



Major Network Upgrades Completed in One Week, in Record Time to Increase Security and System Availability

Frankie Jackson worked with the Network Infrastructure and Communications (NIC) team and strategic partners including Education Partners Solution and Layer3 Communications all during the week of **October 29, 2018 – November 2, 2018** to implement plans for upgrading the district's enterprise level network and taking security precautions. With Paula Ross as the lead, the following actions were implemented as precautionary measures.

- ✓ Increased the district's Cogent Internet bandwidth at Data Center 4 from 6 Gb to 12 Gb burstable to 20 Gb.
- ✓ As a pilot, at no additional cost to the existing ICTX contract, increased ICTX total bandwidth at Data Center 3 from 6 Gb to 10 Gb and ICTX added a 10 Gb connection to LEARN services.
- ✓ As a pilot, at no cost, added the LEARN's Distributed Denial of Service (DDOS) scrubbing for free through December as an immediate response.
- ✓ As a pilot, at no cost, implemented 10 Gb bandwidth of LEARN Peering and Caching to build infrastructure for "Safe and Secure Internet". The 10 Gb connection to priority content such as Amazon Web, Google and Microsoft offers secure and higher quality access to content.
- ✓ Optimized processes for identification and response to potential security issues and/or other Internet service disruption with Internal team, ICTX, Cogent, LEARN and Layer 3.

Next Steps:

- During November, use LEARN services for scrubbing, peering and caching for secured access.
- Upgrade the network's routing infrastructure.
- Evaluate a LEARN proposal for the pilot services through an interlocal agreement with ESC Region 4 to maintain services through June 30, 2019.
- Work with current providers of ICTX and PS Lightwave for access to LEARN services through June 2019 and leverage E-Rate funding currently and long-term when possible.
- Investigate increased Internet monitoring tools and services including the proposal from Layer 3.
- Continue to identify long term solutions for further strengthening security networking practices.