Total Cost of Ownership

La Vernia ISD's technology plan is concerned with total cost of ownership (TCO) as it relates to balancing the need to maintain up-to-date technology with cost-effective long-term maintenance of the District's investment in technology. It is the goal of La Vernia's TCO efforts to maximize the utilization and efficiency of the technology infrastructure, including human infrastructure. TCO efforts help eliminate being saddled with "ten year old systems that have been upgraded to death" while insuring each system is utilized to its fullest during its useful lifespan.

The following strategies are integral components of the La Vernia ISD TCO effort:

- Insure that all infrastructure and equipment is produced by and procured from Tier One vendors in order to maximize the quality and longevity of all key components.
- Procure the longest possible manufacturer's warranty package upon purchase; typically, this is three years on workstations, one-to-three years on printers, and three to five years, 24x7x365 onsite priority response on key servers, core switches, routers and firewalls. Ongoing support contracts are maintained for the life of the servers, routers and core switches (typically five years or more).
- Track system service events to identify problem systems and to identify user-induced problems before they can lead to significant downtime events. User-induced problems are resolved through training and mentoring, while chronically problematic systems are either exchanged or retrofitted while under warranty, or retired and cannibalized when out of warranty.
- Provide pre-failure replacement of components utilizing integrated intelligent manageability with centralized notification of imminent component failure.
- Repurpose aging but still useful or warranted equipment by regularly purchasing new replacement units and moving the still-functioning older unit to a less demanding but still necessary role. An example of this is purchasing new workstations for a business technology lab and repurposing the older units to a keyboarding lab, possibly at a lower grade level. Another example of this practice is purchasing newer, high-performance executive workstations for the offices, and repurposing the older units to libraries for research and online card catalog use. Servers, switches, routers and printers are typically repurposed to training use and/or offline spares.
- Regularly evaluate workstations and printers, then repurpose or retire the older units. The evaluation cycle used by La Vernia ISD is typically every two years for workstations and printers, and every three to five years for servers, switches, routers and firewalls as appropriate and necessary.
- Retire systems that are too old to repair, are out of warranty and are not cost effective to repair, or no longer fulfill a need as the technology is upgraded. Retirement of older, out-of-warranty equipment, and equipment that no longer serves a useful purpose, is a key component of TCO. Too often, one is tempted to "maintain" the investment in older equipment by repairing and upgrading components long after it is economically feasible to do so. In general,

workstations, servers, and high-end printers are maintained under warranty for a three-year period. Lower-end printers, monitors, and end-user devices such as room-level switches and access points are typically maintained under warranty for at least one year. Once the warranty coverage has expired, needed repairs are reviewed on a case-by-case basis dependent upon the type of equipment and its importance to the overall operation of the technology infrastructure. As a general rule, a component will be automatically repaired if it still performs a useful, valued function, and repairs will cost less than 30% of replacement cost. If repairs cost more than this threshold, or the unit no longer serves a necessary function due to obsolescence or age, then the unit will be "written off" and typically cannibalized for parts or used for training purposes.

The final component of La Vernia ISD's TCO program is to supplement District technology staff with certified third-party assistance. Highly qualified outside vendors provide essential network support, supplemental workstation and printer installation, software installation and upgrading, computer repair, and user assistance including mentoring of teachers and one-on-one training. The cost savings realized by using outside specialists as needed instead of staffing additional full-time, high-wage positions lowers overall TCO throughout the District.