



Office of the City Manager
5200 Emerald Parkway • Dublin, OH 43017-1090
Phone: 614.410.4400 • Fax: 614.410.4490

Memo

To: Members of Dublin City Council
From: Dana L. McDaniel, City Manager
Date: August 13, 2019
Re: Council Goal – Most Connected Community

Background

The attached is a summary of several proposed pilot projects and an RFI/RFP process related to City Council's visionary goal to: "Become the Most Connected Community in the U.S." Staff will provide a brief overview of each of these at the work session.

Subsequent work sessions related to this topic are planned for September 16 and November 25. Depending on direction following the August 19 work session, staff will bring back progress updates at the September and November meetings.

Recommendation

For information only. If you have any questions or comments regarding this memorandum, please contact me at 614-206-3311 or dmcdaniel@dublin.oh.us .

Plan Summary for 2019 Council Goal No. 2, Become the Most Connected Community in the U.S.

Pursue pilots to find viable solutions to deliver broadband access and smart city capabilities to all our businesses and residents

Fujitsu 5G Pilot

- The City of Dublin, in partnership with Fujitsu, can install 5G equipment and a fiber optic network in the Historic Dublin Business area to prove the viability of connecting to Smart City devices and displaying data analytics visualizations.
- The current proposal is to temporarily install video cameras as sensors to measure vehicle activity in the Darby Street surface parking lot.
- Success in this Pilot project will provide the City with a temporary 5G wireless network deployment that proves the technology and establishes further partnership opportunities with Fujitsu,
- The pilot equipment will operate for 90 days.

Elysian Data/TRAXyL Business and Residential Pilot

- Dublin based company Elysian Data has become the exclusive distributor of TRAXyL fiber installation technology. Elysian is committed to promoting fiber connectivity to homes and businesses in Dublin. The TRAXyL system is emerging technology that allows fiber to be connected from an existing hub to homes and businesses without digging in the ground.
- Elysian and Dublin can install fiber from Dublin connection points to both homes and businesses. This fiber can be connected back to the Dublin Entrepreneurial Center/Metro Data Center, where both businesses and residents can access a catalog of competitive Internet Service Providers.
- The City will target 1 - 2 residential neighborhoods and one business location to prove the viability of the technology, the potential for widespread connections across the City, and a sustainable business model for long term broadband service provision.

Dublin Smart Neighborhoods Pilot

- Smart Home and IOT manufacturers and service providers, such as Voltaware, who measure and analyze electricity usage within a home, down to the specific appliance or device, can be placed within an emerging Dublin Smart Neighborhood Platform, that will allow homes to use data and analytics to achieve Smart outcomes.
- The City can leverage the proposed network infrastructure buildouts and home broadband connections to establish pilot data and analytics programs establishing the first Smart Neighborhoods.
- We are compiling a catalog of technologies for inclusion.

Dublin Digital Identity Pilot

- Software Verde was engaged by the City of Dublin to establish a Proof of Concept Digital Identity based on blockchain technology. This platform allows residents and businesses to establish secure, private connections with the City for the purpose of performing advanced data transactions.
- The City can Pilot the use of the digital identity to access new digital services. While not every Dublin resident has an account with the City, every volunteer who participates in the Pilot can use this new secure method for connecting their identity with the services and data of the City.
- A successful pilot will result in residents and businesses interacting with the City where they access services, provide their data, and register their choices and preferences. The technology includes a points system that rewards participants for behaviors such as responding to feedback questions, potentially providing the City with a richer, more reliable engagement opportunity for some residents and businesses.

Dublin Connected Neighborhoods RFI/RFP

- Staff continues to study various models of broadband deployment by municipalities particularly to residential neighborhoods. Such study is intended to inform staff and/or provide examples or models of potential Request for Information (RFI) and/or Requests for Proposal (RFP).
- Staff will likely recommend an RFI/P process to seek responses from the Broadband and Telecommunications industries to determine how they would approach the potential rollout of either pilot/s or broader Residential Broadband, or Fiber-to-the-Home (FTTH) in Dublin project/s. We will be seeking estimates on the cost of deploying fiber in the city on a pilot and wide scale.
- The RFI/P may also provide information regarding what infrastructure and network architecture will be necessary to deliver such a service to residents. Proposals that detail the service provision model, including billing and customer service, as well as the contract relationship of a service provider to the city will be explored through this process.
- The City will also gain valuable information about the feasibility of a Fiber-to-the-Home deployment through the planned FTTH Pilot Project that has been initiated.
- To combine the FTTH options with the concept of a Smart Neighborhood, we may also request as part of the RFI/P information regarding digital home services that firms would propose to deploy in conjunction with fiber. This could provide for possible partnerships among a fiber provider and other smart tech companies that work in the realm of smart home hubs, app development and/or smart service development/deployment. Creative ideas gathered through this aspect of a proposal process have the potential to set Dublin apart with smart home digital service delivery.
- The projected timeline for an RFI/P release is late October, with the possibility of proposals collected in late December/early January. The City will evaluate the proposals and make a decision at that point whether to move forward with one of the proposals, a combination of the proposals, or to step back from the initiative based on projected costs or other lessons learned at that point.