



Request for Proposals: NRFP-1118-2023

Applications for

Durham Region Ontario Vehicle Innovation

Network (OVIN) Community Challenge: Dynamic

Curve Warning Challenge

Issued: November 20, 2023

Application Deadline: December 18, 2023

Amended Deadline: January 15, 2024

Challenge Information Recording to be posted on

DRTDS website

Questions due by December 1, 2023

Applications must be submitted through the [Durham](#)

[Regional Technology Development Site \(DRTDS\)](#)

[website](#)

All questions are to be submitted through the [Submit a Question button within the Bidding System](#)

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Part 1 Challenge Invitation

1.1 Intent

The Regional Municipality of Durham (“the Region”) is requesting applications from qualified Applicants to develop a solution that will provide an innovative solution that increases awareness of risks associated with high-speed county curves and its intersection conflict points.

The Region recognizes the opportunity of working with businesses of all sizes - including entrepreneurs, small and medium enterprises, and start-ups - to meet the current and emerging needs of the community. The Durham Regional Technology Development Site (Durham RTDS) enables the Region to find businesses to innovate and collaborate with, to achieve solutions that are not just for the municipal sector but built with the municipal sector.

The Durham RTDS is funded by Ontario Centre of Innovation (OCI) as part of the Ontario Vehicle Innovation Network (OVIN) program.

Similar to the province, where 81 per cent of the census areas in Ontario are rural, the majority of Durham’s vast 2,500 km² are also rural. This is similar across the province with 81 per cent of the census areas in Ontario classified as rural.

The Region of Durham is launching a challenge to innovators and businesses under the theme to address Safe and Accessible transportation in rural areas. Through [Durham Vision Zero Strategic Road Safety Action Plan](#), Durham Region is working to create safer roads for drivers in our rural areas.

The Region of Durham is launching a challenge to innovators and businesses under the theme of ‘*Connected and Smart Mobility*’.

We challenge the business community to make our rural skewed intersections (county curves) safer for road users with technology or other innovative solutions

that increases awareness of risks associated with high-speed county curves and its intersection conflict points. Successful challenge participants will be able to pilot solutions at high-risk Regional intersections.

For more information, visit [Durham Region Technology Development Site \(DRTDS\)](#).

1.2 Value Provided to Successful Applicant(s)

If selected, the Successful Applicant(s) will collaborate with Regional staff from relevant departments to tap into their subject expertise and gain access to relevant infrastructure and data to carry out the solution.

To ensure the success of this challenge, the Region will provide:

- Dedicated check-ins and working sessions with Regional staff;
- Access to program expertise around challenge-based procurement, municipal innovation, and municipal innovation procurement; and
- Policy, strategic and operational advice from Regional staff.

Based on interest and needs of the Successful Applicant(s), they may also access technical expertise and resources from Ontario Tech University and Durham College and/or business advisory services from Spark Centre.

1.3 Expectations and Conditions of Participation in the Challenge

It is the Region's expectation to select one Applicant for inclusion in this Challenge. An Applicant may however choose to partner with other companies for the purposes of participating in this Challenge.

1.3.1 Conditions of Participation:

- a) If the Region should decide to award participation in the program to an Applicant for this challenge, the Region will require the Successful Applicant(s) to sign a Challenge Agreement, attached hereto as Appendix A; and
- b) If the Region decides to purchase a solution after its development based on the assessment of intended outcomes, the supplier will be required to enter an agreement of purchase and sale with the Region, based on terms that will be negotiated between the parties.

During the Challenge, the Successful Applicant will be expected to work closely with the lead department(s) and abide by the meeting schedule and timelines agreed to in the Challenge Agreement.

1.4 Challenge Process**1.4.1 Getting into the Challenge**

- a) Through this RFP, the Region invites Applicants to offer solutions to the Challenge outlined in section 1.5, The Challenge.
- b) A selection committee may shortlist Applicants to be invited for a presentation.
- c) Each invited Applicant will spend no more than 2 hours with Regional staff to:
 - i. Present and demonstrate (virtually or in person) how the Applicant's proposal will create significant impact for the end users and the Region;
 - ii. Demonstrate that the proposed solution will address the desired outcomes described in the Challenge;

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- iii. Answer clarifying questions from the selection committee; and
- iv. Demonstrate how the Applicant would work effectively with Regional staff

Further details about these steps will be provided to those Applicants that are shortlisted.

