As we ride out the worst economic crisis since the Great Depression, there are indicators that the storm is far from over. In the American Association of School Administrators’ October 2009 survey of school administrators, 66 percent of respondents reported having to eliminate positions for the 2009-10 school year, and an overwhelming 83 percent anticipate having to eliminate further positions in 2010-11. According to a 50-state survey carried out by the National Conference of State Legislatures, federal stimulus funds from the American Recovery and Reinvestment Act (ARRA), which dedicated $100 Billion to shore up school operating budgets along with earmarks for technology, have already been used up in 20 states with nothing left for the 2010-2011 fiscal year.

In order to help K-12 technology leaders deal with the corresponding budget cuts, CoSN developed a toolkit, “Mastering the Moment,” for CoSN members. With input from Gartner, the toolkit reviews the severity of the budget cuts and makes recommendations on strategic and tactical actions that can be taken by district technology leaders to survive this crisis, and to take advantage of opportunities that may be presented.

Now, more than a year into the economic downturn, we turn to districts that have a proactive approach to addressing budget reductions to see what lessons can be learned. By streamlining internal IT operations and seeking additional savings and revenue sources, these districts are weathering the storm and learning how to do more with less.

Centralizing IT Staffing and Support

“I think the reality for many schools is that the technology infrastructure is still growing, but budget restrictions are limiting the ability for technology support resources to grow along with it,” says Greg Davis, executive director of technology for Des Moines Public Schools in Iowa. “In the last ten years we’ve seen technology infrastructure grow in my district by four times. Over the same time the technology department staff has decreased by 25 percent.”

This trend is taking place all over the country and showing no signs of abating. So how are CTOs dealing with the challenge of increased technology demand and decreased staff? Many say that it is increasingly important for IT departments to become more efficient at providing infrastructure and user support.
Fortunately, there are tools available for centralizing support services. California’s Modesto City Schools, for example, has implemented help desk software to manage user calls, Windows Remote Desktop for problem determination and troubleshooting, and a configuration manager for pushing updates, patches and other software installations from a central location to individual desktops. “Remote support is a huge cultural change,” says Modesto’s director of information and technology services, Stan Trevena, who points out that it also requires a fast network infrastructure. “Centralized patch management and updates allow districts, especially larger districts, to keep all systems up to current patch levels.

Yes, savings are realized on staff by pushing these out over the wire, but you are also insuring against exploits and ongoing vulnerabilities that can result in incidents affecting large numbers of users in a district network that could lead to extended downtime and resources to correct.”

Modesto City Schools’ support staff now consists of five help-desk techs and ten techs assigned to support specific regional zones. According to Trevena, 80 percent of all calls to the help desk are now handled remotely with onsite visits mostly for hardware installations. Clearly this saves a considerable amount of money on technician travel and time. “The zone assignments keep technicians close to the school sites they support without having to dedicate them to individual sites full time,” he says. “The district added a new high school three years ago, and will be opening another high school this next school year. The streamlining of desktop support services has allowed Modesto City Schools to grow in both school sites and number of systems supported without increasing staffing. Over the past few years the installation and support manager and two technician positions were cut due to lack of funding.”

Steve Young, CTO of Judson ISD in Texas, suggests that, if new staff positions are not an option, districts would do well to “analyze current positions and consider re-purposing a position to something new that will offer more to the organization.” One example he offers: “We turned an A/V technician into a computer technician this year, as we no longer are servicing overheads, file projectors, tape recorders, and TVs.”

Involving students in IT support is another way of doing more with less. While nobody is arguing for replacing full-time staff members with students working in their “spare” time, many districts that have implemented student support teams have found it to be a win-win arrangement, with the schools getting supplementary IT support and the students gaining internship experience. Bill Hamilton, superintendent of schools for the Walled Lake Consolidated School District in Michigan, puts it as follows: “It’s not that we’d be hiring additional techs if the students weren’t available as interns but the level of support they provide is very high quality, adding greatly to what could be offered without them. Even more importantly, it’s a great educational experience for the students.”

**Managing Vendor Costs**

Another opportunity for internal operations savings involves vendor contracts and expenditures. Now is the time, according to many of the CTOs interviewed for this article, to reexamine all contracts, licenses and agreements to see if better deals can be struck.

