

April 11, 2018

Diane Perez, Superintendent
San Jacinto Unified School District
2045 S. San Jacinto Ave.
San Jacinto, CA 92583

Dear Superintendent Perez,

The purpose of this management letter is to present the findings and recommendations resulting from the Fiscal Crisis and Management Assistance Team's (FCMAT's) review of technology services at the San Jacinto Unified School District. As indicated in the study agreement, dated October 13, 2017, FCMAT performed the following:

1. Analyze the status of the following and make recommendations for improvement, if any:
 - a. District technology planning with an emphasis on integration with the Local Control Accountability Plan.
 - b. Disaster recovery planning and testing
 - c. Project management
 - d. Help desk system and ticketing process
2. Review the job descriptions and staffing of the technology department, including any site-level support. Make recommendations for staffing improvements, if any, based on the support level necessary to meet the district's technology requirements.

FCMAT conducted fieldwork at the district on January 17-18, 2018 and additional off-site work during the weeks that followed. FCMAT reviewed numerous documents including board policies, departmental procedures, and job descriptions.

FCMAT

Michael H. Fine, Chief Executive Officer

1300 17th Street - CITY CENTRE, Bakersfield, CA 93301-4533 • Telephone 661-636-4611 • Fax 661-636-4647
755 Baywood Drive, 2nd Floor, Petaluma, CA 94954 • Telephone: 707-775-2850 • Fax: 661-636-4647 • www.fcmat.org
Administrative Agent: Mary C. Barlow - Office of Kern County Superintendent of Schools

Information Technology Staffing

Overview

The San Jacinto Unified School District is composed of 14 school sites, including one comprehensive high school, one continuation school, three middle schools, seven elementary schools, one blended learning academy and one preschool. The district serves approximately 11,200 students and has approximately 768 full-time and part-time staff.

The Technology Services Department is part of the Business Services Division and is responsible for the majority of the district's technology needs. The department is made up of three classified management positions and four classified nonmanagement positions. The management positions include one technology services director, one technology systems manager, and one digital media design specialist. The nonmanagement positions include three technical support specialist II positions and one help desk technician position. The department also has one network administrator classified management position, which has been vacant for approximately three years.

The technology services director reports to the assistant superintendent of business services and is the department's only supervising manager; however, the technology systems manager's job description also lists supervisory responsibilities as one of the job requirements.

The district has separate Educational Technology (EdTech) and Data Management departments, both of which are independent of the Technology Services Department. The coordinators of the two departments report to the executive director of education services, and both departments are considered part of the district's Educational Services Division. The EdTech Department consists of three certificated positions: one educational technology coordinator, and two educational technology teachers on special assignment. The EdTech Department is responsible for supporting the district's educational technology initiatives, including digital curriculum adoptions and helping teachers transition to technology-supported, teaching. The Data Management Department is composed of three employees: one coordinator of data management, and two data management technicians. The Data Management Department is responsible for all state reporting (e.g., for the California Longitudinal Pupil Achievement Data System -- CALPADS) and for day-to-day support of the district's Aeries student information system (SIS).

Separating SIS support and educational technology responsibilities from the Technology Services Department is not uncommon. However, because of the critical importance of these closely-related departments, many California school districts have consolidated the executive management of their technology services, SIS and educational technology departments under a single cabinet-level chief technology officer (CTO) position. In most cases the CTO reports directly to the superintendent. The CTO's role is to ensure the various technology teams' efforts are properly coordinated and in alignment with the district's mission. This structure also gives all executive cabinet members more insight into the important and growing role of technology, and it gives technology departments a consistent presence at the cabinet level.

Information Technology Management Positions

Technology Services Director

The technology services director is responsible for day-to-day management of staff and long-term planning for the department. The director also has advanced network and systems engineering and executive project management responsibilities, though most of these technical duties are delegated to the tech-

nology systems manager position. The district's technology services director job description meets current standards, and according to staff interviewed it accurately represents the daily duties.

