



TECHNOLOGY PLAN

FY2019 – FY2021

Abstract

Outlines the status and guiding vision for technology in the Kenai Peninsula Borough School District for fiscal years 2019 - 2021

Information Services

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TABLE OF CONTENTS

| | |
|---------------------------------------------------|----|
| Section 1: Information Technology Systems | 1 |
| FY19 Needs Assessment | 1 |
| Network Overview | 2 |
| School Connectivity | 3 |
| FCC E-Rate Program | 5 |
| KPBSD Use of E-Rate | 5 |
| E-Rate Funding History and Forecast | 5 |
| Infrastructure | 6 |
| Physical Wiring | 6 |
| Wireless | 6 |
| Virtualization Platform (Compute / Storage) | 6 |
| Services | 7 |
| Internet Access | 7 |
| Video Conferencing | 7 |
| Collaboration (Electronic Mail) | 7 |
| Online Tools (Office 365 / Google Apps) | 7 |
| Browsers | 7 |
| IP Telephony | 8 |
| Security Cameras And Access Control | 8 |
| Parent/Stakeholder Communication | 8 |
| Section 2: District Technology Plan | 10 |
| FY19 Needs Assessment | 10 |
| Funding Sources | 11 |
| Cooperation With KPB | 11 |
| Technology Plan History | 11 |
| Technology Replacement Cycle FY19 – FY21 | 13 |
| Hardware | 13 |
| Computers | 13 |
| Printers | 13 |
| Network Equipment | 14 |
| Software | 14 |
| Tracking | 14 |
| Distribution | 14 |

| | |
|-------------------------------------------------------------------------------------|----|
| Installation | 15 |
| IT Systems..... | 15 |
| The Image | 15 |
| The Network Log on..... | 15 |
| Files saved to a file server | 15 |
| Windows Profiles | 16 |
| Support..... | 16 |
| Support Tools | 17 |
| Repair Department..... | 17 |
| Section 3: Administrative Systems | 18 |
| Financial/HR Software – APECS..... | 18 |
| Student Information System – PowerSchool | 18 |
| Department History | 18 |
| Appendix A: Children’s Internet Protection Act | 22 |
| Agenda – June 4, 2012 School Board Meeting..... | 22 |
| School Board Minutes – Passage of Acceptable Use/Internet Safety Policy..... | 24 |
| School Board Policy AR6161.4 – Acceptable Use Policy – Internet Safety Policy | 32 |
| Appendix B: Technology Plan Contributors | 40 |

SECTION 1: INFORMATION TECHNOLOGY SYSTEMS

FY19 NEEDS ASSESSMENT

Looking toward FY19 and beyond, KPBSD's information technology foundation is sound. A historical and continued focus on systematically ensuring our infrastructure remains current prepares us well for today and the future.

Building Wiring: All buildings are wired with Category 5 Ethernet cable in all rooms. Today approximately half of the devices in buildings connect via Ethernet, with additional devices connecting wirelessly.

Wireless Access: All buildings have adequate 802.11ac wireless coverage to meet present demands, although the continued trend is toward wireless as the primary mechanism for connecting devices to a network. Equipment providing wireless connectivity was originally deployed in the 2010-era, with the most recent refresh occurring in the summer of 2015. We leverage E-Rate Category 2 funding for our wireless platform and will be looking to refresh this equipment in FY21-FY22. The district does our own wiring and configuration so adding additional wireless access points as needed is not particularly burdensome.

Switches/Routers: We are nearing completion of a move to 1Gbps switching districtwide. LAN ports serving critical services such as our telecommunications and wireless platforms have 1Gbps capacity, while services delivered to end-user devices also have 1Gbps capacity. Throughout FY19-FY21, we plan to continue the investment in our switching infrastructure by upgrading aging equipment through the E-Rate Category 2 program.

Security Cameras: The district has standardized on a comprehensive security camera system and inside security cameras were installed at one school as a pilot project late in 2011. Nearly all KPB-owned facilities in the district now have at least basic indoor and outdoor security camera coverage.

Present computers: Computer technology in the schools is of sufficient number (no more than 2.5 students per computer) and of high quality. Adequate software is in place as well. For nearly 20 years we have been successfully sustaining a three-to-seven (now six) year computer refresh cycle. Although historically desktop and laptop focused, in FY18, the technology replacement cycle offered a "web access device" tier for those situations where all services accessed are entirely online.

Future Devices and Platform: The information technology world is headed online and always available. The primary focus for integration in FY19-FY21 is to shift from the traditional model of IT, away from file servers and monolithic service delivery, to online availability of micro-services that are woven together utilizing a service management framework. The prime example of this movement is our initial adoption of Office 365. The Office 365 platform has the capacity to revolutionize how the organization interfaces with data and existing business processes with a focus toward efficiency.

Smartboards: We have Smart brand interactive white boards in many classrooms, however, this equipment is aging, and contributes to resource constraints within our support and repair staff time.

Wide Area Network: There are still a few under-served areas due to limited availability of telecommunications infrastructure, but overall, our WAN connectivity remains fundamentally sound with all schools connecting via a private WAN providing always-on connectivity among sites.

Videoconferencing: A Polycom videoconferencing bridge was installed summer 2012 and upgraded during the summer of 2016. In addition, we leverage Microsoft's Skype for Business platform. Having these pieces in place

provides large scale videoconferencing potential. We expect continued adaptation of the technology and further adoption in classroom environments.

Additional strains on network: Discovery Education, Smartboards, electronic textbooks, and more effective classroom use of technology all signal that increases in bandwidth will continue be necessary at unknown points in the future. Planning for and leveraging data to make these decisions remains critical to our mission.

NETWORK OVERVIEW

The district has been very aggressive in charting our own telecommunications future. In 1999 the district entered into a 10-year contract for 100 miles of fiber optic cable from Homer to Soldotna to Kenai and serving communities in-between. Homer Electric Association (HEA) strung fiber optic cable on their power poles for internal company use and offered to share that capacity with our school district. We partnered with the local internet provider to build out fiber from six HEA power substations to the school locations. In 2009 we entered into other long-term contracts to continue the service (10 years with HEA for two strands of dark fiber; 5 years with 5 one-year extensions with ACS to manage the fiber). Today 19 schools are connected with single mode fiber and an additional other 5 schools also use the fiber backbone for at least a part of their wide-area-network (WAN) connection. The fiber network has a gigabit Ethernet backbone between Homer-Soldotna-Kenai with 100Mbps drops off to elementary schools and 300Mbps drops off to secondary schools.

The availability of EP-LAN technology (formerly called Transparent LAN Services or Metro Ethernet) from Alaska Communications has continued to provide cost-effective options and we have continued to take advantage of the options available. In addition, GCI, SPITwSPOTs, and TelAlaska provide similar key communications services in regions they serve.

Our present WAN is configured in three primary regions: Central Peninsula, Homer, and Seward. Schools logically connect to one of three hub facilities within these regions, and each hub facility is connected logically together. District Office in Soldotna provides core services, aggregating all hub regions and connecting our WAN to the internet. Homer High serves as a hub aggregation facility for East End Road schools, while Seward Middle provides WAN aggregation for the Seward schools.

Homer High connects to the WAN backbone by way of the fiber optic network at 300Mbps. Seward is presently served by a 100Mbps connection to District Office, with an order pending to upgrade this circuit to 150Mbps.

Periodic network performance reviews will be made of school circuits as needed. These reviews are driven by historical trend monitoring to enable data-driven decisions for all bandwidth forecasts.

Our network is designed and built around centrally sharing services, so it is anticipated that the need for a strong and robust network will continue into the future. Our network is in a constant state of change as we are always either anticipating or reacting to instructional needs throughout the district. Add to that the operational requirements necessary to support a 6,500-node computer network and an unknown number of student-owned smart phones or other Internet-ready devices. There are a lot of behind the scenes activities necessary to keep everything operating seamlessly – and it all takes bandwidth.

We have a variety of bandwidth speeds serving schools and have not, nor will we ever, reach parity or equality of bandwidth in our schools. The bandwidth to each site is generally sized to meet the need at that school. ***Our goal is to provide every location with adequate bandwidth to satisfy their instructional and administrative needs.*** The need for adequate bandwidth continues to grow. Where once there was a rough correlation between the number

of computers at a school and the size of the bandwidth serving the school, changes in how many services are provided has changed that relationship. With server backups, in-house video servers, online teacher grade books, teachers taking attendance online, delivering software over the network, distance delivery of coursework, IP telephony, etc., services delivered over the network are growing independent of student population. We are indeed using the network.

SCHOOL CONNECTIVITY

The following table lists connectivity types and speed to each school, updated March 2019 to reflect the 2019 E-Rate Form 470 and Form 471 filing.

| Service Site | Category of Service | Type of Service | Bandwidth | Present Provider |
|----------------------|---------------------|-----------------|----------------------------|-------------------------|
| Aurora Borealis | Data | Fiber | 100Mbps | GCI |
| Chapman Elementary | Data | Fiber | 100Mbps | ACS |
| Connections | Data | Fiber | 1Gbps | KPBSD |
| Cooper Landing | Data | Copper | 10Mbps (20Mbps in FY20) | TelAlaska (GCI in FY20) |
| District Office | Data | Fiber (EP-LAN) | 300Mbps | ACS |
| District Office | Data | Fiber (Private) | 1Gbps | ACS |
| District Office | Data | Fiber | 315Mbps | GCI |
| Fireweed Academy | Data | Fiber | 100Mbps | ACS |
| Fireweed Academy/2 | Data | Fixed Wireless | 1Gbps | KPBSD |
| Homer Flex | Data | Fiber | 100Mbps | GCI |
| Homer High | Data | Fiber | 300Mbps | ACS |
| Homer Middle | Data | Fiber | 300Mbps | ACS |
| Hope | Data | Copper | 10Mbps | ACS |
| Kachemak Selo | Data | Fixed Wireless | 60Mbps (75Mbps in FY20) | SPITwSPOTS |
| Kaleidoscope | Data | Fiber | 100Mbps | ACS |
| K-Beach | Data | Fiber | 100Mbps | ACS |
| Kenai Alt | Data | Fiber | 100Mbps | GCI |
| Kenai Central | Data | Fiber | 300Mbps | ACS |
| Kenai Middle | Data | Fiber | 300Mbps | ACS |
| Kenai Youth Facility | Data | Copper | 10Mbps | ACS |
| McNeil | Data | Fixed Wireless | 60Mbps (75 in FY20) | SPITwSPOTS |
| Moose Pass | Data | Fiber | 10Mbps (20Mbps in FY20) | TelAlaska |
| Mountain View | Data | Fiber | 100Mbps | ACS |
| Nanwalek | Data | Microwave | 20Mbps | ACS |
| Nikiski High | Data | Fiber | 100Mbps | ACS |

| Service Site | Category of Service | Type of Service | Status of Service | Present Provider |
|------------------------------------------------------|---------------------|-----------------|------------------------------------|------------------|
| Nikiski North Star | Data | Fiber | 100Mbps | ACS |
| Nikolaevsk | Data | Fixed Wireless | 60Mbps (75Mbps in FY20) | SPITwSPOTS |
| Ninilchik | Data | Fiber | 100Mbps | ACS |
| Paul Banks | Data | Fiber | 100Mbps | GCI |
| Port Graham | Data | Microwave | 20Mbps | ACS |
| Razdolna | Data | Fixed Wireless | 60Mbps (75Mbps in FY20) | SPITwSPOTS |
| Redoubt | Data | Fiber | 100Mbps | ACS |
| River City Academy | Data | Fiber | 300Mbps | ACS |
| Seward Elementary | Data | Fiber | 100Mbps (150Mbps pending) | ACS |
| Seward High | Data | Fiber | 100Mbps (150Mbps pending) | ACS |
| Seward Middle | Data | Fiber | 100Mbps (150Mbps pending) | ACS |
| Skyview | Data | Fiber | 300Mbps | ACS |
| Soldotna Elementary | Data | Fiber | 1Gbps | KPBSD |
| Soldotna High | Data | Fiber | 300Mbps | ACS |
| Soldotna Prep | Data | Fiber | 300Mbps | ACS |
| Soldotna Montessori | Data | Fiber | 1Gbps | KPBSD |
| Sterling Elementary | Data | Copper | 30Mbps | ACS |
| Susan B. English | Data | Copper | 20Mbps | ACS |
| Tebughna | Data | Microwave | 15Mbps (20Mbps planned FY20) | GCI |
| Tustumena Elementary | Data | Fiber | 100Mbps | ACS |
| Voznesenka | Data | Fixed Wireless | 60Mbps (75 in FY20) | SPITwSPOTS |
| West Homer | Data | Fiber | 100Mbps | ACS |
| Administrative Entity (Connections Homer Office) | | | | At Paul Banks |
| Administrative Entity (Connections Seward Office) | | | | At Seward MS |
| Administrative Entity (District Office) | | | | |
| Administrative Entity (DMC/WH/Purchasing) | | | | KPBSD |
| Administrative Entity (Student Nutrition Serv) | | | | KPBSD |

