



## **2015-2017 TECHNOLOGY PLAN**

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January 2015

## Table of Contents

School Overview .....	1
Summary .....	1
Mission Statement .....	1
Technology Plan .....	2
Technology Needs Assessment .....	2
Needs Analysis .....	3
1. Deploy network domain servers at each campus and integrate the servers to provide better network management and resource supervision. ....	3
2. Upgrade and standardize all Windows-based personal computers to the same operating system and Microsoft Office version. ....	4
3. Review and update the schools' printing and copying resources to reduce costs. ....	5
4. Deploy mobile computing devices for every student for grades 3-12.....	6
5. Upgrade and integrate the campuses' telephone systems with user-friendly interactive systems for incoming calls. ....	8
6. Install functioning interactive instructional boards in every classroom at both campuses. ....	9
7. Implement a better inventory management system and device tracking system for all computing devices at all three schools, especially for monitoring and tracking devices purchased with Title I funds. ....	11
8. Provide professional development to teachers to assist them in utilizing both the new devices being deployed and the new classroom management and learning management software applications being provided to allow them to develop more efficient and effective instructional strategies and assessments for each student. ....	12
9. Provide additional instruction for students to utilize various types of digital resources, including e-mail, Google Drive, Microsoft Office, Google Apps, and other cloud-based learning tools.....	13
10. Identify and seek funding from various federal, state and private sources to upgrade and improve the school's technology, particularly the school's internet network capacity.....	14

## School Overview

### Summary

Legacy is a K5-12 public school within the Greenville County public school system. Legacy reflects both the West End renewal and a community tradition of pride and excellence. Our elementary, middle, and high schools feature a progressive curriculum delivered via a nationally recognized system for teaching and learning. Legacy is the only public school in South Carolina that provides physical education every day for every student.

### Mission Statement

The mission of Legacy Charter School is to offer a quality, rigorous, and relevant educational program leading to college graduation and empowering underserved urban students to become productive, healthy, principled citizens in a changing society.

Legacy Charter School is located on two campuses: Elementary School and Parker. The Elementary School campus contains the Elementary School, which is home to grades Kindergarten through 4<sup>th</sup> grade. The purpose of the Elementary School is to meet clearly defined learning objectives for our children following the Common Core National Standards. While teaching this curriculum, it creates a school atmosphere in which every student can learn the values of discipline, respect, and a love of learning. All students have general music, strings, and percussion. Its curriculum stresses individual attention and community and parental involvement for student success.

The Parker campus is the home of the Middle School and the Early College High School. The Middle School is comprised of our unique Fifth Grade Academy in addition to sixth through eighth grades. The Middle School is structured to prepare its students for the transition from elementary school to middle school and from middle school to success in the Early College High School. Its staff and faculty work collaboratively, focusing on individual learners within small classes. Every middle school student has an on-campus adult mentor. The Early College High School allows qualified students to take college courses and receive both high school and college credit. Our higher education partners are Greenville Tech and North Greenville University.

### Technology Strategic Goals

Through the use of technology within the classroom environment, the school has established the following strategic goals:

- Maximize the learning of students and teachers through the use of technology
- Integrate technology into the curriculum where appropriate
- Strengthen the assessment of student learning and the timely analysis of assessment results through web and other electronic-based assessment instruments
- Engage and strengthen the school community through enhanced communication capabilities such as e-mail, network services, website and other electronic means
- Ensure effective reporting to State and Federal governments.

## Technology Plan

### Technology Needs Assessment

Based upon the current state of the technology infrastructure of the schools at the beginning of the 2015 academic year, the following needs were identified by the school's administration that needed to be addressed by the school's new technology plan:

