuring Oil Extraction for Adequate Energy**

- Adams County Workforce and Business Center (ACWBC)**

- Program target: 175 trained, 158 placed

- ACWBC's project will recruit and train 175 adults as equipment operators, drivers or materials handlers for energy companies through a partnership with Front Range Community College (FRCC), and the Center for Transportation Safety (CTS). This project provides an intensive introduction to working as a driver/heavy equipment operator to increase post-training retention of the participants.

- Contact:** Jeanette Congrove, Case Manager, jcongrove@co.adams.co.us

- **Expert Technician Academy**

- Arapahoe/Douglas Works! (ADW)**

- Program target: 275 trained, 238 placed

- ADW, in collaboration with Arapahoe Community College, Douglas County School District and the Douglas County Educational Foundation will create the Expert Technician Academy (ETA) program to teach both youth and adult learners the technical skills required by the Aerospace, Energy, IT and Bioscience industries. The project will train 150 adults, 75 youth and 50 incumbent workers in certifications for the IT industry, including: A+, Net+, Oracle and Electronics.

- Contact:**

- Dawn Gardner, Targeted Industry Coordinator, dgardner@co.arapahoe.co.us

- **Put Me On the Map**

- Arts Street**

- Program target: 80 trained, 50 placed

- The Put Me On the Map program is an IT training program for youth and young adults ages 16 to 24 in GIS mapping, digital animation, digital video production, interactive communication media, visual informatics and web site content development as well as developing entrepreneurial skills. Partners in this project are Emily Griffith Opportunity School College of Business & Technology, (an accredited Community College of the Denver Public Schools), Martin Luther King Early College, and the Boy Scouts UrbanYouth/Life Development Denver.

- Contact:**

- Stella Yu, Executive Director, Stella.Yu@arts-street.org

**• Multi-Industry Systems Technician
Employment Services of Weld County**

Program target: 120 trained, 102 placed

Weld County and its partners are providing a Multi-Industries Systems Technician (MIST) training and entry-level/mid-level employment program for youth and adults in partnership with Aims Community College. The project will provide an innovative job training program designed to remediate and develop skills needed for employment in the energy industry. Additionally, an intensive Prep-Academy will provide instruction for employer-identified professional skills, such as critical thinking, team work, and personal responsibility as well a remediation of foundational education skills necessary to successfully complete Aims Community College's entrance exam and Xcel Energy's pre-employment exams.

Contact:

Ted Long, Special Program Coordinator, tlong@co.weld.co.us

**• Energy Boost: Training for the Energy Industry
Front Range Community College (FRCC)**

Program target: 120 trained, 100 placed

FRCC's project, Energy Basic Training, provides training in Basic Math Skills, Understanding Basic Statistics and Measurements, Metrology, Reading Blueprints, Introduction to Process Technology, Working in Teams and Communication Skills in the Workplace. Curriculum design includes industry input from major energy companies such as Vestas, a manufacturer of wind turbines and towers. Over the next few years, Vestas is expected to fill over two thousand jobs, and has agreed to interview program graduates and to continue to work with FRCC to strengthen the program.

Contact:

Lynn Vosler, Director, Institute for Community & Professional Development, lynn.vosler@frontrange.edu

**• Increasing the Energy Workforce Pipeline
Goodwill Industries of Denver**

Program target: 60 trained, 48 placed

Goodwill's project will provide paid apprenticeships or entry-level positions with energy businesses by August 2009. Students will be introduced to careers through mentoring, training, apprenticeships and will obtain jobs upon graduation. Goodwill's partners will play a key role in development and delivery of the program. Denver's Division of Workforce Development will participate in job fairs and connect students to JobLink, Red Rocks Community College will host an "Energy Career Summer Camp," and Denver Public Schools will provide dedicated class time for Goodwill's Energy Career class.

Contact:

Claude Harris, Program Manager WIRED, charris@goodwilldenver.org

- **Building the Energy Efficiency Workforce for Colorado**

- International Center for Appropriate and Sustainable Technology (iCAST)**

Program target: 225 trained, 150 placed

iCAST will conduct Energy Efficiency Training for 250 unemployed, underemployed and incumbent workers referred by workforce centers in the WIRED region. Training will include energy auditing for residential, commercial and industrial buildings; solar PV and solar thermal installation; insulation and air sealing installation and other energy savings devices installation and HVAC installation. iCAST will create and post three online course modules in an energy efficiency curriculum, presented in partnership with The Colorado Energy Science Center (CESC) and E-Star Colorado.

Contact:

Mark Palmer, WIRED Admin Project Manager, mark@icastusa.org

- **Rays of Hope**

- Turnabout, Inc.**

Program target: 70 trained, 60 placed

Turnabout is a prisoner reentry agency that focuses on employment. This project provides training on “hard skills” such as Solar Panel Installation, Wind Power Installation and Equipment, OSHA certification, Industrial First Aid/C.P.R. certification, Commercial Drivers License (A and B) for the Energy sector. The program will provide 70 ex-offenders with energy industry job training. On-going support for participants will continue for at least six months after employment through mentoring meetings and sustained case manager/client contact.