FCC E-RATE PROGRAM

No discussion of KPBSD Information Technology infrastructure would be complete without mention of E-Rate. The Federal Communication Commission E-Rate program was developed to bring Internet access to every classroom and public library in America. This is done through government subsidy of telecommunication services, Internet access, classroom wiring, and a variety of equipment and services necessary to build a communications infrastructure in America's schools and libraries. It is not a grant, as we generally think of educational grants, but truly a subsidy on eligible services.

Briefly, this is how it works. Eligible entities submit an application (Form 470) that gives a general feel for the size of the district and what the present and future needs are. Vendors review the 470 applications and contact the district and submit bids to supply the advertised goods or services. After a minimum of time to encourage competitive bidding, the district chooses a successful bidder and enters into a binding contract with the vendor. The District then submits a request for the FCC to subsidize the service (Form 471) detailing the vendor and cost for each eligible service. The FCC reviews the request and gives the district a Funding Commitment Decision Letter notifying the district what portion the FCC will subsidize. The district then sends in another form (Form 486) notifying the FCC the service is in place and to begin paying invoices from the vendor. Our district chooses to pay the vendor 100% of invoice and then seek reimbursement. The reimbursement requires the district to provide proof to the vendor that we have truly purchased what we are requesting subsidy for and submit Form 472 to receive our portion of the subsidy. Once processed, the reimbursement is sent to the district.

The FCC E-Rate subsidy is determined on economic need, in our case, based on federal free and reduced lunch counts. The district discount percentage for the 2018 E-Rate funding year is 70%.

KPBSD USE OF E-RATE

KPBSD has made extensive use of the E-Rate funding from the very beginning of the program. It has always been the intent of the district administration to maximize the benefit we could receive from the E-Rate program. At close of E-Rate funding year 2017, the district has received over 11.4 million dollars in E-Rate subsidy since the inception of the program in 1998. Eligibility rules are forever changing, and we diligently look for E-Rate subsidy opportunities.

There are two primary aspects to E-Rate. Category 1 funds eligible telecommunications services, such as data circuits connecting schools, as well as internet access. Category 1 also covers a limited amount of voice products such as telephone lines, however, support for voice service is being phased out. E-Rate funding year 2017 marks the last year KPBSD will receive any support for voice services under Category 1.

Category 2 supports internal connections that provide LAN services within school facilities, primarily in the form of equipment or implementation services that deliver connectivity within buildings. Examples of this include switching, routing, or wireless equipment that provide end-user connectivity.

E-RATE FUNDING HISTORY AND FORECAST

Although the main purpose given for the E-Rate program is to connect classrooms and libraries to the Internet, our buildings were some of the 14% of class rooms nationwide that were already wired at the beginning of the program in 1998. Our wiring head start was a real advantage. As other districts struggled with the time intensive process of wiring schools in the early E-Rate years, we were already moving on to other things, like fiber optic networks, and more significantly, an entire technology overhaul district-wide. Historically, in times of economic

difficulties technology (equipment) seems to be cut from the school district budget. The lack of a consistent, stable, sustainable technology funding hampered district technology efforts for 20 years. The E-Rate program provided us with reliable funding, year after year, that allowed the district to move forward in a well thought out district technology initiative that provided high quality technology to all our children. And perhaps most important, E-Rate gives us the hope of a reliable stable funding source that doesn't compete with other instructional needs.

Our 2017 funding year pre-discount E-Rate eligible funding request totaled \$1,050,542.47, which resulted in a subsidy of \$660,782.55. The prior year 2016 funding amount (pre-discount) was \$1,073,952.42 with a subsidy awarded of \$667,399.45.

INFRASTRUCTURE

PHYSICAL WIRING

Wiring of school buildings with Category 5 Ethernet cable began in 1994 and was substantially completed by 1997. All rooms are wired, most with one drop with four jacks (minimum). Telephone cross connects were put in place to allow telephone systems to use the same network wiring plant. Except for new construction or major remodel projects all wiring projects have been completed by district information services staff. Additions to existing school wiring are ongoing as necessary. The district primarily uses Siemens wiring products that meet EIA/TIA 568A standards.

WIRELESS

Our wireless platform was refreshed under E-Rate Category 2 supports in funding year 2015 (fiscal year 2016). Presently, this platform provides roughly 650 wireless access points operating on the 802.11ac protocol districtwide.

District-managed devices connect automatically to wireless services. Additionally, KPBSD provides staff and students the opportunity to connect to a wireless network for basic internet access. Schools can also provide guests time-limited access to the wireless network on an as-needed basis.

All connections to the wireless platform are managed by a firewall solution designed to mitigate the risk of mixing managed and unmanaged devices on a common connection.

VIRTUALIZATION PLATFORM (COMPUTE / STORAGE)

KPBDS leverages VMware ESXi for datacenter compute services. Nearly all servers involved in providing districtwide service coverage are housed in a climate-controlled facility with redundant power backup and access security.

14 individual servers make up a cluster of compute power across redundant architecture. On this cluster, we run virtual machines that provide individual services to end-users.

Backing the compute cluster is a storage area network (SAN) that attaches remote computer storage devices, such as disk arrays, to servers in such a way that the devices appear as locally attached to the operating system of each server. A SAN typically is its own network of storage devices that are generally not accessible through the regular network by regular devices. The district has four Dell EqualLogic devices configured into two SANs. One SAN

contains one EqualLogic member and is used for backups and the other SAN contains three EqualLogic members and is our production environment.

SERVICES

INTERNET ACCESS

In 1995, the school district first connected to the internet with a direct connection of 56Kbps. In 2017, we have an 800Mbps direct connection to the internet connecting the District Office and providing service to our WAN-connected facilities. From that location Internet is delivered on leased circuits to all our schools. Internet bandwidth is periodically analyzed and updated appropriately. We continue to see growth in our Internet usage.

We bid out our Internet through the FCC E-Rate process. All Internet access is filtered for both students and adults although adult filtering is less restrictive. We are currently using TeleMate's Netspective product to provide our internet content filtering. Personally-owned devices are filtered at a default restrictive level. We receive automated updates to our filter that routinely adjust filtering based on the changing internet landscape.

VIDEO CONFERENCING

KPBSD first deployed a Polycom videoconferencing architecture in 2012, and later updated this architecture in 2016. In addition, we utilize the Microsoft Skype for Business (formerly Lync) platform for collaborative discussions and meeting delivered as video conferences.

In recent years, an increasing number of classrooms connect on a regular basis using either the Polycom architecture or Skype for Business. We anticipate the continued adoption of this technology, and routinely monitor the platform for service capacity. The infrastructure of KPBSD is well-positioned to support the continued expansion of video conferencing.

In the future, additional collaboration tooling and experiences will become available such as the adoption of Microsoft Teams within the Office 365 platform.

COLLABORATION (ELECTRONIC MAIL)

The district uses Microsoft Exchange and Outlook as our primary email product for staff. All staff and students grade 4-12 are provided email through Google Apps for Education with parent opt-out exceptions. Parent email addresses can be stored in PowerSchool Student Information System.

ONLINE TOOLS (OFFICE 365 / GOOGLE APPS)

The district utilizes both Google Apps for Education as well as Office 365. Work is ongoing to integrate both platforms to allow for organic exchange of information between platforms, allowing the workload to determine which toolset best fits a given need.

With efforts to move to device-agnostic computing, the Office 365 platform will carry a high importance to providing online analogs to Word, Excel, and PowerPoint on any device.

BROWSERS

The district supports both Microsoft Internet Explorer and Google Chrome.

IP TELEPHONY

All telephony within the district is provided via a Voice over IP (VoIP) platform that leverages our Wide Area Network to support voice delivered over phone handsets. Nearly 1400 VoIP telephones exist throughout our voice platform.

Since the deployment of VoIP phones beginning in 2005, the district has been reducing the number of traditional analog lines installed in schools. Coupled with the sunset of E-Rate voice supports that began in 2015, we are exploring new technologies designed to interface with traditional analog phone systems outside our organization (“plain old telephone” or POTS lines). Historically, we have ordered Primary Rate Interface (PRI) lines from the local exchange carrier, which come in blocks of 23 analog lines, however, we have recently begun a migration away from traditional PRI lines to a newer all-digital technology known as SIP Trunking. Not only does this provide a better experience for most workloads, it is also a cheaper technology since it leverages data networks to efficiently move digital signals.

Efforts to reduce our reliance on traditional analog lines will continue, however, some systems such as fire alarm panels may require analog lines well into the foreseeable future.

SECURITY CAMERAS AND ACCESS CONTROL

The district has standardized on Milestone as our district security camera system. Nearly all borough-owned school facilities are protected with both external and internal security cameras, with a minimum 30-day video retention system.

Discussions are also underway to adopt an access control platform that will allow for electronic key card access for door control. If such a system is adopted, integration with Milestone will be a requirement.

PARENT/STAKEHOLDER COMMUNICATION

KPBSD leverages several strategies to communicate with parents. Some may rely on technology and some may not.

1. Direct teacher communication with the parent via:
 - a. Email
 - b. Teacher blogs to parents.
 - c. IP Telephone in classroom.
 - d. Special school Activities
 - i. Back-to-School nights
 - ii. School Open house
 - iii. Parent/teacher conferences
 - iv. Other school functions; Fun Nights, carnival, performances.
2. Communication with the Principal/School, directly or indirectly via:
 - a. E-mail
 - b. School Newsletters published by the school
 - c. Recorded communication via auto-dialer service.
 - d. School Website
 - e. Telephone

3. Communication from the district
 - a. Information on the district's web-site (www.kpbsd.k12.ak.us)
 - b. KPBSD on Facebook
 - c. KPBSD on Twitter
 - d. Radio
 - e. Newspaper
 - f. Superintendents blog on the district's website
4. Communication through formal school organizations such as
 - a. Site Councils,
 - b. PTAs, or
 - c. PTSAs
 - d. School Board
 - e. Various volunteer committees
 - f. Borough Assembly
5. Communication through PowerSchool Parent/Student Portal Sites:
 - a. The PowerSchool Parent/Student portal provides an easy and effective method for parents to follow their student's performance via the Internet. It is a direct view into the teacher's gradebook and as such is always up-to-date.
 - b. Schools using Standards-based Summit Learning platform also have a parent/student portal with grading progress.