1. Deploy network domain servers at each campus and integrate the servers to provide better network management and resource supervision.
2. Upgrade and standardize all Windows-based personal computers to the same operating system and Microsoft Office version.
3. Review and update the schools' printing and copying resources to reduce costs.
4. Deploy mobile computing devices for every student for grades 3-12.
5. Upgrade and integrate the campuses' telephone systems and implement user-friendly response systems for incoming calls.
6. Install functioning interactive instructional boards in every classroom at both campuses.
7. Implement a better inventory management system and device tracking system for all computing devices at all three schools, especially for monitoring and tracking devices purchased with Title I funds.
8. Provide professional development to teachers to assist them in utilizing both the new devices being deployed and the new classroom management and learning management software applications being provided to allow them to develop more efficient and effective instructional strategies and assessments for each student.
9. Provide additional instruction for students to utilize various types of digital resources, including e-mail, Google Drive, Microsoft Office, Google Apps, and other cloud-based learning tools.
10. Identify and seek funding from various federal, state and private sources to upgrade and improve the schools' technology, particularly the school's internet network capacity.
11. Review the school's Acceptable Use Policy and other technology policies to confirm compliance with the Children's Internet Protection Act, the Family Educational Rights and Privacy Act, and other applicable state and federal laws.

## Needs Analysis

1. Deploy network domain servers at each campus and integrate the servers to provide better network management and resource supervision.

### *Initial Assessment:*

Both campuses had file servers that served as a file sharing source. The servers did not require logins to access. The servers did not provide centralized networking services such as login security, network printing, or DNS services.

### *Goals:*

Both campuses need Window-based network domain services to allow for better network service, shared resources, network management and network analytics. The domains need to be configured to allow for integration of the domains in the future. The integrated network domain services will allow for more-efficient deployment of instructional software applications to computers connected to the school's network.

### *Actions needed to Accomplish Goals:*

The school purchased a site license for Microsoft® Windows 2008 Server software. The existing file servers were converted to domain servers to allow for Active Directory user login and shared network resources in October 2014. Initially, the two domain servers served as isolated servers. In December, the two servers were integrated via a Metro-E LAN network connecting the two campuses. In addition, a back-up domain server was added to the Parker Campus, which serves as the print server for both campuses.

Future actions include integrating a second domain server into the network to serve as a back-up domain server and print server. Once the fourth domain server is deployed, then additional networking services including electronic facsimile services and backup services will be deployed between the two campuses. All domain servers should be upgraded or replaced to allow the deployment of Windows 2012 Server at both campuses.

### *Evaluation Process for Goal Achievement:*

The IT department will use Server Management software deployed on the domain servers to monitor, correct and address current and future hardware and software issues. School administration will monitor future technology needs through faculty and student feedback. Based upon this feedback, the administration will provide guidance regarding networking needs for both campuses. The IT department will provide recommendations regarding the technical requirements to meet the campuses' networking needs.

## 2. Upgrade and standardize all Windows-based personal computers to the same operating system and Microsoft Office version.

### *Initial Assessment:*

Both campuses had various types of personal computers, including Dell and Acer computer systems. The Windows operating systems on these computers included Windows XP, Vista, 7 and 8. Microsoft support for Windows XP ended prior to the beginning of the school year. In addition, the computers had several versions of Windows Office Professional ranging from Office 2007 to Office 2010. Because of the variety of operating systems and software applications, support of these systems

### *Goals:*

All Windows-based computers need to have same version of operating systems and office applications to provide faculty and students with the same level of application support. This will allow faculty and students to share documents, images, videos and other electronic products seamlessly with compatibility issues.

### *Actions needed to Accomplish Goals:*

The school purchased a site license for Microsoft® Windows operating systems and Microsoft Office Professional. A computer imaging server was deployed on the network that allowed IT staff to create uniform images of the operating system and computer applications for the various types of personal computers. This imaging system allowed the IT Department to standardize the majority of personal computers to Windows 7 and Microsoft Office Professional 2013. The IT Department also deployed Micro Office 365 through the school's Google® Doman website. This allows faculty and students to save and to access Office documents via the Internet using their Google G-mail accounts.

Future actions include evaluating and upgrading personal computers to newer versions of Windows and Office Professional. In addition, faculty and students need to be instructed on how to access and use Microsoft Office 365 through Internet web browsers. Finally, IT Department will maintain the Imaging Server on the domain server by deleting images for retired computer models, updating current images and creating new images for new computer models.

