



# DEPARTMENT OF TECHNOLOGY SERVICES (DOTS)

## PROGRAM REPORT

WINTER 2018

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## Vision and Mission

Seattle Public Schools is leading the way to prepare students for college, career and life. For the last ten years, we have consistently outperformed the state's academic average and often perform better than similar districts nationwide. Many of our students are ready for success in life and are well prepared for college and careers that require a strong mastery of content, innovation and creativity.

However, while we are making significant progress, our promise to some have not been fulfilled. Seattle Public Schools, despite making promising progress continues to have unacceptable achievement gaps between white students and students of color.

The good news is that since 2011, the number of gap eliminating schools has increased. We now have eight schools that are rapidly increasing achievement for students we have not historically served well. These schools have a common foundation and approach, focused on:

- data driven decisions;
- matching the right support and interventions to student need;
- teachers collaborating to innovate and problem solve;
- supporting leadership from strong instruction-focused principals;
- partners working with staff to provide whole child supports; and
- teachers' unwavering belief in their students is reflected in the school culture, the rigor in the classroom and students' sense of belonging.



**Our Vision**  
**Every student**  
graduates prepared for  
college, career and life

## Our Mission



- Equitable access
- Closing opportunity gaps
- Excellence in education for every student



The Department of Technology Services (DoTS) aligns with the district mission and vision. Through an engagement process with DoTS leadership and staff, we developed a vision and mission for our role in supporting all district departments and schools:

### DoTS Vision

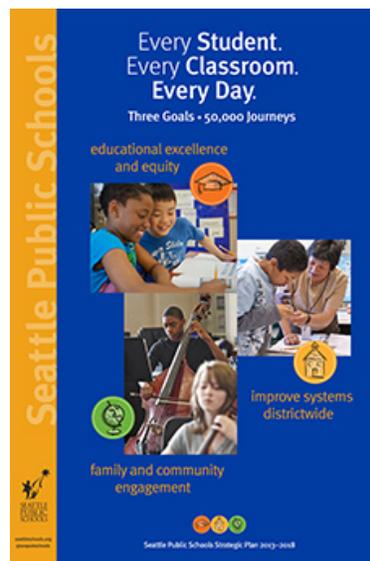
We enable all staff and students to be successful through a secure ecosystem of information, collaboration, software, services, and technology

### DoTS Mission

- Equitable, reliable, coherent information, software, services, and technology
- Timely, relevant, and accurate information to support student focused decision-making districtwide
- Balance safety, security, and usability

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## Strategic Plan and Goals

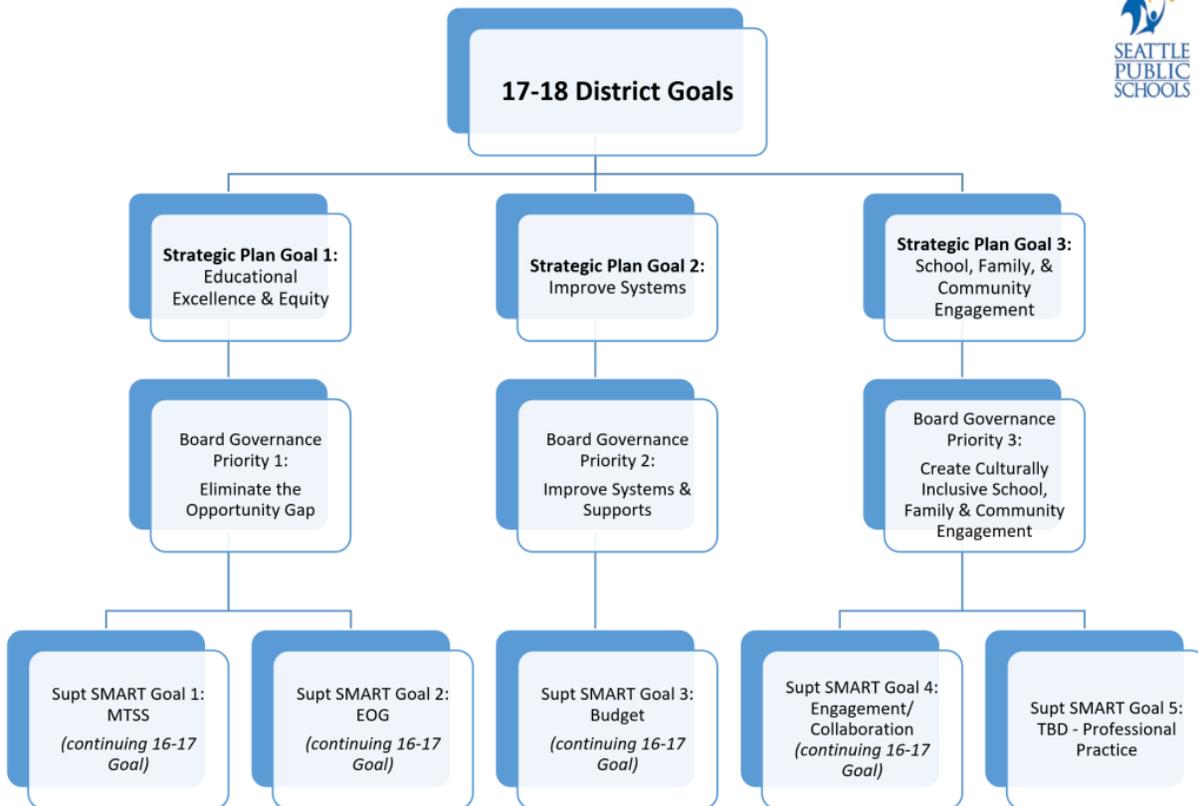


The Seattle Public Schools Strategic Plan developed in 2013 runs through 2018. It is the foundation guiding our goals at the district level and in the Department of Technology Services.

Besides setting the Vision and Mission for the district, the plan sets three areas under which goals are set yearly. These top-level goals include:

- **Educational Excellence and Equity**
- **Improve Systems**
- **School, Family, and Community Engagement**

From these, the board and district leadership has created five Superintendent Smart Goals. These goals are referred to by major initiatives: Multi-tier Systems of Support (MTSS), Ending Opportunity Gaps (EOG), Budget, Engagement, and Professional Practice.



Along with the strategic goals, the district has developed a Formula for Success model. With our Formula for Success, we are learning what works and collaborating across the district with teachers, staff, and community partners to eliminate opportunity gaps and achieve our goal that every student graduates ready for college and career success in Seattle.

Our work to [Eliminate Opportunity Gaps](#) with [MTSS: Multi-Tiered Systems of Support](#) are key to this formula.

## Three Pillars in our Formula for Success



The Department of Technology Services has organized and aligned its work to be in service to the vision, mission, Formula for Success, and the smart goals. All operations and projects are aligned except in an area we label Compliance, Security, Privacy, and Operations/Infrastructure. While this area

could be part of Improve Systems, it is always an area of emphasis for DoTS so we want to call out the projects and operations clearly.

DoTS works closely with the lines of business to meet their needs in their efforts to achieve district goals.

## How DoTS is Supporting Goals

DoTS is committed to supporting the district's strategic goals:

- High Quality Teachers & Leaders: Teachers & leaders have hardware, software, and online services to meet their goals
- MTSS: Teachers & leaders use data to plan, improve, and assess teaching and learning
- EOG: Ensure all students have an opportunity to access the tools, resources, and information to be prepared for college, career, and life
- Improve Systems: Integrate and align operational, business, technology and academic systems to support the needs of students, teachers, and schools
- Community Engagement: Support and enable consistent communications and engagement among all stakeholders to foster trust and collaboration to support academic success
- Compliance, Security, Privacy, Ops: Ensure all technology and data used to support our students, teachers, and leaders is secure and meets our compliance and privacy needs

## How We Work

To be successful in achieving these goals, DoTS is developing an agile approach to work that includes three principals:

- Timeliness/ Speed
- Flexibility
- Accountability

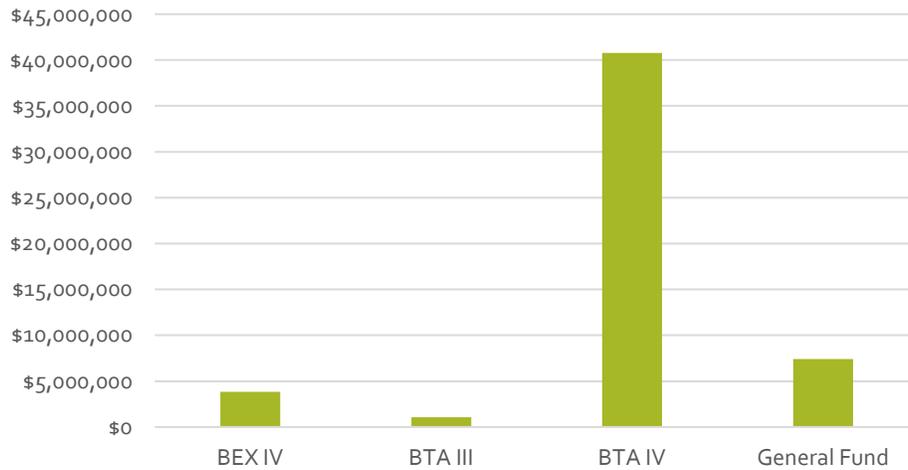
Across departments in DoTS we strive to have incremental, concrete deliverables that give what the business (internal customers like Finance or teachers) needs sometimes as a Minimal Viable Product or as a pilot to deliver and accommodate change in an agile manner. The team tries to be flexible and accommodate tradeoffs on a regular basis. By keeping 'chunks of work' small, DoTS can monitor and adjust according to circumstances. To keep the team accountable and the business engaged and confident, we strive to demonstrate our work at key milestones.