Scott Monroe, executive director of technology for Texas’ Leander ISD, suggests scrutinizing maintenance agreements for value and discontinuing those that are no longer affordable. In some cases, for example, you might find that that buying extra devices for backup purposes might cost less than the extended maintenance contract. Monroe also recommends examining

### Contributors

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Technology Officer</td>
<td>Steve Young</td>
<td>Judson ISD, TX</td>
</tr>
<tr>
<td>Superintendent of Schools</td>
<td>Steven Baule</td>
<td>Community Unit SD 201, IL</td>
</tr>
<tr>
<td>Executive Director, Technology</td>
<td>Greg Davis</td>
<td>Des Moines Public Schools, IA</td>
</tr>
<tr>
<td>Superintendent of Schools</td>
<td>Bill Hamilton</td>
<td>Walled Lake Community SD, MI</td>
</tr>
<tr>
<td>Director, Technology Solutions</td>
<td>Vince Humes</td>
<td>Northwest Tri-County Intermediate Unit 5, PA</td>
</tr>
<tr>
<td>Executive Director, Technology</td>
<td>Scott Monroe</td>
<td>Orange County Public Schools, FL</td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td>Roland Moore</td>
<td>Orange County Public Schools, FL</td>
</tr>
<tr>
<td>Chief Technology Officer</td>
<td>Michael Porter</td>
<td>Traverse Bay Area Intermediate School District, MI</td>
</tr>
<tr>
<td>Director, Information and Technology Services</td>
<td>Stan Trevena</td>
<td>Modesto City Schools, CA</td>
</tr>
<tr>
<td>Chief Information Officer</td>
<td>Wesley Watts</td>
<td>Prince George’s County Public Schools, MD</td>
</tr>
<tr>
<td>Chief Technology Officer</td>
<td>Steve Young</td>
<td>Judson ISD, TX</td>
</tr>
</tbody>
</table>
the software needs of your school or district with an eye to reducing the number of programs you support and license.

“Be aggressive in seeking competitive pricing and bidding out large product purchases,” adds Steve Young. “Many businesses are hungry and are willing to pass along large discounts for those entities that pursue them. It is never a good time to stick with a vendor because ‘we’ve always used them!’” He also advises districts to, “evaluate services and programs to see if there are ones that are too expensive, used too little, or could be done by an ASP.”

Stan Trevana agrees. “You may have been using a specific piece of software for many years and not evaluated other options or new players,” he says. “Modesto City Schools switched antivirus and malware software to another major brand and will save $100,000 a year over the next five years.”

In Prince George’s County Public Schools in Maryland, a telecommunications audit has resulted in savings. “Our telecommunications bill is several million dollars per year,” says CIO Wesley Watts. “The audit reviews our bills and verifies the billing; often the company finds savings in the billings. It also makes recommendations about where to cut costs.”

Prince George’s County also cut spending by reexamining the money it was paying for voice calls. “We reduced the number of cell phones allocated to staff by 80 percent last year,” says Watts. “Our schools currently have pay phones installed in them. Some of the larger schools have five or six of them. We are planning to remove them. Each pay phone costs the district $75 per month. We have over 200 hundred schools. This could save the district at least $200,000.” Other districts have recognized considerable savings by moving calls to Voice over IP.

Vince Humes, director of technology solutions for Pennsylvania’s Intermediate Unit 5 has plenty of experience with another way of saving districts money: volume purchasing. “CTOs need to take action now to put in place procedures to leverage the purchasing power that districts can have when cooperative or joint purchasing is pursued.”

Over the past 20 years, he says, his intermediate unit has had a joint purchasing program for school supplies. For the 2007-2008 school year copy paper was added to the mix and, according to Paula Varee, Unit 5’s director of finance, this change alone saved districts 10-20 percent, for a net savings of approximately $40,000 on copy paper.

“Interestingly enough,” says Humes, “we don’t usually include technology purchases in the joint purchasing program.” He does cite one example of intermediate units working together for pooled purchasing of software: Intermediate Unit 5 and Intermediate Unit 6 have teamed together on web filtering, with one unit consolidating the purchase of one type of security software while the other consolidates the purchasing of another. “This consolidation saves districts approximately 50 percent over purchasing individually because the more seats purchased the cheaper they become.”

The logical next step for his region, Humes explains, is to begin adding other technology purchases to the joint purchasing project. “Our strategy is to take what we have learned from our joint purchasing of supplies and apply it to computer purchases. We feel there is more leverage in approaching vendors with a defined need of equipment for everyone rather than for just one district. In this way a typical district can save a significant amount of money to help balance its budget.”

Going Green

Utility bills are typically the second highest expense for a school or district, behind personnel, and the computing infrastructure can consume up to 25 percent of an organization’s utility bill. “Going green” when it comes to energy consumption can result in tremendous financial savings while modeling environment-friendly practices that are essential for our nation’s future.

