



Apprenticeship and Industry Training Statistical Profiles 2019

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APPRENTICESHIP AT A GLANCE

- Alberta's apprenticeship system is agile, responsive, and facilitates innovative pathways for post-secondary learners to successfully become members of an educated and professional workforce.
- Apprenticeship is a multi-pathway post-secondary program that intersperses classroom instruction with on-the-job learning through mentorship.
- Alberta's apprenticeship education is designed to develop highly knowledgeable and skilled individuals in-line with the needs of the labour market and industry.
- Collaboration and partnerships among government, industry and post-secondary institutions help ensure that apprenticeship education is responsive to the needs of apprentices, industry and the economy.
- Approximately 80 per cent of an apprentice's education is completed on the job and is provided through the employer under the guidance of a qualified individual. The other 20 per cent is completed through classroom instruction provided at, or through, a public post-secondary institution.
- The classroom instruction is most often delivered through 'block release', where the apprentice spends a block of time, generally eight weeks per year, in class. For some apprenticeship programs, classroom instruction may also be offered in other formats such as competency-based apprenticeship training (CBAT), distance delivery, weekly apprenticeship training system (WATS), mobile delivery, and blended learning.
- Most apprenticeship programs are three to four years in length.
- While many Albertans begin an apprenticeship through employment, various alternative pathways are also available.
 - High school students can register through the Registered Apprenticeship Program (RAP). In RAP, they obtain on-the-job learning and work experience as credit toward both an apprenticeship program and a high school diploma while earning an income.
 - High school students can also participate in apprenticeship education through the 19 different Career and Technology Studies (CTS) Pathways to Apprenticeship programs which include first period in-class curriculum. CTS students can receive advanced standing should they choose to continue with a formal apprenticeship program after high school.
 - Many post-secondary institutions, as well as some community organizations and unions, provide apprenticeship preparatory programs for adult Albertans. Some programs provide foundational academic and workplace essential skills and focus on improving employability, while others include first period in-class curriculum.
- Alberta is participating in the Harmonisation Initiative and is part of the Apprentice Mobility Protocol which work to ensure that no Albertan faces mobility barriers to progressing in, and completing an, apprenticeship program.

Financial Support for Apprentices

- Apprentices can access a variety of financial supports including loans, grants, scholarships and awards such as the Apprentice Training Award.
- Apprentices can apply for Alberta student loans and grants through Alberta Student Aid. Loans are also available through the Canada Apprentice Loan for apprentices registered in Red Seal apprenticeship programs.
- Most apprentices are eligible for employment insurance while attending classroom instruction.
- A number of scholarships are also available to recognize achievement. As of 2019, more than 1,800 scholarships are available to Alberta apprentices through the Alberta Apprenticeship and Industry Training Board Family of Scholarships, including the new High School Apprenticeship Scholarships for students who successfully complete RAP or a CTS Apprenticeship Pathway.



Alberta's Network of Industry Committees

- Alberta's apprenticeship education relies on an extensive network of approximately 160 committees and 700 individual industry representatives from grassroots industry through to the Alberta Apprenticeship and Industry Training Board.
- The role of the committees includes recommending standards for skills and competencies, establishing classroom instruction course outlines, and recognizing related program credentials.
- Committee members surveyed in 2018 agreed or strongly agreed (86%) that their committee's work was contributing to positive change in their trade/occupation.

For more information on apprenticeship education in Alberta, go to tradesecrets.alberta.ca.

APPRENTICESHIP STATISTICS AT A GLANCE - 2019

As of December 31, 2019...

- there were more than 44,000 registered apprentices
 - 4,600 were women
 - 2,500 self-identified as Indigenous
 - 2,200 began in RAP
 - 135 began in a CTS Apprenticeship Pathway
 - 80% were registered in 13 programs
- approximately 950 high school students were registered in the Registered Apprenticeship Program (RAP), and were employed at more than 600 employer sites.

In 2019...

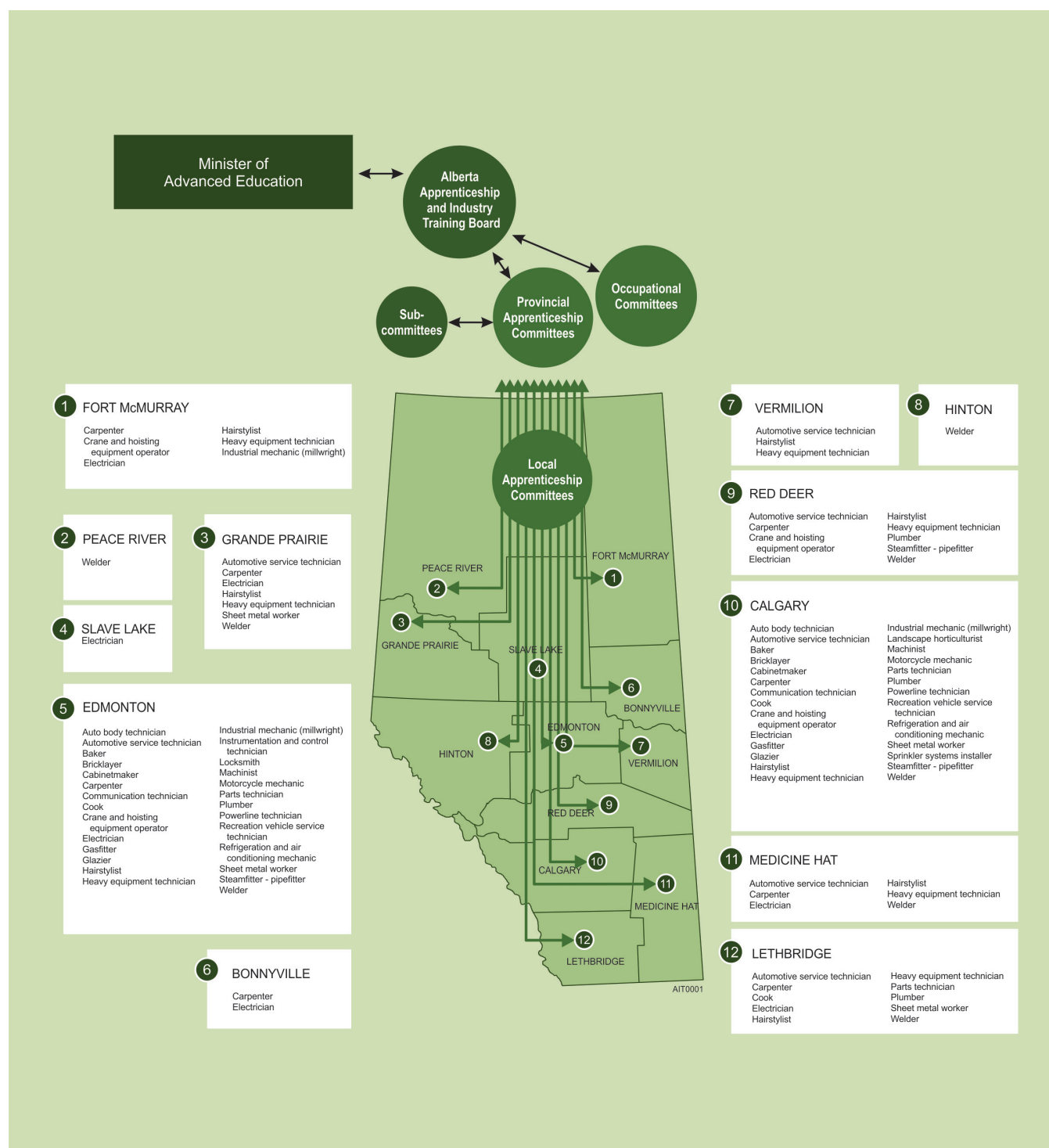
- more than 11,600 new apprentices registered.
- apprentices were being trained at more than 11,000 employer sites around Alberta.
- approximately 7,900 individuals completed their programs. (This includes completed apprentices and individuals issued occupation and qualification certificates).
- Alberta Advanced Education staff connected with more than 12,000 employer shops to promote apprenticeship programs, and work with employers and apprentices to ensure the successful completion of apprenticeship education.
- approximately 1,800 scholarships were awarded to Alberta apprentices totalling \$1.8 million.

Other Interesting Facts...

- More than 5,700 individuals who began their apprenticeship through RAP and 270 who began through CTS Apprenticeship Pathways have gone on to complete their program.
- While Alberta has 12 per cent of Canada's labour force, our province has approximately 17 per cent of the country's apprentices, and the most Red Seal endorsements of any jurisdiction in Canada.
- Alberta welcomes tradespeople from other jurisdictions and recognizes all Canadian apprenticeship certificates.
- The majority of 2018/2019 graduates in Alberta who participated in the most recent apprenticeship graduate survey expressed satisfaction with:
 - the overall quality of on-the-job training (90%);
 - the overall quality of their classroom instruction (93%); and
 - their experience with the apprenticeship program – 89% would still have chosen to become an apprentice.
- According to a 2017 survey of employers, overall satisfaction with Alberta's apprenticeship and trade certification system remains high with 90 per cent of respondents expressing satisfaction with the system.
- The majority of employers who participated in the 2017 employer survey expressed satisfaction with:
 - the skills of certified journeypersons (97%);
 - apprenticeship technical training (87%); and
 - the effectiveness of on-the-job training (95%).



STRUCTURE AND ORGANIZATION OF THE ALBERTA APPRENTICESHIP AND INDUSTRY TRAINING SYSTEM



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TABLE 1

Part A: Total and New Apprentices Registered by Year

	2014	2015	2016	2017	2018	2019
Total Apprentices Registered (all trades)	70,733	67,955	58,337	50,611	48,206	44,115
New Apprentices Registered (all trades)	23,900	17,227	13,004	12,637	13,760	11,627

Source: Alberta Advanced Education

Total Apprentices Registered: Total number registered as of December 31, 2019. Apprentices may be registered in more than one apprenticeship program or branch of a program within the same year but are counted here only once.

New Apprentices Registered: All apprentices registering during a single calendar year. The number includes those who are returning to do an additional apprenticeship program after completing one or more apprenticeship programs in previous years, or continuing in a different apprenticeship program for which they registered in a previous year. Apprentices who registered in more than one apprenticeship program or branch of a program within a specific year, or who changed from one branch to another branch within the same program on the same day, are counted only once. The number does not include reinstated apprentices (unless reinstated in the same year).

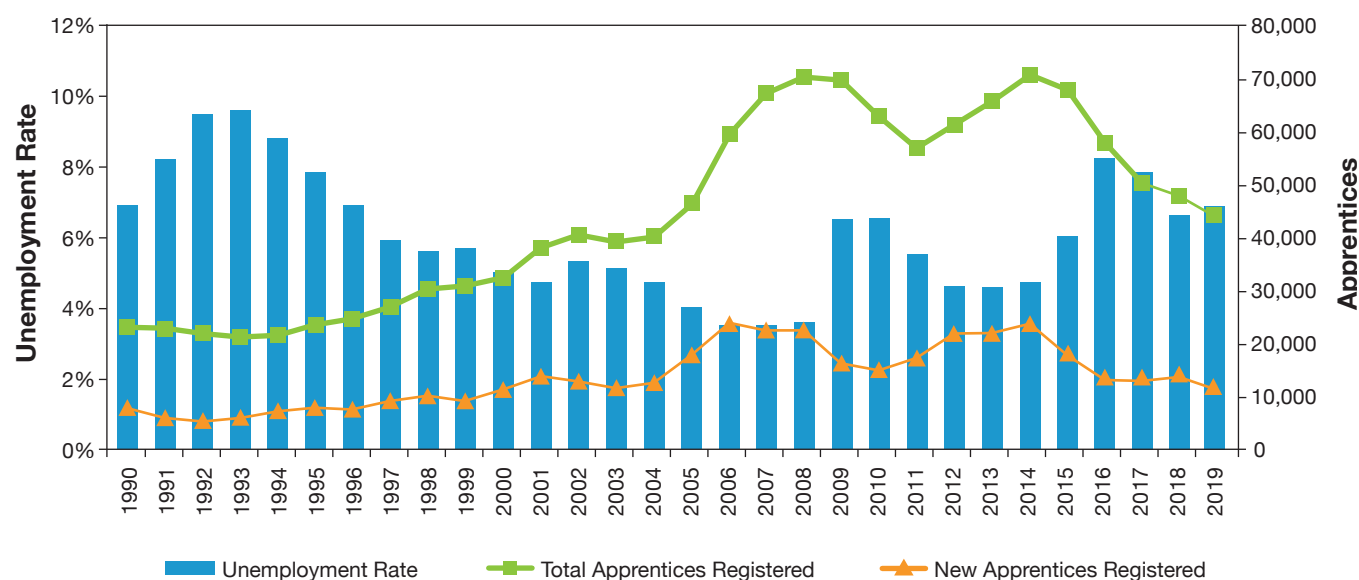
Part B: Provincial Labour Force Statistics by Year

	2014	2015	2016	2017	2018	2019
Labour Force	2,386,250	2,449,167	2,464,600	2,481,660	2,494,810	2,516,240
Employed	2,274,600	2,301,100	2,263,800	2,286,900	2,330,710	2,343,020
Unemployed	111,700	148,100	200,800	194,800	164,130	173,230
Unemployment Rate (%)	4.7%	6.0%	8.2%	7.9%	6.6%	6.9%