### *Evaluation Process for Goal Achievement:*

The IT department will manage and monitor faculty and student use of Microsoft Office through the reporting functionality built into Office 365 administrative functions. Based upon this information, the IT Department will provide additional training and resources to faculty and students as needed. The IT Department will maintain the Imaging Server and upgrade it as new revisions are released.

### 3. Review and update the schools' printing and copying resources to reduce costs.

#### *Initial Assessment:*

The school had a variety of Sharp, Dell and Kyocera-Mita printers deployed throughout both campuses. At the beginning of the school year, the schools had four different lease contracts with Sharp USA for the Sharp and Kyocera printers. The schools had over 70 individual and multi-function printers between the three schools. None of the printers were deployed as network printers. Faculty and students could print to any printer on the school's network provided the printer had been configured as a shared printer. Because of this unmanaged deployment of printer, a substantial amount of duplicate, lost and misdirected printing occurred. A review of school's monthly printing costs with Gretchen Taylor, the school's Controller, indicated that the school was spending between \$8,000.00 and \$10,000.00 per month on printer leases and printing fees. Administration determined the printing costs were excessive and that printing services need to be upgraded to reduce costs and make the school's printing services more effective.

#### *Actions needed to Accomplish Goals:*

The school renegotiated its contracts with Sharp USA to one comprehensive contract. The new contract increased the number of multi-functional printers and cut the number of smaller printers in half. The new contract reduced the number of printers deployed from over 70 to less than 40. In addition, the IT Department created network policies for all of the printers that deployed the printers through the integrated network's Active Directory service. This deployment limited the number of printers that each faculty member could access. The contract also provided the school with Sharp's Papercut® print management software. The software tracks copying and printing jobs for each school employee. The software allows the IT Department to control the amount of color and black & white pages each employee can print. The software also provides a substantial number of reporting functions to monitor individual and school printing costs.

Future actions include training employees on how to access Papercut reporting functions, which will allow them to monitor their own printing and copying activity.

#### *Evaluation Process for Goal Achievement:*

The IT Department will provide group reporting functionality to all levels of school administration. Based upon this information, school administration will develop printing and copying policies and procedures for faculty and staff. The IT Department will implement these policies and train employees how to comply with the policies. Administration will monitor the employees' compliance with these policies through Papercut reports.

#### 4. Deploy mobile computing devices for every student for grades 3-12.

##### *Initial Assessment:*

At the beginning of the academic year, the school was awarded a grant by the Greenville United Way. The school purchased 440 Amazon Kindles for use by the high school for its faculty and staff. The high school also had an Apple iPad cart containing 27 Apple iPad 2s, a laptop cart containing 24 Dell Latitude 5530s, and a laptop cart containing 24 Dell Latitude 3540s. These devices were provided through funds from the federal Title I program. The middle school had approximately fifty Dell 2120 Netbooks. These netbooks were spread out between the various classrooms. The elementary school had three iPad carts containing iPad 2s and iPad 4s. Each cart contained 25 iPads, which were also Title I Program devices. All faculty members had a Dell Latitude laptop, models 5500, 5510, 5520 and 5530s. The teaching assistants were issued Title I Apple iPads. Approximately forty Apple iPads were issued to faculty.

##### *Actions needed to Accomplish Goals:*

Initially, the school had approximately 600 mobile devices, the vast majority of them deployed to the high school. The high school issued each student who signed a Mobile Device Acceptable Use Policy with a Kindle that he or she could take home or use at school for the entire school year.

The school received a grant from ScanSource, which allowed it to purchase 115 Apple iPad Mini 3s and five mobile carts for the elementary school. This gave the elementary school approximately 175 mobile devices to be used by the 3<sup>rd</sup> and 4<sup>th</sup> grades.