- d) The Region will select and notify the Successful Applicant.

1.4.2 Participating in the Challenge

- a) The Successful Applicant will work alongside the relevant Regional department(s) and other end users for an estimated period of up to 12 months to demonstrate the proposed solution.

1.4.3 Assessment of Intended Outcomes

- a) During and at the conclusion of the Challenge, the Region will evaluate the solution based on the intended outcomes in section 1.6 and any other beneficial innovations achieved.
- b) The following scenarios are possible:
 - i. The Region may decide to continue working together with the Successful Applicant to develop the solution outside and beyond this Challenge;
 - ii. The Region may decide to purchase or otherwise invest in a solution and initiate negotiation, with the Successful Applicant, of a Purchase Agreement;
 - iii. The Region may prepare generic specifications for a subsequent competitive bid process to procure a clearly defined product; or
 - iv. Consider the Challenge complete and end the process with neither party making any further commitments.

1.5 The Challenge

Durham Region is working to create safer roads for drivers, pedestrians, and cyclists through the [Durham Vision Zero Strategic Road Safety Action Plan](#).

This challenge is data informed. We know that collisions caused by turning movements are the most common types of collisions at intersections in the Region—representing approximately one third of all fatal and injury collisions at intersections.

Given the horizontal curve configuration of a ‘county curve’, the skewed intersections inherently have a greater number of vehicle conflict points and atypical manoeuvres when compared to the more conventional intersections. These conflict points are prevalent at the local access road intersections that are unique types of conflicts and operational issues. These conflict points are differentiated by the paths drivers must maintain to access the local roads. Potential issues at the intersections include, but not limited to, conspicuity, driver expectancy and driver workload challenges.

Chosen Locations:

1. Regional Road 23 (Beach Road) and Commodore Road, Brock Township
2. Regional Road 23 and Thorah Park Road, Brock Township
3. Regional Road 23 and Beach Road/Thorah Concession 1 Road (Brock Township)

The ideal solution would be able to:

- Factor in the speeds of vehicles approaching and entering the curve
- Factor in road and weather conditions
- Interface with third party navigation systems

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- Notify drivers of potential conflicts and hazards
- Provide remote monitoring and data collection for:
 - Traffic volume and operating speeds
 - Near misses
 - Driver behaviour

We request that respondents to the Challenge have a product that is at [Technology Readiness Level](#) of 4 – 8.

In addition to the above, where feasible and appropriate, the Region may facilitate access to other non-Regional infrastructure assets (e.g., local municipal assets, private/institutional sites, etc.).

Deployment of solution(s) as part of this Challenge participation by the Successful Applicant must always adhere to highest safety standards.

If additional funding will be required for ongoing product development, the Region will support the Successful Applicant(s) in applying to research and development funding through the [Ontario Vehicle Innovation Network](#).

1.6 Intended Outcomes

The Region of Durham anticipates that a successful challenge applicant will work in collaboration with municipal staff to test and evaluate a technology for its ability to increase driver awareness of pedestrians and cyclists and improve safety of signalized intersections.

Potential for:

- 6–12-month pilot project using Regional infrastructure
- 6–12-month research and co-development with municipal staff

The proposed solution should provide the Region with a reasonably affordable implementation option and scalability that is reflective of a municipal environment guided by high standards of road user safety, risk management and liability.

1.7 Key Assumptions and Considerations

Any proposed solution will require extensive lab testing and approvals to ensure safe operation prior to any field deployment. Meeting all CSA and ESA requirements – NEMA standards for field hardware.

The proposed solution will be limited to accessing Regional infrastructure or other supporting/facilitating infrastructure only as required to demonstrate the solution. There will be limitations to the ability to connect to the Regional network and all decisions to connect or integrate into existing Regional infrastructure or other facilitated infrastructure will be at the sole discretion of the Region.

The successful participant challenge submission does not guarantee project funding through OVIN's R&D Partnership funds, however, if additional funding will be required for ongoing product development, the Region will support the successful challenge participant in applying for this funding.

The Region is committed to diversity, equity, and inclusion within its community and organization. The proposed solution should ensure alignment with the Region's values.

1.8 Data

The Applicants shall outline specific data requirements that their proposed solution will rely upon for implementation and/or monitoring of outcomes.