Source: Alberta Labour

CHART 1

Alberta Unemployment Rates and Total and New Apprentices Registered by Year



Source: Alberta Advanced Education and Alberta Labour

TABLE 2

Total Number of Apprentices Registered by Apprenticeship Program¹

APPRENTICESHIP PROGRAM	2014	2015	2016	2017	2018	2019	2018-19 % change
Agricultural Equipment Technician ■	195	199	164	161	170	166	-2%
Appliance Service Technician	75	75	75	73	77	89	16%
Appliance Service Technician • ■	64	68	70	66	70	78	11%
Commercial Appliance Service Technician •	11	7	5	7	7	11	57%
Auto Body Technician	696	661	665	636	669	620	-7%
Auto Body Technician • ■	538	514	504	500	521	466	-11%
Auto Body Prepper •	12	20	24	19	27	31	15%
Auto Body Refinisher • ■ (Note 1)	93	87	94	78	76	73	-4%
Auto Body Repairer • (Note 1)	53	40	43	39	45	50	11%
Automotive Service Technician • ■	3,183	3,205	3,068	3,018	3,066	3,104	1%
Baker ■	203	174	177	183	187	165	-12%
Boilermaker • ■	469	478	527	470	544	536	-1%
Bricklayer ■	172	182	170	158	117	90	-23%
Cabinetmaker ■	279	258	257	263	261	245	-6%
Carpenter ■	3,525	3,374	3,104	2,799	2,670	2,443	-9%
Communication Technician	124	140	135	95	96	87	-9%
Concrete Finisher ■	65	71	57	43	34	26	-24%
Cook ■	973	976	977	875	802	729	-9%
Crane and Hoisting Equipment Operator	3,249	3,017	2,354	1,892	1,944	1,616	-17%
Boom Truck Operator •	1,071	1,014	827	614	609	493	-19%
Mobile Crane Operator • ■	1,070	1,042	804	586	519	524	1%
Tower Crane Operator • ■	65	75	53	48	68	47	-31%
Wellhead Boom Truck Operator •	1,043	886	670	644	748	552	-26%
Electric Motor Systems Technician ■	43	34	35	33	44	41	-7%
Electrician • ■	13,151	13,258	11,714	10,321	9,201	7,983	-13%
Elevator Constructor •	179	253	318	289	254	196	-23%
Floorcovering Installer ■	40	43	35	32	32	24	-25%
Gasfitter	429	529	506	486	517	488	-6%
Gasfitter A • ■	376	450	420	397	406	362	-11%
Gasfitter B • ■	53	79	86	89	111	126	14%
Glazier	258	270	287	290	252	239	-5%
Glazier ■	254	268	287	290	252	239	-5%
Auto Glass Technician (Note 2)	4	2	0	N/A	N/A	N/A	N/A
Hairstylist • ■	2,324	2,222	2,218	2,241	2,248	2,194	-2%
Heavy Equipment Technician	6,550	6,195	4,933	4,214	4,539	4,797	6%
Heavy Equipment Technician •	5,447	4,970	3,842	3,191	3,379	3,508	4%
Heavy Duty Equipment Mechanic (Off Road) • ■	374	443	387	361	412	441	7%
Transport Trailer Mechanic •	137	145	117	101	106	138	30%
Truck and Transport Mechanic • ■	592	637	587	561	642	710	11%
Industrial Mechanic (Millwright) ■	2,269	2,176	1,814	1,554	1,544	1,564	1%
Instrumentation and Control Technician ■	2,157	1,956	1,580	1,429	1,349	1,201	-11%
Insulator (Heat and Frost) ■	800	786	756	826	823	453	-45%
Ironworker	1,513	1,665	1,647	1,156	1,001	1,028	3%
Ironworker (Generalist) • ■ (Note 3)	358	371	358	265	120	45	-63%
Ironworker (Metal Building Systems Erector) •	112	91	77	56	65	102	57%
Ironworker (Reinforcing) • ■	313	337	270	316	444	508	14%
Ironworker (Structural/Ornamental) • ■	730	866	942	519	372	373	0%

(continued)

TABLE 2 (continued)

Total Number of Apprentices Registered by Apprenticeship Program¹

APPRENTICESHIP PROGRAM	2014	2015	2016	2017	2018	2019	2018-19 % change
Landscape Horticulturist ■	147	147	155	147	141	118	-16%
Lather (Interior Systems Mechanic) ■	111	118	111	98	83	73	-12%
Locksmith	118	133	143	127	122	119	-2%
Machinist ■	841	753	529	367	425	457	8%
Metal Fabricator (Fitter) ■	136	129	99	76	64	68	6%
Motorcycle Mechanic • ■	208	203	186	148	141	117	-17%
Natural Gas Compression Technician	32	28	24	19	14	7	-50%
Outdoor Power Equipment Technician	67	58	63	61	54	50	-7%
Power	32	14	20	26	22	23	5%
Recreational	35	44	43	35	32	27	-16%
Painter and Decorator ■	97	95	120	78	61	55	-10%
Parts Technician	1,193	1,128	953	793	798	804	1%
Parts Technician ■	1,064	1,010	852	722	736	743	1%
Materials Technician	129	118	101	71	62	61	-2%
Plumber • ■ (Note 4)	3,800	4,047	3,775	3,330	3,150	2,816	-11%
Powerline Technician ■	891	882	672	528	448	336	-25%
Power System Electrician	484	455	260	197	160	137	-14%
Recreation Vehicle Service Technician • ■	131	157	151	138	129	120	-7%
Refrigeration and Air Conditioning Mechanic • ■	821	822	844	795	877	891	2%
Rig Technician • ■ (Note 5)	2,168	1,797	1,147	823	869	0	-100%
Roofer ■	195	190	217	220	201	181	-10%
Sheet Metal Worker • ■	1,306	1,375	1,428	1,342	1,435	1,223	-15%
Sprinkler Systems Installer ■	281	338	322	285	240	194	-19%
Steamfitter-Pipefitter • ■	5,769	5,261	4,211	3,334	2,438	2,410	-1%
Tilesetter ■	20	20	11	11	5	2	-60%
Transport Refrigeration Technician	37	33	25	29	34	26	-24%
Water Well Driller	46	45	34	26	20	19	-5%
Welder	8,913	7,544	5,284	4,102	3,856	3,768	-2%
Welder • ■	8,840	7,490	5,248	4,072	3,803	3,727	-2%
Wire Processor •	73	54	36	30	53	41	-23%
Total	70,733	67,955	58,337	50,611	48,206	44,115	-8%

Source: Alberta Advanced Education

¹ Total number registered as of December 31, 2019. Apprentices may be registered in more than one apprenticeship program or branch of a program within the same year but are counted here only once. Apprentices registered and employed in another jurisdiction but taking training only in Alberta are not included here.

• = Compulsory certification trade
■ = Red Seal trade

N/A = Not Applicable. Data does not exist in the specified years.

- Note 1:** In 2019, nine of the 73 individuals registered in the refinisher branch of the auto body technician apprenticeship program were also registered in the repairer branch of that program.
- Note 2:** Effective January 1, 2015, the designation of auto glass technician as a branch of the glazier apprenticeship program was rescinded. Apprentices registered in the program before that date could continue in the program until December 31, 2016.
- Note 3:** Effective September 1, 2017, the designation of the generalist branch of the ironworker apprenticeship program was rescinded. Apprentices registered in the program before that day can continue in the program until August 31, 2023.
- Note 4:** In previous Statistical Profiles, the plumber apprenticeship program data was divided by 'plumber & gasfitter B' and 'plumber' to distinguish between plumber apprentices who received their gasfitter B certification through their plumber apprenticeship program and those who had previously obtained their gasfitter B certification. Effective August 3, 2017, plumber will be reported as a single parent apprenticeship program in accordance with the Plumber Trade Regulation.
- Note 5:** A request to de-designate the rig technician trade was received from the Canadian Association of Oilwell Drilling Contractors (CAODC) in January 2019. As part of the process to de-designate, active rig technician apprentices were notified in advance that, as part of the process, their apprenticeship program registration would be cancelled on November 8, 2019. Apprentices who only had to submit their record book for certification were encouraged to do so.

TABLE 3

New Apprentices Registered by Apprenticeship Program¹

APPRENTICESHIP PROGRAM	2014	2015	2016	2017	2018	2019	2018-19 % change
Agricultural Equipment Technician	50	57	33	47	68	54	-21%
Appliance Service Technician	25	19	27	29	29	31	7%
Appliance Service Technician	22	18	26	24	25	24	-4%
Commercial Appliance Service Technician	3	1	1	5	4	7	75%
Auto Body Technician	250	176	208	183	215	163	-24%
Auto Body Technician	199	133	144	138	162	102	-37%
Auto Body Prepper	11	14	16	9	16	12	-25%
Auto Body Refinisher (Note 1)	30	22	32	23	22	31	41%
Auto Body Repairer (Note 1)	10	7	16	13	15	18	20%
Automotive Service Technician	1,027	856	712	766	848	804	-5%
Baker	69	62	57	68	61	37	-39%
Boilermaker	137	134	199	88	216	100	-54%
Bricklayer	40	64	53	36	20	16	-20%
Cabinetmaker	103	71	80	90	80	68	-15%
Carpenter	1,134	935	758	758	745	620	-17%
Communication Technician	32	48	34	25	27	20	-26%
Concrete Finisher	23	38	18	16	12	10	-17%
Cook	391	348	321	275	239	209	-13%
Crane and Hoisting Equipment Operator	1,223	763	489	629	604	392	-35%
Boom Truck Operator	433	266	160	206	169	107	-37%
Mobile Crane Operator	344	261	188	145	124	150	21%
Tower Crane Operator	28	38	12	17	34	15	-56%
Wellhead Boom Truck Operator	418	198	129	261	277	120	-57%
Electric Motor Systems Technician	13	7	15	10	17	12	-29%
Electrician	4,153	2,956	1,923	1,809	1,761	1,363	-23%
Elevator Constructor	40	89	96	28	14	16	14%
Floorcovering Installer	16	19	10	9	15	4	-73%
Gasfitter	200	230	182	183	180	153	-15%
Gasfitter A	165	180	141	135	130	95	-27%
Gasfitter B	35	50	41	48	50	58	16%
Glazier	81	84	87	93	63	62	-2%
Glazier	81	84	87	93	63	62	-2%
Auto Glass Technician (Note 2)	0	N/A	NA	N/A	N/A	N/A	N/A
Hairstylist	856	719	801	876	908	780	-14%
Heavy Equipment Technician	2,081	1,305	849	1,116	1,508	1,506	0%
Heavy Equipment Technician	1,626	854	548	751	1,054	1,015	-4%
Heavy Duty Equipment Mechanic (Off Road)	156	178	105	130	159	169	6%
Transport Trailer Mechanic	75	57	45	47	52	83	60%
Truck and Transport Mechanic	224	216	151	188	243	239	-2%
Industrial Mechanic (Millwright)	636	450	337	377	481	467	-3%
Instrumentation and Control Technician	738	418	354	391	410	319	-22%
Insulator (Heat and Frost)	373	252	276	290	262	55	-79%
Ironworker	642	746	594	330	375	460	23%
Ironworker (Generalist) (Note 3)	159	156	146	58	4	0	-100%
Ironworker (Metal Building Systems Erector)	58	40	21	23	32	68	113%
Ironworker (Reinforcing)	201	188	123	180	264	275	4%
Ironworker (Structural/Ornamental)	224	362	304	69	75	117	56%
Landscape Horticulturist	38	44	49	42	31	42	35%

(continued)

TABLE 3 (continued)

New Apprentices Registered by Apprenticeship Program¹

APPRENTICESHIP PROGRAM	2014	2015	2016	2017	2018	2019	2018-19 % change
Lather (Interior Systems Mechanic)	45	44	37	27	28	16	-43%
Locksmith	53	40	30	37	39	29	-26%
Machinist	227	135	61	85	156	136	-13%
Metal Fabricator (Fitter)	44	37	22	26	25	22	-12%
Motorcycle Mechanic	69	66	49	38	49	29	-41%
Natural Gas Compression Technician	15	5	4	0	4	0	-100%
Outdoor Power Equipment Technician	27	23	24	22	16	20	25%
Power	11	4	8	12	5	9	80%
Recreational	16	19	16	10	11	11	0%
Painter and Decorator	47	31	63	21	19	23	21%
Parts Technician	429	342	246	219	301	261	-13%
Parts Technician	374	299	200	194	278	235	-15%
Materials Technician	55	43	46	25	23	26	13%
Plumber <i>(Note 4)</i>	1,267	1,105	785	614	694	531	-23%
Powerline Technician	338	205	86	150	111	77	-31%
Power System Electrician	198	163	56	58	35	41	17%
Recreation Vehicle Service Technician	57	52	47	36	36	30	-17%
Refrigeration and Air Conditioning Mechanic	246	213	230	186	291	236	-19%
Rig Technician <i>(Note 5)</i>	635	323	77	86	194	31	-84%
Roofer	76	69	100	63	62	61	-2%
Sheet Metal Worker	443	386	384	318	387	235	-39%
Sprinkler Systems Installer	115	121	75	67	56	48	-14%
Steamfitter-Pipefitter	2,192	1,318	1,048	810	793	801	1%
Tilesetter	7	6	2	3	0	0	N/A
Transport Refrigeration Technician	15	7	9	23	10	7	-30%
Water Well Driller	16	8	9	7	5	5	0%
Welder	2,968	1,638	998	1,177	1,260	1,225	-3%
Welder	2,913	1,625	983	1,164	1,228	1,205	-2%
Wire Processor	55	13	15	13	32	20	-38%
Total	23,900	17,227	13,004	12,637	13,760	11,627	-16%

Source: Alberta Advanced Education

¹ New apprentices include all apprentices registering during a single calendar year. The number includes those who are returning to do an additional apprenticeship program after completing one or more apprenticeship programs in previous years, or continuing in a different apprenticeship program for which they registered in a previous year. Apprentices who registered in more than one apprenticeship program or branch of a program within a specific year, or who changed from one branch to another branch within the same program on the same day, are counted only once. The number does not include reinstated apprentices (unless reinstated in the same year).

