Metro Denver’s WI RED Grant
Growing our Own: A Model for Reducing our Dependence on Imported Skills

Presented to: Workforce Liaisons Group
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WIRED Awarded Grants

Generations

1st Generation
2nd Generation
3rd Generation
1st Generation Regions:
- Coastal Maine
- Northeast Pennsylvania
- Upstate New York
- Piedmont Triad North Carolina
- Mid-Michigan
- West Michigan
- North Central Indiana
- Florida's Great Northwest
- Western Alabama & Eastern Mississippi
- Greater Kansas City
- Denver Metro Region
- Central & Eastern Montana
- California Innovation Corridor

2nd Generation Regions:
- Central-Eastern Puerto Rico
- Southwestern Connecticut
- Northern New Jersey
- Delaware Valley
- Appalachian Ohio
- Southeast Michigan
- Tennessee Valley
- Southwest Indiana
- Southeastern Wisconsin
- Arkansas Delta
- Rio South Texas Region
- Wasatch Range
- Northern California

3rd Generation Regions:
- Southern Arizona
- South-Central Idaho
- South-Central Kansas
- Central Kentucky
- Southeastern Mississippi
- Southeast Missouri
- Minnesota Triangle
- Central New Jersey
- Greater Albuquerque (NM)
- North Oregon
- Southeastern Virginia
- Pacific Mountain
  Washington
- South Central & South West Wisconsin
WIRED Metro Denver Nine-County Region
Metro Denver WIRED Goals

GOAL #1:
Develop a home-grown skilled workforce for aerospace, bioscience, information technology and energy so that our regional companies can remain competitive in the global economy.

GOAL #2:
Be the best region in the country in science, technology, engineering and math (STEM) education, supported by a full skill-set of competencies and masteries. Metro Denver will be the “go to” region when companies are deciding to relocate or expand because our workforce has the best STEM skills.

GOAL #3:
Provide an entrepreneurial climate for business creation and expansion for companies in targeted industries.

GOAL #4:
Become the region where the minimum acceptable educational standard for all becomes a post-secondary certificate or an Associate Degree.

GOAL #5:
Create a regional system that seamlessly integrates workforce, education, and economic development programs to effectively meet the standards of individuals and business.
Primary Project Convener and Program Oversight
Metro Denver Economic Development Corporation (EDC)
[Denver Chamber of Commerce]

Goal: To align and bring together Industry and Supply Sides in regional, strategic, sustainable, transformational, industry-specific and innovative ways to address the skills gap and other needs of businesses in select high growth industries

Industry Panels

Aerospace Industry Panel
(Convener: Vicky Lea)

Bioscience Industry Panel
(Convener: Jerry McCarthy)

Energy Industry Panel
(Convener: Mary Jeffreys)

IT/Software Industry Panel
(Convener: Laura Hahn)

Leadership Council
Comprised of two co-chairs from each panel and the Colorado Department of Labor and Employment

Guiding principles/criteria:
R = Regional
S = Sustainable
T = Transformational
I = Industry Targeted, Innovative

Supply Panels

K-12 Education Panel
(Convener: Colorado Children’s Campaign)

Higher Education Panel
(Convener: University of Colorado, Graduate School of Public Affairs)

Local Workforce Boards Panel
(Convener: Workforce Board of Metro Denver [Metro WIB])

Small Business Development Centers Panel
(Convener: Colorado Small Business Development Center Network)
Outcomes To-Date

- Developed Implementation Plan
- Hired WIRED team
- Convened 8 panels & Leadership Council
- Awarded $3.7 million for JumpStart grants
- Conducted Workforce Survey
- Completed regional Asset Mapping
- Partnered with Governor’s Office on NGA STEM grant
Timeline 2006 - 2007

- Sept: WIRED Staff hired
- Oct: JumpStart Grants Awarded
- Nov: JumpStart Grants Meetings
- Dec: Workforce Survey Completed
- Jan: Workforce Survey Completed
- Feb: JumpStart Grants Meetings
- March: Asset Mapping Complete
- April: Industry Focus Group
- May: Workforce Survey Completed
- June: Final WIRED Panel Meetings
- July: Innovation Grants
- Aug: Final WIRED Panel Meetings
- Sept: Implementation Plan Completed
- Oct: 1st WIRED Panel Meetings
- Nov: 1st WIRED Panel Meetings
- Dec: 1st WIRED Panel Meetings
JumpStart Grant Awards

Aerospace
Community College of Denver - *JumpStart into Aerospace*
Serves Denver, Douglas and Jefferson Counties

Aerospace & Bioscience
University of Denver - *Educating Colorado’s Aerospace & Bioscience Workforce*
Serves Boulder, Denver and Douglas Counties

Bioscience
Community College of Aurora - *Preparing High School Faculty and Staff in Emerging Technologies*
Serves Adams, Arapahoe, Denver and Jefferson Counties

