

Background Information	2
Program Overview	3
Program Objectives	3
Benefits	3
Program Structure	4
Key Components	5
Eligible Partners	8
How Funding Works	9
Eligible Expenses	g
Matching Contribution Requirements	10
Flow of Funds	10
Reporting	10
How to Apply	10
Assessment	11
Timeline	12
Evaluation Criteria	12
Project Administration	13
Contacts	13



Regional Future Workforce (RFW) - Empowering Equity in STEM Pilot Program

Background Information:

Ontario stands as a global leader in automotive manufacturing and smart mobility, with the sector being a cornerstone of the province's economy, contributing significantly to its GDP. The landscape of this industry, however, is rapidly evolving, driven by technological disruptions and the imperative to transition to a low-carbon economy. As the demand for skills in areas such as software development, data analysis, and electric vehicle technology rises, the Ontario Vehicle Innovation Network (OVIN) has taken proactive steps to address these shifts.

Through initiatives like the Regional Future Workforce (RFW) program, OVIN, in collaboration with various stakeholders, has made substantial strides in engaging students across Ontario. By reaching over 45,000 students and helping to forge 225 partnerships across diverse sectors though the program, including industry, academia, and government, the RFW program has not only exceeded its initial goals but has also achieved remarkable diversity and inclusivity. With over half of the participants being girls, women, and non-binary individuals, and nearly half coming from underrepresented groups, the program has laid a solid foundation for fostering a more diverse talent pool in the A&MS.

However, the success of such initiatives is not just about meeting current needs but also about addressing future challenges. Ontario's A&MS confronts two significant obstacles: an aging workforce and evolving skill requirements necessitated by technological advancements. To navigate these challenges effectively, it is imperative to engage students and youth early, particularly those from underrepresented groups, in STEM education and career development programs. Research underscores the efficacy of such interventions in sustaining interest in STEM subjects and careers among younger generations.

Recognizing this urgency, Ontario has intensified its investments in early workforce development initiatives, including STEM-focused programs and a revamped curriculum emphasizing STEM skills from grades 1 to 9. By nurturing the next generation of talent through such initiatives, Ontario not only ensures a seamless transition to a technologically advanced and diverse workforce but also fortifies its position as a global hub for automotive innovation and mobility solutions.

In essence, the success of Ontario's A&MS hinges on its ability to cultivate talent and adapt to evolving demands. Through strategic investments and collaborative efforts aimed at engaging younger generations early and promoting diversity, the province is poised to chart a course toward sustained growth and leadership in the automotive and mobility sector.

Program Overview

Building on the success of the Regional Future Workforce (RFW) pilot program, we invite proposals from **non-profits, school boards, and academic institutions** to create Science, Technology, Engineering, and Math (STEM) programs for summer 2024— focusing on fostering equity, diversity, and inclusion (EDI) with a special emphasis on <u>underrepresented groups</u>.

The objective is to continue to foster interest and develop STEM skills for the future of the automotive and mobility sector (A&MS). By targeting equity-deserving groups, we aim to remove stigma and create a more inclusive landscape within the sector.

Definition of underrepresented groups:

Underrepresented groups include, but are not limited to, women, Indigenous Peoples (First Nations, Inuit and Métis), persons with disabilities, members of visible minority/racialized groups, and members of LGBTQ2+ communities (see the Dimensions charter for more information).

Program Objectives:

The goals of OVIN's RFW - Empowering Equity in STEM Pilot Program are:

- To increase exposure to learning and development opportunities relevant to the automotive and mobility sector for underrepresented students (kindergarten to post-secondary) across Ontario;
- To increase the number of equity-deserving and underrepresented students exploring career opportunities in the automotive and mobility sector; and
- To facilitate collaboration across Ontario between non-profit organizations, academic institutions, and the automotive and mobility industry to build a strong talent pipeline.

