NORTH CAROLINA
State Board of Education
Department of Public Instruction

Report to the North Carolina General Assembly

Improve Education Financial and Information Transparency:

Annual Progress Report

S.L. 2017-57, Section 7.16.(f)

Date Due: March 15, 2024
DPI Chronological Schedule, 2023-2024

NC DEPARTMENT OF PUBLIC INSTRUCTION
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EXECUTIVE SUMMARY

In Session Law 2016-94, the General Assembly directed the North Carolina Department of Public Instruction (NCDPI) to begin the work to modernize business systems, with an initial focus on finance, payroll, and human resources. The scope was expanded by the General Assembly in 2017 to include other statewide strategic applications including Licensure and the Student Information System (SIS). The initial focus of finance and HR was selected because so many Local Education Agencies (LEAs) were using a legacy computing architecture introduced to the marketplace in 1979, two years before the invention of the IBM PC. The concept was to develop a modern, cloud-based, integrated finance and HR system that would work seamlessly with NCDPI's Uniform Education Reporting System (UERS) and databases. The focus of the School Business Systems Modernization (SBSM) Initiative includes PSU ERP and agency enterprise systems modernization.

PSU ERP Modernization

The PSU ERP modernization began with developing two convenience contracts (awarded to Tyler Technologies for Munis ERP and CherryRoad Technologies for Oracle Cloud ERP). The vendors were selected through an RFP process consisting of PSU subject matter experts as the evaluators. Participation is an opt-in process for interested PSUs during a pilot phase. New Hanover County Schools went live on Tyler Munis ERP on July 1, 2021, and Gaston County Schools went live on Oracle Fusion Cloud ERP January 1, 2022. These implementations had many issues that needed to be addressed to stabilize their operations and before any other districts could go live. Gaston County Schools had significant conversion issues impacting their payroll. Due to these complications, DPI paused the program for 90 days beginning March 17, 2022, and introduced a new comprehensive "Pre-Go-Live Checklist" on June 17, 2022, including full pro forma (every employee) parallel payroll testing prior to new go-lives.

This governance has improved the outcomes of subsequent implementations. Gaston County Schools Oracle Cloud implementation was fully stable by the end of 2023. The backlog of individual employee issues was addressed by the end of calendar year 2023 and Gaston's HR Helpdesk now has less than 30 tickets, within the normal range for a district the size of Gaston County Schools. Swain County Schools had a successful go-live on Tyler MUNIS on January 1, 2023. Winston-Salem Forsyth has signed an MOU with DPI and is planning to begin a Tyler MUNIS implementation project in early 2024 with ERP go-live anticipated for July 1, 2025, and HR/Payroll go-live anticipated for July 1, 2026. Guilford County Schools released an RFP for an Oracle ERP solution, resulting in the addition of IBM Consulting, Inc. as an approved vendor for the SBSM project. Guilford County Schools has signed an MOU with DPI and is planning to go-live on Oracle Cloud ERP in January 2025. Charlotte-Mecklenburg Schools released their own RFP for an Oracle ERP solution, resulting in the selection and approval of Advanced Software Technologies, LLC (AST) for implementing Oracle Cloud ERP with a projected ERP go-live of July 2025 and HCM/Payroll go-live January 1, 2027. Guiding future ERP

PSU support is the retirement of the SunPac financial system product by Serenic, effective July 1, 2026, which will impact 31 PSUs.

Accomplishments for the program to-date:

- Consolidation of three separate agency grants systems into one single system
- Deployment of critical "Say Something–Anonymous Reporting System" (SS-ARS)
- Deployment of an applicant tracking system (ATS) for PSUs and a new statewide interactive job-board (https://northcarolina.schoolspring.com)
- Modernization and optimization of the NCSIS via contract award to Infinite Campus
- Developed a guide to support PSUs in selecting an ERP modernization strategy
- All PSUs ERP systems have off premises secure backups

Ongoing work:

- Modernization of systems used to support PSU allotments and expenditures through the Office of School Business to streamline and automate processes and provide more timely data to stakeholders.
- Continue PSU ERP transition to full production systems
- Licensure System Modernization RFP re-bid and award
- Agency business process, reporting workflow, and application modernization
- NCSIS (NC Student Information System) Phase 1 (July 1, 2024) and Phase 2 (July 1, 2025) implementations
- SBSM Advisory Board vendor assessment

New work for 2025-2026 biennium:

- Expand and accelerate PSU ERP implementations as funding allows
- Optimize finance and school performance data by combining the Financial Transparency Dashboard and School Report Cards
- Modernize the PSU Identity and Access Management (IAM) statewide solution

Future Needs

Additional PSU ERP and UERS funding will be needed to sustain the work started under this initiative. We anticipate $65 million will be needed to complete the ERP modernization projects and an additional $12 million annually will be needed in the UERS budget to support increased costs of operations and maintenance of these more complex systems.

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FOREWARD

School Business Systems Modernization (BSM) is specified in *Session Law 2017-57* as follows:

IMPROVE EDUCATION FINANCIAL AND INFORMATION TRANSPARENCY

SECTION 7.16.(a) The Department of Public Instruction shall implement the School Business System Modernization Plan, as proposed by the State Board of Education in the report required by Section 8.15(b) of S.L. 2016-94, using the funds appropriated by this act for that purpose. It is the intent of the General Assembly to fund a multiphase, multiyear project to (i) modernize State and local education financial, human capital, and school information systems, (ii) provide for a common reporting system and analytics system, (iii) integrate financial, payroll, human resources, and related human capital systems through the use of a new software as a service enterprise resource planning (ERP) solution, make enhancements to existing local systems, or both, and (iv) link the State licensure system with the upgraded local systems. The State Superintendent of Public Instruction (State Superintendent) shall review and improve business processes in the Department of Public Instruction, as appropriate, and modernize State systems at the Department.

The NC Office of the Superintendent of Public Instruction provides this report pursuant to Section 7.16.(f) that specifies:
The State Superintendent shall submit annual reports to the Committee and the Fiscal Research Division by March 15 of each year on the expenditure of funds for the project and progress of implementation until the completion of the project.

