

# TECHNOLOGY PLAN

OUR ROADMAP FOR A CONNECTED  
FUTURE



2019-2020



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## Introduction

The Technology Division offers technological solutions that makes the District’s work more efficient, reliable and effective, and contributes to the District’s progress in all five strategic plan priority areas. The work of the Technology Division is to:

- Establish and promote the use of standardized technology processes, procedures, and governance to ensure student and staff safety and to improve efficiency.
- Identify and provide the infrastructure, devices, applications and support necessary for students and staff to leverage technology as a safe, reliable, and effective tool for learning and for managing business functions.
- Identify the technology knowledge and skills staff must have to be effective in their roles and offer an innovative, effective training program to support their learning.
- Offer front-line service to internal and external customers seeking information, support, services, or records from our District.

The Technology Division is organized into four (4) departments, *Technology Infrastructure*, *Client Services*, *Business Solutions* and *Instructional Solutions*, each charged with a set of essential functions.

Department	Essential Functions
<b>Technology Infrastructure</b>	<ul style="list-style-type: none"><li>• Infrastructure Management</li><li>• Network Administration and Security</li><li>• Cybersecurity and Safety</li><li>• Telecommunications and Wiring</li><li>• Backup &amp; Disaster Recovery</li></ul>
<b>Client Services</b>	<ul style="list-style-type: none"><li>• IT Technical Support</li><li>• Service Desk/Call Center</li><li>• IT Service Management</li><li>• Asset Management and Deployment</li><li>• Student Records Management</li></ul>
<b>Instructional Technology</b>	<ul style="list-style-type: none"><li>• Training Development and Delivery</li><li>• Technology Integration</li><li>• Instructional Design</li><li>• Hardware and Software Evaluation</li><li>• Curriculum and Assessment Support</li></ul>
<b>Business Solutions</b>	<ul style="list-style-type: none"><li>• Project Management</li><li>• Application Management &amp; Development</li><li>• Systems Integration &amp; Data Transformation (Business Intelligence)</li><li>• Systems Implementation and Integration Support</li></ul>

The purpose of this plan is to outline the current state of technology in the District and communicate a year-long plan for the work of each team above for improving the District’s work through technology.

## Division-Wide Focus Areas

Though each of the four departments in the Division has a distinct set of priorities in the year ahead, each team is embracing the same framework to drive improvement, focusing with equal intensity on its people, processes, and technology systems. Organizations that invest in any one aspect of this triangle without attending to the others will not realize strong returns. A team can buy the best technology, but if it does not have well defined processes, systems cannot be configured to get the desired results. A team can hire the most talented staff available, but if they do not have updated devices to complete their work, they will never be productive. A team can build the best process in the world on paper, but if they do not adequately train their people on how to carry the process out, it will never be put into action. Unfortunately, this uneven pattern of investment has prevailed for more than a decade in Detroit Public Schools. The Technology Division, as a collective entity, will focus on the following areas for the 2019-2020 school year, to systematically break that pattern.

### INVEST IN PEOPLE

#### **Staffing**

Over the past decade, the District largely ceded day to day management of its technology operations to contracted employees. By embracing this level of outsourcing, the District exposed itself to a high level of risk, enabled management inefficiencies, and created unfavorable conditions for both the District and the contracted employees. Issues from unclear management lines and diffused accountability to differing hourly rates and benefits for contracted staff doing the same work plagued the department's organizational structure.

During the 2017-18 School Year, the District spent approximately 51 percent of its annual technology budget on contracted staffing services; salaries and benefits accounted for about 5 percent. By contrast, districts recognized for excellence in IT allocate between 60 and 70 percent of their IT budgets to salaries and benefits. In March 2018, District leadership proposed to undertake a radical restructuring of the Technology Division, without adding costs to the overall budget, bringing core functions back under the direct management of district employees. The purpose of the restructuring was to increase ownership and accountability for results and to improve team culture and morale.

Currently, 83% of staff positions have been filled (71 out of 87 roles) with experienced professional staff as district employees. The division will continue its recruiting efforts to fill the remaining 16 positions this school year. The Business Solutions department will continue to retain contracted services for niche functions, such as application support for PeopleSoft. The overall staffing plan will leave the division with only a 5% need for contracted services in the future.

The team leadership has developed and posted job descriptions for project team roles and will work collaboratively to promote job postings among credible professional network sources. As applicants apply, the team is prepared to interview and evaluate candidates in a timely manner. A hiring exercise will also be used to assess the candidate's skill competency and is intended to mimic the work expectations of the role.

#### **Onboarding and Team Orientation**

The Technology Division is committed provide a welcoming, informative onboarding experience for all new hires. An individualized onboarding plan outlining the new hires first 90 days in the organization will be delivered and reviewed on their first day of employment. Onboarding topics include understanding their job

responsibilities and role, manager's expectations, culture norms, review of organization structure and initiatives, in addition to meeting other team members and colleagues. Team communication norms, structures for collective and one-on-one meetings and streamlined access to division documents and materials support a team culture of transparency, collaboration and responsiveness. The focus on onboarding and team orientation is to create a positive, collaborative working environment with opportunities for professional growth and development where employees are happy at work and equipped with the context, tools and knowledge to advance district priorities and achieve the objective and key results for the department.

A recent survey of fifty-four staff onboarded in technology within the last year illustrated that these efforts are working; 94 percent of participants agreed or strongly agreed that they understand how their work connect to the larger vision for DPSCD, 93 percent indicated that their manager had provided them with feedback that had helped them grow as a professional, and 94 percent reported productive collaboration with their colleagues.

## CODIFY STANDARD OPERATING PROCEDURES AND GUIDELINES

### **Standard Operating Procedure Playbook for Technology Staff**

The Technology Division will develop an up-to-date set of standard operating procedures aligned with board policies and industry best practices to order the work of the division for maximum efficiency. Each department will conduct an audit of current processes and procedures related to daily operations. From the audit results, the departments will establish a list of procedures requiring updates, alignment to district priorities and/or development. A working committee will be established to manage the collection of information, content development, drafting, review and publishing.

### **Technology Procedures and Guidelines for Schools and Departments**

In addition to developing standard operating procedures within the Division, there is a need to update and/or establish technology procedures and guidelines accessible to employees outlining the procedure and/or steps for routine operations and practices in the District. This includes technology purchasing, asset deployment and recovery, and service request guidelines and procedures, aligned with adopted board policies. The Technology Division is currently conducting an audit of customer-facing procedures and guidelines, and has established a process to create, update, review, draft and publish guidelines and supporting documentation annually. These materials, including updated process maps, forms, and instructions, will provide schools and departments with the information and steps related to technology processes within the District and will be posted on the District's intranet for targeted staff.

## IMPROVE PERFORMANCE TRANSPARENCY

### **Establish District Technology Committee**

A District Technology Committee will be established as an advisory committee comprised of teachers, staff, and students. The purpose of the Technology Committee is to provide a standing forum for stakeholder feedback, participation and support for technology planning activities, including the annual District Technology Plan.

### **Monitor Metrics**

The Technology Division has adopted a comprehensive set of objectives and key results to guide its annual work. The team will monitor key performance indicators and address gaps throughout the year with monthly shared reflections on data and a quarterly DataCom process for senior leadership staff, both already underway. The division will also collaborate with other departments to refine processes which directly impact instructional practice, operational functions and/or access to information.

## MAKE WISE, WELL-PLANNED SYSTEM INVESTMENTS

### Technology Purchasing Guide

Technology is constantly evolving. It is important for the District to adopt a streamlined approach to purchasing technology equipment for competitive pricing and to ensure alignment with curriculum and business functions, network/infrastructure compatibility, and technical support. During the 2018-19 school year, the District developed a catalogue to feature devices available for purchase. This year, this project will be expanded into a Technology Purchasing Guide to assist schools and departments with the purchasing process specific to technology equipment including a more expansive catalog of streamlined technologies and frequently ordered equipment, as well as decision making trees to support responsible purchasing.

### Quality Assurance and Vendor Accountability

The District receives goods and services from a wide range of vendors for varied needs and projects. It is important for the District to receive timely, efficient and reliable services and high-quality goods. The Technology Division will develop and implement a quality assurance checklist and method as an accountability measure between the vendor and the District, as well as a means to ensure expectations are met and appropriate gains are realized from the District's investment.