District has a communications liaison position with the responsibility of communicating with the public, of primary importance – parents and stakeholders.

SECTION 2: DISTRICT TECHNOLOGY PLAN

FY19 NEEDS ASSESSMENT

When referring to the *Technology Plan*, one important focus is the district's computer replacement cycle. In 1999 the school board, assembly, borough and school district administrations worked to solve the ongoing problem of funding technology at the schools. The first year of the Tech Plan was 2000 and we have just completed the 19th year of the Tech Plan. There is substantial detail on the formation, execution, and success of the tech plan later in this document, but in this Needs Assessment section we evaluate the present status of the tech plan and determine if changes are necessary for our continued success.

In the past, Technology Plan funding has come from a variety of sources but now rests primarily in the Information Services department of the general fund. Although we sometimes make a logical connection matching the E-Rate subsidy revenue with our tech plan expenditures, no actual physical link exists between the two. We continue to use the original computer replacement schedule replacing approximately 2,800 computers per 3-year cycle. The district has substantially more than 2,800 computers, so it takes roughly twice through the replacement cycle to replace all the machines, putting us on just over a six-year true replacement cycle. There were a significant number of computers purchased through federal stimulus funds that created somewhat of a bubble in 2009 and 2010.

To keep the overall age of devices at the lowest possible number districtwide, a secondary replacement cycle occurs each summer following the placement of new technology. We internally refer to this process as our *redist*, or *redistribution* cycle. Any equipment that is directly replaced in any given year through the normal technology plan process is evaluated and redistributed to other schools with even older technology. This secondary distribution of technology ensures that the equipment we are pulling out of buildings each year is truly the oldest equipment in the district, regardless of small nuances and fluctuations for any given plan year.

Although historically desktops account for the largest percentage of our fleet, we are seeing continued trend toward laptops. Beginning with the 2018 technology replacement cycle, Chromebooks were also offered as an official device under the Technology Plan, in addition to the laptop and desktop models.

Most schools allow students to bring their personally-owned computing devices to school although some schools still enforce limits on cell phone use in school. BYOD or Bring-Your-Own-Device is an attractive alternative to the district supplying all student equipment. The district's extensive wireless environment positions us well for BYOD.

As far as hardware, we continue to standardize on Dell for computers, HP for printers, Aruba Networks for wireless, Cisco for Layer 2 and Layer 3 switching/routing, and FortiGate for our firewall and security platform.

In 2012, we enrolled in Microsoft's Enrollment for Education Solutions (EES) program for K-12 schools. Instead of purchasing Microsoft software outright we are now under an annual subscription based on the number of employees we have. This is a very cost-effective model particularly in consideration of the large amount of Microsoft products we utilize. We continue this approach to licensing.

Standardizing on the EES licensing model allowed us an accelerated trajectory toward Windows operating system updates. In 2018, we completed a districtwide migration to Windows 10. In addition, all KPBSD devices have the latest version of Microsoft Office productivity suite installed by default.

We continue the trajectory toward cloud services. We embarked on this process with Google Apps, and are now working through the process of leveraging Microsoft Office 365 to simplify the model and provide our users with a truly integrated, device-agnostic model to computing.

Overall, Information Services continues to benefit from a highly-capable and technically-knowledgeable staff who are adaptable to an ever-changing environment, however, staff turnover in recent years provides an opportunity to refocus on cross-training and the evaluation of internal process efficiency. We are investing in our future by strengthening our technical foundation and talent from within.

FUNDING SOURCES

E-Rate subsidies cover leased data infrastructure, Internet access, and internal connections equipment (such as routers, switches, and wireless equipment) which is a substantial amount of our recurring expenses, but E-Rate doesn't cover end-user computers or instructional software.

The district budgets for 100% of our telecommunication costs in the general fund and shows our E-Rate subsidy as revenue in our budget. Let's use an example to clarify the process. Let's say we have \$100 due for telecommunications data service. The district will promptly pay the \$100 bill from the vendor. The district will then submit a Form 472 Billed Entity Applicant Reimbursement (BEAR) to E-Rate for \$70 in reimbursable subsidy. Our E-Rate subsidy reimbursement has surpassed \$600,000 annually in recent years.

The district's Tech Plan is funded from the general fund. There has been some correlation between anticipated E-Rate subsidy revenue and general fund Tech Plan funding in the past but going forward that isn't so much the case. The district does have an equipment fund. A portion of the equipment fund, \$1.3 million, was from built from past E-Rate contributions that were never spent, however Tech Plan replacement technology will likely continue to be funded from the general fund.

COOPERATION WITH KPB

The school district and borough IT departments have a 30+ year history of close cooperation. The borough has provided computing resources on the borough's mainframe computers, and operational and technical support to the district for decades. Each group maintains autonomy but cooperation and sharing of resources has been a benefit to borough taxpayers. The borough purchase and support of the mainframe computing environment has come to an end. The borough and school district have moved our administrative software to PC servers and now have abandoned the Unisys LX7100 mainframe. Cooperation continues in a variety of ways including shared IP telephony infrastructure and a shared knowledge base among staff.

TECHNOLOGY PLAN HISTORY

The original Tech Plan was designed assuming consistent Connections enrollment of 150 over the lifecycle of the six-year plan. Connections enrollment was quite volatile. In Year 2 of Tech Plan I (FY 2002) enrollment projections (and computers purchased by Connections) were 600. As it turned out only 300 of the 600 computers purchased were needed by Connections. Having 300 computers sitting in the warehouse until the next summer's implementation cycle was not acceptable, so the plan was accelerated. Beginning in December 2001 we added Year 2.5 to the plan placing an additional 310 computers at eight schools during the school year.

Year 2.5 was a pivotal point in the Tech Plan I implementation. The additional 310 computers placed in Year 2.5 allowed us to totally revamp Tech Plan I. Instead of phasing in computers at the remaining 14 schools over the next 4 years, we were able to complete all 14 schools finishing implementation in three years instead of six years.

Year 1 FY2001, 773 devices: Homer High, Kenai Central, Nikiski Middle/High, Skyview High, Soldotna High, Kenai Alternative, Homer Flex

Year 2 FY2002, 1030 devices: Chapman, Homer Middle, Kenai Middle, McNeil Canyon, Moose Pass, Seward El, Seward High, Soldotna Middle, Spring Creek, Nanwalek, Nikolaevsk, Port Graham, Susan B. English, Tebughna, Voznesenka, Nikiski Elementary, Soldotna Elementary

Year 3 FY2003, 934 devices: Cooper Landing, Hope, K-Beach, Nikiski North Star, Sterling, Tustumena, Redoubt, Ninilchik, Paul Banks, Kachemak Selo, Mountain View, Razdolna, Sears, West Homer

Year 4 FY2004, 283 devices: Homer High, Kenai Central, Nikiski Middle/High, Skyview, Soldotna High, Kenai Alternative, Homer Flex

Year 5 FY2005, 300 devices: Homer High, Kenai Central, Nikiski Middle/High, Skyview, Soldotna High, Kenai Alternative, Homer Flex

Year 6 FY2006, 349 devices: Homer High, Nikiski Middle/High, Chapman, Homer Middle, Kenai Middle, Moose Pass, Seward Elementary, Seward High, Seward Middle, Soldotna Middle

Year 7 FY2007, 501 devices: Chapman, Homer Middle, Kenai Middle, Moose Pass, Seward Elementary, Seward High, Seward Middle, Soldotna Middle, Voznesenka

Year 8 FY2008, 567 devices: Kachemak Selo, K-Beach, Mountain View, Nanwalek, Nikiski North Star, Nikolaevsk, Ninilchik, Paul Banks, Port Graham, Razdolna, Redoubt, Soldotna El, Sterling, Susan B. English, Tebughna, Tustumena, Voznesenka

Year 9 FY2009, 669 devices: Cooper Landing, Hope, K-Beach, Redoubt, Sterling, Tustumena, Ninilchik, Paul Banks, Kachemak Selo, Razdolna, West Homer

Year 10 FY2010, 812 devices: Homer High, Kenai Central, Nikiski Middle/High, Skyview, Soldotna High, Kenai Alternative, Homer Flex

Year 11 FY2011, 947 devices: Chapman, Homer Middle, Kenai Middle, McNeil Canyon, Moose Pass, Seward El, Seward High, Seward Middle, Soldotna Middle, Spring Creek, Nanwalek, Nikolaevsk, Port Graham, Susan B. English, Tebughna, Voznesenka, Soldotna Elementary

Year 12 FY2012, 1011 devices: Cooper Landing, Hope, K-Beach, Marathon, Mountain View, Nikiski North Star, Redoubt, Sterling, Tustumena, Ninilchik, Paul Banks, Kachemak Selo, Razdolna, River City Academy, West Homer

Year 13 FY2013, 812 devices: Homer High, Kenai Central, Nikiski Middle/High, Skyview, Soldotna High, Kenai Alternative, Homer Flex

Year 14 FY2014, 955 devices: Chapman, Homer Middle, Kenai Middle, McNeil Canyon, Moose Pass, Seward El, Seward High, Seward Middle, Soldotna Middle, Spring Creek, Nanwalek, Nikolaevsk, Port Graham, Susan B. English, Tebughna, Voznesenka, Soldotna Elementary

Year 15 FY2015, 1138 devices: Cooper Landing, Hope, K-Beach, Marathon, Mountain View, Nikiski North Star, Redoubt, Sterling, Tustumena, Ninilchik, Paul Banks, Kachemak Selo, Razdolna, River City Academy, West Homer, Skyview (transition from high school to middle school), Soldotna High / Soldotna Prep (reconfiguration from 9-12 to 9th grade house, and 10-12 high school)

Year 16 FY2016, 1195 devices: Homer High, Kenai Central, Nikiski Middle/High, Skyview, Soldotna High, Soldotna Prep, Kenai Alternative, Homer Flex, Aurora Borealis, Fireweed, Kaleidoscope, Soldotna Montessori, Soldotna El (partial), Homer Middle (partial)

Year 17 FY2017, 731 devices: Chapman, Homer Middle, Kenai Middle, McNeil Canyon, Moose Pass, Seward El, Seward High, Seward Middle, Nanwalek, Nikolaevsk, Port Graham, Susan B. English, Tebughna, Voznesenka, Soldotna Elementary

Year 18 FY2018, 1047 devices: Cooper Landing, Hope, K-Beach, Marathon, Mountain View, Nikiski North Star, Redoubt, Sterling, Tustumena, Ninilchik, Paul Banks, Kachemak Selo, Razdolna, River City Academy, West Homer

TECHNOLOGY REPLACEMENT CYCLE FY19 – FY21

Year 19 FY2019, 1203 devices: Homer High, Kenai Central, Nikiski Middle/High, Skyview, Soldotna High, Soldotna Prep, Kenai Alternative, Homer Flex, Aurora Borealis, Fireweed, Kaleidoscope, Soldotna Montessori

Year 20 FY2020 (projected), 791 devices: Chapman, Homer Middle, Kenai Middle, McNeil Canyon, Moose Pass, Seward El, Seward High, Seward Middle, Nanwalek, Nikolaevsk, Port Graham, Susan B. English, Tebughna, Voznesenka, Soldotna Elementary

Year 21 FY2021 (projected), 1047 devices: Cooper Landing, Hope, K-Beach, Marathon, Mountain View, Nikiski North Star, Redoubt, Sterling, Tustumena, Ninilchik, Paul Banks, Kachemak Selo, Razdolna, River City Academy, West Homer

HARDWARE

In any large commuting environment, such as the school district, standardization is critical. With standardization comes consistent operation and management of the resource. Hardware standards are determined by the Information Services Department.