BACKGROUND

The 2016 NC General Assembly directed the development of a plan to modernize the systems used by the Department of Public Instruction (NCDPI), Financial and Business Services Division, to manage and deliver funds and technical support services to local school administrative units and charter schools (*S.L. 2016-94, Sec. 8.15*). The School Business Systems Modernization plan was presented to the General Assembly in 2017, and the 2017 General Assembly provided initial funding (S.L. 2017-57) and directed that the State Superintendent implement the plan. Key elements of the plan include modernized local systems that interact with NCDPI systems, modernized NCDPI systems that support and interact with local and other State agency systems, and modernized data integration, analytics and reporting for improved transparency and efficiency of operations and compliance monitoring.

Since the beginning, the program has made significant accomplishments in several areas, including grants management consolidation, anonymous safety reporting, applicant tracking and hiring, statewide job board, and IT cloud consolidation efforts. In 2018-19, two vendors were awarded convenience contracts to provide modernized ERP systems to North Carolina Public School Units (PSUs). A series of pilots were selected to begin the development of a standard template that would identify business requirements consistent across Local

Education Agencies (LEAs) and allow for more streamlined implementations for districts that implemented the systems in the future. Significantly underestimated technical complexity in combination with a global pandemic that restricted travel and state budget delays slowed down or halted the progress of these pilot implementations. Additionally, significant differences between small and large districts needs emerged presenting both implementation and standardization challenges.

The first two district implementations to go fully live, New Hanover County Schools on Tyler Munis ERP on July 1, 2021, and Gaston County Schools on Oracle Fusion Cloud ERP January 1, 2022, both struggled post go-live. While New Hanover's struggles were significant and burdensome on financial and HR staff, they had minimal outward-facing impact. However, Gaston County's struggles were significant and public. Gaston County had numerous struggles with payroll errors for several months post conversion. While many errors were addressed quickly via paper checks or next 24-48 hour off-cycle payroll runs, some errors took deep analysis to correct. A significant post-implementation effort has been provided by the Gaston County finance team, the CherryRoad implementation team, and Oracle Advanced Client Services payroll subject matter experts to get issues resolved and the district is now in significantly better shape. A lawsuit filed by NCAE and two teachers against Gaston County Schools was dismissed in late 2023. The 1% penalty for late ORBIT file submission from Gaston for the first half of 2022 were waived in the most recent biennial budget bill. The Gaston County Schools HR helpdesk that was set up post implementation is now down to below 30 tickets, which is typical for a district this size. All file submissions and interfaces have been stable for more than six months now for Gaston. Full stabilization of all interfaces allowed Gaston to accelerate in addressing the remaining backlog of individual issues/tickets. Gaston had approximately 1400 tickets after the 2021/2022 school year, approximately 700 tickets after the 2022/2023 school year, and now less than 30 tickets as of December 2023. Gaston remains under a direct five-year contract with CherryRoad Technologies, Inc. The DPI contract with CherryRoad Technologies, Inc. will expire April 17, 2024.

NCDPI paused all new PSU ERP go-lives effective March 17, 2022, while work began to stabilize the districts and develop new governance. This includes a new twelve-page Pre-Go-Live Checklist which requires sign-off from NCDPI School Business, School Business Systems Modernization, the PSU, and the Vendor prior to any new Go-Live. The new governance requires full pro forma parallel payroll testing and validation and new UERS and ORBIT testing and validation. Following two months of full pro forma parallel testing and validation sign-off Swain County Schools had a successful HR/Payroll Go-Live on Tyler Munis ERP in January 2023.

Guilford County Schools experienced multiple issues with their Oracle Cloud ERP implementation well prior to moving to production. Combined with the challenges observed in Gaston County, Guilford County Schools and CherryRoad Technologies mutually agreed to terminate their contract. Guilford County Schools issued a comprehensive RFP for a new Software Integrator for Oracle Fusion Cloud ERP on September 19, 2022. Following a fair and

open competitive bidding process an evaluation team (including representation from the NCDPI Office of Systems Modernization) determined a proposal from IBM Consulting, Inc. represented the best value. Guilford County Schools awarded a contract to IBM Consulting, Inc. on January 10, 2023. NCDPI subsequently issued a vendor approval letter acknowledging that IBM Consulting, Inc. is now an approved implementation provider for Oracle Fusion Cloud ERP software under School Business Systems Modernization. As of February 2023, IBM Consulting and Guilford County Schools are on schedule for meeting all deliverable milestones.

DEFINING "MODERN"

Before a modernization initiative can be successful, it is critical to identify the end goals of the modernization initiative and what it means to be "modern." In many circles, this simply means "shifting away from a mainframe system." While that is indeed a component of a modernization initiative, the success of a modernization initiative starts with clearly articulated design principles that every project can exemplify. The School Business Systems Modernization initiative defines a "modern system" as one that is:

- **People first**: Modern systems put people first. They are aware of the users of the system and provide a user experience to allow users easy access to the functions they need at any given time.
- **Cloud-Based**: Moving IT infrastructure out of traditional server rooms and into the cloud enables systems to be scalable, redundant, secure, and highly available.
- **Security and Privacy as a Mindset**: Instead of applications where security and privacy are an afterthought, modern applications are built with security and privacy in mind from the ground up. Multiple technical and non-technical resources are in place to prevent data breaches and cyberattacks, and users have access only to the information they need and nothing else.
- **Buy Services, Not Tools:** For the State and PSUs, where IT personnel are at a premium, procuring software from vendors as a full-stack service instead of a tool that needs to be configured and maintained makes the most of limited resources.
- **Robust, Extensible Services:** The tools in a software-as-a-service offering have the capabilities to complete the business functions they are designed to complete, while also offering the ability to interoperate and integrate with other services to form a more complete, modular ecosystem.
- **Improve Processes**: Modern systems do not just provide a new interface for the same processes but allow operational processes to be modernized in conjunction with software tools.
- **The Data You Need, When and How You Need It:** Users of the system should be able to see detailed data, summary data, dashboards, and raw data based on what they need at any given time.
- **Transparency:** Modern systems are designed to promote transparency and accountability for all stakeholders.