## Technology Infrastructure Plan

The Technology Infrastructure Department monitors and supports the network infrastructure, telecommunications and device interconnections to the Internet to ensure a fast, safe and reliable network for the District. This district network provides functionality for all of the voice, video and data needs of the District students and staff. The department hosts and operates an enterprise data center to support the instructional and operational technology needs of the District. The District embraces the pivotal role of technology to equip and empower its students to develop the necessary skills to be college and career ready. To support student learning and safety, the Technology Infrastructure team must be equipped with the appropriate infrastructure, support and solutions to protect user privacy and District data. In addition to upgrades to security solutions and the network infrastructure across the District, the Technology infrastructure department will focus efforts to improve classroom access to collaborative learning technologies, upgrade security cameras and increase coverage ranges, and a technology refresh and replacement plan to address the needs of the District.

Over the last ten years, the District has been able to invest in the expansion and upgrade of the wireless network, telephone systems and data cabling through use of E-Rate funding discounts. However, the state of the network infrastructure has not emerged to a stable or proactive state due to funding limitations, out-of-date maintenance agreements on equipment and limited policies, processes, and governance. In an effort to understand the impact of these factors, the District contracted with Plante Moran to conduct a comprehensive assessment of the current state of the network infrastructure and cybersecurity across all buildings during the 2018-19 school year.

The Central Hub (Data Center), the epicenter of the **network**, was assessed first to understand the level of maturity and sustainability across the network in the following areas: *Wide Access Network/Local Area Network, Wireless LAN, Server/Storage/Virtualization, Backup & Disaster Recovery, Telecommunications, IP Surveillance*, and the *Data Center Facility*. To be in good condition, the network infrastructure maturity should be rated as "Proactive" during such a review, meaning that the language, processes and technologies are standardized and institutionalized to meet industry standards and best practices. Unfortunately, the Plante

Morane assessment rated eighty percent (80%) of assessed areas as “Reactive.” While the audit found that some common technologies and basic processes exist, more than 85% of the network infrastructure equipment lacked a maintenance agreement or warranty, putting the District at an increased risk of disaster or an event resulting in massive failure.

The parallel **cybersecurity** assessment provided the District with a representative analysis of the security exposure from a people, process, and technology perspective. Plante Moran auditors reviewed seven categories related to people, process, and technology: *Users, Network, Access, Vendors, Incident Response, Emerging Technologies, and Common Threats*. Of the seven categories, two (2) areas, Incident Response and Emerging Technologies, are at an “Ad-Hoc” level of maturity with informal processes and technology; while the other five (5) areas are in “Reactive” mode. This means that the District faces an increased risk from cybersecurity threats ranging from natural disasters destroying computing equipment, hackers gaining control of information systems or access to data, to employee devices being lost or stolen. Currently, the District has basic protection measures in place to monitor and manage potential threats.

During the 2018-2019 school year, the Technology Division put forth proactive solutions to maintain current systems and/or replace equipment. However, as the technology audit reveals, the District needed to develop a long-term strategy to invest in infrastructure improvements to keep up with the rapid changes in technology, while aligning to industry best practices. The Technology Infrastructure Department has made progress toward this aim.

## **INVEST IN OUR LONG-TERM CONNECTIVITY**

Over the past decade, the District has made some key investments in its network infrastructure, including an enterprise data center, building-wide wireless access in all schools, phones in every classroom and video surveillance district-wide. While these investments have ensured a safer, faster and more reliable network than ever before, the District must continue to make long-range investments to keep pace with industry standards and continue to ensure an effective network infrastructure in the years to come. These investments address the key areas for improvement and highest areas of risk associated with the District’s extensive infrastructure assessment conducted during the 2018-19 school year.

The following projects are specific to this objective and monitoring the established key results will provide insights to measure progress.

### **Implement a Disaster Recovery Solution**

An effective Disaster Recovery Solution is essential for any organization. Regardless of industry, when an unforeseen event takes place and brings day-to-day operations to a halt, an organization needs to recover as quickly as possible and continue to provide services to its clients. From data security breaches to natural disasters, disaster recovery solutions are integral to business continuity.

The Technology Infrastructure Department will oversee the disaster recovery planning process aligned with supporting technologies. The Technology Infrastructure Department is currently codifying a disaster recovery plan to address the restoration of technology services used for instruction and business processes within the District and securing approvals for updates and replacement of legacy equipment to required modern technologies.

### **Improve Internet Capacity**

Internet connectivity and broadband access through a variety of devices is no longer a “nice-to-have” or an enhancement to school operations. The core business functions, and educational resources have moved to the cloud and teachers have an increased need to access online learning resources. The Internet connection is



a vital operation in the District and utilization continues to grow rapidly as the District expands one-to-one learning technologies.

The District currently uses a 2Gbps (burstable to 10Gbps) of internet service. There is a noticeable spike in usage during testing periods, in which the District uses application servers provided by the Michigan Department of Education (MDE) to cache M-STEP testing content. As a long term, sustainable solution, the Technology Infrastructure Department is pursuing a secondary internet connection to meet the increasing demand as well as reducing the risk of network outages, with a goal of increasing overall internet capacity to 20 Gbps.

### **Improve School Infrastructure**

The technology infrastructure within school buildings directly impacts the ability to connect and access district network resources and the Internet. The Technology Assessment has provided the District with an analysis of the infrastructure for each school building. There are opportunities for improvements to the infrastructure at each building. A recurring theme across the buildings includes outdated network equipment, some at its end of life or no longer supported, broken or non-functional video cameras, outdated cabling, and risk exposure for non-managed network closets. With the investment in technology, the central hub and each school building must be leveraged to create the optimal condition to provide stable, sustainable access to the network.

In coordination with the Facilities Audit, the Technology Division will address building specific technology improvements to infrastructure such as network equipment upgrades, data closet access management, data cabling, and telecommunications systems. This includes network upgrades for the EAA schools and new/returning schools for upcoming school year.

### **Migrate to a Voice Over IP (VoIP) Solution**

The District has made a financial commitment to move from traditional, on-premise PBX telecommunications to a VoIP (Voice over IP) cloud solution. This will provide a voice platform for the District with increased functionality, scalability and flexibility reducing the overall cost of ownership. The VoIP migration has already begun in the District as approximately half of district schools have VoIP phones and capabilities. The department will perform the work necessary to migrate to a complete VoIP Solution and ensure that all schools have acceptable telephone systems.

### **Implement Enhanced 911 (E911) Compliance for Telecommunications**

In October 1999, the Wireless Communications and Public Safety Act of 1999 (911 Act) took effect with the purpose of improving public safety by encouraging and facilitating the prompt deployment of a nationwide, seamless communications infrastructure for emergency services. In order to deliver emergency help more quickly and effectively, compliance with E911 services has been mandated by the state of Michigan. To meet this compliance and with the expansion of VoIP, the Infrastructure Team will work in collaboration with the Facilities Operations team to ensure each phone is programmed appropriately with the complete location (building address, room location, floor, etc.) of each district telephone for 911 locator services. With this enhanced feature, 911 will be able to dispatch emergency personnel to the exact location of the event. The deadline for compliance is December 31, 2020.

### **Improve Video Surveillance Infrastructure**

Over the years, video equipment has been purchased and integrated at school buildings across the District resulting in a mix of camera brands and types. This mixed variation of makes and models of cameras limit the ability for centralized monitoring or access, which would be useful for the DPSCD Police Department, school and district leadership.

The District will invest in upgraded video cameras in addition to developing and implementing a unified Video Management System (VMS) to consolidate the mixed analog and digital video platforms to a more robust, user-friendly and fully integrated security solution. This will allow better management video surveillance equipment, including the ability to easily view and retrieve footage and allow for collaboration and sharing with partnership agencies, such as Project Green Light with the City of Detroit.

## **Invest in Cybersecurity**

The 7-Point Cyber Security Assessment conducted by Plante Moran as a component of the Technology Assessment includes recommendations prioritized as high, medium and low and required effort by the assessed categories: *Users, Network, Access, Vendors, Incident Response, Emerging Technologies, and Common Threats*. The following areas are high priority recommendations which require significant effort and/or resources which will be addressed over the next eighteen (18) months to improve and enhance cybersecurity in the District.

### *Users*

- Implement formal IT security training program and documentation for security awareness for employees and contractors
- Provide security awareness training on an annual basis to all employees and upon initial hire.

