Ontario Centre of Innovation –
OVIN Skills, Talent & Workforce Development: Navigator and LMI Dashboard Update
Request for Proposals | 5 December 2023

Deadline for submission of proposals: 5 January 2024

Proponent Session: 13 December 2023 | [Link to Join]

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 (MLITSD).

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 and a Skills & Career Navigator for Ontarians who are interested in careers in the sector. Currently, OVIN is working on further updating the Skills and Career Navigator with the following enhancements:

- Developing a continuous mechanism for providing the most up to date and custom Labour Market Insights (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

oc-innovation.ca
o Providing a real-time LMI dashboard for industry employers, educators, and other stakeholders to develop specific labour solutions for skills deficits, labour shortages, such as, but not limited to: certifications and skills in demand that respond to employers’ immediate needs.

o A real-time job analysis for students from different ages, professionals and other stakeholders to learn more about the sector, career opportunities in region’s across Ontario, skills needed, salaries etc., which will help the talent pipeline in the long run.

o Updates to the Navigator’s resources and infographics to showcase the sector to a range of users (particularly younger users), decrease sector-related stigma, and increase their interest in opportunities.

3. Scope of Work

The Scope of Work outlines two specific deliverables to meet the above-stated objectives:

1. Development of Labour Market Insights (LMI) Visualizations

In order to automate the Navigator’s Labour Market Insights data, ensuring all sector-relevant data remains current, the proponent will develop LMI visualizations as per the specifications below. To populate these Insights, OCI has partnered with Vicinity Jobs for an Application Programming Interface (API) for the continuous retrieval of updated data.

The LMI visualizations should include:

1A - An Interactive LMI Dashboard Graphic

Leveraging data from the Vicinity Jobs API, the proponent will develop an LMI dashboard to display the requisite information on OVIN’s Skills and Career Navigator. Raw data extracted via the API should be transformed as required based on the information that is to be presented. The dashboard should have a responsive and interactive interface including an innovative design to allow for the filtering and applicable display of data from the live data feed. The LMI dashboard should be responsive across all platforms including mobile.

The interactive graphic interface should account for data across all thirteen (13) automotive and mobility segments mentioned under Objectives.

Please note: Proponent should support in developing a Dashboard where users can extract well designed PDF reports applying various filters. OCI Admins should be able to extract and publish different reports on the site. You can click here to see existing OVIN LMI Reports

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

<table>
<thead>
<tr>
<th>Expected Output</th>
<th>Our suggestion for the calculation is based on existing data fields we are aware of. Please note that the Vicinity Jobs API is a pool of data, and we would need the Vendor recommendation with their expertise on Data transformation and analysis.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of jobs in Ontario’s automotive and mobility sector from 2020 - to the present and future prediction</td>
<td>Predictions can be developed by counting annual job increases across 13 segments from Vicinity Jobs API.</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Number of people employed in each segment from 2020 to the present</td>
<td>Based on the number of jobs posted in the past 5 years.</td>
</tr>
<tr>
<td>Number of jobs listed in each job title for</td>
<td>Count number of jobs from the past 5 years to the present for each segment’s 150-300 job title mentioned in the objective section, from the dataset of Vicinity Jobs.</td>
</tr>
<tr>
<td>Average Salary in each segment</td>
<td>Identify related job titles for each segment, see the past year's and present salary range and get the average range of their salaries.</td>
</tr>
<tr>
<td>Average Salary for all job titles</td>
<td>Combine previous year’s salary in addition to current year’s salary and get the average range of their salaries. An overview of Ontario’s top Automotive and mobility sector employers.</td>
</tr>
<tr>
<td>Number of jobs in Ontario’s automotive and mobility sector compared to other Provinces for the past five (5) years.</td>
<td></td>
</tr>
<tr>
<td>Hiring Trends based on the number of jobs posted monthly for the past five (5) years.</td>
<td></td>
</tr>
<tr>
<td>Occupations with high demand and Occupations with low demand</td>
<td>Count number of openings in each occupation in each segment current &amp; past 5 years.</td>
</tr>
</tbody>
</table>

**Please note:** Data variables to make the necessary calculations in all the above examples need to be dynamic and it will need to be automatically updated.

