

NSAA STATISTICS REPORT

2019 - 2020

Introduction

The NSAA Statistics Report is published annually and provides key system performance data for the fiscal period and, in comparison, to previous years.

The Agency continues to increase the number of apprentices in the system. Ongoing efforts to contact employers who were not engaged in the apprenticeship system for over five years has resulted in the reengagement of 224 employers who registered a new apprentice.

The number of apprentices has increased by 5.3% since 2018-2019 and is led by significant increases in Insulator (58%), Heavy Duty Equipment Technician (29.7%), Refrigeration and Air Conditioning Mechanic (20.7%), Auto Body and Collision Technician (17.1%), Sprinkler Fitter (13.6%), Gasfitter (11.8%), and Machinist (10.6%). The following trades have seen significant decreases in the number of apprentices: Steamfitter/Pipefitter (-29.9%), Instrumentation and Control Technician (-15.7%), and Powerline Technician (-14.8%).

All four sectors experienced increases in the number of apprentices: Motive Power (9.8%), Service (8.1%), Industrial/Manufacturing (4.3%), and Construction (3.9%).

The percentage of women registered as apprentices increased to 7.4%, and 15.3% of apprentices identified as diverse. The Construction Electrician, Carpenter, Automotive Service Technician and Welder trades had the highest number of female apprentices at the end of the year.

Effective March 2019, the Motor Vehicle Body Repairer (Metal and Paint) trade name was changed to **Auto Body and Collision Technician** and the Sprinkler System Installer trade name was changed to **Sprinkler Fitter**. Effective 2020, the Partsperson trade name was changed to **Parts Technician**.

Apprentices

Figure 1 highlights the total number of apprentices from 2010-2020. Table 1 outlines the number of apprentices by trade organized by sector.

Figure 1: Active apprentices by fiscal year

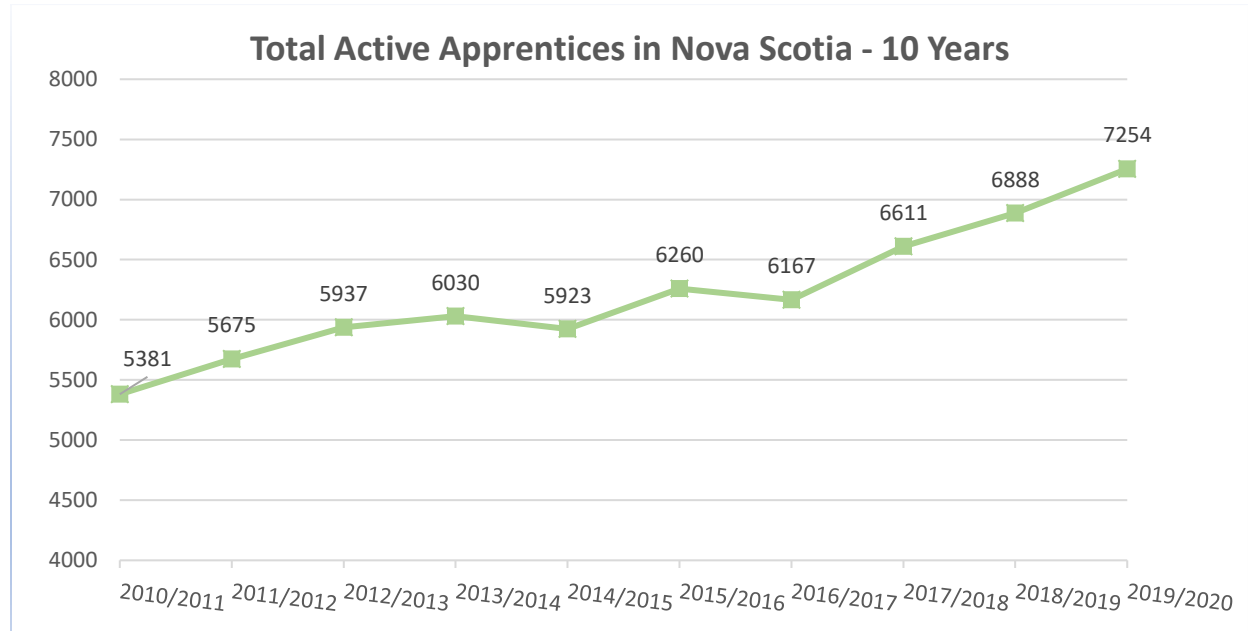


Table 1: Number of apprentices by trade (2015/16 – 2019/20)

Trade	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	One Year Change	Female 2019/ 2020	Male 2019/ 2020
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Construction Sector

Boilermaker	37	31	25	25	28	12.0%	2	26
Bricklayer	88	74	76	87	92	5.8%	4	88
Carpenter	616	621	641	697	758	8.8%	53	705
Construction Electrician	1258	1199	1276	1271	1296	2.0%	70	1226
Gasfitter*	132	62	14	12	10	-16.7%	1	9
Gasfitter A		2	20	20	23	15.0%	0	23
Gasfitter B		42	80	103	118	14.6%	5	113
Glazier			1	1	2	100%		2
Insulator (Heat & Frost)	44	58	55	55	87	58.0%	3	84
Ironworker (Generalist)	5	3	1	1	1	0.0%		1
Ironworker (Reinforcing)	51	47	23	20	23	15.0%		23
Ironworker (Structural/ Ornamental)	41	46	31	27	23	15.0%		23
Mobile Crane Operator	128	140	146	147	150	2.0%	5	145
Oil Heat System Technician	79	79	95	97	101	4.1%	6	95
Plumber	416	412	451	499	545	9.2%	22	523
Powerline Technician	62	75	94	101	86	-14.8%	3	83
Refrigeration and Air Conditioning Mechanic	183	193	202	242	292	20.7%	10	282
Roofer	26	27	42	41	38	-7.3%		38
Sheet Metal Worker	150	154	169	191	205	7.0%	6	199
Sprinkler Fitter	63	64	58	66	75	13.6%	3	72
Steamfitter/Pipefitter	563	550	536	437	350	-19.9%	18	332
TOTAL	3942	3875	4036	4140	4303	3.9%	211	4092

**April 2017 the Gas Fitter trade was divided into Gas Fitter A and Gas Fitter B.

Motive Power Sector

Agricultural Equipment Technician	1	1	5	5	4	-20.0%		4
Auto Body and Collision Technician	94	101	120	140	164	17.1%	21	143
Automotive Service Technician	623	645	714	759	822	8.3%	46	776
Heavy Duty Equipment Technician	46	48	56	64	83	29.7%	2	81
Marine Service Technician		2	4	8	12	50.0%	3	9
Truck and Transport Mechanic	313	294	343	361	383	6.1%	5	378
TOTAL	1077	1091	1242	1337	1468	9.8%	77	1391

Industrial/Manufacturing Sector

Boat Builder	18	15	19	23	27	17.0%	4	23
Industrial Electrician	196	151	157	176	188	7.0%	19	169
Industrial Mechanic (Millwright)	166	152	185	189	204	7.9%	16	188
Instrumentation and Control Technician	72	75	76	70	59	-15.7%	4	55
Machinist	64	62	73	66	73	10.6%	6	67
Metal Fabricator (Fitter)	123	139	148	147	136	-7.5%	21	115
Power Engineer	167	169	178	194	191	-1.6%	6	185
Power Engineer (Plant Operator)	4	16	22	33	49	48.0%	1	48
Welder	197	193	206	218	237	8.7%	38	199
TOTAL	1007	972	1064	1116	1164	4.3%	115	1049

Service Sector

Baker				2	2	0%	2	
Cook	223	215	257	270	294	8.9%	125	169
Hairstylist			6	9	8	-11.0%	7	1
Landscape Horticulturalist	9	12	12	14	15	7.1%	2	13
TOTAL	232	227	275	295	319	8.1%	136	183

Increasing the participation, retention, and completion of women in the trades remains a top priority of the Nova Scotia Apprenticeship Agency. (Table 2).

Table 2: Total apprentices by sector and 2019-2020 gender and diverse community representation

Total Apprentices by Sector	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	One Year Change	Female 2019/2020	Male 2019/2020	Identifying as from a Diverse community 2019/2020
Construction Sector	3942	3875	4036	4140	4303	3.9%	211	4092	1577
Motive Power Sector	1077	1089	1238	1337	1468	9.8%	77	1391	655
Industrial/Manufacturing Sector	1007	972	1064	1116	1164	4.3%	115	1049	321
Service Sector	232	227	206	295	319	8.1%	136	183	192
TOTAL	6259	6167	6611	6888	7254	5.3%	539	6715	*

*Diverse' refers to individuals who identify as a member of a community underrepresented in the Apprenticeship and Trades Qualification System. Individuals may identify as being from more than one diverse community.

