

#### Building Futures to Build Alberta Apprenticeships Foundation



WITH BUILD ALBERTA APPRENTICESHIPS FOUNDATION

#### Our Story

2013 - 11 years - Mckee Homes (Airdrie, Alberta) with Rocky View School Division

**Building Futures - McKee Homes** 





#### 2014

10 years - Kingsmith Homes (Cochrane, Alberta) with Rocky View School Division

Community Involvement | Kingsmith Builders





## Between McKee Homes & Kingsmith Homes

- 630 students have been put through the program.
- Both classes are full with 30 students per class.
- 60 students per year.



#### 







### Road Trip



#### Established 2019

4 years of Operation - Coventry Homes (Edmonton, Alberta) with Parkland School Division







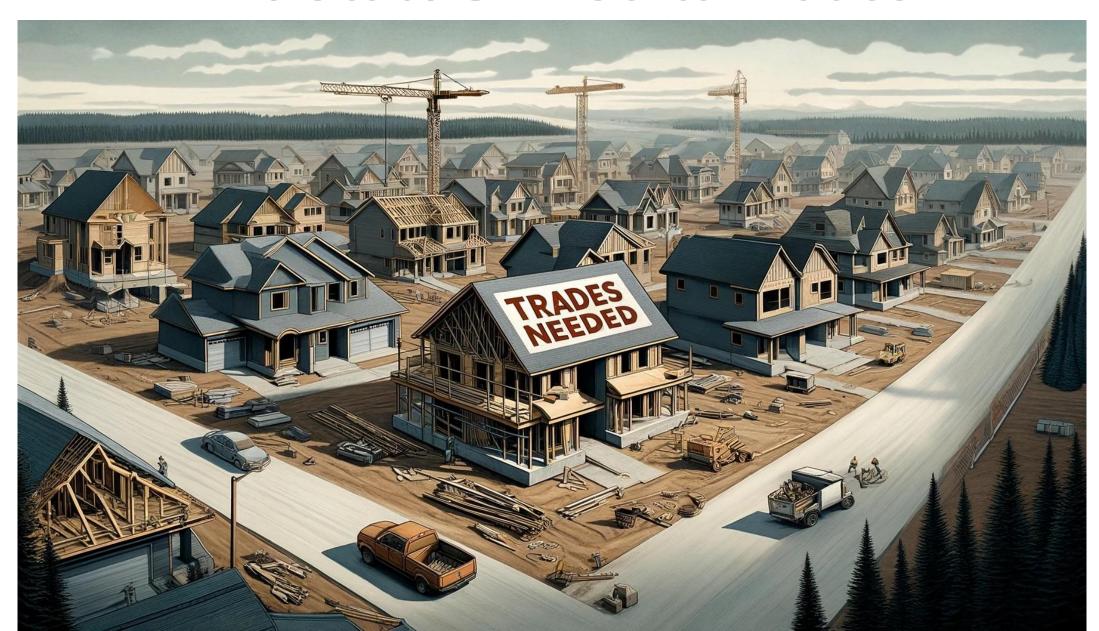


### Program Growth

- Coventry Homes and Parkland School Division have seen 57 students through the program in the first 3 years.
- This past year, Parkland doubled the size of their program, offering it to grades 10, 11 and 12.
- Currently 45 students are in the program.



#### The State of Alberta Trades



#### Alberta Economy

- Alberta is experiencing challenges in attracting and retaining workers in the trades, leading to ongoing labour shortages:
  - Economic fluctuations
  - Aging workforce >3000 skilled workers will retire every year
  - Worst youth employment in decades
  - Perception and societal factors
  - Mismatch between skills and demand
  - Geographic challenges



#### Labour Shortages

Despite new jobs being created combined with the current rate of retirement, ~113,000 new workers will be needed in the non-industrial construction sector by 2027. About 100,000 of those jobs will require skilled trades.

- BuildForce Canada





### Alberta is Calling Skilled Trades

"Alberta's continued economic growth presents a wealth of opportunities for skilled workers from across the country. The Alberta is Calling campaign and Moving Bonus reaffirm our government's commitment to attracting top talent and addressing labour force needs for sectors that are crucial to sustaining our province's prosperity. It also demonstrates we are serious about filling productive jobs with productive workers to support our expanding infrastructure needs."

Matt Jones, Minister of Jobs, Economy and Trade

# Ministry of Education - Mandate

- Equip youth with skills and direction to find meaningful employment
- Promote greater choice in education
- Fund growth of CAREERS to increase student participation in off-campus programs or paid internships
- Increase funding for <u>new</u> dual credit programming and equipment
- Investing \$20 million over 4 years in promoting career pathways
  - Career fairs
  - Funding additional mobile CTS and CTF labs



#### Advanced Education - Mandate

- Lead the skilled trades and professions to ensure a desirable education track for students, leading to highly rewarding careers
- Meet the evolving needs of the economy with a focus on journeypersons
- Funding growth of CAREERS
- Develop and promote career educational scholarships in areas of labour shortages for K-12 students
- Design a job attraction strategy regarding skilled trades and professions, including pathways for education, apprenticeship and training