Benefits:

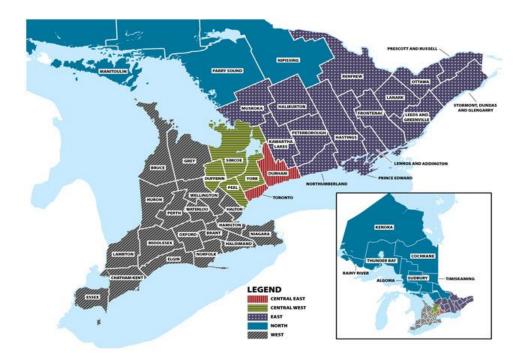
For Applicants and Partners	For A&MS	For Underrepresented Students
 Access to provincial funding sources through one application. Development of relationships with industry, academia, and not-for-profit organizations across the automotive and mobility ecosystem. Development of engaging and specialized programming that creates solutions for 	 Increased awareness of Ontario's dynamic A&MS. Decreased stigma around A&MS careers, including those in the skilled trades. Further development of Ontario's talent pool for the A&MS. Strengthening Ontario as a talent development leader in the global automotive and mobility space, 	 Broadened horizons for future career options. Socialization and increased awareness of Ontario's dynamic automotive and mobility sector and its associated career opportunities. Increased access to learning and development opportunities (including programs

Ontario's automotive	therefore improving	aimed at nurturing
and mobility talent	employment	competitive and in-
pool.	opportunities.	demand skills).
 Ability to engage 		
students in valuable,		
robust, and engaging		
experiential learning.		

Program Structure:

Under the Empowering Equity in STEM program, selected applicants will develop and deploy STEM educational programs (lessons and activities) during the summer period to increase underrepresented students' awareness of automotive and mobility sector careers while improving equity, diversity, and inclusion (EDI) in the sector.

- Programs must be developed in response to the automotive and mobility sector's skills and talent needs.
- Programs must be developed and delivered within a maximum of 2 months of project activation, with all projects closing by September 30, 2024.
- Applicants demonstrating strong partnerships or linkages to industry are preferable
- Applicants must demonstrate a plan to focus on engaging underrepresented students, including students from equity-deserving groups.
- Applicants are encouraged to partner with community organizations that engage and support equity-deserving and underrepresented groups.
- Depending on the age of the audience segments being engaged, applicants and their partners must confirm that the associated project team has met the requirements of Vulnerable Sector and Criminal Record Checks.
- Programs must demonstrate the engagement of at least one audience segment (defined below) and at least one region within Ontario.
 - The following is a map of the regions across Ontario:



- Programs delivered must directly help members of underrepresented groups develop knowledge and skills, as well as provide training and engagement opportunities that reflect the needs of the rapidly evolving automotive and mobility sector and address the underrepresented groups challenges with a focus on STEM.
- Programs must be developed and deployed for one or more of the following audience segments: (1) Kindergarten to Grade 4, (2) Grade 5 to Grade 9, (3) Grade 10 to Grade 12, and (4)
 Post-Secondary (Undergraduate and/or Graduate) students.
- Programs must demonstrate commitment to equity, diversity, and inclusion. This includes diversity of backgrounds and expertise for those delivering the program.
- Applicants are encouraged to conduct an environmental scan of existing programs related to the automotive and mobility sector in region(s) they wish to implement their program to better understand the other players in the region, and to identify potential partners.

Key Components:

- Design, development, and implementation of programming
- Detailed program logistics and administration
- Program's evaluation metrics
- Creation of a marketing, promotion, and outreach plan

Design, development, and implementation of programming

- A) The Program Design must include the following components:
- Program Focus:

- Lesson plans for STEM topics are encouraged to include topics such as, though not limited to, CASE (connected, autonomous, shared and electric) vehicles, artificial intelligence, computer-aided design, etc.
- The grade range of students they plan to engage in this program
- The region(s) of Ontario where applicants plan to launch the program
- Elements that make the program innovative and responsive to the future skills demands of the A&MS
- <u>Underrepresented Groups:</u> The programs designed must focus on supporting students from equity-deserving and underrepresented groups and the content should be catered to them when applicable. Above, under Program Overview, you can find the definition of underrepresented groups.

• Summary of students' participation:

- A high-level summary of student demographics in the region(s) they plan to implement programming in.
 - Provide a strategy to focus on supporting students from equity-deserving and underrepresented groups.
 - The number of students expected to participate in the program. **OVIN requires** applicants to engage at least 50 students with at least 30 coming from underrepresented and equity deserving groups. Please note that programs should be offered to participating students at no cost.
 - Description of how the program is unique and interactive for students.
- B) The Program Development and Implementation must include the following:
 - OVIN requires applicants to develop a program, inclusive of lesson plans and activities, for the Empowering Equity in STEM Education Program. This plan must be signed off and agreed upon by OVIN before the implementation stage.