### *Network*

- Increased security for external storage devices and hard drives for workstations

### *Access*

- Establish an inventory of technology closet keys and users assigned to keys for all district locations

### *Incident Response*

- Update Incident Response Plan, Policy and Procedures
- Continuous improvement efforts to update policy with lessons learned from actual incidents
- Establish and provide employee incident response training
- Conduct annual IT risk assessment
- Document roles needed in IRP, BCP, and DRP processes – including escalation
- Address backup and restoration of systems and data in disaster recovery plan
- Conduct annual testing of disaster recovery plan
- Assure backups are in place, automated and tested for all critical data.

The Technology Infrastructure team is pursuing projects in each of these areas, including with a cybersecurity employee information campaign in the winter of 2020.

## **IMPLEMENT IT POLICIES AND PROCEDURES**

Like the rest of the Division, the Technology Infrastructure team is developing a list of standard policies and operating procedures for information technology and infrastructure management to ensure these policies are developed and aligned to present day practice and industry standards. All staff members from the Technology Infrastructure, Business Solutions and Data Services staff will receive training on the documented infrastructure management procedures connected to the District's infrastructure. In addition, an assessment through surveys and informal interview feedback will be conducted to ensure that the development and implementation of these process and procedures has the intended outcome with staff agreeing that "day to day" operations run more smoothly.

## KEY RESULTS

By June 30, 2020, the Technology Infrastructure department will achieve the following key results towards the department objective.

- Improve Internet Capacity to 20Gbps
- Move at least 20 schools from Unacceptable to Acceptable ratings for Network Closets, Cabling, and Local Area Network
- Move 100% of schools to an Acceptable rating for Telephone systems.
- Move at least 10 schools from Unacceptable to Acceptable ratings for Video Surveillance.
- Reduce network/cyber security staff risk by 50%

## MILESTONES

	7/1/19 – 11/30/19	12/1/2019 – 6/30/2020
INVEST IN OUR LONG-TERM CONNECTIVITY	<ul style="list-style-type: none"> <li>Implement Disaster Recovery Solution</li> <li>Improve Video Surveillance Infrastructure</li> <li>Improve Internet Capacity</li> <li>Implement Enhanced 911 (E911) Compliance for Telecommunications</li> <li>Migrate to a Voice Over IP (VoIP) Solution</li> </ul>	<ul style="list-style-type: none"> <li>Implement a Disaster Recovery Solution</li> <li>Migrate to a Voice Over IP (VoIP) Solution</li> <li>Improve Video Surveillance Infrastructure</li> <li>Implement Enhanced 911 (E911) Compliance for Telecommunications</li> </ul>
ADDRESS AND IMPLEMENT RECOMMENDATIONS FOR IMPROVEMENT	<ul style="list-style-type: none"> <li>High Priority Security Assessment Recommendations</li> <li>Improve School Infrastructure</li> <li>Implement IT Policies and Procedures</li> </ul>	<ul style="list-style-type: none"> <li>Improve School Infrastructure</li> <li>Implement IT Policies and Procedures</li> </ul>
INVEST IN CYBERSECURITY	<ul style="list-style-type: none"> <li>Launch Formal IT Security Training Program</li> <li>Increase Security for External Devices</li> <li>Inventory Network Closet Key Access</li> </ul>	<ul style="list-style-type: none"> <li>Launch Formal IT Security Training Program</li> <li>Develop an Incident Response Plan</li> <li>Inventory Network Closet Key Access</li> </ul>

## Client Services Plan

The Client Services Department represents the first line of customer service and support for the Technology Division and is comprised of four (4) departments: *Asset Management and Deployment*, *Field Services*, *Student Records* and *Service Desk/Call Center*. The Client Services Department provides technical support services for hardware, software and applications supported by the District, call center support by routing service requests and calls to business workstreams such as Human Resources, Finance/Payroll, Transportation and Exceptional Student Education, in addition to managing and fulfilling student records

requests. The department aims to be proactive and responsive to the technology needs of the District while ensuring a positive customer experience for all stakeholders.

## TRANSFORM THE SERVICE DESK

The **Service Desk**, or District call center, has been an integral point of contact and support within the District. This team manages the main district phone number and is an information source for addressing and routing stakeholder calls. They have also been a source of technical support assisting district stakeholders with issues ranging from user account management to specialized solutions such as PeopleSoft and PowerSchool.

The Service Desk serves as the first-level support (or first touch point) for all DPSCD stakeholders including staff, parents, students, community members and external partners. The current hours of operation are from 7:00 AM to 5:00 PM. All service requests and calls are recorded in the service management system. Service desk personnel use remote management tools to access client computers to provide technical support services such as installing software, assisting with software updates, installing drives and other local system management activities.

The Service Desk works diligently to offer efficient, reliable and warm customer support for staff, students, families and partners. For the 2018-2019 school year, the Service Desk team has handled over 52,000 incidents and 94,726 service requests. The Service Desk consists of eight (8) customer service representatives who answers calls, records the issue and attempts to provide a solution. If the issue cannot be resolved on the first call attempt, the issue is escalated to a subject matter expert in the relevant department. Although the Service Desk and other customer-facing teams within the Technology Division were resolving issues and helping customers, a district-aligned set of customer service expectations, standards and training had not been established for driving the engagement and way of work for this team. The information exchange process between the Service Desk and internal departments was either informal, fragmented or non-existent until a stakeholder called with a question or concern.

### **Migrate to a Customer Care & IT Support Center**

Before the team's reorganization in July 2019, when internal and external customers call the Service Desk, the same set of representatives are used to resolve general inquiries, such as parent-teacher conference dates or Board Meeting locations, as well as technical support requests, like changed passwords. That Service Desk structure did not fully support the needs of the District, as customer service representatives are required to maintain a level of IT technical expertise and manage a healthy call center queue simultaneously.

Now, the Customer Care & IT Support Center is configured to provide stronger service with two pathways for help. Customer care functions as a call center to receive all inbound calls for the District and respond to each call based on service level agreements established in collaboration with each workstream. Customer service representatives are becoming increasingly skilled in handling these calls based on scripts and steps provided by the workstream during the established intake process. Technical Support Specialists are trained to handle the IT Support Desk calls and focus on handling all Information Technology calls at an entry level (Level 1), including support on the District's SIS.

### **Implement an IT Service Management System (with integrated Asset Management)**

The District first adopted an IT Service Management System, commonly referred to as a ticketing system, in 2012. Though the District has invested in modest improvements to this system over time, the solution itself is outdated, difficult to manage and requires individuals to perform special configurations to provide metrics that are sub-par compared to the IT Service Management industry today. An upgrade to a new system will allow

the department to improve service based on trending analysis and integration of automation where manual processes may be delaying performance and ticket resolution.

The Technology Division will implement a new IT Service management system which integrates with asset management (ITSM/ITAM) and other DPSCD business applications for optimal performance for client services. There will be a phased in implementation approach to prepare the ITSM/ITAM system for launch in 2020. The first modules to be implemented will be Incident Management, Change Management and Asset Management as part of a strategy to adopt and align to the Information Technology Infrastructure Library (ITIL) best practices. This system will also be used as a district tool to enhance customer service through the Operational Excellence Project.

### **Develop Customer Service Guidelines and Procedures**

Customer Service Guidelines and Procedures will be developed and implemented to include Service Level Agreements and standards relative to customer engagement and communication for all areas within Client Services. The first section in the Customer Service Guidelines and Procedures will outline the roles and responsibilities for Customer Care and IT Support. It will document the ticket management process and will define ticket priority standards and service level agreements. Using ITIL best practices, the Customer Care and IT Support team will develop procedures to 1) create performance metrics for each function and transaction type, 2) monitor and communicate performance results to recommend improvements, and 3) seek and use (internal and external feedback) to analyze results to improve performance.

### **INCREASE TECHNOLOGY FIELD SUPPORT SERVICES**

The Field Services team provides technical support services for hardware and software supported by the District, in addition to, setup and operation of audiovisual equipment. Supported hardware includes desktops in lab or as standalone devices, laptops, tablets, printers, and multifunction devices. Software support includes the installation of district resources and applying security updates and patching as needed. The Field Services team works diligently to provide efficient, timely technical support services while creating a positive, customer service experience for teachers and staff.

Prior to the recent transition to full time employment with the District, contracted Field Service technicians have only supported computers, tablets, and peripherals. Audiovisual services, interactive technology, and telephony have been treated as specialties and handled either by specific team members, or by other teams altogether. This extended the time to resolution and increasing the likelihood of requestors receiving multiple technician visits as tickets are transferred from one technician to another. Now, technicians handle tickets across all service areas and only escalate or transfer tickets when they are unable to find a resolution in the first interaction.

