

NSAA / NSCC STEWARDSHIP REPORT

2020-21

ACADEMIC YEAR



NOVA SCOTIA
APPRENTICESHIP
AGENCY

nscc

WHAT'S INSIDE

BACKGROUND STRATEGIC ALIGNMENT	1
Overview - Joint Stewardship Initiative (JSI)	2
Resetting the Vision of JSI	2
OUTCOMES/HIGHLIGHTS	4
COVID-19 Response	5
Impact of Examinations	5
Impact on Technical Training	5
Cape Breton Infrastructure Initiative	5
LEADERSHIP AND COMMITTEE HIGHLIGHTS	7
Introduction	8
Joint Stewardship Leadership and Governance Committee	9
The Joint Trade Advisory Coordinating Committee	9
Program Review and Development	10
Trade Advisory Committees (TACs)	11
Diversity and Inclusion Committee	12
Technical Training Committee	13
New Delivery	13
Technical Training Enrolment	14
INDUSTRY STANDARDS AND HARMONIZATION	15
Atlantic Apprenticeship Harmonization Project (AAHP)	16
Canadian Council of Directors of Apprenticeship (CCDA) Harmonization Initiative	17
Transfer Credit	18
ONGOING COLLABORATION	19
Mi'kmaw Native Friendship Council Pathways to Shipbuilding	20
Pathways to Building Construction Trades for Racialized Nova Scotian	20
Women and Men in Post COVID-19 Economic Recovery	20
Architectural Sheet Metal Worker Training - Cape Breton	21
Moving Towards the Skilled Trades in Manufacturing	21
FUTURE INITIATIVES	23

2021



BACKGROUND

STRATEGIC ALIGNMENT

Overview - Joint Stewardship Initiative (JSI)

Nova Scotia's apprenticeship system is a post-secondary experience that prepares people for careers in the skilled trades. The Nova Scotia Apprenticeship Agency (NSAA), working jointly with Nova Scotia Community College (NSCC), is focused on improving the number of apprenticeship opportunities in the province, based on labour market needs, and helping apprentices complete their journey to certification.

The concept of joint stewardship of the trades training system in Nova Scotia was initiated to meet the legislative requirements established in 2014 with the creation of the NSAA and changes to the Apprenticeship and Trades Qualifications Act and the Community Colleges Act, made at the time.

NSAA and NSCC support:

- external partnership engagement in the apprenticeship process
- the development of training programs that meet industry standards and match labour market needs
- the success of pre-apprentices and apprentices progressing through the apprenticeship system-from pre-apprenticeship to apprenticeship to certification.

Resetting the Vision of JSI

In 2020, the leadership of the Joint Stewardship Initiative (JSI) reviewed its joint outcomes, governance, committee structure, planning, and reporting requirements. In April 2021, the new Joint Stewardship Planning Playbook was launched. This outlined the new goals of the JSI which include:

- ✓ **Organizational Excellence:** Enhanced operational efficiency and effectiveness that enable solid communication, clear decision-making and a bias for action and excellence.
- ✓ **Teaching and Learning Excellence:** Enhanced processes for driving quality and innovation in program development and delivery.

- ✓ Educational Equity: Enhanced access, experience, and outcomes for members of equity-seeking groups and all apprentices.
- ✓ Promotion: Enhanced interest in trades careers and understanding of the apprenticeship journey.
- ✓ Engagement: Enhanced and coordinated engagement with industry, apprentices, instructors, and NSAA field staff that directly impacts the quality and innovation in program development and delivery; a collective expectation of inclusive work and learning environments and the value of diversity; and a sense of belonging to the apprenticeship community with connectivity along the whole journey.



A photograph of two male technicians in a workshop. The technician on the left is a younger man with red hair, wearing safety glasses and a dark blue work jacket over a light green shirt. He is looking down at a workbench. The technician on the right is an older man with grey hair, also wearing safety glasses and a blue work jacket with reflective yellow stripes on the sleeve. He is focused on a task on the workbench, using a tool. In the foreground, there is a row of dark, cylindrical metal parts. The background shows various workshop equipment, including a large machine with a camera or sensor mounted on it. The entire image has a blue tint.