COMPUTERS

The district was still 87% Apple in 1999 but the shift away from Apple computers to PCs had already begun in earnest at many secondary schools. For nearly two decades the district had been guiding PC purchases to a standard platform, hence, our district never suffered the problems a conglomeration of different PC equipment can cause. Some key benefits to this approach include efficiencies with our warranty staff training, as well as stocking of parts for equipment.

PRINTERS

Only Hewlett-Packard (HP) printers are used. At one time other printer brands were allowed. Every buy “X” and get a free printer caused a proliferation of different printers with many print driver problems. Our experience with HP printers and print drivers lead us to standardize on the HP product line. It is a reliable, broad product line and is widely available.

The district uses Konica/Minolta copiers, and many have multi-function capability including network printing capability.

NETWORK EQUIPMENT

Communications equipment now purchased falls mainly to two vendors, Cisco, and FortiGate.

In the late 1990's we purchased a lot of Enterasys (formerly Cabletron) Ethernet switches and switch/routers.

As the district moved deeper into IP telephony we began using PoE (Power over Ethernet) Ethernet switches. These switches not only deliver network traffic, but also carry power to the phone over the same Ethernet cable. We researched and experimented with various brands and powered patch panels and at this time are buying Cisco PoE switches. We have also expanded use of the Cisco PoE switches to drive our in-building 802.11ac wireless network.

Over the years, we have used a variety of unmanaged Ethernet switches in classrooms. For the last few years we have been buying 8 port Allied Telesis unmanaged 10/100 switches for the classroom.

FortiGate equipment is utilized at various points, including the network edge, for Intrusion Detection/Intrusion Prevention and Next-Generation Firewall (IPS/NGFW) services.

Wireless platform services are presently standardized on Aruba Network (now part of the HP Enterprise product line). We anticipate this platform will be due for refresh in FY21 and a review of available platforms will take place at that time.

SOFTWARE

The district has developed web-enabled software to track software licenses and assign software to specific computers. The process leverages Microsoft Windows Installer (MSI), SQL Server, and ASP.NET technologies to control the distribution and tracking of software across three main process stages: tracking, distribution, and installation.

TRACKING

SQL Server and ASP.NET provide the framework for the software database webpage. Joined with our imaging process, the software database is aware of all computers on our network and the location thereof. As software is purchased, records of the purchases are entered into the software database, allowing IT staff and school officials the ability to select which computers receive software packages within their buildings.

DISTRIBUTION

Each computer runs a custom service written in C# that coordinates with the software database to determine what software is assigned to a computer. Periodically (at system boot, hourly, or upon assigning new software in the software database), this service will evaluate the currently installed software with the software indicated as assigned by the software database. If any software requires installation, the computer will begin a peer-assisted delivery of the installation files. By utilizing peer-assisted transport technologies, other computers on the local network that already have a software title can assist in transferring the software to the computer. This vastly cuts down on server infrastructure required to deploy software within our network and eliminates distribution point congestion when large number of computers simultaneously request software.

INSTALLATION

Once the MSI installation files are received on the target computer, the system initiates the installation of the software in the background. By running the install in the background, users can continue to use a computer for other tasks while the software installs; once completed, users are notified to the availability of new software via a system tray popup. Removals are handled much the same way. When notified by the software database that a title is no longer applicable on a computer, the system uninstalls the software in the background.

The value in such a setup is that nothing irreplaceable resides on the local computer hard drive. The operating system can be rebuilt using the image which will over-write data on the hard drive. The user's data files reside on the file servers. And software is automatically installed on the computer if it isn't present on boot up. This means the computer can be wiped clean at any time - even without user notification.

IT SYSTEMS

Not only do we have hardware and software standardization, we also have a process of standardization that allows us to manage and efficiently support many computers with a small number of staff.

THE IMAGE

We utilize Windows Deployment Services technologies to install a standardized copy of Windows over the network, functionally like traditional imaging or ghosting operations. This process of automating the Windows installation ensures a consistent configuration and is a key component in our standardization efforts. With a consistent Windows configuration, we're able to automatically install software and be assured everything will work properly. Imaging over the network saves considerable time. As part of the imaging process the Borough fixed asset number and room number where the computer is physically placed are captured and stored in a SQL database. We partition off a portion of the hard drive for local storage (the "L" drive). The "L" drive is commonly used as temporary work space, isn't generally overwritten in the imaging process, and is not backed up anywhere.

THE NETWORK LOG ON

Our computers are set to require a network log in by the user. Students and staff members are assigned a user-id and password. Adds and changes to users are downloaded from our administrative systems hourly, so new students are added automatically, and we always know if students have changed schools or if staff members have been re-assigned to a different location. We have made extensive efforts to pull data from our administrative systems and populate other systems, such as Food Service point-of-sale systems, library servers, special education data bases, etc. A network log in is also required for the wireless network.

FILES SAVED TO A FILE SERVER

When we know we have a consistent computer, a consistent operating system, know that every computer is the same in every way, and we know what user is logged on, we can control the way we want the computer to act. For example, when someone saves a file to their Documents or Desktop folders, the file is saving on a server, not on the local hard drive on the computer. Because files are saved on the server instead of the local hard drive, the local computer can be re-imaged, which over-writes the hard drive, without fear of losing data. This aids in support of the computer. We don't spend hours trying to diagnose a problem. We just re-image the computer back to the default configuration. Also, the computer user can get to their files regardless of the computer they are using. Servers are generally backed up daily over the network. Files are stored on a server that is bandwidth-optimally

close to the user's home location; files are automatically transferred to another physical server if the user relocates by enrolling in another school or transferring job locations.

WINDOWS PROFILES

Teachers' Windows profiles are saved, meaning that user changes to a computer configuration are saved at log off with the "user's account information." A teacher can log on to any computer in the district and it will appear just as at the teacher's desk. Student desktop and documents are saved but settings are not saved, so any changes that a student makes are discarded at log off. This prevents electronic vandalism where a student disables a computer from use. Each student that logs on will get the default student profile.

Several automated processes exist to automate common configuration related to Windows profiles. For example, students automatically receive a default set of printers configured for their session based on the location at which they log in.

SUPPORT

The adoption of the Tech Plan changed how technical support services are delivered in the district. In the past, most technology support was handled by existing school staff. With the installation of the PC computers there was a strategic shift to providing technology support from the district level. Additional Information Services staff was hired to support the schools. These are staff assignments as of 2017:

McCarthy Wynkoop – Kenai Alternative, Aurora Borealis, Kenai Middle, Skyview Middle, River City Academy, Soldotna Prep, Soldotna High, Cooper Landing, Hope, Sterling

Sam Blakeley – Chapman, K-Beach, Kaleidoscope, Redoubt, Soldotna Elementary, Soldotna Montessori, Nikolaevsk, Ninilchik, Tustumena

William Burnett – Nikiski Middle/High, Nikiski North Star Elementary, Kenai Central High, Marathon, Moose Pass, Mountain View, Seward Elementary, Seward High, Tebughna

Kevin Wilmeth – Homer High, Homer Middle, West Homer Elementary, Fireweed Academy, Paul Banks Elementary, McNeil Canyon Elementary, Razdolna, Voznesenka, Kachemak Selo, Port Graham, Susan B. English, Nanwalek

Phil Daniel – District Office, District Computer Repair Shop

Dustin Boeshart – District Office, Help Desk & iPad support

Tony Mika – District Office, software installation, imaging development

Patrick Parker – District Office, PowerSchool/Reporting

Jordan Chilson – District Office, Network and IP Telephony

Casey Olson – District Office, senior systems administrator

David Henson, District Office, Application development

Additional technical staff may be required in years ahead.

SUPPORT TOOLS

The Information Services staff utilizes a wide variety of diagnostic and support tools to supplement our school-based staff. In fact, a considerable amount of day-to-day support comes from staff located in the district office. We can use remote access software that is included in every computer image to offer remote assistance to resolve problems or train staff. This is a particularly useful tool in our environment and gives us the ability to respond immediately to a problem in a school regardless of where our school-based technical staff happens to be at that time. Remote control software always gives us the ability to be in all places and greatly extends the reach of our school-based technology support staff. In the district office we use several monitoring tools to manage network traffic and diagnose network bottlenecks.

We use an open source product called Zabbix to monitor some data communication links and our servers. With a Zabbix fault an email is sent to a staff member's phone. These alerts raise potential issues within the network, server, and wireless platforms and can often proactively lead to issue resolution before such issues become user-facing outages.

All end-user support requests are routed through a ticketing system. This provides a mechanism by which support requests can be classified, prioritized, and acted upon in a predetermined fashion. Additionally, this system provides key metrics by which the health of our support response can be determined.

REPAIR DEPARTMENT

The district maintains an equipment repair facility in the borough building in Soldotna. The facility is overseen by Information Services staff and is partially staffed by student workers. The student technician program has proven extremely beneficial as it allows students interested in the information technology field the opportunity to work closely with a group of IT professionals. In fact, 11 of the 12 Information Services staff members are graduates of the Kenai Peninsula Borough School District, some of whom had the opportunity to begin their careers in our student technician program.

SECTION 3: ADMINISTRATIVE SYSTEMS

The general focus of the district's technology plan is related in some way to student instruction but there is another important aspect where technology plays a crucial role in the district and that is record-keeping. The district is, in effect, a 140-million-dollar company and has legal, ethical, and moral obligations as stewards of public funds. From payroll and accounting to student performance and federal and state grant requirements, the requirements for information put on the district are immense. The district has many information systems in place for tracking and accounting for information and has substantial investment in those administrative systems.

FINANCIAL/HR SOFTWARE – APECS

After an exhaustive but very successful conversion effort, the district went live in February 2008 with the APECS software system. This is our largest and most complex software package and is crucial to the efficient running of district operations. The district completed a significant version upgrade to this platform in 2013 and continues to implement iterative improvements to the product and process workflows.

STUDENT INFORMATION SYSTEM – POWERSCHOOL

In 2008 the district began looking in earnest for a replacement/upgrade to our existing Student Information System. We looked at 5 different student systems with wide cost differences. With initial pricing in hand we decided to delay a decision. After an exhaustive review process began in earnest in November 2010, May 2011 the district committed to the PowerSchool product. We began the 2011-2012 school year using PowerSchool. We have modified the PowerSchool product extensively for our use and continue to leverage our custom development staff for improvements to workflow and processes within our student records system.

DEPARTMENT HISTORY

The Data Processing Department was formed in the early 1980s to take the district's administrative systems in-house. Prior to that, data was key-punched onto IBM cards that were sent to Anchorage for processing at a computer service bureau, common in that era. Two district programmers modified old software in use by the borough that brought the school district to a decision point in 1983. In 1983-1984 the district purchased and implemented software for Human Resources, Payroll, and Student Information Systems running on a Burroughs mainframe computer owned by the borough. The decision was made to develop financial accounting software with in-house staff as software suitable to the school district couldn't be found that ran on the Burroughs mainframe at that time. SDFIN, the in-house developed financial software, went live April 1, 1987.

Here are listed some milestones in the development of administrative systems and other key events. The data processing department, now called Information Services, has a rich history supporting administrative system for the district prior to the successful outreach into supporting the instructional technology needs of the district.