#### **Program Operation**



Building Future Apprenticeships: Grade 11-12









### Building Futures: Grade 10

Homeroom approach

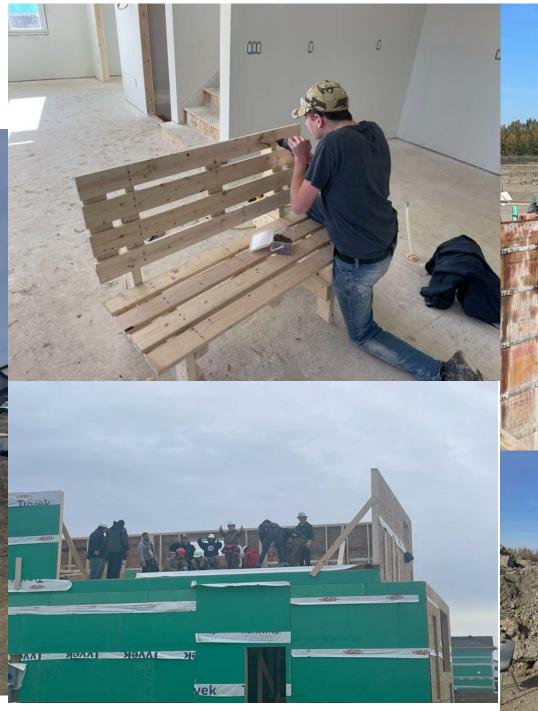
The garage is the classroom





## Students On The Tools







#### The Learning

- Support -1 & -2 students
  - o AM: math & science
  - o PM: English & Social Studies
- CTF credits
- Flexibility
- Relationships
- Personalization
- Creativity



Subject	Credits Earned	Timeline
Math 10-C or 10-3	5	September-January
English 10-1 or 10-2	5	September-January
Career and Life Management (CALM) 20	3	September-January
Science 10 or 14	5	February-June
Social Studies 10-1 or 10-2	5	February-June
Physical Education 10	5	February-June

10-Level Courses	20-Level Courses	30-Level Courses
CON1010 Construction Tools & Materials	CON2010 Site Preparation	CON3010 Concrete: Structures & Finishes
CON1070 Building Construction	CON2020 Concrete Forming	CON3030 Wall & Ceiling Finishing
CON1120 Product Management	CON2035 Framing Systems: Floor	CON3040 Stair Construction
CON1160 Manufactured Materials	CON2045 Framing Systems: Walls	CON3060 Doors & Trim
	CON2050 Roof Structures 1	CON3070 Floorcovering
	CON2070 Electrical Systems	CON3080 Energy Efficient Housing
	CON2080 Plumbing Systems	CON3110 Site Management
	CON2120 Multiple Materials	CON3210 Framing Systems: Advanced
	CON2150 Finishing & Refinishing	HCS3000 Workplace Safety Systems
		HCS3010 Workplace Safety Practices



#### Special Events



- Jill of All Trades
- Grade 9 students do Try-A-Trade
- Coventry Field Trips eg. Drafting, Customer Experience at Design Centre, Drafting Department, Estimation Department, Warranty Department & Home Owner Care
- Inland -learn about how the cement is made and mixed
- Durabuilt window manufacturing plant
- Sandhills Stair Manufacturing
- Sierra Flooring
- NAIT- tour of the main campus and Patricia campus
- Skills Competition with Skills Canada





#### Christian - Tile ... × :



Monday, April 15

This young man spent about 25 minutes cutting himself a "battle axe" out of a piece of tile with the grinder.























#### Building Futures: Grade 11 & 12

Option approach

Students transported from home high school





### **Building Future Apprenticeships**

#### Who is this program for?

- students in grade 11 & 12 who missed the grade 10 experience
- students considering RAP program but is unsure of what trade they want to focus on



### Roles & Responsibilities

School & School Division	Partner/Builder	Trades People	Students
<ul> <li>Program Coordination</li> <li>Student Selection</li> <li>Safety and Compliance</li> <li>Resource Allocation</li> <li>Curriculum Integration</li> <li>Student Support</li> <li>Evaluation &amp; <ul> <li>Assessment</li> </ul> </li> <li>Liaison between</li> <li>students, parents,</li> <li>trades, builder etc.</li> </ul>	<ul> <li>Project Management</li> <li>Trades mentorship</li> <li>Quality Control</li> <li>Home Build Timeline         Management</li> <li>Construction Budget         Management</li> </ul>	<ul> <li>Skill Training</li> <li>Supervision &amp; safety</li> <li>Feedback to staff and students</li> </ul>	<ul> <li>Active Participation</li> <li>Safety Compliance</li> <li>Collaboration and Communication</li> <li>Self-Assessment</li> </ul>

#### Student Safety

Occupational Health and Safety

Alberta Education Off-Campus Handbook Guidelines

 Workplace Safety Systems (HCS 3000) & Construction Safety Training System (CSTS 2020)

 Personal Protective Equipment (PPE) per trade in Building Futures Construction Handbook

