

MINNESOTA PIPELINE PROJECT

PRIVATE INVESTMENT, PUBLIC EDUCATION LABOR AND INDUSTRY EXPERIENCE



**ADVANCED
MANUFACTURING**



AGRICULTURE



**HEALTH CARE
SERVICES**



**INFORMATION
TECHNOLOGY**

Webinar agenda

1. Office of Apprenticeship, USDOL
2. Minnesota PIPELINE Project objectives
3. Project plan and structure
4. Lessons learned and next steps
5. Questions and answers





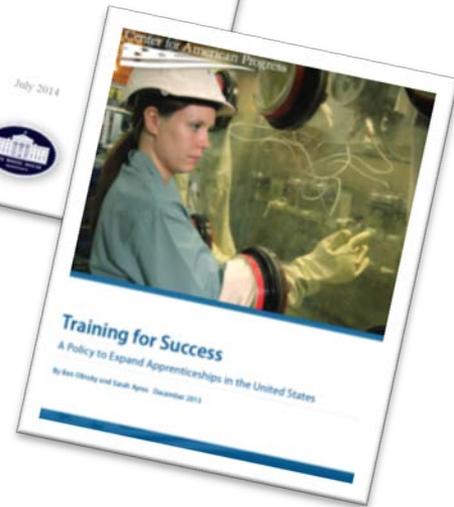
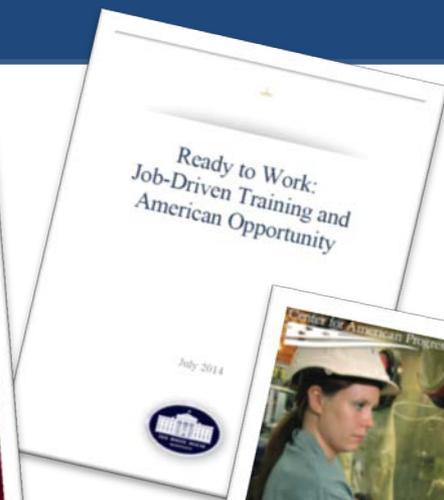
Apprenticeship**USA**

A campaign to expand registered apprenticeship
across the USA and into new industries