N/A = Not Applicable. Data does not exist in the specified years.

Note 1: In 2019, four of the 31 individuals registered in the refinisher branch of the auto body technician apprenticeship program were also registered in other branches of that program.

Note 2: Effective January 1, 2015, the designation of auto glass technician as a branch of the glazier apprenticeship program was rescinded. Apprentices registered in the program before that date could continue in the program until December 31, 2016.

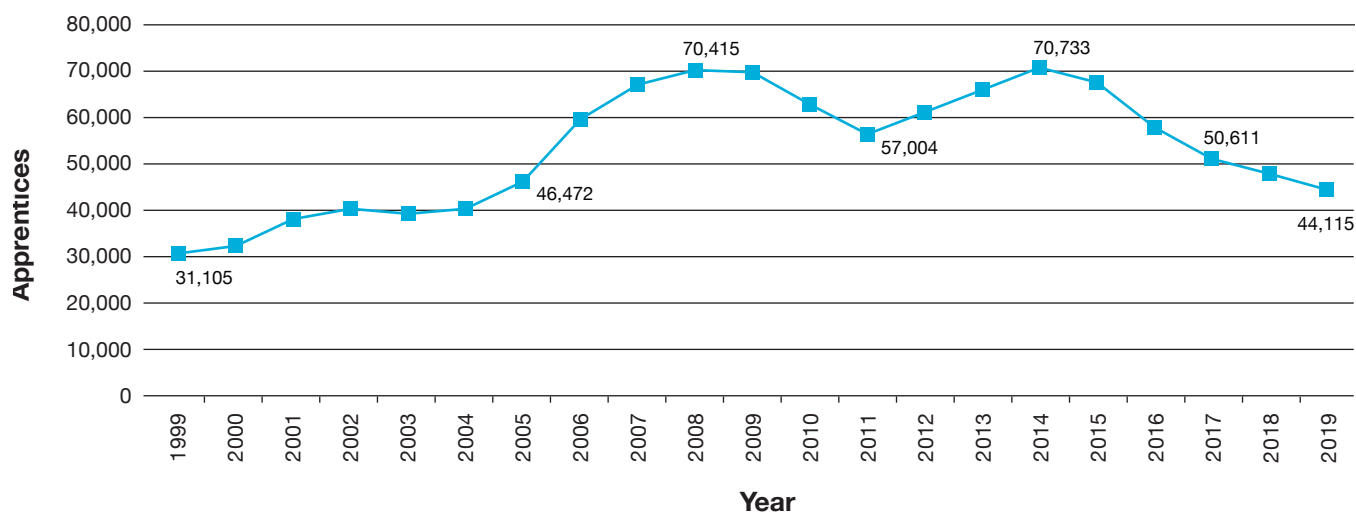
Note 3: Effective September 1, 2017, the designation of the generalist branch of the ironworker apprenticeship program was rescinded. Apprentices registered in the program before that day can continue in the program until August 31, 2023.

Note 4: In previous Statistical Profiles, the plumber apprenticeship program data was divided by 'plumber & gasfitter B' and 'plumber' to distinguish between plumber apprentices who received their gasfitter B certification through their plumber apprenticeship program and those who had previously obtained their gasfitter B certification. Effective August 3, 2017, plumber will be reported as a single parent apprenticeship program in accordance with the Plumber Trade Regulation.

Note 5: A request to de-designate the rig technician trade was received from the Canadian Association of Oilwell Drilling Contractors (CAODC) in January 2019. As part of the process to de-designate, active rig technician apprentices were notified in advance that, as part of the process, their apprenticeship program registration would be cancelled on November 8, 2019. The 31 apprentices with new registrations in 2019 were subsequently cancelled by November 8, 2019.

CHART 2

Total Number of Apprentices Registered by Year¹

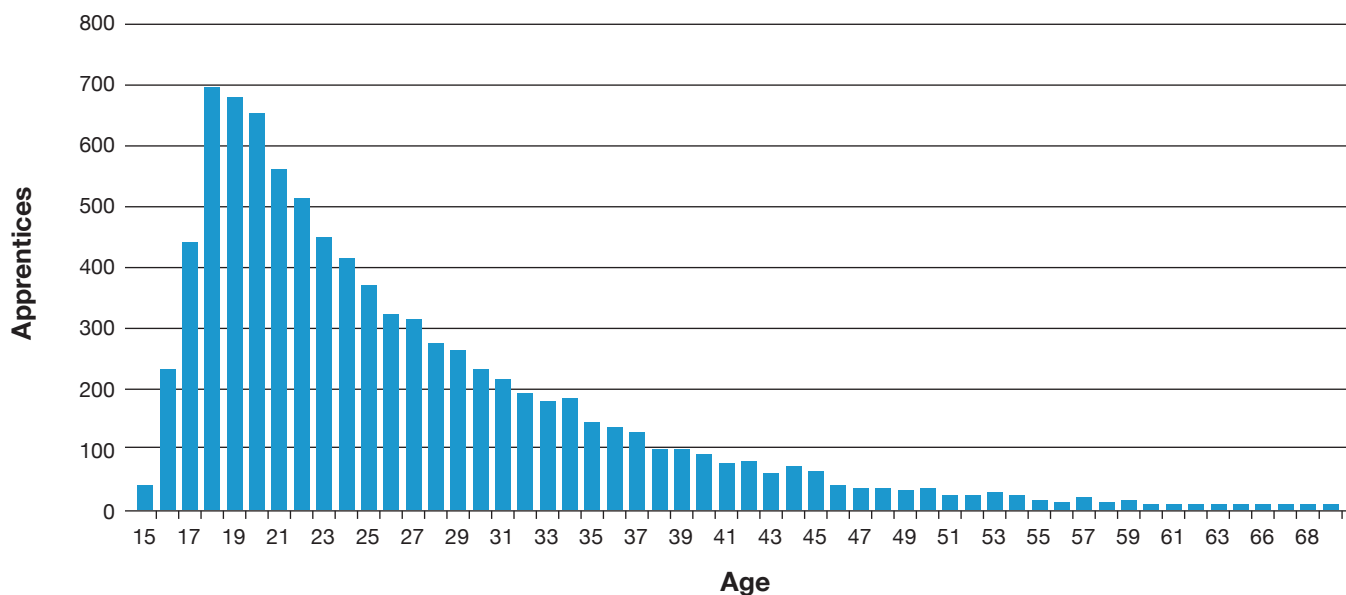


Source: Alberta Advanced Education

¹ This graph represents statistics covering a series of calendar years (January to December).

CHART 3

Age of Alberta Apprentices on Date of Registration in First Apprenticeship Program, 2019¹



Total number of Alberta apprentices registering in their first apprenticeship program in 2019 = 8,484²

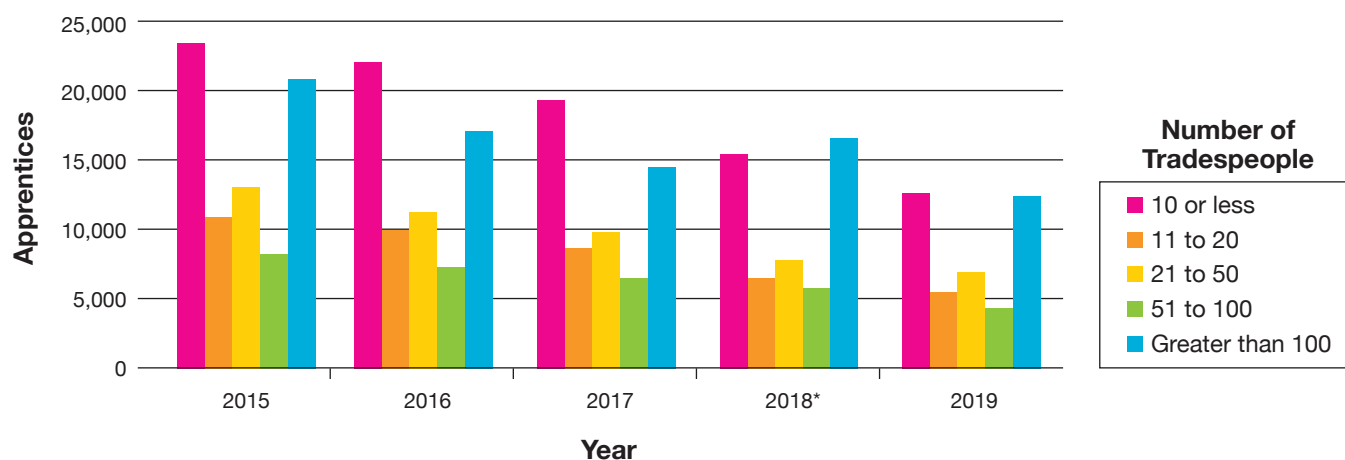
Source: Alberta Advanced Education

¹ Age at date of registration.

² The 8,484 total in the chart above includes only individuals registering in their first apprenticeship program in Alberta in 2019. This number differs from the total number of new apprentices registered (11,627) as presented in Table 3. In Table 3, the number of new apprentices registered includes those who are returning to do an additional apprenticeship program after completing one or more apprenticeship programs in previous years.

CHART 4

Total Apprentices Being Trained by Employer Size¹



Source: Alberta Advanced Education

¹ The size of an employer site is determined by the number of tradespeople.

* Prior to 2018, this chart reflected a count of 'sites' instead of 'employers'. If an employer had multiple work locations, each location was counted as a separate 'site'. As of 2018, the report counts 'employers' instead of 'sites'. All sites of a specific employer are combined and counted as a single 'employer'.

TABLE 4

Total Number of Individuals Certified by Program, 2019¹

PROGRAM	Journeyman Certificates Issued to Completed Apprentices and Individuals Issued Occupation Certificates	Interprovincial Red Seals Issued to Completed Apprentices and Trainees (Note 1)	Qualification Certificates (Note 2)	Other Red Seals Issued (Note 3)
Agricultural Equipment Technician	34	31	0	0
Appliance Service Technician	8	8	4	3
Appliance Service Technician	8	8	3	3
Commercial Appliance Service Technician	0	0	1	0
Auto Body Technician	93	82	14	9
Auto Body Technician	59	10	5	5
Auto Body Prepper	2	0	2	N/A
Auto Body Refinisher	27	72	4	4
Auto Body Repairer	5	0	3	N/A
Automotive Service Technician	438	398	48	47
Baker	28	23	7	7
Boilermaker	51	49	5	5
Bricklayer	22	18	1	0
Cabinetmaker	29	28	1	1
Carpenter	374	284	20	19
Communication Technician	9	0	0	0
Concrete Finisher	8	8	2	2
Cook	96	82	47	42

(continued)

TABLE 4 (continued)

Total Number of Individuals Certified by Program, 2019¹

PROGRAM	Journeyman Certificates Issued to Completed Apprentices and Individuals Issued Occupation Certificates	Interprovincial Red Seals Issued to Completed Apprentices and Trainees (Note 1)	Qualification Certificates (Note 2)	Other Red Seals Issued (Note 3)
Crane and Hoisting Equipment Operator	261	80	9	4
Boom Truck Operator	74	0	5	N/A
Mobile Crane Operator	67	65	3	3
Tower Crane Operator	15	15	1	1
Wellhead Boom Truck Operator	105	0	0	N/A
Electric Motor Systems Technician	6	6	0	0
Electrician	1,540	1,233	30	26
Elevator Constructor	58	0	5	0
Floorcovering Installer	2	1	0	0
Gasfitter	89	383	14	14
Gasfitter A	68	35	5	5
Gasfitter B	21	348	9	9
Glazier	29	28	2	2
Hairstylist	490	361	89	70
Heavy Equipment Technician	826	621	90	77
Heavy Equipment Technician	506	0	18	N/A
Heavy Duty Equipment Mechanic (Off Road)	140	151	29	27
Transport Trailer Mechanic	35	0	4	N/A
Truck and Transport Mechanic	145	470	39	50
Industrial Mechanic (Millwright)	254	226	20	18
Instrumentation and Control Technician	234	164	4	4
Insulator (Heat and Frost)	114	72	3	2
Ironworker	124	73	22	15
Ironworker (Generalist) (Note 4)	24	11	0	0
Ironworker Metal Building Systems Erector	10	0	5	N/A
Ironworker (Reinforcing)	18	13	6	6
Ironworker (Structural/Ornamental)	72	49	11	9
Landscape Horticulturist	27	19	3	3
Lather (Interior Systems Mechanic)	2	2	2	2
Locksmith	14	0	1	N/A
Machinist	60	44	3	3
Metal Fabricator (Fitter)	3	3	5	4
Motorcycle Mechanic	24	21	5	5
Natural Gas Compression Technician	4	0	2	N/A
Outdoor Power Equipment Technician	7	0	3	N/A
Power	0	0	3	N/A
Recreational	7	0	0	N/A
Painter and Decorator	12	7	1	1
Parts Technician	104	83	32	28
Parts Technician	97	83	29	28
Materials Technician	7	0	3	N/A
Plumber	513	111	9	6
Powerline Technician	93	92	14	12

(continued)

TABLE 4 (continued)

Total Number of Individuals Certified by Program, 2019¹

PROGRAM	Journeyman Certificates Issued to Completed Apprentices and Individuals Issued Occupation Certificates	Interprovincial Red Seals Issued to Completed Apprentices and Trainees (Note 1)	Qualification Certificates (Note 2)	Other Red Seals Issued (Note 3)
Power System Electrician	31	0	5	N/A
Recreation Vehicle Service Technician	15	13	2	2
Refrigeration and Air Conditioning Mechanic	123	109	4	4
Rig Technician (Note 5)	15	14	11	7
Roofer	21	20	9	9
Sheet Metal Worker	140	77	1	1
Sprinkler Systems Installer	41	41	0	0
Steamfitter-Pipefitter	183	110	20	18
Tilesetter	1	1	0	0
Transport Refrigeration Technician	6	0	0	N/A
Water Well Driller	5	0	0	N/A
Welder	600	451	23	16
Welder	596	451	22	16
Wire Processor	4	0	1	N/A
Total - Trades	7,261	5,477	592	488
Cathodic Protection Technician	28	N/A	N/A	N/A
Construction Craft Worker	3	0	N/A	3
Field Heat Treatment Technician	12	N/A	N/A	N/A
Gas Utility Operator	7	N/A	N/A	N/A
Industrial Construction Crew Supervisor	53	N/A	N/A	N/A
Oil and Gas Transportation Services	0	N/A	N/A	N/A
Overhead Door Technician	3	N/A	N/A	N/A
Residential Construction Site Manager	1	N/A	N/A	N/A
Slickline Services	0	N/A	N/A	N/A
Snubbing Services	0	N/A	N/A	N/A
Steel Detailer	0	N/A	N/A	N/A
Well Testing Services Supervisor	0	N/A	N/A	N/A
Total - Occupations	107	0	N/A	3
TOTAL	7,368	5,477	592	491

Source: Alberta Advanced Education

¹ Individuals issued more than one certificate in 2019 are counted here only once.