The Industrial/Manufacturing Sector experienced the highest increase in the number of female apprentices likely due to the efforts of our Women in the Skilled Trades program that offers incentives to employers to hire female apprentices. Women in trades now represent 7.43% of apprentices, due to an increase of women in underrepresented trades of 78 women and a small increase in the number of women in the Service Sector.

Table 3: Changes in gender representation in each of the Sectors

SECTORS	Female 2017/2018	Male 2017/2018	% Female of Total 2017/2018	Female 2018/2019	Male 2018/2019	% Female of Total 2018/2019	TOTAL 2019/2020	Female 2019/2020	Male 2019/2020	% Female of Total 2019/2020
Construction Sector	162	3931	4.0%	174	4027	4.2%	4303	211	4092	4.9%
Motive Power Sector	54	1132	4.4%	65	1209	4.9%	1468	77	1391	5.2%
Industrial/ Manufacturing Sector	82	982	7.7%	95	1021	8.5%	1164	115	1049	9.8%
Service Sector	116	159	56.3%	127	168	43.0%	319	136	183	42.6%
TOTAL	414	6204	6.3%	461	6425	6.7%	7254	539	6715	7.4%

Figure 2 represents the top five trades based on the number of registered apprentices. The top 5 trades did not change from 2018-2019.

Figure 2: Five trades with the most apprentices (2015/16 – 2019/20)

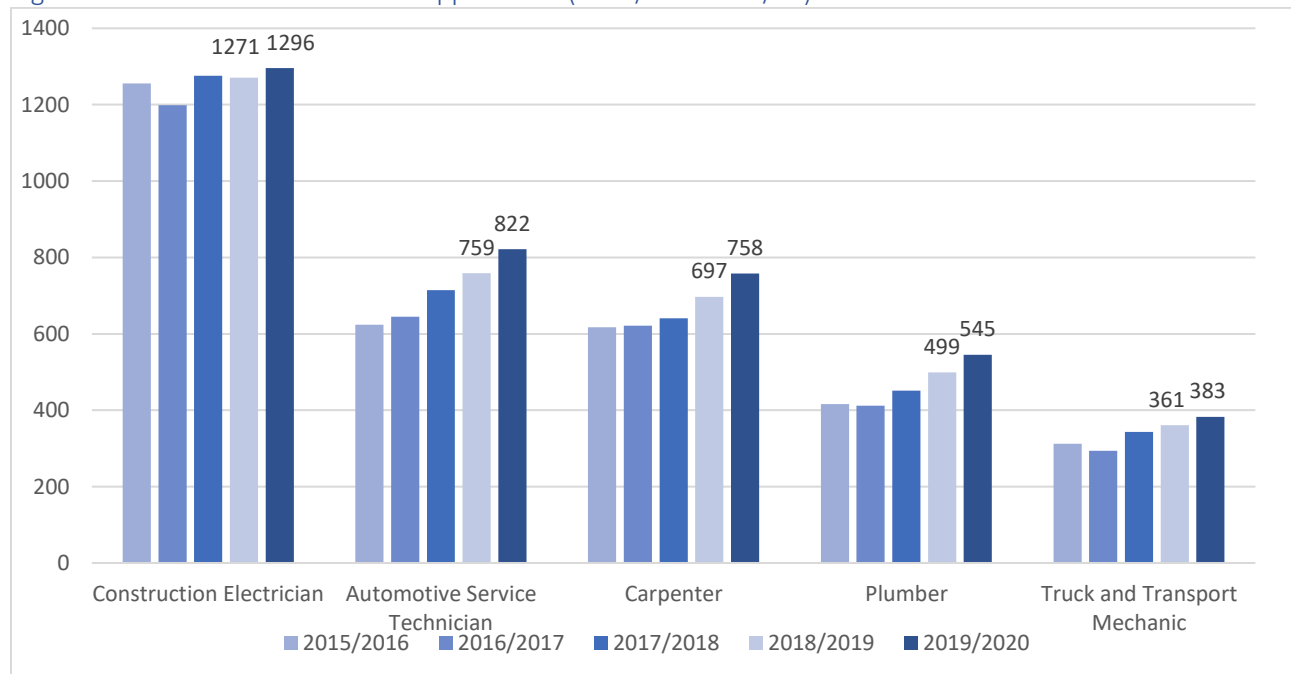


Table 4. The number of new apprentices in 2019-2020 has remained steady with 1480 new apprentices registered in 2019-2020.

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
2015/2016	1374	6260	21.9%
2016/2017	1416	6167	22.9%
2017/2018	1522	6611	23%
2018/2019	1490	6888	21.6%
2019/2020	1480	7254	20.4%

Youth Apprentices

The Nova Scotia Apprenticeship Agency actively engages youth to explore career opportunities in the skilled trades. This is accomplished by in-class presentations from NSAA throughout the school year, hands-on activities at various youth and career fairs, as well as the provision of funding to organizations that engage students and collaborate on initiatives with educators, schools, and industry representatives to offer experiential opportunities in the skilled trades. The number of youth apprentices has increased by 15.5% since 2018-2019. The number of female youth apprentices has also doubled since 2018-2019.

Table 5: Youth apprentice registrations by fiscal year and region

YOUTH REGISTRATIONS by REGION	2015/16		2016/17		2017/18		2018/19		2019/20	
	F	M	F	M	F	M	F	M	F	M
Cape Breton	1	31	0	20	3	42	1	30	4	27
Central	3	55	3	53	1	38	5	46	6	51
Northeastern	0	3	0	7	0	4	0	3	0	4
Northern	0	11	0	14	0	13	0	18	2	17
Southwestern	1	27	0	18	2	29	2	24	4	33
TOTAL	5	127	2	112	6	126	8	121	16	132
GRAND TOTAL	132		115		132		129		148	

School visits take place in a classroom environment and other venues. In-school visits are supported through coordination with the Department of Education and Early Childhood Development, as well as with Youth Pathways Consultants at each Regional Centre for Education and Conseil Scolaire Acadien Provincial. In-school presentations are lower in number this year as NSAA was without a Youth Outreach Coordinator from August to November.

Apprenticeship information is also presented and shared at career fairs, panel discussions, professional development events held for teachers and guidance staff, and industry events. Table 6 shows the number of in-school and additional presentations.

Table 6: School visits and presentations

IN-SCHOOL PRESENTATIONS	2015/16	2016/17	2017/18	2018/19	2019/20
Number of Presentations	67	18	66	62	6
Number of Schools	44	11	54	44	5
Number of Students	1418	339	1593	1353	187
ADDITIONAL PRESENTATIONS (outside of school)					
Number of Presentations	36	51	53	39	39
Direct Interaction with Attendees	1704	2626	1858	1332	1027
Number attending all presentations	4084	5073	7555	3909	1810

The NSAA provides funding to a number of Youth Program delivery partners including Skills Canada Nova Scotia, Techsploration, the Trades Exhibition Hall (TEH), and the Mobile Construction Experience (MCE), the latter two hosted by the Nova Scotia Construction Sector Council. Youth Program delivery partners embed the apprenticeship pathway message into a variety of activities that impact both individual participants, community partners and industry. Figures 3, 4 and 5 (below) show the participants and partners engaged in youth outreach.

The large increase in visitors to the Trades Exhibition Hall (TEH) is due to a number of factors. Usually the TEH does not offer tours/activities during the summer months, but during the summer of 2019 the Nova Scotia Construction Sector Council (NSCSC) partnered with the NSAA to host a Skilled Trades Family Boot Camp. Many organizations who had not visited before participated in this Camp and made return visits in the Fall and Winter. Additionally, many of the NSAA's diverse community partners visited the TEH. The Aboriginal Peoples Training and Employment Commission (APTEC) and Mi'kmaw Kina'matnewey (MK) added adult tours in addition to its annual youth tours and also arranged a tour for guidance counselors and chaperones; African Nova Scotian Affairs (ANSA) and African Nova Scotian community partners also visited. National representatives of the Canadian Council of Directors of Apprenticeship (CCDA) Essential Skills Community of Practice, hosted in Halifax by the NSAA, and the Occupational Health and Safety Branch of Labour and Advanced Education also toured the Hall in 2019-2020.

