Overview

City Name	Project Name	Tech Area	Budget for Solution	City Point of Contact
Syracuse	Vacant Structure Monitoring and Inspection	Other Emerging Tech	$50,000	Jen Tifft, jtifft@syrgov.net

Project Briefs

Project 1: Vacant Structure Monitoring and Inspection

- **Project Scope.**
  The city of Syracuse has more than 1600 vacant buildings that it regularly monitors to ensure public and building safety. This project seeks to modernize and enhance the City's capabilities to monitor its vacant buildings by using sensor technology deployments that can lead to scalable and long-term solutions. The goals of the project are to make it quicker/easier for an inspector to identify safety issues that could lead to damage to the vacant property or neighboring structures, such as water damage, fire/heat indicators, compromised doors/windows, or exterior code violations like tall grasses, snow accumulation or illegal trash dumping. We will develop an early-warning system for when building inspectors should be dispatched outside of their regular scheduled visits to a building.

- **Ideal Technology Solution**
  The City of Syracuse is looking to leverage hardware and software technology for this project. We will evaluate a solution's performance based on how it can accomplish or simplify tasks typically carried out by building inspectors related to evaluating the health of the interior structure of a building (i.e. leaky roofs, deteriorating floors, water damage, determining if locked or boarded windows/doors have been opened, etc.), state of the building's exterior (i.e. grass above 10' in height, snow accumulation, trash presence, etc.) and determining signs of unauthorized human presence. In particular, we are interested in the deployment of integrated sensor arrays that can capture a wide set of environmental and building related information on a continuous basis to assess the health of a vacant building.

  We aim to have three sites in the city with a minimum of three vacant buildings clustered at each site to assess and test a technology solution. In-building sensor arrays should be deployed in at least two floors of the selected buildings at each site. Data from the sensors should be easily aggregated and processed to facilitate the elaboration of dashboards (vendors will work with City designated professionals/institutions to provide access to sensed data). Additionally, we seek video/image analysis solutions for the assessment of the status of the exterior of vacant buildings. For this purpose, one of the building sites must be provisioned with an exterior mounted video-camera solution with associated image analysis processing capabilities to provide useful information of building health. For all sites, we also seek a software solution/product that can process video feeds from police cameras to assess the condition of the exterior of vacant buildings in the camera's field of view. These solutions must be able to

transmit video monitoring and analysis data to the appropriate city department. Data must be stored for a minimum of six months to a city approved data storage repository.

- **Required Cybersecurity and Privacy Standards**
  Any technology solution must align with the City of Syracuse's privacy and security policies. One of our primary data privacy principles is that we do not collect more data than we need – so while we may deploy devices that could capture ancillary images or information, our expectation is that devices are configured to only record or save data that is the target of evaluation. The City of Syracuse's privacy policy is accessible [here](#). The City also follows ISO 27001 information security standards.

- **Project Funding: $50,000 for Solution (not including any in-kind contributions from companies)**
  We are expecting the project to cost roughly $100,000 to execute within a 1-year timeframe. We are able to commit $25,000-30,000 to the project and expect a minimum in-kind or monetary contribution from the relevant technology company of $20,000 to pilot its solution in the City of Syracuse. The ESD grant is roughly $50,000.

- **Other Considerations & Helpful Info**
  The City of Syracuse and Syracuse University entered into a data sharing agreement in 2019 which will provide governing standards and protocols for data collection, analysis, and storage related to this project. Relevant information can be provided upon request.