

Southern Berkshire Shared Services Project Final Report 2.1.18

The Southern Berkshire Shared Services Project (SBSSP) is a collaboration among the following districts: Berkshire Hills, Lee, Lenox, Farmington River, Richmond and Southern Berkshire.

The SBSSP received start-up funding through the Community Compact and through several local banks. We greatly appreciate that support.

The SBSSP has been active meeting monthly. Importantly, the group has weathered three transitions in superintendents and continued its efforts with much success.

The SBSSP has been the dominant catalyst for change within the six South County Districts and within all of Berkshire County. The group has worked collaboratively and in parallel to other groups including: the Superintendents' Roundtable, the Berkshire Compact for Education, and the Berkshire County Education Task Force, and the new South County Group on Regionalization and Consolidation.

Sometimes the line between these efforts can become blurred. The SBSSP has expanded on existing relationships, created a shift in culture where an analysis of the impact of collaboration comes up in almost every context, lead to concrete changes in our approaches to professional development, technology, grant writing, governance, and special education. Some of those efforts have been fully realized, some are in progress, and a few are created a context for future work.

The SBSSP demonstrated and continues to demonstrate that school districts can collaborate and share services to provide higher quality and better educational opportunities while reducing costs and realizing efficiencies. The SBSSP has fundamentally changed how we work within and across our school districts.

To date, the group has focused on four areas with great success and has had additional impact in ancillary areas.

Professional Development

SBSSP played a leadership role is developing two years of professional development workshops hosted on Election Day. Most districts in Berkshire County have scheduled the whole day to train teachers and paraprofessionals. This work is in collaboration with the Superintendents' Roundtable.

In 2016, we created a menu of 40 plus workshops. The workshops were a kick off and all resulted in the development of on-going professional learning committees. Local educators and some outside consultants led the workshops. Superintendent Tim Lee of Lenox organized much of this effort.

In 2017, we expanded our menu to include 65 plus workshops, led by 180 teachers, and 25 community partners including Williams College, Audubon, MCLA, and

Bartholomew's Cobble. A sampling of topics include: growth mindset, developmental math, anxiety in early childhood trauma, high school trauma, integrated arts at MASS MOCA, hands on science at The Berkshire Museum and spoken word at The Colonial Theater.

As important as the individual professional development days, are the professional learning networks that give teachers an opportunity to share works across districts with the help of a facilitator. Work is both face-to-face and on-line. Teacher leaders are regularly interacting, planning and responding to each other through professional learning communities (PLCs) in more than a dozen content areas. These PLCs are supported through the Superintendents' Roundtable.

Technology

Building on Superintendent Al Skrocki's work on technology in Lee that saved roughly \$80,000, the SBSSP contracted with JSX Services to do a full technology audit and implementation plan. Joshua Shaw, the technology consultant, met with superintendents, technology directors and conducted site visits to most of the districts. The report (attached) details several specific steps and opportunities including: infrastructure, applications, vendor consolidation, a range of processes, instructional opportunities and collaboration with local businesses. Most exciting is the conservative estimate of saving \$174,000.

The six South County technology directors are now meeting monthly to review and start to implement the recommendations of the technology report. They are reviewing student information system, learning management systems, purchasing, and building a shared but partitioned cloud for shared services.

Additionally, the SBSSP is reviewing shared electronic systems for hiring and substitutes which would reduce redundant manual task and increase our candidate pool for short and long-term hires.

Grant Writing

SBSSP worked with a consultant to review and develop a list of prospects (attached). We are now working with another consultant to write several grant proposals.

Special Education

SBSSP is working with local special education directors to develop thoughtful professional development and start to examine additional opportunities for shared program development.

BHRSD created two new programs to better meet the needs of students on the autism spectrum. Students are regularly shared across districts based on students' need and program availability.

Ancillary Outcomes

The SBSSP has had an impact bigger than its work on shared services. As a catalyst for change, the SBSSP has created space for additional collaboration, for policy changes, and for discussions about mergers. Our work exists within a broader context that we continue to impact.

Peter Dillon Superintendent at Berkshire Hills is in his second year as the shared Superintendent of the Shaker Mountain School Union (Hancock, New Ashford and Richmond). That shared services experiment is off to a great start and Dillon received an outstanding evaluation. The respective school committees have agreed to continue the arrangement and are in the process of negotiating a new agreement.

BHRSD and Richmond share a psychologist position.

Tim Lee and Peter Dillon both interviewed for the Lee Superintendent's position. While neither was chosen, the dialogue did help foster conversations that supported a pilot program sharing Lenox and Lee's town administrator position.

BHRSD and SBRSD formally proposed discussions on the possible merger of the districts. To our collective surprise, Lee and Lenox joined in on that conversation. The new South County Group on Regionalization and Consolidation has met three times including all superintendents, two or more school committee members from each district, and several staff and citizens. The group has agreed to request each school committee to set aside \$4,000 in the FY19 budget to cover the costs of a facilitator. The group has started to detail points of collaboration (see attached).

BHRSD was featured in the State Auditor's report on regional schools (see attached). Many of the recommendations were tied to the work of SBSSP.

Next Steps

The SBSSP will continue its efforts in the four areas. We'll build on successes in professional development and expand our professional learning networks. We will follow the technology plan and next steps for implementation. We will submit several grants including either an updated Community Compact or Technology grant as well as several foundation grants. We will expand our work in special education both in professional development and program development. We will also consider a range of other possibilities for collaboration.

Attachments:

Original Plan 11.6.2015
Grant Possibilities
Technology Report
Auditor's Report
South County Opportunity
Assorted Press Clippings

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South Berkshire County School Districts

Collaborative Technology Assessment & Recommendations

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October 15th, 2017

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Introduction

As the school districts in South Berkshire County continue to face challenges in declining enrollment and the corresponding reductions in funding, it has become critical to seek innovative ways to both reduce technology costs in each district and to improve the quality of education by using technology. This assessment is intended to identify a number of concrete ways to drive down technology costs for each district through collaborative means, in the most efficient manner possible, while improving or at least maintaining the same quality of service in place today. Additionally the assessment includes a number of ways to utilize technology to improve educational offerings across the districts while maintaining or reducing costs.

We have reviewed the current technology in each district, discussing it in detail with each of the IT directors. From this, we have been able to get a clear understanding of the current state of each district's infrastructure. Each district has already found numerous ways to become more efficient with technology. Our goal in this assessment is to identify unique ways that the districts can continue to do so through collaborative methods that cannot be achieved alone. Recognizing that consolidation may be inevitable in some form, we also have made recommendations that will support and ease consolidation if or when necessary.

The primary set of recommendations focus on providing an infrastructure to share many aspects of a common technical infrastructure while maintaining the independence of each district. Through the use of shared cloud hosting, virtualization and the selection of common technologies, the districts can greatly reduce their infrastructure maintenance and support costs while improving reliability, scalability and accessibility. We also have recommended the adoption of each district providing certain services to all districts in a "Software as a Service" model. Vendor consolidation to negotiate lower costs for county-wide contracts is also an opportunity.

Further, each district can benefit from pooling resources to address some immediate needs. Because of the size of the districts, many are not following some industry standard practices such as annual security audits, business continuity planning and disaster recovery planning. Often these activities are the first to be eliminated when facing resource constraints in organizations, but they can also be the most expensive in the event of an incident. Each district has almost identical, if not identical, needs in these areas and it would be possible to develop a communal plan that can be shared across all districts.

Finally the districts can look to outside organizations for assistance specific to technology. While the local economy has declined in the last few decades there are still a number of medium-sized businesses that are technical in nature and that require technically skilled labor. The districts should seek ways to engage and involve these organizations in the districts whether through internships or sponsorships. There are also a number of external funding sources such as the Perkins Act that can directly assist in funding technical education in the districts. Combining resources to apply for these funds for each district would reduce the workload for each district.

After this assessment the districts should develop a master plan to move forward with the recommendations that are felt to be appropriate. A draft schedule is included as an appendix to this document.



Part I - Core Challenges

Part I.A – Supporting the Current Environment

The majorities of the districts in the county are facing reducing student populations and reduced budgets. This translates into reduced funding for IT in each district and a corresponding increase of pressure on the existing staff. As this pressure increases, IT staff are forced to make a number of compromises to “keep the lights on” in their districts. There is an opportunity to alleviate some of these stresses by increasing collaboration amongst the districts’ IT staff and pooling their resources to assist each other.

