STAFF REPORT

TO: AC Transit Board of Directors
FROM: Michael A. Hursh, General Manager
SUBJECT: Network Improvements for Ellipse Enterprise Asset Management System

ACTION ITEM

RECOMMENDED ACTION(S):

Consider approving the purchase of new network routers and voice gateways to support the Ellipse Enterprise Asset Management system using the National Joint Powers Alliance (NJPA) agreement from the Value Added Reseller, CDW-G.

BACKGROUND/RATIONALE:

The Ellipse Upgrade Project was successfully launched in May 2017. Ellipse 8.7.6 is now being used by over 400 maintenance staff at all District facilities. Ellipse is being successfully used to manage work orders, parts and materials distribution and accounting, and numerous transit asset management efforts at the District.

The Ellipse Enterprise Asset Management (EAM) system is comprised of 1) hosted servers and District local area network infrastructure; 2) communications infrastructure; and 3) local workstations. Access to the Ellipse EAM software requires an internet connection to provide both stability and speed for the Ellipse user.

During the Ellipse software implementation, all Ellipse workstations and their necessary software were upgraded and replaced. The District is also in the process of installing new wired and wireless connection networks at each of bus division. The existing Cisco 2800 series routers and VG220 voice gateways are at end of life and no longer available for Cisco hardware and software technical support. This introduces a significant risk to internet access and network computing at those bus divisions.

Providing new routers at the five (5) District maintenance facility locations will complete the network infrastructure of the recent Ellipse software upgrade project. The new Cisco ISR-4451 routers and VG-310 voice gateways will improve network data throughput and provide reliable data and voice communications for the Maintenance Department. These network upgrades will improve the performance of business systems such as Ellipse, Hastus, and PeopleSoft for users within the divisions.

CDW-G has provided a complete hardware Bill of Materials using the NJPA contract.
BUDGETARY/FISCAL IMPACT:

The purchase and installation of the network switches will cost $225,000. Funding for the effort is included in the existing project budget for the Ellipse EAM as shown below:

<table>
<thead>
<tr>
<th>Funding Source</th>
<th>Funds (budgeted)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Federal Transit Administration -</td>
<td>$180,000</td>
</tr>
<tr>
<td>State of Good Repair Grant Funds</td>
<td></td>
</tr>
<tr>
<td>District Funds</td>
<td>$45,000</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>$225,000</strong></td>
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ADVANTAGES/DISADVANTAGES:

Approval of this purchase will allow the IS Department to replace its aging end-of-life router and voice gateway infrastructure at a time when all of the District’s core software applications are being upgraded. There are no disadvantages to purchasing the equipment as recommended.

ALTERNATIVES ANALYSIS:

The District could decide to keep the existing Cisco 2800 series routers and Cisco VG220 voice gateways and purchase used Cisco routers and gateways to supplement spares; however, since this equipment is past end of life there would be no hardware or software support to identify and resolve any interface problems or incompatibilities with the new technologies or network security threats.

PRIOR RELEVANT BOARD ACTION/POLICIES:

Board Policy 465, Procurement Policy

ATTACHMENTS:

None

Approved by: Michael A. Hursh, General Manager  
Ahsan Baig, Chief Information Services Officer  
Reviewed by: Denise C. Standridge, General Counsel  
Claudia L. Allen, Chief Financial Officer  
Sharon Dennis, Interim Director of Purchasing and Materials  
Michael Carvalho, Enterprise Network Engineer  
Prepared by: Patricia Broadbent, Senior Project Manager