In October, the Greenville County School District announced a Title I Program to initiate a 1:1 mobile device program for all of its 6<sup>th</sup> grade classes. The program provided the school approximately \$255,000.00 for mobile devices. The school administration and IT Department developed a Request for Proposals for Windows laptops or Android tablets to implement the 1:1 program for the entire middle school. The school received six responses to the RFP. The contract was awarded to Quattro Solutions, Inc. to provide 475 E-Bolt Android tablets and Bridgetek Technologies to provide 25 mobile carts. These contracts will provide each classroom in the middle school with a mobile cart containing 25 Android tablets. The tablets will allow students to access Google mail, Microsoft Office 365, and other educational websites and software applications via the tablets. These tablets will be delivered in the summer and deployed by the beginning of the 2015-2016 academic year.

Further actions including transferring mobile devices from the Parker Campus to the Elementary School campus. The elementary school currently has eight mobile iPad carts. The elementary school has five 3<sup>rd</sup> grade and five 4<sup>th</sup> grade classes. To reach the goal of a mobile device for each 3<sup>rd</sup> and 4<sup>th</sup> grade student, the Title I iPads and Netbooks from the middle school will be transferred to the elementary school and placed in mobile carts. Additionally, nine mobile carts containing Amazon Kindles will be deployed to the high school to allow classroom sets of Kindles to be used by the faculty.

At the beginning of the 2015-2016 academic, the school should have enough devices for every student between grades 3 through 12 to have access to a mobile devices on a daily basis.

##### *Evaluation Process for Goal Achievement:*

Once the mobile devices are deployed, the IT Department and administration will monitor faculty and student utilization of the mobile devices in the classroom. The monitoring will include the amount of time the devices are being used, the number and types of software applications being used, and the impact of

the devices on student achievement through MAP testing and other standardized tests administered. The administration will establish a device refreshment policy to establish a budget for device replacement as new technology is released. The IT department will then implement the policies established by the administration by deploying software applications to devices through the school's integrated network and to refresh the mobile devices as they become obsolete. The administration and the IT Department will seek additional sources of funding to provide the school with additional resources including software applications, hardware upgrades and accessories.

## 5. Upgrade and integrate the campuses' telephone systems with user-friendly interactive systems for incoming calls.

### *Initial Assessment:*

At the beginning of the academic year, each campus had its own private VOIP telephone system. Each system was operating over a T1 PRI connection provided by Charter Communications, Inc. In addition, each campus had a dedicated business telephone line for facsimile transmissions. There were additional dedicated POTS lines for fire alarm systems, burglar systems and dedicated telephone lines. The VOIP system at the elementary is a Cisco voice system with a limited number of telephone extensions. The system was at its maximum at the beginning of the year, and additional extensions were needed. The VOIP system at Parker Campus is a Avaya Office 500 VOIP system with seventy extensions. It has the capacity to handle up to 500 extensions. The school had applied for and received E-Rate funds for telecommunication services. The funds cover ninety percent of the telecommunication services for the two campuses. The cost for the two campuses was approximately \$1,400.00 per month for local and long distance services. Because of the limitation of extensions at the Elementary School campus and the announced changes to E-Rate's funding of telecommunication services, the school decided to investigate options to integrate the telephone system of both schools to one integrated VOIP telephone system connected through the school's Metro-E LAN circuit. The school also decided to investigate an Internet hosted VOIP system that would allow

### *Actions needed to Accomplish Goals:*

The school will issue a Form 470 Request for Services through the federal E-Rate program seeking proposals for both a Hosted VOIP system as well as an internal VOIP system. After receipt of the proposals, the administration and the IT Department will evaluate the proposal based upon implementation costs, monthly costs, features, and future expansion.

After a system is selected, the school will implement the system during the summer break. The provider and the IT Department will then provide the faculty and staff with training on how to use the new system prior to the beginning of the 2015-2016 academic year. During the implementation, the school will set up an Auto-Attendant system that will provide parents and other person will better response to telephone calls.

### *Evaluation Process for Goal Achievement:*

After the new system is implemented, the IT Department will monitor telephone responses by monitoring faculty and staff access to voice messages, average response times to incoming calls, number of dropped calls and number of call roll-overs. This information will be provided to school administration. School administration will adjust telephone policies and procedures to provide more efficient responses to incoming telephone compunctions. The IT Department will then modify the VOIP system to implement the changes to the school's policies and procedures. The school will adjust its E-Rate filings to reflect any increases or decreases to telephone communication services for the next three academic years.