Part I.B – Innovating with Limited Resources

Each district is trying to provide the highest levels of service with limited resources. Resources may be limited by budget, personnel, facilities, etc. While the IT departments may be meeting the needs of the districts, there is a critical mass within organizations to support the required resources to provide innovation. In smaller organizations these resource constraints normally mandate that innovation is absent or at a minimum. In the technology space, a lack of innovation will inevitably lead to an outdated infrastructure that will require expensive and extensive upgrades in the future. By combining the IT resources and user base across multiple districts, there should be more ability to innovate and stay current.

Staff within the IT departments also suffer now because many are single (and at times part-time) members of the district’s technology staff. This is not an optimal environment for staff to learn, grow and contribute to each other’s’ success. Also, having a single IT staff member is a critical single point of failure for districts that should be seen as one of the highest risks in the district. Spreading the knowledge and having redundancy of information (i.e. passwords, processes) and skillsets is mandatory to reduce the risk currently present in some of the districts.

Part I.C – Site Consolidation

There are a variety of issues outside of technology that are creating pressure on all of the districts to consolidate in some way. Unless there are significant changes in demographics in the county, these pressures will require some form of consolidation in the school districts. Technology can be used to perform some consolidation such as sharing teaching resources across districts. This type of consolidation may be an easier step towards sharing resources across districts than some of the more comprehensive changes that may be needed.

From a purely technical perspective, the technical infrastructure in the districts can be migrated to a shared model so that the districts are reducing their local technology costs while maintaining or improving their current levels of service.

Finally, completing technical consolidation will ease the barriers if in the future there is more substantial consolidation such as a merger of one or more districts. Technical consolidation can be seen as an introductory step towards what may be an inevitable result.



Part II - Strategic Solutions

Part II.A – Infrastructure

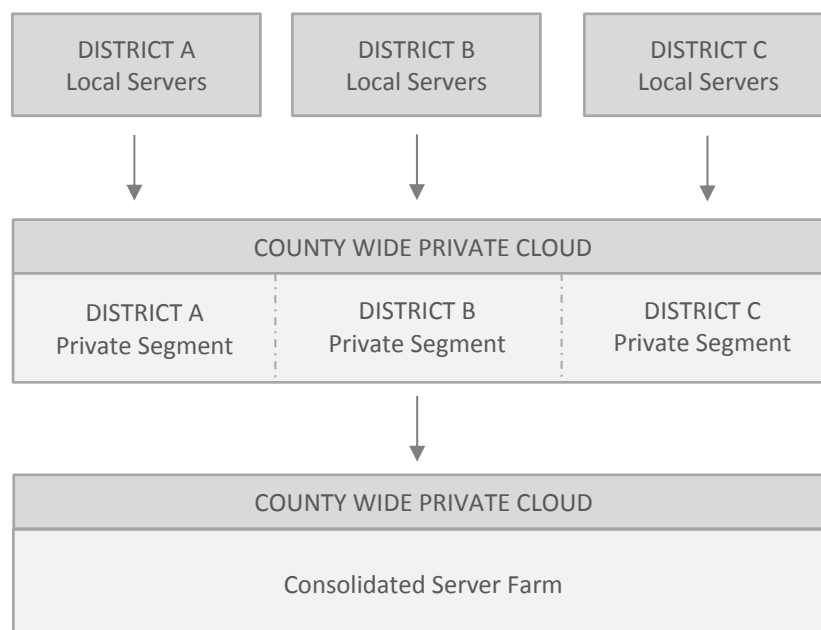
Infrastructure refers to the technical underpinnings of the district that are used to provide IT services such as servers, networks, etc. Collaboration amongst the districts will require that the districts move towards a common infrastructure, whether a shared infrastructure or at a minimum a compatible set of services.

Centralized Cloud-based Hosting

Migration to cloud-based solutions is the foremost trend in IT infrastructure today and continues to gain momentum and impact almost every aspect of IT management. With the availability of high-speed bandwidth to most of the district locations, there is opportunity to migrate a significant portion of a district's local server infrastructure to a common cloud-based provider. The majority of the functions provided by local servers are not extremely bandwidth intensive and are suitable for cloud hosting.

We propose that a county wide private cloud (CWPC) is created that is available to all of the districts. The CWPC would be hosted by a third-party provider such as Amazon via Amazon Web Services (AWS). Where possible the vast majority of servers for a district would migrate to the CWPC. This is not practical for some types of servers (i.e. file servers, print servers) and so each district will most likely retain a small number of local servers.

The CWPC would provide an initially segmented environment for each district for the hosting of virtualized servers. Each district would initially have its own subnet on the CWPC and would therefore be segregated from the other districts. This would alleviate initial concern amongst IT staff regarding privacy, control, etc. of their server infrastructure. Each district would move their local servers onto the CWPC at their own pace as set by their superintendent.





Some of the advantages of utilizing a private cloud for each district are:

- **Outsourced Hardware Maintenance & Support** – All hardware costs are shifted to the private cloud provider and thereby removed from a district's budget. The cost of maintaining the hardware is also shifted, including the training of staff on the hardware platforms, providing redundant systems, maintaining hosting facilities in the district, ensuring 24x7 availability, etc.
- **Improved Reliability & Recovery** – The CWPC would provide near-guaranteed uptime and greatly improved redundancy for disaster recovery and business continuity purposes.
- **Consolidation Pathway** – As will be shown in following sections of the document, centralizing the districts' servers will allow all of the participating districts to provide and share resources amongst each other, greatly reducing costs for each district and allowing for further collaboration. Centralizing the servers is a key step in this process.

We recommend that an incremental hybrid approach is taken to migrate to the CPWC for each district. A common project plan can be developed that can be utilized by each district at their own pace. While each district has a unique environment, the majority of the challenges faced will be the same for each district and the districts can help each other move in this direction.

Integrated Wide Area Network

As collaboration progressed, each district can loosen the security protocols segregating their environment on the CWPC so that the districts can communicate across networks using the CWPC as the hub of a hub-and-spoke network topology. This would be a low cost custom MPLS that would not require any additional networking costs to any of the districts and would support shared server resources.

In the future the districts could optionally expand the network topology to a star topology so that direct connections are established between sites, thereby increasing speed and introducing link redundancy.

Shared Server Resources

As the integration of the districts increased, participating districts could begin to identify redundant services that the districts are providing to themselves. These could be anything from a specific application server to infrastructure servers (i.e. patch management servers). The districts could then select one of the districts to be the shared provider of these services and other districts would then decommission their servers and utilize the services of the shared provider.

Districts could then provide shared services to other districts, reducing costs for all districts.

Depending on the specific function, licensing may need to be reconfigured to support multiple districts and at times licensing costs may not directly decrease. There are however a number of services that most likely can take advantage of shared licensing, and if districts move towards operating under a single contractual entity, almost all licensing costs would be reduced.

Finally, administrative and management costs would collectively be reduced.



Common Virtualization Platform

Each district is in varying stages of virtualization of their server infrastructure. The districts should collectively select a common virtualization platform so that future integration will be as painless as possible. From a cost perspective Microsoft's Hyper-V platform would be the least expensive option but is also less popular than VMWare's solutions. VMWare's ESXi solution can provide a free licensed option for any servers that would remain in a district's local infrastructure.

Once a platform is selected, migrating any existing virtualized servers to the platform is usually very simple and involves little downtime.

Remote Backup Pooling

Once districts move to the CWPC they will also be able to take advantage of pooled remote backups to greatly improve their disaster recovery and business continuity. Due to the size of the districts it is very difficult to develop a practical and cost effective disaster recovery infrastructure alone. By using a shared platform however each district can leverage the systems that are already in place at the CWPC.

Common Workstation Platform

Districts should select a set of common workstation platforms that they will support. These would include a standard version of Microsoft Windows (i.e. Windows 10 Professional), OS X, tablet software (i.e. Android) and Chromebooks. We would also recommend that a common set of hardware specifications and vendors for workstations and tablets are collaboratively agreed to amongst the districts. There are possible cost savings as well by purchasing these units as a group.

We recommend that the IT staff for each district develop the common platform during the IT Monthly Meetings (see below).