N/A = Not Applicable.

Note 1: This number includes the number of 'Interprovincial Red Seals Issued to Completed Apprentices and Trainees' in 2019 regardless of the year the apprentices or trainees completed their training.

Note 2: A Qualification Certificate is a certificate issued to individuals who, through an assessment of their prior work experience, knowledge and skills in a designated trade, demonstrate they meet the standards set for certification in Alberta.

Note 3: 'Other Red Seals Issued' includes red seals issued to individuals other than those who have completed an Alberta apprenticeship or occupational training program. The number includes red seals issued to individuals who were certified through Alberta's Qualification Certificate Program or occupation training and certification program (without completing a trainee program) and to individuals who successfully completed the interprovincial examination in Alberta rather than in the jurisdiction in which they were originally certified.

Note 4: Effective September 1, 2017, the designation of the generalist branch of the ironworker apprenticeship program was rescinded. Apprentices registered in the program before that day can continue in the program until August 31, 2023.

Note 5: A request to de-designate the rig technician trade was received from the Canadian Association of Oilwell Drilling Contractors (CAODC) in January 2019. As part of the process to de-designate, active rig technician apprentices were notified in advance that, as part of the process, their apprenticeship program registration would be cancelled on November 8, 2019. Apprentices who only had to submit their record book for certification were encouraged to do so.

TABLE 5

Completed Apprentices Combined with Individuals Issued Qualification Certificates, and Individuals Issued Occupation Certificates by Program¹

PROGRAM	2014	2015	2016	2017	2018	2019	2018-19 % change
Agricultural Equipment Technician	30	20	33	33	27	34	26%
Appliance Service Technician	17	14	13	18	10	12	20%
Appliance Service Technician	11	8	11	16	8	11	38%
Commercial Appliance Service Technician	6	6	2	2	2	1	-50%
Auto Body Technician	128	100	100	97	95	107	13%
Auto Body Technician	35	49	42	55	44	64	45%
Auto Body Prepper	10	4	3	3	2	4	100%
Auto Body Refinisher	53	30	36	35	37	31	-16%
Auto Body Repairer	30	17	19	4	12	8	-33%
Automotive Service Technician	452	485	443	401	499	486	-3%
Baker	32	44	36	40	32	35	9%
Boilermaker	60	71	80	71	74	56	-24%
Bricklayer	29	29	27	22	22	23	5%
Cabinetmaker	39	48	30	23	32	30	-6%
Carpenter	446	435	368	377	359	394	10%
Communication Technician	22	10	8	15	7	9	29%
Concrete Finisher	12	19	24	17	17	10	-41%
Cook	295	306	217	206	176	143	-19%
Crane and Hoisting Equipment Operator	568	557	517	412	293	270	-8%
Boom Truck Operator	206	188	150	111	84	79	-6%
Mobile Crane Operator	149	172	279	207	112	70	-38%
Tower Crane Operator	14	11	14	15	11	16	45%
Wellhead Boom Truck Operator	199	186	74	79	86	105	22%
Electric Motor Systems Technician	11	8	7	8	3	6	100%
Electrician	1,509	1,545	1,641	1,648	1,673	1,570	-6%
Elevator Constructor	43	20	24	32	39	63	62%
Floorcovering Installer	5	0	6	3	7	2	-71%
Gasfitter	118	90	115	141	112	103	-8%
Gasfitter A	92	74	97	109	86	73	-15%
Gasfitter B	26	16	18	32	26	30	15%
Glazier	54	30	32	31	37	31	-16%
Glazier	53	30	32	31	37	31	-16%
Auto Glass Technician (Note 1)	1	0	0	N/A	N/A	N/A	N/A
Hairstylist	567	528	538	540	562	579	3%
Heavy Equipment Technician	894	1,012	1,100	1,146	938	916	-2%
Heavy Equipment Technician	532	611	715	753	569	524	-8%
Heavy Duty Equipment Mechanic (Off Road)	148	161	159	155	164	169	3%
Transport Trailer Mechanic	38	40	36	39	37	39	5%
Truck and Transport Mechanic	176	200	190	199	168	184	10%
Industrial Mechanic (Millwright)	238	284	423	443	335	274	-18%

(continued)

TABLE 5 (continued)

Completed Apprentices Combined with Individuals Issued Qualification Certificates, and Individuals Issued Occupation Certificates by Program¹

PROGRAM	2014	2015	2016	2017	2018	2019	2018-19 % change
Instrumentation and Control Technician	258	291	323	332	259	238	-8%
Insulator (Heat and Frost)	111	90	96	81	92	117	27%
Ironworker	200	197	151	168	166	146	-12%
Ironworker (Generalist) <i>(Note 2)</i>	26	17	14	25	26	24	-8%
Ironworker (Metal Building Systems Erector)	13	16	25	14	10	15	50%
Ironworker (Reinforcing)	61	48	32	27	44	24	-45%
Ironworker (Structural/Ornamental)	100	116	80	102	86	83	-3%
Landscape Horticulturist	24	21	17	25	21	30	43%
Lather (Interior Systems Mechanic)	9	10	18	13	16	4	-75%
Locksmith	7	4	10	13	17	15	-12%
Machinist	86	87	129	112	74	63	-15%
Metal Fabricator (Fitter)	30	22	18	27	15	8	-47%
Motorcycle Mechanic	25	35	34	23	29	29	0%
Natural Gas Compression Technician	3	3	2	6	6	6	0%
Outdoor Power Equipment Technician	9	10	9	8	6	10	67%
Power	1	5	2	4	0	3	N/A
Recreational	8	5	7	4	6	7	17%
Painter and Decorator	18	15	19	24	11	13	18%
Parts Technician	177	223	205	209	180	136	-24%
Parts Technician	150	205	181	191	171	126	-26%
Materials Technician	27	18	24	18	9	10	11%
Plumber <i>(Note 3)</i>	497	446	409	420	505	522	3%
Powerline Technician	187	170	162	240	155	107	-31%
Power System Electrician	97	88	96	45	44	36	-18%
Recreation Vehicle Service Technician	11	13	22	23	30	17	-43%
Refrigeration and Air Conditioning Mechanic	106	131	122	121	116	127	9%
Rig Technician <i>(Note 4)</i>	283	246	159	54	73	26	-64%
Roofer	38	39	28	38	41	30	-27%
Sheet Metal Worker	164	130	90	96	113	141	25%
Sprinkler Systems Installer	27	26	43	37	53	41	-23%
Steamfitter-Pipefitter	751	675	822	844	868	203	N/A
Tilesetter	3	2	2	1	0	1	N/A
Transport Refrigeration Technician	5	3	9	5	3	6	100%
Water Well Driller	8	7	13	13	6	5	-17%
Welder	1,442	1,636	1,437	1,301	893	623	-30%
Welder	1,410	1,624	1,430	1,296	889	618	-30%
Wire Processor	32	12	7	5	4	5	25%
Total - Trades	10,145	10,275	10,227	10,003	9,141	7,853	-14%

(continued)

TABLE 5 (continued)

Completed Apprentices Combined with Individuals Issued Qualification Certificates, and Individuals Issued Occupation Certificates by Program¹

PROGRAM	2014	2015	2016	2017	2018	2019	2018-19 % change
Cathodic Protection Technician	123	108	56	39	39	28	-28%
Construction Craft Worker <i>(Note 5)</i>	5	9	9	4	3	3	0%
Field Heat Treatment Technician	12	16	10	7	10	12	20%
Gas Utility Operator	26	16	20	20	21	7	-67%
Industrial Construction Crew Supervisor	253	255	239	202	78	53	-32%
Oil and Gas Transportation Services	0	0	0	2	0	0	N/A
Overhead Door Technician <i>(Note 6)</i>	N/A	1	0	6	8	3	-63%
Residential Construction Site Manager	0	0	1	2	1	1	0%
Slickline Services	0	0	0	0	0	0	N/A
Snubbing Services	3	1	2	1	0	0	N/A
Steel Detailer	0	0	0	0	0	0	N/A
Well Testing Services Supervisor	2	0	0	4	0	0	N/A
Total - Occupations	424	406	337	287	160	107	-33%
TOTAL	10,569	10,681	10,564	10,290	9,301	7,960	-14%

Source: Alberta Advanced Education

¹ Individuals issued more than one certificate in each year are counted here only once.

N/A = Not Applicable. Data is not applicable or does not exist.

Note 1: Effective January 1, 2015, the designation of auto glass technician as a branch of the glazier apprenticeship program was rescinded. Apprentices registered in the program before that date could continue in the program until December 31, 2016.

Note 2: Effective September 1, 2017, the designation of the generalist branch of the ironworker apprenticeship program was rescinded. Apprentices registered in the program before that day can continue in the program until August 31, 2023.

Note 3: In previous Statistical Profiles, the plumber apprenticeship program data was divided by 'plumber & gasfitter B' and 'plumber' to distinguish between plumber apprentices who received their gasfitter B certification through their plumber apprenticeship program and those who had previously obtained their gasfitter B certification. Effective August 3, 2017, plumber will be reported as a single parent apprenticeship program in accordance with the Plumber Trade Regulation.

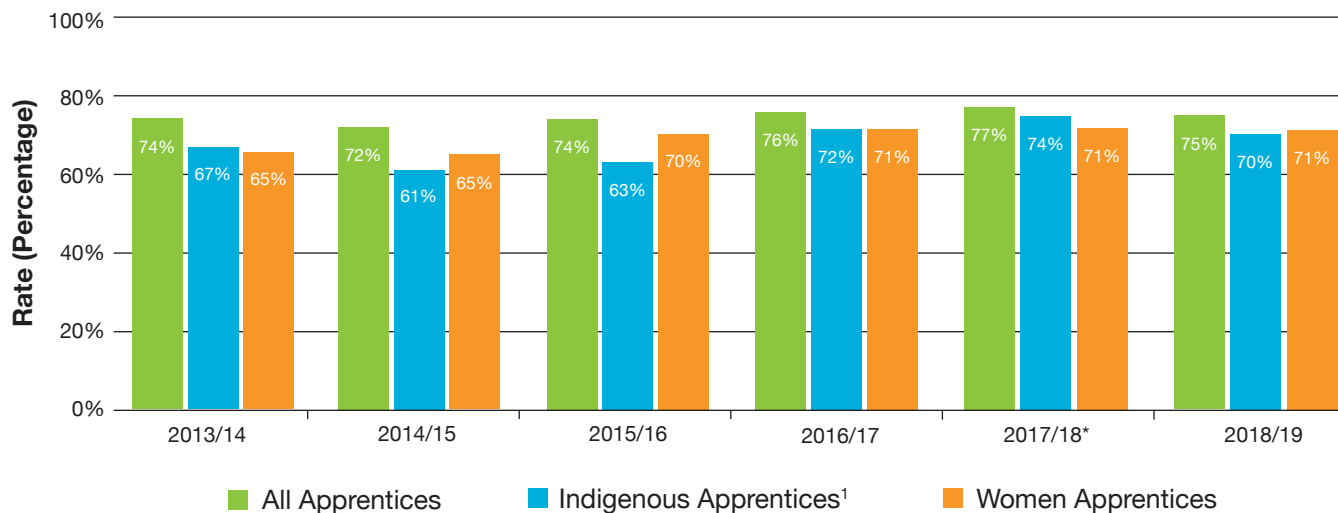
Note 4: A request to de-designate the rig technician trade was received from the Canadian Association of Oilwell Drilling Contractors (CAODC) in January 2019. As part of the process to de-designate, active rig technician apprentices were notified in advance that, as part of the process, their apprenticeship program registration would be cancelled on November 8, 2019. Apprentices who only had to submit their record book for certification were encouraged to do so.