## 6. Install functioning interactive instructional boards in every classroom at both campuses.

### *Initial Assessment:*

The majority of the classrooms at the Parker Campus contained either a stationary or mobile Promethean Board with projector. There were three classrooms in the Fine Arts Center and two classrooms in the main academic building that did not have an interactive board. The elementary school had a combination of SmartBoards and Promethean Boards: eight SmartBoards and 20 Promethean Boards. The SmartBoards had been transferred from a previous school site. Several of these boards did not function or functioned poorly. Three classrooms did not have any type of interactive boards. In October, the administration decided that the immediate needs for functional interactive boards needed to be addressed at the elementary school.

### *Actions needed to Accomplish Goals:*

The administration and IT Department evaluated the Aquos Board Interactive System provided by Sharp USA. After comparing the existing Promethean Board technology implemented at the school, the administration selected to purchase thirteen Aquos Boards for the following reasons:

- The boards are "smart". The board has a computer attached to it. It is integrated into the functioning of the board. This simplifies board implementation because the teacher does not have to connect the board to a separate computer, typically their classroom laptop. The teacher doesn't have to worry about connecting a VGA cable, a USB cable and/or other audio/visual connections. This allows to the teacher to use their computer for other activities that students do not need to see.
- The board will function if the teacher has a substitute or another person in the classroom. When a teacher is absent, the teacher generally has taken their laptop out of the classroom. With a Promethean Board, another laptop/desktop has to be deployed in the classroom for as long as the teacher is gone.
- The Aquos Board has a much smaller "footprint" in the classroom than a Promethean Board. The Aquos Board doesn't have a projector that hangs out into the classroom. Because there isn't a projector, the students cannot change the alignment or the focus of the board if the students touch it.
- The board is a "touch" board. It works like a giant tablet. The teacher does not have to keep up with a pen to operate the board. The board has eight points of touch, which means that up to eight different students can be working on the board at the same time. Because it is a tablet, the teacher typically picks up how to use it very easily.
- The board can be used to manage the classroom through the school's network. The board will allow the teacher to monitor the use of mobile devices in the classroom.
- The board has reduced repair costs. Promethean projector bulbs typically cost about \$170.00 per bulb. They last about 2-3 years maximum. The Aquos Board comes with a five-year repair/replacement warranty. However, these boards should last for a longer period of time.
- The board has a high-definition image instead of a projected one. The image doesn't fade or wash out as the bulb ages. It is much easier to read and see even with the classroom lights on.
- The boards are price competitive to Promethean boards.

Nine of the thirteen Aquos Boards were installed at the elementary school, which replaced all of the Smartboards. Four of the boards were placed at the Parker Campus. After moving around the mobile boards, almost all of the classrooms had a functioning board.

Future actions include installing additional boards as the older boards need replacement. The administration and IT Department will continue to seek funding to replace the existing boards as quickly as possible.

*Evaluation Process for Goal Achievement:*

The IT Department and administration received very favorable responses from the teachers who received the initial set of Aquos Boards. The IT Department will continue to seek input from faculty regarding software and training needs. In addition, the IT Department will seek professional development services from Sharp personnel to provide the IT Department, faculty and staff with training on new features and functionality.

7. Implement a better inventory management system and device tracking system for all computing devices at all three schools, especially for monitoring and tracking devices purchased with Title I funds.

*Initial Assessment:*

At the beginning of the school academic year, the school maintained an inventory of the schools technology in an Excel spreadsheet. The spreadsheet contained information regarding each asset owned by or provided to the school through the Title I program. With the substantial increase in computing devices that the school received at the beginning of the year, it became apparent that the spreadsheet was inadequate to track and monitor the equipment, especially the mobile devices. The IT Department determined that an inventory tracking and monitoring system was needed immediately.

