

# Training Tomorrow's Workforce

Apprenticeship and Industry Training Presentation to  
EPT Symposium by:

Raymond Massey

Chair, Alberta Apprenticeship and Industry Training Board

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Government  
of Alberta



Apprenticeship and  
Industry Training

# Agenda

- The Alberta Apprenticeship and Industry Training System
- The Labour Market Situation in Alberta
- What is Alberta doing to address skilled worker shortages?
- Moving forward

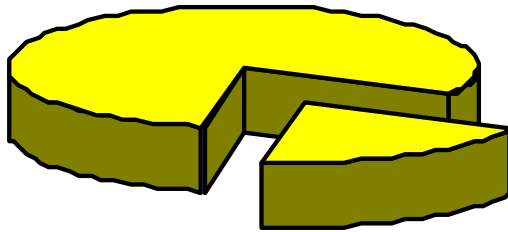
# The Alberta Apprenticeship and Industry Training System

# Industry Driven

Alberta's apprenticeship and industry training system is an **industry-driven** system that ensures a highly skilled, internationally competitive workforce in over 50 designated trades and occupations.

# Apprenticeship Training

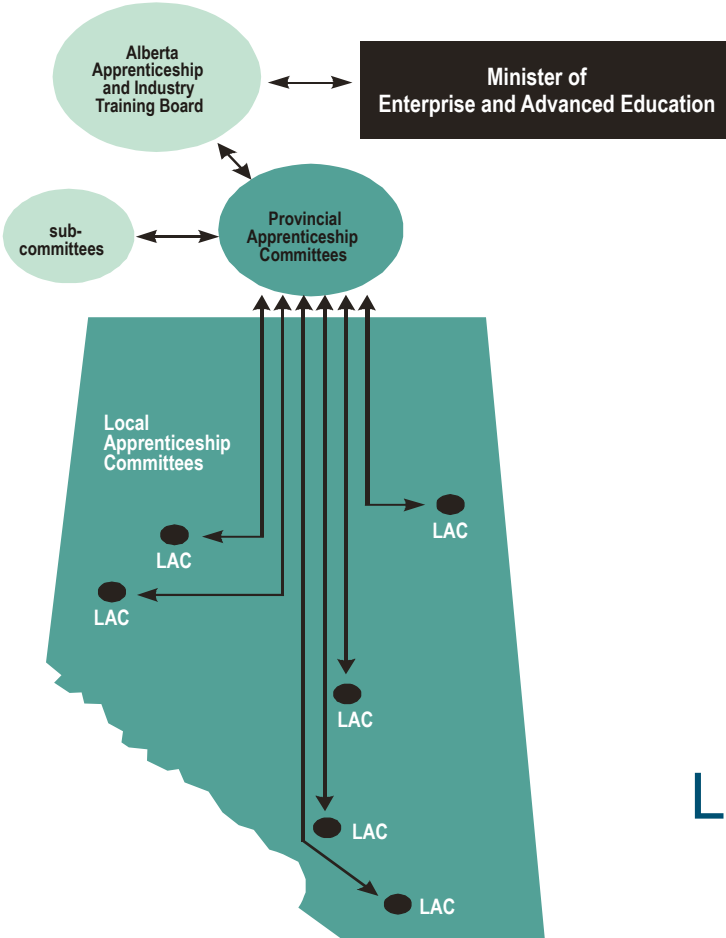
On-the-job  
training  
80%



Technical  
training  
20%

- On-the-job training
  - exposes apprentice to *how* to do the job
  - provides opportunity to practice skills and knowledge
- Technical training
  - provides the bigger picture - the theory, rationale and how things fit together
  - helps broaden the knowledge and abilities of the apprentice

# An Industry Partnership



Alberta Apprenticeship and Industry Training Board



Provincial Apprenticeship Committees (PAC)



Local Apprenticeship Committees (LAC)

# Alberta Apprenticeship Facts

In 2011, there were:

- about **60,000** registered apprentices in Alberta
- more than **17,000** new apprentices registered in Alberta
- approximately **10,000** individuals certified in designated trades and occupations.

# Alberta Apprenticeship Facts

## Apprentice Completion Rate

During the 2010-2011 school year, **78%** of apprentices who completed the first year of their program went on to complete their apprenticeship within two years of the earliest completion date.