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## Financial Overview

DoTS gets funding from both the General Fund and from levy funds, with the majority coming from levies. DoTS has annual funding that covers operational, project specific, and capital expenditures.

## FY 2017-18



### Buildings, Technology and Academics/Athletics Levy (BTA IV)

The BTA IV Capital Levy was approved by voters in 2016 by more than 72 percent. It supports the district's long-range plans to upgrade and renovate aging school facilities and address enrollment growth. For technology levy, funds will be used to:

- Provide classroom technology equipment and instructional support to enhance student learning.
- Provide for academic projects to meet the educational requirements and needs of students.

#### **BTA IV Investment for Technology: Total \$104.7 million**

Making strategic investments in technology supports learning and teaching in the classroom; delivers services to students, teachers, staff and families; and improves efficiency in business processes.

*This total investment includes both operational costs such as IT staffing and infrastructure and also strategic projects. Detailed financial reporting is included in the Capital Programs Semi-Annual Report.*

#### **Student Learning: \$29.3 million**

Upgrade and expand classroom/student technology equipment and services, mobile and stationary computer labs, and increase on-site technical support services for schools and student technology.

#### **Instructional Support and Delivery: \$27.2 million**

Modernize and expand classroom audio-visual presentation systems and faculty workstations, modernize network access, and provide state-of-the-art instructional services including online learning environments to help prepare students for life in the 21st century.

#### **Physical Safety and Security: \$8.4 million**

Modernize school safety and security systems including camera, threat alert, door access and communication services. Modernize the district's telecommunications system.

#### **Information/Data Security and Privacy: \$3.5 million**

Continue operations and improvements to the district's data security systems for the protection of personal (student and staff) sensitive and confidential information; implementation/expansion of

critical data protection and recovery systems (disaster recovery, anti-virus, redundancy); and development of the district's first comprehensive business continuity plan.

**School and Instructional Support: \$30 million**

Continue to improve and enhance districtwide student and business systems, which support all schools and central offices with services such as payroll, purchasing, human resources, finances, budgeting, transportation, health, nutrition, Special Education, scheduling and attendance.

**Communication transparency and outreach: \$6.3 million**

Improve communication with families and community to increase transparency and outreach using website, parent contact, and other technology communication and collaboration tools.

**2017-2018 E-Rate Application Summary**

The Schools and Libraries (E-Rate) program, administered by the Universal Service Administrative Company, with the guidance of policy created by the Federal Communications Commission (FCC), collects and delivers funding focused on places where broadband and connectivity needs are critical. This program serves people in rural, underserved, and difficult-to-reach areas. It provides discounts to keep students and library patrons connected to broadband and voice services. Discounts are based on Free and Reduced Lunch percentages. Seattle Public Schools qualifies to receive a 60% discount on eligible services.

The 2018-2019 E-Rate 470 applications and associated RFP's (13 total) were filed ahead of the deadline on February 20, 2018. There was a lot of work accomplished in a very short time. If things go as planned, 18-19 will be one of the district's largest E-Rate reimbursement opportunities since the program began. The Category One and Category Two products and services support all our schools and particularly apply to construction and infrastructure at our schools opening in the Fall.

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**DoTS Department Overview**

Departments	Key Work
<b>Business Systems</b>	Support for SAP, AESOP, SPOT, Questica, other related business tools and applications
<b>Student Information Systems</b>	Support for PowerSchool, Student Assignment, and other transactional systems for student data
<b>Business Intelligence</b>	Data and Reporting for all stakeholders
<b>Collaboration</b>	Tools & training for collaboration within schools, across teams, throughout district
<b>Client Systems</b>	Computer systems support for staff and students
<b>Education Technology</b>	Instructional technology and educational software and services
<b>Infrastructure</b>	Core network, internet access, wireless, and data center and cloud hosting of district wide systems
<b>Security</b>	Cybersecurity
<b>Administration</b>	Annual Software, Project Management, Helpdesk Services, Management

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## Business Systems

Budget: \$9,046,155

Life-to-date expenditures: \$2,293,664

The Business Systems team provides applications and support to employees to help them perform all the business functions needed to run the school district. The team completed a major upgrade this summer, which made new products and modules available to streamline screens and processes. The team also provided several interfaces and reconciliation reports for the new Online Payment System that was implemented for processing parent/guardian payments for various student fees.

### Systems Supported by Team:

- SAP – Marketplace, Purchasing, Warehouse, Budget/Finance & Accounting, Payroll & Time Reporting, HR, Employee data, and many interfaces including state reports
- Questica and SPOT Budget management tools
- AESOP Substitute tracking system

### Team KPIs (Key Performance Indicators) and Measures of Success:

- Uptime without planned outages
- Uptime with planned outages
- Client satisfaction
- Decrease in client time to perform specific processes

## Projects

### Budget Management Project

Business Sponsor: Finance and HR

#### Strategic Plan Goal 2: Improve Systems

#### Superintendent Smart Goal 3: Budget

#### Project Goal:

The goal of the Budget Management Project is to replace the outdated, unsupported Budget Development System with a system that offers more functionality, integration with SAP and budget controls. The goal is also to implement a Position Control System in SAP which will be integrated with the new Budget Management System. This project supports Strategic Goal 2, Improving Systems.

#### Project Business Value:

- The current system is on an unsupported version of Access with little integration with SAP & limited users. The current system also lacks functionality and would be difficult to modify to meet new state reporting requirements.
- Currently budget for staff is not maintained at the position level so discrepancies between actual and budget are difficult to reconcile. Provides ability to project salary savings and report on position data categorically.

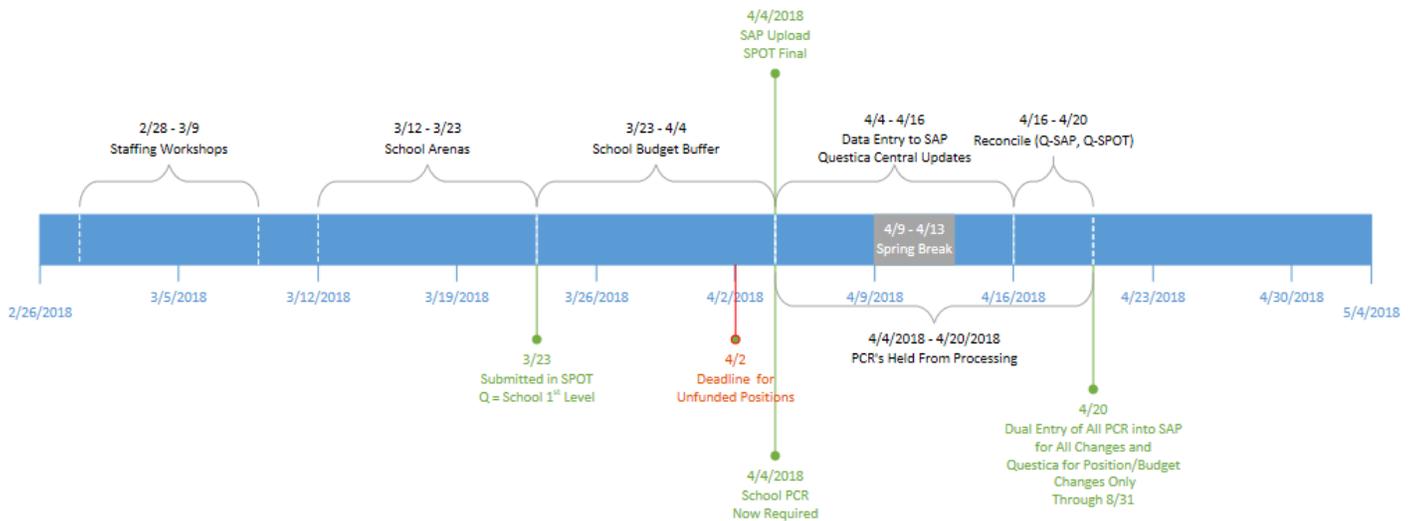
#### Project Status:

- The 2017-2018 budget entry for central managers opened on January 16 and closed on February 2, 2018. During this period, managers of central organizations met with their budget analyst and HR business partner to develop their staffing by position and operational budgets. To

prepare for these meetings, multiple communications and trainings were provided to central managers on what to expect during the budget entry session(s).