Specifically, program content:

- Must increase student awareness of opportunities (career and innovative opportunities)
 within the automotive and mobility sector. OVIN will provide pre-program and postprogram surveys to all programs that should be used to assess participants'
 awareness.
- Must be appropriate and curated for the audience segment specified. Applicants must develop more than one program if they are addressing a wide age range of students.
 Content should be reasonable for the age groups identified.
- Must focus on students from equity-deserving groups and underrepresented groups.
- Should include activities/sessions that encourage active engagement from students. The applicant should describe the tools that will be used to make the program interactive.
- Should include student feedback channels where students can discuss ideas and provide direct feedback on sessions.

Program logistics and administration:

Applicants must establish a plan for the successful deployment of the Empowering Equity in STEM Program. This plan must be approved by OVIN prior to implementation stage.

Specifically, the logistics plan must:

- Outline staffing requirements for the program
- Identify materials required for the program
- Include a detailed program schedule for program participants

Project Team:

- Applicants are required to provide an outline of their team that includes the number of staff
 required to run the program, the expertise of team members, and the aspect of the program each
 team member will be responsible for. If applicants anticipate hiring additional staff, they will need
 to outline the roles, expected salaries, and what component(s) of the program they will contribute
 to.
- Applicants must detail the expertise of the paid employee who satisfies OVIN's matching contribution (as described below in the Matching Contribution section), and their role within the applicant's organization. Please note that these paid employees will be OVIN's point of contact, so please include their contact information in this section. Applicants must outline how paid employees will be involved in each key activity.
- Applicants must outline their logistics and administration plan for implementing the program. Applicants are encouraged to outline details of staff training, materials required to run the program, scheduling of activities, support for programming, etc.
- Applicants has the option to attending and participating in OVIN Highlights Showcase event that
 will occur late August/early September to showcase some of their work with the RFW Empowering Equity in STEM Pilot Program

Marketing and Promotion:

- Applicants must provide their marketing and promotion strategy to promote the program.
- Applicants are also required to develop an outreach plan detailing how they will encourage students to sign up for the program.
- Any marketing and promotional materials that use images and videos of people (including program participants) must have a process and documentation for obtaining informed consent.
- Selected applicants will seek OVIN approval on the marketing materials and will work with the
 OVIN team to market and promote the program. Marketing materials can include but are not
 limited to the website students use to register for the program, email promotions, and posters.

Program's Evaluation Metrics:

OVIN will provide an evaluation framework, comprised of standardized pre- and post- program surveys for students, and specific questions for instructors and program coordinators, for each of the successful applicants to administer.

Student survey data:

- Participant gender
- Number and proportion of participants from rural and remote communities (if applicable)
- Program's impact on A&MS knowledge and awareness
- Program's impact on general interest in the A&MS
- Program's impact on participants' interest in pursuing a career in the A&MS
- Program's impact on STEM skills development

Instructor survey data:

- Perspectives on the program's success
- Number and proportion of underrepresented participants
- Impact on student awareness and interest in the automotive sector
- Impact on student's interest in pursuing a career in the automotive sector
- Impact on STEM skills development and interest

Data and information from instructors and program coordinators:

- Program design and implementation details
 - Overall program focus and strategy
 - Number of mentorship opportunities (if applicable)
 - Number of industry tours (if applicable)
- Total number of collaborations and partnerships (industry partners, school boards, non-profits, post-secondary institutions etc...) created throughout the program
- Total number, as well as which cities, towns, and counties programming was delivered in

Eligibility:

- All partners must be Ontario-based
- Industry partners must be Ontario-based automotive and mobility industry members, including but not limited to:
 - Original Equipment Manufacturers (OEMs);
 - Tier 1 suppliers; and/or
 - Relevant industry associations.
- Elementary and secondary public schools, school boards, post-secondary institutions, non-profits and relevant organizations must be Ontario-based.
- Industry partners are strongly encouraged to contribute in-kind (expertise and other appropriate resources) towards the program.
- All projects should be completed by September 30, 2024, at the latest no project extensions will be provided.
- Applicants that cannot fulfill these requirements will not be eligible for funding.
- Overall partnership requirements are outlined below:

Partnership Requirements	School Boards	Academic Institutions	Non-Profit Organizations
Collaborate with at least one industry partner to develop programs	Strongly Encouraged	Strongly Encouraged	Strongly Encouraged
Work with at least one post-secondary institution with strong automotive and mobility initiatives to develop programs	Strongly Encouraged	N/A	Strongly Encouraged
Work with at least one school/school board to coordinate student participation	N/A	Encouraged	Encouraged

**Please note:

- Program funds will only be released to successful applicants, and not to their partners.
- Applicants who have received over \$500,000 of funding from OCI administered programs in their lifetime (excluding Talent Edge) are required to obtain OCI approval before a new application for funding is initiated.

