

## Westminster Smart Cities Technology Summary

The Information Technology Department is active in Westminster's Smart Cities Task Force. The committee has regularly scheduled internal meetings with staff from multiple departments focusing on innovation related to smart cities technology. The city is also a founder in the Smart City Alliance group for the Front Range: [www.coloradosmart.city](http://www.coloradosmart.city). Several of those innovative initiatives are described below.

### Downtown Westminster Smart City Mobility Initiative

The Downtown Westminster Smart City Mobility Initiative is a transformational project in the heart of the U.S. 36 Tech Corridor in the Denver metropolitan region. The initiative will spur economic development, increase public private collaboration, eliminate an at-grade trail crossing, reduce crash levels, increase transportation options and improve the quality of life.

<https://www.cityofwestminster.us/TIGERSmartMobility>

The Information Technology Department has been engaged in building infrastructure in the new downtown since the planning stages. The City is looking for ways to successfully implement smart cities technology as a major objective. Engaging the technology needs of this new Downtown Westminster area, fits perfectly with that major objective. Laying the network foundation to apply smart cities technology has come in four phases:

- Phase One: Create a Fiber Optic Strategic Plan for the Downtown Westminster project.
- Phase Two: Select and hire a consultant to assist the City in evaluating business and network management strategies.
- Phase Three: Select a partner to assist the City in managing the downtown network.
- Phase Four: Implement a network solution with the selected partner.

Phase one, the completion of the Downtown Westminster Fiber Optic Strategic Plan, was completed in 2017. A consultant was hired to help evaluate strategies in the first quarter of 2018, completing phase two. For phase three, the consultant assisted the City in developing an "Invitation to Participate in the Leasing of Dark Fiber and/or Conduit within the Westminster Downtown Redevelopment Project" which will be sent out to potential partners for managing the downtown network. The invitation asks these vendors to provide models for management that would benefit the City. Once a partner is selected phase four will complete the project. Regardless of the model and vendor selected, the City will retain several pair of fiber specifically dedicated to smart city technologies.

### CDOT Grant for Trails and Bridges data collection

As an example of some of the task force's initiatives, the City's Parks, Recreation, and Libraries Division has applied for grants to fund the use of sensors throughout Westminster's trails and bridges to collect helpful information that could improve services. The division has negotiated a partnership with Kritek, a company specializing in the collection and management of traffic data. Through Kritek, the plan is to follow these steps:

- Submit an application to CDOT for sensor technology.
- If CDOT selects Westminster as a test city, sensors will be installed on the city's trails and bridges. Two types of sensors are being considered:
  - Bridge sensors: These sensors monitor water levels and notify nearby users of flooding or dangerous conditions. The notification can even suggest alternate routes.

- Trail Condition sensors: These sensors monitor the condition of the trail (snow, ice, water, etc.) and notifies the City and users of the current condition.

The sensors will be able to notify users through a variety of methods (social media, text messages, or directly update a website). The sensors will also be capable of notifying the City if problems with the sensor occur.

- Establish processes to collect data from these sensors and respond accordingly.

This project, and others like it, marks Westminster as a city serious about using smart cities technology and gaining the benefits from it.

### **Smart Cities CIP Request**

Westminster's Community Development Department, on behalf of the Smart Cities Task Force Committee, has submitted a capital improvement request for \$300K to be used in 2019 for smart cities technology pilot projects. These funds would be available to any department and disbursed by the Smart Cities Task Force to assist in projects implementing technologies aligned with the Smart Cities Task Force goals. These funds will also be used to participate in any initiative that comes from the Colorado Smart Cities Alliance. The City is offering the use of its developing Downtown Westminster and the recently built Westminster Station as prime areas for testing smart cities technology.