



NOVA SCOTIA APPRENTICESHIP AGENCY  
STATISTICS REPORT  
2021-2022

## Introduction

The Nova Scotia Apprenticeship Agency (the Agency or NSAA) Statistics Report is published annually and provides key system performance data for the fiscal period and a comparison to previous years.

For the most part, the apprenticeship system has rebounded from COVID-19. The number of apprentices has increased by 1.3% from pre-pandemic levels and the number of employers in the system is higher than ever before. Despite this rebound, impacts of the pandemic on the number of certifications will be felt for a few years as many apprentices were stalled in their progress through their practical experience.

The number of apprentices enrolling in technical training is trending down and many apprentices withdraw after registering to attend. It is expected that this trend will continue because employers are experiencing significant labour shortages and apprentices are not being released for training. The Agency will continue to monitor the impacts of delayed participation in technical training on certification rates in the coming years.

The number of apprentices from equity-deserving groups has increased from 15.8% to 17.7%, driven largely by an increase in the number of apprentices identifying with a learning disability. The number of women in the system has increased to 8.4% and certification rates for women has also increased.

## Apprentices

Figure 1 highlights the total number of apprentices from 2012-2013 to 2021-2022. Table 1 outlines the number of apprentices by trade and organized by sector. The number of apprentices increased by 4.1% over 2021-2022 and, more importantly, has increased over pre-pandemic levels (1.3%). Of note, there was a significant decrease in the number of apprentices in the Boilermaker trade as a result of increased learning support to apprentices who have now achieved their certification and are no longer apprentices. The Agency also cleaned up the data for Mobile Crane Operators, removing those who completed their licensing exam with the Technical Safety Division, resulting in a decrease over the previous year. Efforts to increase the participation of Roofers, Refrigeration and Air Conditioning Mechanics, Elevating Device Mechanics and Heavy-Duty Equipment Technicians have resulted in significant increases in the number of apprentices in those trades (39%, 19%, and 17%, respectively). The number of apprentices represents a point in time reference (March 31, 2022) and does not include those apprentices who were active throughout the year and completed their apprenticeship; therefore, is not a true reflection of the number of apprentices being supported by the NSAA throughout the year. The actual number would be much higher.

Figure 1: Active apprentices by fiscal year

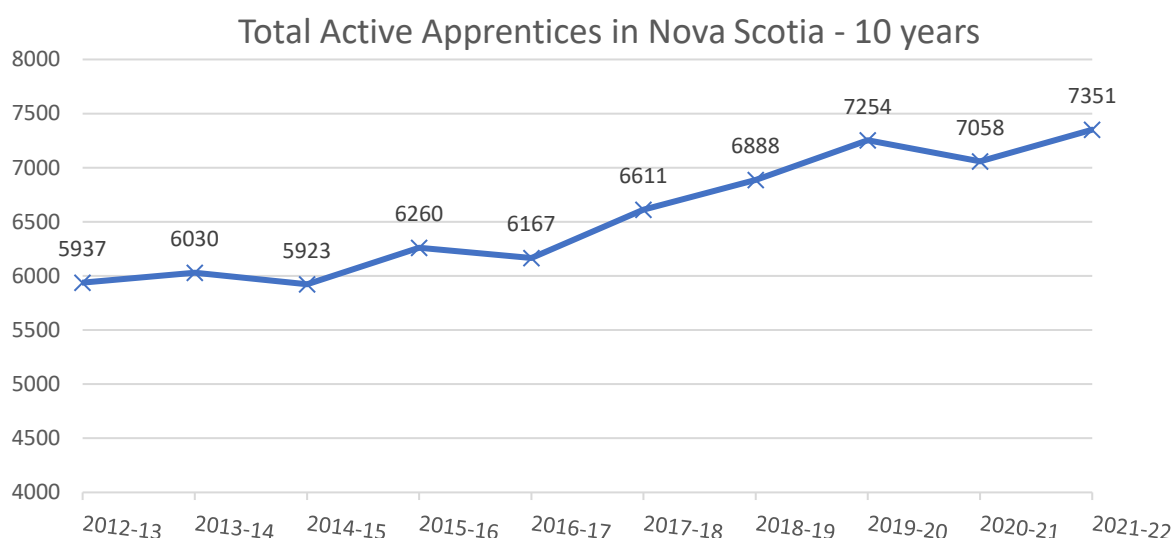


Table 1: Number of apprentices by trade over 5 years (2017-2018 to 2021-2022)

Trade	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	One Year Change 2020-2021 to 2021-2022	Female 2021-2022	Male 2021-2022
<b>Construction Sector</b>								
Boilermaker	25	25	28	32	21	-34.38%	0	21
Bricklayer	76	87	92	84	88	4.76%	4	84
Carpenter	641	697	758	775	839	8.26%	73	766
Construction Electrician	1276	1271	1296	1309	1408	7.56%	93	1315
Elevating Device Mechanic – Class A <sup>(1)</sup>				2	21	19.00%	0	21
Elevating Device Mechanic – Class B <sup>(1)</sup>				1	2	100.00%	0	2
Gasfitter <sup>(2)</sup>	14	12	10	8	2	-6.00%	1	1
Gasfitter A	20	20	23	28	31	10.71%	0	31
Gasfitter B	80	103	118	135	147	8.89%	11	136
Glazier	1	1	2	3	7	133.33%	0	7
Insulator (Heat and Frost)	55	55	87	70	63	-10.00%	5	58
Ironworker (Generalist)	1	1	1	1	0	-100.00%	0	0
Ironworker (Reinforcing)	23	20	23	31	27	-12.9%	0	27
Ironworker (Structural Ornamental)	31	27	23	25	26	4.00%	0	26
Mobile Crane Operator	146	147	150	88	61	-30.68%	2	59
Oil Heat System Technician	95	97	101	91	89	-2.2%	3	86
Plumber	451	499	545	589	605	2.72%	28	577
Powerline Technician	94	101	86	83	75	-9.64%	4	71

Trade	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	One Year Change 2020-2021 to 2021-2022	Female 2021-2022	Male 2021-2022
Refrigeration and Air Conditioning Mechanic	202	242	292	311	358	15.11%	17	341
Roofer	42	41	38	38	53	39.47%	1	52
Sheet Metal Worker	169	191	205	182	199	9.34%	5	194
Sprinkler Fitter <sup>(3)</sup>	58	66	75	72	68	-5.56%	3	65
Steamfitter/Pipefitter	536	437	350	313	283	-9.58%	18	265
<b>TOTAL</b>	<b>4036</b>	<b>4140</b>	<b>4303</b>	<b>4271</b>	<b>4473</b>	<b>4.73%</b>	<b>268</b>	<b>4205</b>
<b>Motive Power Sector</b>								
Agricultural Equipment Technician	5	5	4	6	6	0.00%	0	6
Auto Body and Collision Technician <sup>(4)</sup>	120	140	164	162	139	-14.2%	23	116
Automotive Service Technician	714	759	822	811	822	1.36%	53	769
Heavy Duty Equipment Technician	56	64	83	88	103	17.05%	2	101
Marine Service Technician	4	8	12	11	11	0.00%	3	8
Truck and Transport Mechanic	343	361	383	395	429	8.61%	8	421
<b>TOTAL</b>	<b>1242</b>	<b>1337</b>	<b>1468</b>	<b>1473</b>	<b>1510</b>	<b>2.51%</b>	<b>89</b>	<b>1421</b>
<b>Industrial/Manufacturing Sector</b>								
Boat Builder	19	23	27	17	12	-29.41%	2	10
Industrial Electrician	157	176	188	188	202	7.45%	20	182
Industrial Mechanic (Millwright)	185	189	204	209	222	6.22%	17	205
Instrumentation and Control Technician	76	70	59	57	51	-10.53	5	46
Machinist	73	66	73	73	68	-6.85	6	62
Metal Fabricator (Fitter)	148	147	136	136	151	11.03%	29	122
Power Engineer	178	194	191	91	98	7.69%	8	90
Power Engineer (Plant Operator)	22	33	49	44	51	15.91%	1	50
Welder	206	218	237	231	238	3.03%	38	200
<b>TOTAL</b>	<b>1064</b>	<b>1116</b>	<b>1164</b>	<b>1046</b>	<b>1093</b>	<b>4.49%</b>	<b>126</b>	<b>967</b>
<b>Service Sector</b>								
Baker		2	2	2	3	50.00%	2	1
Cook	257	270	294	246	243	-1.22%	112	131
Hairstylist	6	9	8	10	18	80.00%	15	3
Landscape Horticulturalist	12	14	15	10	11	10.00%	2	9
<b>TOTAL</b>	<b>275</b>	<b>295</b>	<b>319</b>	<b>268</b>	<b>275</b>	<b>2.61%</b>	<b>131</b>	<b>144</b>

(1) Elevating Device Mechanic A/B trade was added in 2020

(2) Gasfitter trade was divided into Gasfitter A and Gasfitter B in 2017

(3) Sprinkler System Installer trade name was changed to Sprinkler Fitter in 2019

(4) Motor Vehicle Body Repairer (Metal and Paint) trade name was changed to Auto Body and Collision Technician in 2019.