1981 – First Data Processing employee hired – Patty Campbell (retired 12/2010)

1982 – Bob Jones hired as Data Processing coordinator (Went to the Borough in 1983, retired Fall 2011)

- Programming on the Borough owned Burroughs mainframe begins to move district off Anchorage computer service bureau

1982 – ECASTS Human Resources, PCASTS Payroll, KCASTS Student Information software purchased \$83,000

1983 – Human Resources and Payroll implemented, multi-point 4800 baud synchronous network begins,

1984 – KCASTS Student Information System implemented at KCHS and SOHI

- All schools completed by 1989
- Burroughs small system B1990 mainframe installed, existing B1855 computer upgraded to dual-processor B1885
- NCS TI990 mini-computer installed for processing standardized tests

1985 – Decision to write our own financial system in 4th generation LINC language

- Burroughs Large System A9F mainframe installed
- CASTS software upgraded from ISAM file structure to DMS-II data base

1986 – District adopts Burroughs B-20 microcomputers instead of dumb terminals.

1987 – SDFIN in-house developed financial system goes live – development continues

1989 – CTCBridge terminal emulation software connects Apple Macintosh to Burroughs mainframe, SAT-19 synchronous to Burroughs TDI converters installed, began running school network over phone wire in school admin offices.

1991 – Unisys quad processor A6KX replaces Burroughs A9F. CP-2000 Communications processor handles mainframe network needs.

1992 – Data Processing brings PCs into the department

1993 – DP Repair facility, Begin move to TCP-IP for Unisys mainframe, C.O. goes Ethernet on Macs

1994 – DP begins wiring schools for Ethernet networks, Plan emerges for digital network

1995 – Wiring schools for Ethernet becomes our mission. Complete by 1997, Digital network begins as schools are wired. Mainframe, FirstClass, and school networks converge eliminating duplication. Talks begin with HEA on future Fiber optic network

1997 – Unisys ClearPath 4620 replaces Unisys A6KX – Still a mainframe but the shift to PC Server based mainframe has begun.

1998 – E-Rate begins – a stable funding source to build infrastructure and instructional technology

1999 – Technology Working Committee of Borough and School District Admin formed to find solution to funding computers for classrooms.

- Last Macintosh purchased by the district.
- District signs 10-year contract for HEA fiber managed by ACS

2000 – 1.6 million funding from the Borough for Tech Plan funding

- Year 1 of Tech Plan 812 PCs installed in 7 schools
- HEA/ACS Fiber build-out to 16 schools – becomes district high speed network backbone
- Software distribution system deployed.
- District early adopter of Windows 2000

2001 – Year 2 Tech Plan 706 PCs in 9 schools

- Year 2.5 310 PCs in 8 schools (an un-planned bonus!)

2002 – Year 3 – Tech Plan complete - 934 PCs placed in 14 schools – All schools now on PCs

- Search begins for Student Information System

2003 – Year 4 - Tech Plan II – PC replacement cycle begins 284 PCs placed in 7 schools

- Discovery Student Information System successfully implemented.
- By now all PCs on Windows XP

2004 – Year 5 – Tech Plan II – 354 PCs placed in 7 schools

- Unisys LX7100 replaces ClearPath 4620. Mainframe is a PC server running Unisys MCP emulation within Windows

2005 – Year 6 – Tech Plan II 355 PCs placed in 11 schools. RFP process begins with Borough to select new financial software

- Start 3-year implementation of IP Phones

2006 – Year 7 – Tech Plan II 501 PCs placed in 10 schools. APECS.net selected as financial/HR/Payroll software product. 2006 Arctic Winter Games.

2007 – Year 8 - Tech Plan II 580 PCs placed in 10 schools. Conversion to APECS.net begins in earnest. 12/1/2007 set as aggressive conversion target date - actual go-live date February 6, 2008. KPBSD takes over Unisys LX7100 from the borough 07/2007.

2008 – Year 9 – Tech Plan II 656 PCs placed in 12 schools.

- APECS replaces SDFIN, our in-house written Finance system
- 27+ year reliance on Borough-owned proprietary mainframes ends with de-implementation of the Unisys LX7100 mainframe on Aug. 31, 2008.
- AASB CDL 1:1 Laptop Initiative pilot at Nikiski Jr/Sr & Razdolna (4 year)

2009 – Year 10 – Tech Plan III – will start the replacement cycle anew

- Most district schools wired for wireless access
- 2nd 10-year contract for HEA fiber managed by ACS

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| <ul style="list-style-type: none"> 950 computers, mostly netbooks, and 80+ Smart Boards added using mostly ARRA federal Stimulus funds |
| <p>2010– Year 11 Tech Plan III – 927 PCs to be placed in 17 schools</p> <ul style="list-style-type: none"> Last year of one-year old Connections computers brought into the schools 350 Dells, 75 SmartBoards ordered - Stimulus funds |
| <p>2011 – Year 12 – Tech Plan III – 1,011 PCs placed in 15 schools</p> <ul style="list-style-type: none"> Laptops and netbooks option available to schools instead of desktops PowerSchool replaces Discovery for SIS |
| <p>2012 – Year 13 – Tech Plan IV 687 PCs placed in 7 schools.</p> <ul style="list-style-type: none"> 34 computers for district office to replace old machines District Office to move to Windows 7 Re-Distributed computers moved to Year 13 and Year 15 schools Windows 7 on all Year 13 and Year 15 schools |
| <p>2013 – Year 14 – Tech Plan IV 955 PCs to be placed in 16 schools.</p> <ul style="list-style-type: none"> Year 14 schools to Windows 7 completing Win/7 upgrade project |
| <p>2014– Year 15 - Tech Plan IV 1,035 PCs to be placed in 15schools.</p> |
| <p>2015 – Year 16 – Tech Plan V 812 PCs to be placed in 7 schools.</p> <ul style="list-style-type: none"> Jim White retires 12/31/2015; Eric Soderquist hired as Director Ted Notter retires 12/31/2015; Jordan Chilson hired as replacement Casey Olson moves into Programmer/Analyst position with system administrator duties Phil Daniel moves into IT Programmer position with repair and field tech support duties Dustin Boeshart moves into DP Programmer role with helpdesk and Apple/Chrome management responsibilities McCarthy Wynkoop joins the department as a field tech |
| <p>2016– Year 17 – Tech Plan V – 955 PC to be replaced in 16 schools.</p> <ul style="list-style-type: none"> Aruba wireless platform upgraded, roughly 650 access points districtwide Kevin Wilmeth joins the department as the Homer field tech |
| <p>2017 – Tech Plan Year 18 – 1047 devices replaced in 15 schools</p> <ul style="list-style-type: none"> Windows 10 deployment complete. All devices running Windows 10. Office 365 introduced |

Kenai Peninsula Borough School District

Board of Education Meeting Agenda

June 4, 2012- 7:00 p.m.
Regular Meeting

Borough Administration Building
148 N. Binkley, Soldotna, Alaska

SCHOOL BOARD MEMBERS:

Mr. Joe Arness, President
Mrs. Liz Downing, Vice President
Mrs. Penny Vadla, Clerk
Ms. Lynn Hohl, Treasurer
Mr. Marty Anderson
Mrs. Sammy Crawford
Mrs. Sunni Hilts
Mr. Bill Holt
Mr. Tim Navarre
Miss Annaleah Ernst, Student Representative

Worksessions

2:00 p.m. School Facilities Usage –

STRUCTURE

2:30 p.m. Policy Manual Revisions –

STRUCTURE

3:15 p.m. Evaluation Systems
(Administrators and Teachers) –

STRUCTURE

3:45 p.m. Career and Technical Education
Update – ACCOUNTABILITY

4:00 p.m. Proposed KPSAA Handbook –
STRUCTURE

4:30 p.m. District Strategic Plan (DRAFT) –
VISION

5:00 p.m. Board Discussion

A-G-E-N-D-A

1. **Executive Session - Negotiations** (BEGINNING AT 1:45 P.M.)
2. **Opening Activities**
 - a. Call to Order
 - b. Pledge of Allegiance/National Anthem/ Alaska Flag Song

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- c. District Mission Statement
 - d. Roll Call
 - e. Approval of Agenda
 - f. Approval of Minutes/[May 7, 2012](#)
3. **Awards and Presentations** – ADVOCACY
 4. **School Reports** - Accountability
 5. **Public Presentations** (3 minutes) (Items not on agenda, 3 minutes per speaker, 30 minutes aggregate)
 6. **Hearing of Delegations** (5 minutes)
 - a. Cheryl Anderson, Outreach Coordinator, Kenai Fish and Wildlife Field Office and Heather Fuller, Habitat Restoration Biologist, Kenai Fish & Wildlife Field Office
 7. **Communications and Petitions**
 8. **Representative selected by the following: Advisory Committee, Site Councils and/or P.T.A., K.P.A.A., K.P.E.A., K.P.E.S.A., Borough Assembly** (5 minutes)
 9. **Superintendent's Report** - Accountability
 10. **Reports** – ACCOUNTABILITY
 - a. Lease Agreements– Mr. Dave Jones
 - b. Finance Report – Mr. Dave Jones
 - c. Board Reports (Reports where members are officially representing the Board)
 - d. Board Worksession Report (Attendance noted)
 11. **Action Items** (Board member comments should be concise and may be limited to speaking twice on a topic)
 - a. Consent Agenda
 - (1) Approval of [KPSAA Recommended Student Handbook Revisions](#) – STRUCTURE
 - (2) Approval of [New Teacher Contracts 2012-13](#) – STRUCTURE
 - (3) Approval of [Tentative Non-Tenured Teacher Contracts 2012-13](#) – STRUCTURE
 - (4) Approval of [Resignations](#) – STRUCTURE
 - (5) Approval of New Administrator Contract 2012-13 (**ORIGINAL**) (**REVISED**) – STRUCTURE
 - (6) Approval of [Budget Transfers](#) – STRUCTURE
 - (7) Approval of [Leave of Absence-Support](#) – STRUCTURE
 - (8) Approval of [Long-term Substitute Contract](#) – STRUCTURE

Instructional Services Support

- b. Approval of [FY12 Budget Revisions](#) – STRUCTURE
- c. [Approval of AR 6161.4, Acceptable Use Policy/Internet Safety Policy](#) – STRUCTURE

Superintendent

- d. Approval of [District Strategic Plan \(DRAFT\)](#) – VISION

12. First Reading of Policy Revisions

- a. [BP 5144.1 Suspension and Expulsion; BP 6141, Curriculum Development; BP 6161.1, Selection of Instructional Materials; BP 6190, Evaluation of Instructional Programs](#)

13. Public Presentations/Comments (INDIVIDUALS ARE LIMITED TO THREE MINUTES EACH ON THE TOPIC(S) LISTED BELOW OR ON ANY TOPIC.)

14. Board Comments (INDIVIDUAL BOARD MEMBER COMMENTS ARE LIMITED TO THREE MINUTES.)

15. Executive Session (IF NEEDED)

16. Adjourn

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COPIES OF AGENDA ITEMS ARE AVAILABLE JUST PRIOR TO THE MEETING IN THE BACK OF THE ROOM OR VISIT OUR WEBSITE AT <http://www.kpbsd.k12.ak.us>. LOG ON TO THE DISTRICT WEBSITE TO LISTEN TO SCHOOL BOARD MEETINGS LIVE OR TO FIND ARCHIVED MEETINGS. EMAIL BoardComment@kpbsd.k12.ak.us TO MAKE A COMMENT ABOUT ANY ITEM ON THE AGENDA (COMMENTS WILL BE REVIEWED FOR APPROPRIATENESS AND LENGTH) .

PERSONS WITH DISABILITIES WHO NEED ACCOMMODATIONS TO PARTICIPATE SHOULD CONTACT DEBBIE TRESSLER AT 907-714-8836, OR E-MAIL dtressler@kpbsd.k12.ak.us NO LATER THAN THREE BUSINESS DAYS BEFORE THE MEETING DATE.

