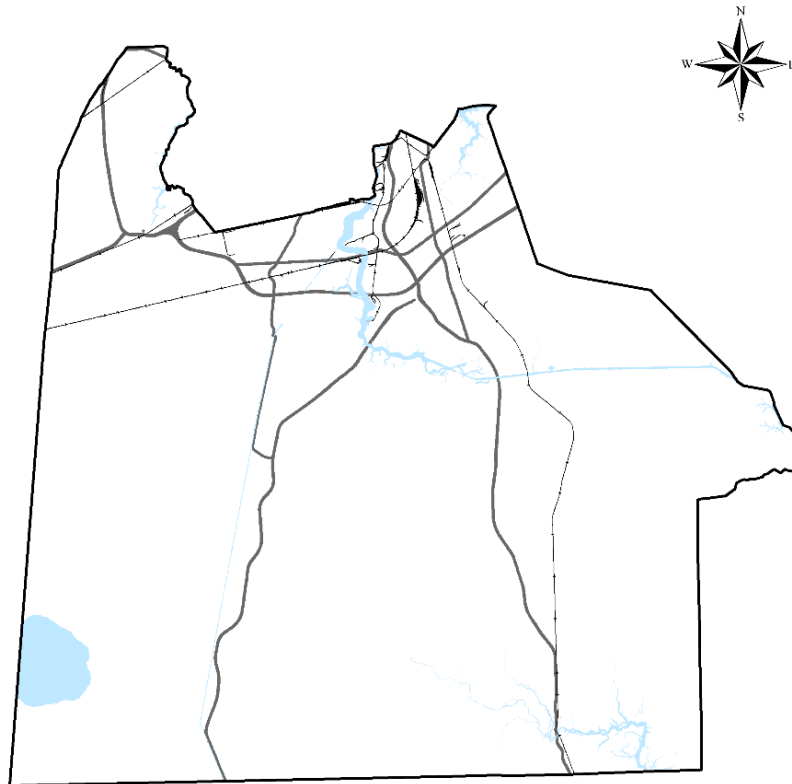


PLN-2232-2021-001

Chesapeake Next Generation Network (NGN) – Citywide Broadband



Proposal: Adoption of C-NGN Master Plan as being in substantial accordance with the adopted Comprehensive Plan.	
Applicant: City of Chesapeake Department of Information Technology	Public Hearing Date: September 9, 2020 Staff Report Date: August 26, 2020
	Project Planner: Benjamin Camas, AICP, Senior Planner
STAFF RECOMMENDATION	
<input checked="" type="checkbox"/> APPROVED <input type="checkbox"/> APPROVED WITH STIPULATION(S) <input type="checkbox"/> CONTINUED <input type="checkbox"/> DENIED	

FINDINGS:

1. The proposed project is in substantial conformance with the adopted Comprehensive Plan as required by 15.2-2232 et seq. of the Code of Virginia.
2. The proposed project supports goals and objectives contained in the Infrastructure chapter of the 2035 Comprehensive Plan.

STAFF RECOMMENDATION:

Based on the findings contained in this staff report, staff recommends that **PLN-2232-2021-001**, be **APPROVED**.

PROJECT DESCRIPTION:

The City of Chesapeake Department of Information Technology seeks approval to develop a fiber and wireless Chesapeake Next Generation Network (C-NGN) to enhance municipal operations, promote economic development, and encourage broadband offerings by the private sector, as being in substantial conformance with the adopted Comprehensive Plan as required by 15.2-2232 et seq. of the Code of Virginia.

The C-NGN Master Plan calls for 172 miles of underground construction to create a City-owned and Department of Information Technology (DIT) operated high-speed optical transport ring. To be constructed in three phases, the C-NGN will consist of four interconnected core sites with sub-second service failover in case of fiber cuts. It will connect 207+ sites, including redundant connections to key facilities, and 32 wireless gateways serving 70,000+ wireless endpoints, 260+ Utility assets, and 15 Safety/Traffic cameras and signs. The City will have 15 more facilities connected and forty times more bandwidth on average than it does currently. The C-NGN will reach across the entire City, plug into private data center services, interconnect with adjacent city networks and the SNA-RCR, and provide shared, redundant, high-capacity Internet access. The network will support future Smart City initiatives and enable Chesapeake to connect additional assets and locations for a nominal cost. The C-NGN will provide more bandwidth, more connections, cost savings, and a hedge against cost increases over time.

