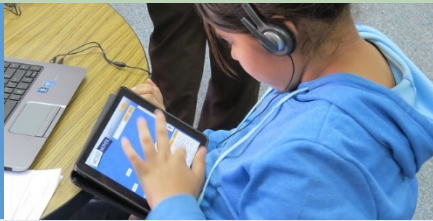# Boerne Independent School District

Information Technology Services

Engage

Inspire

2015 - 2016

Technology Obsolescence Plan

Enrich

Table of Contents

Introduction

The Information Technology Services Department strives to deliver 21st century technology and learning opportunities that foster academic excellence leading to global collaboration, digital citizenship, and a love for learning.

Technology should be available to all students, teachers, administrators, and support staff. Students need adequate access to technology and opportunities to learn the skills and responsibilities they will need to become global learners and leaders. In addition, students need equitable opportunities to utilize resources that enhance the curriculum, such as multimedia software, collaborative online learning spaces, productivity tools, and other online resources.

Technology must be integrated into the management of the classroom and the management of district business functions. All computers and devices play an integral role to provide efficient communication, collaboration, and better access to data for business planning.

An established standardization of hardware and software should be provided for all schools, central offices, and auxiliary facilities. These standards should remain current and maintain flexibility to support continuing instructional and administrative initiatives and programs throughout the district.

This plan outlines a proposal to replace and maintain computers, printers, servers, network infrastructure, structured cabling, audio visual equipment, software, and mobile devices.

Any pricing information provided in this plan is subject to change and may vary at the time of purchase.

Technology Mission

Information Technology Services will strive to provide a superior and innovative digital learning environment to prepare students for life long success, responsible digital citizenship, and sound character.

Technology Vision

Engage. Inspire. Enrich.

Information Technology Services will support our community in engaging students and adults through the use of technology, in a challenging educational environment that inspires creativity and enriches lives for today's realities and tomorrow's possibilities.

Overview

Executive Summary

Beginning with the 2015-2016 academic year, the Information Technology Services Department has plans to develop a District-wide Technology Obsolescence Plan. The purpose of this plan is to outline purposeful strategies to replace district computers, laptops, mobile devices, printers, audio visual equipment, servers, software, and network infrastructure on each campus, central offices, and auxiliary facilities. This plan does not include digital cameras, fax machines, speakers and audio, AV carts, scanners, TV's, and miscellaneous parts, such as math calculators, headphones, etc.

Technology Replacement Goals

1. Ensure the appropriate technology resources are available in all administrative and auxiliary facilities, classrooms and instructional spaces, and other identified locations to support the missions and initiatives of the District.
2. Assure that each staff member who uses technology resources in his/her position has equipment and devices of sufficient capability to fulfill his/her responsibilities.
3. Identify costs over time for the District's administrative staff, all District classrooms and instructional spaces, and District staff members for computers, printers, and peripherals used for instructional purposes.
4. Plan for the disposal of old equipment.

Device Replacement Criteria

The criteria to replace computers and other equipment will be reviewed annually by the Information Technology Department and modified as needed. Beginning with the 2015-2016 academic year, the criteria for replacement are:

- Age and model of equipment
- Administrative recommendations
- New staff members
- Campus and District growth
- Compatibility with current software requirements
- Manufacturer End of Life and End of Support cycles

Requests outside of this criteria are considered individually based on the department's submitted needs and available funds.

Purchase of Technology Equipment

All purchasing of technology equipment including but not limited to desktops, laptops, printers, LCD projectors, document cameras, interactive displays, and all software **shall be purchased through the Boerne ISD Technology Department.**

Liquidation

Computers and related equipment that have been replaced by new or donated units will be liquidated if it is determined that:

- The equipment does not and cannot meet the current District standard configurations.

- Equipment has a history of disrepair.
- The equipment is older than 5 years and cannot economically be repaired, or for which parts cannot be acquired.
- Equipment has no identifiable use within the District.

Donated Hardware

IT Technicians are only able to adequately familiarize themselves with a limited range of hardware. Non-standard equipment increases the likelihood of conflicts that can render a system unstable or inoperable, and increases costs for the District.

The Information Technology Department does not support donated computers, peripherals, or software unless they are in alignment with the hardware and software standards outlined in the **2015-2016 Minimum Standards Guide** – See Appendix. Approved items may undergo further review prior to approval and acceptance by the Chief Technology Officer.