Figure 3: Number of participants by funded partner activity – Trades Exhibition Hall and Mobile Construction Experience

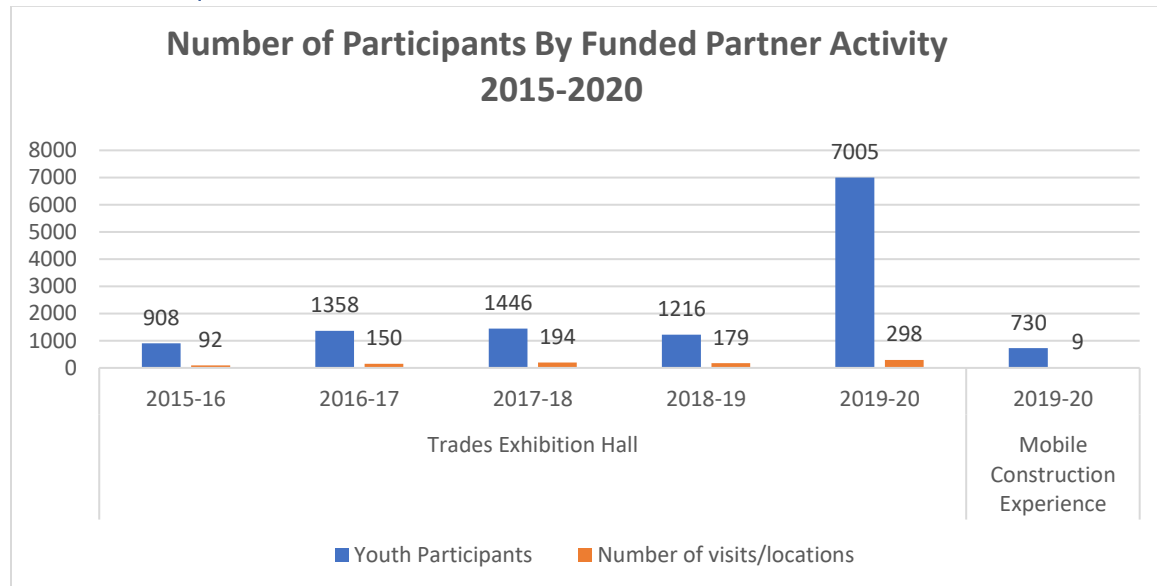
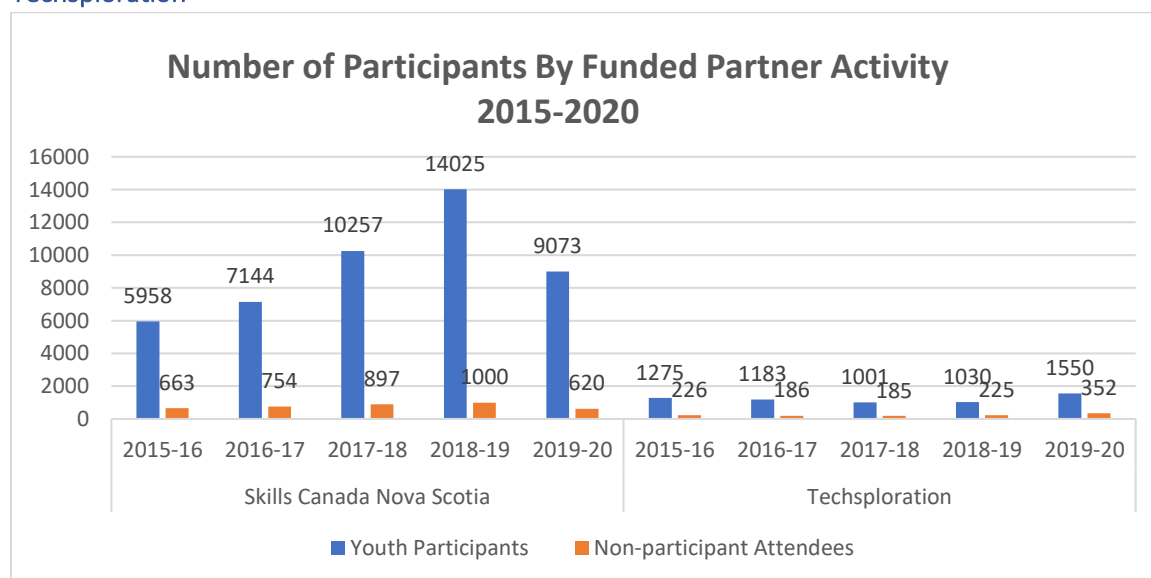
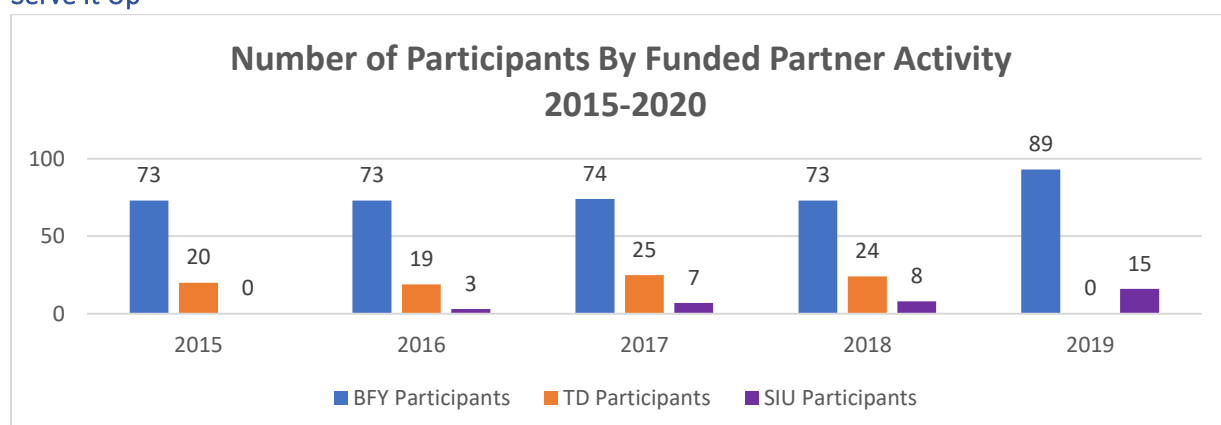


Figure 4: Number of participants by funded partner activity – Skills Canada Nova Scotia and Techsploration



Since 2008, the NSAA has supported summer sector youth apprenticeship programs for approximately 1000 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 the Nova Scotia Tourism Human Resources Sector Council. Participants explore the skilled trades through a paid summer work placement combined with some 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 trade. Note, TestDrive was under review and did not operate as usual in 2019-2020.

Figure 5: Number of participants by funded partner activity – Building Futures for Youth, TestDrive, and Serve It Up



This figure shows the number of students completing all aspects of the program for each of the years listed. TestDrive was under review and did not operate as usual in 2019-2020.

Joint Registration Agreements

Table 7 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. After four years of decline, the number of apprentices in these JRAs has increased slightly since 2018-2019 and was led by the Heat and Frost Insulators, Local 116. Due to the reductions in the number of Steamfitter/Pipefitter apprentices, the UA, Local 56 has 27.7% fewer apprentices over the last five years.