### **Reconfigure Team Structure**

The Field Services team completed the conversion of contractors to full-time employees in July 2019 with the goal of hiring high-quality, customer-focused technical support professionals for the team. The team structure for this team includes a Field Services Lead along with 25 Field Service Technicians, of which four (4) will be designated as senior level. The Field Service Lead plays an integral role in the onboarding, training and development of the technicians to ensure quality standards for customer service are followed and technical skills are up-to-date and aligned to support the needs of the District. Field Service Technicians are assigned to geographical cohorts to provide locations with a familiar point of contact, while senior level technicians serve as cohort leaders providing escalation and advanced technical support to the team. This provides the team with structures for mutual support and communication and will positively impact the customer experience at district locations.

### **Conduct Cross-Functional Training**

As the Field Services team now manages tickets across a wider set of devices and areas, the team will focus develop cross-functional training to ensure all Field Service Technicians are able to provide wraparound technical support services for all hardware and software. This will create efficiency in practice and service management across the team, as well as enhance the customer service experience for all users.

### **Develop Field Services Customer Service Guidelines and Procedures**

The last Field Services Policy & Procedure Manual was published in 2012. The absence of updated, codified policies and procedures has been a hinderance for the team and has motivated staff to create their own standards of work and operating procedures. The Technology Division has prioritized the development and implementation of updated, standard operating procedures over the course of this school year, with an annual improvement process. The Field Services Team will develop policies and procedures to direct quality standards for customer service and steps to order the way of work for the team as it relates to technical support. The team will also actively develop informational articles and instructions for the self-service knowledgebase. The knowledgebase can be used by the technical team as well as district stakeholders to improve work efficiency, access to information and customer satisfaction. The operating procedures for Field Services will be captured as a section in the Customer Service Guidelines and Procedures document.

### **PROACTIVELY MANAGE ASSETS THROUGH THE LIFECYCLE**

The Asset Management and Deployment team is responsible for the lifecycle management of district technology assets. This team manages the technology inventory for the District ensuring all equipment is tagged and recorded appropriately, as well as initiating the process to deploy technology to schools and departments. This includes securing assets at the warehouse upon receipt, as well as setup, staging, tagging, recording and transport of assets to the delivery destination. In addition, this team manages the end of life process for retiring legacy and/or broken equipment. This team has been fulfilling its charge to manage and deploy district assets. However, this team relies heavily on manual processes with systems without a connection or alignment to these processes to effectively manage technology assets from acquisition to retirement.

### **Ensure Technology Deployment Upon Hire**

Presently, the Technology Division is notified of a new hire when the hiring manager of the school/department submits a service desk ticket requesting technology. The ability to fulfill the request is contingent upon the entry of employee information in PeopleSoft, which activates the account provisioning process in Active Directory for new employees. The Asset Management and Deployment uses PeopleSoft to collect the employee's position and school which is pertinent for device setup and deployment. If the employee is not in the PeopleSoft system, there is a delay in getting equipment to the new employee. This process is inefficient and relies on the date the Human Resource department enters the employee data into PeopleSoft and the date the employee's supervisor enters a service desk ticket to request equipment for the new hire. In most cases, equipment is deployed days and sometimes weeks after an employee has been hired and working within the District.

The Asset Management and Deployment Team is currently collaborating with the Human Resource to develop a notification workflow process which will prompt the deployment of technology assets through the employee's onboarding experience. This will ensure newly hired staff are equipped with the necessary technology device(s), access and software for their new position. The Asset Management and Deployment Team will review the number of open and vacant positions regularly to ensure the proper inventory of technology is available for newly hired staff. This effort will support the District priority of Exceptional Talent as it will enhance the hiring and onboarding experience for new staff members.

### **Implement an IT Asset Management System**

The current service desk solution is not integrated with the asset management system currently used in the District, and the updated ITSM will be a critical step forward for this body of work as well as customer support functions.

The new system will allow for better monitoring and management of assets as the Asset Management and Deployment Team can proactively manage and track the inventory of each asset as well as view report history for asset service, assignment, depreciation, and disposal/recycling. To manage physical assets, the Asset Management and Deployment team has started organizing the warehouse vaults for better line in sight views of assets through an indexing/cataloguing system. This will increase visibility to current inventory and will provide the team with a quicker means of verifying inventory reports. The index system used for warehouse management will be added for each asset in the ITSM system.

### **Define Asset Recovery Procedures and Implement an Annual Asset Recovery Schedule**

Schools and departments have become the storage spaces for old, broken technology. Coordination of asset recovery has either been sporadic throughout the year, or a district purge at one time in the year. When technology assets are set for disposition, the Asset Management and Deployment Team previously coordinated with the Facilities team for pickup from the requesting school/department and transport to the warehouse for evaluation on an ad hoc basis. Assets found at the end of life are stored in the warehouse and sent off for recycling and/or disposal. For the 2019-20 school year, the Asset Management Team secured the services of asset recovery vendors to engage in a systematic clean up at each school site. When assets are usable, the Asset Management and Deployment Team finds a need for the equipment and deploys to another district location. The coordination between the school, Facilities and the final stage for the equipment can be more efficient and consistent.

### **Develop Asset Management Customer Service Guidelines and Procedures**

Many of the policies and procedures for the asset management lifecycle are out-of-date. The Technology Division has prioritized the development and implementation of updated, standard operating procedures for this school year. The Asset Management and Deployment Team will develop policies and procedures to direct quality standards for customer service and steps to order the way of work for the team as it relates to the asset management lifecycle.

### **IMPROVE ACCESS TO STUDENT RECORDS**

The Student Records Department fulfills requests for transcripts, education verification, duplicate diplomas and other student records information for current students, alumni, parents and third-party entities. The Student Records Department develops and implements policies and procedures to assure the integrity, security and preservation of each student's official academic record. Academic records information is retained and released in compliance with the Records Retention and Disposal Schedule for Michigan Public Schools. Student records may be requested by mail or walk-up at the Frederick Douglass Academy. The hours of operation for the walk-up site are from 8:30 AM until 4:00 PM Monday through Friday.

There is an estimate of 156,655 cumulative records containing well over 343,250 documents stored in district warehouse, and thousands more at school sites across the District. It is important for the District to maintain access to these educational records as well as protect them against natural disasters, mold and water damage while in storage. The District has engaged in a multi-year volunteerism partnership with Quicken Loans to help make progress in moving these records to a digitized format. Through this partnership, the District is able to make strides with the digitization process and reduce the need to paper files over time. In 2017, the Student Records Department has scanned a total of 13,065 records into the current digital records system. In 2018, the number of records scanned doubled from the previous year. During the 2019-20 school year, the team

intends to capitalize on this growth and move systematically to the state of Michigan's preferred digital records service, Parchment, as a portal for alumni to access records.

### **Implement Streamlined Districtwide Records Management System**

Today, student records are housed in several locations and repositories across the District. Records can be found in schools, in the central office warehouse and data center, at the Student Records walk-up location and in multiple online databases. Student records also exists in multiple formats, including physical hardcopy, microfiche, and Laserfiche.

The department will streamline its partnership with Parchment, a digital records service provider, to transition from a decentralized, individual school purchased solution to a district-wide implementation for better management, system consistency and cost efficiency. The partnership with Parchment will provide for a single, self-service system to replace microfiche and Laserfiche, and become the repository where all student records are scanned. Parchment is the online records system used throughout the state of Michigan. Ultimately, this system will house all student records, across years and record types, to be a single portal for requestors to access their materials independently, and a secure avenue for transmitting official records to other institutions and employers. The single self-service online records management system will allow storage of digital versions of student records (current and archived), routing of records requests and real-time fulfillment for records currently scanned in the system. This will provide the District with a streamlined, reliable and secure storage and routing system to service schools, students, parents and third-party entities more efficiently. To prepare for the large endeavor with Parchment, the Student Records team will prepare all inactive student records in the District by purging them of documents that no longer need retention.