- Phase 1 focused on implementing the new Questica software, position budgeting, interfacing between systems and basic reporting. While the initial Go Live for Phase 1 was January 16, there will be additional functionality delivered from now through September 1 to complete the entire budgeting cycle. In parallel, Phase 2 began in February 2018 and is transforming what we have learned in phase 1 to bring more efficient processes, tighter integration, strategic automation, control levels on position budgeting, analytic reporting, and more. The tracks of work are being kept separate as they have different deliverables and timelines even though they run in parallel.

### School Arena Timeline



## HR Process & Technology Improvement

Business Sponsor: Human Resources

### Strategic Plan Goal 2: Improve Systems

#### Formula for Success pillar 1: High Quality Teachers and Leaders

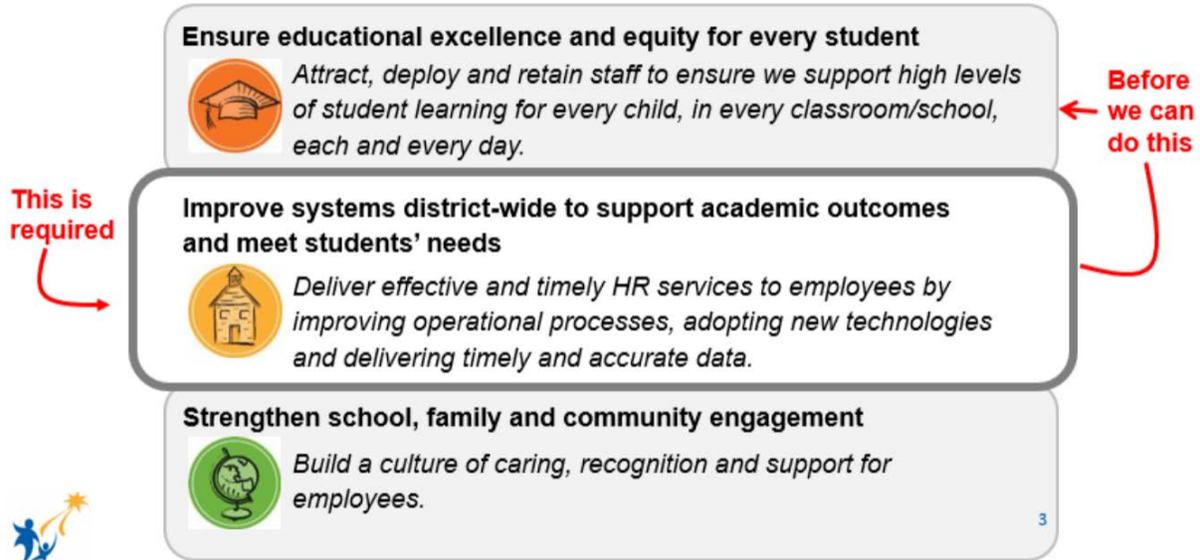
#### Project Goal:

The goal is to streamline HR processes to eliminate rework and improve throughput and data quality, supporting Strategic Goal 2, Improving Systems. This includes several projects to automate and streamline processes and systems.

#### Project Business Value:

HR functions do not follow consistent processes or employ systems efficiently, resulting in a large amount of time-consuming manual work, bottlenecks and rework. This makes it difficult for the HR team to provide the level of service they know is needed by the schools and the district.

## Delivering on Our Vision



## Delivering on the Formula for Success



### **Project Status:**

- The first phase of the project included analyzing and documenting current HR processes and identifying the biggest pain points to be addressed.
- A product called Liquid was used to combine multiple screens into a few screens that follow streamlined processes. This resulted in substantial savings while processing changes during spring staffing.
- This year we anticipate streamlining the processes around Staffing, Class/Comp and Leaves.
- Also, we are researching options for making certificated contracts available online. This would include the ability to do electronic signing, tracking submissions and safely storing signed documents.

### **Other Projects and Operational Work**

Business Sponsor: Multiple

In addition to these major projects, other projects on tap for this year include adding more online self-service applications, streamlining payroll processes, supporting a new budget process, implementing position control, simplifying the SAP experience for casual end users and meeting state mandates for paying sick leave to hourly employees. The team has added new catalogs to our Market Place application, implemented year end legal changes and performed and supported many annual business operations processes.

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## **Student Information Systems**

Budget: \$7,636,000

Life-to-date expenditures: \$875,108

PowerSchool is our Student Information System. This system collects and reports on all the key student information, including demographics, courses, teachers, grades, class schedules, attendance, discipline incidents, transcripts, GPAs and a number of mandatory state reports. It feeds data to several downstream systems, including the Atlas Data Warehouse & Reports System, HomeRoom, Health & Nursing and Truancy. It works with the Student Assignment System (SAS), which allows Enrollment Services to assign students to schools with the programs they need.

The Student Information Systems team provides training and support to our schools in using the systems to track their students' progress and entering correct data for accurate reporting to meet requirements throughout the school year.

### **Systems Supported by Teams:**

- PowerSchool – student information system (SIS)
- PowerTeacher - gradebook
- The Source – parent portal
- Registration and Online Data Verification system
- Schoology – learning management system (LMS)
- Student Assignment System (SAS)
- VersaTrans - transportation system
- Advanced Learning nomination system
- Truman – truancy management system
- Web applications, Safety & Security
- Data integrations
  - Illuminate/CenterPoint - interim assessment system

- Atlas – business intelligence/data warehouse
- Homeroom – school-based business intelligence
- Caretox – nursing management
- SchoolPay – online fee management
- SAP – Enterprise Resource management (ERP)
- Elementary Progress Report (EPR)
- IEP Online, Clever, Focused Fitness, Office 365

**Team KPIs and Measures of Success:**

- 99.9% uptime without planned outages
- 98% with planned outages
- Client satisfaction

## **Projects**

### **Secondary Re-visioning**

Business Sponsor: Curriculum, Assessment and Instruction (CAI)

**Strategic Plan Goal 1: Educational Excellence and Equity**  
**Superintendent Smart Goal 2: Eliminating Opportunity Gaps**  
**Formula for Success pillar 3: Commitment to Racial Equity**

**Project Goal:**

The goal is to provide tools to support our schools in helping students meet the new state 24-credit graduation requirement, supporting the district Goal of Student Achievement. Key recommendations of the 24-credit planning task force were to adopt and deploy a districtwide, electronic High School and Beyond planning platform and to provide Counselors with online tools to support their career and college readiness coaching with students.

**Project Business Value:**

The current student counselor caseload is now over 400:1, whereas the American School Counselor Association (ASCA) recommends a student-to-counselor ratio of 250:1. The 24-Credit Task Force is calling to reduce counselors’ caseloads to the ASCA recommended ratio. Counselors and Registrars currently do manual work to support students in reaching graduation. This project adds online tools for High School and Beyond Plan, Graduation Planner, Career & College Readiness planning and Course Requests.

**Project Status:**

- The first phase was to replace the paper-based forms used by students and counselors for documenting a High School and Beyond Plan, a graduation requirement in Washington State, with an easy-to-use web planning application suitable for use by both middle school and high school students. The tool vendor – Washington School Information Processing Cooperative (WSIPC) – works in partnership with the Office of Superintendent of Public Instruction (OSPI) to ensure the software supports all current Washington State requirements.
- Guidance processes and curriculum for the tool were developed by a counselor working group facilitated by Career and College Readiness (CCR) central office staff.
- PowerScheduler Online Course Request functionality was implemented last year to allow students to log into The Source and sign up for the next year’s courses. Counselors were also

able to use this screen to review and update students' requests as necessary to support graduation requirements.

- After much engagement and addressing privacy concerns, the district purchased Naviance for college and career planning in January 2018.
  - Naviance, created by Hobsons, Inc., is a comprehensive K-12 college and career readiness solution that helps districts and schools align student strengths and interests to postsecondary goals, improving student outcomes and connecting learning to life. School districts and schools purchase Naviance to help students explore their interests and strengths and develop a course of study that matches long-term goals with an actionable plan. The Naviance application is a cloud-based solution. Naviance handles support and updates to the application directly, limiting the responsibilities on the District's technology teams.
  - Naviance was selected through a public RFP process that was advertised to vendors with College and Career Readiness (CCR) software offerings. Vendor proposals included product demos, pricing and references. As part of the review, a group of counselors, parents and students tried out the finalist tools and gave feedback to the selection team. A project team composed of both Business and IT resources reviewed proposals and selected the software. Naviance met the RFP technical requirements, which included single sign-on and PowerSchool integration, and had the most robust college and career exploration and planning features. Hobsons/Naviance also had the most experience working with districts similar to Seattle and had a mature best practice design for security. Bidders for this RFP included offerings from Career Cruising, Excelsoft, Lumentouch, Maia Learning, SchoolData and SchoolHack.
  - A CCR tool was recommended by the 24-Credit Graduation Requirement Task Force, a task force authorized by the district to research and analyze options regarding high school schedules, graduation policy and credit-hour requirements for Seattle Public Schools.
  - There are low/no cost alternatives, such as the Coalition for Access, Affordability and Success tool, but these tools were rejected due to their very limited capability and reach. For instance, the Coalition has arrangements with 130 colleges, only one of which is in the state of Washington and only one in Oregon.
  - Naviance has arrangements with over 3500 colleges and covers every significant Pacific Northwest school including vocational schools. Forty percent of high school students nation-wide have access to Naviance. Naviance eDocs supports electronic document transfer for all 130 of these Coalition member universities, 755 Common App member universities, plus the 2,538 universities that receive submissions through Parchment.