Increasing the participation, retention, and completion of women in the trades remains a top priority of the Nova Scotia Apprenticeship Agency. (Table 2). The number of women increased by 4.1% over 2021-2022. Women represent 8.4% of active apprentices in the system, an increase of 60 women in 2021-2022. (Table 3).

Table 2: Total apprentices by sector and 2021-2022 gender representation

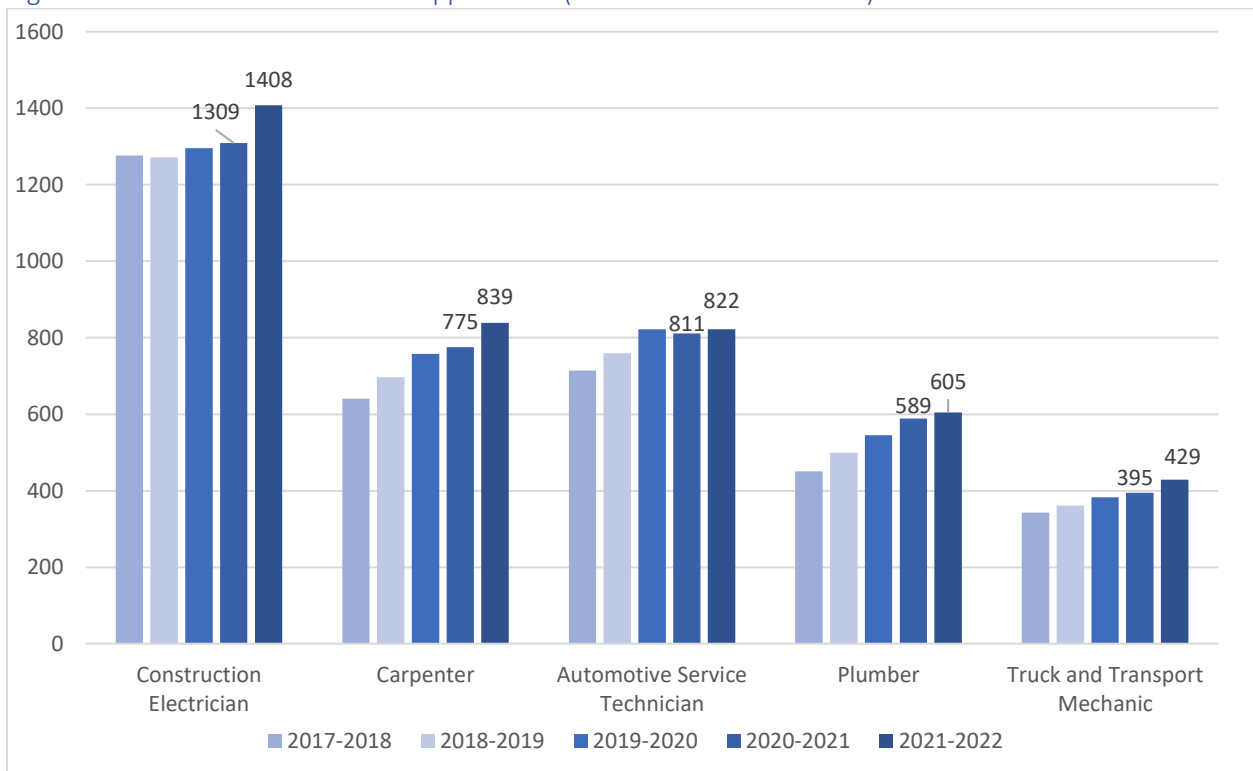
Total Apprentices by Sector	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022	One Year Change	Female 2021-2022	Male 2021-2022
Construction Sector	4036	4140	4303	4271	4473	4.73%	268	4205
Motive Power Sector	1238	1337	1468	1473	1510	2.51%	89	1421
Industrial Manufacturing Sector	1064	1116	1164	1046	1093	4.49%	126	967
Service Sector	206	295	319	268	275	2.61%	131	144
<b>TOTAL</b>	<b>6611</b>	<b>6888</b>	<b>7254</b>	<b>7058</b>	<b>7351</b>	<b>4.15%</b>	<b>614</b>	<b>6737</b>

Table 3: Changes in gender representation by sector

SECTORS	Female 2019-2020	Male 2019-2020	% Female of Total 2019-2020	Female 2020-2021	Male 2020-2021	% Female of Total 2020-2021	TOTAL 2021-2022	Female 2021-2022	Male 2021-2022	% Female of Total 2021-2022
<b>Construction Sector</b>	211	4092	4.9%	232	4039	5.4%	4473	268	4205	5.99%
<b>Motive Power Sector</b>	77	1391	5.2%	81	1392	5.5%	1510	89	1421	5.89%
<b>Industrial/ Manufacturing Sector</b>	115	1049	9.8%	116	930	11.1%	1093	126	967	11.52%
<b>Service Sector</b>	136	183	42.6%	125	143	56.6%	275	131	144	47.63%
<b>TOTAL</b>	539	6715	7.4%	554	6504	7.8%	<b>7351</b>	<b>614</b>	<b>6737</b>	<b>8.4%</b>

The top five trades have remained consistent since 2017-2018. Figure 2 represents the top five trades based on the number of registered apprentices. Of note, Carpenter is now the second largest trade, overtaking Automotive Service Technician this year.

Figure 2: Five trades with the most apprentices (2017-2018 to 2021-2022)



The number of new apprentices increased by 32% over 2021-2022 and was just short of pre-pandemic levels. Of note, new apprentices as a percentage of the total number of apprentices has also rebounded from 2021-2022 but is still less than 2019-2020; this is likely because apprentices were in the system longer while the ability to offer certification exams was impacted by public health restrictions.

Table 4: Newly registered apprentices in Nova Scotia by fiscal year

Year	Total NEW*	Total Active Apprentices (at end of period)	Percentage of Total Apprentices
2017-2018	1522	6611	23%
2018-2019	1490	6888	21.6%
2019-2020	1480	7254	20.4%
2020-2021	1023	7058	14.5%
2021-2022	1354	7351	18.4%

## Youth Engagement

In 2021-2022, NSAA invested over \$1.5 million to fund experiential learning opportunities for youth in the skilled trades. In addition, the Department of Education and Early Childhood Development (EECD) invested \$1.9 million to fund skilled trades education.

NSAA, in collaboration with its partners, actively engaged youth to explore career opportunities in the skilled trades. After a year of providing students with remote learning activities and employers not able to hire students due to the effects of the pandemic (2020-2021), NSAA and its partners were able to return to delivering in-class presentations and provide hands-on activities at various youth and career fairs. NSAA was also able to provide funding to youth serving organizations to engage students, provide paid work placements with employers, and collaborate on initiatives with educators, schools, and industry representatives to offer experiential opportunities in the skilled trades.

The number of registered youth apprentices decreased almost 37% from 2020-2021 (Table 5); however, the number of female youth apprentices remained the same. The decrease in youth registrations was not unexpected given that employers were not hiring youth. In 2022-2023, with the recovery from the pandemic and a tight labour market, the number of registered youth apprentices is anticipated to increase.

Table 5: Youth apprentice registrations by fiscal year and region

YOUTH REGISTRATIONS by REGION	2017-18		2018-19		2019-20		2020-21		2021-22	
	F	M	F	M	F	M	F	M	F	M
Cape Breton	3	42	1	30	4	27	2	15	1	10
Central	1	38	5	46	6	51	0	38	1	18
Northeastern	0	4	0	3	0	4	1	0	0	4
Northern	0	13	0	18	2	17	0	8	1	4
Southwestern	2	29	2	24	4	33	0	34	0	23
<b>TOTAL</b>	<b>6</b>	<b>126</b>	<b>8</b>	<b>121</b>	<b>16</b>	<b>132</b>	<b>3</b>	<b>95</b>	<b>3</b>	<b>59</b>
<b>GRAND TOTAL</b>	<b>132</b>		<b>129</b>		<b>148</b>		<b>98</b>		<b>62</b>	

## Youth From Equity-Deserving Groups

Figure 3 shows the numbers of youth who self-identify from an equity-deserving group and are engaged in skilled trades programs and initiatives. Program partners have been asked to report on the number of youth from equity-deserving groups participating in youth programs funded by NSAA. Of the 437 total youth from equity-deserving groups, 57.7% are Indigenous youth.

