

Overview

City Name	Project Name	Tech Area	Budget for Solution	City Point of Contact
Saratoga Springs	Connected Wi-Fi Street Lights	Smart Mobility & Traffic Flow Systems	\$100,000	Michele Madigan, michele.madigan@saratoga-springs.org

Project Brief

Project 1: Connected Wi-Fi Street Lights

- **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 Saratoga Springs is looking to incorporate smart technology in City operations by leveraging city owned street lights and turning them into “smart street lights” that can deliver public Wi-Fi to residents of low-income housing and along Putnam Street in the downtown business district.

During this unprecedented pandemic, the City recognizes that Wi-Fi in public spaces increases equity and is a public service to its residents and visitors. Placing smart lighting in the right-of-way in front of the Jefferson and Vanderbilt Terrace low-to-moderate (LMI) income housing will allow users mobile access to a secure network, enabling them to access, share, and use data on a variety of different applications without relying on unreliable disparate networks for access. The second location, Putnam Street between Lake Avenue and Spring Street, will test the public benefit smart street lights can have on the downtown business district and in particular bar and nightlife areas. Ultimately, this solution is expected to increase the safety and welfare of Saratoga Springs residents, businesses, and visitors.

The solution will provide:

- Wi-Fi coverage in downtown Saratoga Springs and for low-income residents in public housing and along Putnam Street;
- a secure wireless network for City applications; and
- an easy-to-access open network for internet access.

The ideal solution (or solutions) will be piloted over a 12-month time period, as follows:

- Device Selection: Day 1 – Day 45
- Access Point Buildout in Pilot Areas: Day 46 – Day 90
- Device Installation, Testing, and Software Installation: Day 91 – Day 140
- Ongoing Device Use Case and Feasibility Studies: Day 141 – Day 365

The technology solution will be incorporated into existing streetlight infrastructure and potentially leverage existing IT infrastructure. To find the specifications for city owned street lights, the city’s standard street light detail is located on the City website: <http://www.saratoga-springs.org/469/Standard-Details>. We aim to launch the project, with full installation of hardware/software, by June 2021 and monitor results through December 2021.

- **Ideal Technology Solution**

The City of Saratoga Springs is looking to leverage hardware and software technology.

Smart Cities Testbed Project Brief

- We are open to data collection via recordings or other avenues.
- The hardware component would be incorporated into our existing infrastructure.
- This technology must be able to withstand environmental factors including heat, rain, snow, wind, dirt, and freezing temperatures.
- The software solution must transmit monitoring or analysis of monitoring to the appropriate City department.
- Data must be stored for a minimum of one year. We can work with the vendor about where to store this data.

Please note:

- Fiber backhaul and access points will be installed in pre-defined testbed areas.
- New LED historic style street lights with smart city devices will be installed on the existing street lights, and various devices will be successfully connected to the City's Wi-Fi access points.
- Software installed by the Technology Company will successfully record data from said smart city devices.
- Data collected has the potential to reduce cost, improve City operations, and provide useful baseline information to City staff and Saratoga residents.

- **Required Cybersecurity and Privacy Standards**

Any technology solution must align with the City of Saratoga Springs' cybersecurity and privacy policies. The City of Saratoga Springs' cybersecurity and privacy requirements are available by request. Please contact Kevin Kling, Information Technology Systems Manager, 518.693.4076, kevin.kling@saratoga-springs.org.

- **Project Funding: \$100,000**

The City of Saratoga is expecting the project to cost roughly \$200,550 to execute over a one-year timeframe. The technology firm will receive \$100,000 from ESD towards the project and is expected to contribute approximately \$30,000 either through in-kind services or cash match, to pilot its solution in the City of Saratoga Springs. The remaining \$70,550 will be provided by in-kind City services and by professional services provided by NYSTEC, the Anchor Institution.

- **Other Considerations & Helpful Info**

Saratoga Springs partnered with the Capital District Transportation Committee (CDTC) to complete the [Municipal Smart City Street Light Conversion & Evolving Technology Guidebook](#) to explore how the City and other Capital District municipalities could benefit from the installation of smart LED street lighting.

The guidebook was structured to provide initial planning-level support for conversion efforts to energy-efficient LED and related smart street light technologies, and to assist in the evaluation of the purchase of utility-owned street lights. This project puts the guidebook recommendations into action regarding streetlight conversion.