**To be updated manually by the proponent:**

- Find data on internet on racialized groups and gender diversity in each segment (if available)
• Updated information on Talent Supply Gap in each segment. This can be pulled from a current report published here.
• Add information on Trends in postsecondary enrollment and graduation in Ontario. This can be pulled from a current report we have. (You can find here)
• Add any other data identified by OCI

1B - Job Analysis Dashboard:

You can find below our vision for the user journey through the Job Analysis section on the Navigator Tool. Please note that we are open to suggestions and recommendations from the proponent on how to best share the below data with site users and provide the best user experience:

Step 1: User selects a segment out of the list of 13
Step 2: User selects a job role that interests them (Job roles researched and identified by the proponent from the Vicinity Jobs API)
Step 3: User selects city/ region (Ontario based only)
Step 4: User will be presented with the following data:

▪ Historical data for number of jobs posted for this specific role in the selected city/ region.
▪ Technical and non-technical skills
▪ Top employers
▪ Related job titles
▪ Salary range
▪ Job demand data
▪ Option to view current job openings (Example: from Indeed and/ or Jobs Canada’s free API, open to suggestions)
▪ List of certifications available for upskilling, as per job role

Please note for both LMI Visualization and Job Analysis: At any point of time, the user would have the option to filter as per any of the above criteria as an individual filter or a combination of filters.

The proponent will work with OCI on developing a suitable design reflect OCI’s team vision and assure their satisfaction.

2. Navigator Resources

The goal of updating the Navigator Tool is to update resources for every age group to make it more interactive, responsive, accessible, engaging, informative and have a better overall user experience for each of the age group sections.

The proponent will update each age group with the following data:

Young Learners: (Age Range: Grade 5 to Grade 8)
• Find and add short interactive videos and create infographics to get them excited about automotive industry field
  ▪ Do research and create infographics on how they can get started at this young age in STEM programs/ auto programs and provide examples of external engaging links as resources for them and their parents

High School Students:

• Create and add interactive graphics on the subjects that high school students are taking at their age that can be transferred to auto sector careers (E.g: Art can be transferred to design in the auto sector)
• Keep and update existing career pathways on the Navigator site
• Do research and add examples of how they can get started at this age in STEM programs/ auto programs and provide examples (unique to their age)
• Add a link of job analysis as described in the LMI Visualization part of the RFP

Post Secondary:

• Create and add interactive graphics on the degrees from colleges/ universities that can be transferred to auto sector careers
• Add a link of job analysis as described in the LMI Visualization part of the RFP
• Keep and update existing career pathways on the Navigator site

Professionals:

• Extract existing data from Vicinity Jobs API and curate good certification and course list for each segment
• Link OVIN upskilling platform (if available)
• Add a link of job analysis as described in the LMI Visualization part of the RFP

Please note: All content will need to be reviewed by OVIN/ OCI leads and will need to pass OCI satisfaction before being published.

4. Selection Criteria

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

• Experience designing and implementing data collection systems to support the transformation and displaying of data.
• Diversified team members for different skills (e.g.: Data Analysis, UX/UI design, Infographics development...etc.)
• Expertise in collaborating with multiple project partners and stakeholders
• Experience working with students, educators, and/or employers to develop innovative models
• Experience working on parallel projects at the same time
• Expertise in bringing the Diversity, Equity and Inclusion lens to the project
• Results-oriented approach to perform the services described as part of this project
• Project timeline.
5. Project Management

As part of the project management activities, the proponent will prepare for a kick-off meeting, develop a workplan with detailed timelines for all project deliverables and deliver a status and/or weekly update meeting for the OVIN team. The proponent will work closely with and provide updates to the OVIN Project Lead, Skills Development, and the wider OVIN team as needed.

You can find below our technical process expectations:

**Technical Process at OCI:** The proponent will need to prepare a list of plugins/technology and server requirements and get approval from OCI for its purchase and use. To get the approval from OCI for any plugin/technology, proponent will need to provide the below details. Proponent can mention wherever certain information is not available from the below points:

- Plugin/Technology name:
- Official download link
- Source Verification:
  - Check for Authenticity
  - Verification information that the plugin is from a legitimate and well-known developer or organization.
- Digital signatures or certificates associated with the plugin.
- Documentation link:
  - Any additional provided documentation or user manuals to understand the plugin's intended functionality, features, and installation instructions.
- Compatibility Check: Screenshots/Documentation reference
- How do we make sure the plugin is compatible with the version of the software or platform you are using?
- Security Analysis
  - Run a security scan on the plugin/technology using reputable security software to detect any potential threats or vulnerabilities.
- Reviews and Ratings link/screenshots
- Developer or Support contact info:
  - Reach out to the plugin developer or their support team to ask questions, seek clarifications, or report any issues.
- Test the Plugin: Screenshots
- Performance metrics
- Update history
- Community Feedback:
### 6. Summary of Deliverables

