



Ontario Centre of Innovation – OVIN Workforce Planning & Talent Strategy: REST API RFP

Request for Proposals | March 25 2024

Deadline for submission of proposals | April 15 2024

1. Organization Description

The Ontario Centre of Innovation (OCI), established in 1987, is a leading not-for-profit organization that works with industry, academia, and government. OCI focuses on ensuring that the people of Ontario reap the personal and economic benefits of leading-edge research underway at our publicly funded universities, colleges, and research hospitals - research that can be transformed into technologies and services that enhance quality of life and help build a globally competitive, job-creating economy in Ontario.

Specifically, OCI supports the commercialization of academic intellectual property (IP), industry-academic collaborations, and the development and adoption of emerging technologies. This includes overseeing the execution of advanced technology platforms that will equip Ontario companies to compete in a competitive global digital economy. The organization also contributes to the development and retention of talent to ensure that industry has access to personnel with the most advanced skills and knowledge and that highly trained personnel find opportunities to apply their expertise in Ontario.

OCI leads the Ontario Vehicle Innovation Network (OVIN) initiative on behalf of the Government of Ontario. OVIN's mandate is to accelerate the development of the next generation of electric, connected, and autonomous vehicle and mobility technologies and lead the sector through significant change.

OVIN builds upon Ontario's position as a world-leading automotive manufacturing and supply jurisdiction in addition to the large cluster of information and communication technology companies operating in the province. Ontario's high-quality post-secondary institutions, first class talent, innovative small and medium sized enterprises, and infrastructure to support entrepreneurship ensure that the province is uniquely positioned to capture the economic opportunity of the automotive and mobility technology space and lead the global mobility transformation.

Through resources such as research and development (R&D) funding, talent development, technology acceleration, business and technical supports, and demonstration grounds, OVIN provides a competitive advantage to Ontario-based automotive and mobility companies – allowing Ontario to reinforce its position as a global leader in transformative automotive technologies, as well as transportation and infrastructure systems.

OVIN's five objectives are to: foster the commercialization of Ontario-made advanced automotive technologies and smart mobility solutions; showcase Ontario as the leader in the development, testing, piloting and adoption of the latest transportation and infrastructure technologies; drive innovation and collaboration among the growing network of stakeholders at the convergence of automotive and technology; leverage and retain Ontario's highly skilled talent; harness Ontario's regional strengths and capabilities, and support its automotive and technology clusters.

OVIN is supported by Ontario's Ministry of Economic Development, Job Creation and Trade (MEDJCT), Ministry of Transportation (MTO), and Ministry of Labour, Immigration, Training and Skills Development (MLTSD).

2. Objectives

Ontario's automotive and mobility sector is facing significant technological disruptions driven by the priority to transition to the low carbon economy, as well as improvements in digital and automation technologies. Key drivers contributing to this evolution include factors like environmental sustainability, digitalization, infrastructure demands, and increased expectations for safety and concerns over cybersecurity. As a result, the occupational and skills requirements for the sector are shifting to include an increased demand for: technological skills (e.g., use of software tools and software development), data analysis skills (e.g., machine learning and AI (Artificial Intelligence)), as well as EV (Electric Vehicle) and EV infrastructure skills (e.g., mechatronics, battery chemistry repair).

In response to these shifts, the Ontario Vehicle Innovation Network (OVIN) developed a [Talent Strategy & Roadmap](#) to help position the sector for long-term global success, a [Skills & Career Navigator](#) and a technical Upskilling Platform for Ontarians who are interested in careers in the sector and opportunities for upskilling. Currently, OVIN is working on further updating our products with the following enhancements:

- Developing a continuous mechanism for providing the most up to date and custom Labour Market Information (LMI) at the regional and/or sub-sectoral level in the following segments of the sector:
 - Electrification
 - Connected and Autonomous Vehicles (C/AV)
 - Advanced Air Mobility
 - Light Weighting
 - Propulsion Systems
 - Rail Transportation
 - Marine Transportation
 - Safety Management and Controls
 - Auto and Parts Manufacturing
 - Aftermarket, Maintenance, and Repair
 - Freight and Goods Movement
 - Mobility Planning and Infrastructure
 - Tool, Die, and Mold
- Providing a real-time LMI dashboard for industry employers, educators, and other stakeholders to develop specific labour solutions for skills deficits and labour shortages such as (but not limited to) certifications and in-demand skills that respond to employers' immediate needs.