Figure 3: Total equity-deserving youth in programs 2021-2022

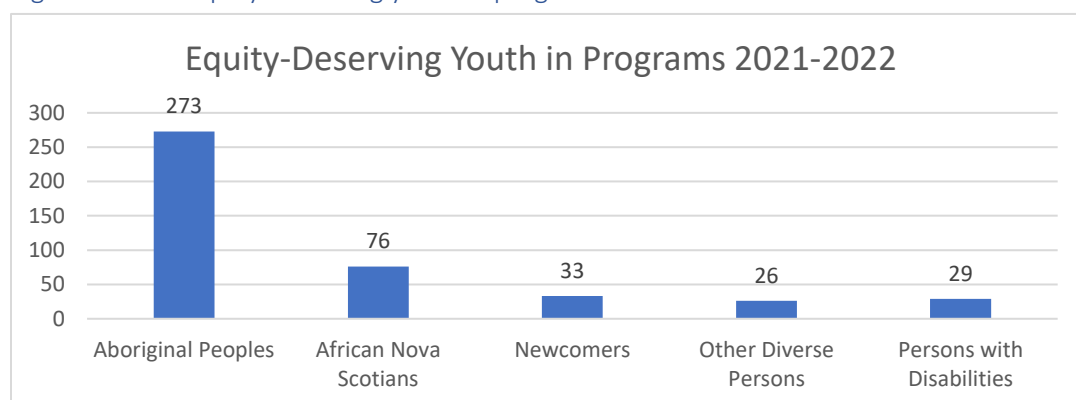


Table 6 shows school visits and presentations. In-school visits take place in a classroom environment and are supported through coordination with the Department of Education and Early Childhood Development and Youth Pathways Consultants at each Regional Centre for Education and Conseil Scolaire Acadien Provincial. After a hiatus in 2020-2021, presentations resumed in 2021-2022 and dramatically increased (392%) from 2019-2020. Apprenticeship information is also shared at additional presentations through career fairs and as part of professional development events held for teachers and guidance staff at schools.

Table 6: School visits and presentations

IN-SCHOOL PRESENTATIONS	2017-18	2018-19	2019-20	2020-21	2021-22
Number of presentations	66	62	6	N/A	44
Number of schools	54	44	5	N/A	33
Number of students	1593	1353	187	N/A	920
ADDITIONAL PRESENTATIONS (outside of school)					
Youth and Young Adults attending presentations				N/A	317
Teacher/School staff attending – 4 special presentations*					37

\*Teachers/School staff includes classroom teachers, guidance staff, O2/Co-op/Skilled Trades teachers, principals, and other school officials

## Youth Engagement Programs

Table 7: Youth engagement programs

Program	2021-22	2020-21*	2019-20	2018-19	2017-18
<b>Trades Exhibition Hall</b>	624	-	7005	1216	1446
<b>Mobile Construction Experience</b>	190	-	730	-	-
<b>Skills Canada Nova Scotia</b>	3158	-	9008	14,025	10,257
<b>Techsploration</b>	900	-	1550	1030	1001

\*2020-21 COVID pandemic

**The Nova Scotia Construction Sector Council (NSCSC)** provides an opportunity for youth (and others) to experience construction occupations through tours/activities at the Trades Exhibition Hall (TEH) and throughout Nova Scotia by visiting the Mobile Construction Experience (MCE). In 2021-2022, NSCSC opened the TEH to school groups and visitors and deployed the MCE to various locations. The NSCSC engaged over 800 participants through the TEH and MCE, of which 38% were female and 30% were from equity-deserving groups (African Nova Scotians, Indigenous Persons, Visible Minority, Newcomers, Persons with a Disability).

**Skills Canada Nova Scotia (SCNS)** hosted in-person and virtual programs and events between September 2021 and March 2022. The in-class presentation was delivered 77 times to 46 schools and 2930 students.

In addition, SCNS engaged 228 youth in provincial skills competitions, including 42 registered apprentices. Of the 228 competitors, 25% were female and 19% were from equity-deserving groups.

**Techsploration**, with a goal to 'empower young women to explore careers in science, engineering, trades and technology', hosted 77 in-school presentations at 46 schools in 2021-2022. These presentations included 19 information sessions and student/teacher interviews, two Techsplorer Events with 14 schools participating, and 10 Techsploration Goes to Work sessions. Through their programming, they engaged approximately 900 young women, of which 32% were from equity-deserving groups.

## Summer Youth Apprenticeship Programs

Since 2008, the NSAA has supported summer sector youth apprenticeship programs for students in Grades 10 and 11. These programs are delivered in partnership with the Construction Association of Nova Scotia, Automotive Sector Council of Nova Scotia, and Nova Scotia Tourism Human Resource Sector Council. Participants explore the skilled trades through a paid summer work placement combined with upfront in-class training. Participating students obtain high school credits as well as apprenticeship hours of practical credit. Building Futures for Youth (BFY) is the original program and connects youth to the Construction Sector; TestDrive (TD) supports students in the Motive Power Sector; and Serve It Up (SIU) supports students in the Service Sector with a specific focus on the Cook and Baker trades.

Table 8: Summer Youth Apprenticeship Programs

Program	2021-22*	2020-21*	2019-20	2018-19	2017-18
<b>Building Futures for Youth</b>	76	-	93	73	74
<b>TestDrive</b>	29	-	0	24	25
<b>ServeltUp!</b>	16	-	16	8	7

\*2020-21 COVID pandemic

**Building Futures for Youth (BFY)** - In 2021-2022, the Construction Association of Nova Scotia, through BFY was able to provide paid work placements to 76 youth with employers in the construction industry. Of the 76 students who received placements, 17% were female and 12% were from equity-deserving groups.

**TestDrive (TD)** - The Nova Scotia Automotive Sector Council, through TD, provided paid work placements to 29 youth with employers in the motive power industry. Of the 29 students who received placements, 13% were female and 7% were from equity-deserving groups. Twenty-nine virtual presentations were given across six school regions.

**Serve It Up! (SIU)** - The Nova Scotia Tourism Human Resource Council, through SIU, provided paid work placements to 16 youth with employers in the service industry, specifically in the cook and baker trades. Of the 16 students received placements, 69% were female and 37% were from equity-deserving groups. One virtual presentation was given reaching approximately 30 students.

### Joint Registration Agreements

Table 9 shows the current Joint Registration Agreements (JRA) with unions and industry organizations, the trades that are represented under these agreements, and the number of apprentices represented under each JRA. The number of apprentices represented by Joint Registration Agreements increased slightly over the 2021-2022 year. Significant efforts have been made in the last year with the Mainland and Cape Breton Carpenter unions evidenced by the 32% increase in the number of apprentices registered to the locals.

Table 9: Number of apprentices in Joint Registration Agreements by JRA holder and trade

JRA Holder	Trade	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
International Association of Heat and Frost Insulators and Asbestos Workers, Local 116	Insulator (Heat and Frost)	55	54	88	71	59
International Brotherhood of Boilermakers, Local 73	Boilermaker	30	30	29	33	30
International Brotherhood of Electrical Workers, Local Union 625	Construction Electrician	176	171	177	168	180
International Brotherhood of Electrical Workers, Local Union 1852	Construction Electrician, Industrial Electrician, Instrumentation and Control Technician	148	120	117	108	107
International Brotherhood of Electrical Workers, Local Union 1928	Industrial Electrician, Industrial Mechanic (Millwright)	16	16	13	11	8
International Union of Bricklayers and Allied Crafts Workers Local 1	Bricklayer	17	18	15	11	11
International Union of Elevator Constructors, Local 125					6	9
International Union of Operating Engineers Local 721 and Construction Management Bureau Limited	Mobile Crane Operator	134	135	138	81	55
Joint Apprenticeship Training Committee of Ironworkers, Local 752	Ironworker (Generalist, Reinforcing, Structural/ Ornamental)	52	47	45	51	49
Mainland Nova Scotia J.T.C., Local 83	Carpenter	60	74	77	69	68



JRA Holder	Trade	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Millwright and Machine Erectors, Local Union 1178	Millwright	31	33	25	26	25
Nova Scotia Boat Builders Association	Boat Builder	20	24	27	17	12
Recreation Facility Association of Nova Scotia	Refrigeration Plant	17	23	36	30	35
Sheet Metal Workers' International Association Joint Apprenticeship Training Committee, Local 56 and Construction Management Bureau Ltd. of Nova Scotia	Sheet Metal Worker, Roofer	21	27	23	25	38
United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of United States and Canada, Locals 244,682,56	Gasfitter, Instrumentation and Control Technician, Metal Fabricator, Oil Heat System Technician, Plumber, Refrigeration and A/C Mechanic, Sprinkler Fitter, Steamfitter/Pipefitter, Welder	493	466	425	409	422
United Brotherhood of Carpenters and Joiners of America Joint Apprenticeship Training Committee, Local Union 1588	Carpenter	80	52	58	82	109
<b>TOTAL</b>		<b>1332</b>	<b>1274</b>	<b>1293</b>	<b>1192</b>	<b>1217</b>

JRAs with First Nations and equity organizations are shown in Table 10.