## **Nurse Data System Replacement**

Business Sponsor: Health Services

### **Strategic Plan Goal 2: Improve Systems**

#### **Board Governance Priority 2: Improve Systems and Supports**

#### **Project Goal:**

The goal is to replace the current NED system for use of School Nurses, supporting Strategic Goal 2 of Improving Systems. The new system is expected to offer more functionality and to streamline nurses processes.

### **Project Business Value:**

NED is an outdated, unsupported Access application that nurses use to track their student health contacts. This work is required by the state and cannot be done manually by the small number of nurses in the district.

### **Project Status:**

- The district's new student electronic health record (EHR) system, CareHub, launched on Monday, August 21, 2017 for the Jump Start kindergarten program, following the successful completion of on-site training of the nurses by the software vendor the prior week. It is both Health Insurance Portability and Accountability Act (HIPAA) and Family Educational Rights and Privacy Act (FERPA) compliant.
- Phase 2 of the implementation plan is underway, allowing for student contacts identified in PowerSchool as guardians to access their student's health information via the CareHub parent/guardian portal as long as they already have a user account established through The Source (PowerSchool parent/guardian portal).
  - Using CareHub, families can optionally update their student's health information, view school-sponsored health screening results, receive notifications when their student visits the school nurse, view medications administered, and receive medication low-inventory alerts.

## **Online Payments**

Business Sponsor: Finance

### **Strategic Plan Goal 2: Improve Systems Superintendent Smart Goal 3: Budget**

### **Project Goal:**

The goal is to implement an online payment system at the schools to improve cash collection processes, supporting Strategic Goal 2 of Improving Systems. With a new online payment system, the district hopes to increase the use of credit card payments, automate more of the reconciliation processes, and reduce manual work performed in the school offices to free up more resources to focus on student achievement.

### **Project Business Value:**

School cash handling is currently done manually, including invoicing, payments and receipting. An Online Payment System will automate these functions, reduce the amount work at the schools, improve reconciliation of funds and provide parents with more payment options.

### **Project Status:**

- The Online Payments project's goal is to assist schools and departments with handling student fees and to allow families to make credit and debit card payments online. Phase I included high schools and the participating middle schools and completed launch August 15, 2017.
- Phase II launched on October 31 and included remaining Middle Schools and all K8s.
- Card readers are expected in Mid-March, with training scheduled for September.
- To date, \$4,038,552.00 has been collected with \$1,771,680.00 of that coming in 2018.

## Online Registration & Data Verification

Business Sponsor: Enrollment Services Office

### Strategic Plan Goal 2: Improve Systems

#### Board Governance Priority 2: Improve Systems and Supports

##### Project Goal:

The goal is to provide online registration forms and processes for families, supporting Strategic District Goal 3, Strengthening engagement among school, family and community.

##### Project Business Value:

Forms for enrollment were manual and required parents and families to go in person to the John Stanford Center and complete a form to enroll each of their children at SPS. Once received, the forms required manual entry by substitutes and employees working overtime. In addition, first-day packets are all manual, requiring hand entry by families and staff. Putting these forms online and automating the intake of data will result in improved data accuracy, faster enrollment processing and family time savings.

##### Project Status:

- In partnership with the Admissions Office, DoTS launched PowerSchool's Online Enrollment for our new families on August 7, 2017. Within the first two weeks, we received nearly 1400 submissions. The response to this new tool has been very positive with parents excited about being able to fill out the new student enrollment form from home. For those parents and guardians who come into the John Stanford Center for Educational Excellence (JSCEE), they are able to work at one of the eight computer kiosks in the lobby. For the duration of the enrollment period we saw shorter lines in the lobby and quicker application processing times.
- The new Online Registration forms service allows families to enter and update their information easily online, where it is validated as needed and automatically entered into the PowerSchool database for reference at the schools. Information on family contacts, medical conditions, and many other items can be updated immediately to provide for better safety and security of our students.
- When Seattle Public Schools transitioned to an online enrollment system there was discussion on whether we should roll this out for preschool through twelfth grade, or to also include the birth to three students. We originally decided to continue to enroll birth to three students centrally, initially making an exception for this population (the only group not using the online enrollment). In early February 2018, a decision was made to include the birth to three students in the online enrollment to provide the same level of services as every other student in the district.
- Our service to ELL and underserved communities in the admissions office is a top priority. This meeting is often the first interaction families have with Seattle Public Schools. Our new online enrollment system has afforded the admissions office staff more time to do the important work of providing great customer service to these families.
- So far for 2018 enrollment, we have received 4263 online applications and assigned 3953 for the 2018-19 school year, which is well over our benchmarks from years past. To date, the Admissions team and the Early Learning department have partnered to conduct 10 community events since January, including these three additional events in March.
- The second phase addresses the SPS Student Verification Form that is sent out annually to all students' families to update their student information. This form will be available online and

because it will be accessed via the web, families may complete the forms from their homes, any district locations, public libraries, etc.

- Adding the Student Verification Form online will save time for school staff who manually print and distribute the forms to each student and then collect and input the changed data. This new process will be quicker, more secure and result in better data entry. Paper forms may still be made available as needed.

## Advanced Learning Referral Process Online Experience Improvements

Business Sponsor: Student Services

### Project Goal:

The goal of this project is to continue the streamlining and automation of processes for the Advanced Learning program by putting Advanced Learning Referral forms online.

### Project Business Value:

The combined efforts of the DoTS and the Advanced Learning teams over the past 10 months improved not only the efficiency but also the security of the Advanced Learning Referral Process by making it available online through the Source, our parent portal.

### Project Status:

- On May 15, 2017, DoTS and Advanced Learning opened the Advanced Learning Referral Window for the 2017-2018 Advanced Learning Eligibility Referral and Decision Process. This is the first year that Advanced Learning was able to open the window for accepting referrals this early and for this long.
- While there were many refinements to the 2016-2017 Advanced Learning Referral Process, this year's launch included some exciting new features that should greatly improve parent and student participation in the Referral Process as well as improve efficiency in the administration and maintenance of the process by both DoTS and the Advanced Learning teams.
- The ability for parents to schedule their own child's Advanced Learning tests is a significant step forward. We expect this improvement to eliminate countless hours spent by the Advanced Learning team simply scheduling and rescheduling testing for parents – as well as improve the turnout by students whose parents now have ownership in the process of scheduling their own tests.
- The addition of teacher recommendations – an expansion of the ability for teachers to rate students who have already been referred by parents – provides teachers the opportunity to submit a recommendation for a student which will then be sent to parents encouraging them to refer their child. This should greatly improve Advanced Learning's ability to serve those students whose parents are not aware of the opportunities that Advanced Learning may present for their children.

## Other Projects and Operational Work

Business Sponsor: Multiple

- Master scheduling training and support
- Course Catalog enhancements
- Interventions/Case management
- Transcript archiving
- Year-round registrar training and support
- System upgrades and year end processing

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## Business Intelligence Systems

Budget: \$4,800,000

Life-to-date expenditures: \$1,051,871

The Business Intelligence team enables SPS to realize full value of data to achieve strategic goals through:

- Data as a service to SPS stakeholders, both internal and external
- Focus on maximizing delivered customer value balanced across short, medium and long term
- Single version of the truth
- Curated, reliable, trustworthy data which accurately reflects source systems
- Widely accessible yet appropriately secured
- Agility: work plans quickly adapt to changes in business priority and available delivery capacity
- Compliance with regulatory reporting requirements

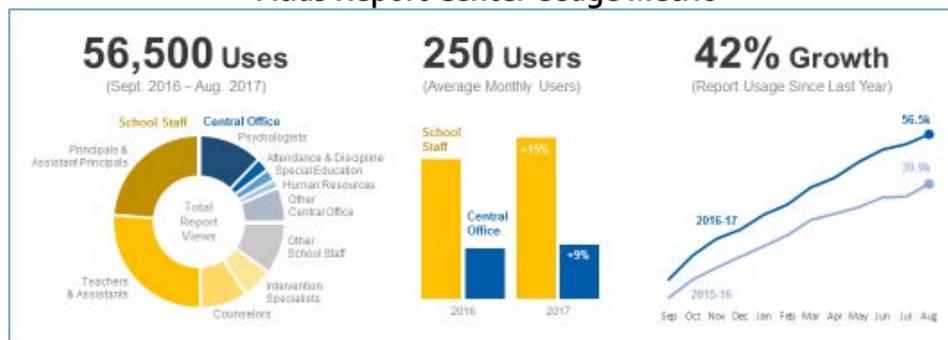
### Systems Supported by Team:

- Atlas, Enterprise Data Warehouse (formerly ADW)
- Atlas Report Center
- Automated Data Reports (ADR)
- PowerSchool State Reporting module
- Tableau
- Data enablement for other systems/processes (SAP, HomeRoom, etc.)