Table 7: Number of apprentices in Joint Registration Agreements (JRAs) by JRA holder and trade

JRA Holder	Trade	2016	2017	2018	2019	2020
International Association of Heat and Frost Insulators and Asbestos Workers, Local 116	Insulator (Heat & Frost)	44	58	55	54	88
International Brotherhood of Boilermakers, Local 73	Boilermaker	37	35	30	30	29
International Brotherhood of Electrical Workers, Local Union 625	Construction Electrician	178	165	176	171	177
International Brotherhood of Electrical Workers, Local Union 1852	Construction Electrician, Industrial Electrician, Instrumentation and Control Technician	114	115	148	120	117
International Brotherhood of Electrical Workers, Local Union 1928	Industrial Electrician, Industrial Mechanic (Millwright)	8	14	16	16	13
International Union of Bricklayers and Allied Crafts Workers Local 1	Bricklayer	33	19	17	18	15
International Union of Operating Engineers Local 721	Mobile Crane Operators	121	132	134	135	138
Joint Apprenticeship Training Committee of Ironworkers, Local 752	Ironworker (Generalist, Reinforcing, Structural/ Ornamental)	96	93	52	47	45
Mainland Nova Scotia J.T.C., Local 83	Carpenter	86	80	60	74	77
Millwright and Machine Erectors, Local Union 1178	Millwright	22	28	31	33	25
Nova Scotia Boatbuilders Association	Boat Builder	18	17	20	24	27
Recreation Facility Association of Nova Scotia	Refrigeration Plant	N/A	10	17	23	36
Sheet Metal Workers' International Association Joint Apprenticeship Training Committee, Local 56	Sheet Metal Worker, Roofer	10	18	21	27	23
United Association of Journeymen and Apprentices of the Plumbing and Pipefitting Industry of United States and Canada, Locals 244,682,56	Gas Fitter, Instrumentation Control Technician, Metal Fabricators, Oil Heat System Technicians, Plumber, Refrigeration and A/C Mechanic, Sprinkler System Installer, Steamfitter/Pipefitter, Welder	588	525	493	466	425
United Brotherhood of Carpenters and Joiners of America Joint Apprenticeship Training Committee, Local Union 1588	Carpenter	80	70	80	52	58
TOTAL		1421	1369	1332	1274	1293

JRAs with First Nations and equity organizations are shown in Table 8.

The number of apprentices associated with JRAs signed with First Nations and equity organizations has increased over the last year (24.7%) led by the Unama’ki First Nations in Cape Breton. Over the last year, staff members have been meeting with the First Nations communities in Cape Breton to renew their Agreements.

Table 8: Number of apprentices in Joint Registration Agreements with First Nations and Equity Organizations

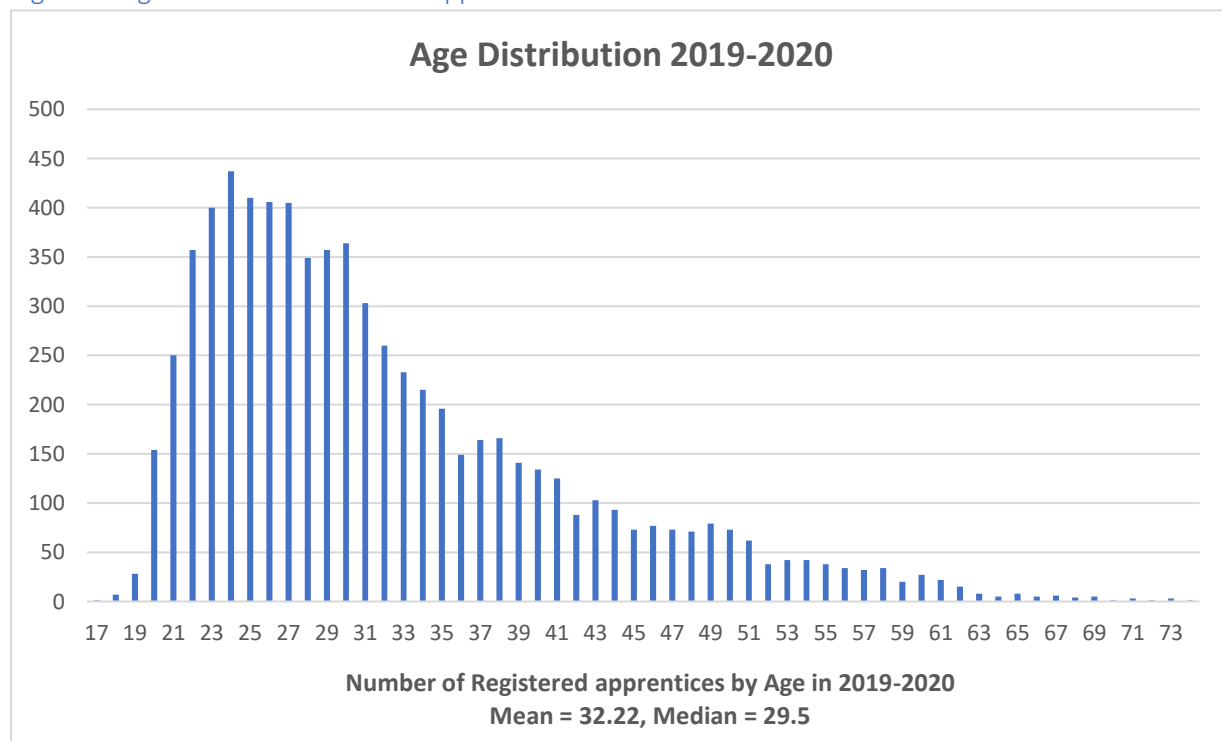
Registered apprentices	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020
Aboriginal Peoples Training & Employment Commission (APTEC), 2016		1	7	12	19
East Preston Empowerment Academy Society, 2018					3
Eskasoni First Nation, 2017	13	16	26	29	40
Immigrant Services Association of Nova Scotia (ISANS), 2020					
Membertou First Nation, 2002	48	31	34	31	27
Mi’kmaw Native Friendship Centre, 2016					
Millbrook First Nation, 2018					
Paqtnkek Mi’kmaw Nation, 2014					
Pictou Landing First Nation, 2011	2	8	9	9	9
Potlotek First Nation, 2013	1	10	13	9	30
Wagmatcook First Nation, 2013	2	1	10	10	11
Waycobah First Nation, 2013			19	21	19
TOTAL	66	67	111	121	158

Demographics

Figure 6 shows the age distribution of registered apprentices in Nova Scotia in 2019-2020.

Apprentices aged 22-30 represent the largest group of age cohorts of all apprentices. Apprentices aged 24 have the single largest number at 437.

Figure 6: Age Distribution of Active Apprentices in 2019 - 2020



Women and Underrepresented Groups

Figures 7 and 8 show a steady increase in the number of female apprentices in the apprenticeship system. The percentage of women registered as apprentices has increased to 7.4%. Since the number of female apprentices in the traditional trades has very small increases, the total increase can be attributed to participation in the non-traditional trades. The Agency recognizes that there is more work to do and with funding support from the Federal Government created a Women in Trades unit to facilitate the successful participation of women in the trades.

Figure 7: Female apprentices in Nova Scotia – 10 Years

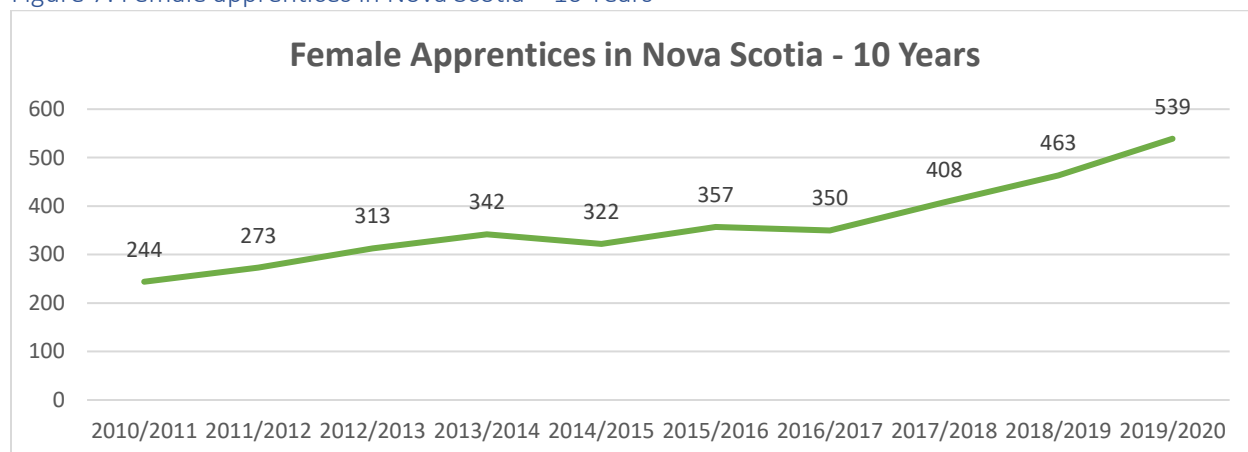


Figure 8: Percentage breakdown of female apprentices registered in traditional and non-traditional trades