Note 5: Effective September 1, 2018, the name of the construction craft labourer occupation was changed to construction craft worker.

Note 6: Overhead door technician became a designated occupation on January 1, 2015.

CHART 5

Apprentice Completion Rate by Year



Source: Alberta Advanced Education

¹ Apprentices choose whether or not to disclose their Indigenous heritage when registering. The total number of Indigenous apprentices reflected here indicates those who disclosed their Indigenous heritage. There may be additional apprentices with Indigenous heritage registered who did not disclose that information.

Notes:

Year = July 1 to June 30

The cohort of apprentices that is followed are those who have completed all the requirements for the first period of their apprenticeship program (including taking the first period of apprenticeship classroom instruction, on-the-job learning and period exams) and went on to complete their program within two years past the normally expected completion date. Apprentices who challenge the first period exam are not included in the cohort.

* Prior to 2017/18, apprentices who received credit for their first period of classroom instruction were not included in the cohort. As of 2017/18, the completion cohort includes apprentices who received credit for a first period of classroom training as a result of completing eligible programs in Career and Technology Studies: Apprenticeship Pathways, pre-employment or certificate/diploma programs. Apprentices who receive credit comprised 8.5% of the total cohort. As a result, the 2017/18 completion rates are not comparable with previous years.

The completion rate is based on apprenticeship programs that are 2, 3 and 4 years in length combined. One-year programs are excluded.

TABLE 6

Classroom Instruction Attendance by Institution and School Year¹

INSTITUTION	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20 ¹
Delmar College of Hair Design (Note 1)	77	89	57	67	67	27
Grande Prairie Regional College	1,585	1,570	1,298	1,067	978	1,026
Keyano College	858	798	643	569	496	464
Lakeland College	1,438	1,397	1,053	891	756	734
Lethbridge College	1,048	1,035	924	836	815	842
MC College (Note 1)	81	79	73	65	73	20
Medicine Hat College	804	705	528	452	343	370
Northern Alberta Institute of Technology	14,064	14,411	12,933	10,350	8,986	8,189
Northern Lakes College	295	259	148	152	98	41
Olds College	434	400	336	235	222	243
Portage College	184	155	109	66	56	35
Red Deer College	3,462	3,462	2,881	2,214	1,848	1,869
Southern Alberta Institute of Technology	8,793	9,158	8,293	6,972	6,337	5,938
Other Providers (Note 2)	287	533	470	397	303	205
TOTAL	33,410	34,051	29,746	24,333	21,378	20,003

Source: Alberta Advanced Education

¹ These statistics cover the school year from August 1 to July 31 for each year represented, with the exception of the 2019/20 school year. The data for this year is the attendance as of the date of posting (March 2020).

Note 1: Delmar College and MC College (formerly Marvel College) provide classroom instruction for hairstylists. The hairstylist apprenticeship program is a two-year program.

Note 2: 'Other' providers may not provide apprenticeship classroom instruction every year. Other providers for 2019/20 include:

Alberta Carpenters Training Centre - provides classroom instruction for its carpenters

ATCO Electric - provides classroom instruction for its powerline technician apprentices

Edmonton Pipe Trades Educational Trust - provides classroom instruction for its plumbers, steamfitter-pipefitters and welders

Enform - (previously Petroleum Industry Training Service) provides classroom instruction for the wellhead boom truck branch of the crane and hoisting equipment operator program

Operating Engineers Local 955 Apprenticeship and Education - (previously Alberta Operating Engineers Training Centre) provides classroom instruction for its mobile crane and hoisting equipment operators.

TABLE 7

Total Number of Apprentices Registered by Apprenticeship Program and Period (or Year) of Classroom Instruction, 2019¹

APPRENTICESHIP PROGRAM	1st Period	2nd Period	3rd Period	4th Period	CI Completed (Note 1)	Total Apprentices
Agricultural Equipment Technician	74	33	28	15	16	166
Appliance Service Technician	47	18	12	N/A	12	89
Appliance Service Technician	38	17	12	N/A	11	78
Commercial Appliance Service Technician	9	1	N/A*	N/A	1	11
Auto Body Technician	188	166	128	96	42	620
Auto Body Technician	113	130	108	96	19	466
Auto Body Prepper	19	N/A*	N/A	N/A	12	31
Auto Body Refinisher	38	27	N/A	N/A	8	73
Auto Body Repairer	18	9	20	N/A	3	50
Automotive Service Technician	1,023	769	597	486	229	3,104
Baker	39	35	19	N/A	72	165
Boilermaker	185	218	107	N/A	26	536
Bricklayer	19	24	39	N/A	8	90
Cabinetmaker	66	74	42	53	10	245
Carpenter	820	594	366	546	117	2,443
Communication Technician	32	10	6	27	12	87
Concrete Finisher	13	5	N/A*	N/A	8	26
Cook	225	148	193	N/A	163	729
Crane and Hoisting Equipment Operator	1,114	N/A*	301	N/A	201	1,616
Boom Truck Operator	454	N/A	N/A	N/A	39	493
Mobile Crane Operator	160	N/A*	301	N/A	63	524
Tower Crane Operator	42	N/A*	N/A	N/A	5	47
Wellhead Boom Truck Operator	458	N/A	N/A	N/A	94	552
Electric Motor Systems Technician	14	8	8	9	2	41
Electrician	1,643	1,793	1,692	2,376	479	7,983
Elevator Constructor	0	0	0	156	40	196
Floorcovering Installer	13	10	N/A	N/A	1	24
Gasfitter	112	132	202	N/A	42	488
Gasfitter A	54	77	202	N/A	29	362
Gasfitter B	58	55	N/A	N/A	13	126
Glazier	79	51	42	52	15	239
Hairstylist	955	260	N/A	N/A	979	2,194
Heavy Equipment Technician	1,756	1,020	1,057	575	389	4,797
Heavy Equipment Technician	1,209	776	689	575	259	3,508
Heavy Duty Equipment Mechanic (Off Road)	170	102	125	N/A	44	441
Transport Trailer Mechanic	116	N/A*	N/A	N/A	22	138
Truck and Transport Mechanic	261	142	243	N/A	64	710
Industrial Mechanic (Millwright)	592	345	245	280	102	1,564
Instrumentation and Control Technician	370	217	197	199	218	1,201
Insulator (Heat and Frost)	147	112	161	N/A	33	453
Ironworker	711	156	104	23	34	1,028
Ironworker (Generalist)	4	4	9	23	5	45
Ironworker (Metal Building Systems Erector)	87	12	N/A	N/A	3	102
Ironworker (Reinforcing)	448	58	N/A	N/A	2	508
Ironworker (Structural/Ornamental)	172	82	95	N/A	24	373

(continued)

TABLE 7 (continued)

Total Number of Apprentices Registered by Apprenticeship Program and Period (or Year) of Classroom Instruction, 2019¹

APPRENTICESHIP PROGRAM	1st Period	2nd Period	3rd Period	4th Period	CI Completed (Note 1)	Total Apprentices
Landscape Horticulturist	50	21	13	19	15	118
Lather (Interior Systems Mechanic)	33	5	33	N/A	2	73
Locksmith	47	42	28	N/A	2	119
Machinist	147	108	109	63	30	457
Metal Fabricator (Fitter)	18	20	28	N/A	2	68
Motorcycle Mechanic	39	26	16	18	18	117
Natural Gas Compression Technician	1	0	1	5	0	7
Outdoor Power Equipment Technician	19	12	14	N/A	5	50
Power	10	3	6	N/A	4	23
Recreational	9	9	8	N/A	1	27
Painter and Decorator	28	11	10	N/A	6	55
Parts Technician	302	282	169	N/A	51	804
Parts Technician	285	253	157	N/A	48	743
Materials Technician	17	29	12	N/A	3	61
Plumber	667	608	672	675	194	2,816
Powerline Technician	105	77	98	N/A*	56	336
Power System Electrician	23	12	42	30	30	137
Recreation Vehicle Service Technician	40	40	26	N/A	14	120
Refrigeration and Air Conditioning Mechanic	228	266	173	143	81	891
Rig Technician (Note 2)	0	0	0	N/A	0	0
Roofer	72	53	38	N/A*	18	181
Sheet Metal Worker	460	249	221	272	21	1,223
Sprinkler Systems Installer	76	42	53	N/A*	23	194
Steamfitter-Pipefitter	1,051	600	500	190	69	2,410
Tilesetter	0	0	N/A*	N/A	2	2
Transport Refrigeration Technician	12	6	5	N/A	3	26
Water Well Driller	8	9	N/A	N/A	2	19
Welder	1,577	795	1,086	N/A	310	3,768
Welder	1,541	795	1,086	N/A	305	3,727
Wire Processor	36	N/A*	N/A	N/A	5	41
Total	15,240	9,482	8,881	6,308	4,204	44,115

Source: Alberta Advanced Education

¹ These statistics are as of December 31, 2019.

N/A = Not all trades have four periods as part of the apprenticeship program. The N/As indicate where there is no period in that program.

N/A* = The number of periods of an apprenticeship program does not always equal the number of periods of technical training required. N/A* indicates where there is a period in the apprenticeship program but no technical training is required in that period.

Note 1: 'CI Completed' refers to those apprentices who have completed, or who have been granted credit for, all classroom instruction (CI) requirements in their apprenticeship program. Industry examination and/or work experience/on-the-job learning requirements for the apprenticeship program have yet to be successfully completed.

Note 2: A request to de-designate the rig technician trade was received from the Canadian Association of Oilwell Drilling Contractors (CAODC) in January 2019. As part of the process to de-designate, active rig technician apprentices were notified in advance that, as part of the process, their apprenticeship program registration would be cancelled on November 8, 2019. Apprentices who only had to submit their record book for certification were encouraged to do so.

TABLE 8

Number of Apprentices Registered, Certified and Attending Classroom Instruction by Apprenticeship and Industry Training Office¹, 2019²

OFFICE/REGION	Total Apprentices Registered	New Apprentices Registered	Apprentices Certified	Classroom Instruction Attendance ³
Bonnyville	798	230	119	351
Calgary	12,509	3,243	2,068	5,827
Edmonton	17,459	4,406	2,914	8,022
Fort McMurray	1,519	380	252	727
Grande Prairie	2,747	860	354	1,050
Hinton	1,086	309	192	513
Lethbridge	1,815	520	288	939
Medicine Hat	1,012	276	158	508
Peace River	609	196	76	281
Red Deer	3,193	813	559	1,574
Slave Lake	574	178	81	305
Vermilion	794	216	200	519
Total - Office Regions	44,115	11,627	7,261	20,616
Interprovincial - Training Only (Note 1)	N/A	N/A	N/A	374
Interprovincial/International - Training and Certification (Note 2)	0	0	0	0
Total - Other	0	0	0	374
TOTAL	44,115	11,627	7,261	20,990

(Note 3)

Source: Alberta Advanced Education

¹ See map on page v for Apprenticeship and Industry Training office regions.

² This table represents statistics covering the January to December 2019 calendar year. Classroom instruction in Table 6 is reported as school year. For this table only, the classroom instruction statistics cover the calendar year for comparability within this table.

³ Attendance reflects the number of classroom instruction seats occupied.

Note 1: Alberta provides classroom instruction for apprentices from other Canadian provinces and territories where the apprenticeship program is designated but the jurisdictions are unable to provide classroom instruction due to small apprentice registration numbers. Alberta does not issue these individuals a certificate. They are not counted in any of the tables or charts reflecting the number of registered Alberta apprentices.

Note 2: Alberta registers apprentices and provides classroom instruction to people from jurisdictions where no apprenticeship program exists. Alberta issues a certificate on completion of the program.

Note 3: Not all apprentices attend classroom instruction in any given year. The reasons for not attending may include:

- Apprentices do not normally attend classroom instruction until they have had at least eight to 10 months of on-the-job learning with their employer.
- Some apprentices are graduates of accredited post-secondary technical programs or have completed an apprenticeship program in another trade and have received credit for their classroom instruction.
- Some have successfully completed all of the classroom instruction and have only the required on-the-job learning to complete before being eligible to be certified.
- Some prefer to obtain the study material (ILMs – individual learning modules) and learn at their own pace, and then challenge the industry exam.
- Some are in the Registered Apprenticeship Program (RAP) and attending high school and are not able to attend classroom instruction.