Integrated VoIP Telecommunications

Each district should be moving towards Voice over IP (VoIP) telephone systems and handsets. VoIP systems provide numerous advantages for a district independently, but also will allow each district to seamlessly integrate with other districts in the future. Integrating digital legacy systems with VoIP systems is possible but would require either costly PRI telephone lines or a translator to VoIP. If a district is considering replacing existing digital telephone systems, VoIP should be selected.

In the future when integration occurs, each district could be assigned a unique prefix for their extensions so that calls can be made between districts using this prefix plus the existing extensions. This would minimize the disruption to the existing telephone extensions but allow intra-district calls without the use of PRIs.



Part II.B – Applications

There are a large number of applications in use in each of the districts. Some of these applications are very specific to education (such as a library management application) whereas others are universal (i.e. email). As the districts increase collaboration, efficiency can be gained by adopting uniform software across the districts so that staff and students can utilize resources across districts as seamlessly as possible.

Common Productivity Tools Infrastructure

Whenever possible districts should migrate towards the use of Google’s G Suite for Education and utilize its productivity applications such as Gmail. Google Classroom is also an excellent tool and is free to schools as is the rest of the G Suite for Education. Having all of the districts on G Suite for Education will also ease student and staff use who will be participating in multiple districts.

While Microsoft’s Office 365 is an effective tool and is also free for schools, G Suite’s native integration with Classroom makes it the optimal solution for schools. Migration to G Suite is fairly simple and there are many third-party tools that can be used to perform the migration with minimal disruption to staff.

Student Information Management System Convergence

The Student Information Management System (SIMS) for each district is its core management software that touches all students, faculty and administrative staff. Currently the districts are utilizing a wide variety of SIMS and have implemented their current SIMS at varying times. Deployment of a SIMS is one of the largest and most disruptive technology projects that a district can undertake. It may be extremely difficult to ask a district to proactively migrate to a different SIMS on their own.

Recognizing this, we propose that a single SIMS software vendor is selected through a collaborative process with all of the districts. A third-party can guide this conversation if needed to ensure that the SIMS that best serves all districts is selected without overdue weight being given to any system.

The selected SIMS will then be deployed as a master SIMS for the overall county. The SIMS must support the ability to segregate faculty and students by district; initial research has shown that this is supported by some of the most popular SIMS. As each district integrates with the overall county, they would need to undertake the migration to the county SIMS. The migrations could follow a uniform project plan and could utilize third party resources (perhaps from the SIMS) to minimize the disruption as much as possible.

A collaboratively selected SIMS will then be deployed as a master SIMS for the overall county as a shared platform.

Licensing costs would only accrue for a district once this occurred, thereby staggering the costs of the county SIMS. A negotiation with the selected SIMS vendor could include a heavily reduced initial cost so that initial costs are limited for the initial deployment.

While this will not be a simple endeavor for any district that is not already using selected SIMS software, the availability of integrated reports, county wide global student records, standardized interfaces for staff and administrators, centralized reporting for the state such as SIFs, etc. would be extremely beneficial and cost effective in the long run. Each district would be able to utilize shared resources for administering the SIMS and onerous tasks such as SIF transmissions.



Application Standardization

We recommend that as districts consider collaboration, department-level committees are designated to determine what software packages will be utilized by all districts. This would most likely only affect department-level software (i.e. CAD software) versus individual teaching aids (i.e. software used by one teacher in the classroom).

Part II.C – Vendor Consolidation

As the districts move towards integration, selecting common vendors will provide an easier path to consolidate contracts and minimize the transitions between vendors. Pursuing common vendors will also provide immediate financial savings to each district by leveraging larger contracts, etc.

Printing/Copying

Combining the districts into a consolidated master contract (with sub contracts for each district) with a single vendor to provide all copiers and printers would definitely drive down the cost for this contract. The vendor would be able to provide separate invoicing and meter usage for each district and thereby support a separate contract for each district.

Telecommunications

There may be limited pricing advantages to consolidating vendors such as ISPs because of the limited number of vendors available in the region. However choosing as few as vendors as possible will minimize the integration costs when the districts do integrate.

Consulting & Support

With a limited number of consulting service providers in the area it is difficult to get competitive rates for consulting services. If the districts move towards cloud-based solutions the districts could eliminate most if not all on-site consulting needs and move towards using a remote provider, perhaps looking in the Boston area to gain more competitive rates. Consulting needs would also be reduced if the districts were using a shared model for IT staff and therefore the staff were available to contribute their specific expertise to multiple districts.

Shared Security Auditing

Each district should be undergoing an annual security audit and assessment from a third-party expert at a minimum. It is now standard practice to have a set of technology security policies that cover everything from routine security processes (i.e. patches, security scans) to incident response plans.

Each district should be undergoing an annual security audit and assessment from a third-party expert at a minimum.

Many third-party experts will provide these policies at a minimum cost and since the districts are almost identical in terms of security exposure, a consolidated project to go through an initial security audit would meet this requirement at a reduced cost to each district. For example, each district can utilize the free Nessus scanning technology to routinely scan their entire network for vulnerabilities.



Part II.D – IT Processes

There are a number of processes that can provide immediate benefit to the districts through collaboration as well as easing future integration.

County Portal

Communication will be a critical aspect of any integration efforts. The creation of a County Portal that would be securely accessible to the staff of all participating districts can be used to facilitate many types of communication. The County Portal can have specific sections for each department (i.e. IT, facilities, educators, administrative staff) with some common functionality:

- Forums – To facilitate miscellaneous conversations. These could be moderated or could be free flowing.
- Shared Calendar – Each district can share any events that other districts may be interested in. This could include specific classes that are offered and available to all students.
- Shared File Repository – A secure repository for districts to share files with each other. There would be sections for different groups (i.e. superintendents, administrative staff) that would have unique security to ensure confidentiality.
- Issues – Any issues or risks that have arisen during integration or within a district can be communicated here.
- Training & Education – Online training materials that can be shared could be posted here as well as posting of shared professional improvement events.
- Resources – Assets such as extraneous equipment can be listed here for other districts.
- Common Forms – Various forms that the districts will use as they integrate can also be available here. For example required paperwork to transition assets from one district to the other could be easily downloaded here.

The County Portal will require at least two administrators from districts to manage accounts, coordinate with the host of the County Portal, etc. It's preferred that the two administrators are from different districts and that both are part of the administrative staff; hence they would have access to most if not all of the documents already. We do not recommend that IT staff be administrators for confidentiality reasons.

Monthly IT Summits

One of the easiest steps to take to encourage communication amongst the districts and encourage collaboration is to mandate a monthly IT meeting that a representative of each district must attend. This would give the IT staff an opportunity to share information, seek advice and assist each other. Sample agenda items could be discussing new technical initiatives a district is undertaking, reviewing vendor performance, identifying new funding sources, etc. This would also familiarize IT staff with each district's unique challenges, environments, etc.

Monthly meetings would familiarize IT staff with each district's unique challenges, environments, etc.



A rotating chair of the meeting could be set every six months amongst the representatives. The chair would be responsible for setting the agenda of each meeting, hosting the physical meeting location, sending out meeting requests, etc. The order of the rotation could be alphabetical to ensure every participating district holds the chair.

Attending the meeting would need to be mandatory and enforced by the superintendent of each district as otherwise attendance most likely will be lacking. The chair would be responsible for providing brief minutes of each meeting to the representatives and the superintendents.

Shared Helpdesk

If the vision of sharing support across districts is to be practical in the future, a shared helpdesk software is critical. Many of the districts are not using any form of helpdesk software at this time. Having a consolidated helpdesk software would route all support tickets to a central repository. A cloud-based solution such as Zenworks that has the ability to group incoming requests into queues based on district would be ideal. In the beginning, each district can manage their own queue separately but over time individual staff members can be assigned to other district queues. This would provide an incremental approach to sharing staff across districts, especially for specific technical areas.

Communal Spare Hardware

The opportunity to share hardware has come up in meetings before. In addition to sharing server hardware (which should be dramatically decreasing as cloud-based solutions are being adopted), user-focused hardware such as laptops, workstations, etc. should also be shared. A section of the County Portal should be dedicated to maintaining an inventory of unused equipment that each district has available and which any other district can request.

This inventory does not need to be constrained to technical equipment and may be useful to facility staff and educators.