Network-based, end-user computing power management is becoming an accepted approach for reducing wasted power
consumption by user devices. In Prince George’s County, for example, power management software has been installed on a majority of the district’s computers. The software monitors the computers, determining when they are inactive and powering them down between users. Wesley Watts estimates that this is saving the district more than $100,000 a year.

In Modesto City Schools, similar power saving software was installed a year ago to reduce the cost of operating nearly 7,000 desktop computers district-wide. “We had a lot of computers left on all the time, even over holidays and summers,” says Stan Trevena. “This allows us to schedule when computers are shut down and turned on. We can also ‘wake up’ computers if we need to patch them unexpectedly.” Trevena estimates that the reduced energy consumption is resulting in a $10,000 to $15,000 savings each month. However, he cautions that, “showing hard numbers on desktop power management is difficult to quantify.” The energy usage is mixed in with all the power consumption at sites, and it’s very hard to separate out this usage for reporting.” He suggests working closely with the local power company to input accurate rates for power management so good savings estimates can be made for presentation to administration and school boards.

Des Moines Public Schools is another district that is hoping to save money and power through power shutdown programming. In addition, according to Greg Davis, the district is moving to decrease the number of devices in use at any one time by reducing the installed base of printers, moving to shared multifunction devices instead.

Des Moines and many other districts are also looking to datacenter consolidation and server virtualization efforts to reduce electrical power requirements while simplifying server and network management. In Prince George’s County Public Schools, over 100 data center servers have been virtualized and the Modesto City Schools is using 60 virtual servers.

In Judson ISD, storage, servers and desktops are all being virtualized. “This in itself has allowed us to either avoid cutbacks in service levels or actually increase computer availability, despite having to trim spending,” says Steve Young. For desktop virtualization, he says, the district chose a non-traditional route; they virtualized a host PC locally and increased PC access by 300 percent. The desktop virtualization cut PC acquisition costs by 50 percent. It also required at least 70 percent less energy for cooling and operation.

Judson ISD, a CoSN green computing certified district, has taken a variety of other steps towards saving money and energy through greener computing. They include:

- Remote management of desktops, servers and network equipment.
- Upgrading to more energy-efficient servers.
- Purchasing Energy Star and EPEAT certified computers.
• Utilizing energy-efficient LCD monitors and phasing out CRT monitors.

• Eliminating almost all ink jet printers and providing a much smaller quantity of shared laser printers and networked copiers.

• Automating shutdown of most district computers, which, over the past four years, has saved a total of $155,111.

A focus on reducing energy use – whether for IT-related uses such as server room cooling or for basic utility needs district-wide – can help schools reduce costs, sometimes with an extra boost from utility providers. In Modesto, the local power company provided a rebate on the purchase of desktop power management software along with maintenance on the software for the first five years.

Communicating Electronically
Another aspect of green computing that holds potential for saving significant sums of money for a school or district is the use of electronic communications, both internally and externally. Many printed documents can be managed electronically, saving paper, ink, electricity, time, travel and stamps. Internal forms, school board meeting documentation, student grade reporting and online registration are just a few examples.

According to Wesley Watts, the Prince George’s County Public Schools have “gone paperless with pay checks, going to direct deposit and looking at statements online through self-service HR. We are also receiving invoices and billing electronically from our largest vendors to reduce the consumption of paper.” The school system currently prints report cards and progress reports eight times a year but the goal is to use a recently-implemented student information system with a family portal to move to paperless progress reports.

Walled Lake superintendent Bill Hamilton expects that eliminating hard-copy report cards – as the district plans to do this year – will save about $40,000. Parents can already view student grades online through a family portal and adding progress reports and report cards to this system makes a lot of sense. “Approximately 90 percent of our parents are online already and we are looking for ways to reach out to the other 10 percent to figure out how we can help them get access to the student information.” Hamilton adds that a lot of time and money has been saved by moving other administrative tasks online, including lunch payments and access to food service accounts, class registration, and more.

In Illinois’ CUSD 201, moving HR tasks such as employee time-off requests online and taking attendance electronically have saved work and money. “We have not needed to expand the business office staff,” says superintendent Steve Baule, “because we have made those functions more effective.”

Moving Classes Online
An important financial metric for schools is the student/teacher ratio, translated into class sizes. Unfortunately, the severity of the current financial crisis and related budget reductions has forced larger class sizes as teachers are furloughed or not replaced when retiring. There are areas where technology can be used effectively to make teachers more efficient.

