

Smart City Initiative - Reverse RFP

Caravela is pleased to offer this “Reverse” Request For Proposal that seeks interesting applications for our Smart City urban network. You bring the desire to capture data and put it to good use. We supply expertise and systems to make it a reality. (More details outlined below). Proposals will be selected, one from a For-Profit organization and one proposal from a Not-For-Profit organization.

A Smart City urban network collects data from sensors measuring environmental conditions or physical objects such as roads, bridges, waterways or buildings. The collected data is processed and analyzed to help manage and monitor those things, or is used to provide insight into the workings of an urban environment.

Smart City networks track data from sensors that detect things such as: Fluid, humidity, flow, pressure, temperature, gas, water, tilt, proximity, position, chemicals, environment, magnetism, radio, speed.

About the Caravela Smart City Network

The Caravela Smart City network is a wireless LoRa network. LoRa networks are specifically used for low-power, long-range sensor applications. LoRa sensors do not need a traditional power source, being able to function for years on a button battery or on solar energy.

Sensor data is reliably captured within a 5-kilometer (3-mile) radius of a service antenna that acts as a “gateway” collection point. The gateway sends collected data to our data center.

Security

The data is secure. Each sensor is registered with the gateway and data cannot go anywhere else. Both the LoRa and cellular networks are 100% separate from any corporate IT network.

Details:

Caravela will bear the cost of the following component parts associated with the winning proposals:

- Project design
- Antenna (cost and placement*)
- Network integration and cellular backhaul
- Database (design, provisioning and hosting)
- Visualization software tool (Integration, presentation of Open Source Grafana)
- Sensors (cost**, sourcing, placement***)
- Ongoing operating costs

Terms and Conditions:

1. * Placement of the antenna depends on the application. We can provide all of the integration and expertise, but possibly not a rooftop location or something else appropriate.
2. ** Caravela will cover the cost of sensors up to a \$500 maximum. While many sensors cost as little as \$2, some specialized sensors can cost \$1,000 per sensor, depending on the application.
3. *** Depending on the application, Caravela may require the successful bidders provide assistance placing the sensors should both parties agree that the application requires such assistance.

4. Caravela expects to establish a mutually beneficial agreement with recipients for a duration of 6 – 12 months from the start of data gathering, with an option to negotiate an extension prior to contract end.
5. Any data produced is wholly owned by the successful bidder.
6. Any publication or publicity resulting from the data production must explicitly credit Caravela with having been responsible for the project design, execution, plus production of data and any insights attributable to Caravela.
7. Respondents and sensors must be within a 100-mile radius of Milwaukee, Wisconsin to allow for face-to-face meetings and effective project management.
8. Questions are due by Friday December 13th 2019
9. Submission deadline for Q1 2020 - Monday January 13th 2020
10. Awards will be announced Friday January 24th 2020.
11. Please send questions and submissions to ifavill@caravelaiot.com

How to Respond to this Reverse RFP:

There are no hard and fast rules or structure you need to conform to. Simply give us an understanding of what type of data you'd like to capture, the parameters you see that the project might entail, and how you would use the data to change your company, our community or the world! The sky is the limit. (Or is it?)

We look forward to hearing from you!

Learn more about us at CaravelaloT.com.