COMPLETED PROJECTS

GRANTS MANAGEMENT SYSTEM

This work involved the collapsing of three separate agency grant systems into one single grant system across the agency. After reviewing the grants system that was on state contract through DIT and after conducting market research, the decision was made to use the existing Comprehensive Continuous Improvement Platform (CCIP) for all agency grants. This system uses LINQ's E-Grants product (formerly owned by HMB) and can host all agency grants. In 2021, the contract was restructured to ensure that it was easy for new divisions to onboard to using the system. Grant Award Notifications (GAN) are now exclusively through CCIP, and the agency is working to also include monitoring and support plans in the system, starting with the bi-annual AIG plan.

A governance committee, led by the Modernization Division, meets regularly to collect feedback from various divisions and the PSU contacts serve to manage the growth of the system and to communicate needs and enhancement requests back to the vendor. This governance committee also created efficiency in the agency by replacing a separate contract for each grant with a combined contract and streamlined protocols for getting new grants online in the system. The time before a grant can be implemented in the system has been cut from several months to under a week.

ANONYMOUS REPORTING SYSTEM

The Say Something – Anonymous Reporting System (SS-ARS) statewide implementation for the Center for Safer Schools and the annual student training requirement has saved lives and proven vital to the health and safety of students and staff. From January 1, 2023, through December 31, 2023, the system received 13,414 tips. Now in production, the operational management of this system has been turned over to the Center for Safer Schools, with support from IT divisions as needed.

APPLICANT TRACKING SYSTEM AND STATEWIDE JOB BOARD

In 2019, NCDPI released an RFP for a convenience contract for an applicant tracking system and a statewide job board. This RFP was awarded to TeacherMatch for their IntelliGlance platform, and School Spring for their platform as the statewide job board. 283 PSUs opted to use the IntelliGlance platform at no cost to the PSU and all PSUs can send job postings from their applicant tracking system into the statewide job board. Both TeacherMatch and SchoolSpring have since been acquired by PowerSchool. The IntelliGlance platform was fully deprecated on October 31, 2022, with a completed transition to the PowerSchool's new Unified Talent Applicant Tracking platform (formerly Talent-ED) and Onboarding Module (formerly Talent-ED). These services have been available to PSUs at no cost to the PSU during the implementation and transition phases. However, without ongoing operations funding for this project from the General Assembly, the costs associated with Applicant Tracking Services (ATS) and Onboarding (e.g. $1/student) will have to be passed to the PSUs beginning July 1, 2025. Access to the deprecated TeacherMatch servers ended on January 27, 2023.

AS/400 MAINFRAME CONSOLIDATION

Districts using the statewide HRMS system used to be required to have a legacy AS/400 system on premises. This requirement created significant technical complexity for the district,

as most districts lacked experience with these systems to maintain and administer them properly. This presented significant risk to the district's data and their continuity of operations. As a result, NCDPI executed a contract in 2012 to move these systems to the cloud at SAS, where they would be administered centrally. This saved each district the significant expense and risk of managing these systems on site. This work was completed in 2020, with only Guilford County Schools still using an AS/400 on premise due to specific customizations. In 2024, all district AS/400 LPARs, including Guilford will be migrated to DIT's new MFaaS vendor Ensono, Inc.

ONGOING WORK

SIS VENDOR SELECTION

After several years of planning, data analyzation and requirements development, an RFP for a modernized Student Information System (SIS) was re-issued in 2022. On November 2, 2023, the State Board of Education awarded a new five-year contract to Infinite Campus to serve as the NCSIS. Implementation will occur in two phases. Phase one will begin July 2024 with approximately 400,000 students enrolled across 120 PSUs going live on the new NCSIS, powered by Infinite Campus. A complete statewide implementation with the remaining PSUs will go live June 30, 2025.

PSU FINANCIAL AND HR SYSTEMS MIGRATION

In 2011, NCDPI engaged with SAS to host the AS/400 systems that house the HRMS systems on behalf of DPI and PSUs. These systems were previously housed and managed within the PSU. However, these systems require specialized skills to administer, and centralizing them to SAS enabled much better support and maintenance. SAS agreed to this as a limited engagement, which has lasted much longer than anticipated due to delays in the project. Because of the significantly extended timeline, SAS has indicated that they no longer want to provide this service. As a result, NCDPI is currently engaged in the planning process with NCDIT to move the AS/400 hosting from SAS to an NCDIT managed hosting solution by June 28, 2024, for the 112 districts currently hosted at SAS and one system hosted by Guilford County Schools. This is important as 40 districts plus the Division of Child Development and Early Education at the Department of Health Human Services still use HRMS in production, 31 districts still use SunPac financials in production, and the remainder of the districts use the historical data residing on their AS/400.

In February 2023 NCDPI signed an Amendment to the PowerSchool Applicant Tracking Service contract to implement a new Interactive Consortium Job Board and new Statewide Reporting (e.g., job vacancy by job category) along with 150 additional PSU training hours for Applicant Tracking and Onboarding. Currently 92 districts and 90 charter schools are live on PowerSchool Unified Talent Applicant Tracking. The current contract term expires July 1, 2024. These services have been available to PSUs at no cost to the PSU, however, costs associated with Applicant Tracking Services (ATS) and Onboarding (e.g. $1/student) will likely have to be passed to the PSUs beginning July 1, 2025, without specific recurring funding from the General Assembly.

In 2018, after an RFP process, two vendors were selected to provide modernized ERP systems to North Carolina PSUs. The goal was that NCDPI would cover a portion of the implementation costs for each PSU along with the development of a "Golden Template" that would identify business requirements consistent across LEAs and allow for more streamlined implementations and reduced costs for districts that implemented the systems in the future. Two vendors were selected with input from multiple stakeholders, including NCDPI staff and PSU finance and HR officers: Tyler Technologies, for their Munis platform, and CherryRoad Technologies as an integrator for Oracle Cloud ERP. The implementation costs for these systems were higher than expected relative to the systems currently in use in PSUs due to the expanded configuration and automation capabilities, but operational costs were relatively consistent.