There has been a modest increase in apprentices registered to First Nations and equity organizations over the past year.

Table 10: Number of apprentices in Joint Registration Agreements with First Nations and Equity Organizations

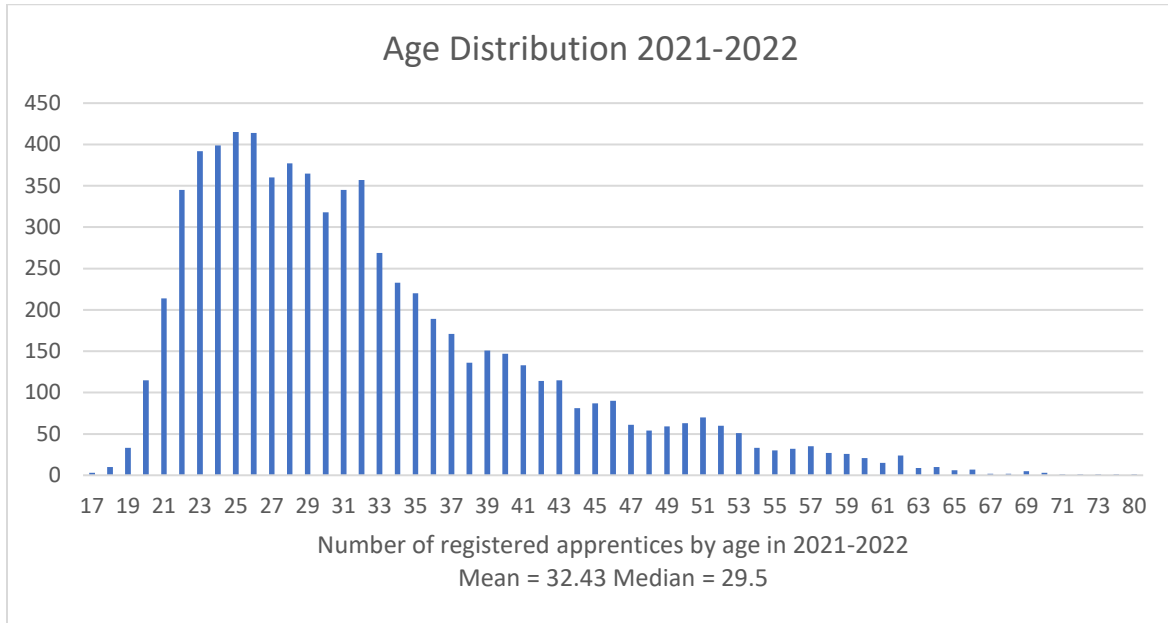
Registered apprentices	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Aboriginal Peoples Training & Employment Commission (APTEC), 2016	7	12	19	24	25
East Preston Empowerment Academy Society, 2018			3	12	13
Eskasoni First Nation, 2017	26	29	40	33	33
Immigrant Services Association of Nova Scotia (ISANS), 2020					
Membertou First Nation, 2002	34	31	27	16	16
Mi'kmaw Native Friendship Centre, 2016					
Millbrook First Nation, 2018				3	2
Paqtnkek Mi'kmaw Nation, 2014					2
Pictou Landing First Nation, 2011	9	9	9	9	9
Potlotek First Nation, 2013	13	9	30	24	24
Wagmatcook First Nation, 2013	10	10	11	7	7
Waycobah First Nation, 2013	19	21	19	11	15
<b>TOTAL</b>	<b>111</b>	<b>121</b>	<b>158</b>	<b>139</b>	<b>146</b>

## Demographics

Figure 4 shows the age distribution of registered apprentices in Nova Scotia in 2021-2022.

Apprentices aged 23-31 represent the largest age group of all apprentices. Apprentices aged 25 have the single largest number at 434. The median age has remained the same at 29.5.

Figure 4: Age Distribution of Active Apprentices in 2021-2022



### Women and Equity-Deserving Groups

In 2021-2022, the percentage of women registered as apprentices has increased to 8.4%.

Figure 5: Female apprentices in Nova Scotia – 10 years

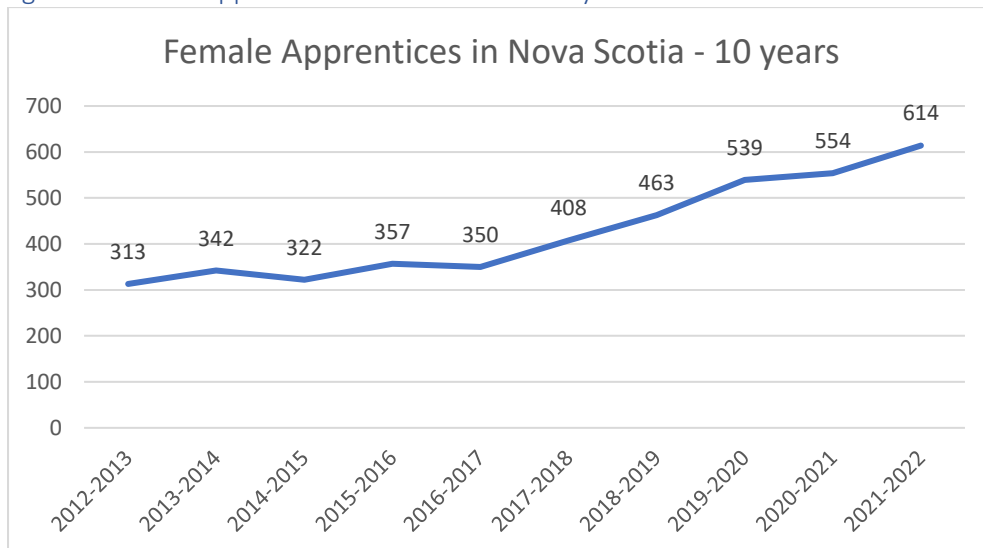
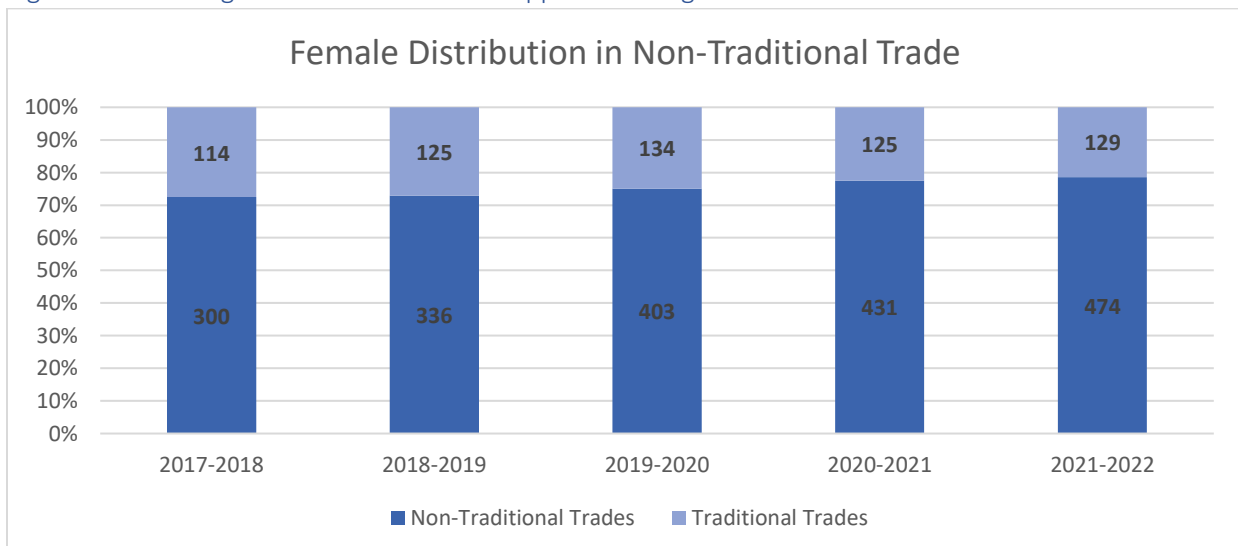


Figure 6: Percentage breakdown of female apprentices registered in traditional and non-traditional trades



In 2021-2022, 17.7% of apprentices identify as diverse, driven by a 15% increase in apprentices with disabilities. This is an increase from 15.8% in 2020-2021.