OUTCOMES

HIGHLIGHTS

COVID-19 Response

Impact of Examinations

Requirements for physical distancing and protocols issued by Provincial Public Health and Occupational Health and Safety officials have evolved throughout the pandemic as directed by the Province and Public Health. These measures resulted in some impact on exams. Between September 1, 2020, and August 31, 2021, the number of apprentices allowed in each exam sitting was limited to 18 with 2 invigilators - for a total of 20 in each exam room. In addition, a total of 1790 clients wrote their exams in general sittings, 48 wrote reader-assisted exams, and 280 wrote their exams individually.

Impact on Technical Training

Due to low subscription and sometimes the lack of available instructors, 56 groups of technical training courses were cancelled from September 1, 2020, to August 31, 2021; 58 groups of training were cancelled in the previous training year. A total of 75 clients were waitlisted for technical training compared to 53 during the same period the previous year.

Cape Breton Infrastructure Initiative

The province is making significant investments in Cape Breton infrastructure projects over the next several years. These projects will create jobs, support workforce training and business development, and strengthen Cape Breton's infrastructure and economic prospects. NSAA and NSCC, through the construction of the new waterfront campus being built to replace the Marconi campus, continue to partner with industry and diverse communities in Cape Breton to maximize local benefit from increased employment, small business opportunities through the local supply chain, and overall economic activity. This work is also a positive impetus for government efforts to respond to training needs and build on skills development initiatives that foster employment opportunities in diverse communities.

In 2020-21, NSAA and NSCC supported the delivery of:

- a pre-apprenticeship program for diverse communities in the Sheet Metal Worker trade in Cape Breton-in partnership with the Sheet Metal Workers and Roofers International Association Local 56
- a training program to provide upgrading for Carpenters
- similar training for Bricklayers, Insulators (Heat and Frost) and Ironworkers, expected to begin in 2021-2022.



A photograph of two industrial workers, a woman on the left and a man on the right, both wearing safety glasses and dark blue polo shirts. They are in a factory setting, looking down at a piece of machinery. The man is operating a large metal wheel. The background is slightly blurred, showing industrial equipment. The entire image has a blue tint.

LEADERSHIP & COMMITTEE HIGHLIGHTS



Anna Burke
VP, Academic - NSCC



Marjorie Davison
CEO - NSAA

Introduction

When the Nova Scotia government proclaimed the Community Colleges Act in April 1996, a new era began not only for Nova Scotia's vocational schools but also for the province. The legislation brought those schools together to create NSCC as we know it. The past quarter century of serving the community and helping to build Nova Scotia's economy and quality of life through education and innovation has grown from that solid foundation of preparing tradespersons for this vital workforce to the modern education and training NSCC provides today. As this 25th milestone is a moment to celebrate the past, it is also time to plan and envision the opportunities for the future.

The Nova Scotia Apprenticeship Agency (NSAA) was established on July 1, 2014 as an agent of the Crown. The Agency is operated under the authority of the Apprenticeship and Trades Qualifications Act, the Operating Charter, and the General Regulations, and is authorized to manage the trades training and certification system in Nova Scotia. The Agency is composed of an industry-led Apprenticeship Board and committees, including Trade Advisory Committees.

With a focus on access, inclusion, quality, and innovation, NSCC and NSAA are excited to continue this important collaborative work. As joint stewards of apprenticeship trades training in the province, the two organizations will leverage their combined strengths, commitment, and vision to advance the growth of relevant, accessible, and quality trades training that meets the present and future needs of Nova Scotians.

Joint Stewardship Leadership & Governance Committee

As legislated joint stewards of the trades training system in Nova Scotia, NSAA and NSCC, through the auspices of the Joint Stewardship Initiative Leadership Team (JSLT), work to achieve the shared outcomes concerning trades and related matters within their mandates. The new Governance Team coordinates and monitors the Committees of the Joint Stewardship Initiative to advance their joint strategic objectives.