How the funding works:

- Eligible applicants can apply for a maximum of \$300,000 to develop and deploy engaging educational programs for at least one of the following audience segments:
 - Kindergarten to Grade 4
 - o Grade 5 to Grade 9
 - o Grade 10 to Grade 12
 - Post-secondary students (undergraduate and/or graduate)
- Applicants must submit one application that clearly articulates how they intend to uniquely engage each audience segment
- Please note the maximum funding an applicant can receive is \$300,000 regardless of the number of audience segments included in their proposals.

Eligible Expenses:

Eligible expenses under this program cover expenses incurred by the applicant under the following categories:

Travel

- Salaries
- Operating expenses

Please refer to the Eligible Expenses Guidelines

Matching contribution:

Applicants must provide a matching contribution for the duration of the project of at least one full-time employee whose salary is paid wholly by the applicant. This employee must be dedicated to the development and implementation of the program.

Please note:

- 1- Matching contributions must be coming directly from the organization/ institution. Funds cannot be coming from other public funds or be leveraged for other public funds.
- 2- Applicants are responsible for meeting their commitment to the matching contribution. Underspend will result in an equal amount deducted from OCI's final contribution.

Flow of Funds:

- OCI funds flow only to the Applicant.
- Upon project activation, OCI will release an advanced payment of up to 50% of the total OCI award, at the sole discretion of OCI.
- The remaining 50% of the overall funding will be released within 30 days of the submission of the required final reports including data, and information requirements, claim form, proof of expenditures and partnership contributions, financial attestation, and a request for reimbursement.
- Only eligible expenses will be reimbursed to successful applicants. (Please refer to the Eligible Expenses guidelines document linked above under Eligible Expenses).

Reporting

Please note that to receive funding from OCI, the applicant MUST complete all required reports as contractual obligation. Note: Applicants MUST retain all proof of purchase, receipts, and other relevant documentation relating to eligible expenses. These should be included in Final Report.

- All projects should be completed by September 30, 2024, at the latest no project extensions will be provided.
- Applicants that cannot fulfill this requirement will not be eligible for funding.
- All eligible expenses related to project execution should be incurred by September 30, 2024 (no expenses incurred after September 30 will be honoured).
- All final reports should be submitted by October 15, 2024, at the latest. There will be no extensions granted for the final reports.

Reporting instructions and templates will be sent to successful parties at the time of reporting. Reports must be received and approved by OCI prior to release of funds for eligible claims.

The Report form is accessed directly on the AccessOCI system from the Report Tab.

Forty-five (45) days prior to the scheduled completion date, the Applicant and project partner(s) will receive an email notification of the project end date from the AccessOCI system, with a link to the Final Project Report, should the Applicant or project partner(s) wish to begin entering data.

On the scheduled project completion date, the Applicant and project partner(s) will receive another notification and a link to complete a Final Project Report the AccessOCI system

Applicants must submit their Final Reports within 15 days of project completion to be reimbursed for eligible expenses, and maintain good financial standing with OCI.

Final Report

- The report should describe the status of program milestones and financial spending.
- All reports must be accompanied by the receipts of expenses incurred towards the program, and attestation from the institution or organization regarding the use of funds.

In addition to the final report, there will be 1 interim presentation to show progress in developing the program.

How to Apply:

Full Proposal Application Submission Due Date: July 16, 2024

- Once ready to apply for the Empowering Equity in STEM Program, the applicant should connect with their OCI Business Development and Commercialization Manager (BDCM) to start the process towards initiating an application.
- If new to OCI, the applicant should complete the <u>Program Enquiry Form</u> to be connected with an OCI BDCM to discuss the eligibility and how to start the application process.
 - Please note that completion of this form does not constitute an application for funding.
- Once the Program Enquiry Form has been completed, an OCI BDCM will contact you shortly to discuss the opportunity and, if required, to assist in initiating the application.

Full Application: Application Requirements

- The full application package must include:
 - o (a) an application proposal
 - (b) other supporting documents (see details below).

Please note the due date to submit the full application is July 16, 2024.