Table 11: Total number of equity-deserving groups and percentage of total apprentices

YEAR	Aboriginal Peoples	% of Total	African Nova Scotians	% of Total	New-comers	% of Total	Other Diverse Persons	% of Total	Persons with Disabilities	% of Total
2017-2018	314	4.7%	71	1.1%	79	1.2%	264	3.9%	180	2.7%
2018-2019	342	4.9%	105	1.5%	112	1.6%	305	4.4%	234	3.4%
2019-2020	404	5.5%	138	1.9%	138	1.9%	351	4.8%	369	5.0%
2020-2021	416	5.9%	174	2.5%	178	2.5%	376	5.3%	416	5.9%
2021-2022	408	5.5%	186	2.5%	202	2.7%	389	5.3%	481	6.5%

Note: All diversity information is based on self-identification and some individuals select more than one category.

Figure 7: Equity-deserving populations in apprenticeship – 5 years

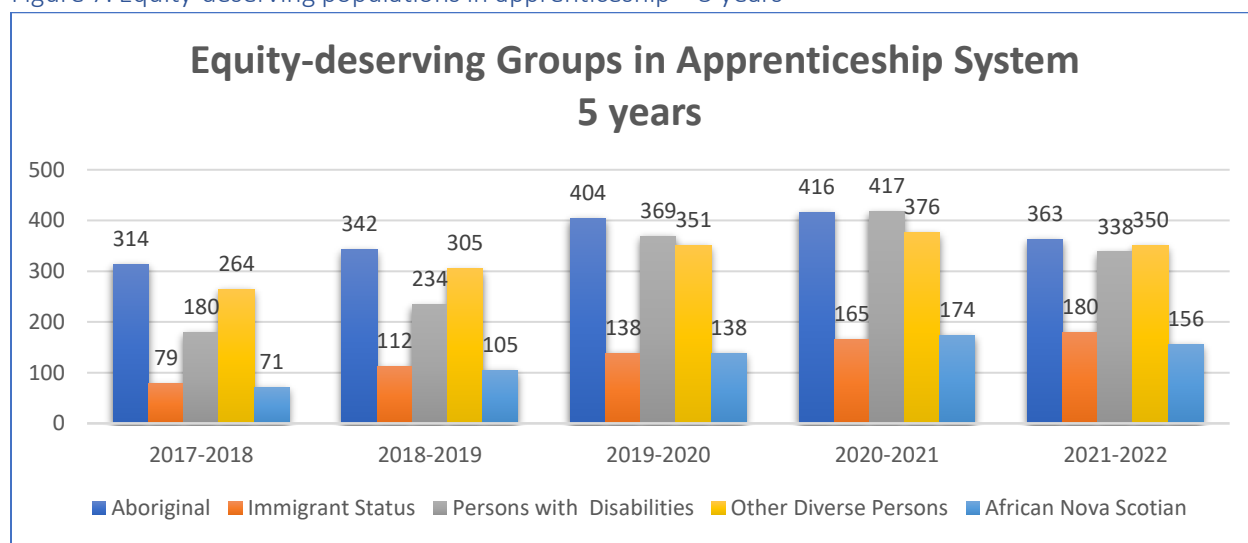
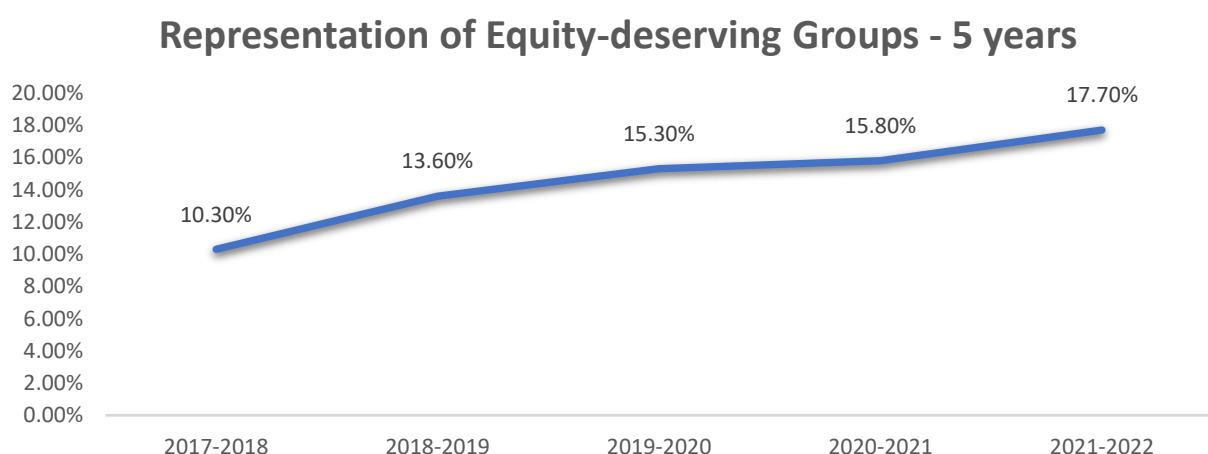


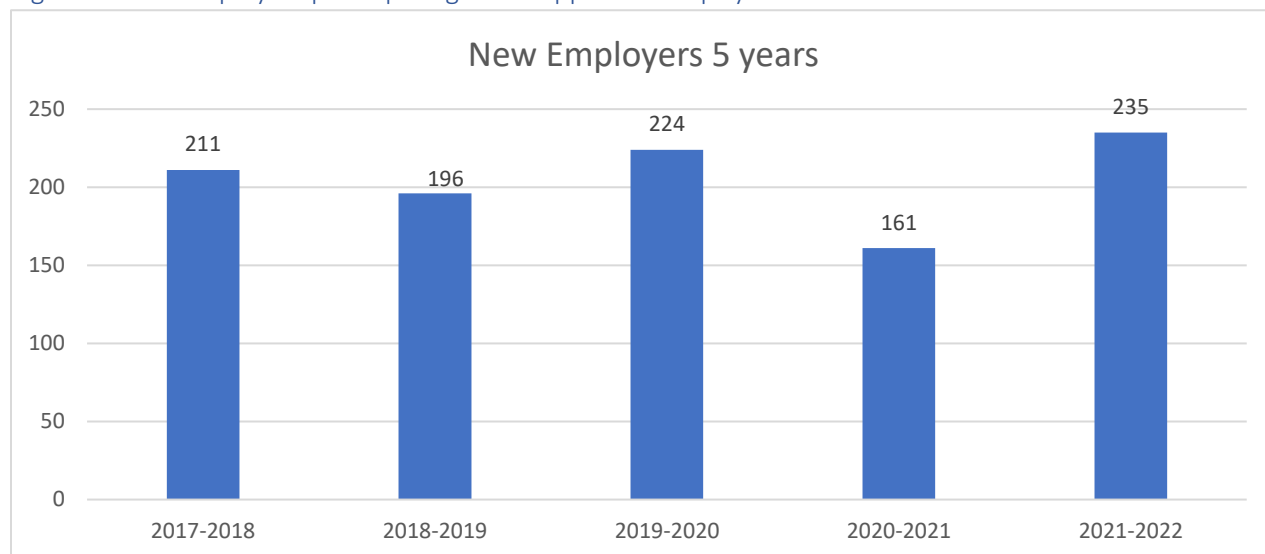
Figure 8: Equity-deserving populations as a percentage of total apprentices – 5 years