### **Implement a Catalogue and Index System for Archived Records**

The District retains each student record a minimum of sixty years after graduation or intended graduation date, in accordance with the State of Michigan Records Retention and Disposal Schedule. These records are stored in the student records archive located at the Warren Avenue warehouse. As student records are retrieved from schools, they are tagged and stored in the warehouse. Upon request for records, the archival staff retrieves the record, provides the information to the requestor and returns the record to the storage box in a designated area. To increase the speed and efficiency of fulfilling requests related to archive records, the Student Records Department will implement an index and catalog system, similar to that of a library. To achieve this goal, the department will need to reorganize the warehouse shelving spaces and establish a location map which coordinates with the barcode/label on the record for the inventory. Additional resources will be required to locate, inventory and file records into the new indexing system.

### **Develop Student Records Customer Service Guidelines and Procedures**

In the Student Records section of the Customer Service Guidelines and Procedures the team is establishing Service Level agreements in line with response times and best practices of other school districts, and is building a formal escalation process for service requests for transcripts, education verifications and diplomas into the ITSM priority level workflow. Using best practices, the Student Records team will develop procedures to 1) create performance metrics for each function and transaction type, 2) monitor and communicate performance results to recommend improvements, and 3) seek and use (internal and external feedback) to analyze results to improve performance.

## **KEY RESULTS**

Client Services Overall



- Maintain an overall satisfaction of 4.5 or higher on the customer service survey across Client Services, with at least 500 responses per month

Service Desk

- By the end of the SY, reduce the call abandon rate by half of August 2018 levels, or achieve 8%
- By March 2020, reduce the Average Speed to Answer for all tickets by half of August 2019 levels, or achieve 6 hours
- At least 75% of Central Office Teams and Initiatives survey items (i.e., “In the past six months, the communications I’ve received from [Department] has been clear, comprehensive, and timely”) for teams with Level 1 call center support improve by at least 10 percentage points, or exceed 85 percent

Field Services and Asset Management & Deployment

- By the end of the SY, reduce the Average Time to Closure for Field Service tickets by half of 2019 levels, or achieve 72 hours
- By the end of the SY, reduce the Average Time to Closure for Asset Management & Deployment tickets by half of 2019 levels, or achieve 72 hours
- Achieve a 2:1 device ratio by the end of the 2019-20 school year
- 85% of Instructional Leaders say that “In the past six months, the communications I’ve received from the Technology Division about technology in my building has been clear, comprehensive, and timely.”

Student Records

- By the end of the SY, reduce the Average Time to Closure for Student Records tickets by half of 2019 levels, or achieve 72 hours
- By the end of the SY, halve the number of walk up requests per month over August 2019 volume
- Digitize at least 40%% of student records by June 30, 2020

MILESTONES

	7/1/19 – 11/30/19	12/1/2019 – 6/30/2020
TRANSFORM THE SERVICE DESK TO A CUSTOMER CALL CENTER AND TECHNOLOGY SUPPORT	Migrate to a Customer Care & IT Support Center  Develop Customer Service Guidelines and Procedures  Implement an IT Service Management System with Integrated Asset Management	Implement an IT Service Management System with Integrated Asset Management
INCREASE TECHNOLOGY FIELD SUPPORT SERVICES	Reorganize Team Staffing and Structure  Conduct Cross-Functional Training  Develop Customer Service Guidelines and Procedures	Conduct Cross-Functional Training  Develop Customer Service Guidelines and Procedures
CHAMPION ASSET MANAGEMENT AND DEPLOYMENT LIFECYCLE	Enhance Asset Inventory Management and Security	Develop Customer Service Guidelines and Procedures

	Implement Asset Management Dashboard  Develop Customer Service Guidelines and Procedures	
ACCELERATE DIGITIZATION OF STUDENT RECORDS	Implement Catalogue and Index System for Archived Records  Streamline and Implement District-wide Records Management System	Implement Catalogue and Index System for Archived Records  Reduce in Person Requests at Student Records Walk-up Station  Develop Student Records Customer Service Guidelines and Procedures

## Instructional Solutions Plan

Over the years, the Technology Division offered technology training and workshops for PeopleSoft, Microsoft Office, and other subject-matter as requested. As the District began to adopt interactive technology, interactive whiteboard training was offered as a support to schools purchasing this technology. This team, a small group of contractors with limited oversight, focused on content creation and delivery on a narrow set of topics and tools, often defaulting to a one-size-fits-all, in-person solution for an audience with different learning styles, levels of ability, and limited availability. Although these trainings were being offered and modestly attended, there was little evidence of knowledge transfer in the skill and ability of staff to perform the tasks presented in training. Further, data in course surveys and leaders in schools and departments consistently called for shorter courses, easy-to-follow reference guides, more engaging trainers and greater differentiation of offerings.

With the adoption of Microsoft in the District more than three years ago, there was a missed opportunity to adequately train staff to use these tools in their work to increase productivity, communication and overall efficiency. This also holds true of new technology purchases. As teachers received new technology, many were not taught how to use it as a teaching tool in the classroom.

Recognizing an opportunity to increase the technology proficiency, and therefore effectiveness, of the District as a whole, and to align proficiency across classifications and roles district-wide, the District created the Instructional Solutions department. This department is responsible for directly supporting technology integration in classrooms, and creating accessible, engaging, and useful technology training materials and sessions for staff in each major area of the District.

The Instructional Solutions Department serves as the support and development team for teachers and staff as it relates to technology specific training and development opportunities, technology integration efforts and instructional design. This team is focused on increasing the technology proficiency of staff and students while promoting effective technology use in the District. This team presents technology as a tool for problem solving, critical thinking and creativity to enhance instruction and daily productivity. The department consists of three (3) functional teams: *Training and Development*, *Technology Integration* and *Instructional Design*. The Training and Development Team is responsible for technology-centered professional development opportunities by creating and presenting a catalog of course offerings related to district supported technology software and applications. The Technology Integration Team is responsible for providing teachers and instructional leaders with the knowledge and skills to seamlessly integrate technology into teaching and learning. The Instructional

Design Team is responsible for applying instructional theory and practice to design and deliver learning experiences to address gaps in skill, knowledge, information or attitude based on the needs of the District. With this new team in place, the District has been able to provide direct technology training to 2,494 participants.

## CREATE A CUSTOMIZED ONLINE LEARNING ENVIRONMENT TO ENGAGE STAFF DEVELOPMENT

The Instructional Solutions Department collects participant surveys at the end of each training session offered. Training survey respondents have expressed an interest in online training, readily available access to reference/quick start guides, smaller group sessions, on-location training options as well as sessions aligned to the appropriate proficiency levels. The department further recognizes the need to provide a professional learning experience, adapted for all learning styles, for staff in which the concepts and key functions learned can be immediately applied to the attendees professional practice and daily work. To deliver on these promises as a new department, Instructional Solutions must build and launch baseline systems and processes for technology professional learning in the District.

### **Administer a Districtwide Technology Needs Assessment**

A baseline of informational data pertaining to the current needs of staff is required to develop a truly impactful training and development plan. The Instructional Solutions team developed and administered a needs assessment tool to identify the current knowledge, skills, information and attitudes of staff toward using technology in general as well as district supported technology tools and equipment. Participants in the needs assessment identified the need for additional training and support with existing classroom technologies, such as SmartBoards, as well as software tools like the Microsoft suite. Staff also identified interest in more expansive training options for the Student Information System. These recommendations have informed the spring PD catalogue.

### **Implement a Monitoring and Evaluation Process for Technology Training**

The purpose of the technology training and development plan is to identify the current needs and challenges related to technology proficiency and use in the District. A monitoring and evaluation process must be developed to effectively monitor and evaluate the progress and impact of the goals and objectives established in the training and development plan. The Technology Committee will play an integral role in the adoption, monitoring and evaluation of the training and development plan. There will be an established rubric for each goal with measurable success metrics included in the training and development plan.

### **Identify and Implement Professional Learning Management System**

Today, the District uses a combination of technology platforms to manage the dissemination and tracking of instructor-led training sessions (Frontline) and the delivery of online training content (Employee Online Training Center-EOTC). A professional learning management system (PLMS) will provide the District with a consolidated solution to host, track, assign, report and deliver online training and development to staff. This unified training solution will provide teachers and staff with a reliable, user-friendly platform to address their training needs with a combination of scheduled in-person opportunities, as well as self-paced learning modules that can be accessed at their convenience. The Instructional Solutions Department will identify and implement a professional learning management system to host customized and purchased training modules, such as the Medication Health Training for school staff and District Conflict of Interest videos. Both of which are currently hosted in the EOTC.