Contact:

Rev. Tina Yankee, Executive Director, info@turnaboutprogram.org

- **Certificate Program in Database Services; Biosciences and Electro-mechanical Systems with an Aerospace Focus**

- University of Denver (DU)**

Program target: 100 trained, 75 placed

DU is training and placing 75 unemployed and underemployed participants into higher paying jobs in the IT, Aerospace and Bioscience industries. The project will identify unemployed and underemployed candidates who have relevant sector experience and/or interest which can be enhanced through the proposed training program. Minority candidates and military veterans will be key targeted populations. There will be three key training areas: (1) Mainframe Administration, an important niche area for Colorado; (2) Good Laboratory Practices (GLP) and Good Manufacturing Practices (GMP) which are essential needs of the Bioscience industry; and (3) combined Mechanical & Electronics (“Mechatronics”), highly marketable skills in a variety of industries, especially Aerospace, Biosciences and advanced Energy Systems

Contact:

Rahmat Shoureshi, Dean of School of Engineering and Computer Science, rshoureshi@du.edu

Workforce Innovation Grant II

The goal of the Workforce Innovation Grant II is similar to that of Workforce Innovation Grant I. The grants provide job training and related activities to assist workers (both unemployed and employed) in gaining skills and competencies needed to obtain or upgrade employment positions in high-growth industries and economic sectors. The grants encompass new processes, partnership structures and ideas for training or other workforce or industry-specific career development and education programs. In October 2008, six projects were approved for funding to a total of \$1.2 million.

- **Renewable Energy Course; PV (Photo Voltaic) Materials and Device Fabrication**

- **Adams County Workforce & Business Center (ACWBC)**

Program target: 350 trained, 289 placed

The goal of this program is the development and delivery of a seven-week, computer-based training program for assembly/production line workers, technicians, and technician assistants in the renewable energy industry. The Department of Corrections will make the training available to prisoners who will be released within 90 days. Ex-offenders who complete the program will be placed in four-year paid apprenticeships with industry partners upon completion of training. The Department of Corrections will continue to use the online curriculum after the grant.

Contact:

Jeanette Congrove, Case Manager, jcongrove@co.adams.co.us

- **Addressing Challenges of Colorado's Advanced Manufacturing Workforce Colorado Association for Manufacturing and Technology (CAMT)**

Program target: 200 trained; 190 will receive certificates/credentials

Industry-specific (aerospace, bioscience, energy) career development for the incumbent/displaced workforce with short-term, high-impact training via five certification programs in "Lean Basics," "Lean Six Sigma," "Quality Basics," "Quality Technician," and "Yellow Belt" training.

Contact:

Jo Ann Miabella Galvan, Director of Industry Alliances & Programs, jgalvan@camt.com

- **Building a Regional Training Center for Product Translation CSU Product Development and Manufacturing Core (PDM Core), Rocky Mountain Regional Center of Excellence for Biodefense and Emerging Infectious Diseases (RMRCE), Department of Microbiology, immunology, and Pathology**

Program target: 100 trained, 40 placed

Proposes offering three two-to-four hour certificate courses directly related to understanding the regulatory process. The first course will target undergraduates, grad students, incumbent workers, and academic faculty and will cover the general regulatory process including current Good Laboratory Practices (cGLP) and Good Manufacturing processes (GMP). The second course will target grad students, senior scientists, and industry counterparts. It will address

topics such as pre-clinical and clinical trial design, toxicology, pharmacodynamics, and biostatistics. The third class will target the same audience as the second class but address topics such as final filtration, validation, and risk management.

A byproduct of the course offerings will be increased industry/academic interaction. The courses offered will ultimately become accredited certification courses and portions of their content (recorded videos) will become available online. The proposed offering is part of a larger plan for building a regional center for product translation.

Contact:

Deanna Scott, Co-Principal Investigator, Deanna.Scott@colostate.edu

**• Building Colorado's Talent Pipeline to Aerospace and Technology
Denver Public Schools**

Program target: 80 trained, 20 placed

This project will recruit, train, and funnel students to fill the employment needs of the aerospace and IT industries. Portions of the project are designed to encourage STEM education in the early HS grades. The project is centered on the FIRST Robotics program and competitions. In addition to training and placing participants, summer internships for teachers and students at Lockheed Martin are also included as part of the grant.

Contact:

Scott Springer, Executive Director, CTE, Scott_Springer@dpsk12.org

**• RAT – Research Animal Technology, Care and Management
Front Range Community College**

Program target: 120 trained, 42 placed

The project will train participants in Laboratory animal technology (for employment in animal research facilities). Participants will either complete exam preparation to take the American Association of Lab Animal Science (AALAS) certification exam (ALAT - Assistant Lab Animal Technician or LAT - Lab Animal Technician) or receive entry-level job skills training. The entry-level training will provide job-specific animal technology skills and there is an associate degree program to obtain the formal education for future career advancement. The degree will transfer to a future new baccalaureate degree in CSU's animal science department, resulting in the creation of a career ladder. The program becomes a 1+2+2 program when partnered with the high school animal technology program that is currently taught at FRCC. Industry partners will provide hands-on training opportunities via internships.