- Real-time job analysis for students of different ages, professionals, and other stakeholders to learn more about the sector as well as career opportunities in regions across Ontario, the skills needed, and available salary information, which will help support the talent pipeline in the long run.

To realize this vision, we will need access to REST (representational state transfer) API (application programming interface) with the technicalities mentioned in the Scope of Work section below.

3. Scope of Work

REST API Functionalities Needed:

Data points expected to be extracted via the REST API include (but are not limited to):

Expected Data Points and Provider’s Requirements
Total number of jobs in Canada’s automotive and mobility sector (Revert back to the 13 segments mentioned in the objectives section)
Number of people employed in each segment – Historical Recruitment Data
Number of jobs listed in each job title/Occupation title
Salary in each occupation
Salary for all occupations
Breakdown of workers in each occupational classification (or segment) by gender, race, ethnicity, and other social identities for each of the 13 identified segments (if applicable).
Provide collected, deduplicated, and analyzed job posting data from across Canada, including both French and English postings. Data should be provided with the following location parameters: <ul style="list-style-type: none"> • Town / city • Upper tier municipality • Economic Region • Province
Occupation: down to 5-digit NOCs, breaking down into 7-digit OaSIS categories and then further sub-occupations where appropriate.
Employer Name (as identified by ESDC or Industry Canada)
Employer Name provided in the job posting
Industry: down to 6-digit NAICS
Level of education requirements (listed in the ads)
NOC by training, education, experience, responsibilities (TEER) level
Data source (website that the postings came from)
Hourly wage (listed in the ads)
Skill groups, skill sub-groups and skills (delineating between technologies and other work requirements)
Certifications
Job type: full-time/part-time
Job duration: permanent/contract
Job posting source (who published the posting - employer or agency)
Experience requirements: Entry level vs. experience required
CIP codes (classification of instructional programs)

- All data points must be from 2020 and continuous in nature.
- OCI is not looking for REST API ownership or development from scratch, we are looking for a subscription for an existing REST API that provides the above data points and includes a continuous data delivery per the scope of this project.
- Please note that that the successful vendor will need to help with the REST API connectivity and provide any technical support when required.
- The vendor will need to disclose their data sources.
- All data will need to be updated on a continuous basis.
- Occupational data needs to map to Employment and Social Development Canada's 5-digit 2021 National Occupational Classification (NOC) and their Occupation and Skills Information System (OaSIS) taxonomy of 900 occupations. The provider's historic data (from 2018) must also be mapped to these taxonomies/definitions.
- Experience supporting provincial governments, including those with French as an official language (New Brunswick or Quebec).
- Experience supporting clients using this data to power/inform end user tools.
- Experience working with Canadian Industry Associations, including manufacturing supporting organizations.
- Ability to purchase data for all Industries (defined by NAICS) and Occupations (defined by NOC codes) or by selected Industries and Occupations.
- Preference will be given to Ontario-owned and operated organizations.

Additional Technical Requirements:

When submitting their proposal, the proponent should mention:

- The authentication mechanisms used to control what actions authenticated users can perform within the API.
- What validation has been used to sanitize all input received and to prevent any injection attacks.
- If there are any rate limitations, keeping in mind the extensive network requests.
- Security headers.
- Continuous API versioning information, to manage backward compatibility and migration to newer versions.
- Security Standard Compliance.
- The network protocol used for data transmission along with methodology to ensure encrypted data transmission.
- Proponent to ensure SSL/TSL certificates for the API.

4. Selection Criteria

The successful recipient of this contract will demonstrate the following in its response:

- Experience in back-end development.
- Diversified team members for different skills (e.g.: Data Analysis, Data Analytics, Cloud Computing, Technical Support, etc.).
- Expertise in collaborating with multiple project partners and stakeholders.
- Experience working on parallel projects at the same time.
- Project timeline.
- Total budget and justification of budget line items.

