

# MINNESOTA PIPELINE PROJECT

**PRIVATE INVESTMENT, PUBLIC EDUCATION  
LABOR AND INDUSTRY EXPERIENCE**



**ADVANCED  
MANUFACTURING**



**AGRICULTURE**



**HEALTH CARE  
SERVICES**



**INFORMATION  
TECHNOLOGY**

# Meeting Agenda

1. Welcome & Introductions
2. PIPELINE Project Highlights
3. PIPELINE Project Tools and Results
4. PIPELINE Project Future Work
5. Individual Industry Council Updates
6. Break Out – Industry Council Discussion & Feedback
7. Wrap-Up



# Introductions

## Ice breaker

What is the thing you are most excited about this summer? (event, celebration, vacation, etc.)





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**INFORMATION  
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## EMPLOYMENT

Employers identify and validate occupational competencies.

Employ trainees.

Hands-on learning.

## EDUCATION

Align curriculum to occupational competencies.

Provide classroom training.

Theoretical learning.



## PIPELINE PROJECT

INDUSTRY-BASED. EMPLOYER-DRIVEN. DUAL-TRAINING EXPERIENCE.

## GOVERNMENT

Integrate and expand the dual-training and registered apprenticeship system in Minnesota.



## PIPELINE Project Highlights

- Industry-based. Employer-driven. Dual-training experience
- Competency based learning.
- Resources for building Dual-Training Programs.
- Alignment and matching with other initiatives, projects and curriculum

## PIPELINE Project Highlights

- Name and position
- Brief explanation of your business
- How and why you and your company have been involved in the PIPELINE Project?
- Anticipated results of your dual-training and/or registered apprenticeship program.



# PIPELINE Project Tools and Results

- More than 350 industry leaders are engaged in the PIPELINE Project.
- More than 300 dual-trainees will be in a PIPELINE Project dual-training program in 2016.
- 64 employers are receiving assistance from DLI in the creation of new dual-training programs.



# PIPELINE Project Tools and Results

- Fifteen employers were awarded dual-training grants totaling \$490,550 in the fall of 2015 and 24 employers applied for dual-training grants in 2016.
- Industry Council outreach, exposure and awareness plan to promote dual-training to workers and youth.
- DLI collaborates to align workforce needs with statewide workforce partners.



# PIPELINE Project

## Competency Standards Development

- Occupation experts
- Review and validate competencies
- Customize process depending on the industry and occupation



## PIPELINE Project validated occupations as of June 13, 2016

INDUSTRY	OCCUPATIONS					
 <b>Advanced Manufacturing</b>	Machinist/CNC	Maintenance and repair worker	Mechatronics	Welder	Flexo technician	Quality supervisor (food safety)
 <b>Agriculture</b>	Agronomist	Swine technician (grow finish)	Swine technician (sow farm)	Swine manager	Mechanic, industrial equipment	Quality supervisor (food safety)
 <b>Health Care Services</b>	Psychiatric/mental health technician (in-patient)	Psychiatric/mental health technician (out-patient)	Senior living culinary manager	Medical assistant	Health support specialist	
 <b>Information Technology</b>	Security analyst	Software developer	Web developer (back end)	Web developer (front end)	Service desk/front line or computer user support specialist	



## **Competency Validation:**

Jess Niebuhr, Executive Director  
Real-Time Talent



## **MnSCU Program Matching:**

Mike McGee, System Director  
Minnesota State Colleges & Universities



## **OHE Dual Training Grants:**

Timothy Larson, Grants Coordinator  
Office of Higher Education (OHE)



# MN Department of Labor and Industry Pipeline Project

**Jess Niebuhr**

Executive Director

**Erin Olson**

Research Strategist

Real-Time Talent



# Department of Labor and Industry

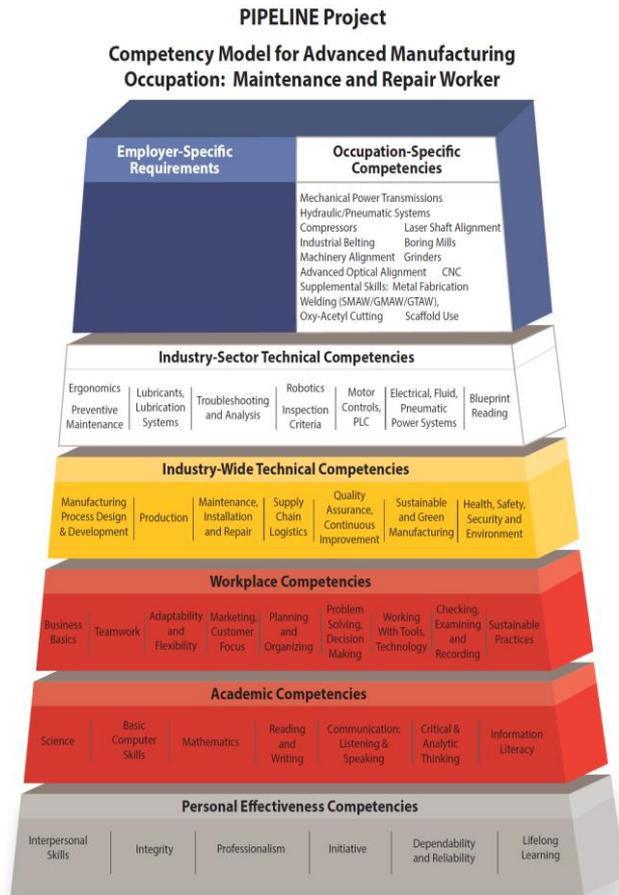
## *Competency Models and Career Pathway Development*