Contact:

Dr. Phyllis Abt, Instructional Services, College-wide, phyllis.abt@frontrange.edu

**• Clean Energy Manufacturing and GIS Technology Manufacturing
Poudre School District**

Program target: 50 trained, 30 placed

The project will develop and implement two state-of-the-art courses in Clean Energy

Manufacturing and GIS Technology Industries for 50 high school students and develop workforce skills booster lessons for an estimated 120 students. Of the 50 high school youth who will take two courses in Clean Energy Manufacturing and Information Technology Industries, thirty will either enter internship programs or entry-level employment and 15 seniors will be placed in entry-level employment.

Contact:

Kathy Hanson, Career & Tech Ed Coordinator, kathyh@psdschools.org



WIRED Grant Scholarship Award at Regis University

WIRED in the News

There have been many articles published in the recent past highlighting WIRED's mission and successes and that of its grantees. On the next few pages are a few articles published in the past year. We have also included some excerpts from the articles. To see additional articles, recent press releases and other useful information, please go to <http://metrodenver.org/workforce-profiles/WIRED/news.html>:

1/4/2008 – *Denver Business Journal*

“Getting Down to Business: Executives are Taking an Active Role in Improving Colorado's Education System”

<http://denver.bizjournals.com/denver/stories/2008/01/07/focus1.html>

Too few students are studying subjects in growing demand by Colorado employers, such as engineering, math and science. As a result, many Colorado companies with high-paying jobs are looking in other states for qualified workers -- or are considering packing up and moving away.

“The onus is on us as employers to make sure that educators know what we need,” said Leanna Clark, Co-Owner and Principal, Schenkein Public Relations. “Our teachers aren't business people, and in many cases haven't worked in a business environment. “So there's as an opportunity in this type of collaboration for business people to help educate our educators as to what we need.”

6/25/2008 – *Denver Newspaper Agency - Your Hub*

“DNA Experiments Open Students' Minds to Bioscience”

<http://denver.yourhub.com/DenverSouth/Stories/News/General-News/Story~488402.aspx>

The CCA WIRED Bioscience project, “Opening Minds to Bioscience,” fulfilled its goal: to equip high school teachers and students with hands-on instruction in molecular biology and information about careers in Colorado's bioscience industry.

“We'll never know how many students will be electrified by this program, but we do know that we will have had a distinct impact,” said CCA President, Linda Bowman.

CCA Professor of Biology Todd Bergren said “By training high school teachers, we end up touching a lot more students' lives, because the teachers can take what they've learned directly into the classroom. There is no way I could teach all of those students myself. By teaching 60 high school teachers, each of whom has at least 100 students, we can have a far bigger impact than we might have had otherwise.”

“This generous grant has allowed us to make an important difference in students' education and in their lives,” said Todd Bergren.

8/15/2008 – *Northern Colorado Business Report*

“New energy technology needs new technicians”

<http://www.ncbr.com/article.asp?id=95491>

As Northern Colorado positions itself as a leader in new energy technology, the region’s colleges are taking on new curriculum tailored to meet the needs of the field's existing employers.

Front Range Community College launched its own WIRED-enabled energy employment program this summer. Energy Boost held its first classes this summer and has three more sessions scheduled for this fall. The 80-hour sessions have a limit of 20 students each, and the first two sessions were completely full.

Keith Korasick, director of manufacturing for Woodward said they are also working with Front Range on the next step in the career ladder - a two-year degree program focused on engineering technology. Front Range continues to look for industry involvement in growing the program and could see such a program develop as early as January.

10/23/2008 – *9News.com*

“Study: Colorado kids not prepared for high tech jobs”

<http://www.9news.com/seenon9news/article.aspx?storyid=102409&catid=509>

Colorado's effort to entice high tech companies has been successful, bringing the bioscience, aerospace, information technology and energy companies to our state. Now the Metro Denver Economic Development Corporation is trying to find a way to make sure Colorado students are prepared to fill jobs in these industries.

“There are sectors of our society that pay much higher than average wages are growing and are on the leading edge of where our economy will go long term and surprisingly we have significant skill shortages in these areas,” explained Tom Clark with the Metro Denver EDC.

Thank You to Our Partners

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Community College of Denver students launch a weather balloon

The Metro Denver WIRED Legacy

By the time the WIRED grant expires on January 31, 2010, WIRED will have provided the vision and tools necessary to change the way people think, act and behave in the region in response to training and job opportunities in aerospace, bioscience, energy, and IT/software. We will have shown individuals and organizations alike the importance of working together to create and maintain a talent development model that meets the needs of industry and gives local citizens the skills and experience needed for jobs in the region's fast-growing industries with high-wages.

Together we can drive prosperity to businesses, individuals and their families, and the regional economy.

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