*Actions needed to Accomplish Goals:*

The IT Department researched Mobile Device Management (MDM) systems that provided inventory management functionality. After researching several systems, the IT Department selected the Meraki MDM system. The system was selected because it could be deployed on all of the platforms being used at the school: Windows devices, IOS devices, Android devices and XOS devices. The system is cloud-based and can be accessed anywhere through Internet access. Finally, the system was provided to educational institutions for free. In November, the IT Department began to deploy the software on all of its computing devices. The software is currently deployed on 600 of the school's devices.

Future actions include deploying the system on any remaining devices without the system installed. In addition, the devices will be classified by type, location, and funding source. These classifications will facilitate managing the inventory system. The system will also allow us to locate any devices that cannot be located during a physical inventory.

*Evaluation Process for Goal Achievement:*

The IT Department will assess the effectiveness of the MDM system on an annual basis with regards to ease of deployment, functionality, effectiveness regarding inventory control and device monitoring. The IT Department will receive training necessary to utilize new features and functionality of any software upgrades to the system.

8. Provide professional development to teachers to assist them in utilizing both the new devices being deployed and the new classroom management and learning management software applications being provided to allow them to develop more efficient and effective instructional strategies and assessments for each student.

*Initial Assessment:*

Because of all of the network infrastructure needs that needed to be addressed at the beginning of the year, the IT Department was limited in its ability to provide training to the faculty and staff at the beginning of the academic year. Because of this limitation, professional development has been provided on an Ad Hoc basis as time has provided. This has limited the faculty's ability to take advantage of all of the technology that has been implemented since the beginning of the year.

*Actions needed to Accomplish Goals:*

Prior to the end of the school year and before the beginning of the new academic year, professional development regarding the new mobile devices and the classroom management software they contain will be provided to faculty. This professional development will be provided by the mobile device vendor. Faculty will receive a mobile device during the summer, which will allow them to research and explore the functionality of the learning management software. In addition, this professional development, the IT Department will research and identify additional instructional applications, such as Google Classroom, Promethean Classflow, and other instructional software applications. The IT Department will then deploy and train the faculty regarding these applications at the beginning of the next academic year.

*Evaluation Process for Goal Achievement:*

The administration will seek feedback from the school's master teachers and mentor teachers regarding the faculty's use of these educational tools. The administration will then determine the type and scope of additional professional development needs to assist the faculty in utilizing these resources. The administration will engage either third-party providers or IT personnel to provide this additional development. Administration will continue to monitor professional development needs for the next three years.

9. Provide additional instruction for students to utilize various types of digital resources, including e-mail, Google Drive, Microsoft Office, Google Apps, and other cloud-based learning tools.

*Initial Assessment:*

The school has acquired a substantial amount of additional digital resources for the students including mobile computing devices, software applications and cloud-based storage and software capability. Although the school has added these additional resources for the students, the students have not received instruction on how to access and utilize these additional resources in their learning experience.

*Actions needed to Accomplish Goals:*

In addition to professional development regarding instructional applications, the school's faculty and staff need to receive training on how to instruct student on how to access their Google Gmail accounts, their Microsoft Office 365 accounts and other school-related educational resources. The faculty and staff will receive training at the beginning of the upcoming academic year regarding the resources that he been provided for the students. The faculty and staff will be instructed on how to access these resources through the various mobile devices that the school has. Business Technology teachers will receive additional instruction regarding account administration, such as account creation, modification and deletion. This instruction will allow each school to administer student accounts with limited involvement from the IT Department.

*Evaluation Process for Goal Achievement:*

The IT Department will monitor the use of the various learning tools using the analytics and reporting functionality contained in Google Gmail, Microsoft Office 365 and other cloud-based learning tools deployed. The IT Department will then provide administration with this information. The school administration will identify additional instructional needs for the students in order to utilize these tools more effectively. The IT Department will then implement training schedules needed to address these needs.

10. Identify and seek funding from various federal, state and private sources to upgrade and improve the school's technology, particularly the school's internet network capacity.