However, in interviews staff indicated that time spent handling advanced technical issues and meeting urgent needs and unexpected requests significantly reduces the time the director has for mid- to long-term planning and staff management. This is supported by the district's lack of a current and comprehensive technology plan and disaster recovery plan. In addition, unanticipated demands on the director's time have led to reductions in staff management activities such as regular staff meetings, and reduced the use of formal project management systems.

Technology Systems Manager

The district's technology systems manager position is responsible for the majority of network and systems management tasks, including advanced troubleshooting, system maintenance, project implementation, and infrastructure documentation. According to interviews with staff, the technology systems manager also provides user support for issues that have been escalated, and spends considerable time on SIS data integration projects.

The technology systems manager is solely responsible for the majority of the district's critical systems and infrastructure. There are no management-level peers to share responsibilities or to act as cross-trained backups for important duties. This isolation of advanced skills places the district at significant risk, with no backup if the technology systems manager is unavailable.

The job description for this position is current but does not include all the duties assigned to this individual. The SIS data integration tasks assigned to this individual do not conform to the current job description, and they consume a substantial amount of this staff member's time and resources. These extra responsibilities have led to inefficiencies, delays in system implementation, and undue stress for technology services staff and for teachers who depend on the SIS integrated systems. Given the position's primary job responsibilities, the technology systems manager position is not ideally suited for important data integration projects. Responsibilities for SIS integration consume valuable system engineering and maintenance time that would be better spent ensuring the district's network and critical systems are healthy and performing optimally.

Important data integration assignments are rarely one-time tasks. To be effective and reliable, SQL-based integration projects require significant research, interaction with third parties, and ongoing maintenance. Districts that rely on successful data integration normally use the services of a database administrator or data system specialist to perform such tasks. It would benefit the district to consider moving these data integration tasks to its Data Management Department. If the coordinator of data management or either of the data management technicians do not have the database administration skills needed, the district could provide appropriate training or establish a new position with Microsoft SQL database administration skills as an essential job requirement.

Digital Media Design Specialist

The digital media design specialist is responsible for producing digital media for internal and public distribution, including video production and audio-visual support. The position also develops and provides training to classified employees on the district's various software systems. Additional duties include telephone help desk and user technical support. The job description for this position is up to date and, according to staff interviews, accurately represents daily duties. However, in interviews staff indicated that this employee spends approximately half of the day assisting with telephone help requests and user support. This significantly reduces the amount of time available for digital media production and

user training. This is an inefficient and unnecessary expense for the district. The time spent on help desk and user support at the expense of other duties indicates a need for additional user support staff.

Network Administrator

The district's network administrator position has been vacant since May of 2015. The network administrator job description was updated in 2014 and meets current industry standards. If filled, this position would be responsible for much of the network and server hardware. The position would serve as a technical counterpart to the technical systems manager position, providing a complementary skill set and allowing the district to better delegate advanced technical responsibilities and reduce the risk to operations posed by the concentration and isolation of duties now given to the technical services manager position.

Classified Support Staff

Help Desk Technician

The district's help desk technician position is mainly responsible for telephone user support and for on-site assistance at the main district office. The position acts as an initial contact for help requests and attempts to resolve issues remotely if possible. According to interviews with staff, the job description is current and accurately represents day-to-day responsibilities. However, staff reported that a significant amount of the help desk technician's time is spent routing calls and emails to the correct support staff outside of the Technology Services Department. Detailed information about ways to divide help desk support and increase efficiency is provided in the Help Desk System and Ticketing section of this letter. The recommendation provided there would likely free the help desk technician and the digital media design specialist to perform more of their main duties.

Technical Support Specialist II

The employees in the district's three technical support specialist II positions act as field technicians, visiting schools and the district office to complete work orders and install new equipment. They also help the technology systems manager with basic installation and troubleshooting of network equipment. One support specialist II position is assigned to the comprehensive high school, one elementary campus and the district's Leadership Academy middle school. Two technical support specialist II positions are assigned to rotate between the remaining schools. The job description for these positions is approximately eight years old but, according to employees interviewed, accurately reflects the day-to-day duties the staff are expected to perform.