The Joint Trade Advisory Coordinating Committee (J-TACC)

The NSCC/NSAA Joint Trade Advisory Coordinating Committee (J-TACC) is a sub-committee of the Joint Stewardship Leadership Team and meets every four weeks. J-TACC is responsible to review the functions of the Trade Advisory Committees (TAC) established by the Nova Scotia Apprenticeship Board that also serve as Program Advisory Committees for NSCC programs as per the Community Colleges Act. The Committee identifies methods to engage industry to ensure that organizational objectives and deadlines are met. It also facilitates industry feedback in support of pre-apprenticeship and apprenticeship programs.

The J-TACC consists of representation from:

- NSCC School of Trades and Transportation
- NSCC School of Technology and the Environment
- NSAA Standards and Examinations
- NSAA Partnership and Innovation

A focus of the 2020-21 academic year was to develop a planning and reporting tool and process maps for program review, program development, and program change. These tools will help with the planning for and the tracking of changes that arise from National or Atlantic harmonization projects changes, industry concerns, apprenticeship development, and the NSCC review schedule. These tools will be finalized in 2021-22.

Program Review & Development

Program Review is an important cyclical process at NSCC that ensures the integrity, relevance, and responsiveness of programming. Over the past year, NSCC closed Program Reviews for 12 pre-apprenticeship programs.

Reviews completed within the School of Technology and Environment are:

- Horticulture and Landscape Technology
- Electro-mechanical Technician

Reviews completed within the School of Trades and Transportation are:

- Building Systems Technician (HVAC & R)
- Gas Technician
- Heavy Equipment Operator
- Heritage Carpentry
- Industrial Mechanical
- Machining
- Oil Heat Systems Technician
- Refrigeration and Air Conditioning/Refrigeration and Air Conditioning – Geothermal
- Utility Line Work – Construction and Maintenance.

NSAA and NSCC continue the work of review with attention on certificate and diploma programs in Carpentry and Power Engineering Technology. Reviews are a critical opportunity to validate currency in terms of quality pre-apprenticeship training. Feedback from a review may also inform subsequent apprenticeship training. Working with the NSAA, Schools gather input from industry through focus groups and TACs. This allows employers the chance to offer their experiences and perspectives and share insights into both current needs and future trends. Their feedback and input from other external partners helps shape the recommendations that come from a review and ensure continued quality programming for the years to come.

As a result of one Program Review, a new program was created. The School of Trades and Transportation completed NSCC's new development process to bring forward its one-year Precision Machining certificate program. This has received Ministerial approval and will see its first intake in the 2022-23 academic year. This pre-apprenticeship program will cover Level 1 outcomes for apprenticeship training in the Machinist trade.

Critically, the concept of a Precision Machining program was endorsed by the Machinist TAC which helped shape and validate the proposed graduate profile of this new offering.

Trade Advisory Committees (TACs)

Over the reporting period, there were three TACs that involved both the NSAA and NSCC:

- Cook/Institutional Cook TAC
Its mandate is to review and make a recommendation to the NSAA Board on the designation of Institutional Cook as a trade in Nova Scotia.
- Heavy-Duty Equipment Operator TAC
Its mandate is to provide feedback concerning the pre-apprenticeship program and explore the development of an apprenticeship training pathway.
- TTT/TTM/HDET
Its mandate for the 2020-21 academic year was to develop a training pathway for Transport Trailer Technician (TTT) and its connection to pre-existing training in the Truck\ and Transport Mechanic (TTM) and Heavy-Duty Equipment Technician (HDET) trades.



Diversity & Inclusion Committee

This past year, the joint Inclusion and Equity (IE) Committee transitioned through several changes. A new NSCC Co-Chair assumed joint leadership of the Committee, and the Committee welcomed several new NSCC members including a new Academic Chair, Principal, School Manager as well as other Faculty representatives. The Terms of Reference underwent revision, which also included a name change from the Diversity and Inclusion Committee to the Inclusion and Equity Committee. The name change represents a shift in focus from recognizing diversity to a more intentional effort towards equity. The IE Committee hosted three meetings in May, June, and October. Feature presentations highlighted:

- NSCC's supportive role in the East Preston Empowerment Academy's Pathway to the Building Construction Trades – a special project funded through Employment Nova Scotia's Back to Work initiative
- the innovative video produced by NSAA's Women in Trades office
- the provincial Accessibility Strategy

The work of the IE Committee will focus on identifying key action items that will advance the JSLT Educational Equity goal of enhancing access, experience, and outcomes for members of equity-seeking groups and all apprentices.