# Alberta Apprenticeship Facts

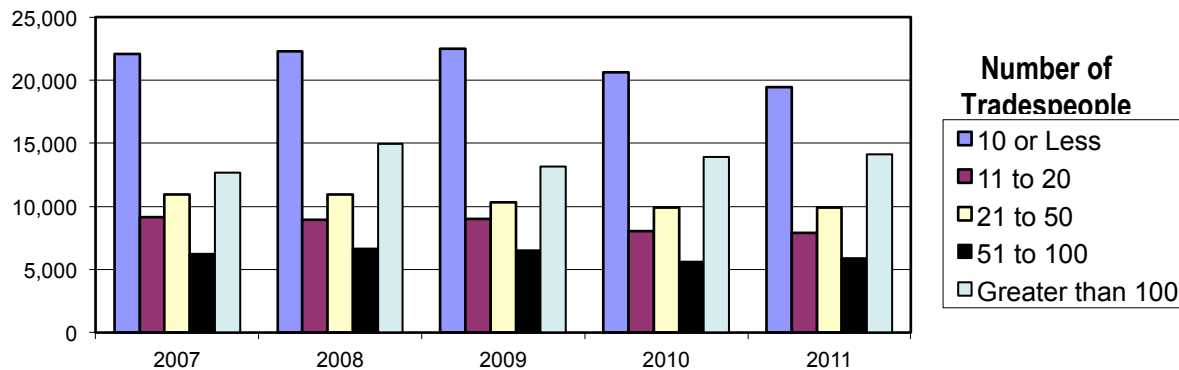
The majority of graduates who participated in the 2010-2011 Apprentice Graduate Survey expressed satisfaction with:

- the overall quality of their on-the-job training **(91%)**
- the overall quality of their technical training **(93%)**
- their experience with the apprenticeship program – **97%**  
would still have chosen to become an apprentice.

# Alberta Apprenticeship Facts

- In 2011, apprentices were being trained at more than **13,800** employer sites around Alberta—nearly half in shops with 20 or fewer tradespeople.

**Total Alberta Apprentices Being Trained by Employer Site Size, 2007 - 2011\***

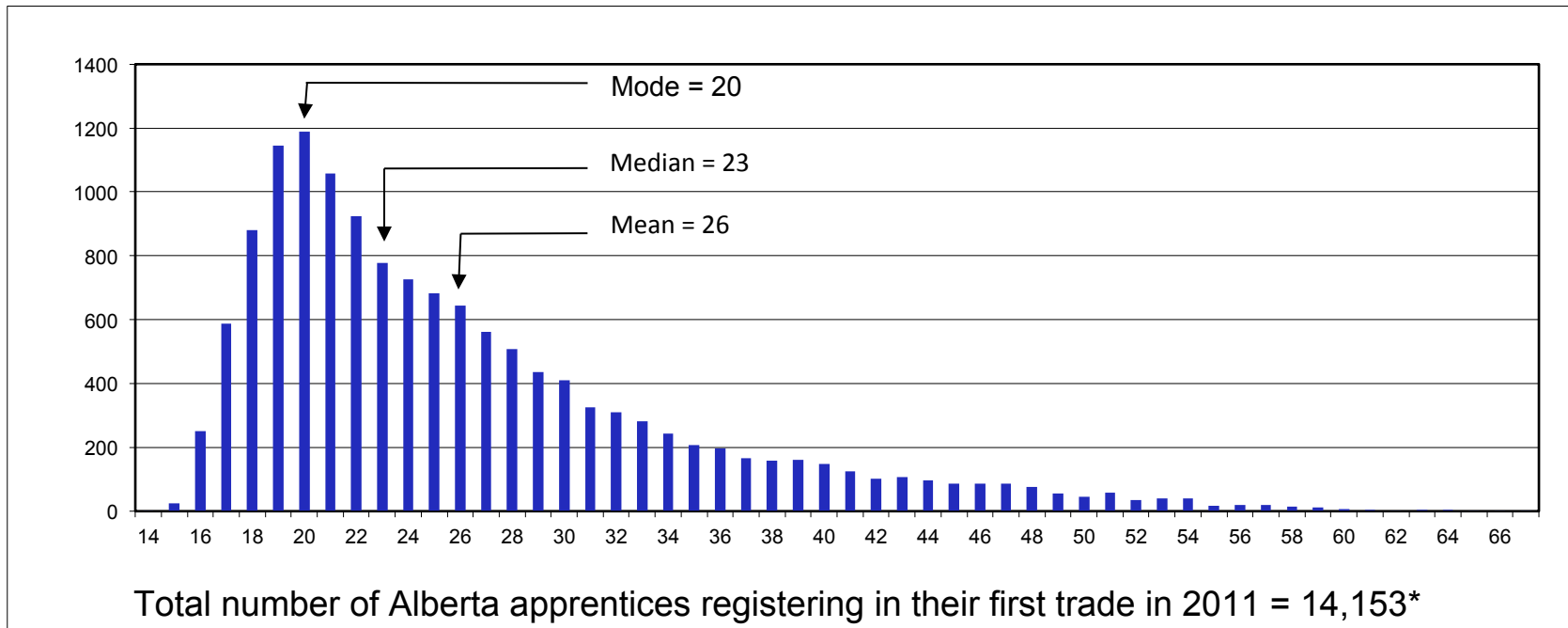


Source: Alberta Advanced Education and Technology

\*The size of an employer site is determined by the number of tradespeople.