Interviews with school staff indicate that satisfaction with the support from the Technology Services Department is high. However, school staff also indicated a growing concern that the increased workload brought on by a 1-to-1 Chromebook adoption and the general growth in technology use is causing delays in services. This concern is supported by a marked increase in time spent on the repair of Chromebooks at the high school, where each student is assigned a device and expected to take it home.

School staff at several locations reported that they rely on non-technology-services staff for initial hardware support; EdTech staff, site educational technology (SET) teachers, facilities personnel, and even school administrators attempt to make initial system repairs. Confusion regarding how to create technology services work requests also adds to the frustration with district staff. FCMAT also received reports of limited communication from Technology Services Department field staff, and heard concerns about inconsistent schedules for technicians' visits.

It is a best practice for districts with increasing technology demands, especially those with 1-to-1 device programs, to use a site-to-technician staffing formula to determine the appropriate number of field-level technicians. Although no one ratio works for all districts, successful organizations usually have staffing levels close to one technician per comprehensive high school, one technician for every two middle schools or alternative education campuses, and one technician for every three to four elementary schools. Depending on their size and distribution, each district office and support site is treated as the equivalent of either a middle school or an elementary campus. For the district to follow this formula, it would need to add one technical support specialist II position.

Recommendations

The district should:

1. Fill the vacant network administrator position.
2. Consider using a site-to-technician formula to determine the appropriate number of field staff, resulting in the addition of one technical system specialist II position to meet the increasing demand for technical support.
3. Move data integration responsibilities from the technology systems manager position to the Data Management Department.
4. Consider creating a cabinet-level chief technology officer position and consolidating the EdTech, Technology Services and Data Management departments under one division.

Help Desk System and Ticketing

The district's Technology Services Department uses a formal help desk system, including a dedicated help desk position and ticketing software; however, it lacks an organized help request and ticket submission process. Although most non-technology services staff interviewed expressed high levels of satisfaction with the support received from the Technology Services Department, staff also conveyed a general sense of confusion about initiating requests for help. School staff reported they were uncertain about the support request process, and different schools and different staff reported using various methods to initiate technology services. The educational technology staff and SET teachers, and in some cases, site facility managers, are often mistakenly contacted first when staff have technology concerns. This leads to delays and inefficiencies in resolving problems.

The Technology Services Department uses a free version of the Trouble Trakker work order system from K12USA for ticket intake and assignment. The district has approximately 750 Trouble Trakker named user licenses. These licenses are not automatically managed, nor is the free version of the system integrated with the district's user directory services, such as Active Directory and Google's G-Suite. Employees must be manually assigned a license when joining the district and then manually removed when they leave the district. Because these licenses are managed manually, many licenses are assigned to employees who have left the district. Until these licenses are freed, they cannot be assigned to other employees.

This requires that Technology Services Department staff manage Trouble Trakker accounts manually for the district's users, which has led to confusion and frustration when users attempt to submit tickets but

find that there are not sufficient numbers of user licenses available. Users are also not required to submit trouble tickets to request Technology Services Department support, and the department's management does not consistently convey and enforce an expectation that a ticket be submitted when users request assistance. In interviews, school and Technology Services Department staff indicated that most requests for services are initiated by phone call, email, in person, or by radio. The online ticketing system was reportedly one of the least used methods for requesting help. As a result, most work requests are not tracked by the ticketing system, which makes it difficult to accurately measure department workload, productivity and responsiveness.