Project Management

IT organizations typically fulfill regular operational responsibilities and also have finite projects with definitive scopes, start and end dates. Unfortunately management of these projects is usually a prime cause for project failure. Adding the integration of separate IT departments can greatly increase this risk of failure due to a variety of reasons. To mitigate this, we recommend that a common project management approach is agreed upon by the participating districts and followed.

While some aspects of the project management philosophy may seem overly rigorous, it ensures that projects are managed in a uniform aspect and will help provide a common structure for cooperating IT departments to engage in.

The level of project management required for a project will differ based on the project's complexity, size, duration, etc. It would be IT Director's responsibility to determine the appropriate level and then execute this level to ensure a project's success. The IT Director cannot assume that the organization's management will be able to determine this; it must rest on the IT Director's shoulders.

Structure and organization, in a commonly agreed upon manner, will be one of the most difficult aspects to completing successful projects.



All projects undertaken by IT should follow some standard project management guidelines. These guidelines are shown below:

- Stakeholder Identification: Each project should have a list of stakeholders that will define the requirements and validate the project's success.
- Project Team: All involved parties should be identified and a contact sheet distributed at the beginning of the project.
- Functional Requirements: A list of functional requirements should be one of the first steps in the project. The stakeholders should define these requirements, the requirements should be documented, and the stakeholders should sign off on the requirements.
- Schedule: A schedule with calendar due dates and milestones must be published initially and on a weekly basis throughout the lifetime of the project.
- Tasks: The work that is required to complete the project should be divided into tasks and each task should be assigned to one individual. We will never assign one task to more than one person, as this removes accountability for the task.
- Project Meetings: A weekly meeting or conference call should be held to update the project team and stakeholders.
- Postmortem: After the completion of a project, a postmortem meeting should be held with the stakeholders and project team to determine the project's outcome and lessons learned.

We recommend using a project management application to enable and enforce project management processes throughout the department. Regardless of the specific application, we recommend that the application support the following features:

- Online shared access
- User-specific task assignment
- Exportable reports
- Task alerts via email and/or text

We frequently recommend a four-phase methodology for projects, whether an IT-centric or an application-development project:

- Inception: During inception the stakeholders are identified, requirements are defined, success criteria are understood, project team is assigned, etc.
- Design: During this phase the architecture of the solution is defined such that all of the requirements are met. This can include server specification, database schemas, data flow diagrams, etc.



- Production: During this phase, the solution is implemented. This should include an alpha and/or beta phase during which quality assurance and user acceptance testing is performed.
- Deployment: During deployment, the solution is rolled into the production environment. User communication and documentation should occur in this phase.
The final step in this phase should be the postmortem meeting.

While this methodology is not required, it does ensure that the project management philosophy is followed.



Part III - Improving Technology Education Through Collaboration

Part III.A – Pooled Courses

For many of the districts, there is not enough of a critical mass of students for many of the more specific courses or topics. There also may not be faculty available to teach a class for which there are enough students.

Providing courses in one district that can be utilized in other districts through the use of video conferencing could be a key method to alleviate this issue. The technical aspects of providing video conferencing are fairly simple and straightforward, especially if there is network interconnectivity via the CWPC or something similar. Courses could be recorded so that districts with differing class schedules would not be affected; students would view the prerecorded video during their normal class times. Video conferencing could be allocated at a specific sub-set of time that overlaps class times for each district. Remote testing could be done with local faculty as provosts.

The key challenges involve uniform grading, faculty compensation, etc. between districts. These topics are outside of the scope of this assessment and would need to be resolved before the technical solution could be implemented.

Part III.B – Distance Education

Some of the districts have experimented with remote learning solutions for students with varying degrees of success. Selecting a uniform distance education provider may result in lower overall costs for participating districts. This could be easily selected by the districts in a collaborative manner and would benefit the smaller districts where there are limited resources to research and manage a solution.

The core challenge to the success of distance education may also not be technical in nature but administrative. Districts may be able to collaborate on these issues as well to identify common solutions that would work in all of the districts. The development of a common policy towards distance education that is enforced throughout all districts would alleviate these issues and ease the introduction and use of distance learning as well.

Part III.C – Technology Competitions

To encourage students to utilize technology and pursue it from a career perspective the districts can engage in one of the many technology competitions available, whether state or national, such as the Computer Science Student Network or eCybermission. These competitions can both motivate students to learn more about STEM disciplines and expose them to career paths that they may not be aware of.

Many of the districts are currently too small to have enough resources and/or students. Similar to the current state of athletics in the county and the consolidation of certain sports across districts, it may be applicable to develop a single team for all of the participating districts. One or more districts could act as the host to the team or this could be done on a rotating basis.



Part IV.D – Internships

One of the districts is already utilizing students as interns to support staff with basic IT support issues. For smaller districts this may not be practical because there is not enough supervision possible or enough students with the skillset and interest. Additionally there are probably a number of possible internships with local businesses (see Section IV) that are not being identified because most of the districts do not have the resources and/or time to actively engage with these businesses. Creating a shared list of internships, whether within a district as a support staff or with a local business, would allow students from all participating districts to avail themselves of opportunities outside of their local district.



Part IV - External Assistance

Part IV.A – Local Businesses

Engaging local businesses is another way to encourage students to engage in technology across districts and potentially leverage their resources for the districts.

- Berkshire Corp
- Sheffield Plastics
- Onyx Specialty Papers

Part IV.B – Alternative Funding

There are various external funding sources that most of the districts are not availing themselves of due to the onerous requirements for applications, lack of staff time and resources to apply, etc. such as the Perkins Act. If the districts collaborated they could very easily work together on the application process and pool resources to complete all of the districts' applications simultaneously for grants.

We recommend that a chair is selected for a sub-committee that can investigate what grants and funding sources the districts are currently receiving and identifying the personnel with the experience and knowledge of the application process. The chair can then prioritize and organize a coordinated and collective effort to complete the applications for each district.



Appendixes

Implementation Plan & Timeline

The following tables outline the tasks and estimated schedule for successful completion of the consolidation of IT resources and processes. These are sorted in a suggested order of completion.

Each task is assigned an item number that is a unique identifier of the task. It is preceded by the phase that the task has been assigned to in the schedule. There are six total phases.

Whenever the term “local” is used it means at a district level.

Item No.	Task	Key Benefits	Key Barriers	Estimated Cost	Estimated Schedule
Phase 1 - Processes & Infrastructure These tasks are related to the successful initiation of the integration and provide the basic structures necessary to keep momentum and organization throughout the effort.					
P1 101	Obtain Formal Agreement Obtain formal agreement from those districts that wish to participate in the integration. Other districts may join at a later date.	<ul style="list-style-type: none"> Commitment of resources, time and effort to the consolidation effort. 	<ul style="list-style-type: none"> None 	NA	NA
P1 102	Identify IT Staff Point of Contact in Each District Each superintendent to select one representative from each district to server as the point of contact for the district. This POC will attend the IT Monthly Summits with any other staff needed.	<ul style="list-style-type: none"> Single point of contact for each district to expedite IT decisions and actions. 	<ul style="list-style-type: none"> None 	NA	NA
P1 103	Setup Recurring IT Monthly Summit Select a recurring date such as the first Wednesday of each month to have the IT Monthly Summit. Utilize a standard agenda to assign tasks and move consolidation effort forward.	<ul style="list-style-type: none"> Consistent action and communication will be necessary to move the consolidation effort forward. 	<ul style="list-style-type: none"> Each district staff will need to allocate time for this meeting and the activities that result from it. 	NA	NA



P1 104	Select a Vendor to Launch County Portal Select a local vendor to implement the first iteration of the County Portal with the basic functionality (calendar, file repository) to support the IT consolidation effort. Summit minutes must be posted here to ensure that superintendents are informed on the progress being made on the project.	<ul style="list-style-type: none"> A central repository that can be used to coordinate IT efforts and then expand to offer county-wide information and resources. 	<ul style="list-style-type: none"> None 	\$2,000 - \$3,000	1 month
P1 105	Select a Local Coordination Leader Select a technical resource outside of district staff that will lead the technical implementation of the consolidation effort.	<ul style="list-style-type: none"> A single unbiased consulting resource with technical expertise that can implement the initial consolidated assets, assist the districts as needed, etc. 	<ul style="list-style-type: none"> None 	Varied by month	1 month

Phase 2 - County Wide Private Cloud Implementation

These tasks must be completed to prepare the County Wide Private Cloud (CWPC) for the districts to migrate to as well to establish processes that will be required for successful completion of the county-wide integration.