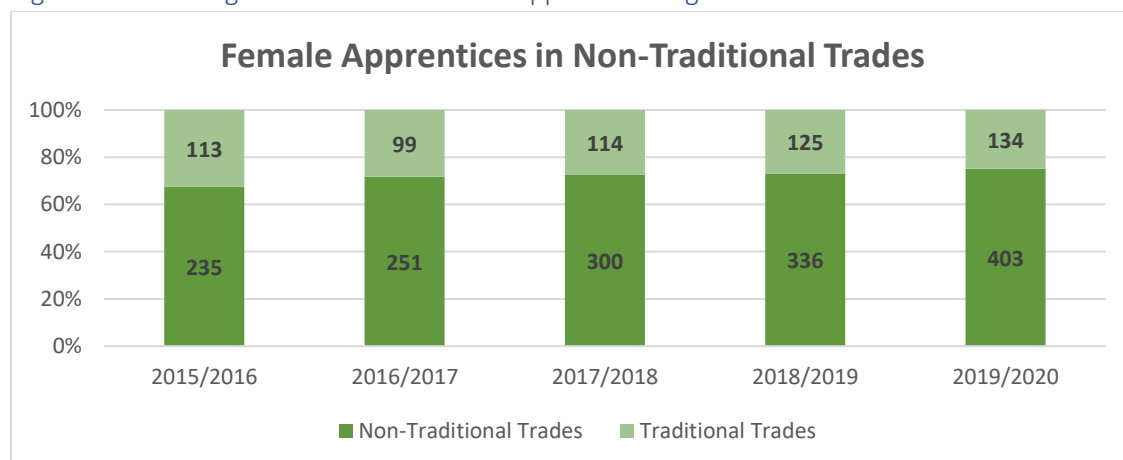


Table 9 and Figure 9 reflect representation of underrepresented groups throughout the Nova Scotia apprenticeship system. The Agency has increased the participation of underrepresented groups in all categories. 15.3% of apprentices identify as diverse.

Table 9: Total number of underrepresented 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
2015/2016	208	3.3%	8	0.12%	42	0.7%	237	3.8%	126	2.0%
2016/2017	223	3.6%	28	0.45%	55	0.9%	242	3.9%	122	1.9%
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%

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

Figure 9: Underrepresented populations in apprenticeship – 5 years

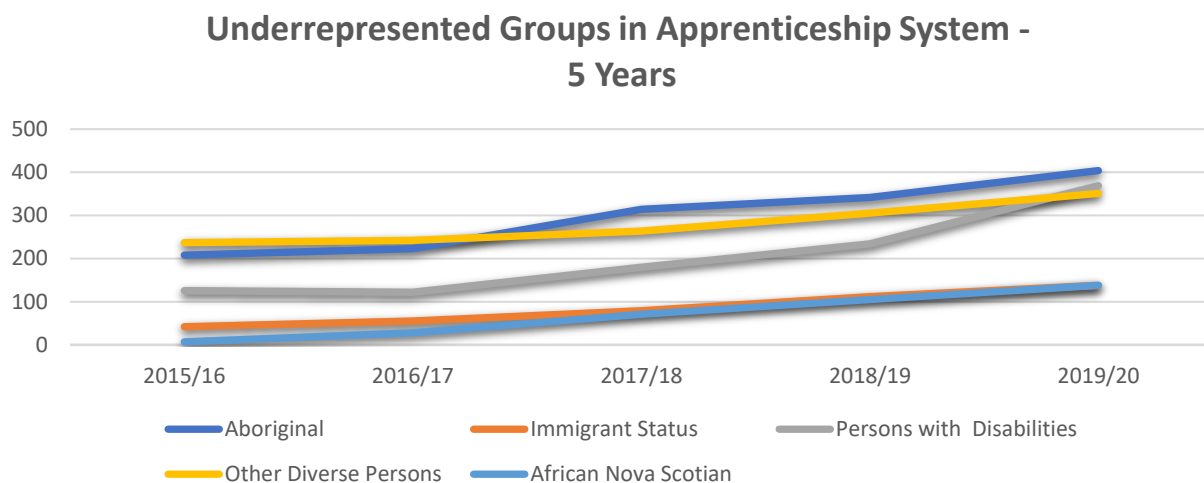
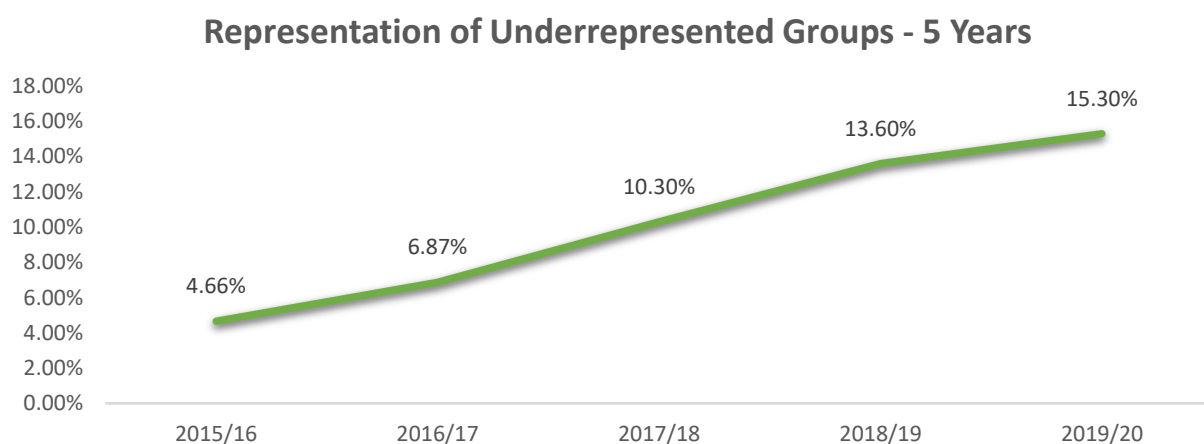


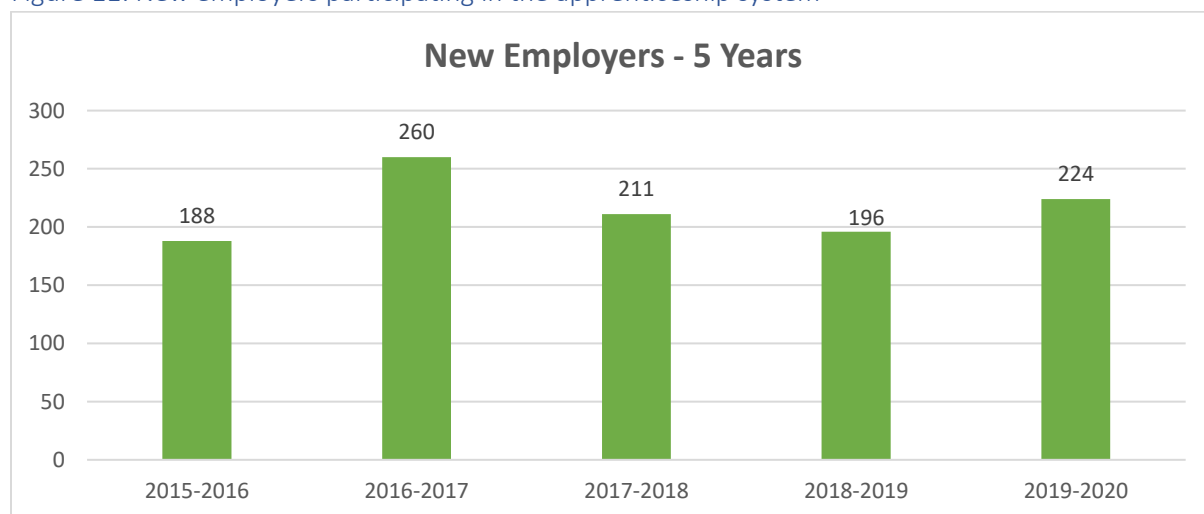
Figure 10: Underrepresented populations as a percentage of total apprentices – 5 years