### Team KPIs and Measures of Success:

- Sprint delivery rate / Story points delivered per sprint
- Broad adoption and consumption of Atlas data usage across customer groups
- Growth in number of users YOY and frequency of usage
- New datasets onboarded and integrated
- 100% Compliance with regulatory requirements

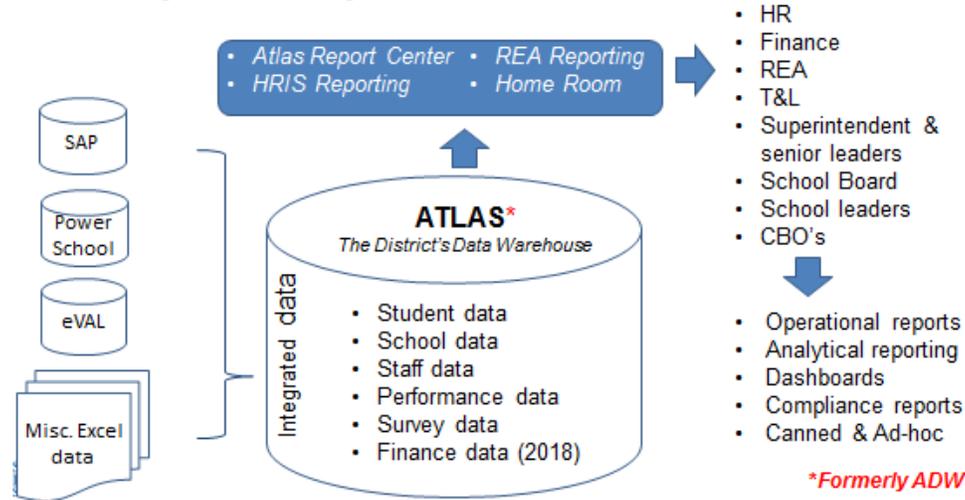
### Atlas Report Center Usage Metric



### Data as a Strategic Asset

Atlas, our enterprise data warehouse, is the central version of the truth for SPS integrated data. The data warehouse brings together internal and external sources, such as PowerSchool, SAP, eVAL, and OSPI, to enable consistent and timely reporting and data access.

**Atlas\*, the District's data warehouse, provides data to many District systems and stakeholders.**



**Projects**

**Update Data Model & Architecture in Atlas (formerly Academic Data Warehouse, ADW)**

**Strategic Plan Goal 2: Improve Systems  
Board Governance Priority 2: Improve Systems and Supports**

**Project Goal:**

Review, redesign, and migrate ADW technical architecture to reduce complexity and apply best design practices. Scope includes ETL design, data model, and permissions. The overarching goal is to simplify the data model. Legacy business logic is partially obsolete, highly complex, or over-centralized and risky to change.

**Project Business Value:**

- Onboarding new datasets will be done with greater agility
- User facing data model will simplify to allow power users ability to easily self-serve
- More efficient to maintain with less senior skill levels

**Project Status:**

Currently in progress and about 75% complete. Target end date will be May 2018. As of October 2017, we had spent \$52,210 on a discovery phase with external consultants. The purpose of the discovery was to discuss best practices and possible approaches. Since that initial expenditure in March 2017, we have used internal resources to perform the work.

**Onboard New HR/Finance Data Sets into Atlas**

Business Sponsor: HR and Finance

**Strategic Plan Goal 2: Improve Systems  
Board Governance Priority 2: Improve Systems and Supports  
Strategic Plan Goal 1: Educational Excellence and Equity**

## **Formula for Success pillar 1: High Quality Teachers and Leaders**

### **Project Goal:**

Expand existing data warehouse to include HR/Finance data to better support new groups of users in the business (expanding the footprint and driving the value of integrated data to new parts of the business). Create integrated data views, tables, and SSRS reports to enable operational & strategic reporting and data analysis.

### **Project Business Value:**

- An integrated data mart to support operational analytic reporting which business users do not have today.
- Eliminates the need for central office departments to initiate independent data mart efforts

### **Project Status:**

Phases 1 and 2 of the HR portion of this project were completed in August and October 2017, respectively. Technical implementation of HR Phase 3 was deployed in February 2018. We are working with our partners in HR on a user adoption plan and rolling out these reports to central office managers and school leaders. The Budget/Finance portion of this project has been deferred, as of October 2017, to allow resources to fully focus on the Budget Replacement project.

## **Modernize Reporting Tools / Launch Tableau Server**

Business Sponsor: DoTS

### **Strategic Plan Goal 2: Improve Systems**

### **Board Governance Priority 2: Improve Systems and Supports**

### **Strategic Plan Goal 1: Educational Excellence and Equity**

### **Superintendent Smart Goal 1: MTSS**

### **Formula for Success pillar 1: High Quality Teachers and Leaders**

### **Formula for Success pillar 2: Collaboration Focused on Learning**

### **Project Goal:**

Modern reporting tools are needed for data visualization, exploration, and integrating data sets. Over several years, many SPS users had already purchased Tableau desktop licenses and were using the desktop version to perform queries and create data visualizations. The project goal for implementing Tableau Server is for scalability; to centrally manage collaboration, approved data sources, security, governance, and performance.

### **Project Business Value:**

To support new usage dashboards and data exploration/advanced ad hoc analysis (primary users: leadership & power analysts). Tableau as an analytics tool will enable the business to better visualize data and gain new insights. Also, business users can self-serve more easily on data needs rather than making a request to IT and waiting in line. Tableau Server efficiently manages access to data sources and provides a collaborative platform for reporting.

### **Project Status:**

Phase 1 of Tableau server was launched in August 2017 primarily for the purpose of supporting Research & Evaluation's Strategic Data Dashboard initiative. We are working with stakeholders to plan a staggered launch in 2018.

## Data Portal Upgrade

Business Sponsor: DoTS

**Strategic Plan Goal 2: Improve Systems**

**Board Governance Priority 2: Improve Systems and Supports**

**Strategic Plan Goal 1: Educational Excellence and Equity**

**Superintendent Smart Goal 1: Multi-Tiered Systems of Support (MTSS)**

**Formula for Success pillar 1: High Quality Teachers and Leaders**

**Formula for Success pillar 2: Collaboration Focused on Learning**

### Project Goal:

Collaboratively visualize and create a custom role based portal that provides a seamless user experience in the UI – while the backend may be sourcing data from any number of systems.

### Project Business Value:

Seamless user experience - i.e. one place for principals to go for their data needs.

### Project Status:

Updated portal was deployed in February 2018. Project is complete.

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## Collaboration

Budget: \$1,878,845

Life-to-date expenditures: \$329,596

The Collaboration team provides tools, training, and support to employees to help them communicate and collaborate across the district, as well as with families and the community. The team supports the public websites for the district and all 103 schools, as well as an internal staff website called MySPS. The team also supports internal collaboration for schools and departments with training and support on SharePoint on their own “community sites” and on project sites.

### Systems Supported by Team:

- SharePoint – Online & On Premise
- School Messenger Web Presence
- Clever

### Team KPIs and Measures of Success:

- 99.99% uptime without planned outages
- Compliance with ADA Accessibility Consent Decree on 80% of public websites

## Projects

### Website Refresh

Business Sponsor: Communications

**Strategic Plan Goal 3: School, Family, and Community Engagement**

**Board Governance Priority 3: Create Culturally Inclusive Schools, Family & Community Engagement**

**Superintendent Smart Goal 4: Engagement / Collaboration**

### **Project Goal:**

The goal was to provide public district and school websites that facilitate communications with schools, families and community members, supporting the district goal of Strengthening School, Family and Community Engagement.

### **Project Business Value:**

Our public websites were designed 7 years ago. Information needed to be more eye-catching and easy to locate for our families and community members.

### **Project Status:**

- The Website Refresh was implemented in August for the district's public website and for all school websites. The new design included a fresh look and easier navigation, which was guided by user input, analytics and a focus group of school and department users.
- ADA Accessibility testing with our automated tool from AudioEye has been completed and errors are being intercepted on the web pages and corrected.
- Manual Accessibility testing was done in October by AudioEye staff using assistive technologies. Any problems will be referred to School Messenger Presence for mitigation.
- Communications is conducting an online survey to assess the satisfaction with the new design and will evaluate input for adjustments if needed.
- Final adjustments are being made to the website and focus is being transitioned to implementing a mobile application which will be available late 2018.