## PROVIDE TECHNOLOGY TRAINING TO ALL STAFF ENHANCING AND MAXIMIZING THEIR TECHNICAL PROFICIENCIES

## **Relaunch Office 365 to Support New Ways of Work**

The District has used Office 365 for several years. As Microsoft has added new products and features, the usage and adoption of many of these products has been underutilized mostly because of unawareness. A focus will be placed on introducing and raising awareness of the available products and features in Office 365, teaching staff to be more productive in new and exciting ways. In fact, in the needs assessment, training and support materials on Microsoft products were among the most highly requested.

- *Build Quick Reference Guides and Support Articles for Office 365 Applications*  
A library of Quick Reference Guides, Self-Paced Online Training and Support Articles are currently under construction for the suite of Office 365 applications. The team has identified currently available artifacts and is developing new artifacts where gaps are identified to provide staff with robust and easy to use learning tools to support staff in building their knowledge and skills in the various Office 365 products; all of these tools will be published on the District's intranet over the course of this school year.
- *Build and Deliver Differentiated Training Opportunities Aligned to Success Profiles and Roles*  
One of the challenges that employees often have is not knowing what training they need and what training can help them be more efficient and effective in their job. Learning Plans will be developed based on job roles that are aligned to the District's Thrive Success profiles that will help guide employees with identifying their training needs. The plans will include core technology skills that are needed for all District employees (using email and calendar), role specific technology skills that directly impact the effectiveness on a staff member's day-to-day activities and additional skills that enhance a staff member's career development. Differentiated training opportunities will be built and delivered to align with specific Success Profiles and job roles to ensure training is relevant and meaningful to the participants.
- *Develop a Cohort Microsoft Innovative Educator Champions*  
The Instructional Solutions team participated in the Microsoft Innovator Education program that provided in-depth training on several of the Microsoft Office 365 products during the 2018-2019 school year. The program also included training for teachers that were selected based on their participation with the Computer Science cohort. The Training and Development team will continue to work with this group and continue to add more teachers to a build a cohort of Microsoft Innovative Educator Champions within our schools providing training and support to the teacher cohort to further develop their skills and encourage their adoption and demonstrated use of the Office 365 products in their schools.
- *Launch LinkedIn Learning as a Mechanism for Independent Learning*  
The District has secured licensing for the LinkedIn Learning platform for Central Office users as an additional mechanism for independent self-paced learning. The team is working with Cabinet staff and their designees to identify training modules appropriate for staff in their Thrive development plans, or to support key projects.

## **Standardize Supports for Essential District Technology Tools**

The District has purchased additional essential tools to enhance productivity and support District initiatives. Training and support for these additional tools will be developed and delivered to support staff development.

- *Support a Successful Launch of Enterprise Adobe Creative Suite*  
The District has provided access to the Adobe Creative Cloud Suite of products and instructor-led training will be developed based on demand and use of various products. Initially, an Adobe Acrobat training course will be developed to teach staff the various uses of this application including creating, editing, converting, sharing, and signing PDF documents.
- *Deliver Differentiated Trainings for Blackboard Mass Notification and Web Content Manager*  
The District purchased two of Blackboard's services during the 2018-2019 school year, Mass Notifications and Web Content Management. Training will be provided through instructor-led, online training and training guides to support both products.
- *Build and Deliver Qualtrics 101 for School and Central Office Users*  
Qualtrics is a simple to use web-based survey tool to conduct survey research, evaluations and other data collection activities. Training will be built and delivered as a new course to teach School and Central Office staff the basics of developing, administering and gathering results using Qualtrics. The training will include the basics of creating a survey and introduce basic branching techniques for a more customized product. Users will learn various methods to distribute their survey and how to view and download their results data for analysis.
- *Contribute to a Sustainable PowerSchool Training Plan*  
The District is implementing a new Student Information System (PowerSchool) for the first time in many years and the team will provide backup training support to the SIS team in the core functions of the system. Each training team member will focus on a job role and support the core functions that are needed for that job role. The team will work with the SIS team to identify these key job roles and core functions.

### **Build a Technology Onboarding Experience for New Staff**

The District is placing a priority on hiring Exceptional Talent. A positive and informative Technology Onboarding experience will allow teachers and staff to become familiar with the tools that are available to them and provide instruction on how to use them as part of their work and daily activities.

- *Build and Lead New Teacher Institute Sessions*  
New Teacher Institute training sessions were held throughout the summer to welcome and introduce new teachers to the technology resources available to them. The team coordinated with the Asset Management and Deployment team to ensure that every teacher received their new teacher laptop, walk through logging into their computer and showing them how to access the District's resources. The team also introduced the DPSCD "HUB" and reviewed each of the District supported applications that are available. They also introduced various Office 365 applications that are an essential part of their daily work. 89% (54 of 61) of the New Teacher Institute participants agreed that their Technology Onboarding Experience helped them prepare for success in their new job. This program will continue in the Summer of 2020 with continued improvements in response to teacher feedback.
- *Build and Lead Ongoing Onboarding Modules for Use Throughout the Summer and School Year*  
A Technology Onboarding Learning Path is under development that will provide timely and useful information regarding technology and the use of technology within the District. The Onboarding

Learning Path will consist of various resources including a welcome letter and video, online training modules and quick start guides. The resources will include information about how to login using their District account, accessing various technology online resources, policies specific to the use and management of technology and cyber security.

## SUPPORT THE USE OF TECHNOLOGY IN THE CLASSROOM

Technology Integration is used as a transformative tool within the District to create rich, meaningful learning environments and experiences. The One-to-One Technology Initiative will provide each student with access to a laptop with personalized learning experiences and electronic access to independent reading books, digital curriculum tools to support acceleration and remediation, online literacy and mathematics assessments, and supplemental learning experiences. Access to technology creates opportunities for students and teachers to enhance their teaching and learning experience through collaboration, critical thinking, problem solving, innovation and creativity. In this digital age, it is important for all staff, but especially teachers to feel comfortable and confident with the use of technology in their classroom. The Technology Integration team was developed to provide additional support to teachers to expand their understanding of how to use technology to enhance instructional practice and prepare students for the real world.

### **Foster Educator Understanding of How to Use Technology to Support Student Learning**

The One-to-One Technology Initiative has provided students with the access to technology to expand their learning opportunities. To maximize that investment, the District must ensure that educators are prepared to foster student learning and provide highly engaging and relevant learning experiences utilizing technology. The Technology Integration team aims to build the technology competency of teachers to effectively integration technology into the classroom. Additionally, the Technology Integration team is introducing the MITECS standards to teachers, develop exemplar Curriculum Guide technology integration samples, and providing workshops and coaching to Master Teachers.

- *Introduce the MITEC Standards to Technology and Master Teachers*  
The MITECS, Michigan Integrated Technology Competencies for Students focus on learning enhanced by technology. The MITECS are aligned to the Top 10 in 10 focus area of Learner-Centered Support, reflecting a learner-driven approach that empowers students to be active participants in their educational pursuits and support learning in all content areas. The Technology Integration team will introduce the MITECS standards to Technology and Master teachers. The team will conduct workshops and provide coaching to help teachers understand the seven (7) competencies and the age band articulations of the standards to support their understanding of how they can be used with students of all ages.
- *Develop Exemplars of Technology Integration in Our Curriculum, Aligned to the MITECS Standards*  
The Curriculum and Instruction team rolled out new or revised Curriculum Guides prior to the 2019 school year. The Technology Integration team is currently researching and analyzing the Curriculum Guide Performance Tasks across various grade levels and subjects to create exemplar examples and strategies of integrating technology into the curriculum aligned to the MITEC standards. The team will collaborate and present with the Curriculum & Instruction team to review and refine the examples and strategies. The team will provide professional development sessions and direct coaching to C&I Training and Support Coordinators, Master Teachers and classroom teachers on identifying opportunities to integrate technology into the curriculum.
- *Introduce Technology Integration Coaching for Master Teachers*

The Master Teacher program was implemented at the start of the 2018-2019 school year. The goal of the Master Teacher is to improve a team of teachers' abilities to effectively plan and deliver high-quality instruction in pursuit of better outcomes for students. The Technology Integration team will work with Master Teacher's to perform a staff technology assessment for their individual school, perform classroom observations, and collaborate with the school's Master Teacher to address the school's technology integration needs through co-teaching, training, and coaching. An ongoing guide will be developed and regularly updated that will include a framework and engagement plan that can be used and scaled out to other schools.