# Alberta Apprenticeship Facts

## Age of Alberta Apprentices on Date of Registration in First Trade, 2011



Source: Alberta Advanced Education and Technology

\* First-time registrations in first trades.



Alberta has only **11** per cent of Canada's labour force, yet trains more than **20** per cent of the country's apprentices.

# Three common myths about the trades ...

## *Myths*

1. A career in the trades is only for students that don't get good grades.
2. Trades careers are dirty and dead-end jobs.
3. Women tradespeople can only be bakers and hairstylists.
4. Hiring apprentices will cost business money.

## *Reality*

1. Tradespeople need to have a strong academic foundation in reading, math and sciences to be successful in their careers.
2. Skilled tradespeople are in high demand around the world. They make good salaries and can advance to managerial positions or even own their own businesses.
3. Women in the trades can be electricians, welders, carpenters, millwrights, or any of the other designated trades or occupations.
4. Research indicates employers receive a benefit of \$1.47 for every \$1 spent on apprenticeship training.

**Employers want the best employees in their organizations!**

# Reasons why people choose a career in the trades

## Skilled tradespeople:

- are in demand in Alberta, across Canada, and all around the world!
- are well paid.
- do the work that they love.
- earn while they learn.
- can explore many career paths and opportunities.
- acquire valuable job market skills.
- become entrepreneurs.
- receive a valuable Alberta Journeyman Certificate.
- train future generations of apprentices.

# The Labour Market Situation in Alberta

# Projected Labour Shortage

“For the coming decade, Alberta could experience a labour shortage of approximately 114,000 workers”

Alberta Human Services  
Alberta's Occupational Demand and Supply Outlook 2011-2021  
Released: December 2011



# High Demand Construction Trades in Alberta

- Boilermakers
- Construction millwrights
- Electricians
- Gasfitters
- Industrial instrument mechanics
- Insulators
- Ironworkers
- Steamfitter-pipefitters
- Welders

“Local construction workforce will need to attract 44,000 new workers from outside the industry to meet total labour requirements.”\*

**Source:**

\* *Construction Sector Council, Construction Looking Forward, An Assessment of Construction Labour Markets from 2012 to 2020, February 2012).*

# Top 10 Oil and Gas Trades/Occupations with Greatest Labour Shortages to 2015

- Rig Technicians
- Millwrights
- Welders
- Steamfitter-pipefitters
- Instrumentation technicians
- Heavy Duty Equipment Technicians
- Industrial electricians
- Crane Operators
- Insulators
- Machinists

“Alberta’s oil and gas industry will need to fill approximately 10,000 job openings over the next four years, not including employee turnover.”\*

Source:

\* *Petroleum Human Resource Council of Canada, Alberta’s Oil and Gas Labour Market Outlook to 2015, May 2012.*

# An aging workforce

- The number of people 55 years of age and older in Alberta is expected to increase by nearly 40% between 2012 and 2022. <sup>(1)</sup>
- During this same time period, the number of people aged 18-28 years of age in Alberta is expected to increase 0.7%. <sup>(1)</sup>
- In the oil sands sector, 30% of the sector's hiring requirements will be due to age-related attrition by 2021. <sup>(2)</sup>

Source:

1. *Alberta Treasury Board & Finance. Population projections-medium growth*
2. *Petroleum Human Resource Council of Canada, Oil Sands Labour Market Outlook to 2021, Spring 2012.*

# What is Alberta doing to address skilled worker shortages?

# Strategic Initiative: Industry Champions

- A board led initiative.
- Vision: Leaders in industry can positively affect the public perception of a career in the trades, and are the best conduits to promote the benefits of hiring and training apprentices in their organization, as well as to their peers.
- To-date: productive conversations with oil and gas companies to develop a common understanding/language, and develop performance targets.

# Strategic Initiative: Legislation Review

- The Apprenticeship and Industry Training Act sets the framework for everything we can do.
- Beginning the preliminary reviews, and consultation with industry will be needed to determine what do we want to do strategically as a province with apprenticeship and industry training.
- The new legislation will build on these discussions and ensure that we have the enablers we need for a highly skilled and internationally competitive workforce in Alberta.

# Strategic Initiative: Changing Ratios

- Changed Journeyperson to Apprentice ratios so that all trades now have a ratio of one journeyperson to two apprentices or greater.