Personal Equipment

Certain personal devices may be brought in from home for use within our network. All personal devices that you bring into the district for school use should be tagged with a high-visibility label provided by the Technology Department. Personal devices such as cell phones are exempt. Below is an example of what this label should look like. Labeling your personal devices helps Technology maintain accurate inventory and prevents any confusion.

Property of:

_____

Boerne ISD is not responsible for lost, stolen, or damaged personal property.

The follow list of personal devices **may not** be used for any purpose inside the district:

- Wireless Access Points or hotspots
- Home routers or modems
- Network hubs or switches
- Any other devices that would impede network performance, beacon to other devices, illegally or unknowingly track and report user activity or information, or devices that are prohibited by other district policies and regulations.

Hardware and Software Standards

All hardware and software purchases must follow the standards outlined in the **2015-2016 Minimum Standards Guide**. The Technology department will continue to evaluate updated standards for the purchasing of all technology hardware and software. **District staff members will notify the Technology Department before making hardware or software purchases.**

Hardware is approved by the Information Technology Department based on the following criteria:

- Initial cost
- Impact on network and support
- Vendor economic strength, support, and expertise
- Product/Technology maturity and availability
- Interoperability
- Use of industry recommended design standards
- Availability of appropriate documentation
- Security and internal control designs
- Learning curve and training for end users
- Consistency with business and education strategies
- DIR or other bid lists

Hardware Standards

Desktop and laptop computers are an indispensable work tool for every office at Boerne ISD. Faculty, staff, and administrators use their workstations in every aspect of their duties. Therefore, it is essential that those computers support current technology needs and are able to run the essential applications within BISD. This plan will help guide upgrades and purchasing of new equipment and facilitate the retirement of obsolete technology. The Windows platform of computers is the standard for Boerne ISD and will be updated as needed. For a complete list of device hardware minimum standards, refer to the **2015-2016 Minimum Standards Guide**.

User Responsibilities

It is important to ensure users make effective use of all technology systems and that the Technology Department efficiently contains the costs associated with providing IT support. Knowing how to use technology appropriately should be regarded as part of the professional responsibilities of all administration and staff. User responsibilities include:

- Using the standard hardware and software whenever possible.
- Acquiring training in the use of their systems by attending classes, reading instructions, manuals, and accessing online help.
- Performing routine backups of important data and files to the file servers or other secure locations.
- Using their systems and devices responsibly and ethically.
- Inform the Technology Department before purchasing hardware or software.
- Report any issues or damage immediately to their Principal or Supervisor, and the Technology Department.
- Report any lost or stolen items immediately to their Principal or Supervisor, the Technology Department, and their campus SRO.
- Run Antivirus and Malware scans on a regular basis.

Software Standards

Standard support software products are those that are widely used in Boerne ISD, such as Microsoft Windows, Microsoft Office, Adobe Reader, QuickTime, Google Apps for Education, Adobe Flash Player, Antivirus, etc. For these products, the Information Technology Department has the extensive skills, expertise, and resources necessary to provide in-depth assistance to users.

When a new computer is purchased, the latest approved versions of the software are purchased along with all necessary hardware. Older versions will not be transferred to new machines.

Software is divided into two categories:

1. Standard software that is provided on all computers in a particular school, grade level, area, or department
2. Approved software that may be purchased by schools or departments and is installed on select, licensed devices

Standard management software, an Internet browser, Microsoft Office, Antivirus, Adobe Reader, QuickTime, Adobe Flash Player, Updates, and other appropriate applications are loaded on all computers. An updated list of standard software is available on the **2015-2016 Approved Software List** – See Appendix.

In addition to the standard software provided to all BISD computers, schools may purchase software to use by grade-level or by department. **This software must be approved by the Technology Department prior to purchase.** A list of currently approved software is also available on the **2015-2016 Approved Software List**.

Unapproved Software

Any toolbars, widgets, add-ons, applications, or programs that hinder performance, track and report user activity, misguide users, misrepresent their purpose, or serve no educational or instructional value, are considered unapproved software applications and should be removed.

Lifecycle Standards

Operating System Lifecycles

Boerne ISD makes every effort to make sure all staff and students have the most current software necessary to perform daily functions. When software manufacturers update their software versions, they may terminate support for earlier versions of a product, making continued support difficult. The use of non-standard and outdated software can increase organizational costs for support and disrupt productivity. The table below shows the current lifecycle for the Operating Systems in use by Boerne ISD for the 2015-2016 academic year.