Kenai Peninsula Borough School District Board of Education Meeting Minutes

June 4, 2012 – 7:00 p.m.
Regular Meeting

Borough Administration Building
148 N. Binkley, Soldotna, Alaska

SCHOOL BOARD MEMBERS:

Mr. Joe Arness, President
Mrs. Liz Downing, Vice President
Mrs. Penny Vadla, Clerk
Ms. Lynn Hohl, Treasurer
Mr. Marty Anderson
Mrs. Sammy Crawford
Mrs. Sunni Hilts
Mr. Bill Holt
Mr. Tim Navarre
Miss Annaleah Ernst, Student Representative
Dr. Steve Atwater, Superintendent of Schools
Sean Dusek, Assistant Superintendent
Dave Jones, Assistant Superintendent

STAFF PRESENT:

OTHERS PRESENT:

| | |
|--------------------|-----------------------|
| Mr. Joe Nicks | Mrs. Christine Ermold |
| Mr. Dave Spence | Ms. Pegge Erkeneff |
| Mr. John O'Brien | Mrs. Laurie Olson |
| Mr. Jim White | Ms. Cheryl Anderson |
| Ms. Heather Fuller | Mr. Tim Peterson |

CALL TO ORDER:

Mr. Arness called the meeting to order at 1:49 p.m. A quorum of School Board members, Mr. Navarre, Mr. Anderson, Mrs. Hilts, Ms. Hohl, Mrs. Vadla and Mr. Arness were present.

EXECUTIVE SESSION:

At 1:49 p.m., Mrs. Hilts moved the Board go into executive session to discuss matters, the immediate knowledge of which would clearly have an adverse effect upon the finances of the School District. Specifically, the executive session was to discuss negotiations strategies and tactics. Mrs. Vadla seconded.

Motion carried unanimously.

ADJOURN EXECUTIVE SESSION:

At 2:37 p.m., Mrs. Hilts moved the executive session be adjourned. Mr. Anderson seconded.

Motion carried unanimously.

At 2:37 p.m., the Board recessed the meeting to conduct worksessions.

CALL TO ORDER: (7:00:15 PM)

Mr. Arness called the meeting back to order at 7:00 p.m.

PLEDGE OF ALLEGIANCE: (7:00:38 PM)

Mr. Arness invited those present to participate in the Pledge of Allegiance.

DISTRICT MISSION STATEMENT: (7:01:03 PM)

Mrs. Crawford read the District's mission statement.

ROLL CALL: (7:01:32 PM)

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|---------------------|----------------|
| Mr. Joe Arness | Present |
| Mr. Marty Anderson | Present |
| Mrs. Sammy Crawford | Present |
| Mrs. Liz Downing | Absent/Excused |
| Mrs. Sunni Hilts | Present |
| Ms. Lynn Hohl | Present |

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| Mr. Bill Holt | Present |
| Mr. Tim Navarre | Present |
| Mrs. Penny Vadla | Present |
| Miss Annaleah Ernst | Present |

APPROVAL OF AGENDA: (7:02:33 PM)

The agenda was approved with a revision to 11a(5) Approval of New Administrator Contract 2012-13.

APPROVAL OF MINUTES: (7:02:53 PM)

The School Board Minutes of May 7, 2012, were approved as printed.

HEARING OF DELEGATIONS: (7:06:13 PM)

Ms. Cheryl Anderson, Outreach Coordinator, Kenai Fish and Wildlife Field Office and Ms. Heather Fuller, Habitat Restoration Biologist, Kenai U.S. Fish & Wildlife Field Office spoke to the Board about the school yard habitat program, the services provided and how the program is funded.

COMMUNICATIONS AND PETITIONS: (7:03:43 PM)

Dr. Atwater announced that Nancy Kleine, the Homer area Connection's teacher, was given the Golden Apple Award. He reported receiving the Annual Nurse's Report and commended Ms. Naomi Walsworth, Nurse Coordinator, and all nurses for their work, especially during the PowerSchool software conversion. He reported on a survey conducted by First Student regarding transportation, school busses and traffic violations and that based on the results of the survey, the District will be working on an informational campaign in August to help promote bus safety.

ADVISORY COMMITTEE, SITE COUNCIL AND/OR P.T.A., K.P.A.A., K.P.E.A., K.P.E.S.A, BOROUGH ASSEMBLY: (7:21:37 PM)

Mrs. Christine Ermold, KPAA President, reported that school administrators will meet with the District Office Leadership team on June 5 and 6 to analyze student data and invited the Board to attend the group sessions. She commented on the superior pool of applicants available during recent District hiring.

SUPERINTENDENT'S REPORT: (7:23:12 PM)

Dr. Atwater reported on the lack of fresh drinking water in Moose Pass School due to a local substandard waste water facility close to the school and that the District is currently working with the DEC on a solution. He announced that the District applied for a federal grant that would provide for additional school counselors in several District elementary schools. He reported that the State of Alaska would seek a waiver from No Child Left Behind mandates; that he plans to support the waiver as it may affect some of our schools that did not make AYP last year; and he asked that the Board offer their comments during the Board Planning Session on Tuesday, June 5, 2012.

LEASE AGREEMENTS: (7:26:35 PM)

Mr. Jones reviewed the report of leases and agreements for the 2012-2013 school year.

FINANCIAL REPORT: (7:29:23 PM)

BOARD REPORTS: (7:30:18 PM)

Mr. Jones presented the financial report of the District for the period ending April 30, 2012. Mrs. Vadla reported that she attended the Soldotna High School awards banquet and River City Academy, Ninilchik School and Soldotna High School graduations. She attended Mrs. Tachick, Ms. Manion and Mr. Spence's retirement party and wished them well in their future plans.

Ms. Hohl reported that she attended Seward High School and Connections graduations.

Mr. Anderson announced that he attended Skyview High School and Soldotna High School graduations.

Mrs. Hilts reported that she attended six graduations and that some included several Connections students.

Mr. Holt reported that he attended Skyview High School and Kenai Alternative High School graduations and commented on the superior National Anthem performance at Skyview High School's ceremony and the appreciation shown by Kenai Alternative students for their graduation.

Mrs. Crawford reported that she attended Soldotna High School's awards night and graduation and the River City Academy graduation.

Miss. Ernst reported that she attended the Nikiski graduation as an Honor Marshall and commented on the musical performance and accomplishments of several of the graduates.

Mr. Navarre reported that he attended Kenai Alternative High School, Kenai Central High School and Ninilchik High School graduations and commented on the continuing need for the Kenai Alternative High School program, that his nephew was the guest speaker at Kenai Central High School's ceremony and that the \$25,000 Oskolkoff Scholarship was given to a Ninilchik student.

BOARD WORKSESSION REPORT: (7:40:13 PM)

Mr. Arness reported that the Board discussed school facilities usage, proposed Policy Manual revisions, proposed KPSAA Handbook revisions and the proposed District Strategic Plan. He announced that the Evaluation Systems worksession and the Career and Technical Education worksession were delayed due to time constraints. He noted that all Board members were present except Mrs. Downing.

CONSENT AGENDA: (7:40:45 PM)

KPSAA RECOMMENDED STUDENT HANDBOOK REVISIONS:

NEW TEACHER CONTRACTS 2012-13:

TENTATIVE NON-TENURED TEACHER CONTRACTS 2012-13:

Items presented on the Consent Agenda were Approval of KPSAA Recommended Student Handbook Revisions; New Teacher Contracts 2012-13; Tentative Non-Tenured Teacher Contracts 2012-13; Resignations; New Administrator Contract 2012-13 Revised; Budget Transfers; Leave of Absence–Support and Long-term Substitute Contract.

Mr. Jones recommended the Board approve proposed changes to the 2012-2013 Kenai Peninsula School Activities Handbooks which included eligibility for participation, student representative to KPBSD Board of Education, parent representative by-law change, middle school drug and alcohol policy change and cooperative football team formation.

Mr. Jones recommended the Board approve new teacher contracts for Albert Plan, math/science teacher, Seward High School; Annaleah Karron, social studies/generalist teacher, River City Academy; Barbara Gray, temporary elementary multi-grade teacher, Nanwalek School; Chelsea Lorge, math teacher, Kenai Middle School; Chelsea Van Vickle, primary grade teacher, Redoubt Elementary School; Dana Strong, language arts/social studies teacher, Ninilchik School; Isaac Erhardt, math teacher, Soldotna High School; Jamie Hughes, temporary elementary teacher, Port Graham School; Jason Leslie, K-6 teacher (Science), Kaleidoscope Charter School; Jeanne Duhan, elementary general/instrumental music teacher, K-Beach Elementary School; Jonathan Dillon, elementary general/instrumental music teacher, Mt. View Elementary School; Josh Tone, secondary teacher, Port Graham School; Keith Gray, language arts/social studies teacher, Nanwalek School; Nicole Stover, interventionist (.50 FTE), Seward Elementary; Peter Dahl, permanent (.85 FTE)/temporary (.15 FTE) elementary general/instrumental music teacher, Soldotna Elementary and Soldotna Montessori School; Sami King, physical education/health/activities director teacher (.80 FTE), Seward High School and Todd Peterson, special education intensive needs teacher (cross-categorical), Tustumena Elementary School.

Mr. Jones recommended the Board approve tentative non-tenured teacher contracts for Adrienne Bostic, teacher/regular (temporary), Central Peninsula Area; Jeremy McKibben, teacher/regular [permanent (.50 FTE)/temporary (.50 FTE)], Mt. View Elementary School; Justin Zank, teacher/regular (temporary), Homer Area; Matthew Creamer,

teacher/special education, Chapman School; Michelle Barrows, teacher/special education, Mt. View Elementary School; Sarah Compton, teacher/regular, Ninilchik School and Theresa Salzetti, teacher/regular (temporary), K-Beach Elementary School.

RESIGNATIONS:

Mr. Jones recommended the Board approve resignations effective at the end of the 2011-12 school year for Eric Dahl, math teacher, Soldotna Middle School; Tammy Farrell, librarian, Mt. View Elementary School; Anna Fisher, social studies teacher, Homer High School; Maryvonne Guillemain, Spanish/French/language arts teacher, Skyview High School; Kara Schreur, 2nd grade teacher, Redoubt Elementary School; Sarah Swaney, special education intensive needs teacher, Soldotna Elementary School and Elizabeth Wallin, 3rd grade teacher, Mt. View Elementary School.

NEW ADMINISTRATOR CONTRACT 2012-13:

Mr. Jones recommended the Board approve Mr. Dave Tressler as Director of Planning and Operations and Mr. Karl Kircher as assistant principal of Mt. View Elementary.

BUDGET TRANSFERS:

Mr. Jones recommended the Board approve budget transfer number 1374 for \$79,282 to pay for Fireweed Academy Charter School salaries and benefits and number 1384 for \$60,000 to pay for Aurora Borealis Charter School long-term administrator substitute salary.

LEAVE OF ABSENCE-SUPPORT:

Mr. Jones recommended the Board approve a request for a leave of absence-support for Carole Nolden, Kenai Middle School (effective the 2012-13 school year).

LONG-TERM SUBSTITUTE CONTRACT:

Mr. Jones recommended the Board approve a long-term substitute teacher contract for Ruby Smith, Redoubt Elementary.

MOTION

Mrs. Crawford moved the Board approve Consent Agenda Items Numbers 1 through 8. Mrs. Vadla seconded.

Ms. Hohl removed Number 1, Approval of KPSAA Recommended Student Handbook Revisions.

Motion carried unanimously for Numbers 2 through 8.

Motion carried unanimously for Number 1.