School districts with highly organized and efficient help desks rely heavily on a formal work order or trouble ticket system. Effective trouble ticket systems allow users to submit requests quickly using web-based forms and/or an automated email system. Districts with well-developed request systems allow all users to submit their own requests and have the expectation that all requests will be entered into the system. This minimizes delays in work order submissions, reduces errors in collecting work order details, and allows direct communication with and support of users. Districts with properly implemented ticketing systems have access to work order data that can be used to assess and more efficiently manage staff workloads. In addition, most advanced help desk ticketing systems allow automated work order routing based on various factors including requestor location, technology type, and severity of the problem. When properly configured, automated work order routing can simplify and improve users' experiences, reduce the number of incorrect ticket assignments, and decrease Technology Services' response time.

It would benefit the district to require the use of ticket-based work requests because this could minimize user confusion and frustration with the support request process.

The Technology Services Department would need to ensure that the current ticket system provides all industry-standard features, including the following:

- Automatic and conditional request routing
- Support for web- and email-based submission
- Automated status updates for both requester and assigned support staff
- The ability to create custom work request categories
- Tools to conduct and use customer satisfaction surveys
- Detailed reporting capabilities

The district would need to purchase enough licenses for every district staff user. It would be beneficial to integrate the ticketing system with the district's Active Directory or G-Suite so that licenses are automatically applied to all users and automatically deactivated for employees who have left the district. The expectation to use the ticketing system would need to be encouraged from the top down and modeled by cabinet-level administrators, department heads and school principals. If a user is not able to submit a ticket to request help, Technology Services Department staff need to be expected to submit a ticket on the user's behalf. Technology Services Department managers would need to make presentations at district leadership meetings to encourage the use of, and communicate the need for, a ticket-based work request system.

The district could assign the Technology Services Department's digital media specialist to develop communication materials to promote the support request ticketing system. It would be best to focus on clarifying the support ticket and request escalation processes. Promotional material would need to include quick tips for submitting request tickets, screencasts, and/or videos. Newsletters and regular

email reminders could also be used to communicate detail about which systems are supported by the Technology Services Department and which are the responsibilities of the EdTech Department. The Technology Services Department's web page could direct users to the correct support staff and list the systems and services the Technology Services Department is responsible for supporting. The Technology Services Department would need to establish a menu-driven phone tree for the help desk. The phone tree would help direct users to the proper source for support and remind them of the requirement to submit support request tickets. Best practice would also be to have all Technology Services Department staff members' email signatures include links to the ticketing system and to the department's support web page or pages.

Once support request ticketing and expectations for it are established and most requests are initiated by the ticketing system, Technology Services Department managers will need to provide monthly reports to school and department managers. Reports need to include common metrics such as the number of requests submitted, number completed, number pending resolution, and average time to completion. It would also be best practice to measure user satisfaction via questionnaires to requesters after tickets are completed, and to share this information with department managers and school administrators. Quarterly and annual support request ticket metrics and user satisfaction rates could also be shared with the superintendent's cabinet and during the district's leadership meetings.

Recommendations

The district should:

1. Require that requests for technology services support be initiated by users via the Technology Services Department support request ticketing system.
2. Encourage and model the use of ticket-based requests, including requiring ticket submissions from cabinet-level administrators, department managers and school principals.
3. Ensure the existing support request system has sufficient licenses for all users.
4. Ensure the existing support request system includes powerful and important features such as automated conditional routing, web- and email-based submission forms, customer satisfaction surveys, and extensive work request ticket metrics and reporting capabilities.
5. Develop and distribute promotional materials about the support request ticketing system, including quick tips, screencasts and/or videos, how-to instructions, emails and newsletters. In addition, update the Technology Services Department web page to clarify the support request process.
6. Use leadership meetings to encourage the use of the support request ticketing system and to review support request-related performance metrics.
7. Use a help desk phone tree to remind users to submit support request tickets and to properly route telephone requests for help.