Operating System	Lifecycle End Date
Windows 7	January 13, 2015
Windows 8.1	January 9, 2018
Windows 10	TBD
Apple iOS 8	TBD
Apple iOS 9	TBD

A solid network foundation is critical in all operations of technology. Desktops, servers, laptops, iPads, and phones all run across the network. Mostly unknown to users, the switching and routing equipment is the lifeline to all devices and resources.

Network Equipment Lifecycles

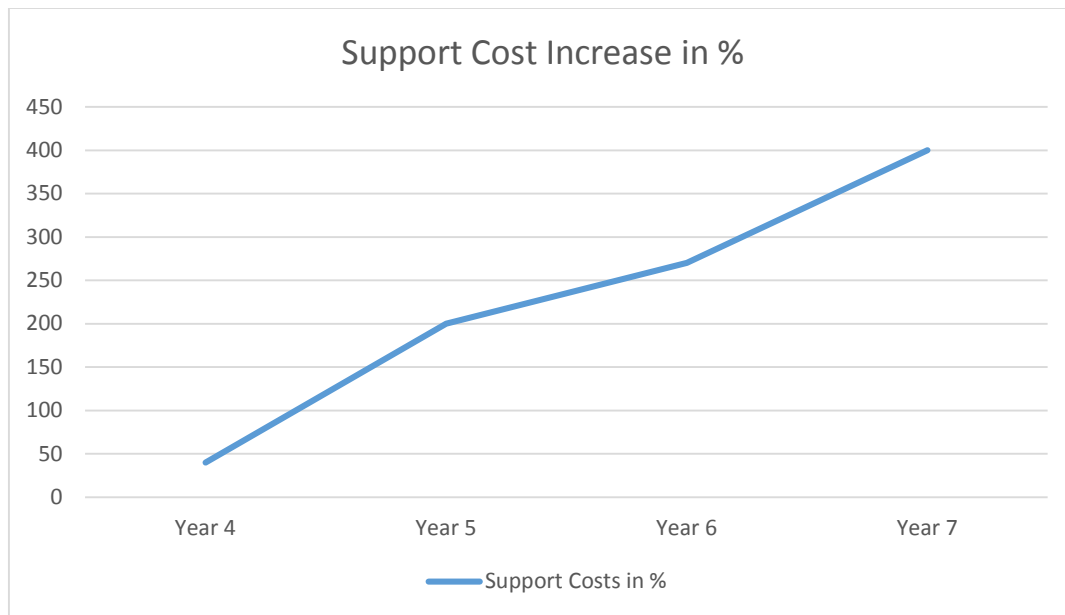| EQUIPMENT TYPE	END OF LIFE
Network Access Switch	7 years
Network Distribution Switch	7 years
Wireless Access Point	7 years

Server and Appliance Lifecycles

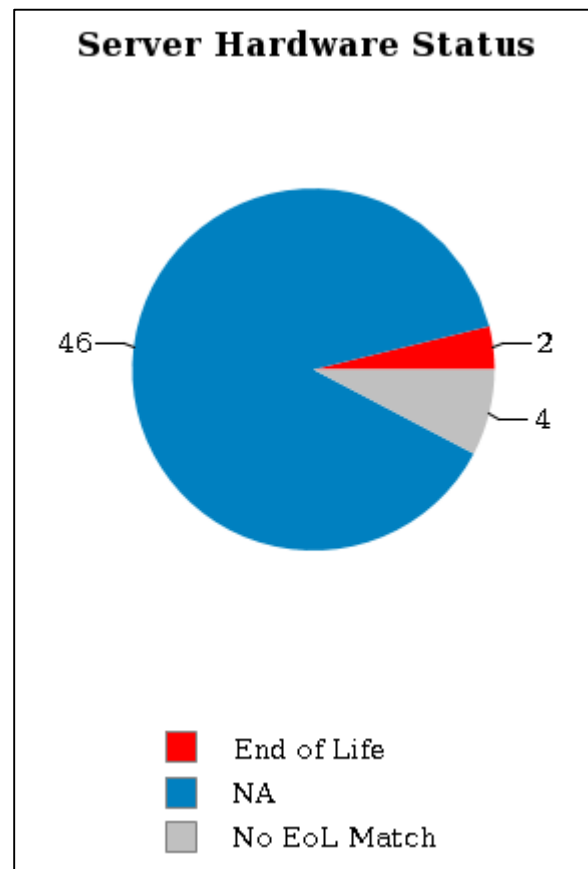| EQUIPMENT TYPE	END OF LIFE
Server	7 years

Support Cost Increase in %

Starting in the fourth year of the life of a server, support costs increase dramatically. Successful organizations use a manageable refresh cycle of every four years and/or 20% hardware refresh per year.