Because of the size and scope of these projects, many PSUs were hesitant to be the first to move to a new system, especially while managing COVID-19 and staffing shortages.

Fourteen districts signed up for the original pilots for the CherryRoad Oracle Cloud and Tyler MUNIS ERP solutions. Several have dropped out of the program for several reasons – mostly around complexity or personnel changes due to COVID (Cabarrus, Cleveland, Chapel–Hill Carrboro, Harnett, Stanly, Craven, Northampton, and Macon). Six PSUs did not wait for funding or pilot completion and chose to self-fund their programs with the hope of getting funding later (Cumberland, Forsyth, Guilford, Lexington City, Rowan-Salisbury, The Math and Science Academy of Apex [TMSA]). Of those six, Lexington City and TMSA have dropped out. Of the 14 districts, Gaston, along with New Hanover and Swain are fully live with both Financial and HR components of the software. Swain successfully went live on Tyler Munis HR/Payroll in January 2023. Union is live on Tyler MUNIS with financials only. For a variety of reasons ranging from staffing shortages experienced by both the vendors and PSUs to unexpected complexities in implementation, most of these 14 implementations were delayed at least twice.

Approximately 79 districts currently use the server-based LINQ (v6), with 49 of those now hosted by LINQ and 30 of those still hosted on-premise. Five districts (Ashe, Hyde, Clay, Bladen, and Lexington City) and 200 plus charters now use LINQ's cloud-based ERP solution (note that several of these charters use LINQ for UERS reporting, but a different system for Payroll (e.g. Sage, ADP, etc.). The remaining 31 districts use SunPac hosted on AS/400 IBM iSeries LPARs (i.e., virtual machines) at SAS. Wake County Schools currently uses a highly customized on-premise legacy version of Oracle and Charlotte-Mecklenburg Schools uses a legacy Lawson system. Serenic (owners of SunPac) recently purchased WenGAGE, which is the Oklahoma Statewide K-12 cloud-based ERP system. Serenic rebranded WenGAGE to SylogistED and is refining it through an Agile process to make it a multi-state product including supporting North Carolina districts. SylogistED is being piloted in Durham County Schools. Durham County Schools went live on ERP in July 2023 and plans to go-live on HR/Payroll in summer 2024 (though the current payroll issues in Durham are policy matters unrelated to this migration). The six LINQ Cloud ERP districts are all self-funded as is the SylogistED pilot in

Durham. Critical to note, is that SylogistED (formerly Serenic) announced to their 31 remaining SunPac customers on November 10, 2023, that all 31 had to move to SylogistED by July 1, 2026 (or to another ERP provider). If some of these districts choose Oracle or Tyler MUNIS funds will be needed in the short session to cover the MOUs. Some of these districts may choose LINQ Cloud ERP implementations or move to SylogistED.

The level of complexity associated with upgrading legacy, and often customized, on-premise K-12 HR and Financial systems to modern cloud-based ERP systems while maintaining continuity of operations has been significant, and has been underestimated by the Vendors, DPI, and the PSUs during the project. There have been numerous lessons learned by all parties that will help inform future migrations. DPI is now ensuring that PSUs have a much better understanding of the time availability necessary for key roles, level of effort, level of complexity, and the total cost of ownership involved in a migration to a new ERP system in the future. Backfilling key roles for the work they do in the legacy system is a critical component of a successful implementation and differs depending on the solution chosen, but key roles may need to spend 50% of their time during the implementation phase focusing training on the new application, identifying new workflows and processes, testing scenarios, and change management.

After Ransomware attacks in several PSUs that impacted financial functions, the General Assembly included a provision in S.L. 2021-180, Section 7.79, to require migration to a cloud-based ERP system for all PSUs and Charter Schools. S.L. 2022-74 Section 7.1.(a) revised Section 7.79 to articulate the requirement for PSUs to store backup copy of their HR and financial data that meets the following criteria by June 30, 2023:
- Immutable (unable to be deleted)
- Recent enough to allow for recovery from a ransomware attack
- Off-site

All but a handful of charters meet this requirement as of January 1, 2024. It also requires PSUs to move to cloud-based HR and Financial systems, providing a mechanism for NCDPI to establish a grant program for PSUs choosing to select solutions other than Tyler MUNIS or Oracle Cloud ERP from an approved provider. NCDPI performed an analysis study of all LEA ERP systems currently in use in North Carolina late 2023.

The additional funding provided in the last biennium budget allowed new projects to start in Winston-Salem Forsyth using Tyler MUNIS and in Guilford and Charlotte-Mecklenburg using Oracle Cloud ERP. The first MOU since the program pause was issued to Guilford County Schools in February 2023 covering a portion of the one-time implementation and one year of Software as a Service (SaaS)/Managed Services fees for IBM Consulting, Inc. to implement Oracle Cloud ERP. The Guilford MOU includes a repayment requirement of up to 100% should the district fail to complete their implementation within 3.5 years.

The MOU that has been issued between Guilford County Schools and NCDPI has been updated based on lessons learned during pilots to delineate expectations more clearly for both

the Agency and the PSUs, and to ensure that funds are best utilized to ensure successful implementations. All new MOUs will include a clause requiring return of funds if the PSU terminates their project prior to Go-Live. New MOUs also require the PSU to provide a plan to ensure internal resources are available to allow adequate time to implement ERP. Based on our projections for the remaining (approximately 105) districts, NCDPI expects at least $65 million in additional funding from the General Assembly will be necessary to complete implementation in all remaining districts.

The second MOU following the program pause was issued to Winston-Salem Forsyth County Schools in May 2023 to cover a portion of the implementation costs for Tyler MUNIS. A new MOU is anticipated to be issued to Charlotte-Mecklenburg Schools in March 2024 to provide partial funding to complete their Oracle Cloud ERP implementation using AST integrator as the vendor.