Technical Training Committee (TTC)

New Delivery

Several new training initiatives took place throughout 2020-21 that have expanded the scope of technical training. NSAA and NSCC worked together to:

1. Develop and deliver Level 1 training for Elevating Devices Mechanic. This training runs September to June with a scheduled weekly meeting with apprentices.
2. Create new online delivery models in the following trades:
 - Automotive Service Technician (Level 1)
 - Carpenter (Level 1)
 - Electrician (Level 1)
 - Plumber (Level 1)
 - Machining (Level 3)

This model offers a defined start and completion date with instructor support and will integrate in-person cohort learning opportunities as appropriate.

3. Begin development of training for Agricultural Equipment Technician, Transport Trailer Technician, and Glazier.
4. Expand delivery models beyond face to face and open entry/exit. New approaches now include:
 - **Blended (In Person/Online)** which entails delivering both on campus and online using the Brightspace Learning Management System, as well as other digital learning tools (e.g., Microsoft Teams) as needed. Instructor-led sessions are scheduled full-time Monday through Fridays for the duration of the training.
 - **Online (Instructor-led)** involves fully online, full-time remote delivery via instructor-led sessions, scheduled Monday through Fridays. Training is delivered in the Brightspace Learning Management System and uses other digital learning tools (e.g., Microsoft Teams) as needed.
 - **Online (Instructor-led/ Self-Paced)** primarily entails self-paced training via the Brightspace Learning Management System, with additional digital learning tools (e.g., Microsoft Teams) as required. To support student success, the self-paced training is complemented with weekly scheduled instructor-led sessions.

Technical Training Enrolment

Technical Training enrolments for the 2020-2021 training year were lower due to a public safety response to COVID-19 requiring mostly remote learning, however, 2060 apprentices completed their training or 83% of the number of apprentices from the previous year. This success was largely due to the hard work to reduce barriers and support apprentices by both NSAA and NSCC.

	September 2020 - August 2021	September 2019 - August 2020
Clients Scheduled	2399	2818
Clients Attended	2060	2484
Waitlisted	75	189
Training Seats Available	3120	3405

NSAA and NSCC continue to work together through the Technical Training Operational committee to provide additional courses to eliminate waitlists and, at the same time, encourage apprentices to fill the training seats available.





INDUSTRY STANDARDS & HARMONIZATION

Atlantic Apprenticeship Harmonization Project (AAHP)

Nova Scotia continues to be an active participant in the Atlantic Apprenticeship Harmonization Project (AAHP). Under the AAHP, the Apprenticeship Board recruits and appoints members representing Nova Scotia to an Atlantic Trade Advisory Committee (ATAC). An ATAC consists of one employer, one employee, and one training provider representative from each Atlantic jurisdiction. ATACs support the development of Atlantic curriculum standards, apprentice logbooks, and exam banks for their respective trades.

The NSAA process for recruiting ATAC members involves contacting industry representatives within the specific trade to gauge their interest in participating. NSAA then advertises for ATAC employer/employee participants and screens applicants. Where NSCC is a training provider, NSAA defers the selection of the training representative to NSCC. All ATAC candidates are approved by the Apprenticeship Board.

During Phase 2 of the Atlantic project, the following ATACs were established and have convened:

- Automotive Service Technician (AST)
- Boilermaker
- Heavy Duty Equipment Technician (HDET)
- Industrial Mechanic (Millwright)
- Sprinkler Fitter
- Truck and Transport Mechanic (TTM)

Through a series of workshops and meetings, the ATACs supported the development of harmonized curriculum standards, logbooks, and exam banks. Implementation of the new harmonized Level 1 training for Boilermaker, HDET, and TTM took place in the 2020-21 training year (AST, Millwright, and Sprinkler Fitter were implemented the previous year).