SOURCE: http://en.community.dell.com/dell-groups/dell_it_efficiency_metrics/w/data_center_performance_metrics/1351

The following charts reflect the **2015-2016** BISD network and server environment.

Infrastructure Hardware Status

- 13
- 3
- 91
- 36
- 156

Legend:
- EOX Not released
- End of Support
- LDoS 12 to 24 Months
- LDoS 24+ Months
- No EOX Match

Server Hardware Status

- 46
- 2
- 4

Legend:
- End of Life
- NA
- No EoL Match
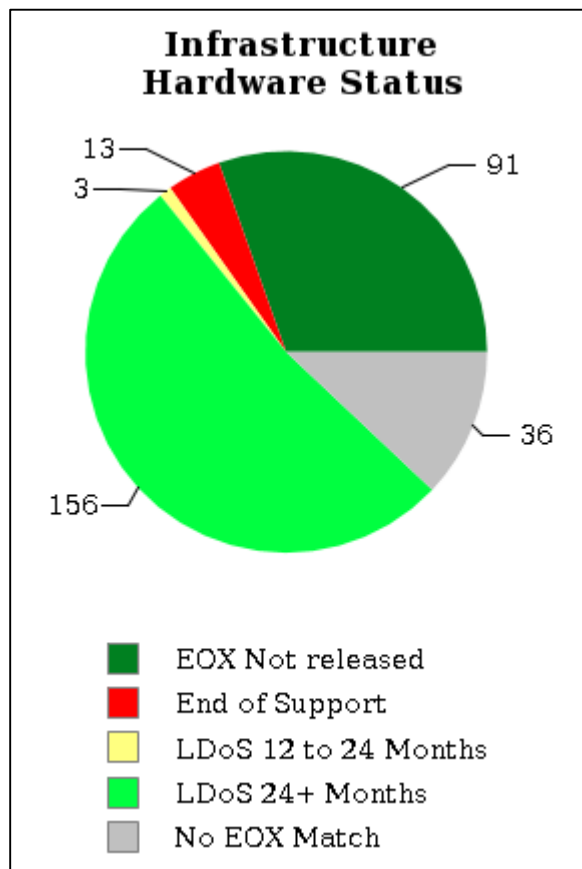
Technology Obsolescence Plan

The Boerne ISD Technology Department recommends an initiated cyclic Technology Replacement Plan to ensure that all technology located at district facilities is kept up-to-date. Currently, equipment is refreshed through bond funded initiatives or when it becomes irreparable. Most equipment is not under any formal replacement plan.

The technology replacement process will cover all computer desktops, laptops, printers, mobile devices, cellular phones, LCD projectors, interactive display devices, network hardware, servers, and wireless access points.

Technology Type	Recommended Lifecycle (Years)
Desktop	Staff: 5 – 7 Student: 4 – 6
Laptop	4 – 6
Mobile Device	3 – 5
Projector	4 – 6
Interactive Display (SMART Board)	5 – 7
Network Switch	5 – 7
Wireless Access Point	5 – 7
Server or Network Appliance	3 – 5
Printer	5 – 7
Cellular Phone	2 – 4
Surveillance Camera	5 – 7

Appendix

Minimum Standards Guide

STAFF DESKTOP	
PROCESSOR:	Intel Core i7
MEMORY:	8 GB
HARD DRIVE:	125 GB SSD (Solid State Drive) or 500 GB 7200 RPM SATA
OPERATING SYSTEM:	Windows 7 64-bit
NETWORK:	10/100/1000 LAN or 802.11 a/b/g/n WLAN (If applicable)
VIDEO:	Integrated Video

STUDENT DESKTOP	
PROCESSOR:	Intel Core i5
MEMORY:	8 GB
HARD DRIVE:	125 GB SSD or 500 GB 7200 RPM SATA
OPERATING SYSTEM:	Windows 7 64-bit
NETWORK:	10/100/1000 LAN or 802.11 a/b/g/n WLAN (if applicable)
VIDEO:	Integrated Video

STUDENT CTE LAB DESKTOP	
PROCESSOR:	Intel Core i5
MEMORY:	8 GB
HARD DRIVE:	125 GB SSD or 500 GB 7200 RPM SATA
OPERATING SYSTEM:	Windows 7 64-bit
NETWORK:	10/100/1000 LAN or 802.11 a/b/g/n WLAN (if applicable)
VIDEO:	1 GB AMD Radeon