PSU FINANCIAL AND HR SYSTEMS FIT-GAP ANALYSIS

The decision on which ERP solution to select varies greatly from PSU to PSU based on their specific needs. For the largest districts, they need an Enterprise-level ERP system such as Oracle Cloud ERP. Oracle has the most power and flexibility of the ERP systems in use in the state, bringing a level of complexity that is required for a large district to operate but that would be overwhelming and untenable for most small and mid-sized districts. Conversely, the products that are a best-fit for the smallest PSUs are not nearly configurable enough for the largest PSUs to support their more complex operations.

In Fall 2023, NCDPI engaged with the four largest North Carolina district finance and HR/Payroll vendors to perform a Fit-Gap Analysis of their cloud-based ERP software applications to develop a tool to support PSUs in selecting an ERP vendor. Each vendor assisted with the completion of a 1700 plus row spreadsheet, as well as participated in interviews and demonstrations. The LEA ERP Fit-Gap Study Report, consisting of 208 pages, is now available to PSU Finance and HR personnel via the SBSM Projects SharePoint.

The fit-gap analysis provides a comprehensive source of information for public school units and other stakeholders to make the best decision based on their specific needs. This will include estimates of the total cost of ownership of each solution, the staffing and resources required to migrate, and the resources and timelines required of any migrations.

In addition to helping PSUs evaluate the technical capabilities of each platform, this tool will help districts in determining if they have the resources to migrate to the ERP platform of their choice. Many ERP implementations fail and the most common reasons for this failure are (1) not being prepared for the size and scope of the project, (2) not having appropriate project management capacity internally, (3) not augmenting staff or making critical resources available for a migration of this complexity.

PSU must insure their best functional leads are available for the project and relieve them of some of their operational burdens. Leading industry experts have said that projects with less than 50% commitment of these resources experience a high degree of failure. Some corporate advisory firms (e.g. Gartner) have indicated key district resource in Finance and HR/Payroll need to dedicate up to 80% of their time to the implementation during key phases to be successful. NCDPI recommends backfilling these key positions for at least 50% of the time.

PSU ENTERPRISE RESOURCE PLANNING (ERP) ROLLOUT STATUS

Oracle Fusion Cloud ERP Rollout Status as of February 25, 2024

ORACLE FUSION CLOUD ERP IMPLEMENTATION SCHEDULES (PROJECTED GO LIVES)																
PSU	//	Imp. Phase	7/1/21	1/1/22	2/1/22	4/1/22	10/1/23	1/1/24	7/1/24	1/1/25	4/1/25	7/1/25	1/1/26	1/1/27	
Charlotte Mecklenberg VENDOR Selection in Process	Lawson	ERP - Finance										Go Live			
		HR/Payroll												Go Live	
Gaston (ERP Live 7/21) (HCM Payroll Live 1/22) CHERRYROAD TECHNOLOGIES	SunPac & HRMS	HCM-PR-ERP+CORE	ERP (LIVE)	HCM-PR (LIVE)											
		EXT. Functions		EXT. Fnctns (CANCELLED)											
Guilford IBM CONSULTING	SunPac & HRMS	ERP-Finance								GO-LIVE					
		HCM-Payroll													
Cumberland VENDOR RFP - TBD Restart - TBD	SunPac & HRMS	ERP - Finance												GO TBD	
		HR/Payroll													
	Key Notes: There is an ERP/HCM PR Go-Live blackout month of June to permit PSU / DPI Year End Financial Close and avoid key resource constraints.														

Tyler MUNIS Cloud ERP Rollout Status as of February 25, 2024

TYLER - MUNIS CLOUD ERP IMPLEMENTATION SCHEDULES (PROJECTED GO LIVES) Page 1																
PSU	Legacy System	Imp. Phase	8/1/21	10/1/21	2/1/22	1/1/23	4/1/23	1/1/24	3/1/24	1/1/25	4/1/25	7/1/25	9/1/25	1/1/26	
Swain (ERP LIVE 10/21) (HCM-PR LIVE 1/23) Child Nutrition 7/5	SunPac & HRMS	ERP		ERP (LIVE)											
		HCM-PR				HCM-PR (Live)									
Winston Salem - Forsyth County New MOU Signed Project to Restart Jan 1, 2024, No Est Go-Live Date	SunPac & HRMS	ERP										Go-Live TBD			
		HCM-PR												Go-Live TBD	
Union (ERP LIVE 8/21) HR - PYRL On-Hold No Tentative Sched go-live date	SunPac & HRMS	ERP	ERP (LIVE)												
		HCM-PR													
Key Notes: There is an ERP/HCM PR Go-Live blackout month of June to permit PSU / DPI Year End Financial Close and avoid key resource constraints.																

LINQ Cloud ERP Rollout Status as of February 25, 2024

LINQ CLOUD IMPLEMENTATION SCHEDULES (PROJECTED GO-LIVES) PAGE 1

PSU	Legacy System	Imp. Phase	11/1/23	1/1/24	2/1/24	3/1/24	4/1/24	5/1/24	7/1/24	9/1/24	10/1/24	12/1/25	1/1/26	4/1/26
Bladen Live on FIN/ERP Cloud, HCM-Pyrl TBD	LINQ & LINQ HR	FIN	ERP Live											
		HCM-PR							GO-LIVE					
Craven (Go-Live - TBD)	SunPac & HRMS	FIN												
		HCM-PR												
Cherokee Requested Go-Live Change to 7/1/2024 (by Client)	LINQ V6	FIN												
	LINQ V6	HCM-PR							GO-LIVE					
Hertford County Schools	SunPac	FIN												
	HRMS	HCM-PR				GO-LIVE								
Currituck County Schools	SunPac	FIN												
	HRMS	HCM-PR				GO-LIVE								
Catawba County Schools	LINQ V6	FIN												
	LINQ V6	HCM-PR					GO-LIVE							

Key Notes: There is an ERP/HCM PR Go-Live blackout month of June to permit PSU / DPI Year End Financial Close and avoid key resource constraints.