Science, Technology, Engineering & Math (STEM)
Colorado Minority Engineering Association ~ Mathematics Engineering Science Achievement (CMEA~MESA)
Serves Adams, Arapahoe, Broomfield, Boulder, Denver, Jefferson, Larimer and Weld Counties

Thompson School District - *Sustaining Transformation through STEM*
Serves Larimer and Weld Counties
JumpStart Grant Awards

Energy
- The Council for Adult and Experiential Learning (CAEL) - *Education Today, Energy Tomorrow*
  Serves Denver and Jefferson Counties

- Red Rocks Community College - *Building and Sustaining a Pipeline of Process and Maintenance Technicians*
  Serves Adams, Denver and Jefferson Counties

Information Technology
- Denver School of Science and Technology - *11th Grade Internship Program*
  Serves Adams, Arapahoe, Boulder and Denver Counties

- Regis University – *Business and IT Management Bilingual Degree*
  Serves Adams, Arapahoe, Broomfield, Boulder, Denver, Douglas, Jefferson, Larimer and Weld Counties

All Industries
- Jobs for America’s Graduates (JAG)
  Serves Adams, Denver, Jefferson and Weld Counties
County Coverage of JumpStart Grants

- Larimer: 3 Grants
- Weld: 4 Grants
- Boulder: 4 Grants
- Broomfield: 2 Grants
- Adams: 6 Grants
- Arapahoe: 4 Grants
- Denver: 9 Grants
- Jefferson: 7 Grants
- Douglas: 3 Grants
# In-Demand Occupations

## Aerospace
**Engineers**: Aerospace, Electronics, Systems, Software, & Mechanical  
**Managers**: Mission Assurance, Business, Engineering & Program  
**Business Operations Personnel**  
**Technicians**: Assembly & Test  
**Analysts**: Business, Mission, Structural & Thermal

## Bioscience
**Scientists**: (MD/PhD 10-15 years experience)  
**Engineers**: All types, including software and manufacturing process  
**Technicians/ Associates**: (including instrument calibration technicians)  
**Skilled Trades & Facilities Maintenance Personnel**  
**Business Operations Personnel**

## Energy
**Scientists**: Geologists & Petro Physicists  
**Engineers**: all types  
**Technicians**: Engineering, Lab, Service, Manufacturing & Maintenance  
**Field Personnel**: CDL Drivers, Rig Hands, Linemen & Pipeline Operators  
**Business Operations Personnel**

## IT/Software
**Designers/Developers/Programmers**: ASP.net/Java/Oracle  
**Architect Senior Designers**  
**Highly Technical Specialists** w/ Customer Service Skills  
**Highly Technical Project Managers** w/ Engineering skills  
**Senior Engineers**: Software & System  
**Applied R&D Staff**  
**Business Operations Personnel**, esp. Technical Sales
In-Demand Business Operations Occupations

- **Aerospace:** Business Analysts, Contracts & Proposal Specialists, Strategic Product Managers, Programming Consultants

- **Bioscience:** Business Analysts, Project Managers, Business Development Specialists

- **Energy:** Managers, Accountants, Auditors, Landsmen, Sales Personnel

- **IT/Software:** Sales and Marketing Personnel, Account Managers, Project Managers

**Most sought after employees have 6-14 years experience**
Skills Required For WIRED Industries:

• Strengthened basic core skills
• Leadership and personnel skills
• Project management
• Communication skills
• Business skills
• Technical literacy
• Critical thinking
• Teamwork and team-building
• Complex problem solving
WIRED Industry Needs and Issues

• Lack of connectivity between industry & education:
  – Difficulties identifying education partners
  – Better connections needed with Tech Transfer offices
  – User-friendly access points needed for internship information (for industry & students)
  – “Structural” issues, or lack of “marketing”?

• STEM skills:
  – Better STEM skills needed for high-level jobs
  – More rigorous STEM education required for K-12 population

• Better business and “soft” skills needed:
  – Leadership, project management, communication, team-working
WIRED Industries Needs & Issues Cont…

- Technology education standards
- How to address unbalanced information from career counselors/teachers/parents
- How to develop & retain student interest in STEM, provide positive influence on career choice
- Experience and skill set most important requirement for new hires
- Lack of diversity in applicant pool
- Lack of awareness about workforce services
- Perception that workforce system does not provide qualified applicants
- Emerging jobs hard to fit into workforce system’s standardized job descriptions
**Issues When Recruiting from Outside the Region:**

- Out-of-state recruiting builds networks for future hires
- Narrow specialization of some highly specialized positions requires external recruitment
- Where occupational pay across the country is even, cost of living in Metro Denver Region can be high
- Internal recruitment/promotion may utilize out of state employees
- Relocation and transfer costs
Next Steps

- Finalize panel recommendations
- Conduct gap/issues analysis
- Poll students, teachers, job-seekers
- Complete global competitiveness research
- Complete research & development phase
- Develop an action plan for sustainability
- Fund transformational initiatives
Contact Us

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