STAFF LAPTOP	
PROCESSOR:	Intel Core i5
MEMORY:	8 GB
HARD DRIVE:	128 GB SSD
OPERATING SYSTEM:	Windows 7 64-bit
NETWORK:	802.11 a/b/g/n/ac WLAN and 10/100/1000 LAN (if applicable)
VIDEO:	Integrated Video
DISPLAY:	13.3" Diagonal

STUDENT LAPTOP	
PROCESSOR:	Intel Pentium 3700 Quad Core (1.6 GHz)
MEMORY:	8 GB
HARD DRIVE:	500 GB 7200 RPM SATA
OPERATING SYSTEM:	Windows 7 64-bit
NETWORK:	802.11 a/b/g/n WLAN and 10/100/1000 LAN (if applicable)
VIDEO:	Integrated Video
DISPLAY:	11" Diagonal

TABLET/IPAD	
MODEL:	Apple iPad Air 1
HARD DRIVE:	16 GB

MONITOR	
DISPLAY SIZE:	23"
AVAILABLE CONNECTIONS:	SVGA, Display Port, DVI

SMART BOARD	
MODEL:	680

CEILING MOUNT PROJECTOR	
MODEL:	NEC M271X

SHORT THROW PROJECTOR	
INTERACTIVE MODEL:	Epson 585wi
NON-INTERACTIVE MODEL:	Panasonic PT-DW740

2015-2016 Approved Software List

SOFTWARE TITLE	TYPE	COMPATIBILITY
Windows 7 64-bit	Operating System	
WINDOWS 8.1 64-bit	Operating System	
WINDOWS 10 64-bit	Operating System	
APPLE IOS	Mobile Operating System	IOS 7 or greater
ADDITIONAL SOFTWARE		
Office 2013 or greater	Productivity	Windows 7 or greater
Internet Explorer	Browser	Windows 7 or greater
Google Chrome	Browser	Windows 7 or greater
Adobe Flash Player		Windows 7 or greater
Adobe Acrobat Reader	Productivity	Windows 7 or greater
Java Runtime Environment		Windows 7 or greater
QuickTime		Windows 7 or greater
iTunes	Multimedia	Windows 7 or greater
Audacity and LAM Encoder	Multimedia	Windows 7 or greater
Cisco IPTV	Multimedia	Windows 7 or greater
VBrick	Multimedia	Windows 7 or greater
Microsoft Movie Maker	Multimedia	Windows 7 or greater
SMART Teacher Toolkit	Productivity	Windows 7 or greater
SMART Gallery Essentials	Productivity	Windows 7 or greater
SMART Notebook 11.1 or greater	Productivity	Windows 7 or greater
Kurzweil	Educational	Windows 7 or greater
Adobe Shockwave		Windows 7 or greater
SketchUp Pro	Educational	Windows 7 or greater
Google Earth	Educational	Windows 7 or greater
iStation	Educational	Windows 7 or greater
Scratch	Educational	Windows 7 or greater
Prezi	Productivity	Windows 7 or greater
ExamView	Educational	Windows 7 or greater
EverNote	Productivity	Windows 7 or greater
Notepad++	Productivity	Windows 7 or greater

Screencast-O-Matic	Multimedia	Windows 7 or greater
Google Drive Sync	Productivity	Windows 7 or greater
VLC	Multimedia	Windows 7 or greater
Java Development Kit	Developer	Windows 7 or greater
Adobe Creative Suite	Productivity	Windows 7 or greater
Chief Architect	Educational	Windows 7 or greater
Finale Notepad	Productivity	Windows 7 or greater
AutoCAD	Educational	Windows 7 or greater
LogerPro	Educational	Windows 7 or greater
Inspiration	Educational	Windows 7 or greater
KidPix	Educational	Windows 7 or greater
Mavis Beacon	Educational	Windows 7 or greater
Music Ace	Educational	Windows 7 or greater
Plato	Educational	Windows 7 or greater
Soliloquy	Educational	Windows 7 or greater
Typing Master	Educational	Windows 7 or greater
Doceri Desktop	Educational	Windows 7 or greater
Vision	Educational	Windows 7 or greater
TestNAV	Educational	Windows 7 or greater
OneDrive for Business	Productivity	Windows 7 or greater
Google Apps for Education	Productivity	Windows 7 or greater