LINQ CLOUD IMPLEMENTATION SCHEDULES (PROJECTED GO-LIVES) PAGE 2

PSU	Legacy System	Imp. Phase	1/1/24	2/1/24	3/1/24	4/1/24	5/1/24	7/1/24	9/1/24	10/1/24	12/1/24	1/1/25	4/1/25	7/1/25
Chatham County Schools	LINQ V6	FIN				GO-LIVE								
	Frontline	HCM-PR												
Edenton-Chowan City Schools	SunPac	FIN					GO-LIVE							
	HRMS	HCM-PR												
Welden City Schools	SunPac	FIN												
	HRMS	HCM-PR						GO-LIVE						
Washington County Schools	LINQ V6	FIN												
	LINQ V6	HCM-PR						GO-LIVE						
Cherokee County Schools	FIN	FIN												
	HCM-PR	HCM-PR						GO-LIVE						
Anson County Schools	FIN	FIN												
	HCM-PR	HCM-PR							GO-LIVE					
Carteret County Schools	SunPac & HRMS	FIN												
		HCM-PR								GO-LIVE				
Elizabeth City - Pasquotank Public Schools	LINQ & LINQ HR	FIN												
		HCM-PR								GO-LIVE				
Wilkes County Schools	SunPac & HRMS	FIN -LIVE										GO-LIVE		
		HCM-PR												
Elkin City Schools TBD	LINQ ERP & LINQ HR	FIN -LIVE												
		HCM-PR												

SylogistED Cloud ERP Rollout Status as of February 1, 2024

SylogistEd CLOUD ERP

PSU	Legacy System	Imp. Phase	10/1/20	7/1/21	8/1/21	3/1/23	4/1/23	7/1/23	12/1/23	1/1/24	2/1/24	3/1/24	5/1/24	7/1/24
Durham	SunPac & HRMS	FIN						LIVE						
HR/PYRL Go-Live TBD		HCM-PR												Go-Live

Note: There is an ERP/HCM PR Go-Live blackout month of June to permit PSU / DPI Year End Financial Close and avoid key resource constraints.

LICENSURE SYSTEM UPDATE

An RFP for a new Licensure System was released in July 2021. The RFP was terminated in late 2022 with intent to rebid in 2024, with the goal of incorporating recommendations advanced by the State Board of Education and the PEPSC commission. It is anticipated that implementation work would begin in 2025, assuming funding is available to cover the full cost of implementation and annual O&M through the initial term of the contract as required by

OSBM to approve of the initial contract. A go-live in 2026/2027 is expected. We expect that any new licensure system will result in a significant subscription price increase for the state – additional appropriations and a possible increase in licensure fees will be required.

OPERATIONAL DATA STORE FRAMEWORK

An updated DPI Statewide Data Integration and Consolidated Reporting plan is being implemented focusing on increasing interoperability utilizing modern standards such as Ed-Fi and OneRoster for data and application integration and CEDS for federal and state reporting. The plan calls for providing PSUs with near real time access to their operational data as well as reports and dashboards via a modern reporting data warehouse. DPI applied for a 2023 State Longitudinal Data System (SLDS) grant in June 2023 and was awarded $3.75M from the USED IES in late September 2023. This is a four-year grant award that helps fund a $7.5 million effort to modernize the K-13 NC SchoolWorks component of the NCLDS and the systems that feed NC SchoolsWorks (e.g. SIS ODS, State/SAS ODS, CEDARS Reporting Data Warehouse, etc.).

NEW WORK

AGENCY FINANCIAL MSA MAINFRAME REGION F SYSTEMS MODERNIZATION

NCDPI went live on the new North Carolina Financial System (NCFS), which replaced the North Carolina Accounting System (NCAS), on October 5-10, 2023, using Oracle Cloud ERP. The work to integrate DPI workflows and downstream systems with NCFS is ongoing.

Currently, NCDPI runs a separate copy of NCAS, where accounting ledgers from each PSU are recreated monthly, aggregated, and then transferred to NCAS at the Office of the State Controller. This mainframe system is known as Region F also provides the Cash Management/Cash Request system for PSUs and non-Units. The current data exchange process from PSUs to NCDPI using Region F is old and cumbersome, with limited analytics capability and limited flexibility. NCDPI IT Services and School Business Division are in the first of two or three phases of designing and implement a modern cloud-based solution. The goals of this project are to:
- Enable a modern environment for NCDPI to adopt a standards-based approach to receive data from PSUs
- Receive data in near real-time to allow more accurate reporting and decision-making, to reduce the reporting burden on PSUs
- Enable DPI ensure data quality from the PSU
- Enable a cleaner process to aggregate PSU budget data for transfer to OSC.
- Enable Grant-Year Accounting using the newly implemented 34-digit PSU Chart of Accounts (CoA) effective July 2024.

This is a high-risk project, as it involves all cash requests from PSUs and non-Units, a new PSU chart of accounts, and accounting for Federal grants that includes reporting of the grant year. DIT is committed to supporting the mainframe, but has a transition plan to a new Cloud

provider that will require significant upfit from DPI staff. DIT is working with DPI to support this work.

Simultaneously, NCDPI successfully worked with OSC/DIT/Deloitte to complete migration from statewide NCAS to NCFS, which included the migration of our existing 14 interfaces. System Integration Testing on these new interfaces began in January 2023 with User Acceptance Testing in April 2023. All NCDPI NCAS interfaces were submitted to OSC for testing by February 15, 2023. Once NCDPI has full access to the new Oracle Fusion Cloud ERP report builder query tool additional modernization phases will take place including implementation of appropriate modern ERP modules based on transforming business processes related to NCFS and PSU data and cash management.