## Employers

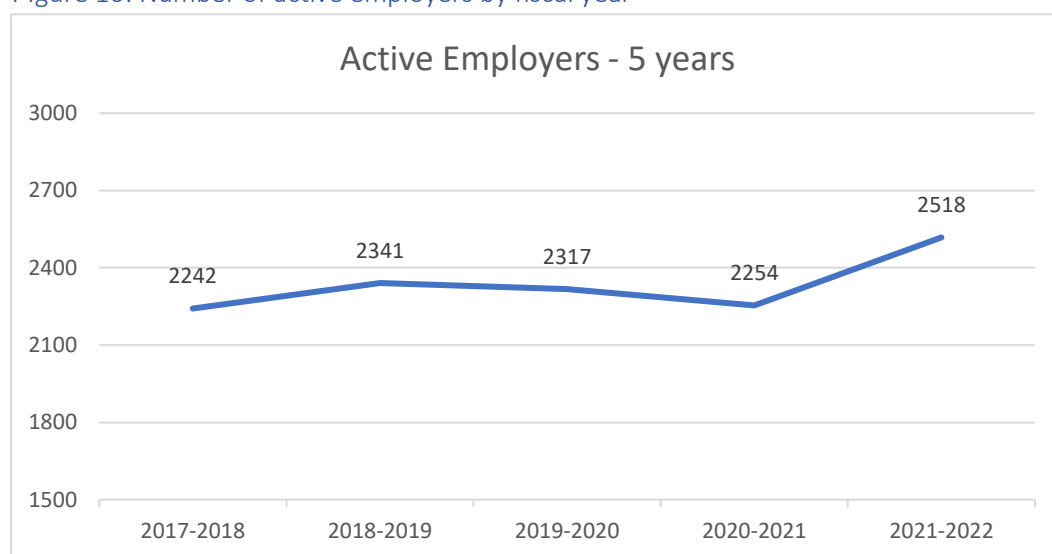
The number of new employers in the apprenticeship system has rebounded from 2020-2021 and more new employers registered apprentices in 2021-2022 than in any other year. This is also true for the total number of employers who train apprentices.

Figure 9: New employers participating in the apprenticeship system



The trend for the number of employers participating in the apprenticeship system is shown in Figure 10.

Figure 10: Number of active employers by fiscal year



\*Includes JRA employers.

Table 12: Number of apprentices registered to employers, March 31, 2022

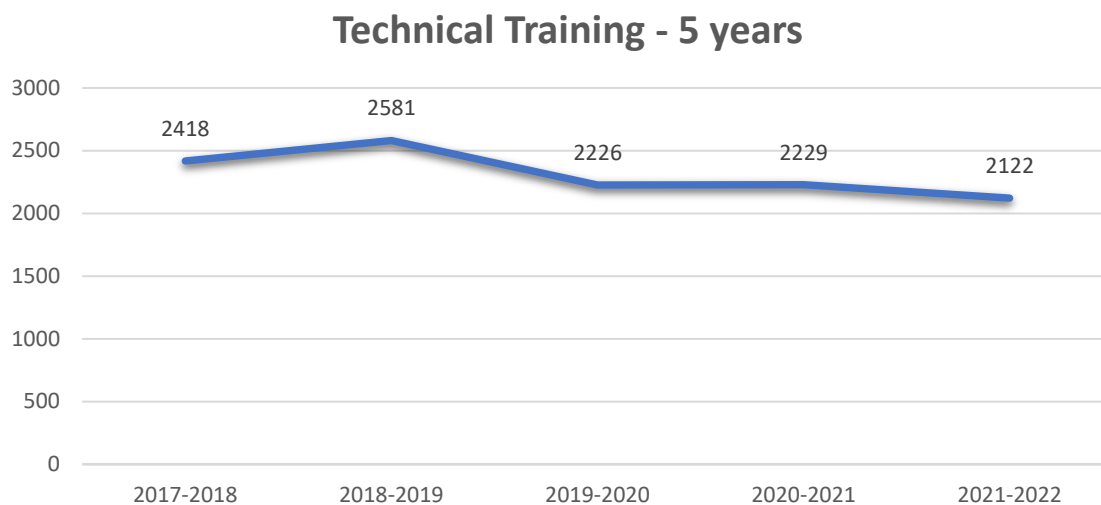
Apprentices	Employers* March 31, 2020	Employers* March 31, 2021	Employers* March 31, 2022
<b>1-5</b>	1971	1975	2075
<b>5-10</b>	170	164	167
<b>10-15</b>	37	33	30
<b>15-20</b>	12	10	15
<b>20-100</b>	23	26	20
<b>100-500</b>	5	4	6

\*Total does not include JRA employers

### Technical Training

The public health restrictions continued to impact technical training enrolment for 2021-2022 as apprentices were reluctant to attend technical training virtually. It is also anticipated that apprentices are having difficulties leaving employment for training with the current labour shortages. In addition, the number of apprentices who withdraw from training continues to increase.

Figure 11: Trends for apprentices scheduled for technical training



Note: Numbers include those who have completed online training

Table 13: Technical training offered by trade and academic year, September 2021-August 2022

Trade Name	Number of Clients Scheduled	Number of Clients Attended	Training Total Weeks	Refresher Training Total Weeks
Auto Body and Collision Technician <sup>(1)</sup>	38	32	22	6
Automotive Service Technician (includes ASEP)	237	205	160	
Boiler Maker	29	28	22	
Bricklayer	30	16	14	9
Carpenter	109	103	75	
Construction/Industrial Electrician	418	380	252	6
Cook	24	19	20	
Farm Technician Provincial Refresher	48	45	10	6
Gasfitter	19	17	48	
Hairstylist	15	13	4	
Heavy Duty	37	31	11	
Heavy Duty/ Truck and Transport Mechanic <sup>(2)</sup>	45	41	20	
Industrial Electrician	44	28	21	3
Industrial Mechanic	80	70	51	
Instrumentation and Control Technician	9	9	15	
Insulator (Heat and Frost) <sup>(3)</sup>	35	30	33	3
Iron Worker (Reinforcing + Structural/Ornamental)	41	40	6	3
Machinist	9	9	13	
Metal Fabricator	34	34	20	
Oil Heat System Technician	16	14	12	
Plumber	242	217	126	9
Power Engineer	18	18	9	
Powerline Technician	48	48	19	
Refrigeration and Air Conditioning Mechanic	130	110	48	3
Refrigeration Plant Certification	11	11	1	
Roofer	14	12	12	
Sheet Metal Worker	71	67	44	
Sprinkler Fitter <sup>(1)</sup>	25	24	24	
Steamfitter/Pipefitter	51	43	51	
Transport Trailer Technician	0	0	0	
Truck and Transport Mechanic <sup>(2)</sup>	119	105	59	
Welder	68	62	44	
Refrigeration Plant Operator Review Week	8	5	1	
<b>TOTAL<sup>(4)</sup></b>	<b>2122</b>	<b>1886</b>	<b>1267</b>	<b>48</b>

(1) Motor Vehicle Body Repairer renamed **Auto Body and Collision Technician** and Sprinkler System Installer renamed **Sprinkler Fitter** in 2019; (2) Levels 1 and 2 of **Heavy Duty Equipment Technician** and **Truck and Transport Mechanic** are the same. Levels 3 and 4 of both trades require specialized training (3) Training provided by Unions (4) Total includes multiple NSCC locations and concurrent classroom sessions.

The Agency is re-designing online training programs and phasing out the open entry/open exit training in favour of an online cohort model that has classroom instruction with support from an instructor. Therefore, the number of individuals enrolling in these programs will diminish as they are phased out.

Table 14: Online self-directed technical training – 5 years

Online Training Programs	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Automotive Service Technician	74	63	78	67	34
Carpenter	34	60	52	37	32
Construction Electrician	94	129	138	133	66
Gasfitter A	61	53	64	43	12
Gasfitter B					29
Industrial Electrician	18	10	18	18	1
Machinist	6	6	6	6	3
Oil Heat Systems Technician	16	13	8	14	7
Power Engineer 1 <sup>st</sup> Class	10	**17	**28	**10	1
Power Engineer 2 <sup>nd</sup> Class					1
Plumber	45	38	31	42	
Steamfitter/Pipefitter	1	1		2	
<b>TOTAL</b>	403	390	423	372	248

\*\*includes Refrigeration Plant Operator 2<sup>nd</sup> Class

Some trades in Table 15 have mandatory level exams but are not harmonized. Please refer to this document for a list of the Phase 1, 2 and 3 harmonized trades:

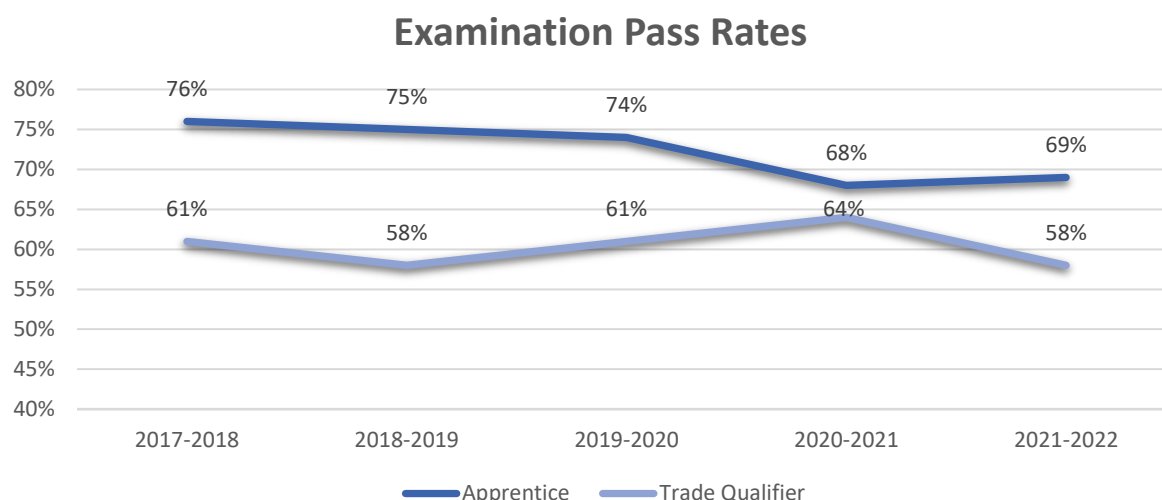
<https://www.nsapprenticeship.ca/sites/default/files/files/NSAA-FactSheet-AAHP.pdf>

Table 15: Level exam performance 2017-2018 to 2021-2022\*

\*n/a (not available) indicates the results with less than 3 exam candidates have been suppressed for privacy reasons.

Trade Name	Level	2017-2018	Pass Rate	2018-2019	Pass Rate	2019-2020	Pass Rate	2020-2021	Pass Rate	2021-2022	Pass Rate
Automotive Service Technician	Level 1	-	-	-	-	46	35%	8	24%	55	27%
	Level 2	-	-	-	-	-	-	14	52%	47	68%
	Level 3	-	-	-	-	-	-	--	-	22	100%
Boilermaker	Level 1	11	91%	5	80%	n/a	50%	8	100%	0	N/A
	Level 2	8	100%	10	90%	5	100%	-	-	7	71%
Bricklayer	Level 1	5	100%	4	50%	9	67%	-	-	2	50%
	Level 2	7	0%	13	77%	15	60%	7	58%	10	90%
	Level 3	-	-	8	100%	5	100%	6	100%	7	71%
Carpenter	Level 1	35	69%	45	47%	64	34%	12	32%	38	47%
	Level 2	-	-	28	89%	23	91%	4	67%	23	91%
	Level 3	-	-	34	79%	54	67%	22	76%	24	88%
	Level 4	-	-	-	-	18	89%	21	95%	18	83%
Construction Electrician	Level 1	37	43%	44	55%	39	51%	12	46%	16	56%
	Level 2	-	-	135	59%	140	54%	45	53%	132	55%
	Level 3	-	-	-	-	26	73%	31	67%	72	68%
	Level 4	-	-	-	-	-	-	11	69%	56	77%
Cook	Level 1	9	78%	23	70%	16	44%	11	61%	0	N/A
	Level 2	16	69%	13	69%	24	71%	5	83%	3	67%
	Level 3	4	75%	24	67%	43	49%	8	44%	17	53%
Heavy Duty Equipment Technician	Level 1	-	-	-	-	-	-	1	100%	4	50%
	Level 2	-	-	-	-	-	-	0	0%	0	N/A
Industrial Electrician	Level 1	n/a	100%	4	75%	n/a	100%	2	67%	5	80%
	Level 2	-	-	8	75%	9	89%	1	50%	10	60%
	Level 3	-	-	-	-	n/a	100%	5	100%	1	100%
	Level 4	-	-	-	-	-	-	-	-	6	67%
Industrial Mechanic (Millwright)	Level 1	-	-	-	-	4	75%	10	100%	21	86%
	Level 2	-	-	-	-	-	-	12	80%	25	52%
	Level 3	-	-	-	-	-	-	-	-	0	N/A
Instrumentation and Control Technician	Level 1	-	-	n/a	100%	-	-	1	100%	1	100%
	Level 2	n/a	100%	-	-	n/a	50%	-	-	0	N/A
	Level 3	4	100%	5	100%	-	-	-	-	0	N/A
	Level 4	14	64%	5	100%	4	75%	2	100%	3	100%
Insulator (Heat and Frost)	Level 1	7	100%	14	86%	20	95%	18	90%	2	0%
	Level 2	14	100%	-	-	9	100%	10	83%	10	80%
	Level 3	n/a	0%	18	100%	-	-	8	100%	13	85%
Metal Fabricator (Fitter)	Level 1	6	17%	n/a	50%	3	67%	-	-	4	25%
	Level 2	14	57%	6	33%	7	14%	2	33%	2	100%
	Level 3	-	-	29	38%	37	41%	1	17%	N/A	N/A
Plumber	Level 1	53	96%	86	97%	92	93%	63	91%	83	93%
	Level 2	-	-	31	65%	91	68%	32	58%	102	81%
	Level 3	-	-	5	60%	30	87%	24	96%	21	95%
	Level 4	-	-	-	-	-	-	12	86%	30	93%
Roofer	Level 1	-	-	-	-	-	-	-	-	0	N/A
	Level 2	5	80%	-	-	7	86%	2	50%	1	0%
	Level 3	n/a	0%	-	-	6	83%	-	-	4	25%
Sheet Metal Worker	Level 1	6	67%	27	96%	31	84%	6	75%	22	64%
	Level 2	17	82%	19	68%	15	100%	13	76%	13	46%
	Level 3	14	57%	18	61%	21	67%	-	-	0	N/A
	Level 4	11	91%	27	81%	23	61%	7	58%	17	82%
Sprinkler Fitter	Level 1	9	78%	8	100%	14	86%	13	76%	7	100%
	Level 2	-	-	10	90%	9	89%	10	100	9	100%
Steamfitter/Pipefitter	Level 1	12	67%	3	67%	n/a	100%	5	83%	2	50%
	Level 2	50	78%	33	55%	29	66%	6	55%	10	60%
	Level 3	41	85%	35	100%	15	100%	6	50%	19	63%
	Level 4	76	64%	83	84%	53	79%	5	63%	5	80%
Truck and Transport Mechanic	Level 1	-	-	-	-	-	-	9	43%	26	46%
	Level 2	-	-	-	-	-	-	0	0%	1	100%
Welder	Level 1	10	40%	11	45%	9	33%	-	-	8	25%
	Level 2	-	-	21	86%	4	75%	1	33%	7	86%
	Level 3	-	-	37	73%	34	74%	20	80%	39	85%

Figure 12: Examination pass rates for Red Seal trades from 2017-2018 to 2021-2022



### Apprenticeship START Program

The Apprenticeship START program was expanded to include employers in Sydney, Truro, and Halifax and now enables employers who re-hire apprentices who were laid off during the pandemic to continue to receive START funding. It was anticipated that up to 400 new apprentices and 200 laid off apprentices could be hired through the expanded program and as of March 2022, the employers of 498 apprentices have benefited from the expansion.

Through the Apprenticeship START incentive, \$4,330,000 was distributed in 2021-2022 to employers who hired, progressed, and completed their apprentices. As of March 31, 2022, there are 2021 active apprentices and 1671 employers participating in the Apprenticeship START Program as indicated in Table 16. Twenty-five per cent (25%) of apprentices are equity-deserving and eight per cent (8%) are women.

Table 16: Employers and apprentices in Apprenticeship START program 2021-2022

Employers and apprentices in Apprenticeship START Program 2020-2021	
Active Employers	1671
Active Employers Hiring Diverse Apprentices	441
Active Apprentices	2021
Active Apprentices – Diverse	505
Active Female Apprentices	163

Since the inception of the program, 215 apprentices have completed their program of which 13% were diverse. The percentage of diverse apprentices completing their programs is significantly higher if the employer receives the START incentive.

Table 17: Apprentice completion of Apprenticeship START program

Level of Apprenticeship	Number of Apprentices	Percentage of Diverse Apprentices
Level 1	1254	22%
Level 2	331	29%
Level 3	271	30%
Level 4/IP Exam	168	32%
Completions	215	13%



## Apprentice Progression and Completion Awards

In 2021-2022, awards totaling \$220,500 were issued to 264 apprentices.