FY12 BUDGET REVISION: (7:45:58 PM)

The Board unanimously approved a total revised General Fund budget of \$138,363,091 (\$200,000 increase to In-Kind Maintenance for unanticipated snow removal costs and a reduction of \$550,000 in the use of Fund Balance. [Prior to Alaska State Legislature action, a \$750,000 transfer from the General Fund was anticipated to make up for the shortfall in the FY12 Pupil Transportation budget. Since additional funding has been allocated for Pupil Transportation statewide, the transfer will not be required]).

MOTION

Mr. Holt moved the Board approve a total revised General Fund FY12 budget of \$138,363,091. Mrs. Crawford seconded.

Motion carried unanimously.

**POLICY MANUAL REVISION:
(7:46:42 PM)**

Mr. Jones recommended the Board approve proposed revisions to AR 6161.4, Acceptable Use Policy/Internet Safety Policy.

MOTION

Mrs. Vadla moved the Board approve proposed revisions to AR 6161.4, Acceptable Use Policy/Internet Safety Policy. Mr. Anderson seconded.

Motion carried unanimously.

**DISTRICT STRATEGIC PLAN:
(7:48:40 PM)**

Dr. Atwater recommended the Board approve the 2013-17 Strategic Plan.

MOTION

Mrs. Crawford moved the Board approve the 2013-17 Strategic Plan. Mr. Holt seconded.

MOTION

Mrs. Crawford recommended the Board approve an amendment to endorse the 2013-17 Strategic Plan. Mrs. Vadla seconded.

Amendment carried unanimously.

Amended motion carried unanimously.

**FIRST READING OF POLICY REVISIONS:
(7:50:10 PM)**

The Board heard a first reading of proposed revisions to BP 5144.1, Suspension and Expulsion; BP 6141, Curriculum Development; BP 6161.1, Selection of Instructional Materials and BP 6190, Evaluation of Instructional Programs.

BOARD COMMENTS: (7:51:50 PM)

Mr. Holt announced that he will continue to enjoy working with Annaleah Ernst and welcomed Mrs. Tressler.

Mrs. Vadla welcomed Mrs. Tressler. She recognized Mr. David Kingsland's participation in the Centennial Iditarod Monument program. She thanked Mrs. Ermold for her work with KPAA. She expressed appreciation for being a part of the KPSAA worksession and process.

She thanked Miss. Ernst for her work with the Board.

Mrs. Hilts commended Mrs. Kleine, Golden Apple Award winner. She expressed appreciation for the District's overall good work and ability to work together.

Mrs. Crawford thanked Mrs. Tachick for her service. She welcomed Mrs. Tressler and thanked Miss. Ernst for her work. She expressed appreciation for the accomplishments of the District and the honor of serving on the School Board.

Mr. Anderson welcomed Mrs. Tressler. He thanked Mrs. Tachick for her service. He recognized Miss. Ernst for her work on the Board and her work in Juneau. He thanked Mr. Spence and others for their work to provide improvements to Sterling Elementary. He asked for an updated online calendar of 2012-13 board meeting dates.

Ms. Hohl expressed appreciation for the roofing work at Sterling Elementary. She reported that she attended the Sterling Art Show. She welcomed Mrs. Tressler and Mr. Dave Tressler and said goodbye to Mr. Spence. She stated that she is pleased with the District's progress at Moose Pass School. She reported on the land that would be vacant in Seward due to the Air Force leaving.

Miss. Ernst reported that she will attend the July meeting, she will be in China for the August meeting and she is planning to attend the September meeting. She thanked the Kenai Fish and Wildlife Field Office Representatives for their presentation and commented on the value of their program. She thanked the Board and Mrs. Tachick for their help and welcomed Mrs. Tressler.

Mr. Arness reminded the Board about the Planning Session meeting at Soldotna High School on Tuesday, June 5 beginning at 8:00 a.m. for coffee and breakfast and 8:30 for the meeting.

At 8:02 p.m., Mr. Arness adjourned the meeting. Motion carried unanimously.
Respectfully submitted,

Mr. Joe Arness , President

BOARD COMMENTS:

(continued)

ADJOURN: (8:02:35 PM)

The Minutes of June 4, 2012,
were approved on
July 9, 2012 as written.

SCHOOL BOARD POLICY AR6161.4 – ACCEPTABLE USE POLICY – INTERNET SAFETY POLICY

KPBSD Policy Manual

AR 6161.4

Instruction

ACCEPTABLE USE POLICY/INTERNET SAFETY POLICY

Terms and Conditions for Use

General Information

Purpose

The Kenai Peninsula Borough School District provides all students access to computers, networks, and the Internet as a means to enhance their education. It is the intent to promote the use of computers in a manner that is responsible, legal, ethical, and appropriate. The purpose of this policy is to assure that all users recognize the limitations that are imposed on their use of these resources. Our many varied stakeholders work within a shared environment where all must follow the rules of use so as not to let their actions infringe on the opportunity of others to accomplish their work.

Electronic Related Technologies

Kenai Peninsula Borough School District Electronic Network Related Technologies is an interconnected system of computers, terminals, servers, databases, routers, hubs, switches, video-conferencing equipment, and wireless devices. The District's network is an inherent part of how we do business.

Authorized Users

The District's computer network is intended for the use of authorized users only. This also applies to the District's Wi-Fi network. Authorized users include students, staff, and others with a legitimate educational purpose for access as determined by a Memorandum of Agreement with the District. Individual schools may grant guest access on a temporary basis, but only for bona-fide school-related business. Any person using the network, or using any devices attached to the network, agrees to abide by the terms and conditions set forth herein. This policy is referenced in the KPBSD Parent/Student Handbook.

Assumption of Risk

The District will make a good faith effort to keep the District network system in working order and its available information accurate. However, users acknowledge that there is no warranty or guarantee of any kind, either express or implied, regarding the accuracy, quality, or validity of any of the data or information residing on the District network

or available from the Internet. The District has no ability to maintain such information and has no authority over these materials. For example, and without limitation, the District does not warrant that the District network will be error-free or free of computer viruses.

Indemnification

In making use of these resources, users agree to release the District from all claims of any kind, including claims for direct or indirect, incidental, or consequential damages of any nature, arising from any use or inability to use the network, and from any claim for negligence in connection with the operation of the District network. Use of District computers and/or the District network is at the risk of the user.

Ownership

Files, data, emails and any other information stored on District-owned equipment or produced while working for the District or while attending as a student, are the property of the District.

Personally-owned Electronic Devices

Schools not allowing students to bring personally-owned equipment to school are

- Marathon School

Unless otherwise listed above, students may bring laptops, netbooks, smart phones, tablet computers, MP3 players, e-readers, etc. to school for their personal educational use. The user is responsible for assuring that personally-owned computers are ready for use with the District network. The District will not troubleshoot or provide technical support on personally-owned equipment. Bringing personally-owned equipment to school is absolutely done at the users own risk. The District is not responsible for theft or damage of personal property including loss of data.

Wireless access by a personally-owned laptop is allowed, but connecting to the physical network by plugging into a wall jack is never allowed.

Any electronic device falls under the authority of the Acceptable Use Policy if used on school grounds, regardless of whether they may or may not be wirelessly connected to the District network infrastructure. For example, texting or emailing inappropriate pictures to other students while on school property would be a violation of the Acceptable Use Policy even if only done using the user's personal cellular plan and using no District provided network services.

Software on Personally-Owned Devices

The District will not provide software for personally-owned computers. Schools may distribute software apps to iPads, iPods, iPhones, or potentially other personally-owned (non-computer) devices, for both students and staff, if done in accordance with District policies in place at that time.

iPods or MP3 players

Only legally purchased music may be installed on a District-owned MP3 player or any district computer. It is the responsibility of the assigned iPod user to provide proof of ownership of all copyrighted music. The user must also backup their music as Information Services does not backup MP3 files nor check for MP3 files when imaging computers.

Access to Wi-Fi

Access to the wireless network by personally-owned computers, smart phones, or other devices is allowed by authorized users. The District must balance the needs to keep our network operational and protected from viruses or loss of service attacks with the educational advantages of a more open, inclusive network. With the wireless capability KPBSD has the ability to have an acceptable level of protection for our network and still allow computers into the wireless network. **EXHIBIT 6161.4(B) KPBSD WIRELESS INFORMATION** shows what service level can be expected from various computer operating systems. Most personally-owned computers or devices will connect to the wireless network; however, most will probably only connect at the Low-Speed Internet level. Network resources commonly taken for granted, like printer access, network file storage, and file backup are not available for the personally-owned devices.

Electronic Mail (Email)

The District provides one email address (@g.kpbsd.org) for grade 4-12 students (or lower grade at the request of the principal). The District does not filter email beyond the SPAM filtering done by Google for the District-provided Gmail email accounts. Google may also have rules for use beyond what is covered in this agreement. The District provides two email addresses for staff (Microsoft Exchange/Outlook @ kpbsd.k12.ak.us and Google-GMail @ g.kpbsd.org). Staff should use the Microsoft Exchange/Outlook @ kpbsd.k12.ak.us for all District communications.

SPAMMING, or the mass sending of email, from any District email accounts, for any purpose whatsoever, is strictly prohibited. Spammers often search out individuals and attempt to get people to divulge username or password information to allow the spammers to use an email account and our network to send out SPAM email. Spammers have been surprisingly successful enticing staff to divulge network login information. The District will never ask a user to disclose a username and password through an email. Any such request, regardless of how credible it may seem, is an attempt to hijack an account.

Blogs

The District also creates a personal web log or blog for each student and staff for educational use. The user must initially activate the blog. KPBSD blogs are only indexed within the District, meaning they are not searchable from the Internet. However, if the URL address is shared, anyone on the Internet can view or contribute to the blog. When using blogs, users are expected to maintain the same level of civility as required on all communication covered by this policy. Post with respect, stick to the facts, and avoid unnecessary or unproductive arguments.

Websites

The school's website is limited to school-related materials and events. Students may create web pages as a part of a class activity. The District has the right to exercise final editorial authority over the content and/or style of user web pages created as part of a class activity.

Parental Request for Non-Participation by Students (Internet or Email Opt-Out)

Parents of minor students (under 18 years of age) may request that their student(s) not be allowed access to the Internet, or may opt out of District-provided Gmail email accounts by submitting [E 6161.4\(a\) Internet Access Non-Permission Form](#) to the office at the student's school. Such restriction, once signed, remains in force until rescinded by the parent or the legal aged student.

This action also denies access to the District wireless network. It should be noted that Gmail is part of the Google Apps online collaborative office productivity suite. Denying access to Gmail also denies access to Google Apps. Opting-out does not mean a student will not access email at school; it just means that the District will not provide the

email address for the student to use. There are many free email sites on the Internet where anyone can get a free email account. Other free email sites are also not content filtered and may not filter SPAM.

Directory Information Parent Opt-Out Form

Parents of minor students (under 18 years of age) may request that the District not post their children’s work, photographs or names on the Internet by completing and returning [E 5125.1\(B\) DIRECTORY INFORMATION PARENT OPT-OUT FORM](#) to the school office.

Security

No illegal entry (hacking) or unethical attempt should ever be made to access any network, computer, or data belonging to someone else. Users should never log on with the network credentials of another person, but should only use the username and password supplied by the District for their exclusive use. Users should make every effort to keep all passwords supplied by the District for their exclusive use secure and private. Any activity undertaken for the purpose of hiding one’s identity, to bypass the Internet filter, or to spread computer viruses is forbidden. All users are to promptly report any security violations of the Acceptable Use Policy to the school principal. The principal should then report violations to the Information Services department.

Monitoring

Network activity is logged including websites visited by users. Email processed, delivered, or stored on District-owned equipment is owned by the District. Information Services commonly uses software to remotely access and control any District computer on the network with or without the user’s permission, but only for a legitimate purpose. Remote access, where the user grants permission for access, has been given to some District-level support staff. Remote-access capability is commonly used to diagnose and quickly correct problems, or to train the remote staff member on some computer or software function.