The Traverse Bay Area Intermediate School District (TBAISD), a regional educational service agency, serves five counties in Michigan. According to TBAISD CTO Mike Porter, ”For 21st century learning, our region has set a goal of having ‘blended instruction’ available for every middle and high school class that is offered.” This project has several goals:

• Make content available in multiple modalities so students can learn in a style that best fits their needs;

• Create “meta courses” so that teachers do not have to reinvent the wheel, but can improve on the ones provided to them;

• Prepare teachers with professional development so that they can improve these classes, and change teaching to
best use the technology, not fit the technology into the old system;

• Implement support systems for students and teachers around both technology and learning.

While all of these goals are instructional, rather than financial, there are clearly economies of scale as the 21st century learning program is built to serve multiple districts. Elsewhere in Michigan, the Walled Lake Consolidated School District is recognizing savings by moving a number of its classes online. After piloting Web-based classes in summer school last year, the district is ramping up for the fall, offering English and math classes online to any high school students who want to participate. Registrants can complete coursework from home or any other place that offers Internet connectivity and get face-to-face support from teachers available in a lab during the first and last period of each school day.

Superintendent Hamilton says that the savings offered by this program are impressive. For the online summer school classes, parents were charged $99 instead of the $280 they had previously paid for summer school – and it was the first summer that the district broke even. Since the infrastructure and computer labs needed for the lab program were already in place, hardware has not been a new expenditure. And the online provider the district chose charges based on the number of simultaneous users – rather than the total number of students enrolled – which helps bring down the costs.

The lab teachers play an important role; in fact, Hamilton thinks that allowing students to seek out help during lab time and requiring any student who falls behind to attend face-to-face sessions until they get back on track are key to a successful program. However, because the online software does so much of the teaching and evaluation, there is much more efficiency – which translates into serious savings. “Since the teachers are mostly monitoring and giving students feedback, we estimate that each teacher can supervise 75 students per hour and that a single .8 FTE can support up to 300 students; this translates into a 60 percent savings over traditional stand-up classes.”

Using External Service Providers

From cloud computing, in which certain functions are handled remotely over the Internet, to outsourcing services to local providers, today’s districts have many options for rethinking the role traditionally provided by district IT staff. Sometimes outside providers can offer better service at a lower cost, especially in areas that are not considered core to the mission of the school district.

In Des Moines, using outsourced labor for targeted areas of operation has allowed the district to cut FTEs. In Prince George’s County, Wesley Watts expects a new three-year agreement that has the district’s WAN circuits managed by a vendor to reduce costs by $500,000. And by moving from in-house warranty work on its desktop computers to outsourcing that support to a local vendor, Modesto City Schools expects to free up resources in the form of technicians and support staff who previously were involved in the convoluted process of tracking warranty replacement parts.

According to Watts, a cloud implementation in Prince George’s County, “Removed over 20 servers from our environment, and took the burden of backup and disaster recovery from staff.” Educators received a large mailbox (50 times the size of their previous one) plus a variety of tools for online collaboration and group calendaring. This year the district

<table>
<thead>
<tr>
<th>TRADITIONAL VS. ONLINE COURSE DELIVERY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cost Savings Per Student (Walled Lake Public Schools)</strong></td>
</tr>
<tr>
<td>Per-student annual cost for two face-to-face courses</td>
</tr>
<tr>
<td>Per-student annual cost for two online courses, including teacher support</td>
</tr>
<tr>
<td>Annual per-student savings</td>
</tr>
</tbody>
</table>
is piloting the use of similar cloud-based applications with students. Watts estimates the savings over a three-year period to be one million dollars.

The district is considering removing a number of file servers from schools and promoting the use of online storage that staff and students will be able to access anytime, anywhere from an Internet-connected device. “This would save the school district $800,000 in equipment costs and at this point an undetermined amount of money for backups and so on,” says Watts. “Our hope is to fully roll out these services to students by the 2011-2012 school year.”

Moving to the cloud is viewed as a possible solution for the Michigan districts served by the Traverse Bay Area Intermediate School District, as well. “Under budget pressure we need to find ways to continue improving our services, support and availability without increasing staff or costs,” says Mike Porter, echoing the sentiments of the other CTOs who contributed to this article. One solution has been to move e-mail and storage online. “Our 21st century learning initiative means every student needs an e-mail account and that we need significantly more storage for student generated content,” he explains. To accomplish this, TBAISD is providing students with cloud-based e-mail accounts, collaboration tools, and storage for learning. The ISD is also exploring creating its own regional cloud computing system that would allow “thin,” inexpensive, easily-imaged and easily-maintained student devices to access educational tools and content online.