As well, during the 2020-21 training year, NSAA and NSCC continued to work collaboratively to implement the new harmonized training and exams for the trades harmonized in Phases 1 and 2:

- Automotive Service Technician (Level 2)
- Construction Electrician (Level 4)
- Industrial Electrician (Level 4)
- Industrial Mechanic (Millwright) (Level 2)
- Instrumentation & Control Technician (Levels 3 and 4)
- Plumber (Level 4)
- Sprinkler Fitter (Level 2)
- Steamfitter/Pipefitter – (Level 4)

The following Phase 3 trades were also selected for Atlantic harmonization. ATACs were established and have convened for the initial curriculum workshop in all trades, except for Oil Heat System Technician (OHST). As Nova Scotia is host for the Refrigeration and Air Conditioning Mechanic and Sheet Metal Worker trades, NSCC faculty were heavily involved in the initial development work. COVID-19 delayed some of the scheduled exam work, but additional workshops and recruitment of the OHST ATAC will commence in the Fall 2021.

- Auto Body and Collision Technician
- Insulator (Heat and Frost)
- Machinist
- Oil Heat System Technician
- Powerline Technician
- Refrigeration and Air Conditioning Mechanic
- Sheet Metal Worker

Canadian Council of Directors of Apprenticeship Harmonization Initiative

Nova Scotia is an active participant in the Canadian Council of Directors of Apprenticeship (CCDA) Harmonization Initiative. The goal of this project is to substantively align apprenticeship training and certification requirements for Red Seal trades in all provinces and territories across Canada.

Priorities for harmonization include trade name, total hours, number of training levels and curriculum sequencing. In collaboration with the provinces and territories, the CCDA has assigned each trade selected for harmonization to one of nine phases. Phases 1 to 6 of the project are complete and implementation timelines have been identified. During the 2020-21 training year, work began on the Phase 7 and 8 trades and included some post-harmonization work. As well, NSCC faculty attended the following Red Seal workshops, meetings, and webinars:

- Carpenter Red Seal Occupational Standard Workshop
- Carpenter Red Seal Occupational Standard Provincial Validation and Weighting
- Gasfitter Red Seal Exam Bank Workshop
- Instrumentation and Control Technician Red Seal Exam Bank Workshop
- Metal Fabricator Fitter Red Seal Occupational Standard Provincial Validation and Weighting
- Motorcycle Technician Red Seal Exam Bank Workshop
- Roofer Curriculum Sequencing Webinar
- Roofer Red Seal Exam Bank Workshop
- Steamfitter Red Seal Occupational Standard Workshop
- Welder Red Seal Exam Bank Workshop

NSAA and NSCC will continue to work together and participate in Red Seal workshops, webinars, and discussions with apprenticeship partners in the Atlantic region and across the country. NSAA and NSCC will also continue to collaborate and update training to meet CCDA recommendations for curriculum sequencing in harmonized trades that have apprenticeship training components. NSCC pre-apprenticeship programs will also be adjusted to reflect the harmonization standards.

Transfer Credit

In adherence with approved transfer credits, NSAA awards NSCC graduates with credits toward apprenticeship when they successfully complete approved pre-apprenticeship programs, including technical training and practical hour credits. Programs are reviewed against the industry standard annually, and credits are currently available in 34 NSCC pre-apprenticeship programs.



ONGOING COLLABORATION

Mikmaw Native Friendship Council Pathways to Shipbuilding

The second Irving Shipbuilding Centre of Excellence Indigenous student pathway program is underway. Ten participants began the two-year initiative online in July, due to COVID-19. In August, the cohort moved to in-person classes at NSCC's IT Campus. In September, another participant was added to the cohort. The program plan includes an eleven-week preparatory academic component followed by a two-week career exploration experience on site at Irving Shipbuilding Incorporated (ISI). After successful completion of the preparatory program in September, participants began NSCC's pre-apprenticeship Pipe Trades diploma program, including the plumber and steamfitter trades preparation. The Irving Shipbuilding Centre of Excellence – of which NSCC is a partner – works closely with the Mi'kmaw Native Friendship Centre (MNFC) as the program's community partner. This ensures the eleven participants receive thorough preparation on the programming side, while the MNFC ensures participants have a sense of community and cultural support. Many of the participants are from First Nation communities located in rural areas; therefore, living and attending college in an urban setting can be a new and challenging experience for some. To date, nine males and two females are engaged in the Pathways to Shipbuilding initiative with an expected graduation date of February 2023.