## **ADA Accessibility Consent Decree Compliance**

Business Sponsor: Deputy Superintendent

**Strategic Plan Goal 3: School, Family, and Community Engagement**

**Board Governance Priority 3: Create Culturally Inclusive School, Family & Community Engagement**

**Superintendent Smart Goal 4: Engagement / Collaboration**

**Strategic Plan Goal 2: Improve Systems**

**Board Governance Priority 2: Improve Systems and Supports**

### **Project Goal:**

SPS is committed to making all content located on external district sponsored websites and educational software programs accessible for persons with disabilities. SPS is required to meet the guidelines in Section 504 of the Rehabilitation Act, Web Content Accessibility Guidelines (WCAG) 2.0 AA, and the components of a court Consent Decree (CD) the district entered into in October 2015. Assuming all guidelines are met, the CD expires April 5, 2019

### **Project Business Value:**

By meeting ADA accessibility standards, all students, families and community members are provided quality communications and instructional resources needed to ensure student achievement and the mandates of the Consent Decree are met.

### **Project Status:**

- All public websites were migrated to an accessible web platform and work has continued to make all the content accessible as it is posted.
- To address accessibility of educational software used district-wide, DoTS formed a team which reviews all educational software for ADA accessibility, as well as proper data privacy and

protection provisions and end user licensing agreements. The team is working through an inventory of software, working with vendors to evaluate the accessibility and obtain timelines for issues to be resolved.

- Key Accomplishments as of March 2018 include:
  - Accessibility plan in development to meet WCAG 2.0 AA for 2018: Tumblebook Library, PebbleGo, Read180, Typing Agent, Destiny Library Manager
  - Amplify Science approved for district-wide use
  - Updated Educational Software Spreadsheet
  - AudioEye remediation report
  - Website Accessibility Certification for WCAG 2.0 AA

## SharePoint Enhancement and Growth

Business Sponsor: DoTS

**Strategic Plan Goal 3: School, Family, and Community Engagement**

**Superintendent Smart Goal 4: Engagement / Collaboration**

**Strategic Plan Goal 2: Improve Systems**

**Board Governance Priority 2: Improve Systems and Supports**

### Project Goal:

The goal is to facilitate communications within departments, project teams, and schools, supporting the district Goal of Improving Systems. Employees need to have a common place to store documents for collaboration and reference in their departments or project teams.

### Project Business Value:

The newly designed SharePoint sites are easy to navigate and offer visible, easily managed areas for collaboration within and among departments, schools, and project teams. Currently documents are stored in a number of places that can be hard to find. The new SharePoint sites pull all documents together for easy reference and retention classification.

### Project Status:

- Older departmental SharePoint sites were replaced and migrated to a new design and newer SharePoint software. The goal of the new design was to make SharePoint sites easier to find and share between team members and across teams where needed. The new sites have been created for departments and for project teams, using documents and templates that provide consistency.
- School SharePoint sites are a secure FERPA-compliant place to keep all the information schools need. This is a great way to enhance communication and ensure that important announcements and other information are easily available to everyone. We are currently in the midst of deploying SharePoint Sites for Schools with 32 schools having active sites to date.
- The goal is to have a SharePoint site for each school by the end of the 17-18 school year. SharePoint sites have been built for all the schools and are ready for designated school owners to complete training and begin managing the sites.

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## Client Systems and Education Technology

Budget: \$4,808,448

Life-to-date expenditures: \$6,340,161

**Technology Support Specialists:** Respond to support requests; act as a first-level problem-solving resource regarding all classroom technologies, including answering questions, providing advice, troubleshooting, and following up with customers to solve their network system equipment problems; maintains service records, including an action plan for problem resolution.

**The Client Management Team:** Workstation and tablet management systems, automation, application packaging, optimization, computer policy editing, patch management, login scripts, and software distribution.

**Project Management:** Plans and manages the BTA IV Levy to refresh student, teacher, and AV equipment.

**IT Project Coordinator:** Coordinates all technology related activities in relation to new school openings and capacity planning to achieve a smooth start of school operations and activities.

- Across 100 schools, 3,508 teachers, and 54,000 students
  - We support:
    - 19,655 Windows devices
    - 4,085 Apple devices
    - 6,856 iPads
    - A total of 30,596 devices
  - So far this year we've handled:
    - 7,440 incidents and 2,663 requests

**Instructional Technology Team:** Provides functional, planning and implementation of support for a number of DoTs initiatives that directly impact learning and teaching:

- Functional Support: PowerTeacher, Schoology, Office 365, Teacher Presentation Stations, iPads, and other classroom technology
- Planning Support: SharePoint for schools, teacher, and student computers, online assessments, grading systems, PD systems
- Implementation Support: Teachers, Students, School Administrators, CAI staff

While the team does not have strict KPI's their work is often measured based on levy initiative rollout completion and participation

Projects all fit within the broader mandate to support functional use of technology tools in the classroom for learning and teaching. This has three main components:

- Develop teacher fluency in the effective use of technology in their instructional practice, aligned with state standards and district strategic goals
- Provide planning, professional development and ongoing functional support for Levy funded initiatives like Schoology, PowerSchool, Teacher and Student Computers, and Technology for new schools rolled out by Capital Projects and Planning
- Liaison between schools, Curriculum Assessment and Instruction, and DoTS

# Projects

## School Technology Services Support

Business Sponsor: DoTS

### Strategic Plan Goal 2: Improve Systems

### Board Governance Priority 2: Improve Systems and Supports

#### Project Goal:

Combined with general funding, DoTS will provide funding to adequately meet the technology support needs of all SPS Schools and facilities, in all five areas of the district (plus JSCEE), to meet National Benchmarks and recommendations from the Council of Greater City Schools (CGCS) and the Center for Educational Leadership & Technology (CELT). This structure provides each of the five district areas with one Technology Support Specialist (TSS) Lead, five TSS staff, (TSS I/TSSII) plus TSS and college tech personnel to support the JSCEE. With approximately twenty schools per region, this provides a tiered level of support to maximize customer service.

SPS currently has only 32 Technology Support Specialists serving 100 schools. CELT recommends that best practices would require SPS to have 40-45 field technicians. In addition, lack of "in the field" staff to support schools is one of the most frequent criticisms of DoTS during annual school leadership survey. Without proper supports, SPS runs the risk of having school technology, student devices, classroom equipment, etc. down for excessive periods of time impacting curriculum delivery and instruction.

#### Project Business Value:

The benefit to students of the funding is that computer repairs happen much faster so more equipment is available to students. More support for students during testing (SBAC) means less frustration when there is a technology issue. More technicians allow for support of a 2:1 program which would greatly impact students access to technology. Some schools are able to fund their own technicians thus creating equity issues. Every school deserves the same level of support.

#### KPI's

- Time to resolve: 5 business days to resolve a ServiceNow ticket.
- Time to respond: Status change from New to Active in one Business Day.
- Percentage of SLA met
- Site adherence to standards: Following our own standards
- Customer Satisfaction Score/Net Promoter Score

#### Project Status:

- DoTS migrated all student Windows workstations from Windows 7 to Windows 10 before the start of the 2017-2018 school year. We wanted to share the advantages to moving to Windows 10:
  - Windows 10 offers better integration with Office 365 and SharePoint.
  - Windows 10 offers more security and compatibility.
  - Having one Windows platform is fundamental to standardize our support and to ensure unified experiences for our teachers and students.
  - Windows 10 will include the new Office 365 ProPlus version that enhances OneDrive and online collaborative tools.

- DoTS is excited to be moving forward with Windows 10, new teacher laptops, and Office 365 ProPlus. This will offer teachers and students a better user experience.
- The Technology Support Specialists (TSS) recently completed a DoTS infographic distributed to all schools and district trainings highlighting useful resources and outlining the various catalogs and service centers available to incoming and current employees.

## Student & Classroom Computing Modernization Program

Business Sponsor: CAI

**Strategic Plan Goal 1: Education Excellence and Equity**

**Board Governance Priority 1: Eliminate Opportunity Gaps**

**Superintendent Smart Goal 2: Eliminate Opportunity Gaps**

**Strategic Plan Goal 2: Improve Systems**

**Board Governance Priority 2: Improve Systems and Supports**

### Project Goal:

Students deserve to have access to equipment that supports a more engaging learning experience. School PTAs raise money to outfit classrooms with technology thus creating equity issues. Every student in every classroom deserves the same learning experience. Our goal is to:

- Establish a four-year replacement cycle to assure that all equipment meets necessary standards of performance and reliability,
- Increase the number of computers/devices to keep up with enrollment growth, and
- Provide a device for students in 6th to 12th grades who qualify for free and reduced lunch.

Failure to do this places our students at a significant disadvantage, does not address the equity concerns across the district, and will not support our students being college/career ready.

