WHITEPAPER

The K–12 Telecom Landscape Post E-Rate

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Introduction

Your district's phone system may not be your primary concern right now, but it is a concern. Since the FCC adopted the E-Rate Modernization Order of 20141, discounts for voice services have phased down 20 percent every year, to free up funding for broadband, Wi-Fi, and Internet services. For schools that were counting on those discounts to pay for ongoing service contracts or to upgrade or replace their aging phone systems, the phase-out presents a new IT budget challenge.

As these cuts continue, certain questions will become more persistent among K–12 IT teams: How much longer will your current phone system last? How much longer will you be able to avoid the expense of an upgrade?

In the past, school districts have—either by choice or out of necessity—milked their phone systems for all they were worth, nursing them along for as many years as possible. As a result, users have learned to cope with the problems arising from this approach: outages, poor call quality, hunting for compatible phones and components, and waiting for technicians to make needed changes, repairs, and updates. And in previous decades, when phone technology didn't change much year to year, this type of strategy worked.

Fast forward to today. As technology evolves faster than ever, IT systems rely more heavily on software that requires more frequent updates to remain operational. The older your hardware and software, the more isolated you are from new functions, like mobility options or increased security measures. This reduces the lifespan of your average phone system.

But what if it didn't have to be that way?

Forward-thinking administrators and IT staff are already taking advantage of the opportunities offered by modern, cloud-based phone systems, including:

- **Elimination of future hardware and wiring costs** through the consolidation of campus infrastructure.
- **Integration with school safety solutions** and existing paging systems.
- **Easy-to-manage remote technology** to make the most of your already-stretched IT staff.
- **Vendor-hosted and managed solutions** that never require an upgrade again—ever.

This whitepaper discusses the current landscape of K–12 telecom funding, the rising concerns impacted by recent changes, and what schools should look for in future K–12 phone systems.

If you have an older, outdated system, you might feel like you're sitting on a time bomb. Evaluating possible replacements is especially critical when:

Your phone system is **reaching end of life** and your **service contract has lapsed**.

Your **IT staff is changing** and **you can no longer support your system** without the added costs of technicians and support.

Your system is fine, but **outdated**, and **doesn't offer mobility applications or integrate with safety solutions.**

The Current State of Telecom Funding Post-E-Rate

The E-Rate Program is no longer a reliable source for telecom funding. Though the program is financially sound, with $3.9 billion set aside for E-Rate funding[2] and $200 million rolling over from 2016, recent updates to the program earmark the lion's share of those funds for upgrades to schools' Internet connections.

Despite its strong financial backing and the recent updates, the program still suffers from "serious flaws" and "a lack of transparency," according to a recent letter[3] from FCC Chairman Ajit Pai. In the letter, Pai took the organization that oversees E-Rate, USAC, to task because of their own struggles to modernize their operations. USAC's plan was to replace the program's slow, paperwork-heavy application process with a "fast, simple, and efficient" online portal. The project is already past deadline and over budget (the initial estimate was $11 million, but now it's more around $60 million).

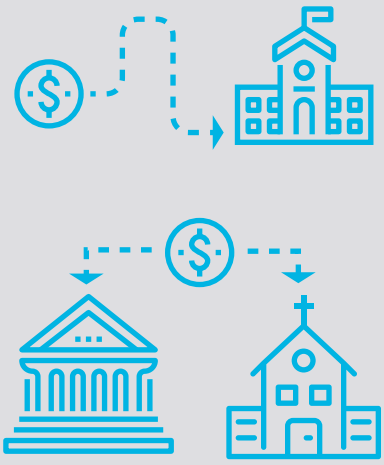
The E-Rate program struggles mirror the issues faced by schools seeking to update their phone systems. The difference is E-Rate can afford to go over budget since they rely on the resources of the federal government. School districts, on the other hand, must find ways to stretch their limited budgets to cover technology costs.

However, under the new administration, it looks like those budgets are about to tighten even further. The proposed Department of Education budget4 cuts education funding by $9.2 billion, with additional funds siphoned off to support "school choice" and vouchers. While this budget is still up for debate, it's unlikely we'll see any expansion of school spending, or a revision of the E-Rate Modernization Order, any time soon.

For any future telecom solutions, the nation's current course suggests that schools are on their own.

What is School Choice?

In general, school choice is a term describing the range of educational alternatives to publicly provided schools.



Proponents argue[5] that parents should be free to choose the school or program that best serves the needs of their children. According to them, families' tax dollars—in the form of public education funds—should follow their child to whatever school they select.

Opponents argue[6] that "school choice" is a deceptive term; that it provides cover for schemes that funnel public funding to religious and for-profit schools. These schools, they insist, aren't held to the same standards as public schools and can discriminate against minority or lower-income children, or children with disabilities.

Concerns: What Does This Mean for School Districts?

The state of the E-Rate program requires school districts like yours to weigh the possible value of a telecom investment against the inevitable impact on your budget.