- Report of Advanced Manufacturing and Industrial Maintenance and Repair Jobs
- Verify accuracy of over 25 competency models for the MN Pipeline Project
  1. Text Analysis: Compare employer feedback to matching job descriptions
  2. Occupation Search: Open search of online postings by job title, function, or occupation to indicate trends in skill and education demand as employers are marketing positions



# Competency Model Validation



Based on: Advanced Manufacturing Competency Model Employment and Training Administration, United States Department of Labor, April 2010.

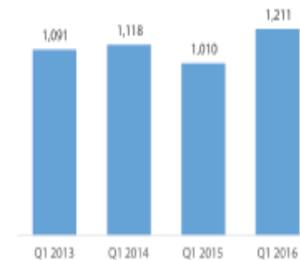
## MANUFACTURING



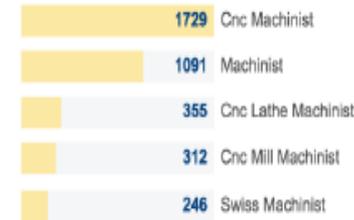
**HIGH MATCH**  
 between job posting  
 requirements and  
 Pipeline Competencies

## Machinist

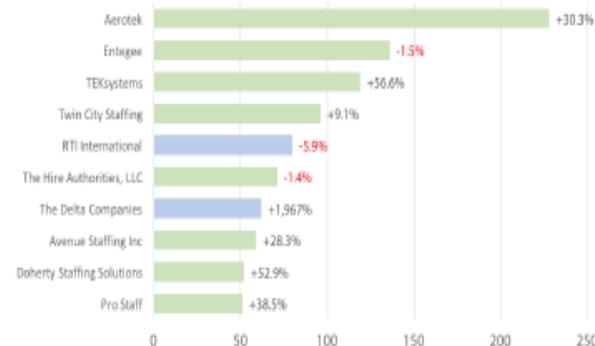
### Machinist Jobs Posted Online in MN



### Top 5 Job Titles Used by Employers



### Top Employers of 2015



### Current Hiring Statistics (3/31/16)

Online openings, including staffing: 376 jobs  
 Number of employers hiring now: 151 employers  
 Candidate supply: 12,000  
 Average posting period: 50 days  
 Median salary: \$41,450

Locally **32** candidates / job opening

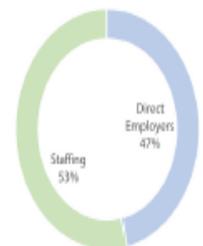
### Top 5 Hard Skills (2015)

1. CNC Machine Operation
2. Shop Math
3. Enterprise Resource Planning Software\*
4. Precision Machining Experience
5. Geometric Dimensioning & Tolerancing\*

### Top 5 Soft Skills (2015)

1. Oral & Written Communication
2. Team-Oriented, Teamwork
3. Troubleshooting\*
4. Problem-Solving
5. Detail-Oriented\*

### Online Job Postings, 2015



# Coming Soon

- In its role as a convener and data innovation hub, RTT will manage a cross-sector initiative to...
  - Pilot a new model of online labor exchange
  - Brings efficiency through employer to employee matching
  - Supports K-12 career development and high school employment
  - Provides unprecedented access to data on employer demand, time to fill positions, fill rate of positions, etc.



# Research Support from Real-Time Talent

- Data Pulls - for specific grant, career pathways, and curriculum needs
- Reports
- Industry Fact Sheets
- Occupation Snapshots
- Survey Advising
- Search Criteria



# MnSCU Program Matching

- Matching data/employer identified competencies to curriculum
- Helping employers and education providers to create a common language
- Promoting current credit and non-credit education programs
- Highlighting that most occupational competencies are currently integrated into program curriculum
- Continuing conversation on the identification and validation of industry recognized credentials

**MINNESOTA PIPELINE PROJECT: DUAL-TRAINING GRANTS**  
PRIVATE INVESTMENT, PUBLIC EDUCATION LABOR AND INDUSTRY EXPERIENCE

## Dual Training Grant Basics

- Will cover the cost of training (tuition, fees, and books and materials)
- Maximum grant
  - \$150,000 per employer/organization per application
  - \$6,000 per student per year
- Large employers are required to pay a 25% match
- Student must apply for a FAFSA if they attend an eligible Institution.



