On **November 3, 2015**, Kalkaska Public Schools will be asking the voters to vote on a Technology Bond. If passed, this bond will benefit KPS students through upgrades to our current technology and improvements to the infrastructure. Any funds from this bond cannot be used to pay for staff salaries or other general fund expenses.

What Does the Bond Include?

Computers: Classroom and Computer Lab – Outdated computers in these locations create accessibility problems for students. Slow login times, and a lack of computing "horsepower," prevent students from using their classroom and computer lab time efficiently. While there are many computers (480 devices) in these locations, they will be replaced over 5 years. Starting with the most outdated equipment. **Cost: $240,000** (480 devices @ $500 each)

Computers: Mobile Carts – Watching paint dry is very boring. Despite our best efforts to improve this, our current mobile carts take an incredibly long time to boot up and connect to our network. This is due to their age and limited processor power. The need for additional carts of mobile computers is very high. Such carts greatly increase student accessibility to technology. **Cost: $247,000** (450 devices @ $500 each – 15 computer carts @ $1,500 each)

Projectors – The mainstay of the classroom, our projectors bring the world to the students. However, our current projectors are starting to fail due to old age. Advances in projector technology allow for bulb lives that are 10 times longer than our current models. Improved projection will ensure that no child is left behind when it comes to his/her class presentations. **Cost: $218,000** for district-wide projector replacement.

Tablets – When blended with current teaching methods, tablets give the students a chance to further explore what is being studied within the classroom. Lesson-specific apps allow students to experience the lesson through and interactive experience. Tablets also bring a mobile teaching environment where students can present through the tablet via projectors. **Cost: $75,000** (150 devices @ $500 per device)

Wireless Upgrade – Excellent Wi-Fi is the key to a good mobile computing environment. Our current wireless system is not equipped to adequately handle the demands of the average classroom sizes. Upgrading our wireless infrastructure will allow greater Wi-Fi capabilities – allowing more students to connect per access point. The use of mobile devices could be embedded into lessons, allowing students to establish deeper connections to the curriculum. **Cost: $130,000** to purchase 170 new 802.11AC access points (with additional operational licenses).

Internal Network Wiring – Infrastructure, infrastructure, infrastructure. Without updating the internal network wiring, all of the improvements (Wi-Fi, cameras, projectors) will be for nothing. By increasing the infrastructure, we create an environment where students' experiences are enhanced by little or no interruptions to service. **Cost: $100,000**

Network Switches: Upgrade – Much like traffic jams, information flowing through our network becomes "backed up" due to the inadequate/outdated switches we are currently using. Upgrading the switches creates more lanes for the information to travel through. This will increase the speed at which students can access information, log onto computers, and work collaboratively with other students on our network. **Cost: $160,000**

Battery Back-Up Replacement – Our current phone system operates over our network. However, if power is lost to the network, our current battery back-up system only permits the phones to work for 5 minutes. Replacing this system with a system that meets current needs will triple these times. **Cost: $19,500**
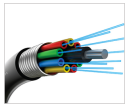
Inter-Building Fiber – The fiber providing the network/internet to buildings within our district is over 10 years old. Current technology demands have pushed this fiber beyond its limit. Upgrading this fiber will produce a massive speed increase for the buildings it serves. Students will benefit from faster access to the Internet, quicker login times, and it also eases the demands of state-mandated online testing. **Cost: $100,000**

Server Replacement – Time is hard on a server. Our current servers are nearing their end of life. Within the next 2-3 years we will need to replace them. By replacing the existing servers with 2 large virtual servers, we will be able to meet the anticipated future needs of the district. These new servers will also help the district reduce electrical and cooling costs while having enough processing power to support the most demanding software. **Cost: $50,000**

Additional Data Storage – Information storage is a constant battle. The current demands of technology have shown us that we need more data storage to handle the demands of the students and the district. **Cost: $75,000**

PC Replacement – Many of the computers utilized throughout the district, but not found in the labs will need to be replaced over the next 4 years. (Many are limping along right now.) In doing this, students and staff will be provided better access to our network on devices that are more dependable than what is currently being used. **Cost: $73,000** (125 devices @ $584 per device)

Student Safety Improvements – Safety can always be improved. Additional security cameras, replacing outdated P.A. systems are a must. New P.A. systems allow for staff to make building wide announcements via their classroom phones should an emergency arise. Student safety is a school's top priority. **Cost: $125,000**

Installation and Configuration – Additional configuration and installation is required to get all of the new wiring and equipment operational. **Cost: $75,000**

Frequently Asked Questions

• **What is the School asking for?** 　○ A millage of 0.68	• **What is the total amount of the millage?** 　○ $1.75 million
• **What is the duration of the millage?** 　○ 7 years	• **Will this provide one-to-one devices for students?** 　○ No, our goal is to increase access to technology, not go to a 1:1 device format.
• **How much will this cost me?** 　○ **$1.42 per month** for a home with a $25,000 taxable value (home worth $50,000) 　○ **$2.83 per month** for a home with a $50,000 taxable value (home worth $100,000)	• **Will this place my child in front of a computer all day long?** 　○ No, technology is a tool teachers use to enhance their lessons. This bond provides students with an increased access to technology. This, blended with effective teaching strategies, will prepare students for the future technological demands they will face in the workforce and college.

* The district is constantly applying for grants to help support our technological requirements. The grants that we have received have proven insufficient to meet the districts needs. The grants have addressed our small problems. The technology bond will allow the district to address costly, pressing concerns, and help future-proof the district.

** The difference in cost between the amounts provided and the asking amount of the bond is due to the cost of bond development – attorney and bond agent fees.