### Project Business Value:

It is difficult to incorporate technology into the classroom when the equipment is outdated and has reached end of life. Students deserve to have access to equipment that supports a more engaging learning experience. School PTAs raise money to outfit classrooms with more technology thus creating an equity issue. Every student in every classroom deserves the same rich interactive experience.

During replacement and expansion of student technology, the Department of Technology Support (DoTS) is improving the coordination and collaboration with the Teaching and Learning division to directly support its core initiatives. These include the re-visioning of secondary schools, Eliminating Opportunity Gaps (EOG), and Multi-Tiered Systems of Support (MTSS), producing high quality teaching and learning, which are all initiatives represented in the Formula for Success. Improvements in student learning that come about by these efforts will be accelerated and amplified by the use of digital resources and technology. Students across the district currently rely on digital technologies for many purposes: accessing a vast span of resources to research ideas, expressing themselves creatively, assessing their knowledge, working collaboratively with others, producing artifacts of learning, and developing new skills. As well, computers help to support and reinforce deep content understanding in different content areas. These opportunities will be improved through replacement and expansion of technology, and will ensure that all students, including those historically underserved by education, will have ample access.

### **Project Status:**

A pilot program for 80 carts of 16 computers each was approved at the December 6, 2017, School Board meeting with the deployment already complete. Ninety-four teachers from across the district applied for the 50 available spots for this pilot program. The Instructional Technology team intentionally evaluated applications on individual teacher qualifications coupled with the school they represented. In the selection process, there was a preference given to teachers applying from schools serving high needs student populations.

## **Faculty/Academic Staff Technology Modernization Program**

Business Sponsor: CAI

**Strategic Plan Goal 1: Education Excellence and Equity**

**Superintendent Smart Goal 1: MTSS**

**Superintendent Smart Goal 2: Eliminate Opportunity Gaps**

**Strategic Plan Goal 2: Improve Systems**

**Board Governance Priority 2: Improve Systems and Supports**

**Formula for Success pillar 1: High Quality Teachers and Leaders**

### **Project Goal:**

The impact to students is great if teachers are unable to use PowerSchool or take attendance when teacher machines begin to fail. Low morale due to outdated equipment affects teacher performance thus impacts students. Teachers are unable to use technology in their curriculum because the current age of classroom equipment does not support innovative use.

### **Project Business Value:**

Faculty computers across the district are outdated and are of poor performance and reliability. We continue to move further and further behind our ability to support. This places us at vulnerability for security concerns, along with performance and the ability for instructors to do their jobs. Computer devices are used to leverage instructional tools necessary to meet student need within a Multi-Tiered Systems of Support (MTSS) framework. New devices will allow rapid access to different sources of data used to make sound instructional decisions that enhance whole group, small group, and individual instruction.

### **Project Status:**

- The School Board approved the purchase of mobile computer devices for all certificated staff at the December 6, 2018 Board meeting. The approval authorized up to \$5.5 million to be used for new computer devices for teachers, librarians, counselors, social workers and nurses.
- Approximately 10 schools per week will be receiving laptops with an anticipated end date scheduled for mid-May 2018.
- The first shipment of roughly 20% of the teacher laptops have been received. An initial set of 25 laptops has been distributed to the Instructional Technology group and a small group of pilot teachers. We completed delivery to the first three schools, Rainier Beach, Denny and Martin Luther King Jr., on January 30<sup>th</sup> and are evaluating the feedback. Delivery, direct to the staff, includes a technical and instructional briefing. If the feedback continues to be positive, we will proceed to begin full deployment to all SEA represented non-supervisory certificated staff on February 28<sup>th</sup>. We anticipate directly distributing to approximately 10 schools a week, finishing by mid-May. Approximately 450 central office represented certificated staff will also get laptops during this time.
- Deployment at each school is structured to support two main goals:

- Goal 1: Staff know how to use the new laptop to continue to do the work that they currently do.
- Goal 2: Staff are aware of how to use the laptop in new ways not possible before to impact student learning, enhance instruction, and increase collaboration.
- This will be achieved through a short initial engagement (30 minutes) when the laptops are deployed to a school or department. Schools are assigned either a Tuesday or Thursday when the Technology Support Specialists (TSS) and Instructional Technology Support Teachers (ITs) work with teachers either after school or during their planning periods.
- The IT group has also developed an initial online module that teachers can take as part of the eight hours of paid tech time for this year. The group is developing additional modules to support deeper instructional use that can also be used by teachers as part of their eight hours of tech time.
- The rollout schedule has been developed with our vendors, the district warehouse, DoTS, and Instructional Technology. Schedule Highlights:
  - January 30th – laptops will be deployed to Rainier Beach, Martin Luther King Jr. and Denny as a pilot to test the process from vendor through deployment and replacement of teacher's desktop.
  - February 2nd – finish evaluation of pilot process and provide feedback and final go to Thornburg (vendor).
  - February 27th – begin official rollout at school sites and district departments.
  - May 10th – last regular school deployment.

## Administrative Staff Technology Modernization

Business Sponsor: CAI

### Strategic Plan Goal 2: Improve Systems

#### Board Governance Priority 2: Improve Systems and Supports

#### Formula for Success pillar 1: High Quality Teachers and Leaders

#### Project Goal:

The impact to schools is great if office staff is unable to use SAP or ESS. Currently, administrative computers are failing and have to be replaced with donated computers. Low morale due to outdated equipment affects performance thus impacts schools and productivity.

#### Project Business Value:

Administrative computers across the district are outdated, unreliable, and will soon be unable to run the latest OS and application versions. As time passes, we move further and further away from being able to support these devices. This places us at vulnerability for security concerns, along with performance and the ability for staff to do their jobs.

#### Project Status:

Refresh administrative staff workstations and update auditorium at JSCEE

- Principal and all PASS member commuters: PASS members who are eligible for a new laptop will receive one this Fall.
- New computers for school office staff
- Auditorium refresh at Central Office (Complete).
- Rooms in the JSCEE Professional Learning Center continue to be updated with new Audio/Visual equipment.

## Schoology Enhancement and Growth

Business Sponsor: CAI

**Strategic Plan Goal 1: Education Excellence and Equity**

**Superintendent Smart Goal 2: Eliminate Opportunity Gaps**

**Strategic Plan Goal 2: Improve Systems**

**Board Governance Priority 2: Improve Systems and Supports**

**Formula for Success pillar 1: High Quality Teachers and Leaders**

### **Project Goal:**

The goal is to provide teachers with online tools to enhance their instruction with students and communications with families, supporting the District Goals of Student Achievement and Strengthening School, Family and Community Engagement. Enhancements include LTI integrations, implementation of an assessment tool and the Schoology gradebook. 18% growth 2015 to 2017.

### **Project Business Value:**

Teachers can use Schoology to post assignments, videos, web materials, links and assessments to aid their students' learning inside and outside the classroom and to help parents support their child's growth. Materials and lesson plans can be more current, engaging and shared among teachers across the district and the country.

### **Project Status:**

- To improve learning and collaboration with students, Schoology (our Learning Management System) and Microsoft OneDrive have combined forces to create the Microsoft OneDrive Assignment application. This app enables teachers to assign Microsoft Word docs, Excel spreadsheets, and PowerPoint slideshows directly within the Schoology platform. Once assigned, students make their own copies of the content to work on and submit to the teacher, all without leaving Schoology. Teachers can then provide feedback on the submitted work and grade the assignment. The Microsoft OneDrive Assignment app can be found in the Create Assignment tool in Schoology.
- Benefits of OneDrive Assignment with Schoology include:
- Easily distribute materials to students in a Schoology course using your Microsoft OneDrive account.
- Provide personalized live feedback and collaboration with students.
- Save time and resources with a paperless solution for the classroom.
- Enrich your content using Schoology features like rubrics and student completion rules to your OneDrive assignments.

Professional Development is an essential part of the new teacher laptop deployment at Seattle Schools. In addition to onsite training for staff, Instructional Technologists are leveraging Schoology to host resources and to provide interactive content for teachers to make the most of the new equipment. All teachers enrolled in the Instructional Technology modules have access to the laptop essentials including information about ways to use the new technology can improve instruction in the classroom.

## **Instructional Technology - Certificated Staff Training**

Business Sponsor: CAI

**Strategic Plan Goal 1: Education Excellence and Equity**

**Superintendent Smart Goal 1: MTSS**

**Superintendent Smart Goal 2: Eliminate Opportunity Gaps**

**Formula for Success pillar 1: High Quality Teachers and Leaders**

### **Project Goal:**

DoTS is providing eight hours of training to all certificated staff as required by the current SEA collective bargaining agreement. In order to provide this level of training to the nearly 3,500 represented certificated staff, the Instructional Technology team has created a collection of one hour online modules in Schoology that teachers can take independently on their own time or in hybrid classes on this year's designated technology Wednesdays.

### **Project Business Value:**

Although this project's goal directly fulfills contract obligations, its primary business value is building capacity in our instructional staff to use district provided technology to improve instruction.