P2 201	Acquire a County Domain Select a county domain (i.e. URL) that will be used as the umbrella domain. This will be registered with G Suite (i.e. Google Apps), etc.	<ul style="list-style-type: none"> This will be required when integrating the district domains. Users will be able to move between district domains easily. 	<ul style="list-style-type: none"> None 	\$10/year	1 day
P2 202	Select CWPC Cloud Provider Select a cloud provider that has the ability to meet the networking and segregation requirements as outlined above in II.A. While the provider is not required to be local, it would be easier if it was in the same time zone and relatively close to the county. An RFP would be required for final selection but initially a provider like BostonVPS	<ul style="list-style-type: none"> The CWPC is needed to provide shared resources. 	<ul style="list-style-type: none"> Completion of migration to the CWPC would dramatically reduce management costs and equipment costs in each district. 	NA	1 mnth.



	(www.bostonvps.com) would be able to provide a cost-effective solution that can be customized to meet the requirements.				
P2 203	Deploy Initial Host Virtual Servers Deploy one host server for each participating district and one consolidated host server. Each district host server will be available for migration of local virtual servers to the CWPC. All Consolidated Servers (see tasks below) will be housed on the consolidated host server. We recommend that VMware ESXi is used as the virtual OS. Note that initially each district host server will be isolated to only communicate at a network level with the relative district.	<ul style="list-style-type: none">Centrally located and uniformly deployed host servers.Low cost cloud colocation for each district.	<ul style="list-style-type: none">None	Initially \$500 - \$1,000 per month	1 mnth.
P2 204	Implement Network Configuration at CWPC Work with cloud provider to implement VPN connections for each participating district. Each VPN connection will have access to the consolidated host server (and all virtual servers on it) as well as the relative district host server.	<ul style="list-style-type: none">Provides foundation for network interconnectivity between the CWPC and between the districts in the future.	<ul style="list-style-type: none">None	NA	1 wk.
P2 205	Implement Common Helpdesk Solution Implement a cloud-based helpdesk solution that each district can migrate to from their existing (if any) system. Initial recommendation is Zendesk for Education.	<ul style="list-style-type: none">Allows districts to begin to share tickets and support resources.County-wide metrics and understanding of shared issues.	<ul style="list-style-type: none">Local implementation and replacement of existing solution (if any).	TBD	1 wk.



P2 206	Implement Common Remote Assistance Solution Implement a remote assistance (i.e. remote desktop) solution that integrates with the helpdesk software. We recommend Bomgar.	<ul style="list-style-type: none"> Allows support staff to remotely connect to any workstation across all participating districts. 	<ul style="list-style-type: none"> None 	TBD	1 wk.
P2 207	Implement Common IT Asset Management Solution Implement an asset management solution that will be used by all participating districts to inventory and manage their assets. We recommend a plugin for Zendesk like Oomnitza.	<ul style="list-style-type: none"> Consolidated inventory of assets. Eases ability for districts to see complete inventory and share equipment. 	<ul style="list-style-type: none"> None 	NA	2 wks.
P2 208	Implement Common Backup Solution Implement a centrally managed backup solution that will back up all file servers and other critical data on both CWPC servers and district servers to the CWPC. This data should then be replicated off-site from the CWPC to another repository. We recommend Macrium Software for a simple, reliable, comprehensive solution.	<ul style="list-style-type: none"> Reduced cost for each district. Reduced management cost. Reliable backups. 	<ul style="list-style-type: none"> Local implementation and replacement of existing solution. 	\$1,000 - \$1,500	2 wks.
P2 209	Implement Common Antivirus Solution This solution will be centrally managed and will be deployed at all districts. We recommend Avast Endpoint Protection Advanced with significant educational discounts.	<ul style="list-style-type: none"> Reduced cost for each district. Reduced management cost. 	<ul style="list-style-type: none"> Local implementation and replacement of existing solution. 	\$2,500 - \$4,000	2 wks.



P2 210	Implement Common Imaging & Patch Management Solution Implement a solution to deploy client images for workstations and other user-level machines from a common repository. We recommend Windows SUS and Microsoft Deployment Toolkit (MDT).	<ul style="list-style-type: none"> Enforces a common set of images for all districts. Reduces staff time to maintain district-specific images. Allows imaging for any districts that currently do not use imaging. 	<ul style="list-style-type: none"> Local implementation and replacement of existing solution. 	NA	2 wks.
P2 211	Implement Common Active Directory Forest Deploy a primary and redundant Active Directory controller with a county-wide forest that participating districts will migrate to during the integration process.	<ul style="list-style-type: none"> Allows for shared authentication across districts to support future integration. Eventually will support flattening of domains as needed and easy migration of user accounts between districts. 	<ul style="list-style-type: none"> Local implementation and replacement of existing solution. 	\$1,000	1 day

Phase 3 – Common Standards & Processes Design

The participating districts will collaborate to define the common standards and processes that will be implemented over time in each district. These will all be fluid standards that may evolve in the future but each district must commit to adhering to these standards.

P3 301	Define Common Workstation Profiles Define standard workstation profiles for workstations, laptops, tablets, etc. A standard would include the OS, version, minimum hardware requirements, etc.	<ul style="list-style-type: none"> Common platform for county-wide shared support. Ability to easily migrate equipment amongst districts Easily allow staff to utilize equipment at any district. Minimize TCO on user hardware and software. 	<ul style="list-style-type: none"> None 	District Staff	3 wks.



P3 302	Select Common Productivity Package As a group select a common productivity package (i.e. Microsoft Office or Google Apps) to use throughout the participating districts. This includes the version of the suite if applicable.	<ul style="list-style-type: none"> Common platform for county-wide shared support. Easily allow staff to utilize equipment at any district. 	<ul style="list-style-type: none"> None 	District Staff	1 wk.
P3 303	Define Standard Common Group Policy Objects Define a set of standard GPOs that will be implemented in each district. As the districts integrate their Active Directory with the county forest, these GPOs will take effect.	<ul style="list-style-type: none"> Uniform management policies on hardware across the county. 	<ul style="list-style-type: none"> None 	District Staff	4 wks.
P3 304	Define Standard Naming Conventions Define a set of standard naming conventions for objects such as usernames, workstations, servers, etc. This may be only used for future objects as renaming existing objects may be too onerous.	<ul style="list-style-type: none"> Common naming conventions to ease support between districts. 	<ul style="list-style-type: none"> None 	District Staff	2 wks.

Phase 4 - District-level Initial Implementation

Each district will need to follow this implementation plan. Each district can move at their own pace but there should be a set realistic deadline for each item at which all districts must have successfully completed the item. This will allow the county as a whole to conform to a schedule for completion of the integration.

P4 401	Implement Redundant Internet Connectivity Connection to the CWPC will be critical. All districts must have redundant connections to the Internet, whether active-active or active-passive.	<ul style="list-style-type: none"> Required to ensure communication to the CWPC. 	<ul style="list-style-type: none"> Additional cost and complexity at the district level. 	Varies	1 day
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P4 402	Implement VPN Connection to CWPC Utilizing the existing network hardware at the district, create a permanent site-to-site VPN connection to the CWPC. If the district has redundant	<ul style="list-style-type: none"> Required to communicate with the CWPC and utilize its resources. 	<ul style="list-style-type: none"> May require consulting resources to implement at each district. 	\$0 - \$250	1 day
P4 403	Migrate First Virtual Server to CWPC Select one low-risk virtual server in the district to migrate to the CWPC; if there is no virtualization present in the district, select a physical server to convert and migrate. This would be a test case for district staff to become familiar with	<ul style="list-style-type: none"> Allows district staff to become familiar with the CWPC and debug performance, network issues, etc. 	<ul style="list-style-type: none"> None 	District Staff	1 wk.
P4 404	Migrate All Remaining Applicable Servers to CWPC Migrate all remaining applicable servers to the CWPC. This may exclude servers such as servers hosting large files, printer servers, etc. The goal is to minimize the number of local servers. If additional host servers are required at the CWPC for a district, coordinate with the cloud provider to deploy them. Utilize the CWPC common solutions (i.e. backup) for all migrated servers.	<ul style="list-style-type: none"> Move as many servers as possible to the CWPC, reducing local maintenance and hardware costs, mitigates risk, improves reliability and uptime. 	<ul style="list-style-type: none"> None 	District Staff	3 mnths.
P4 405	Migrate Local Backups to Common Backup Solution Move all backups to the CWPC for all servers. Retire any existing local backup solutions including offsite replication.	<ul style="list-style-type: none"> Moves all backups to an offsite secure location. Leverages backup infrastructure at CWPC. 	<ul style="list-style-type: none"> None 	District Staff	1 wk.
P4 406	Migrate to Common Antivirus Solution Deploy agent on all local workstations and servers.	<ul style="list-style-type: none"> Eliminates local agents and license costs. 	<ul style="list-style-type: none"> None 	District Staff	1 wk.