Technology Planning and Integration with the Local Control and Accountability Plan

The district has an established culture of systematic planning for state-required Local Control and Accountability Plan (LCAP) development, including roles and responsibilities for executive and extended cabinet members, specific subcommittees, and district management meetings. The district's LCAP was developed and is maintained using four action teams: Future Ready Learners, First Class Facilities, High Quality Staffing, and 21st Century Communications and Partnerships. These teams meet multiple times a year and determine mid- to long-term plans. The teams work under the direction and supervision of the district's principal planning body, known as the Vision 20/20 committee, which is made up of approximately 90 district stakeholders including executive leaders, bargaining unit members, parents, students and community representatives. The plans developed by the subcommittees are vetted by the Vision 20/20 group and, if approved, are incorporated into the district's official LCAP document. The subcommittees are also responsible for monitoring and reporting on the progress made toward existing LCAP goals.

Two of the four LCAP action teams are mainly responsible for technology-related planning. The First Class Facilities group is responsible for developing facilities plans and goals, including those for the district's technology infrastructure. The technology services director attends these meetings, as do school site, curriculum, union and other district department representatives. The Future Ready Learners action team is focused on curriculum and student achievement. This group develops curriculum goals and plans, including those that involve students' and teachers' use of technology. The district's educational technology coordinator and technology services director attend this group's meetings, as do various other district representatives. Although these action teams address technology matters, neither acts as the district's formal technology committee, nor are they responsible for producing a comprehensive technology plan.

The district's technology plan was last updated in July 2013 and expired in June 2016. It was developed to meet E-Rate requirements and has not been updated in several years. It is no longer used by the district's Technology Services Department, nor is it referenced by any of the LCAP action teams. The Technology Services Department also does not have an internal, department-specific plan. Technology Services Department staff indicate that planning is done informally and is driven by the budget cycle, schools' immediate needs, the executive cabinet, and urgent technology issues.

The district's Board Policy 0440 requires the superintendent or superintendent's designee to develop a three- to five-year technology plan. The board policy and accompanying administrative regulation, AR 0440, provide unambiguous detail regarding who will draft the plan and what it will include. Per BP 0440, the district's technology plan is to be developed and written by a committee that consists of various representatives including teachers, school administrators, division and/or department administrators, classified staff, parents and students. The district does not currently have such a planning or technology committee and is thus out of compliance with Board Policy 0440.

It would benefit the district to develop a two- to three-year technology plan and use it to help guide development of the Technology Services and EdTech departments' budgets, prioritization of projects, and general direction for Technology Services and EdTech department staff. Technology plans should be developed by a district technology committee that includes representatives from the Technology Services, EdTech and Curriculum departments, school sites, and, if possible, students and parents.

It would benefit the district to have the technology committee meet two to three times each year to set and review annual priorities, review new classroom and office technologies, discuss and facilitate the resolution of systemic problems, and develop consensus for future technology goals. The committee's decisions will determine the outline of the district's technology plan, so its work should incorporate the technology and educational technology goals specified in the district's LCAP document.

When the technology plan is complete, the district needs to use it as a detailed guide to meet larger technology-related LCAP goals. Specific actions and investments required to meet the technology committee's goals will need to be determined with collaborative input from Technology Services and EdTech managers; these will constitute the technology plan's details. The technology plan should include technology services and educational technology staffing needs, required infrastructure investments, device procurement projections, software adoption timelines, and specifics of technology-related professional development. Information about developing district technology plans, including plan templates and a web-based plan builder, can be found on the California Department of Education's website at: <https://www.cde.ca.gov/ls/et/rs/>.

Once a districtwide technology plan is developed, the Technology Services and EdTech departments' managers should present the plan to the relevant LCAP action teams. The action teams can confirm whether the plan supports the district's LCAP goals and add any relevant input needed. The technology plan should then be submitted to the executive cabinet for review and approval. The executive cabinet review should be used to document any significant capital and staffing investments required to meet the plan's stated goals. Investments must align with budgets detailed in the LCAP but may provide more detail based on specific projects or initiatives. The technology plan should then be presented to the district's governing board, either as an informational staff report or a submission for formal approval. An annual update and a brief nontechnical review of the district's technology plan would also need to be provided to the Vision 20/20 committee and the governing board. Once approved by the Vision 20/20 committee and governing board, the technology plan needs to be posted to the district's public website and updated annually per the technology committee's direction.

