

**BOARD OF SUPERVISORS
FINANCE/GOVERNMENT OPERATIONS AND
ECONOMIC DEVELOPMENT COMMITTEE
ACTION ITEM**

SUBJECT: **AWARD AUTHORITY INCREASE/NOVEC Managed Transport Services**

ELECTION DISTRICT: Countywide

CRITICAL ACTION DATE: October 11, 2016

STAFF CONTACTS: Wendy Wickens, Information Technology
Ken Olson, Information Technology
Sandra Lineberry, Finance and Procurement

PURPOSE: To increase the award authority for the NOVEC Managed Network Transport Services contract.

RECOMMENDATION: Staff recommends the Finance/Government Operations and Economic Development Committee authorize the Purchasing Agent to increase the contract for NOVEC Managed Network Transport Services with NOVEC Solutions, Inc. (NOVEC) in the amount of \$471,990 for a new contract award amount of \$1,037,300.

BACKGROUND: In December 2012, the County government had two (2) managed fiber Internet connections (circuits) provided through Verizon with one installed at the Government Center and the second at the Department Information Technology (DIT) Center that connect the County to the Internet through Verizon's Internet backbone. The purpose of having two separate paths to the Internet is to ensure Internet connectivity in the event that the path through Leesburg, or the path through Ashburn becomes non-operational. However, the County continued to have risk because both managed fiber services were provided by the same carrier, Verizon, and both managed fiber services connected to the Verizon Internet backbone. In the event of a local Verizon fiber disruption, the two current Internet fiber connections would no longer provide the County a fiber path to the Internet. Also, in the event of a more global catastrophic event impacting Verizon backbone Internet services, the County would lose Internet connectivity regardless of the operational status of the Verizon managed fiber service.

Due to this potential risk, the County evaluated other service providers which included Comcast and NOVEC solutions and concluded that the NOVEC solutions was the best solution for the County for the following reasons:

- NOVEC was the only service provider that offered connectivity to the Internet from multiple vendors through its Equinix partner. Comcast was not carrier neutral.
- NOVEC was the only service provider with currently installed available fiber in the Government Center that provided a managed fiber services connection to the Equinix Data Center in eastern Loudoun County.

Therefore, the County awarded a sole source contract to NOVEC in the amount \$116,700 to replace the Government Center Verizon Internet circuit with a 200 megabits per second (Mbps) connection using a managed fiber service provider other than Verizon through a carrier neutral Internet service provider. This helped to ensure continued Internet service in the event of a local Verizon fiber network outage or a more global Verizon backbone Internet service problem. In addition, it was desired that the new fiber service terminate in one of Loudoun's County's third party data centers. The potential future placement of County servers in an alternate data center that is connected by fiber to the County network will greatly facilitate the provision of disaster recovery and continuity of operations services in the event of a disastrous event at the County data center.

Since 2012, the County has increased the capacity of the NOVEC Internet circuit from 200Mbps to 400Mbps for an additional \$13,050. By having a separate provider for the County's Internet circuit, the County can cut over between circuits when there is an issue impacting one particular circuit, thus improving up-time availability. By increasing the bandwidth from 200Mbps to 400Mbps, the County has increased the ability to support more customers and applications via the Internet. In June, 2013, an addendum was authorized for \$313,200 to provide redundant 10 gigabits per second (Gbps) point to point connectivity from the Government Center to the DIT Center. On March 17, 2016, the Board of Supervisors authorized the Purchasing Agent to increase the contract to add a redundant NOVEC connection for 17 County facilities in eastern Loudoun County in the amount of \$122,360 for a new contract total of \$565,310. These circuit connection enhancements have resulted in improved redundancy, capacity and availability of services delivered.

Currently, the County has two 400 megabit (Mbps) Internet circuits, one with Verizon and one with NOVEC/Cogent. The current circuits are reaching capacity and need to be upgraded to accommodate the increased load from existing applications such as the newly implemented Computer Aided Dispatching (CAD) and Records Management System, Enterprise Resource Planning (ERP) System, the Integrated Library System (ILS) as well as the future GeoHub. The additional capacity is necessary to avoid disruptions to County operations. NOVEC will provide connectivity to Equinix and RagingWire via two 10 Gig circuits. NOVEC is the only service provider that currently has fiber already installed on the County network at the Government Center, DIT, Equinix and RagingWire locations. NOVEC will then provide connectivity to two separate Internet Service Providers (ISPs), providing two independent two (2) gigabit (Gbps) Internet circuits. By redesigning the Internet circuit configuration and delivery, the County will reduce its cost for bandwidth (per megabit) by approximately four (4) times, and improve our access to Equinix and RagingWire with two (2), 10 Gbps links. The monthly fees plus non-recurring fees total \$471,990 for a 3-year term. The cost per Mbps for the current (800 Mbps) Internet circuits is

\$13.30. The cost per Mbps for the replacement circuits (4 Gbps) will be \$3.25. This provides a major increase in Internet bandwidth with only a minor increase in monthly cost.

ISSUES: The County internet circuits are at capacity and need to be upgraded, to avoid disruptions to Internet service. This redesign using NOVEC will provide two separate 2 Gigabit Internet circuits from two separate locations and providers, and reduce our per Megabit cost for Internet service.

FISCAL IMPACT: Sufficient funding for these services, including construction costs is available in the County adopted FY 2017 Department of Information Technology's operating budget. Future monthly recurring costs will be subject to Board of Supervisors appropriations.

ALTERNATIVES:

1. Authorize the Purchasing Agent to increase the contract for NOVEC Managed Network Transport Services with NOVEC Solutions, Inc. in the amount of \$471,990 for new contract amount of \$ 1,037,300.

OR

2. Do not recommend the contract increase; however, this alternative is not recommended for the reasons stated above.

DRAFT MOTIONS:

1. I move that the Finance/Government Operations and Economic Development Committee authorize the Purchasing Agent to increase the contract for NOVEC Managed Network Transport Services with NOVEC Solutions, Inc. for a new contract amount of 1,037,300.

OR

2. I move an alternate motion.