John Ladd
Administrator, Office of Apprenticeship, USDOL

National call to action: Double the number of apprentices

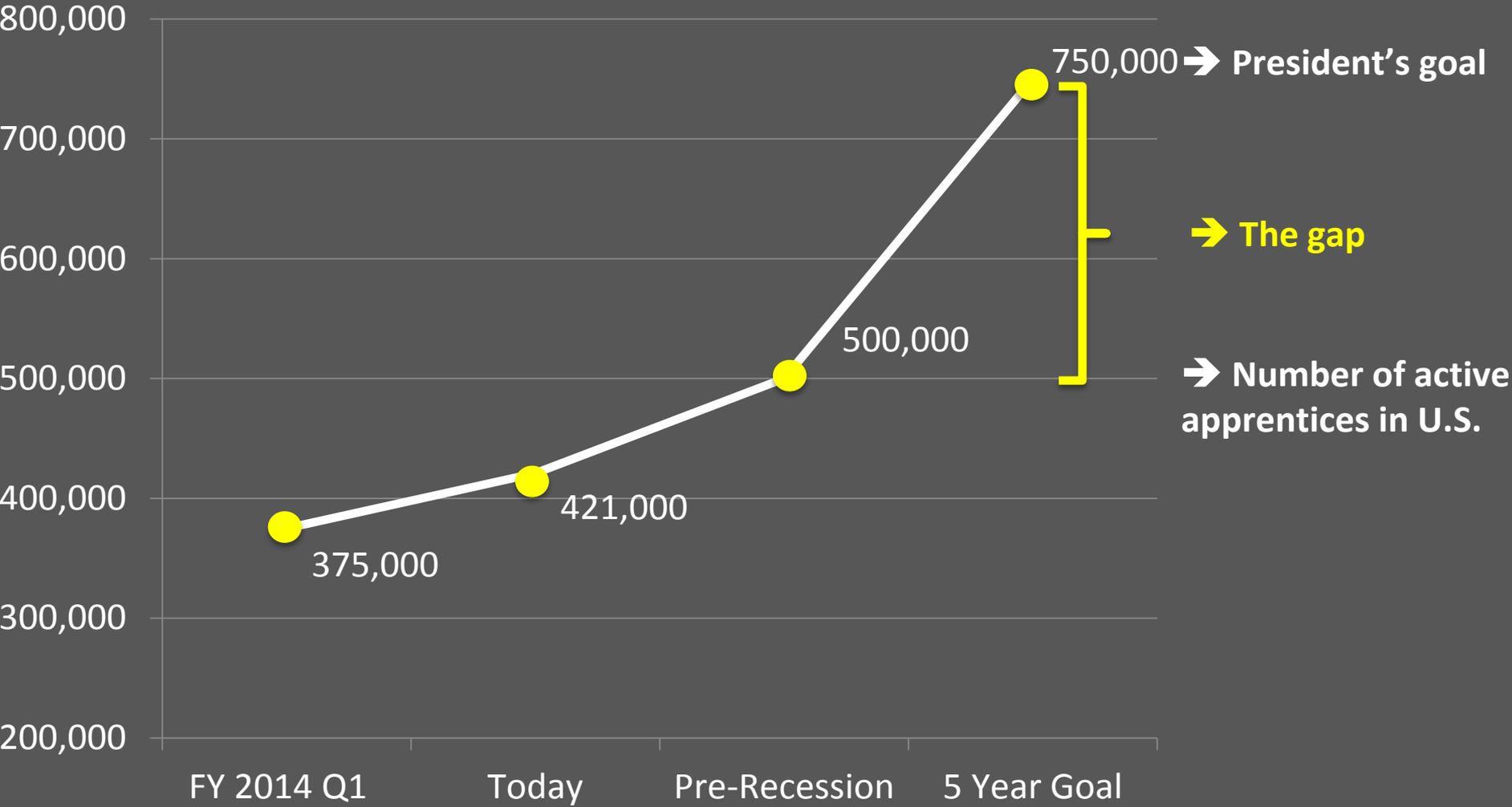
“Tonight, I’m also asking more businesses to follow the lead of companies like CVS and UPS, and offer more educational benefits and paid apprenticeships -- opportunities that give workers the chance to earn higher-paying jobs even if they don’t have a higher education.”
– President Obama, State of the Union Address, January 20, 2015



**American
Apprenticeship Grants
\$100 Million**

Challenge: Need new strategies to reach higher levels

Number of active apprentices in U.S.





How do we bridge that gap?



Seeking to grow **Registered Apprenticeship** in traditional industries and expand into new and emerging occupations and sectors.



Energy



Healthcare



Transportation
and Logistics



Advanced
Manufacturing



ICT

Expanding **Registered Apprenticeship** in new sectors brings new challenges ...

Lack of infrastructure or experience with apprenticeship

Can't get to scale working single employer by single employer

Few intermediaries available with expertise to help

Doesn't make sense for every new employer to have to "reinvent the wheel"



... and opportunities for new approaches and solutions.



Today

National approach getting underway
ApprenticeshipUSA | LEADERS | SEAs

Innovative state approach
Minnesota PIPELINE Project

ApprenticeshipUSA

Sectors of excellence in apprenticeship

- **Supporting Registered Apprenticeship growth in targeted sectors.**
- **Work with businesses and other partners to expand Registered Apprenticeship in a specific sector.**

LEADERS

- **Organizations and leaders in advocating and supporting growth of Registered Apprenticeship across the US.**