Trade specific lessons prior to on tools (teacher & trades person)

Insurance - can't be over 6 feet high



#### Student Selection

- Limited spots available
- Application Based
- Student Survey
- Shadow Days
- Review Process
- Final Selection



#### Student Benefits

- Skills in trades
- Soft Skills (teamwork, problem solving, leadership, confidence etc.
- Head start on apprenticeships
- Academic engagement
- Employment opportunities
- Life experience



#### **Building Futures...**

#### **Graduation Rates**

Year	Total Students	Graduated	Certificate of Completion	Not Yet Graduated
2020-2021	17	15	1	1
2021-2022	18	4 (early)	TBD	TBD
2022-2023	22	TBD	TBD	TBD
2023-2024	24	TBD	TBD	TBD

### Credit Completion in Grade 10

Year	Total Students	Average # of Credits Per Student
2020-2021	17	57
2021-2022	18	57
2022-2023	22	54
2023-2024	24	TBD

### Alberta Industry Training Approved

Trade	Hours Credited to Red Seal Ticket
Plumbing	54 hours
Electrical	54 hours
Carpentry	200 hours

### RAP Program

Year	Total Students	RAP Program	% of Students
2020-2021	17	7	41%
2021-2022	18	4	22%
2022-2023	22	12	54%
2023-2024	24	TBD	TBD

#### Women in the Trades

Program	Year	<b>Total Students</b>	Female	% of Female
PSD	2020-2021	17	4	24%
PSD	2021-2022	18	3	17%
PSD	2022-2023	22	6	27%
PSD	2023-2024	24	4	17%
RV Mckee	2023-2024	25	9	36%
RV Kingsmith	2023-2024	30	14	47%

#### **Success Stories**





#### Student Testimonials

I enjoyed this program because everything is chill and it is a small class. You get to meet new friends and the teachers are all very nice. My favorite trade would be framing. It is the longest one you will be with. The Framers were super nice and they taught us a lot. The framing part was a lot of teamwork and we all got along together. I enjoyed the whole program from class and teachers to the trades people. It is a lot of fun and if I could I would do it again.

-Nathan

So far I have enjoyed the program. It is a cool experience and a good bragging right to say 'I built a house at 16'.

-Pickles (Braydi)

If I was able to do things all over, I would. The things I have learned, friends I have made, I will remember for the rest of my life.

-T2 (Taydyn)

I think the course is great. It is well put together, and has some awesome teachers.

-Griffin

#### **Negative Reviews**

I really didn't like the framing on the cold days when it was snowing.

-Jesse

#### In the News

#### **News Articles**

#### **Spruce Grove Examiner/Stony Plain Reporter**

- PSD Students getting hands-on experience with building futures program by Josh Thomas
- Students raise first wall of Building Futures complex by Josh Thomas

#### 88.1 - The ONE

• Parkland county students building a home from scratch - by Andrew Walker

#### **Global Edmonton**

• Parkland County students building duplex in immersive learning program - by Morgan Black

#### **CTV Edmonton**

• Students in Spruce Grove building house as part of high school curriculum - by Brandon Lynch

#### **CBC Edmonton**

• With hammers and saws, these students are building a house in high school | CBC News



#### Impact & Benefits to Builders

- Addressing Skilled Labor Shortages
- Retention and Employee Loyalty
- Building a Talent Pipeline
- Enhancing Reputation and Corporate Social Responsibility



#### Future Direction & Opportunities

- Build Alberta Apprenticeships Foundation
- Program Expansion
- Future Partnerships
- Community of Practice with participating School Divisions



## Build Alberta Apprenticeships Foundation

- Mission of the Program
- Vision of the Program
- Objectives of the Program

#### September 2024

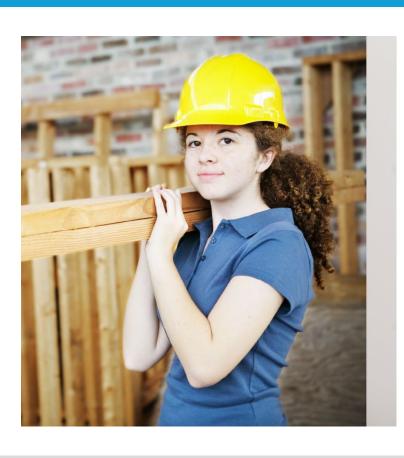
Encore Master Builders (St. Albert, Alberta) with St. Albert Public Schools

24 students starting in September of 2024





### Program Potential



- There are currently 2600 students between Spruce Grove Composite High School and Memorial Composite in Stony Plain
- Building Futures is currently reaching 1.7% of the student body in Parkland High Schools
- 2023-2024:
  - 60,692 Grade 10 students in Alberta, 1.7% is 1031 students
  - 59,614 Grade 11 students in Alberta, 1.7% is 1013 students
  - 72,609 Grade 12 students in Alberta, 1.7% is 1234 students
- More than 3000 skilled workers retire each year in Alberta.
- If Building Futures could reach 1.7% of high school students in the Province = 3278 students offsetting the number of retirees.



#### **Contact Information**

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