*Initial Assessment:*

The school currently is receiving E-Rate funding for its telecommunications services. These funds supplement the costs for the schools' local, long distance and wireless telecommunication services. At the beginning of the academic year, the school had joined the state's Internet Services consortium, which reduced the school's monthly Internet costs from \$1,100.00 per month to zero. The School is currently receiving 50MBS WAN bandwidth through the consortium. The school has requested an increase of 100MBS WAN bandwidth through the consortium and an increase to the Metro-E LAN bandwidth to 100MBS as well. The school had previously applied for upgrades to its internal network infrastructure using the assistance of an E-Rate consultant. However, these requests had not received funding. After the Federal Communication Commission announced the revisions to the E-Rate Program, the school reviewed all of the services to determine which programs and services it may qualify.

After reviewing the services covered under the E-Rate Program, including the proposed changes contained the FCCs Modernization Order, the IT Department identified several opportunities for additional funding for services covered by the E-Rate Program. In addition to local, long distance and wireless telecommunications services, the school has a set of 25 "touch-to-talk" telecommunication devices that it uses to communicate with operational and transportation employees. This service appears to be covered under E-Rate. The IT Department also identified firewall, routing and web caching services to should be covered under Category Two Services. The school is currently the Untangle® NG Firewall suite of applications for these services.

In addition to those services, USAC has announced additional funding to modernize internal network infrastructure including wiring, routers, switches and wireless access points. USAC has establish a budget of \$150 per student for funding purposes. With a current student enrollment of 1,100 students, the school would be eligible to pursue up to \$165,000.00 of funding for internal network connections upgrades. The Parker Campus is scheduled for a significant renovation project beginning this summer. Because of this project, this summer would be an excellent time to replace the outdate wiring and networking equipment at the campus. The network cabling at the Parker campus consists of a combination of fiber optic and Ethernet Category 5 cabling that is a minimum of fifteen years old. Currently, the majority of network switches at either campus have maximum transfer speeds of 100MBS. This limited speed has created several bottlenecks within the internal network, especially between the two campuses. In addition, all of the network switches at both campuses are between ten and twenty years old. The switches are made by a variety of vendors, which has created integration problems within the network. With the implementation of 1:1 mobile computing devices at both campuses next year, upgrading the existing internal network is essential for the implementation of these devices in the classroom environment.

*Actions needed to Accomplish Goals:*

The IT Department will file Form 470 Request for Proposals for network cabling projects at the Parker Campus and upgrades to networking equipment at both campuses. The IT Department will then review all proposals submitted for the most cost-effective proposals. The IT Department will then file Form 471

Requests for Funding with the E-Rate Program. The IT Department will seek funding for its router/firewall/web caching services as well through E-Rate qualified vendors. The IT Department will file a Category Two Form 470 for these services. The IT Department will then select the most cost-effective provider for these services.

If these funding requests are approved, then the IT Department will coordinate installation and implementation schedules with the selected vendors and the general contractor for the building renovations. This projects should be completed by August 1, 2015. In the event the funding are requests are not approved, then the school will continue to seek funding for these network renovations through the federal E-Rate Program in future funding cycles.

In addition to federal E-Rate funding, the school will pursue additional state and federal funding to implement a wireless closed-circuit camera system for bus transportation and campus monitoring. Additional funding will be sought to implement a keyless entry system at the main entrances at both campuses.

*Evaluation Process for Goal Achievement:*

After the initial upgrades to the networking system, the IT Department will monitor data throughput throughout the internal network to identify bottlenecks and other unreliable networking equipment. The IT Department will then use any remaining E-Rate funds to upgrade or replace any cabling or networking equipment that is the source of the networking problems. The IT Department will monitor the use of WAN Bandwidth and request additional bandwidth as needed. The school will also monitor changes to the structure of the E-Rate funding for Category One telecommunication services. The school will adjust its use of telecommunications services to reflect changes to the funding rubric to minimize the school's expenses.

11. Review the school's Acceptable Use Policy and other technology policies to confirm compliance with the Children's Internet Protection Act, the Family Educational Rights and Privacy Act, and other applicable state and federal laws.