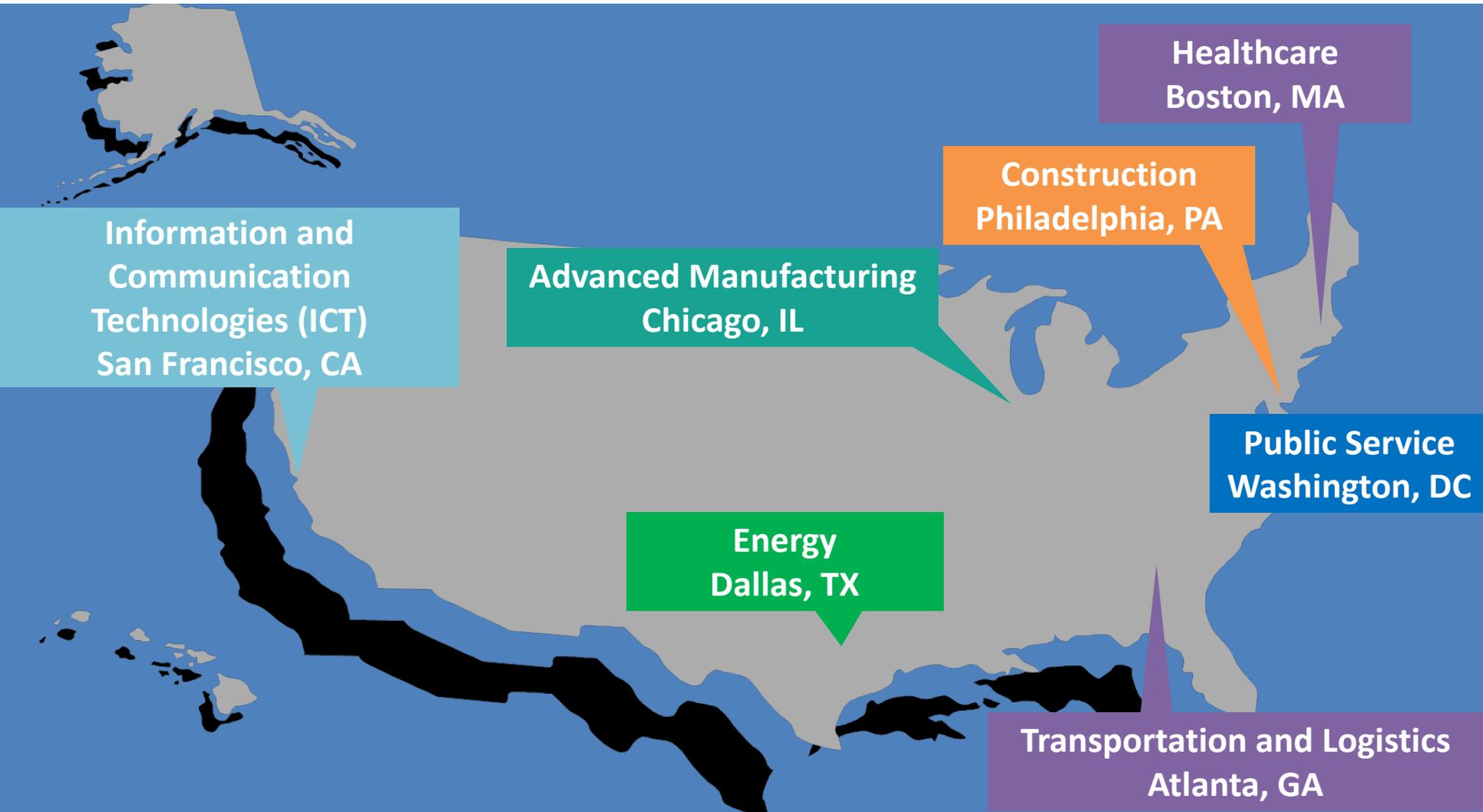
Sectors of Excellence in Apprenticeship (SEAs)

A sector-based framework for Apprenticeship expansion that serves to:

- Sector-based convening of industry leaders, intermediaries, experts, government, others
- Promote Apprenticeship expansion through sector-based outreach and engagement
- Help industries realize the value, potential and advantages of training apprentices through sector-focused technical assistance

Sectors of Excellence in Apprenticeship (SEAs)

ETA to Convene 7 SEAs Around Key Industry Sectors



MINNESOTA PIPELINE PROJECT

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



**ADVANCED
MANUFACTURING**



AGRICULTURE



**HEALTH CARE
SERVICES**



**INFORMATION
TECHNOLOGY**

Minnesota PIPELINE Project

Private Investment, Public Education, Labor and Industry Experience

State agencies to work with recognized industry experts, representative employers, higher education institutions, and labor representatives to define competency standards for occupations in:

- advanced manufacturing
- agriculture
- health care services
- information technology



PIPELINE Project objectives

- **Develop and enhance Minnesota skilled workforce**
- **Participation from industry leaders**
- **Expand registered apprenticeship in Minnesota**



Dual-training and Registered Apprenticeship

Dual-training:		Registered Apprenticeship:
Dual-trainee is an employee of participating employer		Registered Apprentice is an employee of sponsoring employer
Competency Standards	Work Process	Work process: 2,000 hours or equivalent of structured OJT
	Related Instruction	Related technical instruction: 144 hours each year or equivalent
		Safety training: 50 hours
		Progressive wage schedule
		State issued completion certificate

PIPELINE Project plan

Component #1

Convene *Industry Councils* for four industries:

Advanced Manufacturing
Agriculture
Healthcare Services
Information Technology

Component #2

Develop *competency standards* for up to four occupations in each industry.

