

DEPARTMENT OF FINANCE LEGISLATIVE SUMMARY
Proof of Concept Smart Technologies

Ordinance No.: 884-2022

Purpose of the Request:

The purpose of this request is to authorize the City of Cleveland to enter into one or more agreements with Case Western Reserve University ("CWRU") and Cleveland State University ("CSU") for the purpose of collaborative educational pilot project aimed at establishing a proof of concept solution to monitor and address illegal dumping activity utilizing a Smart City initiative ("Project"). The partnership between CWRU's Institute for Smart, Secure, and Connected Systems (ISSACS) and CSU's T.E.C.H. Hub is identified as the IoT Collaborative. The IoT Collaborative coordinates staff and students delivering on Smart City solutions and AI development (modeling) with IoT and Edge Computing devices. The City of Cleveland intends to partner with the IoT Collaborative on this Project for the deployment of a Smart Streetlight with cameras and the development of AI components to monitor a corridor for illegal dumping activity.

This partnership benefits CWRU, CSU, and City of Cleveland in modeling and enhancing its foray into Smart City programs:

- City of Cleveland will utilize its own cameras and video capture equipment for the corridors to be monitored.
- CWRU/CSU's IoT Collaborative staff and students will develop AI models to recognize illegal dumping activities and alert authorities when a monitored view approaches a threshold or concern to be investigated.

The intent is for the AI model to be developed in a curriculum format, and tested/piloted on campus in a controlled environment. Upon acceptance of test results and outcomes, the Smart Streetlight, cameras,

and AI model(s) can be deployed on two corridors in Cleveland (an east side focus and a west side focus), to begin the proof of concept for a Smart City illegal dumping solution.

There is no expected cost to the City of Cleveland. The City of Cleveland will, however, provide IT support and administrative services as necessary at such a time as to when the Smart City solution is ready for migration from campus testing to deployment at a City monitored corridor.

Desired Outcome:

The desired outcome is authorization for a Smart City proof of concept project to enhance city operations in mitigating illegal dumping activity through technological innovations and Smart City solutions.

Priority:

The priority of this item is urgent.

Cost:

N/A