



### Summary

This document is intended to clarify proposed spending for technology as a part of the proposed 2016 bond issue. All initiatives mentioned below align with the district's Long Range Technology Plan.

### **Total requested amount: \$9,138,903**

#### Network Refresh and Data Center Relocation

---

**Estimated Cost: \$4,000,000**

##### **Network Refresh**

In October 2015, a network risk assessment was performed by an outside third party. In addition to this assessment, an obsolescence analysis was also performed on the network infrastructure as well as the server infrastructure. The results of these assessments are available online at the Boerne ISD website.

The estimated cost for network refresh involves replacement of all obsolete and end of life network equipment. It also includes design recommendations that will improve network performance, stability, and reliability.

##### **Data Center Relocation**

Proposed in the 2016 bond issue is a relocation of the Central Office facility to the existing Fabra Elementary building. If approved, the existing Data Center will need to be relocated as well. The estimated cost includes the relocation and establishment of a new Data Center at the new facility.

The following LRTP strategies are addressed with this proposal:

##### **Strategy 4.1.4**

Identify and leverage cost-effective solutions for increasing the server infrastructure to support users and applications, maintaining data integrity, data security, redundancy, and reliability.

##### **Strategy 4.1.5**

Maintain, update, and expand the Storage Area Network capacity and functionality to accommodate growing District capacity needs.

##### **Strategy 4.1.6**

Maintain and update existing network infrastructure and perimeter devices in network closets and data center locations, including firewalls, web and spam filters, monitoring and reporting devices, and co-location of mission critical resources.

##### **Strategy 4.1.9**

Ensure that all campus network closets have adequate ventilation and HVAC units to extend the life of and obtain consistent service from the network equipment.

**Strategy 4.1.10**

Upgrade and maintain fiber optic cable and connectivity between campus MDF closets and IDF closets with appropriate current standards to support speeds of 10 Gigabit or greater, and maintain consistent, reliable backbone and access bandwidth across the campus LAN.

**Strategy 4.1.11**

Upgrade and maintain fiber optic cable and WAN connectivity between campuses and the data center to support speeds of 10 Gigabit or greater at secondary campuses and speeds of 1 Gigabit or greater at elementary and auxiliary campuses/locations to support District growth and needs.

**Strategy 4.6.5**

Evaluate and design a data center infrastructure that emphasizes redundancy, recoverability, scalability, and efficiency.

**Strategy 4.6.6**

Evaluate existing HVAC units and design an appropriate HVAC system for the data center to maintain adequate temperature levels.

**Strategy 4.6.7**

Research, design, and implement an enterprise-level power generator for the data center and Disaster Recovery site.

**Strategy 4.6.8**

Research, design, and implement a fire suppression system for the data center and Disaster Recovery site.

**Strategy 4.5.7**

Monitor, manage, and increase resiliency of Internet access and provide additional bandwidth when needed in support of applications and services for operations, and teaching and learning.

Continuation of LRTP Initiatives

---

**Estimated Cost: \$5,138,903**

**1. Maintain Existing Technology: \$2,258,952****Video Distribution and Broadcasting Initiative - \$830,000**

From interviews with campus administration, there was great desire to continue to support and enhance our campus broadcasting initiatives. These estimates provide solutions that allows every school to leverage available broadcasting and video distribution technologies.

The following LRTP strategies are addressed with this proposal:

**Strategy 3.3.1**

Explore online and distance learning opportunities at all levels to provide additional curriculum-based content, activities, and resources to students.

**Strategy 4.3.3**

Provide unified communications technology to support classroom collaboration, student engagement, and teaching and learning initiatives.

#### **Strategy 4.3.4**

Design and implement a video distribution system for live or recorded online video content streaming, distance learning and training, delivery of instructional content, meetings, and events.

#### **Equipment Obsolescence Initiative - \$1,428,952**

Through evaluation of our existing equipment it was identified that a number of devices are out of compliance with the Technology Obsolescence Plan and have reached their projected end of life status. Therefore, it is recommended that this equipment be replaced with newer, comparable technology.

- Voice (phones, etc.) - **\$260,353**
- Devices (laptops, desktops, mobile devices) - **\$250,172**
- Printers - **\$350,228**
- Wireless Infrastructure - **\$230,146**
- Existing Security Cameras - **\$63,053**
- Contracted services - **\$275,000**

The following LRTP strategies are addressed with this proposal:

#### **Strategy 3.5.4**

Design and implement consistent and reliable operations of equipment and services through efficient maintenance of service contracts for support, replacement and upgrades.

#### **Strategy 3.5.13**

Identify and replace or upgrade outdated technology equipment as defined by the Technology Lifecycle Replacement Plan.

#### **Strategy 4.1.2**

Implement a Technology Obsolescence Plan to refresh existing, aging equipment and introduce new technology.

#### **Strategy 4.1.3**

Upgrade district servers based on criteria defined in the Technology Obsolescence Plan.

#### **Strategy 4.1.8**

Maintain and update as needed district-wide wireless infrastructure and wireless security standards to ensure reliable wireless connectivity and adequate density and coverage.

#### **Strategy 4.1.15**

Maintain and expand the existing VoIP infrastructure to account for growth, needs, and emerging capabilities.

## **2. Plan for District Growth - \$2,879,951**

#### **Student Growth - \$599,651**

In the 2013 bond issue, Boerne ISD made a commitment to achieve a 3:1 and 5:1 student to device ratios in secondary and elementary schools respectively. In order to maintain this ratio, additional devices will need to be purchased.

#### **Student Device Access & Ratios Initiative - \$2,000,300**

From interviews with campus administration, there was a need to increase our student to device ratios to further enhance the learning opportunities of our students and to support the digital learning initiatives in the classrooms. To support these initiatives, the proposal calls for increasing student to device ratios in secondary (6-12) ELAR and

Social Studies classrooms to 1:1 within the classroom. In grades K-5, the proposal calls for increasing the student to device ratios to 3:1 in general classrooms, and 1:1 for identified special student populations (ELL, GT, Dyslexia, 504, etc.)

The following LRTP strategies are addressed with this proposal:

**Strategy 1.3.1**

to students to 1:1 for Grades 6 – 12 in ELAR and Social Studies classrooms, 3:1 in general education classrooms for Grades K-5, and 1:1 to support identified student populations (ELL, GT, Dyslexia, 504, etc.)

**Strategy 3.3.4**

Investigate and recommend a technology check-out program for students.

**Strategy 3.5.3**

Provide a detailed plan containing acquisition, support, and sustainability for student device programs for grades K-12.

**Bond Funded Technical Positions - \$280,000**

1 – Customer Support Specialist (Helpdesk) - **\$110,000.00**

1 – Campus Technology Support Specialist - **\$170,000.00**

The following LRTP strategies are addressed with this proposal:

**Strategy 4.5.1**

Employ appropriately skilled technology staff to promote successful implementation of technology projects and to provide the highest quality product and service at the most cost effective price.

**Strategy 4.5.2**

Employ highly qualified Network Administrators, Network Specialists, Subject Matter Experts and technical staff to provide a continual, consistent, high level of service.