Component #3

Develop *delivery models* of dual-training and apprenticeship.

Component #4

Progress report and implementation of industry council *recommendations*.

Component #5

Scaling and expansion.



Minnesota PIPELINE Project

Component #1

Convene *Industry Councils* for four industries



**ADVANCED
MANUFACTURING**



AGRICULTURE



**HEALTH CARE
SERVICES**



**INFORMATION
TECHNOLOGY**

Industry Councils

249 participants in Industry Councils

- **95 employers and industry association representatives**
- **46 education representatives**
- **21 labor and labor/education representatives**
- **87 government, legislative and other**



Industry Councils overview



Understanding requirements of the industry	Gathering information	Feedback and next steps	Reporting outcomes
<p>Identify current and future industry workforce needs.</p> <p>Discuss current state of each industry.</p>	<p>Select at least three occupations for each industry.</p> <p>Identify experts to assist with occupational competency validation.</p>	<p>Explore dual-training/ apprenticeship delivery models.</p> <p>Receive feedback to implement dual-training/ apprenticeship in each industry.</p>	<p>2015 Progress Report to the Minnesota State Legislature submitted January 2015.</p>



Advanced Manufacturing in Minnesota

More than 300,000 manufacturing jobs statewide in 2013. Currently 30 companies sponsoring apprentices with a combined 182 active apprenticeships in place.

75 people participated in the Advanced Manufacturing Industry Council meetings.

- **27 from industry and industry associations**
- **14 education representatives**
- **Seven labor and labor education representatives**
- **27 government, legislative and other representatives.**

Industry Council identified occupations

Advanced Manufacturing

- **CNC Operator/Machinist**
- **Maintenance and Repair Worker**
- **Mechatronics Technician**
- **Metal Fabricators: welders, cutters, solderers, brazers**





Agriculture in Minnesota

Minnesota ranks fourth in the US for total market value of products sold, including fourth in the value of crops and seventh in the value of livestock products.

52 people participated in the Agriculture Industry Council meetings.

- **19 member of industry and industry associations**
- **Nine education representatives**
- **Four labor and labor/education representatives**
- **20 government, legislative and other representatives**



Industry Council identified occupations

Agriculture

- **Agronomist**
- **Herd Manager**
- **Skilled Mechanic (Agriculture)**

Information Technology in Minnesota

Information Technology (IT) has grown in importance in the state of Minnesota, providing more than 88,600 jobs. IT occupations are projected to gain more than 8,000 new jobs through 2022.

65 people participated in the Information Technology Industry Council meetings

- **30 Members of industry or industry associations**
- **12 education representatives**
- **Four labor and labor/education representatives**
- **19 government, legislative and other**



Industry Council identified occupations

Information Technology

- Security Analyst
- Web Developer
- Software Developer
- Service Desk/Front Line Support or Computer User Support Specialist



Health Care Services in Minnesota

With more than 445,000 jobs at more than 14,000 organizations, Health Care and Social Assistance is the largest employing industry in Minnesota. Currently Health Support Specialist Registered Apprenticeship program has 87 registered apprentices through eight employer sponsors.

57 people participated in the Health Care Services Industry Council meetings.

- **19 Members of industry or industry associations**
- **11 education representatives**
- **Six labor and labor/education representatives**
- **21 government, legislative and other.**



Industry Council identified occupations

Health Care Services

- Health Information Technician
- Health Support Specialist (current registered apprenticeship program)
- Medical Scribe
- Psychiatric Technician/Mental Health Technician