Monitoring Staff Computer Usage

No member of KPBSD management has access to an employee’s email accounts, web-browsing history, or data files. Information Services staff will provide such information to the Director, Human Resources, upon request.

Monitoring Student Computer Usage

School principals have access to student Gmail accounts and to the Internet browsing history of the students at their school. Some principals may assign a designee for that access responsibility, such as assistant principals, counselors, or secretaries. Information Services has access to the above items, and also has access to a student’s data files and will provide any of this information to a school principal or their designee upon request. Information Services staff will on occasion search logs for security violations and will report violators to the appropriate school principal or in some cases may take independent action.

Software

The Kenai Peninsula Borough School District will not install computer software that we are not licensed to use. There are no exceptions. All computer software license agreements and proof of ownership are documented in the Information Services department. Software is installed by Information Services staff or through tools provided by them to key school personnel. No commercial computer software will be installed on District-owned computers by other staff or students. If teachers buy software and want the software loaded on District computers, they will have to donate the software and license to the District and provide proof of purchase.

Lawsuits

The District will not defend users against lawsuit for Acceptable Use Policy violations including music, software, or print copyright violations.

User Responsibilities

Users should be polite, kind, courteous, and respectful at all times. Users are expected to respect the property of others, including District property, and be responsible for using equipment appropriately, including using personally-owned equipment appropriately. It is the responsibility of all members of the school staff to appropriately supervise and monitor student usage to ensure compliance with this Acceptable Use Policy and the Children's Internet Protection Act.

Acceptable Uses

It may be helpful to correlate acceptable behavior in the school building to what is acceptable behavior online. In the school setting, treat others as you would like to be treated. Show respect and kindness to others.

The User Should:

1. Adhere to current Acceptable Use Policy guidelines each time the District network is used.
2. Immediately disclose an inadvertent access of inappropriate information to a teacher or the school principal.
3. Show proper consideration for topics that may be considered objectionable or inflammatory.
4. Keep everyone's personal information confidential, including addresses, telephone numbers, and pictures, etc.
5. Abide by all plagiarism, copyright and fair use laws, including print, music, and software copyright laws.
6. Make available for inspection by a principal, or upon request by a teacher, any messages or files sent or received by a student at any District Internet location. Staff should have a legitimate safety concern to invoke inspection.
7. Use technology for school-related purposes during the instructional day.
8. Report any cyberbullying against any student to the principal.
9. Use Internet related Chat (IRC) or other instant messaging appropriately. Always know the person you are messaging.

Unacceptable Uses

Do not use derogatory or inflammatory language that is generally considered offensive or threatening. Do not insult, bully, threaten, or personally attack people. Be on your best school behavior while online.

The User Should:

1. Not view or attempt to locate material in any format (electronic, printed, audio, or video) that is unacceptable in a school setting. This includes, but is not limited to, sexist or racist material, sexually explicit, pornographic, obscene, or vulgar images or language; graphically-violent music, music videos, screen savers, backdrops, and pictures. The criteria for acceptability is demonstrated in the types of material made available to students by principals, teachers, and the school media center.
2. Not download, upload, import or view files or websites that purport the use of illegal drugs, alcohol or illegal and/or violent behavior except when school-approved and teacher-supervised.
3. Not use online social networks or any form of online publishing or online personal communication during the instructional day unless specifically allowed at school or under the direction of a teacher. Not stream non-educational music or video during the instructional day.

4. Not invade the privacy of individuals, including the unauthorized disclosure, dissemination, or use of information, photographs, or videos.
5. Not use for soliciting or distributing information with the intent to incite violence; cause personal harm or bodily injury; or to harass, bully, or “stalk” another individual.
6. Not upload, post, email, transmit, create direct web links to, or otherwise make available any content that is inappropriate, unlawful, dangerous, or may cause a security risk.
7. Not use for wagering, gambling, junk mail, chain letters, jokes, raffles, or fundraisers.
8. Not use a USB storage device to launch software.
9. Not use a District email account to express religious or political views. When expressing personal opinions a personal account is to be used.
10. Not play games, including Internet-based games, during the instructional day, unless school-approved and teacher-supervised.
11. Not use for financial gain or for the transaction of any personal business or commercial activities, including any personal purchase or sale activity that requires an exchange of money or use of a personal credit card number or for any product or service advertisement.
12. Not waste school resources through improper or personal use of the computer system.
13. Not deface or vandalize District-owned equipment in any way, or the equipment of another person in any way.
14. Not violate of any provision of the Family Educational Rights and Privacy Act which makes confidential a student's educational records, including, but not limited to, a student's grades and test scores. Staff members are solely responsible to safeguard the confidentiality of student-related data on a personally-owned computer.

Sanctions

Internet access and email use is a privilege, not a right. A violation of the Acceptable Use Policy may result in termination of usage and/or appropriate discipline for both students and teachers. The Terms and Conditions shall be used in conjunction with the District's discipline policies ([AR 5144 Discipline](#)). Individual schools may choose to have additional rules and regulations pertaining to the use of networked resources in their respective buildings. Users may be denied access to the District network while an investigation is underway. If a user's access to the District network is suspended or revoked by network administrators as a result of violations of this policy, the user may appeal the suspension in writing, to the Superintendent within ten (10) days. If a violator is removed from the District network, there shall be no obligation to provide a subsequent opportunity to access the network.

The Children's Internet Protection Act (CIPA)

The Children's Internet Protection Act was signed into law on December 21, 2000. To receive support for Internet access and internal connections services from the Universal Service Fund (USF), school and library authorities must certify that they are enforcing a policy of Internet safety that includes measures to block or filter Internet access for both minors and adults to certain visual depictions. The relevant authority with responsibility for administration of the eligible school or library must certify the status of its compliance for the purpose of CIPA in order to receive USF support.

In general, schools and library authorities must certify either that they have complied with the requirements of CIPA; that they are undertaking actions, including any necessary procurement procedures to comply with the requirements of CIPA; or that CIPA does not apply to them because they are receiving discounts for telecommunications services only. CIPA requirements include the following three items:

1. Internet Safety Policy

Schools and libraries receiving universal service discounts are required to adopt and enforce an Internet safety policy that includes a technology protection measure that protects against access by adults and minors to visual depictions

that are obscene, child pornography, or—with respect to use of computers with Internet access by minors—harmful to minors.

KPBSD Response: The Acceptable Use Policy/Internet Safety Policy addresses all required Internet Safety Policy issues.

For schools, the policy must also include monitoring the online activities of minors. Note: beginning July 1, 2012, when schools certify their compliance with CIPA, they will also be certifying that their Internet safety policies have been updated to provide for educating minors about appropriate online behavior, including interacting with other individuals on social networking websites and in chat rooms, cyberbullying awareness, and response.

KPBSD Response: Students will be provided age-appropriate instruction regarding safe and appropriate behavior on social networking sites, chat rooms, and other Internet services. Such instruction shall include, at a minimum, the dangers of posting personal information online, misrepresentation by online predators, how to report inappropriate or offensive content or threats, behaviors that constitute cyberbullying, and how to respond when subjected to cyberbullying.

(cf. 5131.43 Harassment, Intimidation and Bullying)

2. Technology Protection Measure.

A technology protection measure is a specific technology that blocks or filters Internet access. The school or library must enforce the operation of the technology protection measure during the use of its computers with Internet access, although an administrator, supervisor, or other person authorized by the authority with responsibility for administration of the school or library may disable the technology protection measure during use by an adult to enable access for bona fide research or other lawful purpose.

KPBSD Response: The District uses filtering software to screen Internet sites for offensive material. The Internet is a collection of thousands of worldwide networks and organizations that contain millions of pages of information. Users are cautioned that many of these pages contain offensive, sexually explicit, and inappropriate material, including, but not limited to the following categories: adult content, nudity, sex, gambling, violence, weapons, hacking, personals/dating, lingerie/swimsuit, racism/hate, tasteless, and illegal/questionable. In general, it is difficult to avoid at least some contact with this material while using the Internet. Even innocuous search requests may lead to sites with highly offensive content. Additionally, having an unfiltered email address on the Internet, as do both staff and students, may lead to receipt of unsolicited email containing offensive content. Users accessing the Internet do so at their own risk. No filtering software is one hundred percent effective, and it is possible that the software could fail. In the event that filtering is unsuccessful and users gain access to inappropriate and/or harmful material, the District will not be liable.

The District will never override the Internet filter for students and will only in the very rarest of circumstances override the filter, even for bona-fide research by adults.

3. Public Notice and Hearing or Meeting

The authority with responsibility for administration of the school or library must provide reasonable public notice and hold at least one public hearing or meeting to address a proposed technology protection measure and Internet safety policy. (For private schools, “public” notice means notice to their appropriate constituent group.) Unless required by local or state rules, an additional public notice and a hearing or meeting is not necessary for amendments to Internet safety policies.

KPBSD Response: Public notice and hearing are provided through the normal school board policy adoption process.

LEGAL REFERENCE

UNITED STATES CODE

15 U.S.C. 6501-6505 CHILDREN'S ONLINE PRIVACY PROTECTION ACT

20 U.S.C. 6751-6777, ENHANCING EDUCATION THROUGH TECHNOLOGY ACT, TITLE II, PART D

47 U.S.C. § 254, CHILDREN'S INTERNET PROTECTION ACT, AS AMENDED BY THE BROADBAND DATA IMPROVEMENT ACT (P.L. 110-385)

CODE OF FEDERAL REGULATIONS

47 C.F.R. § 54.520, AS UPDATED BY THE FEDERAL COMMUNICATIONS COMMISSION ORDER AND REPORT 11-125 (2011)

KENAI PENINSULA BOROUGH SCHOOL DISTRICT
Revised: 06/04/2012

[BP 6161.4 Internet Use](#)

[E 6161.4a Internet Non-Permission Form](#)

[E 6161.4\(b\) KPBSD Wireless Information](#)

APPENDIX B: TECHNOLOGY PLAN CONTRIBUTORS

Throughout the years, the following individuals have contributed to the KPBSD Technology Plan.

| Name | Affiliation |
|-------------------|---------------------------------------------------------------|
| Marty Anderson | Community |
| Dr. Steve Atwater | Former Superintendent, KPBSD |
| Joe Arness | Community |
| Hayden Beard | Student |
| Doris Cannon | Former Director, Elementary Curriculum/K-12 Curriculum, KPBSD |
| Michael Crawford | Former Information Services Staff, KPBSD |
| Sammy Crawford | Community |
| Liz Downing | Community |
| Sean Dusek | Superintendent, KPBSD |
| Annaleah Ernst | Student |
| Elizabeth Hayes | Director of Finance, KPBSD |
| David Henson | Information Services Staff, KPBSD |
| Sunni Hilts | Community |
| Lynn Hohl | Community |
| Bill Holt | Community |
| Jamie Meyers | Former Technology Integration Specialist, KPBSD |
| Tony Mika | Information Services Staff, KPBSD |
| Sandy Miller | Former Assistant Director, Federal Programs, KPBSD |
| Tim Navarre | Community |
| Ted Notter | Former Information Services Staff, KPBSD |
| John O'Brien | Assistant Superintendent of Instruction, KPBSD |
| Laurie Olson | Former Director of Finance, KPBSD |
| Eric Soderquist | Director, Information Services, KPBSD |
| Michelle Thomason | Professional Development Coach, KPBSD |
| Penny Vadla | Community |
| Tim Vlasak | Director, K-12 Schools/Assessment & Federal Programs, KPBSD |
| Jim White | Former Director, Information Services, KPBSD |