### **Support Schools' Use of One-to-One Technology Resources**

The implementation of One-to-One Technology at K-8 schools has provided teachers with an opportunity to utilize technology in their classroom daily. By the end of the 2019-2020 school year, every K-8 school will have received One-to-One technology. The Technology Integration team is providing support to ensure that teachers are comfortable and confident instructing their students on effectively using technology in their day-to-day learning.

- *Coordination of "Launch Day"*

The Technology Integration team has supported with an onsite "Launch Day" to provide an introductory training session to every teacher receiving a new Interactive Flat Panel. This helps to ensure instructional staff feel comfortable with using the new technology hardware as well as providing ideas and guidance on incorporating the new device into current teaching practices. The team is also providing follow up training on how to use the SMART board and associated software specific to the grade level curriculum resources and pedagogical practices.

- *Enhance Smart Learning Suite Trainings with Advanced Offerings*

To ensure that the technology is being utilized effectively in the classroom to enhance student learning, advanced training will be offered so participants can develop instructional presentations and materials using the SMART Learning Suite software with the SMART Flat Panel. The trainings focus on making learning more visual and interactive using the SMART Interactive Flat Panel and the SMART Learning Suite software using existing resources and developing new resources. The team will also facilitate hands-on sessions for teachers to create one or more engaging and interactive classroom activities that they can use immediately in their classroom.

### **Promote Sprint One Million Initiative**

The District has a partnership with the 1Million Project in which the foundation provides a free, Internet enabled device to students without Internet access at home. This purpose of this partnership is to provide students with the resources to support their academic progress. The Technology Integration team, in coordination with the Asset Management & Deployment and Curriculum & Instruction team, will work to identify how the 1 Million devices can be leveraged to support online learning activities and tasks that teachers require students to complete during and outside of the school day. The Technology Integration team will develop to inform administrators, teachers, and students on how the Sprint One Million devices can be used to support these learning activities. Teachers will be supported through necessary training, co-teaching, and professional development.

### **Build Turn-Key Student Modules to Support Digital Citizenship and Online Safety**

Students today are using the internet and social media to explore, connect, create and learn in many new ways never imagined before. This freedom and power come with ethical dilemmas and challenging issues, such as cyberbullying, privacy violations, digital distraction and much more. Digital Citizenship

needs to be a foundational skill for learning and life. Students must be prepared to navigate and properly use technology for responsible participation and engagement. An online training module on Digital Citizenship, Cyber Security and Online Safety, will be creating to assist teachers and school leaders with setting expectations for students for acceptable technology use in the District.

### Lead Configuration and Data Integration of Digital and Online Learning Tools

The District continues to make available online Curriculum applications and the team provides ongoing and new implementation support for these 3<sup>rd</sup> party applications. Many of the applications are accessed through the Clever online application, which provides students and teachers with a single sign on portal for most of the District’s online learning such as i-Ready, MyON, Algebra Nation, Achieve 3000, and Edgenuity. The Technology Integration team provides Implementation support by working collaboratively with application vendors during the initial configuration and system setup while also managing the data integration with the student information system as required. Support services will continue to be provided with the adoption of a new SIS system, PowerSchool, and onboarding implementation of new curriculum applications for the fall 2019 school year.

### KEY RESULTS

By June 30, 2020, the Instructional Solutions department will achieve the following key results towards the department objective.

- Engage at least 6,000 participants in technology and/or online learning experiences
- At least 80% of new employees agree that, “The Technology Onboarding Experience I received from the District helped me prepare for success in my new job.”
- At least 90% of principals agree, “In the past six months, I have developed new skills that I was able to apply in my role.”
- At least 75% of teachers agree, “In the past six months, someone at my school or district has helped me develop new skills or content knowledge that I was able to apply in my own classroom.”
- At least 75% of central office staff agree, “In the past six months, I have developed new skills that I was able to immediately apply in my role.”
- Improve the positive student survey responses to, “How likely is it that someone from your school will bully you online?” by 10 percent

### MILESTONES

	6/1/19 – 9/30/19	10/1/19 – 12/31/19	1/1/2020 – 6/30/2020
CREATE A CUSTOMIZED ONLINE LEARNING ENVIRONMENT TO ENGAGE STAFF DEVELOPMENT	Identify and Implement Professional Learning Management System  Identify and Implement Professional Learning Management System	Administer Districtwide Technology Needs Assessment  Implement Monitoring and Evaluation Process	Update and Publish Technology Resources  Administer Districtwide Technology Needs Assessment
PROVIDE TECHNOLOGY TRAINING TO ALL STAFF ENHANCING AND MAXIMIZING THEIR TECHNICAL PROFICIENCIES	Relaunch Office 365 to support New Ways of Work	Build a Technology Onboarding Experience for New Staff	Relaunch Office 365 to Support New Ways of Work  Establish Course



	Standardize Supports for Essential District Technology Tools  Establish Course Catalog, Content and Supporting Materials	Relaunch Office 365 to support New Ways of Work  Establish Course Catalog, Content and Supporting Materials	Catalog, Content and Supporting Materials
SUPPORT THE USE OF TECHNOLOGY IN THE CLASSROOM TO ENHANCE INSTRUCTION AND INCREASE STUDENT ENGAGEMENT	Support Schools' Use of 1:1 Technology Resources with a revised "Launch Day" experience and SMART Learning Suite trainings  Build Turn-key Student Modules to Support Digital Citizenship and Online Safety  Lead Configuration and Data Integration of Digital and Online Learning Tools	Foster Understanding of How to Use Technology to Support Student Learning  Promote One Million Project Initiative  Build Turn-key Student Modules to Support Digital Citizenship and Online Safety  Lead Configuration and Data Integration of Digital and Online Learning Tools	Build Turn-key Student Modules to Support Digital Citizenship and Online Safety  Promote One Million Project Initiative  Lead Configuration and Data Integration of Digital and Online Learning Tools

**Business Solutions Plan**

The Business Solutions Department is responsible for systems integration, application maintenance and support, business process development, project management and the extraction of meaning insights for district data as well as implementation of new business applications. This department manages the support and maintenance for PeopleSoft, the District's enterprise resource planning system for human resource and finance management. Currently, this team is comprised of six (6) contractors providing technical and functional support as developers, business analysts, security and database administrators. Although PeopleSoft is a robust and highly effective world-class application, the HCM and Finance business functionality is underutilized by the District which reduces central office staff efficiency, customer service, and reduces the ability for management to utilize actionable insights.

The Technology Division also provides consultative services and project management related to infrastructure planning, technology purchasing, applications development, and special projects. The Business Solutions Department is also responsible for the process of planning, executing and delegating responsibilities and solutions related to information technology in the District. This includes collaborating with team members within the Technology Division to coordinating with external partners to prioritize tasks, manage vendors, create process maps and deliver solutions based on established requirements to complete a project or accomplish a goal. The objective of the Business Solutions department is to accelerate the effectiveness of other teams by providing exemplary technology solutions. To measure the progress of this objective, the Business Solutions department will coordinate and collaborate regularly with their support teams on the progress of their objectives and key results. The Business Solutions team key results will be directly impacted by the success of the support teams towards their departments objectives and key results.

## PROVIDE IMPLEMENTATION SUPPORT FOR HUMAN RESOURCE & FINANCE PROJECTS

### **Collaborate with Outside Firm PeopleSoft Assessment**

Through the Operational Excellence Project, the Technology Division and Finance Department are charged with establishing an enterprise resource planning (ERP) map for the District. To properly create the ERP map, both departments are participating in a third-party assessment and analysis of the staffing, business and functional processes and the configuration and security of PeopleSoft with Ernst and Young. The findings and recommendations from this assessment will provide Finance, Human Resources and Technology with a roadmap to improve the use of PeopleSoft in the District for all stakeholders.

### **Partner with Human Capital Management to implement Talemetry Recruiting Solution**

To increase quality of District hires and to reduce the teacher vacancies, the Office of Human Resources is implementing the Talemetry recruiting solution. This will revitalize the recruitment and employment experience for applicants by reducing the time and effort to apply for jobs within the District. The Business Solutions department is coordinating with the Office of Human Resources to integrate the Talemetry software with the existing the PeopleSoft HCM application as well as the reengineered onboarding process in PeopleSoft.

### **Reengineer the Onboarding, Offboarding, and Trans Boarding Business Processes**

To increase data quality, transparency, and reduction of cycle time for employee movement the Business Solutions department has collaborated with all departments to reengineer and document all business processes involved in welcoming employees to the District, as well as business processes that separate the employee's relationship with the District. The partnership has resulted in a new online onboarding experience that automates core functions and radically decreases required paperwork; the new module is currently in pilot and will be fully deployed in time for the 2020 hiring season.