TABLE 9

Number of Committee Meetings by Program and Year

PROGRAM	Provincial Apprenticeship Committee (Full, Sub and Special) and Occupational Committee Meetings (Notes 1 & 2)							Local Apprenticeship Committee Meetings (Note 3)							
	2014	2015	2016	2017	2018	2019	Total	2014	2015	2016	2017	2018	2019	Total	Number of LACs
Agricultural Equipment Technician	2	1	3	3	4	2	15								0
Appliance Service Technician	2	7	3	1	1	1	15	0	0	0	0	0	0	0	0
Auto Body Technician	3	9	8	3	1	1	25	2	0	0	1	0	2	5	2
Automotive Service Technician	4	3	10	8	3	1	29	3	6	4	7	6	3	29	7
Baker	3	4	3	1	1	1	13	1	1	3	2	3	2	12	2
Boilermaker	3	2	3	7	4	3	22								0
Bricklayer	2	5	2	1	1	1	12	1	3	3	2	2	2	13	2
Cabinetmaker	5	2	2	3	2	2	16	1	3	0	0	3	4	11	2
Carpenter	10	8	1	3	8	6	36	5	6	2	4	9	10	36	8
Communication Technician	4	4	1	2	2	5	18	2	2	2	2	2	1	11	2
Concrete Finisher	0	1	1	3	2	1	8								0
Cook	3	5	2	2	1	5	18	3	4	4	4	4	4	23	3
Crane and Hoisting Equipment Operator	5	5	4	6	0	3	23	3	0	0	1	0	1	5	4
Electric Motor Systems Technician	2	6	7	4	1	0	20	0	1					1	0
Electrician	9	4	9	3	4	4	33	2	6	6	8	6	8	36	9
Elevator Constructor	2	3	4	4	5	1	19								0
Floorcovering Installer	1	0	3	4	2	0	10								0
Gasfitter	7	12	8	12	3	2	44	1	1	3	0	2	3	10	2
Glazier	5	2	3	2	3	3	18	0	1	0	3	2	2	8	2
Hairstylist	4	3	5	4	9	4	29	5	8	6	7	9	3	38	8
Heavy Equipment Technician	7	8	4	10	7	2	38	6	7	4	8	13	0	38	8
Industrial Mechanic (Millwright)	2	4	8	6	7	3	30	3	2	3	0	0	2	10	3
Instrumentation and Control Technician	6	4	3	10	1	2	26	0	0	0	1	0	0	1	1
Insulator (Heat and Frost)	3	3	0	7	4	2	19								0
Ironworker	7	9	5	3	3	4	31								0
Landscape Horticulturist	2	2	3	7	9	2	25	1	0	1	2	1	2	7	1
Lather (Interior Systems Mechanic)	1	2	1	10	3	2	19								0
Locksmith	5	9	9	2	3	2	30	1	0	1	1	1	1	5	1
Machinist	16	3	2	6	8	5	40	0	2	3	1	2	1	9	2
Metal Fabricator (Fitter)	6	1	1	0	0	2	10								0
Motorcycle Mechanic	2	2	1	1	1	0	7	1	2	0	0	2	0	5	2
Natural Gas Compression Technician	1	1	0	0	0	0	2								0
Outdoor Power Equipment Technician	2	0	2	1	1	2	8								0
Painter and Decorator	1	1	9	6	3	0	20	2	1	1	0	0	0	4	0
Parts Technician	5	4	4	2	3	2	20	4	3	1	2	3	1	14	3
Plumber	1	5	12	12	11	1	42	2	3	3	3	2	1	14	4
Powerline Technician	8	8	2	1	7	7	33	2	1	2	2	2	1	10	2
Power System Electrician	3	7	4	1	3	6	24								0
Recreation Vehicle Service Technician	8	4	0	0	1	0	13	1	0	0	1	2	1	5	2
Refrigeration and Air Conditioning Mechanic	6	4	9	2	5	1	27	0	2	1	2	2	1	8	2

(continued)

TABLE 9 (continued)

Number of Committee Meetings by Program and Year

PROGRAM	Provincial Apprenticeship Committee (Full, Sub and Special) and Occupational Committee Meetings <small>(Notes 1 & 2)</small>							Local Apprenticeship Committee Meetings <small>(Note 3)</small>							
	2014	2015	2016	2017	2018	2019	Total	2014	2015	2016	2017	2018	2019	Total	Number of LACs
Rig Technician	2	3	2	2	1	0	10								0
Roofer	2	0	1	2	3	0	8								0
Sheet Metal Worker	2	4	12	13	5	1	37	2	1	3	0	4	4	14	4
Sprinkler Systems Installer	1	5	3	4	6	4	23	0	1	0	1	1	0	3	1
Steamfitter-Pipefitter	1	13	9	10	10	2	45	0	1	2	1	3	1	8	3
Tilesetter	1	0	2	0	0	0	3								0
Transport Refrigeration Technician	7	2	4	1	2	2	18								0
Water Well Driller	5	2	2	1	1	0	11								0
Welder	9	7	2	3	4	3	28	4	4	5	9	5	6	33	8
Total Meetings - Trades <small>(Note 4)</small>	190	195	191	186	163	100	1,025	58	72	63	75	91	67	426	100
Cathodic Protection Technician	1	2	2	1	2	1	9								
Construction Craft Worker	1	2	2	0	2	0	7								
Field Heat Treatment Technician	1	0	1	1	1	1	5								
Gas Utility Operator	2	2	3	0	1	2	10								
Industrial Construction Crew Supervisor	0	3	1	3	1	1	9								
Oil and Gas Transportation Services <small>(Note 5)</small>															
Overhead Door Technician		9	2	1	1	1	14								
Petroleum Competency Program Steering Committee <small>(Note 5)</small>	0	0	0	0	0	0	0								
Residential Construction Site Manager	0	0	0	3	1	1	5								
Slickline Services <small>(Note 5)</small>															
Snubbing Services <small>(Note 5)</small>															
Steel Detailer	4	7	0	0	1	0	12								
Well Testing Services Supervisor <small>(Note 5)</small>															
Total - Occupations	9	25	11	9	10	7	71								

Source: Alberta Advanced Education

Note 1: There is one provincial apprenticeship committee for each parent apprenticeship program and one occupational committee for each designated occupation. For the exception to this, see Note 5 below.

Note 2: The number of provincial apprenticeship committees and occupational committees meetings in this table includes general, sub-committee and special meetings. It does not include ballots for any of the committees.

Note 3: The number of local apprenticeship committees (LACs) varies by apprenticeship program. The number of LACs for each apprenticeship program as of December 31, 2019 is indicated in the 'Number of LACs' column. Some apprenticeship programs do not have any LACs. The number of LAC meetings reflected in the table for each apprenticeship program adds together the meetings of all the LACs in the province for that program.

■ Shaded cells indicate that a committee did not exist in that program for all or part of the year. Designated occupations do not have local committees.

Note 4: A number of meetings of provincial apprenticeship committees (PACs) were held jointly with other PACs. These joint meetings are counted in the meetings for each PAC, but are only counted once in the totals. The number of joint meetings varies each year. The number of joint meetings in each year are as follows: 2014 – 8; 2015 – 3; 2016 – 10; 2017 – 11; 2018 – 4; 2019 – 3.

Note 5: As of 2010, the Petroleum Competency Program Steering Committee has served as the industry committee for the following designated occupations: oil and gas transportation services, slickline services, snubbing services and well testing services supervisor.

TABLE 10

Number of Participants in the Registered Apprenticeship Program (RAP) by Apprenticeship Program¹, 2019

APPRENTICESHIP PROGRAM	High School	Full Time	Certified (Note 1)
Agricultural Equipment Technician	18	24	73
Appliance Service Technician	0	2	6
Appliance Service Technician	0	2	6
Commercial Appliance Service Technician	0	0	0
Auto Body Technician	25	64	121
Auto Body Technician	23	59	39
Auto Body Prepper	1	1	0
Auto Body Refinisher	1	2	46
Auto Body Repairer	0	2	36
Automotive Service Technician	115	269	604
Baker	4	8	16
Boilermaker	0	0	1
Bricklayer	0	2	18
Cabinetmaker	4	17	57
Carpenter	71	175	347
Communication Technician	5	3	2
Concrete Finisher	0	3	6
Cook	36	51	96
Crane and Hoisting Equipment Operator	2	5	29
Boom Truck Operator	1	2	10
Mobile Crane Operator	1	3	18
Tower Crane Operator	0	0	1
Wellhead Boom Truck Operator	0	0	0
Electric Motor Systems Technician	4	0	0
Electrician	85	315	751
Elevator Constructor	0	0	0
Floorcovering Installer	5	2	4
Gasfitter	1	3	10
Gasfitter A	1	2	9
Gasfitter B	0	1	1
Glazier	6	5	10
Hairstylist	58	91	675
Heavy Equipment Technician	193	491	808
Heavy Equipment Technician	156	444	760
Heavy Duty Equipment Mechanic (Off Road)	14	14	9
Transport Trailer Mechanic	1	4	6
Truck and Transport Mechanic	22	29	33
Industrial Mechanic (Millwright)	36	87	171
Instrumentation and Control Technician	18	43	143
Insulator (Heat and Frost)	0	1	2

(continued)

TABLE 10 (continued)

Number of Participants in the Registered Apprenticeship Program (RAP) by Apprenticeship Program¹, 2019

APPRENTICESHIP PROGRAM	High School	Full Time	Certified <i>(Note 1)</i>
Ironworker	12	18	6
Ironworker (Generalist)	0	2	2
Ironworker (Metal Building Systems Erector)	3	0	1
Ironworker (Reinforcing)	6	11	0
Ironworker (Structural/Ornamental)	3	5	3
Landscape Horticulturist	13	5	9
Lather (Interior Systems Mechanic)	7	12	4
Locksmith	1	1	4
Machinist	14	20	70
Metal Fabricator (Fitter)	0	2	8
Motorcycle Mechanic	7	6	35
Natural Gas Compression Technician	0	1	0
Outdoor Power Equipment Technician	0	10	9
Power	0	5	2
Recreational	0	5	7
Painter and Decorator	1	0	6
Parts Technician	14	20	100
Parts Technician	14	20	99
Materials Technician	0	0	1
Plumber	33	82	214
Powerline Technician	5	13	32
Power System Electrician	0	0	0
Recreation Vehicle Service Technician	5	10	8
Refrigeration and Air Conditioning Mechanic	7	23	25
Rig Technician <i>(Note 2)</i>	0	0	0
Roofer	3	2	5
Sheet Metal Worker	15	33	45
Sprinkler Systems Installer	2	5	11
Steamfitter-Pipefitter	19	26	68
Tilessetter	0	0	3
Transport Refrigeration Technician	0	0	4
Water Well Driller	3	0	5
Welder	105	255	1166
Welder	103	254	1166
Wire Processor	2	1	0
Total	952	2,205	5,787

Source: Alberta Advanced Education

¹ Total number registered as of December 31, 2019

High School = RAP participants currently in high school.

Full Time = RAP participants who have completed high school and are now full time apprentices.

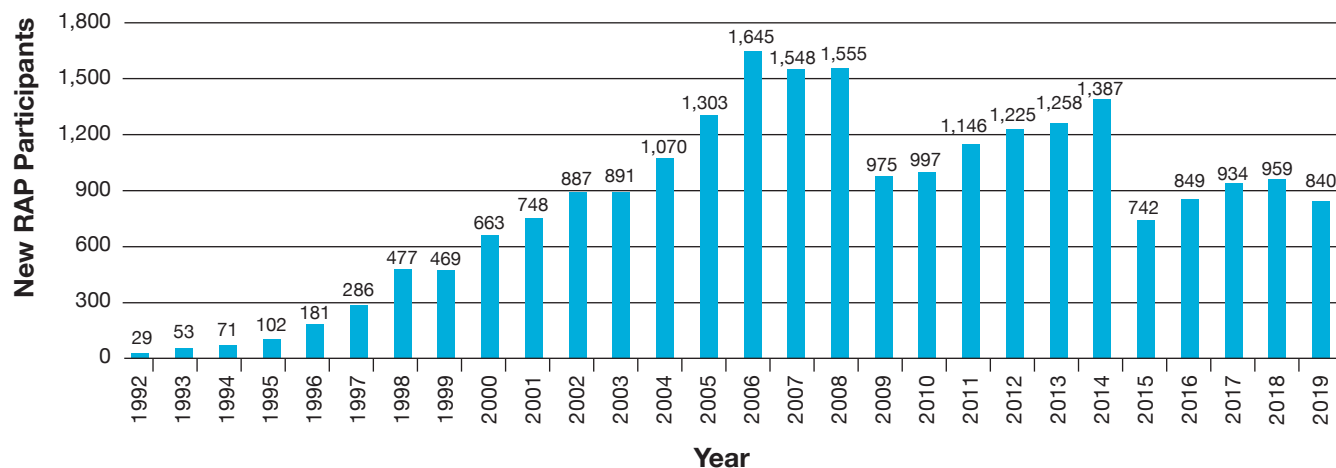
Certified = Apprentices who began in RAP, have completed their apprenticeship program and are now certified tradespeople.

Note 1: Total number of RAP participants certified since inception of program (1992).

Note 2: A request to de-designate the rig technician trade was received from the Canadian Association of Oilwell Drilling Contractors (CAODC) in January 2019. As part of the process to de-designate, active rig technician apprentices were notified in advance that, as part of the process, their apprenticeship program registration would be cancelled on November 8, 2019.