### LEA AS400 LPAR HOSTING MIGRATION

The 112 district LPARs currently hosted at SAS Institute will be migrated to DIT's new Mainframe as a Service (MFaaS) vendor Ensono, Inc. between February and June 28, 2024. SAS provided initial support to DPI as an interim solution but wishes to exit this work as it has taken longer than anticipated to shut down the AS/400s and it is a one-off engagement that SAS no longer wishes to maintain. The amendment to the master NCDIT MFaaS contract with Ensono covers five years, a three-year initial term plus two optional one-year extensions. NCDPI plans to collect costs associated with the contract (e.g. $7,500 annually for HRMS or SunPac archive districts/$15,000 annually for HRMS and SunPac production districts) from school districts and will no longer pay for AS/400 hosting for production or archival past December 2028 meaning if a district needs to continue subscribing to the MFaaS Services past December 2028 they will need to negotiate directly with Ensono for the service. Over the course of the contract NCDPI intends to work with NCDIT and Ensono to transition historical data to a secure cloud-hosted non-AS400 backend with a role-based access web-portal for historical data.

STUDENT INFORMATION SYSTEM

The current Student Information System (SIS) solution was implemented in 2012, after the previous product experienced an acquisition and end-of-life. The Student Information System was last competitively bid in 1997, when SIMS was replaced with NCWise. Additionally, the current SIS was heavily customized at deployment creating a "version drift" where North Carolina's instance of the system is out of date and has significant differences with the vendor's core product. This creates significant technical complexity for maintenance and support on the part of NCDPI and the Vendor. It creates additional complication for PSUs because they depend on documentation and community support to get data from the SIS, which does not exist for North Carolina's customizations. In addition, vendors who can integrate with the SIS in other places often cannot do so in North Carolina without considerable time or expense. As a result, the move to a modern system was legislated in SL2017-57. An updated Student Information System, while taking time to learn and revise business processes to support, should bring both efficiency and a new set of modern and powerful tools to the building, classroom, and home to help accelerate personalized learning.

We know from the past two SIS changes over the last 20 years that it is imperative that multiple communication channels are utilized so that all stakeholders are aware of this coming change. The SIS is the most visible information system to students and their families, so ensuring that communication about this change happens early, often, and widely is critical to the success of the program and for supporting families and PSU faculty and staff through the transition. A new Website (http://ncsis.gov) will provide information and schedules for 119 Wave 1 PSUs as well as address questions and answers (Q & A) for the public. Regional Support Implementation leads will assist the Wave 1 (starting July 1, 2024) and Wave 2 (July 1, 2025) PSUs throughout the transition process.

MODERNIZATION TIMELINE
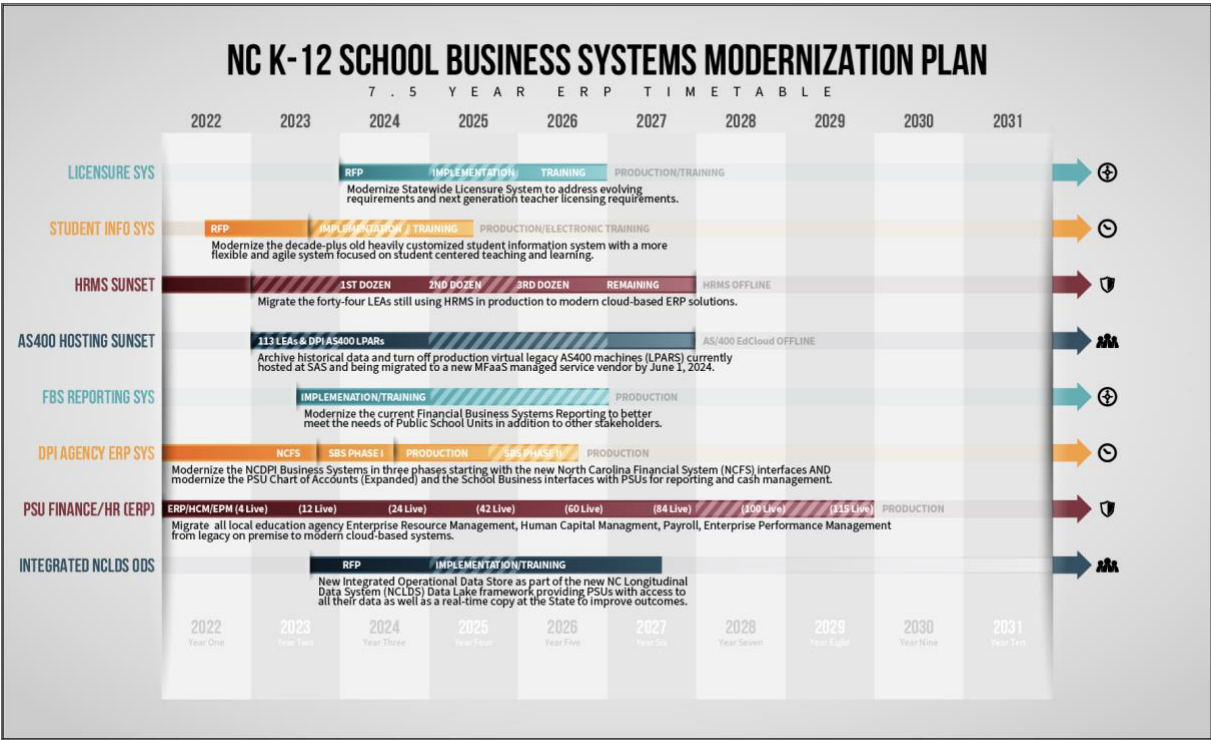
BUDGET

Due to the program pause and reset NCDPI projects the current funding from S.L. 2021-180 to be sufficient for the next biennium to cover SIS, Agency Finance Modernization, Licensure, ODS, Financial Transparency Dashboard, AS/400 hosting migration, but NOT projected PSU ERP implementations or Identity and Access Management. NCDPI is projecting, a need for, at minimum, an additional $65M to continue PSU ERP modernization. For example, the current funding available to SBSM is not projected to be sufficient to provide funding for Wake County Schools ERP modernization project implementation which is projected to cost at least $25M and run from 2025-2028.