Most school districts will take the time-honored approach to reducing technology costs—besides applying for E-Rate discounts. These involve delaying or deferring contracts, applying for grants, or simply putting off tech purchases until next year. But these tactics amount to kicking the can down the road. Or, in the case of federal grants in the wake of budget cuts, throwing a Hail Mary pass.

The danger is that a "sit and wait" strategy might prove more costly in the long run, especially in light of persistent trends in the educational industry, such as:

- **Budget shortfalls**
- **Staffing shortages**
- **School competition**
- **Demands for heightened school safety**

Budgets will continue to be schools' top concern for years to come.

Across multiple reports, surveys, and studies, district budgets consistently emerge as the top concern[7] for school districts. Budget limits remain educator's foremost concern for the third year in a row, according to the CoSN 2017 Leadership Survey Report[8] And another report established that 70 percent of administrators said their technology budgets have either "plateaued or decreased[9]."

The difference between the budget woes of the past and now is that many of the ways districts coped with limited technology budgets, like E-Rate, have begun to fail—at least where voice services are concerned. Schools have to come to terms with the fact that, if their phone system is reaching its end of life, or it fails to deliver much-needed features and integrations, then the district has to find new approaches to upgrading school infrastructure.

Staffing shortages will curtail any value from new tech purchases.

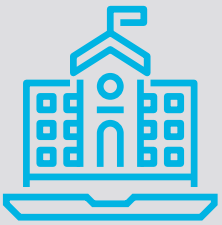
Reductions in budgets often translate into smaller staffs[10] that have to accomplish more with far fewer resources. Not only are schools struggling to fill basic teaching slots during a time when public school enrollment[11] is on the rise, but IT teams are also coming up short. Only 13 percent of IT leaders in the education community reported that they had sufficient staff[8] to meet their needs.

The danger presented by stretched-thin IT teams is that, even if a district invests in an updated phone system, they'll have insufficient staff to realize the full value of the upgrade. They need additional staff to implement and maintain the system, and to train school employees to use it. In fact, the majority of of IT departments (52 percent)[8] indicated that they spend most of their time solving technical issues instead of working proactively to anticipate problems and capitalize on infrastructure. This potentially blunts any anticipated gains from new technologies investments.

Increasing competition between traditional and emerging educational models will drive technology upgrades.
The educational market is expanding, offering more choices to parents. Like it or not, "school choice" has taken the political center stage, particularly in the current administration's Department of Education. In fact, the department's proposed budget allocates millions to vouchers and school choice initiatives4, drawn from school districts' budgets.

The concern here is that alternative educational models (e.g., charter, virtual, and home schools) have the potential to breed competition[13] between schools. As parents weigh the advantages of different institutions, factors like access to the latest technology often play a deciding role. The benefits of innovative learning technologies are obvious, but parents will also expect a school to have a reliable communications array, in addition to effective security measures to safeguard their children.

The vast majority of children still attend public school. However, the numbers of families selecting emerging educational models is growing.



Approximately **1 million children**[14] (2 percent of those in K-12) participate in some form of online learning.

There are more than **6,900 charter schools**[4], enrolling an estimated 3.1 million students, a number that has tripled in the last 10 years.

An estimated **2.3 million children are homeschooled**[15] in the U.S.

Greater emphasis on school safety will also drive technology investments.

Campus safety has always been a compelling concern for K–12 institutions. Although instances of serious on-campus violence—like school shootings—remain rare[16], and schools are arguably safer than ever, the fallout from such an event is devastating. The very real fears of parents and the potential for media scrutiny place school administrators under extraordinary pressure to do all they can to mitigate any risk factors. These efforts often involve investing in security-enhancing technology like emergency communications, video cameras, and alarm systems.

But budget cuts place districts in a difficult position. Schools that want to successfully compete in an era of school choice must offer parents assurances that the school is doing everything it can to provide a safe learning environment. However, without any budget to spare for additional security measures, districts have to look elsewhere for ways to protect their students.

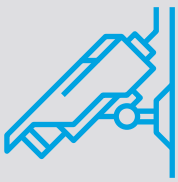
Modern telecom services have branched out to offer security-specific solutions. The National Institute for Justice identified key challenges associated with securing schools. An expert panel evaluated these challenges and issued recommended technologies, many of which are available through an advanced phone system. The panel recommended:

- **Reliable emergency alerts and communications.** School employees need direct two-way communication between them and emergency responders.
- **"All-in-one" unified applications and portals.** Scattered safety policies and technologies only create more confusion in emergency situations. A single, integrated system can better coordinate the efforts of faculty, administrators, parents, and support staff.
- **Adaptable, integrated systems.** Before purchasing new technologies, schools were encouraged to determine whether that technology could integrate with their current systems, and could be upgraded in the future.
- **Visitor-monitoring systems.** Establishing simple controls over who enters and exits a school can be critical to preventing violent incidents.

Schools have adopted a variety of technologies to tackle the issue of student safety.

93% OF PUBLIC SCHOOLS

reported that they controlled access to school buildings by locking or monitoring doors[17] during school hours.