1.9 Current Processes

Not applicable

Part 2 Challenge Evaluation and Selection of Applicants

2.1 Application

To be an Applicant to the Challenge program, please complete the Application Form posted on [Durham Region Technology Development Site \(DRTDS\)](#).

Applications for the Durham Region Community Challenge must be submitted through the [Durham RTDS website](#) on or before December 18, 2023 to be considered for the Challenge.

Applications will go through a two-stage process. The first stage will be an evaluation of the submitted application to select Applicant(s) for a second stage. Applicants selected for stage two will be asked to make a presentation (virtual or in person) on their solution to a selection committee.

2.2 Minimum Essential Requirements

Applicants must demonstrate that their solution meets the following requirements in order to move to the evaluation phase:

The solution is not currently being used in the market for same or similar application. However, it is acknowledged that applicants may propose solutions that are made up of technologies, software and other infrastructure transferable from other market spaces to the traffic sector. The intent of this Challenge is to work together to develop a solution to meet the goals herein.

The solution must be at a [Technology Readiness Level](#) of 4 - 8.

2.3 Evaluation of the Application

The Region will evaluate proposals based on the following criteria:

Challenge Evaluation Criteria Section	Weight Percentage
Section 1 - Experience (Qualifications / experience of applicant and team members)	20
Section 2 – Suitability (Assessment of how the proposed solution will meet the terms of the Challenge)	30
Section 3 – Meeting Challenge Goals (Proposed Solution Project Logistics)	20
Section 4 - Technical Readiness Level	5
Section 5 – Benefit to the Community (Assessment for benefits to economic development goals, or collaboration with other OVIN partners)	10
Presentation	15
Total Score	100

2.4 Selection of Successful Applicant(s)

The Region intends to include the top-scoring Applicant in the Challenge but reserves the right to accept any Applicant that the Region determines is in its best interest or reject any or all Applicants for any reason whatsoever. The Region's decisions in this regard are final and binding.

2.5 Notice to Successful Applicant and Execution of Challenge Agreement

The Successful Applicant will receive a written invitation to finalize the Challenge Agreement with the Region.

In addition to all of the Region's other remedies, if the selected Applicant fails to execute the Challenge Agreement or satisfy any applicable conditions within thirty (30) days of notice of selection, the Region may, without incurring any liability, withdraw the selection of that Applicant and proceed with the selection of another Applicant.

2.6 Potential Purchase Post Challenge

2.6.1 Challenge Results

Upon completion of the Challenge, the Region may decide to purchase a solution based on the assessment of intended outcomes. In that case, the supplier will be required to enter an agreement of purchase and sale with the Region, which terms will be negotiated between the parties.

2.6.2 Negotiation Process

Any negotiations will be subject to the process rules contained in the Terms and Conditions of the RFP Process and will not constitute a legally binding offer to enter into a purchase agreement on the part of the Region

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or the Successful Applicant and there will be no obligation on the part of the Region outside of the Challenge Agreement unless or until the parties agree on the terms of a purchase agreement.

Part 3 Challenge Terms and Conditions of the RFP Process

3.1 General Information and Instructions

3.1.1 Purchasing Representative

The RFP Contact for this Challenge is:

Kellie Dickson, Procurement Officer

3.1.2 RFP Incorporated into Proposal

All of the provisions of this RFP are deemed to be accepted by each Applicant and incorporated into each Applicant's proposal, unless specifically addressed and amended during contract negotiations.

3.1.3 Applicants to Follow Instructions

Applicants should structure their proposals in accordance with the instructions in this RFP. Where information is requested in this RFP, any response made in a proposal should reference the applicable section numbers of this RFP.

3.1.4 Proposals in English

All proposals are to be in English only.

3.1.5 No Incorporation by Reference

The entire content of the Applicant's proposal should be submitted in a fixed form, and the content of websites or other external documents referred to in the Applicant's proposal but not attached will not be considered to form part of its proposal

3.1.6 References and Past Performance

In the evaluation process, the Region may include information provided by the Applicant's references and may also consider the Applicant's past performance or conduct on previous contracts with the Region or other institutions.

3.1.7 Applicants to Bear their Own Costs

The Applicant will bear all costs associated with or incurred in the preparation and presentation of its proposal, including, if applicable, costs incurred for interviews or demonstrations.

3.1.8 Proposal to be Retained by the Region

The Region will not return the proposal or any accompanying documentation submitted by an Applicant. Information shared must be non-proprietary as it may be used to determine specifications for a future open competitive bid process.