*Initial Assessment:*

The school previously adopted an Acceptable Use Policy in compliance with CIPA as part of its E-Rate funding requests. The policy was incorporated into the school's Student Handbook and placed on the school's website. When the school issued the Kindle Fire devices to the high school students, it also developed and adopted a Mobile Device Acceptable Use Policy for use of these devices both on and off school campus. In order to comply with the CIPA requirements for web filtering, the school deployed an Untangle NG web filtering application at each campus. This application allowed the IT Department to block the students' access to inappropriate materials located on the Internet. It also allowed the IT Department to monitor bandwidth and overall Internet Usage.

*Actions needed to Accomplish Goals:*

After the two campuses were connected using the Metro-E LAN switch, the school implement one web filtering device for all Internet traffic for both campuses. This application allows the IT Department to create "logical racks" that allow the IT Department to allow different schools access to age-appropriate materials.

Future actions include reviewing both policies to confirm that they comply with applicable federal laws, including CIPA and FERPA.

*Evaluation Process for Goal Achievement:*

The IT Department will continue to collect signed acknowledgements of both policies from both parents and teachers. The IT Department will audit the signed acknowledgements that all students and parents had provided assignments. The IT Department will assure receipt of these acknowledgements prior to the issuance and use of any of the school's computing devices.

## Legacy Charter School Technology Budget 2015-2018

	2015-2016	2016-2017	2017-2018
<b>Recurring Expenses</b>			
<b>Telecommunications</b>			
Local and Long Distance Services	7,500.00	7,500.00	7,500.00
Cellular Telephone Services	8,000.00	8,300.00	8,300.00
Wireless Telephone Services	1,850.00	1,900.00	1,950.00
<b>Internet Access</b>	1,100.00	1,100.00	2,200.00
<b>Firewall/Content Filtering</b>	4,400.00	4,400.00	4,400.00
<b>Access Point Licenses</b>	2,000.00	2,000.00	2,500.00
<b>Software Licenses</b>			
Microsoft Software Site License	5,250.00	5,250.00	5,250.00
NWEA MAP Testing Software License	12,600.00	12,800.00	13,000.00
Compass Learning Software License	5,500.00	5,500.00	5,500.00
<b>Printing Services</b>	65,000.00	65,000.00	65,000.00
<b>Total Recurring Expenses</b>	<b>113,200.00</b>	<b>113,750.00</b>	<b>115,600.00</b>
<b>Equipment Refurbishment</b>			
<b>Staff Devices</b>	28,000.00	28,000.00	28,000.00
<b>Interactive Classroom Boards</b>	58,000.00	88,800.00	118,800.00
<b>Lab Computers</b>			
<b>Student Devices</b>			
Elementary School	5,000.00	5,000.00	5,000.00
Middle School	255,000.00	255,000.00	25,000.00
High School	17,000.00	22,000.00	25,000.00
<b>Total Equipment Refurbishment</b>	<b>363,000.00</b>	<b>398,800.00</b>	<b>201,800.00</b>
<b>Capital Projects</b>			
Parker Network Wiring Project	40,000.00	4,000.00	2,500.00
Network Connection Upgrade	106,000.00	4,000.00	2,500.00
Telephone System Integration	16,250.00		
Domain Server Upgrades		8,000.00	4,000.00
<b>Total Capital Project Expenditures</b>	<b>162,250.00</b>	<b>16,000.00</b>	<b>9,000.00</b>
<b>Total Cash Outflow</b>	<b>638,450.00</b>	<b>528,550.00</b>	<b>326,400.00</b>

The school has applied for funding for telecommunication services through the USAC E-Rate program. The school has been approved previously. E-Rate covers 70% of these costs for 2015-2016, 50% for 2016-2017 and 30% for 2017-2018.



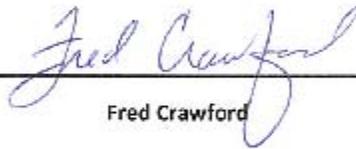


## 2015-2018 TECHNOLOGY PLAN

### Signature Page

We, the undersigned hereby submit this Technology Plan to the South Carolina Department of Education for review and approval:

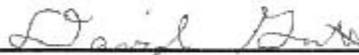
#### Executive Director



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Fred Crawford

#### Plan Preparer



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David Gantt

Director of Technology