5. Project Management

As part of the project management activities, the proponent will prepare for a kick-off meeting, discuss a workplan with detailed timelines for all project deliverables, and work closely with the OVIN Project team on API Connectivity and meet as necessary for technical support.

6. Summary of Deliverables

The deliverables for this scope are summarized in the table below:

PHASE	ACTIVITY	TIMELINE
Project Planning	RFP Launch	25 March 2024
	Proposal Submission Deadline	15 April 2024
	OCI Decision	23 April 2024
	Project Kick-off	1 May 2024
Deployment	Access to API documentation	8 May 2024
	Configure and Deploy Project-Specific API	15 May 2024
	Technical Support	Ongoing from contract start
Project Close	Access to be granted for 12 months following contract start	Annual subscription renewal to be discussed as needed per project requirements

7. Bidding Requirements

- Financial. Must include a breakdown of costs by activity (including things like different plug-ins required and enhancement options, etc.).** Daily rate for the project including any estimated expenses is to be provided. Any expenses or additional cost must be approved by OCI in advance and in writing.
- Firm Fixed-cost Proposal.** Descriptions of the approach and methodology. Detailed timelines and deliverables are to be provided. 30-minute interviews including a presentation on approach and methodology and Q&A may be scheduled with short-listed candidates.
- Collaborative Bids.** Proponents are welcome to submit collaborative bids in partnership with other vendors.
- Service Level.** Delivery of milestones on time and of a quality acceptable to OCI.
- Terms and Conditions.**

- Any information provided by OCI either in this RFP or in subsequent verbal or written communications shall be considered confidential and for express use in the preparation of this proposal.
 - All proposals submitted become the property of OCI and are to be received and held in confidence.
 - All data collected and all resulting reports and publications prepared by the successful bidder will be the exclusive property of OCI.
 - This RFP does not create an employment relationship. Individuals performing services required by the contract are not employees of OCI.
 - Any changes to scope of services and associated costs following execution of contract must be submitted in writing and are subject to approval by OCI.
 - Travel and travel reimbursement may be authorized for this acquisition and will require written requests, breakdown of costs, and formal approval by OVIN.
 - The successful bidder will be paid at the prices stipulated on the contract upon submission of final invoice to OCI after the successful completion of the project.
 - Invoices will contain the contract number and reference number.
 - OCI follows a standard contract and agreement policy allowing for limited changes to clauses.
- f. **Conflict of Interest.** Arms-length relationship or disclosure of potential conflict of interest is required.
- g. **References.** References with details of work completed are to be provided.
- h. **Evaluation Criteria.** Proposals will be evaluated on the basis of:

Expertise & Qualifications (40%)

- Those assigned to deliver this project reflect a diverse team of qualified individuals who will each have an active and intentional role in the work. There should be a balance of junior and senior level staff with the appropriate subject matter expertise engaged in this work.
- Demonstrates understanding of the project objectives and context.
- Relevant experience and references in Data Analysis, Data Analytics, Cloud Computing and Technical Support

Methodology (40%)

- Proposed approach and methodology of the project is clear, detailed, and feasible.
- Proposed approach has a strong stakeholder engagement strategy that demonstrates understanding for how to engage stakeholders.
- How well does the proposal address RFP requirements?
- Management and organization of the assignment.
- Commitment to assignment timelines, deadline, and overall terms and conditions.

Cost (20%)

- Breakdown of costs by activity.
- Justification of the budget line items.

- j. **Submission Format.** Proposals are to be submitted in free form electronically in Word and PDF format. Please have proposals named as **"Company Name Submission OVIN_ REST API_ DD- MM-YYYY"**. The receipt will be confirmed via e-mail.
- k. **Contact.** Send proposal submissions and any questions and additional information requests to Alèque Juneau at ajuneau@oc-innovation.ca and CC Rodayna Abuelwafa at rabelwafa@oc-innovation.ca and Deepan Parikh at dparikh@oc-innovation.ca.

Please note that any questions may be shared with all potential bidders.

Bidding Process and Schedule:

1. The application deadline is **15 April 2024**.
2. Short-listed candidates may be invited for an interview.
3. Final selection is expected to be done by **23 April 2024**.

We reserve the right not to award the contract to any of those submitting proposals, and we may seek further responses.