### **Support the of Implementation of eCapital Budgeting System**

Working in collaboration with the Budget department, the Business Solution department is implementing a user-friendly Planning and Budgeting Software solution using IBM Planning Analytics software. The Business Solutions department is also work with the professional services firm to provide industry leading practices and design expertise to ensure the system will be developed to meet current and future business needs of the District.

## OPTIMIZE APPLICATION SECURITY AND EFFICIENCY

### **Manage Systems Update and Patching Schedules**

From a system perspective, the District still uses the on-premise, server-based version of PeopleSoft and upgraded to the most recent version within the last year. In the past, database administrators have been unable to maintain a schedule for server maintenance to ensure the application servers are at the latest versions with the latest security updates and patches. For the 2018-2019 school year, the Business Solutions team collaborated with the teams impacted to better plan for system maintenance outages. Although this practice has started, system maintenance has to become a known, routine practice to increase the reliability and security of this enterprise system.

To maintain the District's software systems, it is necessary to apply vendor provided updates to the operating systems, databases, and application software. These updates are periodically provided on a set schedule by the software vendors. The Business Solutions department in partnership with the Technology Infrastructure department is developing a comprehensive operating system, database, and application patch strategy. This will ensure the District's computer systems maintain a high level of security, operating efficiency, and stability.

### **Implement Disaster Failover for the HCM and Financials ERP systems**

The Business Solutions department is currently implementing a disaster failover to the Oracle cloud in two phases. The first phase mirrored the PeopleSoft Human Capital production database in the Oracle cloud to provide the ability to pay, onboard, and provide compliance with state and federal regulations in the event of a failure of the District’s data center. The second phase will be to mirror the PeopleSoft Financials production database in the Oracle cloud to provide the ability to procure, make payments, and provide financial business continuity regulations in the event of a failure of the District’s data center.

### **USE ELECTRONIC WORKFLOWS TO AUTOMATE BUSINESS PROCESSES**

Working with the central office departments, the Business Solutions department will help teams reengineer paper-based business processes to an electronic approval-based processes. The redesign process will focus on improving user interface and providing management greater insights into the aggregated view of the automated transactions, like the work undertaken for employee onboarding. This will reduce staff effort as well as improve the data quality of the transactions. This will also provide better transparency of central office business processes and increase customer service while decreasing the cycle time of central office business processes.

### **Implement an Electronic Budgetary Position Approval Process**

In collaboration with the Budget Department, the Business Solutions department will convert the current paper-based Position approval process to an electronic approval-based process. This will reduce staffing time as well as improve the transparency of all transactions. This will also allow the Finance Department to view the aggregate status of all positions, and the ability to drill down to the department or individual position.

### **Reengineer the FMLA and Integrate with Time Entry**

Business Solutions In conjunction with the benefits department will integrate the Family Medical Leave Act business processes with the Time Entry system and automate paper processes. This will increase the benefits department’s efficiency and increase the quality of the data.

### **Implement an Electronic Certificates for Grants Accounting**

In collaboration with the Grants Department, the Business Solutions department will convert the current paper-based certification process to an electronic approval-based process. This will reduce staffing time as well as improve the transparency of all transactions. This will also allow the Finance Department to view the aggregate status of all approvals.

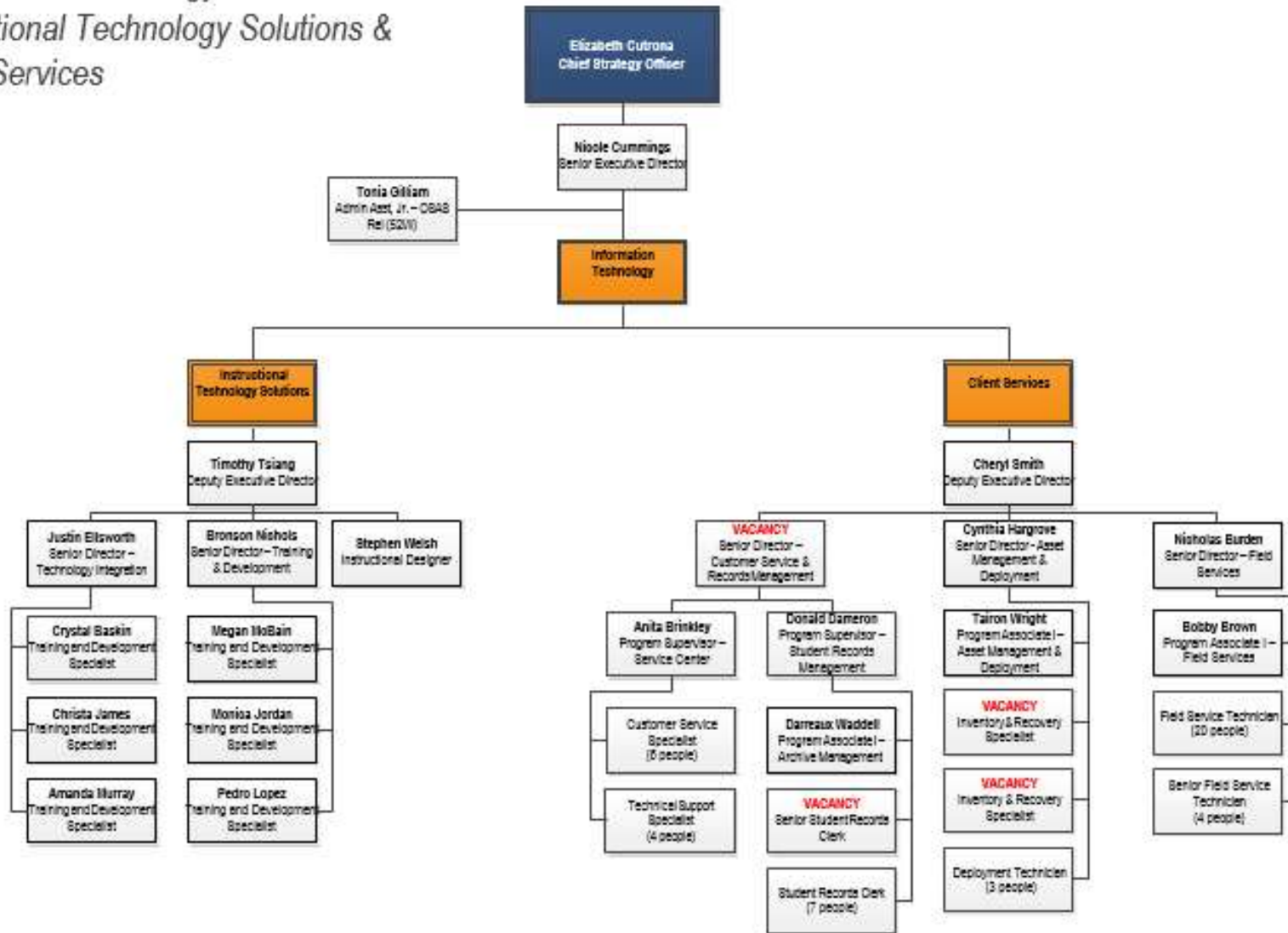
### **MILESTONES**

	<b>7/1/19 – 12/31/19</b>	<b>1/1/2020 – 6/30/2020</b>
<b>Provide implementation support for Human REsource &amp; Finance projects</b>	Participate in PeopleSoft Assessment  Partner with Human Capital Management to implement Talemetry Recruiting Solution  Integration and Support of Implementation of eCapital Budgeting System	Implement Phase I of the PeopleSoft Assessment Recommendations  Reengineer the Onboarding, Offboarding, and Trans Boarding Business Processes  Implement an Electronic Budgetary Position Approval Process
<b>OPTIMIZE APPLICATION SECURITY AND EFFICIENCY</b>	Improve Best Practices for Application Security  Manage Systems Update and Patching Schedules	Manage Systems Update and Patching Schedules

	Use Electronic Workflows to Automate Business Processes	Use Electronic Workflows to Automate Business Processes  Implement Disaster Failover for the HCM and Financials ERP systems
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# Strategy

Information Technology –  
Instructional Technology Solutions &  
Client Services



# Strategy (cont.)

Information Technology – Technology  
Infrastructure & Business Solutions/  
Logistics & Development