P4 407	Migrate to G Suite (i.e. Google Apps) If not already on Google Apps, migrate email to Google Apps. Integrate synchronization of local Active Directory with Google.	<ul style="list-style-type: none"> • Migrates all email infrastructure to cloud. • Moves all antispyam software to the cloud. • Moves all backup of email to cloud provider • Utilizes uniform email platform for county-wide support. • Eliminates any local email client software. 	<ul style="list-style-type: none"> • Email migration is not trivial and will require data migration and user training. 	District Staff	2 mnths.
P4 408	Implement Google for Education If not already, sign up for Google for Education for the district domain. Assign a district staff member other than an IT member to lead the implementation of Google for Education within the district.	<ul style="list-style-type: none"> • Utilize Google for Education for the local district. • Enables future collaboration and sharing amongst the districts by supporting common online capabilities (i.e. for remote classes). 	<ul style="list-style-type: none"> • None 	District Staff	2-3 mnths.
P4 409	Implement Common Helpdesk, Remote Assistance, IT Asset Management, Patch Management Solutions Implement the use of these common solutions in the district. It is critical that all servers and applications, especially unique servers that cannot be migrated to the CWPC , are heavily documented.	<ul style="list-style-type: none"> • Ability to distribute tickets in the future across districts. • Sharing of knowledge base and user self-service features of helpdesk solution. • Ability to support users across districts. 	<ul style="list-style-type: none"> • Migration of existing tickets if needed to common system. 	District Staff	2-3 mnths.
P4 410	Integrate with Common Active Directory Forest Migrate district Active Directory domain to the county Active Directory forest.	<ul style="list-style-type: none"> • Allows for shared authentication across districts to support future integration. 	<ul style="list-style-type: none"> • May require consulting resources to implement at each district. 	TBD	2 wks.
P4 411	Implement Common GPOs Implement the county GPOs on all servers and workstations.	<ul style="list-style-type: none"> • Creates consistent policies across all districts. 	<ul style="list-style-type: none"> • None 	District Staff	1 day



P4 412	Implement Common Naming Conventions Utilize common naming conventions for all new objects and optionally rename existing objects as appropriate.	<ul style="list-style-type: none"> Creates consistent naming conventions that aid in shared support. 	<ul style="list-style-type: none"> None 	District Staff	NA
P4 413	Deploy Common Images Deploy the common images on all workstations.	<ul style="list-style-type: none"> Uniform workstation configurations across all districts for shared support. 	<ul style="list-style-type: none"> This is a time and labor intensive effort but will ensure a common platform across the participating districts. 	District Staff	2 mnths.

Phase 5 - Application Consolidation

Once each district has replaced many of their local infrastructure and IT solutions with shared common solutions, the next step will be to move their organization-specific solutions (i.e. the SIMS) to a shared common solution. This phase will also begin to share county-wide IT responsibilities amongst district IT staff.

P5 501	Select Future Common SIMS An extensive selection process will be required to select a single SIMS (Student Information Management System) that will be used by all participating districts. We recommend that initially an RFP is generated with all functional requirements. The RFP process can then be used to vet the options and select the most effective solution. Once selected, each participating district must commit to a realistic deadline to migrate to it. This is only the task to select the SIMS, not to migrate to it.	<ul style="list-style-type: none"> A common SIMS will be required to efficiently share data between the districts on students and staff including grading. 	<ul style="list-style-type: none"> Will require the involvement of more than just the IT staff. May require external assistance to generate the RFP and manage the RFP process. 	TBD	2 mnths.
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P5 502	Loosen CWPC Network Restrictions Remove the network restrictions that restrict traffic between the districts host servers. Utilize the CWPC as the hub of a star topology between the districts to allow connectivity between the districts.	<ul style="list-style-type: none">• Allows all participating districts to share all resources at the CWPC.• Allows IT staff to support users in any participating districts.	<ul style="list-style-type: none">• None	NA	1 day
P5 503	Select Common Solution Managers Select a primary and secondary staff member from within the districts for each of the consolidated systems (i.e. antivirus, backup, imaging, GPOs) to be the administrators of these systems. Using the common helpdesk solution, tickets will be routed appropriately to the solution managers for shared applications.	<ul style="list-style-type: none">• Reduces staff workload at individual districts.• Allows all participating districts to leverage CWPC resources.	<ul style="list-style-type: none">• IT staff within the districts may have duties outside of their current duties.	District Staff	1 day
P5 504	Select Shared Applications Each district will have migrated all possible servers to the CWPC on their respective host servers. The districts will now review these applications to identify common functions (i.e. library management software, cafeteria management software) across the districts. Wherever possible, the districts will select one solution and all districts will migrate to the common solution. Once a common solution is selected, elect a solution manager.	<ul style="list-style-type: none">• Over time this will greatly reduce the number of applications and servers in use across the districts in aggregate.	<ul style="list-style-type: none">• Each application will have its own unique requirements and barriers.• Each district may utilize applications in different ways or may have different integrations (i.e. SIMS to cafeteria software) that will require specific migration plans.	District Staff	6 mnths.



P5 505	Local Server Standardization Review the inventory of local servers that did not migrate to the CWPC and create a project to either migrate the server or redeploy the server to meet the common standards, especially for local file/print servers.	<ul style="list-style-type: none">• Reduces local server infrastructure, reducing management and hardware costs further.• Reduces the number of unique solutions requiring specific knowledge and history to manage.	<ul style="list-style-type: none">• None	District Staff	3 mnths.

Phase 6 - Application & Staff Reorganization

The final phase is the reorganization of the staff and consolidation of the SIMS which as the core system will require the most effort and will impact all staff in participating districts.

P6 601	Reorganize IT Staff Reorganize IT staff in all districts to report in a county-wide hierarchy. Hire a county-wide IT Director who will be responsible for IT issues in all participating districts. Define a set of responsibilities for each local district and allocate these responsibilities to local staff. Define a further set of county-wide responsibilities (i.e. common solution managers, overall helpdesk management, CWPC management) and allocate these to staff that will span the districts.	<ul style="list-style-type: none">• Completes the integration of the districts from an IT perspective.	<ul style="list-style-type: none">• Funds must be allocated for the IT Director.• Financial allocations of staff will need to be determined.	NA	6 mnths.
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P6 602	Complete Implementation of Common SIMS Each district will need to commence a separate project to move to the common SIMS. It is extremely likely that the selected SIMS will already be in use in one or more of the districts and it may be that the other districts move incrementally to the same installation of the SIMS. Regardless the migration effort will need to be its own project for each district due to its complexity. Once all districts have migrated to the common SIMS, consolidation of staff responsibilities outside of IT such as state reporting requirements can be accomplished across the districts.	<ul style="list-style-type: none">• Reduces licensing and support costs.• Allows staff to support responsibilities in the SIMS across districts.• Greatly eases district consolidation if it occurs in the future.	<ul style="list-style-type: none">• Each district will require a unique migration plan.	TBD	6 mnths.



Estimated Schedule

The following table illustrates a possible schedule for the six phases. While some of the phases could be performed simultaneously, additional staff or consulting assistance would be required.

Phase	2017	2018				2019			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Phase 1 - Processes & Infrastructure									
Phase 2 - County Wide Private Cloud Implementation									
Phase 3 – Common Standards & Processes Design									
Phase 4 - District-level Initial Implementation									
Phase 5 - Application Consolidation									
Phase 6 - Application & Staff Reorganization									



Estimated Cost Savings

The following table outlines the approximate IT budget (excluding staff) for the districts. We then evaluated each district budget and identified costs that either:

- Could be completely omitted due to the expected use of zero cost resources in the CWPC.
- Could be reduced to approximately 20% of current costs due to the expected shared use of resources with costs in the CWPC.