Outsourcing and cloud computing are not always the answer, of course, and even those CTOs that recommend these options advise caution; it’s important to evaluate possible vendors closely and realize that transitions can be disruptive and that external providers still need to be managed and measured via service level agreement. Stan Trevana agrees, saying that hardware replacement – whether as part of a planned refresh cycle or in response to breakdowns – is frequently the most cost-effective choice. “We’ve made the determination that it is often more efficient to purchase a used computer from a secondary market rather than trying to repair older computers,” he says. “We have found that purchasing a block of computers of comparable specification with our three- to four-year-old computers makes more sense than trying to repair them. A used computer that is tested and warranted for a year costs less than $200. When a computer has a bad motherboard or other system failure, we surplus out the old computer and replace it with a used one from our warehouse supply. This eliminates the time and hardware swapping involved in fixing a broken older computer, and all the technician time required for troubleshooting. This also applies to older switches in the network. Replacing an older switch with the same model from a secondary market is significantly lower cost than a new model switch.”

Other ways to stretch the hardware budget include leasing to reduce the initial purchase amount, using shared or network-attached thin devices, or embracing the sorts of student devices that schools typically ban. This last approach is being taken by Traverse Bay Area ISD. “With a one-to-one goal in our region, we can not afford to purchase everything for every student,” says Mike Porter. “We understand that we need to help some families so we are working to support what I call the ‘band instrument model.’” Just as schools with band programs provide a limited number of instruments for students who need them, while expecting families to provide

**Salvaging the Computer Refresh Cycle**

One of the first items to go with budget cuts is planned computer replacements. If yours is one of the 70 percent of U.S. districts with a refresh cycle, bypassing this year’s replacements might be tempting. But Steve Baule of CUSD 201 warns that “putting off technology replacement programs for the purpose of short-term savings or to retain other programs will, in the long run, cause problems with equipment failures and lost productivity.”

Stan Trevana agrees, saying that hardware replacement – whether as part of a planned refresh cycle or in response to breakdowns – is frequently the most cost-effective choice. “We’ve made the determination that it is often more efficient to purchase a used computer from a secondary market rather than trying to repair older computers,” he says. “We have found that purchasing a block of computers of comparable specification with our three- to four-year-old computers makes more sense than trying to repair them. A used computer that is tested and warranted for a year costs less than $200. When a computer has a bad motherboard or other system failure, we surplus out the old computer and replace it with a used one from our warehouse supply. This eliminates the time and hardware swapping involved in fixing a broken older computer, and all the technician time required for troubleshooting. This also applies to older switches in the network. Replacing an older switch with the same model from a secondary market is significantly lower cost than a new model switch.”

Other ways to stretch the hardware budget include leasing to reduce the initial purchase amount, using shared or network-attached thin devices, or embracing the sorts of student devices that schools typically ban. This last approach is being taken by Traverse Bay Area ISD. “With a one-to-one goal in our region, we can not afford to purchase everything for every student,” says Mike Porter. “We understand that we need to help some families so we are working to support what I call the ‘band instrument model.’” Just as schools with band programs provide a limited number of instruments for students who need them, while expecting families to provide
their own instruments when possible, Porter explains that TBAISD districts are “implementing network, policy and staff training changes so that we can let student technology into the building as a learning tool. We currently have a test case high school that is allowing all student devices, including cell phones.”

ARRA and Other Funding Sources

Although the distribution and uses of ARRA money has varied tremendously from state to state – with many districts still waiting to see the funds – some of the administrators and technology leaders interviewed for this article are finding the stimulus funding helpful to their technology programs. In Illinois’ CUSD 201, for example, Steve Baule says, “We have been able to use the Title I ARRA funding for a number of technology purchases including both software and hardware. We have been able to purchase interactive whiteboards and online remediation and support software with those federal dollars. Otherwise, those purchases could not have been made for this year. The budget situation has slowed technology growth, but the ARRA funding has helped provide needed equipment and software specifically related to improving student achievement.”

Traverse Bay Area ISD is applying stimulus funding to building a regional data system. “Michigan is a ‘local control’ state,” Mike Porter says, “so it is not realistic to expect the state department of education to build a system that will include all the information needed for the three groups that need data: teachers, building administrators and district decision makers. Michigan has a data system that can be used to answer broad questions about district success, but that system will not and can not be made to drill down to a classroom or student level for decision making. By working with the state system and connecting it to our new system, the ARRA funds allow us to jumpstart a more robust data system and get it to a level that can be maintained after the funds are gone.”