Employers

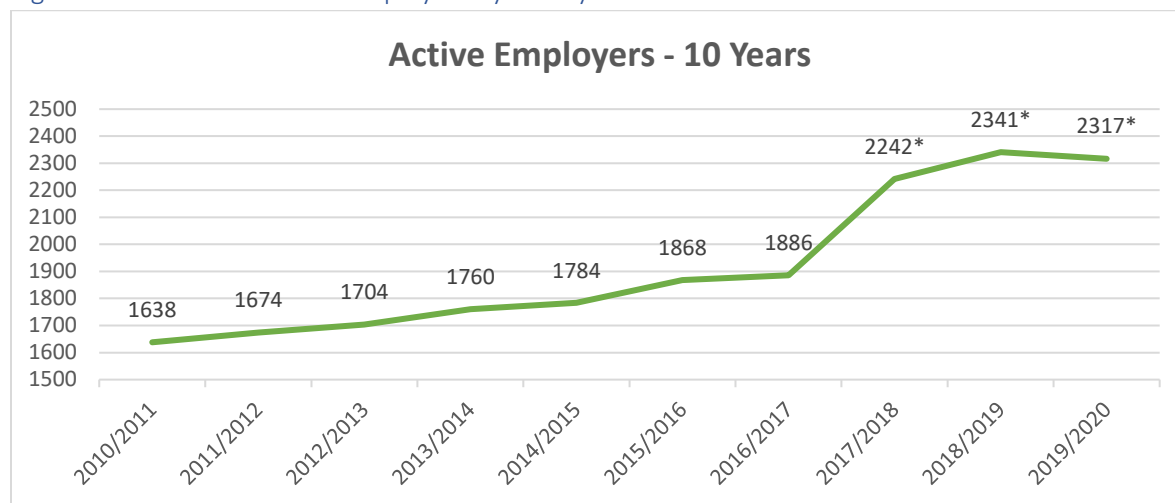
After a small dip in 2018-2019 in the number of new employers, NSAA gained 224 new employers in the system in 2019-2020. There was a significant effort made to re-engage employers who had been inactive for over five years that accounts for the number of new employers. The total number of employers in the system dropped slightly due to a reduction in the number of employers in the JRA sector.

Figure 11: New employers participating in the apprenticeship system



The trend for the number of employers participating in the apprenticeship system is shown in Figure 12.

Figure 12: Number of active employers by fiscal year



*2017-2020 counts include JRA employers. The total without JRA employers in 2018/19 is 2096 and in 2019/20 is 2149.

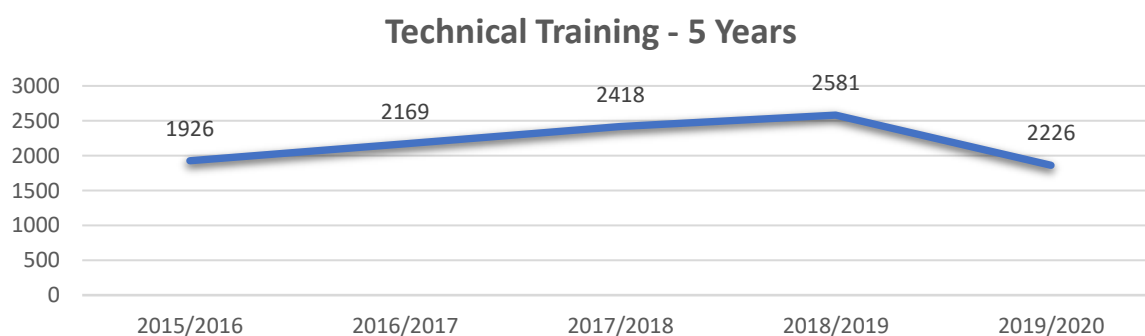
Table 10: Number of employers with number-range of apprentices

Employers	Apprentices
1971 employers	1-5 apprentices
170 employers	5-10 apprentices
37 employers	10-15 apprentices
12 employers	15-20 apprentices
23 employers	20-100 apprentices
5 employers	100-500 apprentices

Technical Training

The number of apprentices who completed technical training dropped in the 2019-2020 training year. This was due to disruptions in training during the last quarter (January – March) caused by the COVID-19 pandemic which resulted in the closure of our largest training provider, the Nova Scotia Community College. Technical training in some trades resumed in April via remote delivery in response to physical distancing directives issued by public health officials. Several classes with significant practical components, however; were cancelled because remote delivery was not an option. Online training remained stable in 2019-2020.

Figure 13: Trends for apprentices scheduled for technical training



*numbers include those who have completed online training

Table 11: Classroom training offered by trade and academic year, September 2019-August 2020

NOTE: Motor Vehicle Body Repairer renamed Auto Body and Collision Technician and Sprinkler System Installer renamed Sprinkler Fitter

*Includes multiple NSCC locations and concurrent classroom sessions ** Training provided by Unions

TRADE NAME	Number Clients Scheduled	Number Clients Attended	Classroom training total weeks	Refresher Training Total Weeks
Auto Body and Collision Technician	71	66	36	
Automotive Service Technician (includes ASEPT)	292	278	152	
Boilermaker	42	42	24	
Bricklayer	15	13	15	
Carpenter	170	141	115	
Cook	48	44	30	
Electrician - Construction and Industrial	507	471	306	4
Electrician- Industrial	23	21	12	
Gasfitter A/B	15	15	6	
Glazier				11
Heavy Duty Equipment Tech Level 3 & 4	31	31	11	
Heavy Duty/Truck and Transport level 1 & 2	92	70	45	
Industrial Mechanic Millwright	89	85	49	
Instrumentation and Control Technician	6	5	7	
Insulator (Heat & Frost)**	18	18	12	
Ironworker Reinforcing	19	18	15	
Ironworker Structural/Ornamental	17	17	14	
Machinist	12	12	12	
Metal Fabricator (Fitter)	41	37	24	
Oil Heat System Technician	32	32	18	
Plumber	198	189	89	
Power Engineer	54	54	15	
Powerline Technician	76	72	32	
Refrigeration and Air Conditioning Mechanic	116	112	54	
Refrigeration Plant Operator Review	7	7	1	
Roofer	25	18	18	
Sheet Metal Worker	78	78	42	
Sprinkler Fitter**	22	21	16	
Steamfitter/Pipefitter	72	64	49	
Truck and Transport Mechanic Level 3 & 4	113	109	45	
Welder	36	29	21	
TOTAL *	2337	2169	1285	15

Table 12: Virtual Campus, online technical training – 5 years

Full academic year not included in 2019-20 - dates. Dates shown below are September 4, 2019 to May 12, 2020*

Online Training Programs	2015-16	2016-17	2017-18	2018-19	2019-20*
Automotive Service Technician	106	89	74	63	78
Carpenter	57	45	34	60	52
Construction Electrician	106	100	94	129	138
Cook	70	38	44	*0	*0
Gasfitter	61	64	61	53	64
Industrial Electrician	12	13	18	10	18
Machinist	4	5	6	6	6
Oil Heat Systems Technician	11	15	16	13	8
Power Engineer	20	27	10	**17	**28
Plumber	29	38	45	38	31
Steamfitter/Pipefitter		1	1	1	
TOTAL	476	435	403	390	423

*Cook is now blended delivery and is no longer considered online training. **includes Refrigeration Plant Operator 2nd Class

The Agency participates in the Atlantic Apprenticeship Harmonization Project (AAHP). Under AAHP, we are aligning apprenticeship standards in the Atlantic Provinces, including introducing harmonized apprenticeship level exams in a phased-in approach, level-by-level, year-by-year.

We implemented our inaugural Phase 1 harmonized exams in the 2015/16 training year. We continue to implement for all of the Phase 2 trades and have started development of Phase 3 trades. Some of these trades, such as Boilermaker, Sprinkler Fitter and Steamfitter/Pipefitter, already had level exams embedded into their apprenticeship programs (pre-harmonization). Others, like Construction Electrician, Cook, and Metal Fabricator, had not; level exams for these trades are a new experience and represent a ‘culture shift’, which is reflected in the average exam results being lower.

For trades with multi-year data, if the average pass rate for a level 1 exam is below 70%, the pass rate has increased for the subsequent levels, except for Cook and Metal Fabricator. For Cook, the low level 3 exam results could be due to clients who have come into apprenticeship after having completed a pre-apprenticeship program for which they have been granted credit for levels 1 and 2. Over the coming years, we anticipate an improvement in pass rates for these trades.