Other assumptions that were made include:

- Four to six districts would participate in the initial effort.
- Zero reduction of local equipment acquisition for users, classrooms, local facilities, etc.
- 80% reduction of local server hardware acquisition and maintenance costs.
- No changes in staffing were included.

All assumed cost savings were directly correlated to the detail of the information provided by the districts. Wherever there was insufficient detail, a conservative cost savings was used.

All figures are annual figures.

District	Current IT Budget	Projected IT Budget	Savings
Lee	\$134,000	\$112,000	\$22,000
Lenox	\$192,000	\$176,000	\$16,000
Southern Berkshire	\$168,000	\$119,000	\$49,000
Berkshire Hills	\$294,000	\$216,000	\$78,000
Farmington River	\$71,000	\$62,000	\$9,000
		Total Estimated Savings	\$174,000

Short Term

Area	Impact	People Responsible	Amount	Investment
Professional Development	Design and implement connected on-going workshops for 681 teachers and staff for a minimum of three days.	Superintendents, Principals, Lead Teachers, Curriculum Directors	\$10,000	Stipends to support professional learning networks.
Grant Writer	Research, apply and secure additional funding for the SBSSP.	Consultant in collaboration with superintendents.	\$10,000-\$15,000	200-300 hours @\$50/hr to research and write grants to sustain SBSSP's efforts.
Curriculum Coordination	Work across districts to align assessments which will in turn inform learning and instruction. Start with English, Math and Science.	Curriculum directors, principals and lead teachers.	\$15,000-\$20,000	Consultant fees and stipends to support developing common assessments.
Data Support	Work across districts, to support data analysis and strategies to assess learning needs.	Consultants, data analysts, administrators.	\$5,000-\$10,000	Consultant fees to better access shared reports in EDWIN to inform instruction.
Technology	Work across districts to assess and align existing systems and develop an approach to sharing technology services through a Chief Technology Officer or consultant.	Consultants and existing technology staff.	\$30,000-\$40,000	Consultant fees to assess and align existing systems.
Total			\$70,000-\$95,000	

Shared Services Grant Possibilities

INTRODUCTION

The below are ordered by ease of application and possibility of award. Typically that means that the first grants below will be for smaller amounts.

Most of these grants are accepted on a rolling basis. In general, the grants that appear later in this document will require a more defined plan with clear outcomes, action steps and timelines. With that in mind, it might be worth considering the later grants as “Phase 2” of the Shared Services effort. Phase 1 can focus on discovery and exploration, whereas Phase 2 can focus on implementation and execution of a particular effort.

GRANTS

State Farm Good Citizenship Grant

State Farm grants focus on three areas: Safety, Community Development, and Education.

They describe their Education focus as: *“we support efforts to provide all children with an education that will allow them to reach their greatest potential and prepare them to participate in a nation and economy that continues as a global leader. We fund three types of grants for K-12 public schools.*

They focus on:

Teacher Development

Service-Learning

Education Reform/Systemic Improvement - The third strand would be perfect for the Shared Services projects.

Timeline – 2018 grant window will open in September

Amount: Not specified, but likely not large as grants start at \$5,000.

Stray Notes: This looks like a very simple application, so it might be worth seeking for a very targeted part of the project.

Stavros Niarchos Foundation

The Stavros Niarchos Foundation (www.SNF.org) is one of the world’s leading private international philanthropic organizations, making grants in the areas of arts and culture, education, health and sports, and social welfare. The Foundation funds organizations and projects that are expected to achieve a broad, lasting and positive

Shared Services Grant Possibilities

impact for society at large, focusing on vulnerable groups such as children and the elderly, and also exhibit strong leadership and sound management. The Foundation also seeks actively to support projects that facilitate the formation of public-private partnerships as an effective means for serving public welfare.

Timeline: Rolling. [Online application here](#)

Amount: Very wide ranging, from small amounts to multi-million dollar grants.

Stray Notes: This grant is a wild card. They give out a *lot* of money, and the application is very simple, so it is certainly worth taking a stab at. Their funding is so varied that it is a little hard to pin down. Whoever writes the grants, it would be worth doing deep research into past funding to find the sweet spot for this grant.

SC Johnson Giving Inc.

SC Johnson assists “existing non-profit organizations or programs focused on defined areas of interest including education, social services, environment, community development, arts and culture, and health.”

Areas of Focused Giving includes:

Arts, Culture & Humanities - Programs that provide accessible and affordable arts and cultural experiences to the community, i.e., the performing arts, architectural and historical societies, museums, zoos.

Education - Programs that emphasize student academic achievement, with a focus on academic enrichment and advancement, i.e., early childhood education, K-12; post-secondary; technical and vocational schools.

Timeline: Applications accepted on a rolling basis. In most cases, applications will be reviewed by staff within 90-120 days of their submission

Amount: \$25 to \$900,000 (\$2,288,348 for 389 grants)

Honda Foundation

The American Honda Foundation engages in grant making that reflects the basic tenets, beliefs and philosophies of Honda companies, which are characterized by the following qualities: imaginative, creative, youthful, forward-thinking, scientific, humanistic and innovative. We support youth education with a specific focus on the STEM (science, technology, engineering and mathematics) subjects in addition to the environment.

Shared Services Grant Possibilities

Honda grants more commonly go to large non-profits and charter schools, but that may just be due to the ability of charters to innovate as they are starting from scratch. Grants have certainly gone to public districts as well.

Timeline:

	Deadline for Submission*	Anticipated Board Review	Anticipated Grants Awarded
New Organizations	February 1	April	May 1
Returning Organizations	May 1	July	August 1
New Organizations	August 1	October	November 1

Amount: \$20,000 – \$75,000

Farrell Family Foundation

Mission to contribute to the betterment of society through the support of education, health, human welfare and the arts. An integral role of contributions will be to promote and encourage self-reliance, responsibility and accountability.

EDUCATION, WITH AN EMPHASIS ON TECHNOLOGY - Gifts will be made to tertiary institutions, as well as secondary schools oriented toward technology. Ideally these schools will serve underprivileged children who have the capability but not the resources to reach their full potential. Current focus on San Diego, but also giving in MA (Harvard and MIT) – might be good if we partner through AHC with SD theatres (i.e. Media Art Center)

Timeline: Rolling

Amount: Matching Funds – up to \$1,000,000

The MOTT Foundation

Education wing has four areas:

- Advancing Afterschool
- Graduating High School, College, and Career Readiness – This is potentially a good match, because they are looking for innovation. The rural education issue is nationwide, and if we can identify ways to both reduce taxpayer burden *and* improve outcomes and learning, then we are good candidates.
- Youth Engagement

Shared Services Grant Possibilities

- Special Initiatives – This area is more of a stretch, but worth considering. From their materials, they say that Special Initiatives funding “also provides the flexibility to take advantage of unplanned, collaborative or time-sensitive opportunities that inform the current or future activities of the Education program.”

Timeline: Letter of Interest required first. ([linked here](#)). After that, it is a rolling deadline.

Amount: \$40,000 - \$500,000

Stray Notes: This grant will require a *clear action plan and vision* to advance beyond the Letter of Interest Phase. This is potentially a Phase II grant once a clear path forward has been determined.

I3 Innovation Grant

Federal Grant: Multi-Stage

Note: This grant has not been announced yet for further funding. Given the fact that we are in uncertain times when it comes to federal money for education, it is possible that this grant won't be continued. However, *if* the Shared Services project comes up with a very big idea that could serve as a model for other parts of the country and this grant still exists, this would be the big one for this project. It would require a clear idea and a *big* idea – likely one that would impact all of Berkshire County. Worth considering in the long run.

The Investing in Innovation Fund, established under section 14007 of the American Recovery and Reinvestment Act of 2009 (ARRA), provides funding to support (1) local educational agencies (LEAs) and (2) nonprofit organizations in partnership with (a) one or more LEAs or (b) a consortium of schools. The purpose of this program is to provide competitive grants to applicants with a record of improving student achievement and attainment in order to expand the implementation of, and investment in, innovative practices that are demonstrated to have an impact on improving student achievement or student growth, closing achievement gaps, decreasing dropout rates, increasing high school graduation rates, or increasing college enrollment and completion rates.

