

Overview

| City Name | Project Name | Tech Area | Budget for Solution | City Point of Contact |
|---------------|----------------------------|----------------------------|---------------------|--|
| New York City | Real-Time Flood Monitoring | Clean Energy & Environment | \$90,500 | Rebecca Fischman, rfischman@cityhall.nyc.gov Paul Rothman, prothman@cto.nyc.gov |

Project Briefs

Project 1: Real-Time Flood Monitoring

- **Project Scope. Please provide project narrative. Outline the problem that needs a solution and include high level timeline and end product. Be clear and succinct.**

The City of New York and ESD are looking to expand in-progress, real-time flood monitoring pilot projects led by the City University of New York (CUNY) and New York University (NYU) to help understand flood events, protect local communities, and improve resiliency. Both testbed sensor sites, Gowanus, Brooklyn, and Hamilton/Howard Beach in Queens, have a history of nuisance flooding and the City relies on local residents to document the scale and scope of water on the streets. The software solution must act as an online data dashboard for residents and researchers to access the collected flood data. We aim to begin the work in January 2021, and as design advances, the team will facilitate participatory workshops to inform interface development. By early June, the software platform will be ready for public release and data collection will begin. The final project report will be released in December.

- **Ideal Technology Solution**

The overall intention of the project is two-fold: deploy a network of connected sensors in Gowanus, Brooklyn, and Hamilton/Howard Beach, Queens, and develop a software platform to integrate, store, and disseminate the collected data. This grant opportunity will focus on the development of the online data dashboard and backend that will enable residents and researchers to access the collected flood data. The software solution will need to integrate data collected from sensors and other sources (precipitation, tides, etc.). The team is interested in working with companies or nonprofits that can develop open-source software that can be used by academia and municipalities in perpetuity. The sensor design and software platform will be documented and shared in a way that it can be used as a reference for other municipalities.

- **Required Cybersecurity and Privacy Standards**

Any technology solution must align with the New York City's cybersecurity and privacy policies. The City of New York's cybersecurity and privacy requirements are available here:

<https://www1.nyc.gov/site/doitt/business/it-security-requirements-vendors-contractors.page>

https://www1.nyc.gov/assets/moip/downloads/pdf/citywide_privacy_protection_policies_and_protocols.pdf

Smart Cities Testbed Project Brief

- **Project Funding: \$90,500**

We are expecting the project to cost roughly \$100,500 to execute over a 1-year timeframe. We are able to commit \$90,500 to the project and expect an in-kind or monetary contribution from interested companies to fill the other portion of the budget. The City of New York is looking for approximately \$10,000 contribution from the relevant technology company either through in-kind services or cash match to pilot its solution in the City of New York.

- **Other Considerations & Helpful Info**

To understand the community science flood reporting work that CUNY (via the Science and Resiliency Institute at Jamaica Bay) is doing, please go to: <https://www.srijb.org/jbfloodwatch/>

To learn more about our community partners in Gowanus, go to:

<https://gowanuscanalconservancy.org>

<http://gowanusbydesign.org>

And, for more information on New York City's coastal flood hazards, visit:

<https://dcp.maps.arcgis.com/apps/webappviewer/index.html?id=1c37d271fba14163bbb520517153d6d5>