Table 13: Level Exam Performance 2015/16 to 2019/20*

Trade Name	Level	2015/2016	Pass Rate	2016/2017	Pass Rate	2017/2018	Pass Rate	2018/2019	Pass Rate	2019/2020	Pass Rate
Automotive Service Technician	Level 1	-	-	-	-	-	-	-	-	46	35%
Boilermaker	Level 1	10	100%	7	100%	11	91%	5	80%	n/a	50%
	Level 2	10	100%	10	100%	8	100%	10	90%	5	100%
Bricklayer	Level 1	-	-	-	-	5	100%	4	50%	9	67%
	Level 2	-	-	-	-	7	0%	13	77%	15	60%
	Level 3	-	-	-	-	-	-	8	100%	5	100%
Carpenter	Level 1	4	75%	20	45%	35	69%	45	47%	64	34%
	Level 2	-	-	-	-	-	-	28	89%	23	91%
	Level 3	-	-	-	-	-	-	34	79%	54	67%
	Level 4	-	-	-	-	-	-	-	-	18	89%

Trade Name	Level	2015/ 2016	Pass Rate	2016/ 2017	Pass Rate	2017/ 2018	Pass Rate	2018/ 2019	Pass Rate	2019/ 2020	Pass Rate
Construction Electrician	Level 1	n/a*	0%	41	32%	37	43%	44	55%	39	51%
	Level 2	-	-	n/a	0%	-	-	135	59%	140	54%
	Level 3	-	-	-	-	-	-	-	-	26	73%
Cook	Level 1	8	75%	15	60%	9	78%	23	70%	16	44%
	Level 2	-	-	4	75%	16	69%	13	69%	24	71%
	Level 3	n/a	50%	3	33%	4	75%	24	67%	43	49%
Industrial Electrician	Level 1	n/a	100%	-	-	n/a	100%	4	75%	n/a	100%
	Level 2	-	-	-	-	-	-	8	75%	9	89%
	Level 3	-	-	-	-	-	-	-	-	n/a	100%
Industrial Mechanic (Millwright)	Level 1	-	-	-	-	-	-	-	-	4	75%
Instrumentation and Control Technician	Level 1	3	67%	3	33%	-	-	n/a	100%	-	-
	Level 2	-	-	n/a	100%	n/a	100%	-	-	n/a	50%
	Level 3	-	-	22	100%	4	100%	5	100%	-	-
	Level 4	8	75%	10	70%	14	64%	5	100%	4	75%
Insulator (Heat & Frost)	Level 1	-	-	9	100%	7	100%	14	86%	20	95%
	Level 2	8	75%	-	-	14	100%	-	-	9	100%
	Level 3	20	75%	-	-	n/a	0%	18	100%	-	-
Metal Fabricator (Fitter)	Level 1	n/a	100%	21	95%	6	17%	n/a	50%	3	67%
	Level 2	-	-	-	-	14	57%	6	33%	7	14%
	Level 3	-	-	-	-	-	-	29	38%	37	41%
Plumber	Level 1	n/a	50%	n/a	100%	53	96%	86	97%	92	93%
	Level 2	-	-	n/a	100%	-	-	31	65%	91	68%
	Level 3	-	-	-	-	-	-	5	60%	30	87%
Roofer	Level 1	-	-	-	-	-	-	-	-	-	-
	Level 2	8	88%	n/a	100%	5	80%	-	-	7	86%
	Level 3	n/a	100%	8	88%	n/a	0%	-	-	6	83%
Sheet Metal Worker	Level 1	5	80%	15	73%	6	67%	27	96%	31	84%
	Level 2	-	-	-	-	17	82%	19	68%	15	100%
	Level 3	-	-	-	-	14	57%	18	61%	21	67%
	Level 4	16	88%	11	82%	11	91%	27	81%	23	61%
	Level 3 *	12	100%	16	69%	-	-	-	-	-	-

Trade Name	Level	2015/ 2016	Pass Rate	2016/ 2017	Pass Rate	2017/ 2018	Pass Rate	2018/ 2019	Pass Rate	2019/ 2020	Pass Rate
Sprinkler Fitter	Level 1	5	100%	10	100%	9	78%	8	100%	14	86%
	Level 2	-	-	-	-	-	-	10	90%	9	89%
Steamfitter/ Pipefitter	Level 1	16	81%	36	89%	12	67%	3	67%	n/a	100%
	Level 2	50	98%	48	88%	50	78%	33	55%	29	66%
	Level 3	45	80%	63	86%	41	85%	35	100%	15	100%
	Level 4	-	-	16	100%	76	64%	83	84%	53	79%
Welder	Level 1	-	-	6	33%	10	40%	11	45%	9	33%
	Level 2	-	-	-	-	-	-	21	86%	4	75%
	Level 3	-	-	-	-	-	-	37	73%	34	74%

*Previously called Block 3 Sheet Metal Worker *n/a (not available) indicates all results less than 3 have been suppressed for privacy reasons

*Some trades in the table 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://nsapprenticeship.ca/sites/default/files/docs/pubs/NSAA-FactSheet-AAHP.pdf>

Apprenticeship START Program

Through the Apprenticeship START Incentive, \$2,992,500 was distributed in 2019-2020 to employers who hired, progressed and completed their apprentices. As of March 31, 2020, there are 1187 active apprentices and 1080 employers participating in the Apprenticeship START Program as indicated in Table 14. Twenty-nine per cent (29%) of apprentices are diverse and eleven per cent (11%) are women.

Table 14: Employers and Apprentices in START Program 2019-2020

Employers and Apprentices in START Program 2019-2020	
Active Employers	1080
Active Employers Hiring Diverse Apprentices	329
Active Apprentices	1187
Active Apprentices - Diverse	344
Active Female Apprentices	105

Since the investment of an additional \$2,000,000 in the program in 2017, 140 apprentices have completed their program and 15% were diverse. The percent of diverse apprentices completing their programs is significantly higher if the employer receives the START incentive.

Table 15: Apprentice completion of START Program

Level of Apprenticeship	Number of Apprentices	Percentage of Diverse Apprentices
Level 1	667	33%
Level 2	174	28%
Level 3	144	28%
Level 4/IP Exam	54	31%
Completions	140	15%

Apprentice Progression and Completion Awards

Apprentice Progression and Completion Awards are disbursed during each fiscal year in September and April upon successful completion of an eligible level of apprenticeship or of all apprenticeship requirements. These monetary awards are made possible through the Apprentice Award Trust and help to defray the costs of participating in apprenticeship training. In 2019-2020, awards totaling \$300,500 were issued to 384 apprentices. Government announced in the budget for 2020-2021 that the Trust would be continued for another three years.

Table 16: Apprentice progression/completion awards by trade

Trade Name	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020
Auto Body and Collision Technician			5	4	13	2
Automotive Service Technician	55	46	63	82	68	61
Boat Builder		2	3		2	1
Bricklayer		1	1	1		
Boilermaker						2
Carpenter	64	38	33	42	46	33
Construction Electrician	102	128	145	111	101	94
Cook			1			1
Gasfitter	9	15	16	22		
Glazier		1	1			
Heavy Duty Equipment Technician	3	7	8	6	1	8
Industrial Electrician	45	28	44	38	24	12
Industrial Mechanic (Millwright)	11	17	12	19	14	11
Instrumentation and Control Technician	1	6	6	8	1	
Machinist	6	7	7	7	11	4
Metal Fabricator (Fitter)	5	11	12	13	4	1
Oil Heat Systems Technician				1		
Plumber	51	44	28	22	40	42
Power Engineer	9	11	17	13	13	10
Powerline Technician	1	4		15	3	15
Refrigeration and Air Conditioning Mechanic	12	15	24	24	26	17
Sheet Metal Worker	7	7	11	9	5	7
Sprinkler Fitter				1		
Steamfitter/Pipefitter	64	50	34	28	9	18
Truck and Transport Mechanic	42	42	24	26	27	45
Welder				2		
TOTAL	487	480	495	494	408	384

*In 2019, two trades had formal name changes; Motor Vehicle Body Repairer was changed to **Auto Body and Collision Technician** and Sprinkler System Installer was changed to **Sprinkler Fitter**.

Figure 14 shows those who have completed apprenticeship training and attained a Certificate of Qualification over the past ten years. There was a reduction in the number of Certificates of Qualification issued in 2019-2020 which may be attributed to the introduction of level exams in the larger trades. Some individuals would have been unsuccessful in their level exams, which would delay the certification exam. It is expected that these numbers will rebound over the next couple of years.