Pathways to Building Construction Trades for Racialized Nova Scotian Women and Men in Post COVID-19 Economic Recovery

This pathways project was developed by East Preston Empowerment Academy in collaboration with NSAA, YMCA Nova Scotia Works, NSCC, the Atlantic Home Building and Renovation Sector Council, the Nova Scotia Construction Sector Council (ICI), Precision Concrete Services Limited, Akoma Holdings Inc., DORA Construction, and En Point Mentorship. The aim of the project is to respond to the growing need for skilled workers in the construction industry, and seeks to train 20 individuals from March 1, 2021, to February 28, 2022, at a cost of \$500,000.



Architectural Sheet Metal Worker Training - Cape Breton

As a precursor to the Architectural Sheet Metal Worker (ASMW) trade being designated in Nova Scotia, training was developed and offered to a group in Cape Breton. Developed in conjunction with the ASMW TAC, the training was aligned to the Level 1 program currently offered in British Columbia. The training consists of in-class instruction and hands-on experience and includes two weeks of job shadowing in the workplace. Twelve participants started and remain fully engaged in the training. Feedback has been extremely positive, with local contractors aware of the group and support given by industry.

Moving Towards the Skilled Trades in Manufacturing

The Moving Towards the Skilled Trades in Manufacturing project was led by the Dartmouth Learning Network with NSAA, NSCC, and the Canadian Manufacturers and Exporters as partners. The program is modelled after the NSAA's Summer Youth Programs in terms of partners and work placements. Half of the placements are in the skilled trades and NSCC provides safety and worksite readiness training. The project initially supported 16 individuals who had not completed high school and/or who were unemployed. Priority was given to youth, women, and individuals from underrepresented groups.

The project is expected to complete at the end of September 2021. Of the initial 16 participants, 13 have continued with the program. Of those participants, five are female and three are from an under-represented group. Initially over half of the placements were in the skilled trades, but as the project progressed, there were changes in work placements and some participants were placed in other areas such as construction or service-related occupations.

It is anticipated that four individuals may gain permanent employment of which three are in skilled trades and one in a related occupation. Of the three in the skilled trades, two are interested in pursuing apprenticeship (Sheet Metal Worker and Cook) and one is in a voluntary trade and not interested in pursuing apprenticeship. One individual who gained welding experience is unemployed but is looking to obtain his welding tickets and become employed as a Welder.



A smiling woman with dark curly hair, wearing safety glasses and a light blue work shirt, is shown in a factory setting. She is leaning forward with her right hand on a red industrial machine. The background is filled with industrial structures and machinery, creating a sense of a busy manufacturing environment. The text "FUTURE INITIATIVES" is overlaid in large, bold, white capital letters on the right side of the image.

FUTURE INITIATIVES

NSCC is excited to be working with NSAA to support the Zero Carbon economy. Discussions are underway related to Electric Vehicle servicing and safety as well as solar power installation. Work continues to identify labour market gaps and training opportunities in the green economy. In addition, the development of strategies to support equity, diversity, inclusion, and accessibility began in 2021 and will continue through the 2021-22 academic year for launch in September 2022. NSCC and NSAA will continue to work towards their revised shared goals of achieving effective joint communication and decision making across each organization, promoting the skilled trades, delivering quality training and inclusive learning experiences, and coordinating engagement with industry and other partners.





Respectfully submitted,

Handwritten signature of Don Bureaux in black ink, underlined.

Don Bureaux, President - NSCC

Handwritten signature of Marjorie Davison in black ink, underlined.

Marjorie Davison, CEO - NSAA