Greg Davis says that ed tech stimulus funds have not yet been released to Iowa schools. When they are, however, he expects they will be focused on supporting online learning at the high school and middle school level. His overall advice: “Remembering that these funds, when they come, are a one-time infusion, it is wise to invest them in projects that will be self-sustaining.” Des Moines also leverages sources of school funding other than the district’s general fund. “For example,” says Davis, “we have a school infrastructure fund that is taking on more technology expenditures.”

Other sources of funding for district technology programs include private and state grants and negotiating the return of a portion of energy savings generated through green computing back to the technology budget.

<table>
<thead>
<tr>
<th>STIMULUS FUNDING: WHERE HAS IT GONE?</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Included in $100 Billion ARRA Stimulus Funds:</strong></td>
</tr>
<tr>
<td>- Ed tech (EETT/Title II-D) .................... $650 million</td>
</tr>
<tr>
<td>- Rural/Underserved Broadband Grants ........... $72 billion</td>
</tr>
<tr>
<td>- State Fiscal Stabilization Fund .............. $48.6 billion</td>
</tr>
<tr>
<td>- Race to the Top Grants ....................... $4.3 billion</td>
</tr>
<tr>
<td>- Investing in Innovation Fund ................ $650 million</td>
</tr>
<tr>
<td>- Title I Funds ................................... $13 billion</td>
</tr>
<tr>
<td>- Students with Disabilities (IDEA) ............ $12.2 billion</td>
</tr>
<tr>
<td><strong>As of January, 2010:</strong></td>
</tr>
<tr>
<td>- Of the $100 billion for schools, over $69 billion had been awarded.</td>
</tr>
<tr>
<td>- The U.S. Department of Education reported that over 300,000 jobs had been retained through ARRA Funding and 24 states had avoided higher education tuition increases as a result of the funds.</td>
</tr>
<tr>
<td>- However, 83 percent of districts surveyed by the American Association of School Administrators reported that ARRA dollars did not represent a funding increase since state funding for schools was decreased when ARRA money became available.</td>
</tr>
<tr>
<td>- According to a survey by the National Conference of State Legislatures, 20 states do not have stimulus funds left for the 2010-2011 school year.</td>
</tr>
</tbody>
</table>
Scrutinizing Proposed Projects for Impact

When budgets are tight, school districts need to scrutinize investments carefully to determine how each project will help the school or district reach important objectives and positively support the mission. There are formal and informal ways to address this need; CoSN’s Value of Investment (VOI) Leadership Initiative provides a methodology for relating proposed projects to the district strategic plan, mission, goals and mandates (see sidebar). Some other informal approaches used by districts are reviewed here.

A non-instructional example from Prince George’s County involves the use of GPS devices. “Several years ago our school system installed GPS systems in each of the district’s buses,” says Wesley Watts. “This system has helped improve routing and saved the district several million each year on routing buses.”

In the Orange County Public Schools in Florida, CIO Roland Moore says, “We have begun a fiscal risk analysis process for all new IT-related projects and initiatives. This is projected out five years, and in some cases ten, to understand the fiscal impact on the school district. Additionally, projects must have a business case that specifies the fiscal ROI or instructional impact. Projects that have a fiscal return, must show how it will help mitigate the previously stated objectives, or just reduce expense.” The IT governance process for the district has been re-initialized, with Instructional Executive Steering Teams (EST’s) created to prioritize and manage the work that must be accomplished. “The process is designed to ensure that business and instructional needs are met,” says Moore, “but that the execute process is followed so that all resources are appropriately engaged in the right efforts.”

Steve Baule sums things up as follows: “With the current fiscal situation, we need to make sure that every purchase is tied to our core strategic directions. There is no room for ‘nice to have’ purchases at this time. However, technology can streamline processes and make programs more effective when used properly.”

CoSN Resources for Weathering the Storm

The following CoSN Leadership Initiatives are designed to help schools understand costs, save energy, evaluate projects and deal with the economic crisis:

- Total Cost of Ownership, using the CoSN-Gartner TCO tool: http://www.cosn.org/tco
- Green Computing, with an energy usage estimator: http://www.cosn.org/greencomputing
- Value of Investment, with a proposed project cost estimator and project benefits spreadsheet with scoring model: http://www.edtechvoi.org