3.2 Communication after Issuance of RFP**3.2.1 Applicants to Review RFP**

Applicants should promptly examine all of the documents comprising this RFP, and

- a) should report any errors, omissions or ambiguities; and
- b) may direct questions or seek additional information in writing to the RFP Contact. No such communications are to be directed to anyone else at the Region

3.2.2 All New Information to Applicants by way of Addenda

This RFP may be amended only by addendum in accordance with this section. If the Region, for any reason, determines that it is necessary to provide additional information relating to this RFP, such information will be communicated to all Applicants by addendum. Each addendum forms an integral part of this RFP and may contain important information, including significant changes to this RFP. Applicants are responsible for obtaining all addenda issued by the Region.

3.2.3 Post-Deadline Addenda and Extension of Submission Deadline

If the Region determines that it is necessary to issue an addendum after the Deadline for Issuing Addenda, the Region may extend the Submission Deadline for a reasonable period of time.

3.2.4 Verify, Clarify and Supplement

When evaluating proposals, the Region may request further information from the Applicant or third parties in order to verify, clarify or supplement the information provided in the Applicant's proposal. The response received by the Region will, if accepted by the Region, form an integral part of the Applicant's proposal.

3.3 Notification and Feedback

3.3.1 Notification to Other Applicants

Once the Agreement is executed between the Region and the Successful Applicant, the other Applicants will be notified by public posting in the same manner that the RFP was originally posted of the outcome of the procurement process.

3.3.2 Feedback Review

Applicants may request feedback after receipt of a notification of the outcome of the procurement process. All requests must be in writing to the RFP Contact and must be made within thirty (30) days of such notification. The intent of the feedback information session is to aid the Applicant in presenting a better proposal in subsequent procurement opportunities.

Any feedback provided is not for the purpose of providing an opportunity to challenge the procurement process or its outcome.

3.4 Conflict of Interest and Prohibited Conduct

3.4.1 Conflict of Interest

The Region may disqualify an Applicant for any conduct, situation or circumstances, determined by the Region, in its sole and absolute discretion, to constitute a Conflict of Interest.

3.4.2 Disqualification for Prohibited Conduct

The Region may disqualify an Applicant, rescind an invitation to negotiate or terminate a contract subsequently entered into if the Region determines that the Applicant has engaged in any conduct prohibited by this RFP.

3.4.3 Prohibited Applicant Communications

Applicants must not engage in any communications that could constitute a Conflict of Interest.

3.4.4 Applicant not to Communicate with Media

Applicants must not at any time directly or indirectly communicate with the media in relation to this RFP or any agreement entered into pursuant to this RFP without first obtaining the written permission of the RFP Contact.

3.4.5 No lobbying

Applicants must not, in relation to this RFP or the evaluation and selection process, engage directly or indirectly in any form of political or other lobbying whatsoever to influence the selection of the successful Applicant(s).

3.4.6 Illegal or Unethical Conduct

Applicants must not engage in any illegal business practices, including activities such as bid-rigging, price-fixing, bribery, fraud, coercion or collusion. Applicants must not engage in any unethical conduct, including lobbying, as described above, or other inappropriate communications; offering gifts to any employees, officers, agents, elected or appointed officials or other representatives of the Region; deceitfulness; submitting proposals containing misrepresentations or other misleading or inaccurate information; or any other conduct that compromises or may be seen to compromise the competitive process provided for in this RFP.

3.4.7 Past Performance or Past Conduct

The Region may prohibit a supplier from participating in a procurement process based on past performance or based on inappropriate conduct in a prior procurement process, including but not limited to the following:

- a) illegal or unethical conduct as described above;

- b) the refusal of the supplier to honour its submitted pricing or other commitments; or
- c) any conduct, situation or circumstance determined by the Region, in its sole and absolute discretion, to have constituted an undisclosed Conflict of Interest.

3.5 Confidential Information

3.5.1 Confidential Information of the Region

All information provided by or obtained from the Region in any form in connection with this RFP either before or after the issuance of this RFP

- a) is the sole property of the Region and must be treated as confidential;
- b) is not to be used for any purpose other than replying to this RFP and the performance of any subsequent contract;
- c) must not be disclosed without prior written authorization from the Region; and
- d) must be returned by the Applicant to the Region immediately upon the request of the Region.