The proposed project would position the City for sustainable, technology based economic development, capitalizing on the city's abundant developable opportunities, geographic position, and proximity to trans-Atlantic cable landings, and support improvements in municipal center operations, services and overall quality of life. Great business and residential connectivity, along with smart public technology use, are essential for this purpose. The proposed project would also cost-effectively interconnect City assets and facilities to support improved municipal operations, provide a foundation for Smart City initiatives, and foster private broadband investment so all citizens and organizations have the access they need to prosper in Chesapeake.

PROJECT BACKGROUND:

Section 15.2-2232 of the Virginia State Code states that whenever the local Planning Commission recommends a Comprehensive Plan or part thereof for the locality and such plan has been approved by the local governing body, it shall control the general or approximate location, character and extent of each feature shown on the plan. If the feature is not shown on the plan, no street or connection to an existing street, park or other public area, public building or structure, public utility facility, etc., can be constructed, established, or authorized until the general or approximate location, character and extent has been submitted to and approved by the Commission as being substantially in accord with the adopted comprehensive plan or part thereof.

The City of Chesapeake hired Magellan Advisors in September 2019 to develop a Broadband Master Plan. Magellan Advisors was asked to clearly define the gap between

where Chesapeake is and where the City wants to be. There was extensive data gathering of the current state of Broadband Services in Chesapeake and the region. The project team conducted 20+ work sessions with City, Library, Chesapeake Public School personnel, and external stakeholder groups, involving more than 240 people in the process. Along the way, the project team learned that Chesapeake is generally underserved with relatively few providers, limited competition, and significant “Digital Deserts.” The City currently pays substantial sums for limited broadband services and has significant unmet needs, such as broadband access in rural areas of the City. The City has the opportunity to substantially simplify and consolidate WAN services, resulting in lower costs without encroaching on City, School, and Library network autonomy. By addressing this critical infrastructure need, the City will be able to ensure its network is financially and operationally sustainable and resilient.

STAFF ANALYSIS:

The City’s 2035 Comprehensive Plan outlines policy objectives related to communications infrastructure in the “Infrastructure” chapter. The “Infrastructure” chapter contains the following goal that directly addresses the importance of broadband infrastructure in the City:

Chapter 3, Goal 2 (page 128): The City will encourage the development of a robust, aesthetically sensitive, dependable and efficient telecommunications infrastructure in order to remain competitive in the global economy.

This section of the Plan (page 128) elaborates on this goal by stating that, “Broadband internet capability and wireless access will have an increasing role in enhancing the ability of a community to prosper as the knowledge economy matures. Although these services will continue to be primarily provided by the private sector, communities must recognize the importance of the telecommunications infrastructure in promoting economic development and smart growth principles.” The importance of broadband internet is further underscored in this section, with the Plan (page 130) stating that, “The City will promote the provision of fiber optic cable” and “the provision of broadband internet access is rapidly becoming an extremely important factor in economic and community development.”

The proposed project will directly support these goals and objectives through a robust (citywide) and aesthetically sensitive (primarily underground) broadband network that provides dependable and efficient internet connectivity for Chesapeake residents, businesses, and visitors. The proposed project would provide crucial internet capability and wireless access to underserved areas of the City and provide the City with an opportunity to cost-effectively interconnect City assets and facilities. The proposed project recognizes the increasing importance of internet connectivity to everyday life and the critical role internet access has in keeping us connected to one another.

The 2035 Comprehensive Plan contains clear support for the creation of Chesapeake’s Next Generation Network (C-NGN). The creation of a citywide broadband network would

directly contribute to several of the 2035 Comprehensive Plan's objectives specifically related to communications infrastructure. The proposed project would also support economic development and quality of life objectives of the Plan. As the role of and reliance on digital infrastructure has become even more pronounced over the past year and a half, the proposed project would provide great benefits to all who would access its services.

Based on the findings that the proposed project is in substantial conformance with the adopted Comprehensive Plan as required by 15.2-2232 et seq. of the Code of Virginia and the proposed project supports goals and objectives contained in the Infrastructure chapter of the 2035 Comprehensive Plan, staff recommends that PLN-2232-2021-001 be approved.