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

<table>
<thead>
<tr>
<th>Phase</th>
<th>Activity</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Planning</td>
<td>RFP launch</td>
<td>5 Dec 2023</td>
</tr>
<tr>
<td></td>
<td>Proposal submission Deadline</td>
<td>5 Jan 2024</td>
</tr>
<tr>
<td></td>
<td>OCI Decision</td>
<td>23 Jan 2024</td>
</tr>
<tr>
<td></td>
<td>Project Kickoff</td>
<td>19 Feb 2024</td>
</tr>
<tr>
<td>Wireframing and Prototyping</td>
<td>1	extsuperscript{st} Draft of Age wise infographics and content update</td>
<td>4 March 2024</td>
</tr>
<tr>
<td></td>
<td>LMI Dashboard Design Prototype/ Draft</td>
<td>11 March 2024</td>
</tr>
<tr>
<td></td>
<td>Job Analytics Design Prototype/ Draft</td>
<td>18 March 2024</td>
</tr>
<tr>
<td>Development</td>
<td>Final infographics updated on site</td>
<td>1 April 2024</td>
</tr>
<tr>
<td></td>
<td>LMI Dashboard Developed and linked on the site</td>
<td>15 May 2024</td>
</tr>
<tr>
<td></td>
<td>Job Analytics Dashboard</td>
<td>25 June 2024</td>
</tr>
<tr>
<td></td>
<td>Enhancements</td>
<td>5 July 2024</td>
</tr>
<tr>
<td></td>
<td>Final Draft to be presented to OVIN Team</td>
<td>12 July 2024</td>
</tr>
<tr>
<td>Project Close</td>
<td>Handover:</td>
<td>4\textsuperscript{th} week of July 2024</td>
</tr>
<tr>
<td></td>
<td>- Demo session for the update</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Deployment of updated site on ovin-navigator.ca</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- Provide a technical report consisting of: Login used on the sites/ credentials</td>
<td></td>
</tr>
</tbody>
</table>
used and dates for any renewals
- Provide a PDF Report on the Future scopes and usage
- Accessibility for all the plugin and any technical subscriptions.
- Maintenance overview: Plugins and other technical considerations.
- Database management for static data.
- Handoff documentation and tutorials for any maintenance required.

7. Bidding Requirements

a. **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.

b. **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.

c. **Collaborative Bids.** Proponents are welcome to submit collaborative bids in partnership with other vendors.

d. **Service Level.** Delivery of milestones on time and of a quality acceptable to OCI.

e. **Terms and Conditions.**
o 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.

o All proposals submitted become the property of OCI and are to be received and held in confidence.

o All data collected and all resulting reports and publications prepared by the successful bidder will be the exclusive property of OCI.

o This RFP does not create an employment relationship. Individuals performing services required by the contract are not employees of OCI.

o 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.

o Travel and travel reimbursement may be authorized for this acquisition and will require written requests, breakdown of costs, and formal approval by OVIN.

o 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.

o Invoices will contain the contract number and reference number.

o 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 (30%)**

   o 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.

   o Demonstrates understanding of the project objectives and context, including clear ability to incorporate EDI considerations specifically in developing the Navigator resources pathways for different ages and being able to clearly measure the impact according to the program's guidelines and objectives.

   o Relevant experience and references in research, future forecasting, and/or data analysis and UX Design

   **Methodology (50%)**

   o Proposed approach and methodology of the project is clear, detailed and feasible. Proposed approach includes the types of information and research that will inform the vendor’s deliverables.

   o Proposed approach has a strong stakeholder engagement strategy that demonstrates exceptional understanding for how to engage stakeholders

   o 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_RFW_Evaluation_RFP_DD-MM-YYYY”. The receipt will be confirmed via e-mail.

**k. Contact.** Send proposals submissions and any questions and additional information requests to Rodayna Abuelwafa at rabuelwafa@oc-innovation.ca and CC Deepan Parikh at dparikh@oc-innovation.ca Please note that any responses may be shared with all potential bidders.

**Bidding Process and Schedule:**

1. The application deadline is 5 **January 2024**.
2. Short-listed candidates may be invited for an interview.
3. Final selection is expected to be done by **January 2024**.

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