Minnesota PIPELINE Project

Component #2

Develop *competency standards*



**ADVANCED
MANUFACTURING**



AGRICULTURE

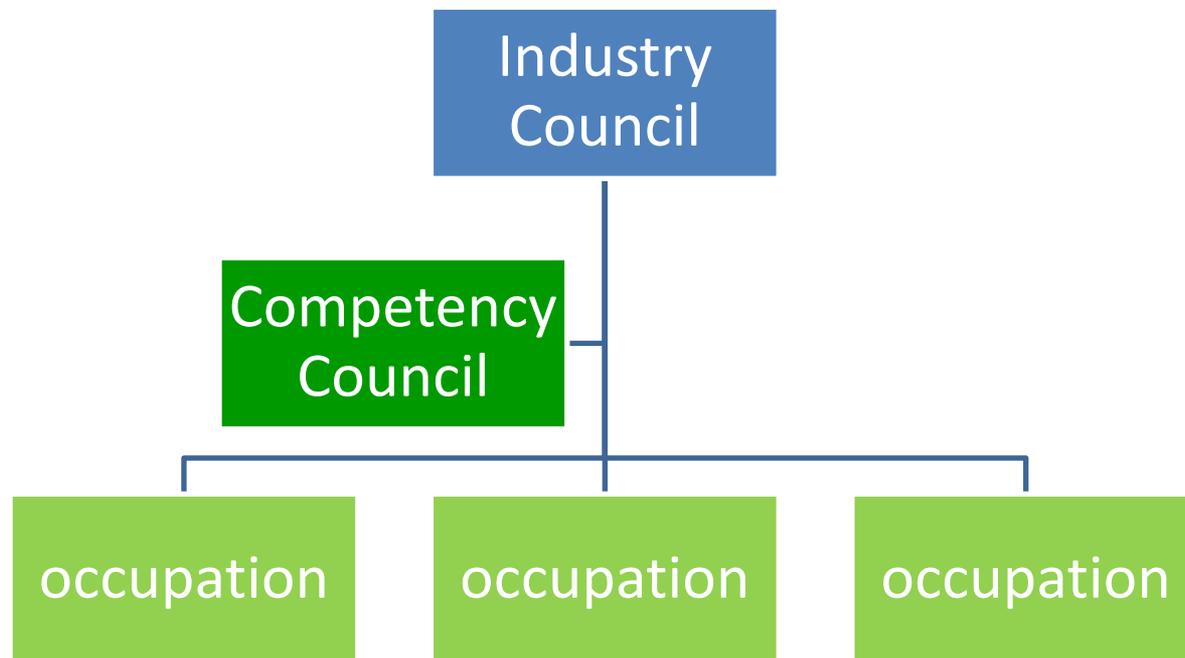


**HEALTH CARE
SERVICES**



**INFORMATION
TECHNOLOGY**

Competency Development Approach

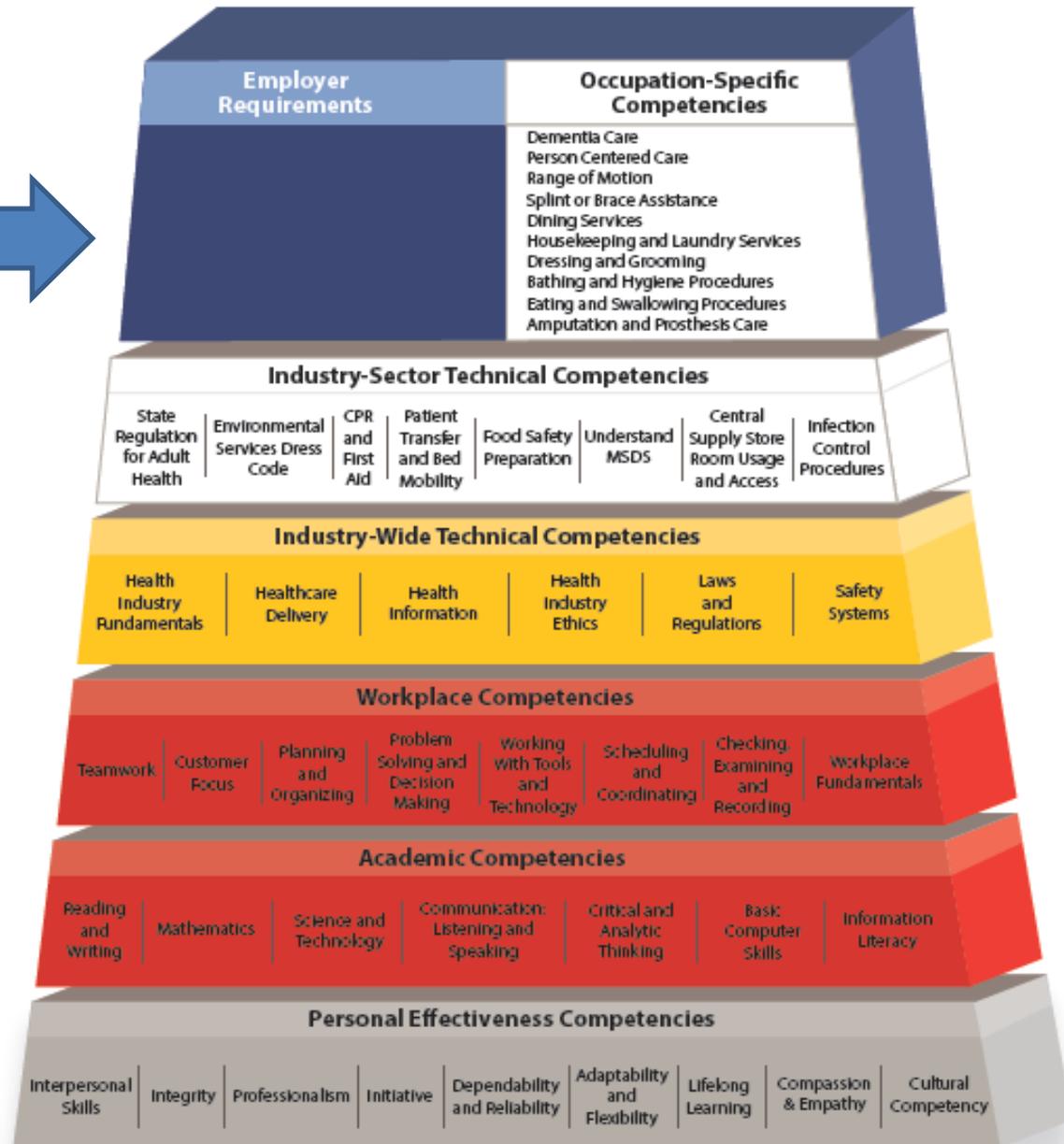


Competency Council overview

Understanding requirements of the industry	Gathering information	Feedback and next steps	Reporting outcomes
<p>Convene Industry Planning Teams to provide guidance with validation processes in their industry.</p> <p>Identify occupational SMEs.</p> <p>Help prioritize occupational competency work.</p>	<p>Research occupations identified in Industry Councils by using educational programs, current apprenticeship programs in US and international, and US DOL competency model.</p>	<p>Utilize occupational experts in competency councils: employers, related instruction providers and labor representative.</p> <p>Identify and validate competencies through facilitated discussions, webinars and electronic forms.</p>	<p>PIPELINE Competency Findings Report June 2015.</p>



Occupation: Health Support Specialist



Based on: Health: Allied Health Competency Model Employment and Training Administration, United States Department of Labor, December 2011.