After the plan is officially adopted, the Technology Services and EdTech departments' managers should meet at least monthly for quick plan status updates and problem-solving sessions. Meeting agendas should be prepared ahead of time and minutes should be taken to record action items and decisions.

The district's technology plan needs to drive the Technology Services Department's annual priorities, guide the department's month-to-month efforts, and influence its day-to-day tasks. Technology Services Department managers need to meet with Technology Services Department staff regularly, preferably once a month, to provide direction based on the plan, report status updates on plan-specific projects, and evaluate department performance metrics related to the plan's goals. Monthly Technology Services Department meetings should also include problem-solving and cross-training sessions, as well as technology services policy and procedure discussions in support of the district's technology plan.

It would benefit the district to encourage the Technology Services Department managers to attend and add agenda items to the district's leadership meetings, or ask them to provide brief updates on any ongoing or upcoming projects related to the technology plan. These updates could also include technology topics of immediate interest and relevance that school site and curriculum department leaders should know about, such as the status of data integration projects for curriculum software, school hardware upgrades, and the resolution of systemic performance problems. A brief, nontechnical review of the technology plan with the leadership team should take place annually.

Recommendations

The district should:

1. Form a district technology committee that is responsible for developing the guiding outline for the district's technology plan.
2. Ensure that the technology plan determines technology-related priorities for the next two to three years.
3. Ensure that the technology plan aligns with the district's LCAP goals.
4. Ensure that the technology plan includes specific technology services and educational technology goals that are supported by action items and that include infrastructure, investment in human resources, device procurement, system implementation, and staff development.
5. Use the technology plan to set Technology Services and EdTech department priorities and direction for the Technology Services and EdTech departments' managers and staff.
6. Provide technology plan updates to various stakeholder groups regularly (i.e., annually, quarterly, semimonthly, or monthly).

Project Management

The district's Technology Services Department staff indicated that no formal project management processes are used in the department. Projects are managed using an informal and ad hoc system of emails and to-do lists. Projects are handled on a first-come, first-served basis, or by the relative organizational importance of the requestor. Staff reported that technology services projects and other projects that require technology services involvement are generated by unpredictable allotments of one-time money and are brought to the Technology Services Department's attention in an inconsistent manner. This causes unexpected changes in priorities and creates difficulties in coordinating technology services staff. Staff expressed frustration about balancing day-to-day technology support demands and the pressure to complete significant projects. The lack of a formal project management process complicates Technology Services Department management and puts important projects at risk of unnecessary delays, costly inefficiencies and communication breakdowns.

It is best practice to have a consistent project management method using industry-standard tools and processes. Formal project management allows a technology services department to improve project outcomes, provide clear communication, and better assess the performance of each project, including time to delivery and total project costs. If implemented properly, project management can also provide a better accounting of staff time, yield more insight into the department's workload, and serve as a source for developing system documentation.

The district's Technology Services Department staff stated that they have experimented with using the G-Suite Sheets application for occasional project management, but it has not been implemented consistently and systematically or with any expected workflow. Google has created an article titled "Top 10 ways to use G-Suite in Project Management" (available at <https://gsuite.google.com/learning-center/>)

use-at-work/project-management/#!/) that provides ideas for project workflow and ways to help integrate a number of G-Suite applications into an organization's project management processes.

A number of other project management tools – such as Wrike, Microsoft Project Online, and Trello – are also used by many K-12 technology departments and in private industry. Any one of these could help the district's Technology Services Department implement a formal project management process.

Recommendations

The district should:

1. Implement a formal project management process in the Technology Services Department.
2. Evaluate various project management software systems, select the one that best meets the needs of the department, and use it as the default project management tool.
3. Pilot the implementation of formal project management using the system and software platform for a small to medium-sized project. Collect feedback from participants regarding the process and software, make adjustments as needed, and implement the process and software for all technology-related projects.