CHART 6

Number of New Registrants in the Registered Apprenticeship Program (RAP) by Year¹

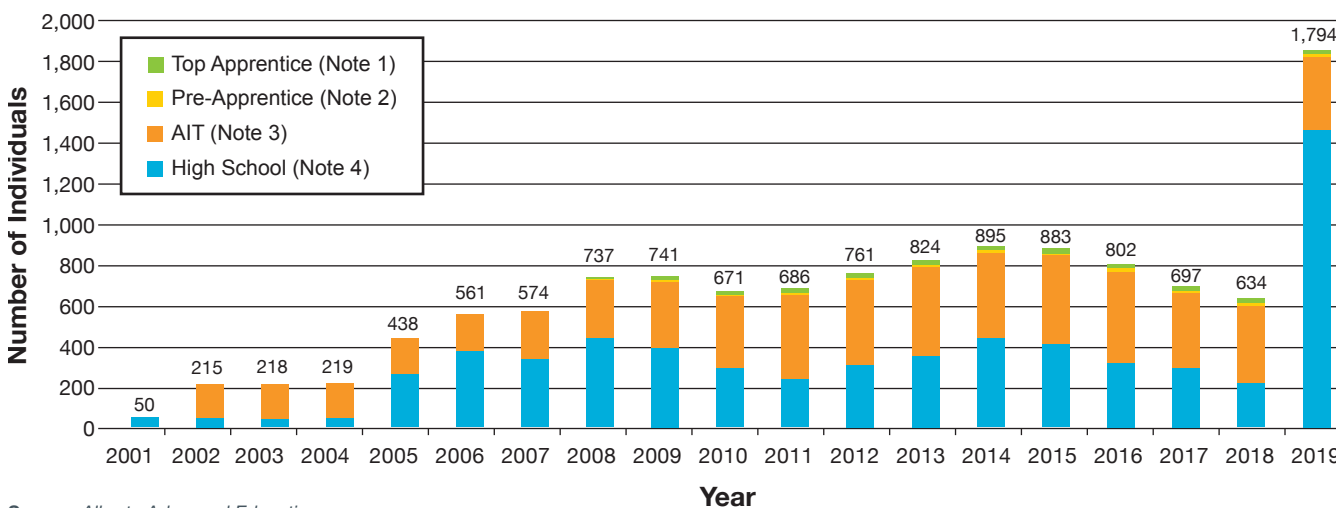


Source: Alberta Advanced Education

¹ This graph represents statistics covering calendar years (January to December).

CHART 7

Total Number of Individuals Awarded Scholarships by Year



Source: Alberta Advanced Education

Note 1: There are currently 22 Top Apprentice Scholarships of \$1,500 available each year. The first year the scholarships were awarded was 2008. Top Apprentice Scholarships are awarded to apprentices who achieved a very high academic standing in their classroom instruction.

Note 2: There are currently 11 Pre-Apprentice Scholarships of \$1,000 available each year. The first year the scholarships were awarded was 2008. Pre-Apprenticeship Scholarships are awarded to individuals who have completed a pre-apprentice program and have since become registered apprentices. Recipients are selected based on their marks.

Note 3: There are a minimum of 357 Apprenticeship and Industry Training (AIT) Scholarships of \$1,000 available each year. The number varies each year based on the value of the endowment fund. The first year the scholarships were awarded was 2002. AIT Scholarships are awarded to registered apprentices who are continuing in, and working toward, completing their apprenticeship program. Recipients are selected based on their marks.

Note 4: Under the new *High School Apprenticeship Scholarship program*, 1,500 scholarships are available each year. There are two types of scholarships: 1) *High School Apprenticeship Scholarship (HSAS)* valued at \$1,000 for students who successfully completed either the Registered Apprenticeship Program (RAP) or a Career and Technology Studies (CTS) Apprenticeship Pathways, and 2) *High School Apprenticeship Scholarship – Bright Future (HSAS-BF)* valued at \$2,000 for successfully completing both RAP and a CTS Apprenticeship Pathway. In 2019, 1,380 HSAS and 34 HSAS-BF were awarded totalling 1,414 scholarships.

In 2019, the *High School Apprenticeship Scholarship program* replaced the scholarship previously known as the *Registered Apprentice Program/Career and Technology Studies Apprenticeship Pathways (RAP/CTS) scholarship* valued at \$1,000 each. For the years 2001 to 2004, there were 50 RAP/CTS Scholarships available. From 2005 to 2018, 500 RAP/CTS Scholarships were available each year.

For more information on scholarships, go to: tradesecrets.alberta.ca

TABLE 11

Number of Apprentices Registered by Apprenticeship Program - Total, Indigenous and Women, 2019¹

APPRENTICESHIP PROGRAM	Total Apprentices Registered	Indigenous Apprentices Registered <i>(Note 1)</i>	Women Apprentices Registered
Agricultural Equipment Technician	166	6	3
Appliance Service Technician	89	1	2
Appliance Service Technician	78	1	2
Commercial Appliance Service Technician	11	0	0
Auto Body Technician	620	24	57
Auto Body Technician	466	17	40
Auto Body Prepper	31	0	5
Auto Body Refinisher	73	3	10
Auto Body Repairer	50	4	2
Automotive Service Technician	3,104	140	116
Baker	165	6	129
Boilermaker	536	39	35
Bricklayer	90	3	1
Cabinetmaker	245	7	45
Carpenter	2,443	216	162
Communication Technician	87	4	3
Concrete Finisher	26	0	0
Cook	729	56	253
Crane and Hoisting Equipment Operator	1,616	65	32
Boom Truck Operator	493	23	9
Mobile Crane Operator	524	24	19
Tower Crane Operator	47	2	0
Wellhead Boom Truck Operator	552	16	4
Electric Motor Systems Technician	41	1	0
Electrician	7,983	364	471
Elevator Constructor	196	5	3
Floorcovering Installer	24	0	1
Gasfitter	488	15	16
Gasfitter A	362	13	16
Gasfitter B	126	2	0
Glazier	239	8	11
Hairstylist	2,194	137	1,777
Heavy Equipment Technician	4,797	269	170
Heavy Equipment Technician	3,508	210	143
Heavy Duty Equipment Mechanic (Off Road)	441	26	14
Transport Trailer Mechanic	138	9	1
Truck and Transport Mechanic	710	24	12
Industrial Mechanic (Millwright)	1,564	97	64
Instrumentation and Control Technician	1,201	56	66
Insulator (Heat and Frost)	453	30	75
Ironworker	1,028	213	44
Ironworker (Generalist)	45	7	4
Ironworker (Metal Building Systems Erector)	102	12	2
Ironworker (Reinforcing)	508	154	27
Ironworker (Structural/Ornamental)	373	40	11

(continued)

TABLE 11 (continued)

Number of Apprentices Registered by Apprenticeship Program - Total, Indigenous and Women, 2019¹

APPRENTICESHIP PROGRAM	Total Apprentices Registered	Indigenous Apprentices Registered <small>(Note 1)</small>	Women Apprentices Registered
Landscape Horticulturist	118	6	48
Lather (Interior Systems Mechanic)	73	2	3
Locksmith	119	1	4
Machinist	457	12	19
Metal Fabricator (Fitter)	68	3	3
Motorcycle Mechanic	117	3	4
Natural Gas Compression Technician	7	1	0
Outdoor Power Equipment Technician	50	2	2
Power	23	2	1
Recreational	27	0	1
Painter and Decorator	55	1	15
Parts Technician	804	31	313
Parts Technician	743	27	284
Materials Technician	61	4	29
Plumber	2,816	164	101
Powerline Technician	336	44	7
Power System Electrician	137	4	5
Recreation Vehicle Service Technician	120	1	4
Refrigeration and Air Conditioning Mechanic	891	32	17
Rig Technician <small>(Note 2)</small>	0	0	0
Roofer	181	16	7
Sheet Metal Worker	1,223	55	56
Sprinkler Systems Installer	194	6	3
Steamfitter-Pipefitter	2,410	174	160
Tilesetter	2	0	1
Transport Refrigeration Technician	26	0	0
Water Well Driller	19	1	0
Welder	3,768	271	337
Welder	3,727	269	334
Wire Processor	41	2	3
Total	44,115	2,592	4,645

Source: Alberta Advanced Education

(Note 1)

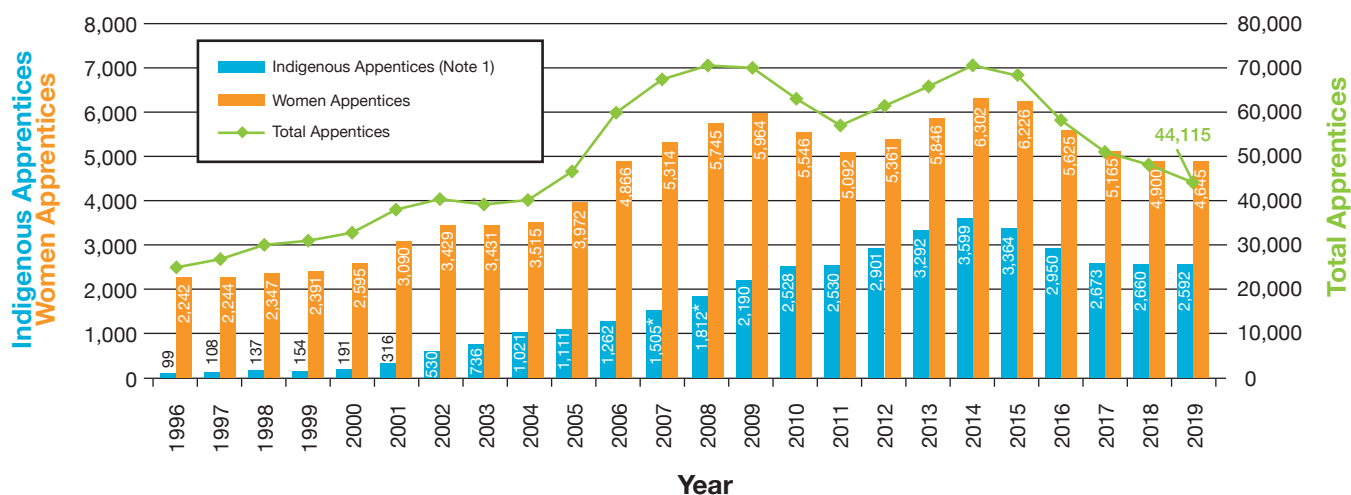
¹ Total number of apprentices registered as of December 31. Apprentices may be registered in more than one apprenticeship program or branch of a program within the same year, but are counted here only once.

Note 1: Apprentices choose whether or not to disclose their Indigenous heritage when registering. The total number of Indigenous apprentices reflected here indicates those who disclosed their Indigenous heritage. There may be additional apprentices with Indigenous heritage registered who did not disclose that information.

Note 2: A request to de-designate the rig technician trade was received from the Canadian Association of Oilwell Drilling Contractors (CAODC) in January 2019. As part of the process to de-designate, active rig technician apprentices were notified in advance that, as part of the process, their apprenticeship program registration would be cancelled on November 8, 2019. Apprentices who only had to submit their record book for certification were encouraged to do so.

CHART 8

Total, Women and Indigenous Apprentices Registered by Year



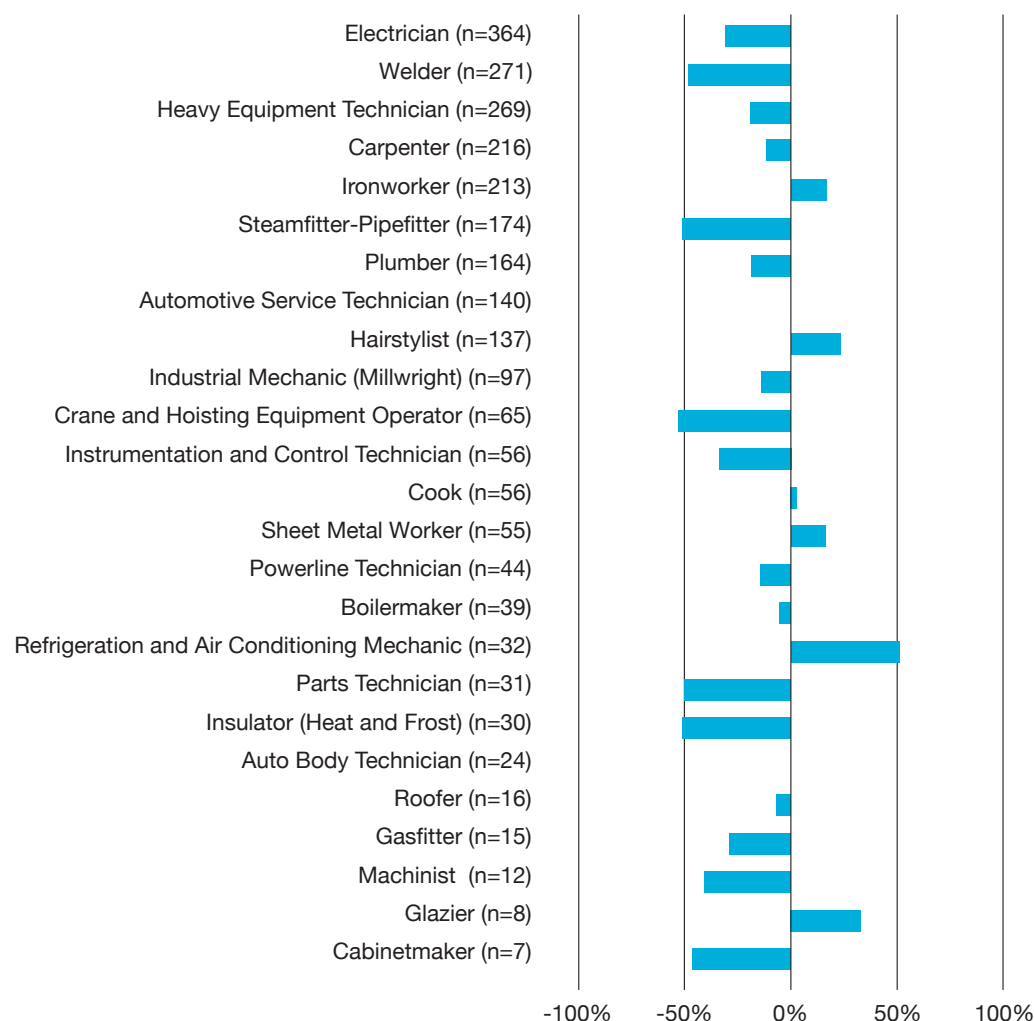
Source: Alberta Advanced Education

Note 1: Apprentices choose whether or not to disclose their Indigenous heritage when registering. The total number of Indigenous apprentices reflected here indicates those who disclosed their Indigenous heritage. There may be additional apprentices with Indigenous heritage registered who did not disclose that information.