PRC 153 SBSM MOU Obligation of Funding as Of February 1, 2024:

Date of signed MOU	Updated signed MOU	Vendor	LEA#	LEA_Name	MOU Total Allotment	FY20 Expenditures	FY21 Expenditures	FY22 Expenditures	FY23 Expenditures	FY20 & FY21 & FY22 & FY23 Total Expenditures	FY24 Expenditures	Total Remaining on Contract
9/26/19	11/10/20	Cherry Road	600	Char.-Mecklenburg	$ 12,024,925	$ 4,887,214.07	$ 3,097,758.21	$ 3,707,403.66	$ 332,549.00	$ 12,024,924.94	$ -	$ 0.06
3/20/20	5/7/20	CherryRoad	360	Gaston	$ 4,625,002	$ 788,427.25	$ 1,399,858.46	$ 1,926,844.98	$ 329,977.00	$ 4,445,107.69	$ -	$ 179,894.31
8/8/19	5/7/20	Tyler	650	New Hanover	$ 1,364,380	$ 391,756.29	$ 201,223.00	$ 248,381.68	$ 383,126.00	$ 1,224,486.97	$ -	$ 139,893.03
8/13/19	5/7/20	Tyler	870	Swain	$ 199,316	$ -	$ 46,816.00	$ 1,734.14	$ 75,000.00	$ 123,550.14	$ -	$ 75,765.86
3/10/20	5/7/20	Tyler	900	Union	$ 2,309,204	$ 441,388.11	$ 344,611.95	$ 10,982.10	$ -	$ 796,982.16	$ -	$ 1,512,221.84
5/2/23		Tyler	340	Forsyth	$ 2,292,038	$ -	$ -	$ -	$ -	$ -	$ 202,440.57	$ 2,089,597.43
3/28/23		IBM Consult	410	Guilford	$ 8,691,835	$ -	$ -	$ -	$ 520,000.20	$ 520,000.20	$ 1,236,410.52	$ 6,935,424.28
YTD				TOTAL	$ 31,506,700	$ 6,508,785.72	$ 5,090,267.62	$ 5,895,346.56	$ 1,640,652.20	$ 19,135,052.10	$ 1,438,851.09	$ 10,932,796.81

Charlotte-Mecklenburg's March 2024 MOU adds $5,000,000
to the table above over three fiscal years.

Original 5 Year Preliminary Budget Planning Table from 2019-2020 (Pre-COVID):

	19-20 All Pilots	20-21	21-22	22-23	23-24	24-25	Total
Program Administration	$2,096,598	$1,872,000	$1,872,000	$1,872,000	$1,872,000	$1,457,000	$11,041,598
LEA Modernization	$19,804,411	$18,821,756	$19,791,431	$18,791,431	$17,146,756	$13,857,405	$108,213,190
Agency Modernization	$503,078	$712,921	$18,697,008	$16,697,008	$0	$0	$36,610,015
Stabilization	$1,759,050	$2,441,000	$1,000,000	$750,000	$500,000	$250,000	$6,700,050
Data Transparency	$2,649,700	$1,050,000	$1,050,000	$1,050,000	$450,000	$450,000	$6,699,700
Total	$26,812,837	$24,897,677	$42,410,439	$39,160,439	$19,968,756	$16,014,405	$169,264,553

Based on the current project state, we expect the project to continue longer than originally expected and take a number of years. To date, the program has expended approximately $25M towards LEA ERP Modernization with another $17.5M committed via current MOUs for a total of $42.5 towards this implementation. Another $30M has been expended on AS400 migration and hosting, migrating from TeacherMatch to PowerSchool Applicant Tracking/Onboarding, Grants Management, Integrations, School Report Card/Financial Transparency (GDAC), and Program Management. Out of the remaining approximately $60M only a very small amount of funds is available for LEA ERP Modernization (i.e. less than $5M) due to costs of SIS Implementation, licensure, Agency School Business Modernization, Consolidated Data and Reporting Modernization, Identity and Access Management Modernization, and another AS400 migration to MFaaS.

FUTURE NEEDS

The implementation of the Modernization Initiative remains a critical need for NCDPI and the PSUs. NCDPI's systems are in need of modernizing because of the ongoing migration to NCFS and the drive to improve data usage and transparency. NCDPI continues to maintain HRMS, a 40-year-old system Supporting HR functions in 44 LEAs along with the Division of Child Development and Early Education at the Department of Health Human Services. Most LEAs continue to rely on decades-old systems for basic financial and HR functionality and the migration to a modern cloud-based ERP system can be incredibly challenging to already lean Finance and HR departments. The roadmap for SBSM is to deprecate all HRMS systems by supporting schools in transitioning to a SaaS Human Capital Management System that exceeds the existing HRMS functions and integrates with a financial ERP.

Due to increasing costs of SaaS and ongoing new procurements for updated software, the State will need to consider sustainable funding models to support operations and maintenance costs at both the Agency and PSU levels, including the statewide applicant tracking system, a new agency financial system, a new licensure system, a new consolidated data and reporting framework, and an updated student information system. The current UERS budget is limited in its ability to sustain operations and maintenance of these systems, as costs for the new systems are all expected to be significantly higher than the current systems, and vendors are now typically increasing prices 3-5% per year or more due to inflation. Additional recurring funding will be necessary to maintain modern, secure, flexible systems and interfaces that improve efficiency and transparency for data driven decisions and ensure all State and Federal reporting requirements continue to be met accurately and timely.

NCDPI projects the annual recurring budget for UERS will need to more than double by 2024-25 to approximately $27 million annually to maintain the systems currently funded by the Department. This is in addition to the approximately $65 million in one-time funding which will be required to complete PSU ERP migrations to cloud-based systems and modernize Identity and Access Management.

We note that future technical corrections or amendments to statutes (e.g., G.S. 115C) may be required to align with modern cloud-based ERP and SIS systems by removing the need for specific customizations, configurations, or reports. We will continue to communicate these items through our legislative team as they arise.