**MINNESOTA PIPELINE PROJECT: DUAL-TRAINING GRANTS**  
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## Eligible Grant Applicants

Employer (or organization representing employers) can apply if:

- Employees will be trained in an eligible occupation
- Employees have not yet attained competency standard(s)
- Positions located in Minnesota
- The application documentation details the competencies to be met through related instruction and on-the-job training



**MINNESOTA PIPELINE PROJECT: DUAL-TRAINING GRANTS**  
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## First Round Grants

- 15 Grantees
- Total awards of \$490,548.09
- A complete list is available on our website

## Second Round Grants

- Received 22 applications
- Total ask of \$1,026,000.00
- Information will be posted once we award



**MINNESOTA PIPELINE PROJECT: DUAL-TRAINING GRANTS**  
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## Grant Timeline

- We are in the process of reviewing and determining grants for this latest round of applications.
- Decisions will be sent out by the end of June.
- For selected Grantees, orientation sessions will be in July and August.
- Anticipate next request for application released sometime this fall.

More information on dual training grants:

<http://www.ohe.state.mn.us/mPg.cfm?pageID=2160>



# PIPELINE Project Future Work

## Industry Councils:

- Engagement with trade associations in PIPELINE industries
- Explore regional meetings
- Industry Councils twice per year (November 2016 and April 2017)
- Dual Training and Registered Apprenticeship Conference in Summer 2017



# PIPELINE Project Future Work

## Occupational Competency Development:

- Identify 4 – 10 new occupations July 2016 – June 2017
- Matching PIPELINE identified technical occupations validated by employers with academic programs and training: DUE September 2016
- Correlating OJT with employer identified and validated competency standards.



# PIPELINE Project Future Work

## Dual-Training Development Tools:

### DLI dual-training tools

- Employer to employer mentoring
- Dual-training program development: Related Instruction and On-the-Job Training
- Resource identifier and locator for employers
- Facilitator for public and private barriers to dual-training and registered apprenticeship programs



# Industry Council Highlights Advanced Manufacturing

- Exposure and employment opportunities for youth.
- Flexo Technician and Quality Supervisor (Food Safety)
- Maintenance Repair and Mechanic, and Mechatronics most popular occupations for dual-training programs



# Industry Council Updates Advanced Manufacturing

- Matching employer validated competencies to academic programs and training: MnSCU Centers of Excellence, DCTC and HTC.
- Employer to employer mentoring .
- Accessing grants to assist with startup costs for dual-training and registered apprenticeship programs through MAI grant and OHE Dual Training grants.



# Industry Council Updates

## Agriculture

- Expanding exposure to agriculture career opportunities.
- Identification of next PIPELINE occupational competencies: finance with Department of Agriculture, Centers of Excellence, Agri-Growth and Real Time Talent.
- Quality Supervisor (Food Safety) – new PIPELINE Project occupation.



# Industry Council Updates

## Agriculture

- Agronomist, Swine Manger and Swine Technician are most popular occupations for dual-training programs.
- Matching employer validated competencies to academic programs and training: MnSCU Centers of Excellence, MN Pork Board, South Central College.
- Accessing grants to assist with startup costs for DT and RA programs through MAI grant and DT grant.



# Industry Council Updates

## Health Care Services

- Medical Assistant, and Senior Living Culinary Manager are new PIPELINE Project validated occupations.
- Radiology Technician – idea for occupational competencies, currently on hold per employers request.
- HSS is most popular occupation for dual-training programs.



# Industry Council Updates Health Care Services

- Matching employer validated competencies to academic programs and training:  
HealthForce MN: MnSCU Center of Excellence, Care Providers, Leading Age MN, Fairview Health System, and HCMC.
- Accessing grants to assist with startup costs for dual training and registered apprenticeship programs through MAI grant and OHE Dual Training grants.



# Industry Council Updates Information Technology

- Exposure and employment opportunities for youth.
- Software developer is the most popular dual-training program.
- Project Manager (IT) and Big Data/Cloud Computing are occupations that are currently in the competency development process .
- Matching employer validated competencies to academic programs and training: MnSCU IT Center of Excellence .



# Industry Council Updates Information Technology

- Employer to employer mentoring.
- Dual-training development tools for registered apprenticeship, specifically related to on-the-job training that are flexible.
- Accessing grants to assist with startup costs for dual training and registered apprenticeship programs through MAI grant and OHE Dual Training grants.



# Industry Council Discussion and Feedback

- What does success look like for the PIPELINE Project in 2019?
- How should success be measured?
- How should the PIPELINE Project engage more industry leaders in dual-training and/or registered apprenticeship?





# Next Industry Council Meeting

## November 15, 2016

### 9:00 am – 12 noon

# Thank You!

For more information contact  
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