Disaster Recovery Planning and Testing

The district's Technology Services Department staff and district leaders indicated that the district has no disaster recovery or business continuity plan. This places the district at risk of a severe disruption to important services in the event of a disaster that critically damages or destroys the district's data center, which is located at the district's central office. As an organization becomes more dependent on network-enabled communication systems, business software and education platforms, it should give priority to planning for prolonged unexpected outages.

The district needs to develop a disaster recovery plan that includes options and costs for an acceptable level of operation (as defined by the district's executive management and technology committee) for at least two scenarios:

- Short-term service outages during which the district is unable to deliver critical services.
- Long-term disruptions as a result of serious physical damage to the data center, or significant communication disruption as a result of a regional disaster such as fire, flood, or earthquake.

Industry-standard disaster recovery plans include a description of how and to what level an organization will recover its network, software, and internal and external communications systems. A comprehensive plan will also define an acceptable timeframe for recovery and assign required recovery tasks to specific Technology Services Department positions. These descriptions and definitions help determine the total investment in hardware, software and staffing needed to execute the plan, and help establish service expectations if the plan must be enacted.

Unless sufficient initial and ongoing funds are available, a district does not need to ensure that every software and hardware system is ready to use during a disaster. A careful analysis of essential software and hardware systems is needed to determine which systems need to be protected and how they will be made

available during an outage. The analysis should place a priority on maintaining the district's ability to conduct business and ensure the safety of students and staff.

A comprehensive disaster recovery plan will identify a disaster recovery location – normally a physically separate site within the district – that can house the equipment needed to back up data and restore services if the main data center is damaged or destroyed. The plan will also determine how schools and support sites will connect to the recovery site, and what hardware will be needed to establish backup network communications.

Many free online disaster recovery resources are available to help the district develop a disaster recovery plan. One of the most well-known and widely used sources for cyber security preparation and planning, which includes disaster recovery options, is available from the SANS institute. The SANS Institute's white paper on backup and disaster recovery provides a vendor-agnostic approach to drafting and implementing a disaster recovery plan and is available at <https://www.sans.org/reading-room/whitepapers/recovery/disaster-recovery-plan-strategies-processes-564>.

Once a disaster recovery plan is developed and approved, the district will need to conduct annual tests of the disaster recovery network and systems. Depending on their scope, disaster recovery tests should emulate outages of the district's main data center and confirm that communications and services can be restored per the plan's requirements. It is best practice to report results of the annual tests to a district's executive cabinet and any emergency planning committees.

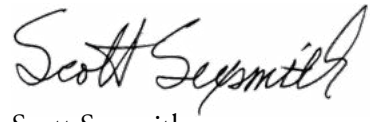
Recommendations

The district should:

1. Seek input from various departments and schools regarding the important data and critical systems that must be protected and made available in the event of a disaster. Consider all state and federal laws regarding data retention and student data privacy protection when drafting a backup and recovery plan.
2. Based on input from the various parties in recommendation 1 above, identify critical systems and sources of important data to help design and implement an effective disaster recovery plan.
3. Draft a disaster recovery and business continuity plan based on clearly communicated expectations for recovery levels.
4. Develop an initial investment budget and ongoing maintenance estimates based on its disaster recovery needs.
5. Submit the disaster recovery plan draft and budget to the district's technology committee and executive cabinet for approval.
6. Purchase and install the hardware, software and telecommunication services required by the disaster recovery plan.
7. Test its disaster recovery plan annually. Update the plan based on changes to critical systems, service expectations, and the results of annual tests. The results should also be shared with the district's executive cabinet and others involved with emergency planning.

FCMAT appreciates the opportunity to serve the San Jacinto Unified School District and extends thanks to its staff for their cooperation and assistance during this review.

Sincerely,

A handwritten signature in black ink that reads "Scott Sexsmith". The signature is written in a cursive style with a large, stylized "S" at the beginning.

Scott Sexsmith
Intervention Specialist