Minnesota PIPELINE Project

Component #3

Develop *delivery models*



**ADVANCED
MANUFACTURING**



AGRICULTURE

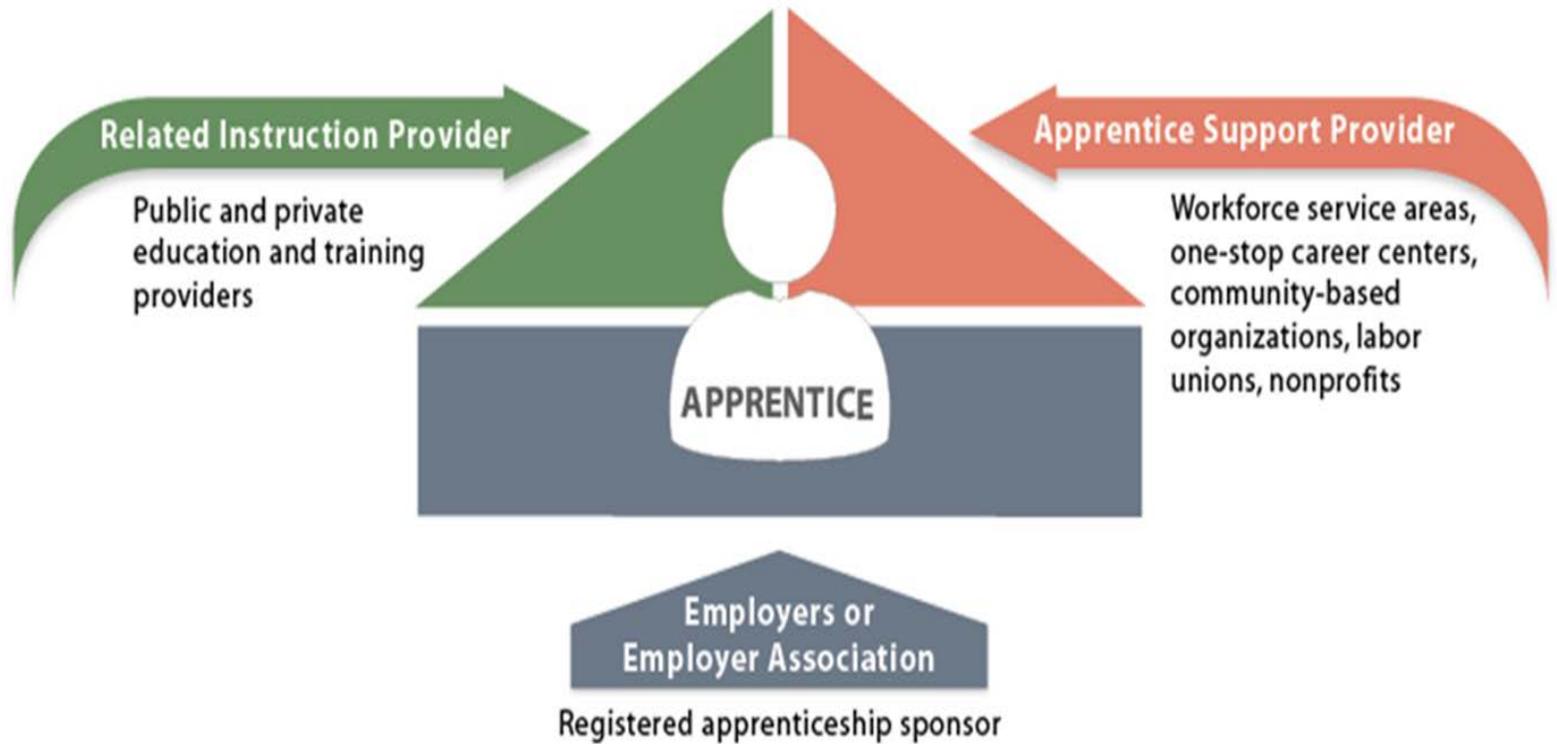


**HEALTH CARE
SERVICES**



**INFORMATION
TECHNOLOGY**

Delivery model



Minnesota PIPELINE Project

Component #4

Industry recommendations



**ADVANCED
MANUFACTURING**



AGRICULTURE



**HEALTH CARE
SERVICES**



**INFORMATION
TECHNOLOGY**

2015 Progress Report to the Minnesota Legislature



<http://www.dli.mn.gov/pipeline.asp>

Minnesota PIPELINE Project

Lessons Learned and Next Steps



**ADVANCED
MANUFACTURING**



AGRICULTURE



**HEALTH CARE
SERVICES**



**INFORMATION
TECHNOLOGY**

PIPELINE Project Lessons Learned

- Engage legislative and employer champions.
- Actively involve decision and policy makers in industry councils.
- Align state agencies and federal goals to project.
- Involve labor organizations in all aspects of project.
- Present government's role as a resource partner.
- Focus competency council work to key industry technical and occupation specific needs (top of the pyramid).
- Brand project to create energy and momentum.
- Address capacity building for employers and industries to implement registered apprenticeship.
- Recognize the unique needs and processes of each industry.



Lessons learned cont.

- Create small sponsorship group to develop industry council membership and meeting agendas.
- Utilize industry leaders to share information about the state of their industry, workforce needs and current successful apprenticeship models.
- Enlist at least two industry sponsors for each competency council.
- Develop templates and implementation tools for employers interested in creating registered apprenticeships to build capacity and confidence.
- Acknowledge and align dual-training/registered apprenticeship programs to other workforce system initiatives.



Next steps

- **New PIPELINE legislation**
- **Ongoing PIPELINE Project work**
 - Complete and validate competencies for identified occupations.
 - Implement dual-training/registered apprenticeship programs in each targeted industry.
 - Create and execute outreach, exposure and awareness plan for dual-training/registered apprenticeship.
 - Research and identify tools to measure registered apprenticeship effectiveness and ROI.
 - Add new occupations in these industries.



Questions?

(Please use the chat function on your screen to submit questions.)

Thank you for your participation!

For more information contact
Heather McGannon, Project Manager at (651) 284-5130 or
heather.mcgannon@state.mn.us.