3.5.2 Confidential Information of Applicant

An Applicant should identify any information in its proposal, or any accompanying documentation supplied in confidence for which confidentiality is to be maintained by the Region. The confidentiality of such information will be maintained by the Region, except as otherwise required by law or by order of a court or tribunal. Applicants are advised that their proposals will, as necessary, be disclosed on a confidential basis to advisers retained by the Region to advise or assist with the RFP

process, including the evaluation of proposals. If an Applicant has any questions about the collection and use of personal information pursuant to this RFP, questions are to be submitted to the RFP Contact.

3.6 Non-Binding Procurement Process

3.6.1 No Contract A and No Claims

This procurement process is not intended to create and will not create a formal, legally binding bidding process and will instead be governed by the law applicable to direct commercial negotiations. For greater certainty and without limitation:

- a) This RFP will not give rise to any Contract A–based tendering law duties or any other legal obligations arising out of any process contract or collateral contract; and
- b) Neither the Applicant nor the Region will have the right to make any claims (in contract, tort, or otherwise) against the other with respect to the award of a contract, failure to award a contract or failure to honour a proposal submitted in response to this RFP.

3.6.2 No Contract until Execution of Written Agreement

This RFP process is intended to identify prospective suppliers for the purposes of negotiating potential agreements. No legal relationship or obligation regarding the procurement of any good or service will be created between the Applicant and the Region by this RFP process until the successful negotiation and execution of a written agreement for the acquisition of such goods and/or services.

3.7 Reserved Rights and Limitation of Liability

3.7.1 Reserved Rights of the Region

The Region reserves the right to

- a) make public the names of any or all Applicants;
- b) make changes, including substantial changes, to this RFP provided that those changes are issued by way of addendum in the manner set out in this RFP;
- c) request written clarification or the submission of supplementary written information in relation to the clarification request from any Applicant and incorporate a Applicant's response to that request for clarification into the Applicant's proposal;
- d) assess a Applicant's proposal on the basis of: (i) a financial analysis determining the actual cost of the proposal when considering factors including quality, service, price and transition costs arising from the replacement of existing goods, services, practices, methodologies and infrastructure (howsoever originally established); and (ii) in addition to any other evaluation criteria or considerations set out in this RFP, consider any other relevant information that arises during this RFP process; and (iii) any act of bankruptcy; or receiver appointment on account of a bidder's insolvency or in respect of any of a bidder's property; or a general assignment for the benefit of a bidder's creditors;
- e) waive formalities and accept proposals that substantially comply with the requirements of this RFP;
- f) verify with any Applicant or with a third party any information set out in a proposal;

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- g) check references of the Applicant;
- h) disqualify an Applicant, rescind a notice of selection or terminate a contract subsequently entered into if the Applicant has engaged in any conduct that breaches the process rules or otherwise compromises or may be seen to compromise the competitive process;
- i) select an Applicant other than the Applicant whose proposal reflects the lowest cost to the Region;
- j) cancel this RFP process at any stage;
- k) cancel this RFP process at any stage and issue a new RFP for the same or similar deliverables;
- l) accept any proposal in whole or in part; or
- m) reject any or all proposals;

and these reserved rights are in addition to any other express rights or any other rights that may be implied in the circumstances.

3.7.2 Limitation of Liability

By submitting a proposal, each Applicant agrees that

- a) neither the Region nor any of its employees, officers, agents, elected or appointed officials, advisors or representatives will be liable, under any circumstances, for any claim arising out of this proposal process including but not limited to costs of preparation of the proposal, loss of profits, loss of opportunity or for any other claim; and
- b) the Applicant waives any claim for any compensation of any kind whatsoever, including claims for costs of preparation of the proposal, loss of profit or loss of opportunity by reason of the Region's decision

to not accept the proposal submitted by the Applicant, to enter into an agreement with any other Applicant or to cancel this proposal process, and the Applicant is to be deemed to have agreed to waive such right or claim.

3.8 Governing Law and Interpretation

These Terms and Conditions of the RFP Process:

- are intended to be interpreted broadly and independently (with no particular provision intended to limit the scope of any other provision);
- are non-exhaustive and will not be construed as intending to limit the pre-existing rights of the Region; and
- are to be governed by and construed in accordance with the laws of the province of Ontario and the federal laws of Canada applicable therein.