These grants will (1) allow eligible entities to expand and develop innovative practices that can serve as models of best practices, (2) allow eligible entities to work in partnership with the private sector and the philanthropic community, and (3) identify and document best practices that can be shared and taken to scale based on demonstrated success.

I3 gives three types of grants: Development Grant, Validation Grant, Scale up Grant

Shared Services Grant Possibilities

Timeline:

Amount: \$2,000,000 - \$20,000,000

						"Why" Domain										
						District				Importance (priority) Scale						
Goal						Lee	Lenox	BHRSD	SBRSD							
Increase educational opportunity, quality, access, and outcomes						x	x			5	4	3	2	1		
Control financial impact to communities						x	x			5	4	3	2	1		
Uniquely brand our (sub) region to increase residency/economic development						x				5	4	3	2	1		
"Challenges" Domain																
Challenges/Considerations (General and specific)																

Opportunities (benefits):	"Opportunities" Domain					Ease/Impact Scale					
	District										
	Lee	Lenox	BHRSD	SBRSD		Easy/High	-	-	-	Hard/Low	
Aligned IT systems (purchasing, student management, data, storage/records)	x					5	4	3	2	1	
						5	4	3	2	1	
General IT/computer technology management (hardware, software, staffing, tech support, training)	x					5	4	3	2	1	
						5	4	3	2	1	
Aligned purchasing (some occurring - increase in areas such as busing)	x					5	4	3	2	1	
						5	4	3	2	1	
Shared professional development (limited capacity by grade/license/content area)	x					5	4	3	2	1	
						5	4	3	2	1	
Shared curriculum development (texts, programs, instructional systems). Curriculum alignment.	x	x	x			5	4	3	2	1	
						5	4	3	2	1	
Shared assessment systems	x		x			5	4	3	2	1	
						5	4	3	2	1	
Joint specialized programs (special education)	x		x	x		5	4	3	2	1	
						5	4	3	2	1	
Joint specialized programs (emotional disability)	x			x		5	4	3	2	1	
						5	4	3	2	1	
Joint specialized programs (alternative education)	x	x				5	4	3	2	1	
						5	4	3	2	1	
Joint specialized programs (vocational)	x	x	x	x		5	4	3	2	1	
						5	4	3	2	1	
Access to shared course work for students 6-12 in areas where enrollment is low, such as specials	x					5	4	3	2	1	
						5	4	3	2	1	
Access to shared course work for students 6-12 in areas where enrollment is low, such as gifted and talented education	x					5	4	3	2	1	
						5	4	3	2	1	
Access to shared course work for students 6-12 in areas where enrollment is low, such as AP/dual enrollment	x			x		5	4	3	2	1	
						5	4	3	2	1	
Blended/online courses - developing a shared learning management system	x					5	4	3	2	1	
						5	4	3	2	1	
Dual enrollment courses in concert with MCLA/BCC/Wesfield	x					5	4	3	2	1	
						5	4	3	2	1	

"Opportunities" Domain											Rank according to a) how easy each opportunity is to do, and, b) how much impact each would have Easy to do OR Hard to do. High impact OR low impact		
Opportunities (benefits):	District				Ease/Impact Scale						Primary benefit to:		
	Lee	Lenox	BHRSD	SBRSD	Easy/High	-	-	-	Hard/Low		ORGAN.	STAFF	STUDENT
Aligned IT systems (purchasing, student management, data, storage/records)	x				5	4	3	2	1	Ease Impact	x		
General IT/computer technology management (hardware, software, staffing, tech support, training)	x				5	4	3	2	1	Ease Impact	x		
Aligned purchasing (some occurring - increase in areas such as busing)	x				5	4	3	2	1	Ease Impact	x		
Shared professional development (limited capacity by grade/course/content area)	x				5	4	3	2	1	Ease Impact		x	
Shared curriculum development (texts, programs, instructional systems). Curriculum alignment.	x	x	x		5	4	3	2	1	Ease Impact	x		
Shared assessment systems	x		x		5	4	3	2	1	Ease Impact			x
Joint specialized programs (special education)	x		x	x	5	4	3	2	1	Ease Impact			x
Joint specialized programs (emotional disability)	x			x	5	4	3	2	1	Ease Impact			x
Joint specialized programs (alternative education)	x	x			5	4	3	2	1	Ease Impact			x
Joint specialized programs (vocational)	x	x	x	x	5	4	3	2	1	Ease Impact			x
Access to shared course work for students 6-12 in areas where enrollment is low, such as specials	x				5	4	3	2	1	Ease Impact			x
Access to shared course work for students 6-12 in areas where enrollment is low, such as gifted and talented education	x				5	4	3	2	1	Ease Impact			x
Access to shared course work for students 6-12 in areas where enrollment is low, such as AP/dual enrollment	x			x	5	4	3	2	1	Ease Impact			x
Blended/online courses - developing a shared learning management system	x				5	4	3	2	1	Ease Impact			x
Dual enrollment courses in concert with MCLA/BCC/Westfield	x				5	4	3	2	1	Ease Impact			x
Organization of education-to-career pathways, connecting activities (connection to local employers). Career Awareness, Exploration, and Immersion (internships) activities. Community work connection. Innovations related to career options.	x	x	x	x	5	4	3	2	1	Ease Impact			x
Pathways for non-college/career		x			5	4	3	2	1	Ease Impact			x
Exploration of emerging pedagogies such as competency based, design thinking/problem-based, thematic and interdisciplinary approaches, badges and certifications. Applications of innovations in education.	x	x	x		5	4	3	2	1	Ease Impact		x	
Compliance training (state requirements, right-to-know, evaluation, SEL, etc.)	x				5	4	3	2	1	Ease Impact	x		
Shared staffing (teachers and support) including counseling, safety nets, school psychology - low incidence.	x	x	x		5	4	3	2	1	Ease Impact	x		
Expanded early childhood programming (early-K, pre-K, K)	x	x			5	4	3	2	1	Ease Impact			x
Grant writing and entrepreneurship	x				5	4	3	2	1	Ease Impact	x		
Program evaluation	x				5	4	3	2	1	Ease Impact	x		
Adult education and consumer programming	x				5	4	3	2	1	Ease Impact	x		
Access to co-curricular programming (clubs and activities) cross district such as robotics, theater, band, social justice, etc.	x				5	4	3	2	1	Ease Impact			x
Social Emotional needs of children—counseling and evaluation services				x	5	4	3	2	1	Ease Impact			x
Transportation			x	x	5	4	3	2	1	Ease Impact	x		
New languages such as Chinese			x	x	5	4	3	2	1	Ease Impact			x
Support efforts to expose students to diversity beyond their experiences in South County, including World Education Alliance and Great Barrington Rotary exchange programs abroad as well as exploring sister school programs with more diverse communities in the region and in the state to provide more awareness				x	5	4	3	2	1	Ease			x
Expanded partnerships with local agencies and organizations (DA, United Way, etc.)	x				5	4	3	2	1	Ease Impact	x		
Middle school structure		x			5	4	3	2	1	Ease Impact	x		
Maintaining successful programs (scaling?)		x			5	4	3	2	1	Ease Impact		x	
Improved safety nets	x				5	4	3	2	1	Ease Impact			x
Access to technology courses			x		5	4	3	2	1	Ease Impact			x
Enhance afterschool and summer programming			x		5	4	3	2	1	Ease Impact			x
Common schedule and time		x			5	4	3	2	1	Ease Impact	x		
Recruiting staff in shortage areas		x			5	4	3	2	1	Ease Impact	x		
Alternative assessment (portfolio, other)			x		5	4	3	2	1	Ease Impact		x	
Benchmarking as compared to national (case study and comparative analysis)			x		5	4	3	2	1	Ease Impact	x		

	"Scenarios" Domain					Rank according to willingness to consider each scenario
	Yes	Possibly		No way		
Become part of county-wide single (Berkshire) district	5	4	3	2	1	
Combine into single south-county district	5	4	3	2	1	
Combine into geographically proximal districts (Lee-Lenox, BHRSD-SBRSD)	5	4	3	2	1	
Advance high-intensity collaborative efforts (shared staffing, schedule, contracts, programs)	5	4	3	2	1	
Advance low-intensity collaborative efforts (purchasing, back office, technology)	5	4	3	2	1	
Continue forward, status quo	5	4	3	2	1	