1. Application Proposal:

Applicants must develop and submit a proposal for the Empowering Equity in STEM Pilot Program, which includes the following sections:

- Background: Applicant organization background and demonstration of managing similar program deployments.
- Key Components:
 - o Program Design, Development, and Implementation:
 - Details on program focus, methodology of student engagement, strategy on supporting EDI initiatives.
 - A detailed work plan outlining how they plan to manage key milestones, activities, and timelines.
 - Logistics and Administration: a draft of the program's logistics plan (includes the overall resources utilized to deploy the program).
 - Program Marketing and Promotion: Applicants are required to outline what marketing materials they plan to develop and how they plan to promote the program.
 - Monitoring and Evaluation: Details on how the applicant plans to measure program outcomes and impact, and track and collect data. Please use OVIN's pre- and postprogram surveys as part of your evaluation techniques (the surveys will be provided if you are a successful applicant).
 - o Program Highlights Showcase: A final showcase will be hosted by OVIN inviting all applicants to showcase their work.
 - o Financial Breakdown and Justification: How the approved funds will be utilized.

Assessment:

- The Empowering Equity in STEM Education Program is a discretionary, non-entitlement program with limited funding. **Not all eligible applications can necessarily be funded**. All eligible applications are assessed on their merit and undergo a review process in which the applications are reviewed against program objectives and evaluation criteria.
- Full applications are internally reviewed for eligibility, completeness, and financial compliance prior to evaluation by independent external reviewers with domain and sector expertise.
- Each application will undergo a written external review by three subject-matter experts. All reviewers are bound by Non-Disclosure Agreements (NDAs).
- Applicants may be invited to present their proposals in person or by video conference to OVIN's External and Internal Review Panel.
- The External Review Panel will review the submitted applications and make the funding recommendations to OCI. The final funding decision is made by OCI.
- Successful applicants will be notified by OCI and provided with additional information necessary to activate the project.

Timeline:

Action Item	Due Date
Application opens	July 2
Proponent Session	July 10
Expect Emails showing applicants' interests	July 11
Full Application Due	July 16
Eligibility Check for Applications	July 17
Applicants to address elements flagged from Eligibility Check	July 20
Final Eligibility Check Review	July 21
Selected applicant presentations to send to OCI Team	Mid-late July
OCI Final Decision - Award and Decline letters sent	Late July
OCI response to confirm Contact Info with Applicants	Late July
Signed Agreement Due	July 29
Project Activation	August 1
OVIN Led Showcase Event for all Successful Applicants	Early September
Interim Presentation	September 2024
Project Close	Sept 30
Programs Reports Due	Oct 15

Evaluation Criteria:

- Applicant's previous experience running successful programming for K-12 students
- The grade range of students that applicants plan to design program(s) for
- The region(s) in Ontario where applicants plan to implement their program(s)
- Elements of STEM the program teaches and incorporates, and their relation to the A&MS
- Applicant's focus and commitment to Equity, Diversity, and Inclusion, and their ability to support students from underrepresented groups
- How innovative the proposed program design is
- How innovative the proposed program curriculum is
- Whether proposed data collection methods are sufficient to understand program impact
- The projected number of students who will participate in the program
- Please note:
 - Preference will be given to applicants who can engage a higher number of students from underrepresented and equity deserving groups

- Preference will be given to applicants that demonstrate plans to deploy the program to multiple audience segments and multiple regions within Ontario
- To ensure we are representative of diverse audiences across the province, OCI will
 prioritize funding one applicant per region (as appropriate based on Applications
 received)
- Applicants demonstrating strong partnerships or linkages to industry are preferable

Project Administration:

Project Activation

- Upon approval of a project for funding, the selected applicant will be forwarded a copy of the
 funding agreement with schedules specific to the approved proposal. This funding agreement
 must be signed via OCI's online electronic signature function by all contracting parties within 2
 days of notification of the award.
- The purpose of the OCI funding agreement is to define roles and obligations for the project partners with regard to OCI's guidelines and funding contribution only. Project partners are encouraged to enter into a separate agreement to commit to other roles and responsibilities relating to the program.
- The project will be activated upon receipt of the signed funding agreement. The start date will by default be the date of activation and cannot be changed.

Links to Important documents:

- Funding Agreement
- Eligible Expenses
- Application/ Proposal Questions
- Survey Link

Contacts:

For further questions regarding program guidelines, eligibility, and the online application, please contact your OCI Business Development and Commercialization Manager (BDCM)

or

You can contract Rodayna Abuelwafa, Skills Development Project Lead directly at <u>rabuelwafa@ocinnovation.ca</u> for further information.