TO: AC Transit Board of Directors
FROM: Michael A. Hursh, General Manager
SUBJECT: Cisco Access Switch Replacement Purchase

ACTION ITEM

RECOMMENDED ACTION(S):
Consider approving the purchase of new Cisco Catalyst 3850 Access Switches using the National Joint Powers Alliance (NJPA) contract from the Value Added Reseller CDW-G.

BACKGROUND/RATIONALE:
The existing Cisco Catalyst 3750 access switches provide the access layer to connect phones, computers, and wireless access points to AC Transit’s Local Area Networks (LAN) and Wireless Local Area Networks (WLAN). The access switches define all the subnet Virtual Local Area Networks (VLANs), route traffic between local VLANs, implement Quality of Service rules to prioritize different types of network traffic, and route network traffic to the core switch and routers.

The existing Cisco Catalyst 3750 access switches have several limitations. They do not have 10Gb network interfaces and cannot use the new 10Gb fiber installed at the General Office and at the divisions. The switches have limited backplane throughput and can only accommodate 100Mb access ports and 1GB uplinks. New hardware and software applications require higher network throughput. Most importantly this 13 year old technology is past end of life and is no longer eligible for manufacturer’s technical support. Updated software with security updates and patches is no longer available, and their continued use creates a liability for the district.

The new Cisco Catalyst 3850’s will provide a high speed reliable frontend infrastructure for AC Transit’s Local Area Network (LAN) and Wireless Local Area Network (WLAN). CDW-G has provided a complete hardware Bill of Materials using the NJPA contract.

BUDGETARY/FISCAL IMPACT:
The cost of the project came in under the $610,000.00 budget at $601,167.52. Budget funds will be used to purchase, install, and implement this project which was included in the FY 2017-18 Capital Budget.

ADVANTAGES/DISADVANTAGES:
Approval of this purchase will allow the IS Department to replace its aging end-of-life switch infrastructure. There are no disadvantages to purchasing the equipment as recommended.
ALTERNATIVES ANALYSIS:

The District could decide to keep the exiting Cisco 3750 access switches and purchase used Cisco switches 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.

Another alternative is to do a competitive procurement. Doing a competitive procurement will increase the equipment delivery date, extend the equipment installation date, add procurement costs to the project, and put the district at risk for several additional months in the event a security vulnerability develops or switch equipment failure occurs.

PRIOR RELEVANT BOARD ACTION/POLICIES:

Board Policy 465, Procurement Policy

ATTACHMENTS:

1. None

Approved by: 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
Prepared by: Michael Carvalho, Enterprise Network Engineer