In 2000, only **19% OF PUBLIC SCHOOLS** reported using security cameras[18].

Now, **75%** use security cameras[17] to monitor the school.

4% OF PUBLIC SCHOOLS reported conducting random metal detector tests[17].

Solutions: What Future K-12 Phone Systems Will Look Like.

None of these issues are going away anytime soon, but the shifting educational landscape can be viewed as both trial and opportunity. This is the time to assess your district's needs, the available infrastructure, and ask yourself what a modern K–12 phone system should look like. In this section, we'll discuss how looking at the long-term savings and benefits of newer, cloud-based systems are a better fit for school districts given the current environment.

Control Budgets Through Forward-Thinking Technology Investments.

In the past, schools invested in premises-based phone systems with a high initial price tag followed by low monthly service rates. But with the shelf life for these systems growing gradually shorter, the high initial cost involved in replacing them will make this model unsustainable.

Cloud-based phone systems typically require less hardware, so they arrive with a much lower initial capital investment. However, the monthly service rates for these systems tend to be higher than those offered by traditional on-premises models. The advantage is that those service rates usually consolidate costs that traditional systems tack on separately: ongoing software upgrades, licensing fees, system and hardware maintenance, and tech support. With these costs baked into the price, it's possible to forecast annual communications budgets with greater accuracy.

Many of the savings offered by cloud-based phone systems are realized through the elimination of future expenses. With a cloud phone system, schools can consolidate data networks with phone networks, reducing the infrastructure costs involved in maintaining separate phone lines. A cloud system also grants schools more flexibility if they're unsatisfied with their current provider. Switching to a new service provider doesn't require the purchase of an entirely new system. Most of the hardware used with one cloud solution will operate for another.

Combine safety packages and integrations with other services.

Modern phone systems in the K–12 space should deliver more than the typical features and functions that come with every system. They should come bundled with other needed services, such as school safety features, or with the ability to integrate with existing paging, alarm, and bell systems. Through the strategic acquisition of integrable applications and services, schools can consolidate the cost of essential services under their telecom budget, often without having to significantly increase the budget.

As schools evaluate safety-related telecom solutions, they should look for those capable of upgrading school security with an expensive infrastructure overhaul. These systems should include:

- **Instant connections to first responders.** Installed endpoints like panic buttons can immediately connect teachers and staff with emergency services.
- **Unified systems.** Having a single "one-stop shop" to make changes or updates to intercom and alarm systems helps keep security protocols current with the latest district policies.
- **Integrated and updated systems.** Online services and cloud-based communications are easier to keep current with state and federal requirements. They can integrate seamlessly with existing alarm, paging, and bell systems. They also undergo routine, provider-driven updates without any effort on the district's part.
- **Control public access to the school.** Cameras and intercom consoles at entrances can promote more accurate monitoring and management of school visitors. Cloud systems can even integrate with door locks, allowing administrators to trigger lockdowns remotely from their phones.

Cloud phone systems built with K–12 schools in mind should also integrate with a district's paging system, preserving that investment while simultaneously upgrading its capabilities.

Combining a cloud phone system with a legacy paging system can free administrators to:

- Make announcements from any phone.
- Play announcements on any phone or speaker in the system.
- Manage bell schedules and announcements from any computer.

Implement simple-to-manage technology to ease the strain on IT staff.

Another defining characteristic of future K–12 phone systems should be the ability to free up a district's already scarce IT resources and staff. For example, Google has made inroads into the K–12 space by reducing the burden on IT teams and faculty. More than half (52 percent) of school employees prefer Google products and services primarily because of their perceived ease of use[12].

IT teams can also benefit from the innate simplicity of cloud phone systems. One of the strongest factors driving the adoption of cloud communications is due to how little time, effort, and budget is spent on managing and maintaining them. Software upgrades and hardware maintenance is handled by the provider, freeing IT departments to act more proactively on other district initiatives.

Conclusion

The temptation to use tried-and-true strategies and technologies to maintain district communications is strong. The problem is, you have to hope nothing upsets the status quo. But this approach denies that the changing landscape of K–12 telecom funding has already changed everything. It calls for ignoring the developments we've outlined, such as the:

- Updates to the E-Rate program
- Emphasis on school choice by the new Secretary of Education
- Slashing of educational budgets
- Competition caused by emerging educational models
- Growing demand for heightened school security

A new landscape calls for new solutions, and a new basis to evaluate the merit of those solutions. For this new set of criteria, this paper recommends districts consider:

- **What is the long-term cost of ownership** and overall value?
- **Is there any potential for consolidatio**n of campus infrastructure?
- **Will the system eliminate future hardware**, wiring, and system replacement costs?
- **What integrations and upgrades** does the system offer beyond typical voice service?
- **How does the system free up your IT team** for mission-critical priorities?

This is only a primer for the questions districts should ask when defining what a modern K–12 phone system means to them. To learn more about how a phone system in the Cloud can modernize your district's operations, visit **jive.com/k12** today.

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