1:2

# Strategic Initiative: Innovation in Technical Training Delivery

- Blended Learning
  - A combination of theory delivered on-line and the practical component of technical training taking place at a training institute.
  - Four trades are currently available for blended learning on-line instruction:
    - NAIT
      - Machinist – 1<sup>st</sup> and 2<sup>nd</sup> periods (3<sup>rd</sup> and 4<sup>th</sup> period under development)
    - SAIT\*
      - Plumber – 2<sup>nd</sup> and 3<sup>rd</sup> periods (4<sup>th</sup> period under development)
      - Welder – 2<sup>nd</sup> and 3 periods
      - Electrician – 3<sup>rd</sup> and 4<sup>th</sup> periods (2<sup>nd</sup> period under development)
- \* New – Carpenter – 4<sup>th</sup> period under development



# Strategic Initiative: Innovation in Technical Training Delivery

- Helping apprentices access training and attain certification



Aldred Centre, Trades and Technology Complex, SAIT Campus

# Strategic Initiative: Recognizing Work Experience, Training and Certification

- Recognizing work experience, training and certification of tradespeople from jurisdictions other than Alberta in certain trades
  - United States of America
  - United Kingdom
  - Republic of Ireland
- Recognizing Certificates of Military Achievement issued by the Department of National Defence and the Canadian Forces as equivalent to certain Alberta trades.
- Funding contributor to the Helmets to Hardhats Canada program.

# Strategic Initiative: Market the trades as a career

- Partnerships with organizations such as Women Building Futures and CAREERS: Next Generation.
- Registered Apprenticeship Program - 1,300 students in 2011.
- Learning Clicks Ambassador Program – more than 1,000 presentations to 22,000 youth in 2011.

# Strategic Initiative: Market the trades as a career

- This year, a record **11** Albertans will compete on Team Canada at the 2013 WorldSkills competition in Leipzig, Germany.
- Team Canada will have competitors in **15** different trades at WorldSkills Leipzig 2013.



# Strategic Initiative: Market the trades as a career

- Youth in Transition to Apprenticeship.
- Apprenticeship Futures.
- Career and Technology Studies in secondary education: automotive, carpenter, cook, hair stylist and welder.
- Alberta Aboriginal Apprenticeship Initiative.
- Attending job fairs and post secondary open houses.

# Support apprentices to finish their training

- Scholarships
  - Alberta Apprenticeship and Industry Training Board Family of Scholarships
    - Alberta Apprenticeship and Industry Training Scholarships
    - Top Apprentice Scholarships
    - Pre-Apprentice Scholarships
    - RAP/CTS Scholarships



**As of March 31, 2012, over \$5 million awarded to apprentices through the board's family of scholarships.**

# Financial Assistance available to Apprentices and Tradespersons

- Employment Insurance (EI) Benefits for Apprentices ([www.servicecanada.gc.ca](http://www.servicecanada.gc.ca))
- Apprenticeship Grants ([www.servicecanada.gc.ca/eng/goc/apprenticeship](http://www.servicecanada.gc.ca/eng/goc/apprenticeship))
  - Apprenticeship Incentive Grant
  - Apprenticeship Completion Grant
- Tradesperson's Tools Deduction ([www.cra-arc.gc.ca/trades](http://www.cra-arc.gc.ca/trades))
- Alberta Government Grants for apprentice costs while attending technical training through Apprentice Income Support (based on need) ([www.humanservices.alberta/financial-support](http://www.humanservices.alberta/financial-support))
- Apprenticeship and Industry Training Board Scholarships ([www.tradesecrets.alberta.ca](http://www.tradesecrets.alberta.ca))

# Moving forward



# We all play a part

The skilled trades are a key cornerstone to Alberta's economy.

Our high quality of life depends on Alberta developing a high skilled and internationally competitive workforce.

# We all play a part

We all have an important role to play to ensure that Alberta has the skilled work force it needs for economic prosperity, now and in the future.

# How do we train the future?

- Promote the trades as a “career of choice” to Albertans.
- Reach out to parents and the education community so that they can present the trades as a viable career option for young Albertans.
- Engage industry to hire and train more apprentices to ensure we have a sustainable workforce in the future.
- Ensure Alberta’s apprenticeship and industry training system course outlines are current and relevant to industry’s needs.
- Be responsive to industry’s needs for flexible technical training options.
- Have financial assistance options such as scholarships and grants in place to help apprentices afford to attend technical training.



**Please visit Alberta's Apprenticeship and Industry Training website for more information**

**[www.tradesecrets.alberta.ca](http://www.tradesecrets.alberta.ca)**

**Thank you.**