

Chronology Network Infrastructure Enhancement Phase II

The Division of Information & Instructional Technology (DIIT) is requesting to partner with StepCG for strategic technology investments aimed at bolstering DeKalb County Schools' cybersecurity, network reliability, and operational resilience. This initiative includes **Firewall Upgrade, Incident Response Package, Apex Managed Services, Managed VPN Failover Solution, and Aruba UXI Sensors** and will improve cybersecurity and connectivity, in addition to, enhancing instructional delivery, supporting DIIT team efficiency, and future-proofs the district's network infrastructure.

Firewall Upgrade – \$745,942.20

DeKalb County Schools needs to upgrade its firewall infrastructure to strengthen cybersecurity, support increased internet bandwidth, and maintain effective network management. Firewalls are critical for protecting district systems, blocking malicious traffic, and ensuring secure, reliable access to educational resources. StepCG will deploy next generation Palo Alto Networks firewalls with upgraded hardware, security subscriptions, management tools, and provide implementation support.

Benefits include:

- Supports increased internet bandwidth essential for modern digital learning
- Reduces latency and improves daily performance (e.g., updates, access to educational platforms)
- Enhances cybersecurity and scalability for future growth
- Eliminates performance bottlenecks that currently impact instructional and operational efficiency

Incident Response Rescue Package – \$32,000

Network stability is essential to instructional delivery, staff productivity, and district operations. Emergencies such as hardware failures, cyber threats, or service disruptions can occur without warning, requiring immediate and expert response. StepCG will provide remote and on-site support, real-time monitoring tools, engineering assessments, and vendor coordination during incidents.

Benefits include:

- Ensures swift resolution of incidents, minimizing instructional and operational downtime
- Identifies vulnerabilities proactively to prevent repeat issues
- Provides thorough documentation and strategic guidance to improve long-term resilience
- Offers 24/7 flexibility in response based on the severity of the issue.

Apex Managed Services – \$119,158.40

StepCG's Apex Managed Services will strengthen IT operations through their comprehensive managed services package offering continuous support and optimization. This program will include 24/7 network monitoring, Tier 1–3 technical support, proactive maintenance, vendor management, and strategic network assessment. This will enhance network reliability, reduce instructional disruptions, and extend the capacity of DCSD's internal IT operations.

Benefits include:

- Improves network uptime and instructional continuity
- Offloads routine IT tasks, allowing internal staff to focus on strategic priorities
- Enhances visibility and accountability through dashboards and quarterly reviews
- Ensures best-practice alignment via Information Technology Infrastructure Library (ITIL) standards

Managed VPN Failover Solution – \$96,875

To ensure business continuity and uninterrupted access to DCSD hosted applications and internet services, STEP CG’s Managed VPN will provide a secondary or tertiary connectivity path from schools to the datacenter. This alternate path, delivered over business class internet or 5G cellular, serves as a reliable backup when the primary DCSD-owned fiber is disrupted due to construction, weather, or other outages. StepCG will deploy SD-WAN and cellular WAN technologies at 25 strategic locations (starting with 16 network hubs) to create this path/connection.

Benefits include:

- Preserves instruction and business continuity even when primary fiber is down
- Targets high-risk points of failure to provide reliable service across 140 sites
- Uses dynamic routing to reroute traffic efficiently, maintaining core network functions
- Particularly effective during outages caused by construction or severe weather

Aruba UXI Sensors – \$21,876

Aruba User Experience Insight (UXI) sensors are a strategic investment to enhance the reliability and performance of DeKalb County Schools’ network infrastructure. These sensors simulate real user interactions such as connecting to Wi-Fi and accessing platforms like Google Classroom or Microsoft Teams to detect and resolve issues before they disrupt instruction. With real-time insights into Wi-Fi, DNS, DHCP, and application performance, IT staff can quickly pinpoint problems, reduce downtime, and support schools more efficiently. StepCG will install and monitor six Aruba UXI sensors at key locations across the district.

Benefits include:

- Simulates real student/teacher activity (e.g., connecting to Wi-Fi, using Google Classroom)
- Identifies issues in DNS, DHCP, and application performance in real-time
- Reduces the need for on-site technicians by enabling remote diagnostics
- Supports high-stakes testing and capacity planning by ensuring consistent digital access

Financial Impact:

Description	Cost
Firewall Upgrade	\$745,942.20
Incident Response Package	\$32,000
Apex Managed Services	\$119,158.40
Managed VPN Failover Solution	\$96,875
Aruba UXI Sensors	\$21,876
Total	\$1,015,851.60