### **Project Status:**

The Instructional Technology team has created or supported the creation of 19 one-hour modules in the online technology course, including modules for eVal, Homeroom and the new teacher laptops. The team is working on additional modules for the gradebook upgrade, a second module for the teacher laptop, and new integrations between Office 365 and Schoology. To date 2068 certificated staff have enrolled in the online technology course, completing 5075 discussion posts and 117,554 page views. The IT staff has also provided face to face courses at school sites on district designated tech Wednesdays.

## **Instructional Technology - Educational Application Onboarding**

Business Sponsor: CAI

**Strategic Plan Goal 1: Education Excellence and Equity**

**Strategic Plan Goal 2: Improve Systems**

**Superintendent Smart Goal 3: Improve Systems**

**Board Governance Priority 2: Improve Systems and Supports**

**Formula for Success pillar 1: High Quality Teachers and Leaders**

### **Project Goal:**

To ensure that all educational software used in Seattle Public Schools that is purchased at the district or school level or that requires student data for sign on or rostering is fully compliant with state and federal law, district policy and other legal obligations including the district current agreements in ADA related consent decrees. To ensure this DoTS is partnering with purchasing to develop a list of approved software and a process to add new software to an approved list.

### **Project Business Value:**

This project has two primary benefits to the district: ensuring students have access to safe, appropriate and secure educational software and to reduce liability risk for the district by ensuring there is a clear and effective process to ensure compliance with compliance state and federal law, district policy and other legal obligations.

### **Project Status:**

DoTS has formed a team responsible for evaluation existing and new educational software. The team has developed a draft process that it is currently being refined to ensure we are meeting the obligations for ADA compliance in our current consent decree. This process will be communicated to district staff before the end of the year. Currently the team is working through the backlog of existing software and posting approved software online. The team has also been working with the purchasing department to build a process that will restrict schools from purchasing unapproved software.

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## **Infrastructure**

Budget: \$19,143,552

Life-to-date expenditures: \$1,062,269

The Infrastructure supports the district's enterprise network architecture, its data center, and the core IT services to all staff and students.

### **Systems Supported by Teams:**

- Active Directory, O365 Tenant, ADFS/LDAP Authentication, Single Sign-On (SSO)
- DNS/DHCP/WINS, Kerberos, Certificates
- District Network Routers, Switches and Wireless
- All Servers and Appliances, Storage, backups, DR
- PBX/telephones, cameras, WAN fiber ring, wireless, cell phones, LAN switch installations at the new BEX schools

### **Team KPIs and Measures of Success:**

- Internet Bandwidth Usage
- Wireless usage
- Data Center Uptime
- Phone calls

## **Projects**

### **Data Center & Network Operations Center (NOC) Modernization & Operations**

Business Sponsor: DoTS

#### **Strategic Plan Goal 2: Improve Systems**

#### **Board Governance Policy 2: Improve Systems and Supports**

### **Project Goal:**

Funding for the replacement of oldest hardware (servers, storage systems, core NOC equipment, Ancillary equipment, UPS, etc.) in the Data Center in support of the established System Architecture and Process Changes, some equipment is approaching end-of-service/end-of-life.

### **Project Business Value:**

Infrastructure hardware that supports all schools for access to resources that students and staff use to teach and learn.

### **Project Status:**

Wireless access points (WAPs), network switches and IP CCTV cameras have been installed and connected in the following new schools: Olympic Hills Elementary, Cascadia Elementary, Robert Eagle Staff Middle School and Meany Middle School. Portables continue to have work done, with temporary wiring supporting desk phones and wireless access points.

## **Telecommunications System Modernization**

Business Sponsor: Deputy Superintendent

### **Strategic Plan Goal 2: Improve Systems**

#### **Board Governance Policy 2: Improve Systems and Supports**

### **Project Goal:**

Modernization and replacement of 17-year old SPS phone system which is beyond End of Service and unable to deploy the latest features and productivity improvement tools. Final solution to be determined, vetted, and designed (i.e. Unified Communication and Unified Messaging). Estimate includes all staff, consulting, hardware, software, training, and miscellaneous costs in support of the district goal of improved systems and support.

### **Project Business Value:**

Key security need:

- Assumptions -The assumption is that this will take place in a three-year time frame.
- Risks - A phone system failure will be catastrophic, impacting all schools, with no immediate mitigation available. Depending on vendor selection, we may not have enough funding.

### **Project Status:**

- RFP is underway with a final decision scheduled for March 2018. Upon selection of a finalist, a Board Action Report will be brought before the School Board for approval of a five-year agreement for software and hardware support.
- Completion of the network upgrade/replacement is expected to take approximately two to three years from start of work.

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## **Information Security**

Budget: \$3,900,000

Life-to-date expenditures: \$239,971

The Cyber and Information Security team provides incident response for cyber-attacks (internal or external), facilitate cyber safety training for adults, and provides digital forensic support to the legal, HR and safety teams.

### **Systems Supported by Teams:**

- Document searching and indexing
- Digital archives
- Cyber/Information security systems
- Digital forensics and eDiscovery
- Student records and transcripts

**Team KPIs and Measures of Success:**

- Incident response
- Workforce behavior profiling

## **Projects**

### **Electronic Records**

Business Sponsor: Deputy Superintendent

**Strategic Plan Goal 2: Improve Systems**

**Board Governance Policy 2: Improve Systems and Supports**

**Strategic Plan Goal 3: School, Family, and Community Engagement**

**Superintendent Smart Goal 5: Professional Practice**

**Project Goal:**

To provide a central platform Phase II Electronic Content Management, spanning electronic forms, electronic workflows, case management, platform management Enterprise Document Tracking and Compliance initiative for digitization and categorization of remaining SPS documentation; and back end document retention. Project funds establish a base platform and training, building a core platform for future e-forms, case management and retention work in support of improved systems and supports.

**Project Business Value:**

The organization needs to move from paper-based manual workflows, including forms management, document retention, and case management.

**Project Status:**

Pilot has started with configuration and establishment of an enterprise framework for content management.

### **Disaster Recovery and Loss Protection**

Business Sponsor: DoTS

**Strategic Plan Goal 2: Improve Systems**

**Board Governance Policy 2: Improve Systems and Supports**

**Superintendent Smart Goal 5: Professional Practice**

**Project Goal:**

One-time funding required for implementation of most critical recommendations and needs as identified in the BEX IV Disaster Recovery Plan and Fit/Gap Assessment. Potential projects include the implementation of an external recovery function, implementation of redundancy in critical locations, etc. Recurring costs include the Operational and Maintenance support of Disaster Recovery, Security initiatives, and the hiring of a full-time Information Security Officer for the district, as was recommended as a priority in the CELT Assessment.

**Project Business Value:**

Reduction in risk profile for district; possible decreased insurance premiums; reduction of data loss risk to students.

### **Project Status:**

- Full-time Information Security Officer and Engineer hired.
  - Cloud access security broker (CASB) cloud security implemented
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## **Administration**

Budget: \$10,184,000

Life-to-date expenditures: \$1,927,210

Administration includes all annual software and licensing, project management, help desk services (TechLine), and management of the division and departments.

### **Licensing/maintenance**

All major SPS software applications and site/enterprise licensing for district-wide systems including Microsoft Enterprise Agreement, SAP, PowerSchool, Antivirus, infrastructure support licensing, district wide library and education applications (This includes licensing costs only. No labor or other expenses are associated with this amount.)

### **Help Desk /TechLine**

The TechLine supports most technical systems and services that are used by staff throughout the district such as: PowerSchool\PowerTeacher, SAP\ESS\MSS, Marketplace, Office 365 (i.e. Exchange, OneDrive), as well as networking issues, hardware issues, basic instruction, etc.

Techline tickets as of 3/1/2018:

- Total tickets since 8/1/17 = 42,358
- Total tickets between 2/13/18 through 2/27/18 = 1,802
- Customer Satisfaction = 9

### **Team KPIs and Measures of Success:**

- First Touch Response
  - Customer Satisfaction using scale of 1-10
  - Average time to ticket closure
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## **Building Excellence Capital Levy (BEX V) and Long-Term Technology Planning**

The Building Excellence (BEX) capital program enables Seattle Public Schools to replace, modernize or make major renovations to district buildings, infrastructure and technology. Every six years, the Seattle School Board requests BEX capital program funding from Seattle voters via a ballot measure so that every student may have a safe and productive learning environment. In anticipation, DoTS has been meeting with business stakeholders to evaluate the progress of current Building, Technology and Academics (BTA IV) Levy projects to ensure they align with current district goals as well as to start the initial planning and conversation around potential BEX V system improvements. As a result, DoTS has been able to gather valuable insight from all departments related to goals they want accomplished while establishing quantifiable measures of success to ensure they're met.

DoTS will be presenting a BEX V update in a Winter 2018 Board Work Session in which key initiatives determined to help achieve Strategic Goals identified by district stakeholders will be discussed.