* In 2007 and 2008, the statistical methodology for the Indigenous apprentice number changed, therefore, the numbers in those two years cannot be compared to those of previous or future years.

CHART 9

Per Cent Change of Indigenous Apprentices Registered¹ by Apprenticeship Program Between 2014 and 2019



Source: Alberta Advanced Education

¹ Apprentices choose whether or not to disclose their Indigenous heritage when registering. The total number of Indigenous apprentices reflected here indicates those who disclosed their Indigenous heritage. There may be additional apprentices with Indigenous heritage registered who did not disclose that information.

Notes:

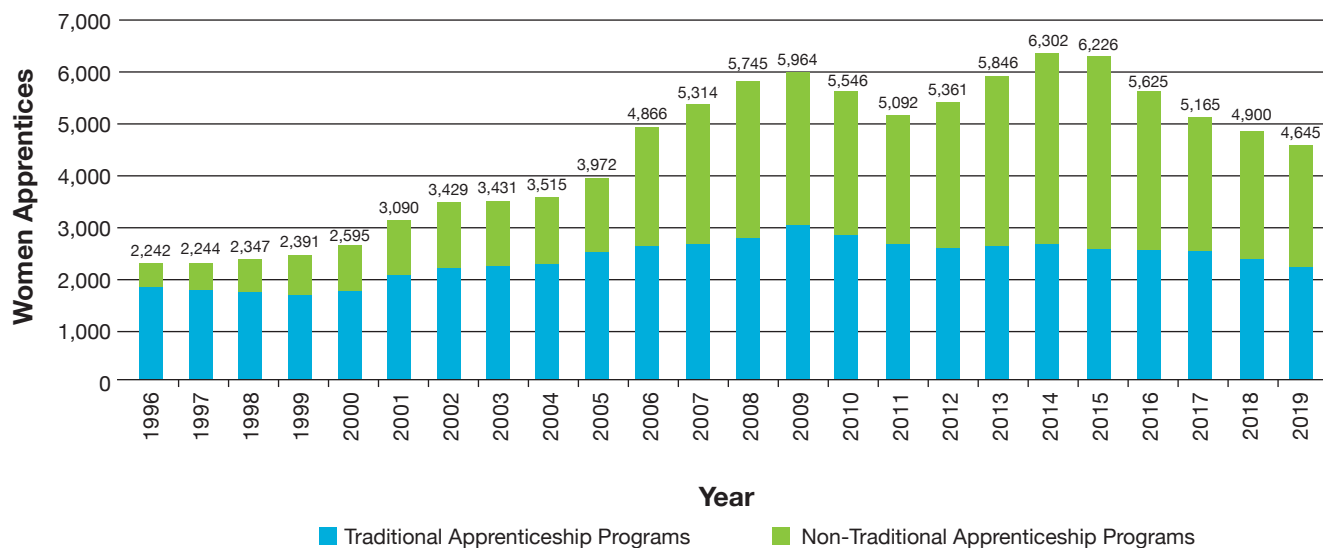
The 25 of 49 apprenticeship programs represented in the chart are those in which there were the highest number of Indigenous apprentices registered as of December 31, 2019. The list of apprenticeship programs is rank ordered with the highest to lowest number of Indigenous apprentices registered.

The 'n' provided is the number of Indigenous apprentices registered in the given apprenticeship program as of December 31, 2019.

Due to small registration numbers in some apprenticeship programs, large percentage changes may occur.

CHART 10

Total Number of Women Apprentices Registered by Year¹



Source: Alberta Advanced Education

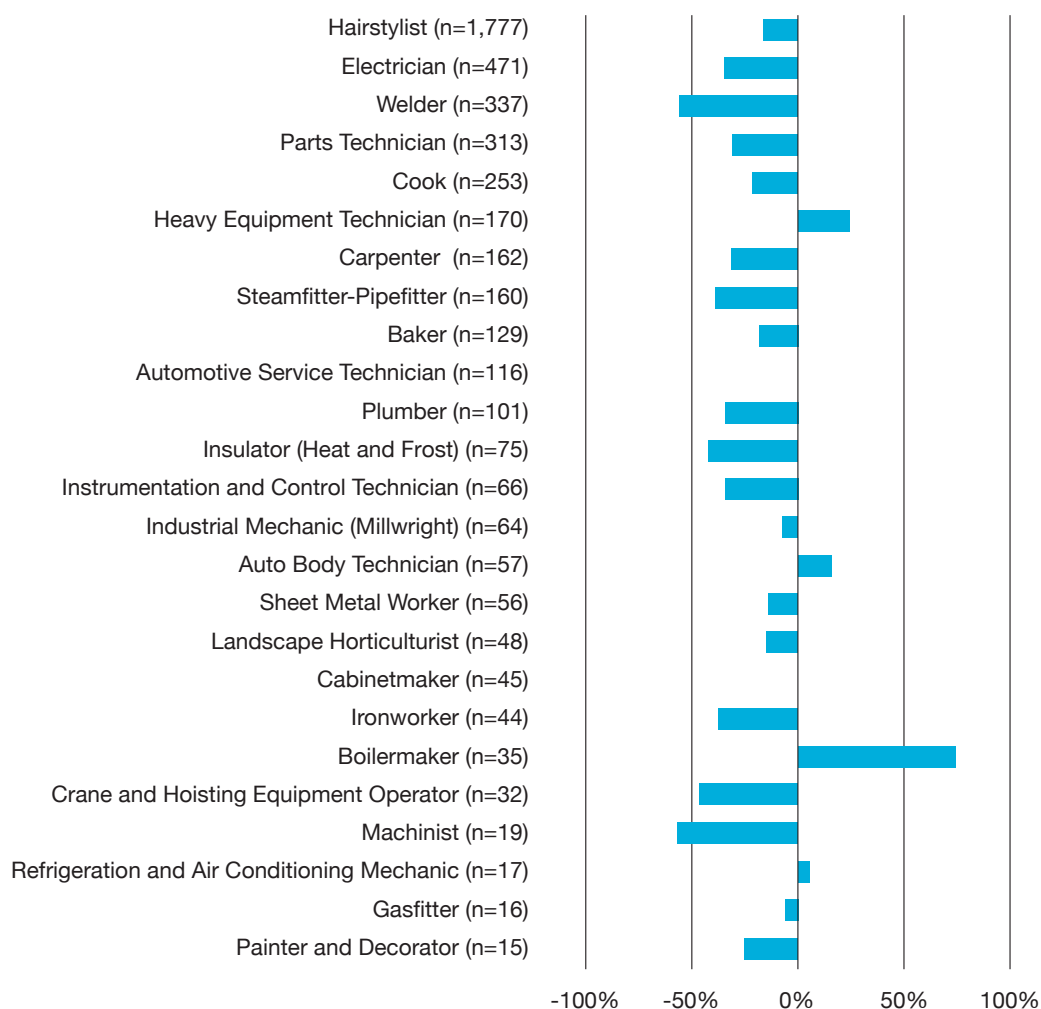
¹ This graph represents statistics covering a series of calendar years (January to December).

Traditional Apprenticeship Programs = Apprenticeship Programs that are gender-biased toward women. They are programs in which women have traditionally made up a large proportion of the total apprentices registered. These apprenticeship programs are: baker, cook, hairstylist, landscape horticulturist.

Non-Traditional Apprenticeship Programs = All apprenticeship programs other than the four 'Traditional Apprenticeship Programs'.

CHART 11

Per Cent Change of Women Apprentices Registered by Apprenticeship Program Between 2014 and 2019



Source: Alberta Advanced Education

Notes:

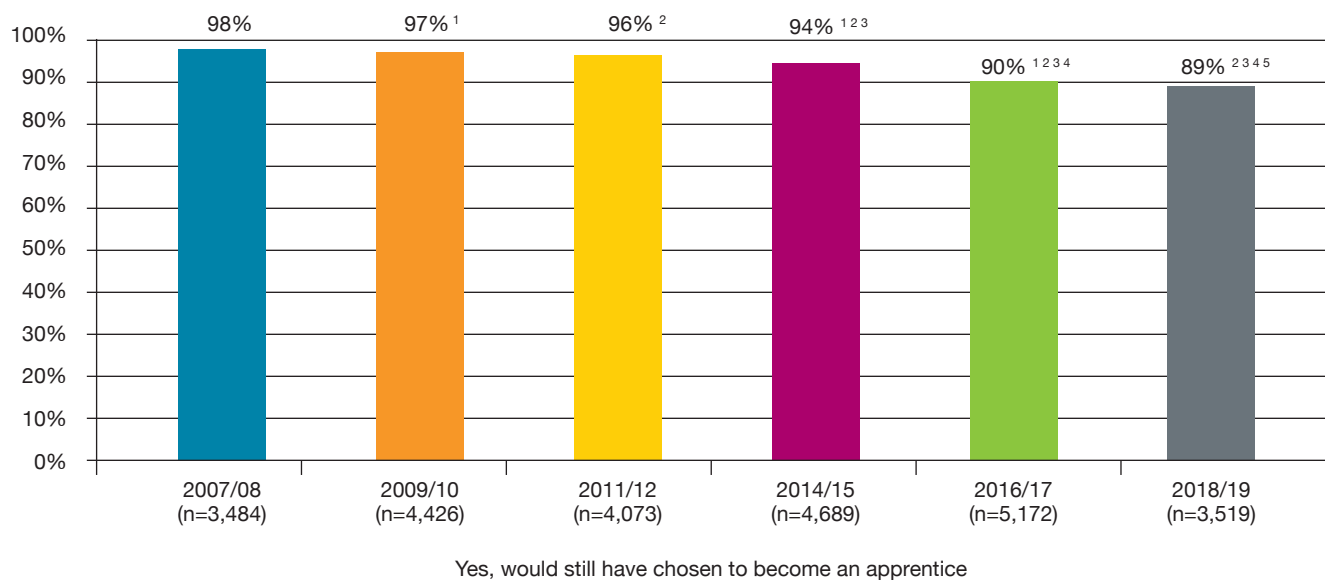
The 25 of 49 apprenticeship programs represented in the chart are those in which there were the highest number of women apprentices registered as of December 31, 2019. The list of apprenticeship programs is rank ordered with the highest to lowest number of women apprentices registered.

The 'n' provided is the number of women apprentices registered in the given apprenticeship program as of December 31, 2019.

Due to small registration numbers in some apprenticeship programs, large percentage changes may occur.

CHART 12

Apprentice Graduate Satisfaction with Apprenticeship System



Source: Alberta Advanced Education, surveys of graduates of apprenticeship and industry training

Survey Question #F6X: In retrospect, based on your experience with the Alberta apprenticeship program, would you still have chosen to become an apprentice?

¹ Indicates a significant change in response at a .05 level of significance compared to the previous survey year.

² Indicates a significant change in response at a .05 level of significance compared to two surveys previous.

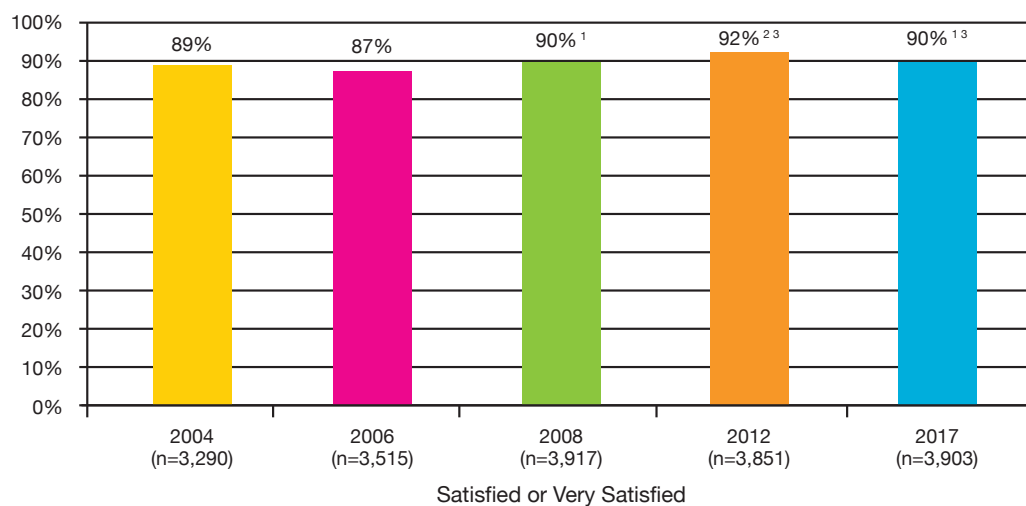
³ Indicates a significant change in response at a .05 level of significance compared to three surveys previous.

⁴ Indicates a significant change in response at a .05 level of significance compared to four surveys previous.

⁵ Indicates a significant change in response at a .05 level of significance compared to five surveys previous.

CHART 13

Employer Satisfaction with Apprenticeship System



Source: Alberta Advanced Education, surveys of employer satisfaction with apprenticeship training and skilled tradespeople

Survey Question #45: Overall, how satisfied are you with the apprenticeship and trade certification system in Alberta?

¹ Indicates a significant change in response at a .05 level of confidence compared to the previous survey year.

² Indicates a significant change in response at a .05 level of confidence compared to two surveys previous.

³ Indicates a significant change in response at a .05 level of confidence compared to three surveys previous.