Figure 14: Nova Scotia apprenticeship completions 2010-2020

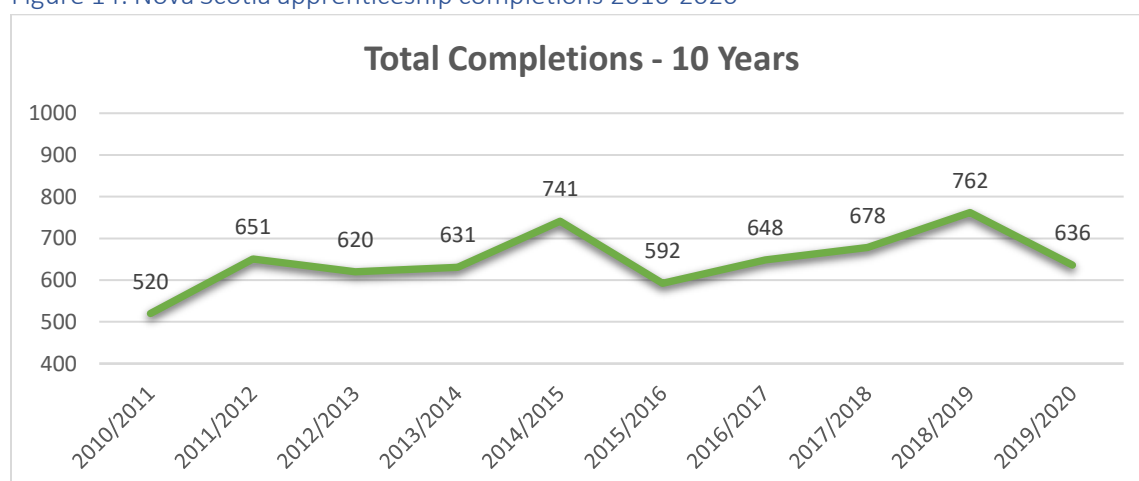
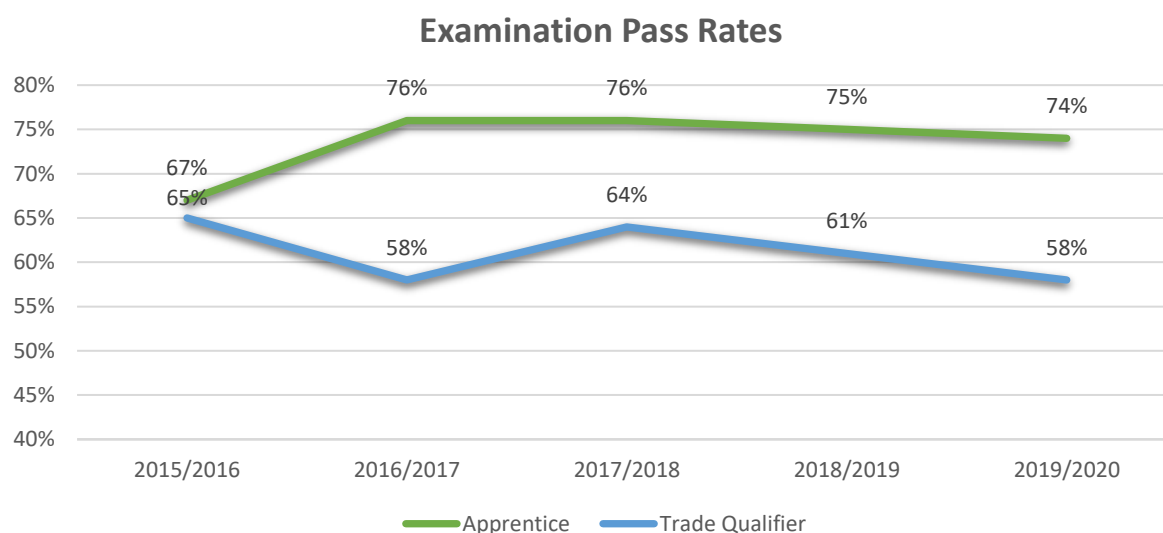


Figure 15: Examination pass rates for Red Seal trades 2015-2020



The number of Certificates of Qualification issued to Automotive Service Technicians has dropped since 2018-2019 after several years of significant increases. Efforts to complete carpenter apprentices have increased the number of Certificates of Qualification issued in that trade. Table 17 shows Certificates of Qualification issued in Nova Scotia.

Table 17: All Certificates of Qualification issued by trade and year in Nova Scotia – Apprentices and Trade Qualifiers

Construction Sector	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Blaster	5	5	3	5	6
Boilermaker	7	10	11	8	7
Bricklayer	6	3	6	10	5
Carpenter	33	47	40	33	52
Concrete Finisher					1
Construction Electrician	145	134	151	170	165
Elevating Device Mechanic					2
Gasfitter A**			1	5	4
Gasfitter B**			15	17	15
Glazier	1				13
Insulator (Heat and Frost)	7	3	5	22	
Ironworker (Generalist)	3				
Ironworker (Reinforcing)	10	18	1	12	4
Ironworker (Structural/Ornamental)	15	10	19	1	7
Mobile Crane Operator	11	10	5	9	2
Oil Heat System Technician	7	14	10	7	6
Painter and Decorator					2
Plumber	41	48	46	36	37
Powerline Technician	4	5	16	15	31
Refrigeration and A/C Mechanic	19	27	24	31	34
Restoration Stone Mason					1
Roofer	1	10	7		5
Sheet Metal Worker	38	21	18	15	19
Sprinkler Fitter*	4	4	8	7	5
Steamfitter/Pipefitter	51	50	57	60	40
Tower Crane Operator		2		1	1
Welder	39	38	44	46	28
TOTAL	447	459	487	510	490

Industrial/Manufacturing Sector	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Boat Builder	3	1	2	2	1
Cabinetmaker				1	
Industrial Electrician	28	33	30	17	13
Industrial Mechanic (Millwright)	46	34	16	35	29
Instrumentation and Control Technician	8	2	11	7	7
Machinist	7	11	4	10	7
Metal Fabricator (Fitter)	13	1	12	16	19
Welder	39	38	44	46	28
TOTAL	144	120	119	134	104

Motive Power Sector	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Agricultural Equipment Technician			5		1
Auto Body and Collision Technician*	10	16	13	14	10
Automotive Service Technician	66	63	160	181	128
Elevating Device Mechanic					2
Heavy Duty Equipment Technician	10	19	5	14	10
Marine Service Technician		1	11		4
Motorcycle Mechanic	6	3	5	8	6
Parts Technician*			1		
Recreation Vehicle Service Technician			2		
Transport Trailer Technician	2				1
Truck and Transport Mechanic	46	64	44	69	60
TOTAL	140	166	246	286	222

Service Sector	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020
Alarm and Security Technician					1
Appliance Service Technician					1
Baker	2	1	3	7	3
Cook	28	17	24	21	23
Hairstylist	2	2	20	2	2
Landscape Horticulturalist		2		3	2
TOTAL	32	22	47	33	32

* Effective March 2019, the Motor Vehicle Body Repairer (Metal and Paint) trade name was changed to **Auto Body and Collision Technician** and the Sprinkler System Installer trade name was changed to **Sprinkler Fitter**. Effective 2020, the Partsperson trade name was changed to **Parts Technician**.

April 2017 the Gasfitter trade was divided into **Gasfitter A and **Gasfitter B**.

Overall, the number of Certificates of Qualification issued this year has decreased therefore the number of women and diverse apprentices receiving a Certificate of Qualification has also decreased.

Table 18: Certificates of Qualification issued to Apprentices who self-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
2019/20	601	38	28	2	12	0	4	0	21	0	7	1	11	1	62%	58%
2018/19	642	58	36	1	24	1	1	2	16	3	2	1	16	3	63%	77%
2017/18	625	49	21	2	8	0	1	0	13	2	4	0	20	0	68%	73%
2016/17	579	54	31	2	15	1	1	0	10	0	5	1	17	2	67%	69%
2015/16	532	50	21	1	7	1	0	0	21	1	4	0	7	1	67%	76%

*'Diverse' refers to individuals who identify as a member of a community underrepresented in the Apprenticeship and Trades Qualification System

Table 19: Certificates of Qualification issued to Trade Qualifiers 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
2019/20	93	13	6	1	1	0	2	0	1	0	3	0	0	0	49%	46%
2018/19	101	8	7	0	0	1	0	0	5	0	0	0	0	0	51%	62%
2017/18	112	22	11	0	1	0	2	0	1	0	8	0	4	0	52%	44%
2016/17	113	16	7	0	2	0	0	0	2	0	2	0	3	2	50%	33%
2015/16	126	16	3	0	1	0	0	0	2	1	0	0	1	0	55%	55%

*'Diverse' refers to individuals who identify as a member of a community underrepresented in the Apprenticeship and Trades Qualification System