Table 18: Apprentice progression/completion awards by trade

Trade Name	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Auto Body and Collision Technician <sup>(1)</sup>	4	13	2	9	8
Automotive Service Technician	82	68	61	68	29
Boat Builder		2	1		4
Bricklayer	1				
Boilermaker			2		
Carpenter	42	46	33	23	23
Construction Electrician	111	101	94	69	53
Cook			1	1	
Elevating Device Mechanic					12
Gasfitter	22				
Glazier					
Heavy Duty Equipment Technician	6	1	8	4	10
Industrial Electrician	38	24	12	13	4
Industrial Mechanic (Millwright)	19	14	11	8	6
Instrumentation and Control Technician	8	1		13	
Machinist	7	11	4		3
Metal Fabricator (Fitter)	13	4	1		
Oil Heat Systems Technician	1				
Plumber	22	40	42	23	34
Power Engineer	13	13	10	8	2
Powerline Technician	15	3	15	11	8
Refrigeration and Air Conditioning Mechanic	24	26	17	14	33
Sheet Metal Worker	9	5	7	6	1
Sprinkler Fitter <sup>(2)</sup>	1				6
Steamfitter/Pipefitter	28	9	18	11	2
Truck and Transport Mechanic	26	27	45	43	25
Welder	2			1	1
<b>TOTAL</b>	<b>494</b>	<b>408</b>	<b>384</b>	<b>325</b>	<b>264</b>

(1) Motor Vehicle Body Repairer (Metal and Paint) trade name was changed to **Auto Body and Collision Technician** in 2019

(2) Sprinkler System Installer trade name was changed to **Sprinkler Fitter** in 2019.

Figure 13 shows those who have completed apprenticeship training and attained a Certificate of Qualification over the past ten years. The Agency was still not able to fully invigilate examinations through 2021-2022 due to public health restrictions, and many apprentices were laid off for significant periods of time which made it difficult for them to achieve the hours required for certification and therefore, the number of certifications issued has not rebounded to pre-pandemic levels. It is expected to take up to three years for the impact on certification from the pandemic to subside. In addition to apprentices, 217 trade qualifiers also certified in 2021-2022.

Figure 13: Nova Scotia apprenticeship completions from 2012-2013 to 2021-2022



Table 19: Certificates of Qualification issued by trade and year for Apprentices and Trade Qualifiers

Construction Sector	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Blaster	3	5	6	16	8
Boilermaker	11	8	7	5	11
Bricklayer	6	10	5	2	7
Carpenter	40	33	52	39	43
Concrete Finisher			1		1
Construction Electrician	151	170	165	98	150
Elevating Device Mechanic			2	1	
Elevating Device Mechanic A <sup>(1)</sup>					3
Elevating Device Mechanic B <sup>(1)</sup>					1
Gasfitter A <sup>(2)</sup>	1	5	4	2	2
Gasfitter B <sup>(2)</sup>	15	17	15	10	20
Glazier			13	1	
Insulator (Heat and Frost)	5	22		20	20
Ironworker (Reinforcing)	1	12	4		26
Ironworker (Structural/Ornamental)	19	1	7	5	13
Mobile Crane Operator	5	9	2	2	2
Oil Heat System Technician	10	7	6	7	12
Painter and Decorator			2	1	
Plumber	46	36	37	38	43
Powerline Technician	16	15	31	22	17
Refrigeration and A/C Mechanic	24	31	34	14	17
Restoration Stone Mason			1		
Roofer	7		5		1
Sheet Metal Worker	18	15	19	7	8
Sprinkler Fitter <sup>(3)</sup>	8	7	5	6	9
Steamfitter/Pipefitter	57	60	40	13	30
Tower Crane Operator		1	1		
Welder	44	46	28	17	28
<b>TOTAL</b>	<b>487</b>	<b>510</b>	<b>492</b>	<b>326</b>	<b>472</b>

Industrial/Manufacturing Sector	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Boat Builder	2	2	1	1	7
Cabinetmaker		1		1	1
Industrial Electrician	30	17	13	16	18
Industrial Mechanic (Millwright)	16	35	29	21	6
Instrumentation and Control Technician	11	7	7	4	7
Machinist	4	10	7	2	9
Metal Fabricator (Fitter)	12	16	19	6	28
Welder	44	46	28	17	28
<b>TOTAL</b>	<b>119</b>	<b>134</b>	<b>104</b>	<b>68</b>	<b>104</b>

Motive Power Sector	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Agricultural Equipment Technician	5		1		
Auto Body and Collision Technician <sup>(4)</sup>	13	14	10	5	17
Automotive Service Technician	160	181	128	92	63
Elevating Device Mechanic			2	1	
Heavy Duty Equipment Technician	5	14	10	10	5
Marine Service Technician	11		4		
Motorcycle Mechanic	5	8	6	4	5
Parts Technician <sup>(5)</sup>	1				1
Recreation Vehicle Service Technician	2				
Transport Trailer Technician			1		1
Truck and Transport Mechanic	44	69	60	33	40
<b>TOTAL</b>	<b>246</b>	<b>286</b>	<b>222</b>	<b>145</b>	<b>132</b>

Service Sector	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Alarm and Security Technician			1		
Appliance Service Technician			1		
Baker	3	7	3	1	2
Cook	24	21	23	12	16
Hairstylist	20	2	2	8	
Landscape Horticulturalist		3	2		9
<b>TOTAL</b>	<b>47</b>	<b>33</b>	<b>32</b>	<b>21</b>	<b>27</b>

(1) Elevating Device Mechanic A/B trade was added in 2020; (2) Gasfitter trade was divided into **Gasfitter A** and **Gasfitter B** in 2017; (3) Sprinkler System Installer trade name was changed to **Sprinkler Fitter** in 2019; (4) Motor Vehicle Body Repairer (Metal and Paint) trade name was changed to **Auto Body and Collision Technician** in 2019; (5) Partsperson trade name was changed to **Parts Technician** in 2020.

Table 20: Total certifications by sector 2021-2022

Total Certifications by Sector	2021- 2022
Construction Sector	444
Industrial Manufacturing Sector	104
Motive Power Sector	132
Service Sector	27
<b>TOTAL</b>	<b>707</b>

\*Welder is counted only once in this table, though appears twice in table 19.

Although the number of Certifications issued was lower than previous years, certifications issued to equity-deserving apprentices has rebounded from pre-pandemic levels.

Table 21: Certificates of Qualification issued to all apprentices and those who identify as female or diverse\*

C of Qs Apprentices	TOTAL ALL		Women		Aboriginal		African NS		Persons with Disabilities		Newcomers		Other Diverse Persons		Pass Rate	
	IP	Prov	IP	Prov	IP	Prov	IP	Prov	IP	Prov	IP	Prov	IP	Prov	IP	Prov
<b>2021-2022</b>	487	23	29	-	19	2	10	-	16	2	12	1	22	1	58%	66%
<b>2020-2021</b>	382	14	23	15	10	-	7	-	11	1	6	-	13	-	59%	50%
<b>2019-2020</b>	601	38	28	2	12	-	4	0	21	-	7	1	11	1	62%	58%
<b>2018-2019</b>	642	58	36	1	24	1	1	2	16	3	2	1	16	3	63%	77%
<b>2017-2018</b>	625	49	21	2	8	-	1	-	13	2	4	-	20	-	68%	73%

\*Diverse refers to individuals who identify as a member of an equity-deserving community in the Apprenticeship and Trades Qualification System

Table 22 Certificates of Qualification issued to all trade qualifiers and those who identify as female or diverse\*

C of Qs Trade Qualifiers	TOTAL ALL		Women		Aboriginal		African NS		Persons with Disabilities		Newcomers		Other Diverse Persons		Pass Rate	
	IP	Prov	IP	Prov	IP	Prov	IP	Prov	IP	Prov	IP	Prov	IP	Prov	IP	Prov
<b>2021-2022</b>	106	11	4	1	1	-	2	1	1	-	1	-	3	-	51%	55%
<b>2020-2021</b>	79	13	3	1	1	-	-	-	1	-	1	-	1	-	58%	93%
<b>2019-2020</b>	93	13	6	1	1	-	2	-	1	-	3	-	-	-	49%	46%
<b>2018-2019</b>	101	8	7	-	-	1	-	-	5	-	-	-	-	-	51%	62%
<b>2017-2018</b>	112	22	11	-	1	-	2	-	1	-	8	-	4	-	52%	44%

\*Diverse refers to individuals who identify as a member of an equity-deserving community in the Apprenticeship and Trades Qualification System