NCSUITS
STATE UNEMPLOYMENT INSURANCE TAX SYSTEM

NC DEPARTMENT *of* **COMMERCE**
EMPLOYMENT SECURITY

Modernizing Unemployment Tax Administration and Collection for North Carolina's Employers

State Date: Sept. 1, 2022
End Date: Nov. 13, 2023
NASCIO Award Category:
Digital Services – Government to Business

Submitting State:
State of North Carolina,
Department of Commerce |
Division of Employment Security

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Executive Summary

The North Carolina Department of Commerce Division of Employment Security (DES) is responsible for the administration of the unemployment insurance (UI) program in the State of North Carolina. As part of its mission, DES collects quarterly state unemployment taxes and wage records from employers. Until November 2023, DES operated three outdated systems for tax administration, posing challenges in maintenance and updates.

To address these issues, DES secured funding from the U.S. Department of Labor (USDOL) to modernize its tax administration and collection systems. The key goals include improving UI Tax program quality, accountability, and performance integrity; providing self-service capabilities to employers and agents; enhancing work item management; using business rules engine to quickly implement legislative changes; improving wage and payment processing capabilities; and transitioning to paperless processes.

The project achieved completion within an impressive timeframe of approximately 14 months, starting from the contract award in September 2022 to the go-live milestone in November 2023. This rapid pace of implementation was unprecedented, given the complexity of the endeavor and the extensive collaboration required with multiple stakeholders. Prior to and following implementation, an educational campaign effectively informed stakeholders, facilitated by resources such as guidance documents, instructional videos, webinars, and social media messages.

The launch of the North Carolina State Unemployment Insurance Tax System (NCSUITS) represents a significant milestone in North Carolina's UI tax system modernization efforts, benefiting nearly 300,000 employers and agents statewide. This initiative is closely aligned with several of the 2024 NASCIO top 10 priorities, including "Digital Government/Digital Services," "Legacy Modernization," and "Cloud Services."

Idea

The North Carolina Division of Employment Security (DES) plays a crucial role in the state's economic landscape by collecting UI taxes from employers and distributing UI benefits to eligible workers. For years, both employers and DES staff navigated through three separate systems for UI tax collection and administration. This included an outdated 30-year-old mainframe application, which presented challenges in terms of support and maintenance, scalability, accessibility, and functionality.

Recognizing the nationwide need for technological upgrades in unemployment programs, the USDOL offered funding to states for UI system improvements. North Carolina seized this opportunity to modernize its UI tax systems into an integrated, cloud-based platform by leveraging the system used by its consortium partner state, South Carolina. DES conducted feasibility analyses and awarded Sagitec the contract to develop and implement the new tax administration system.
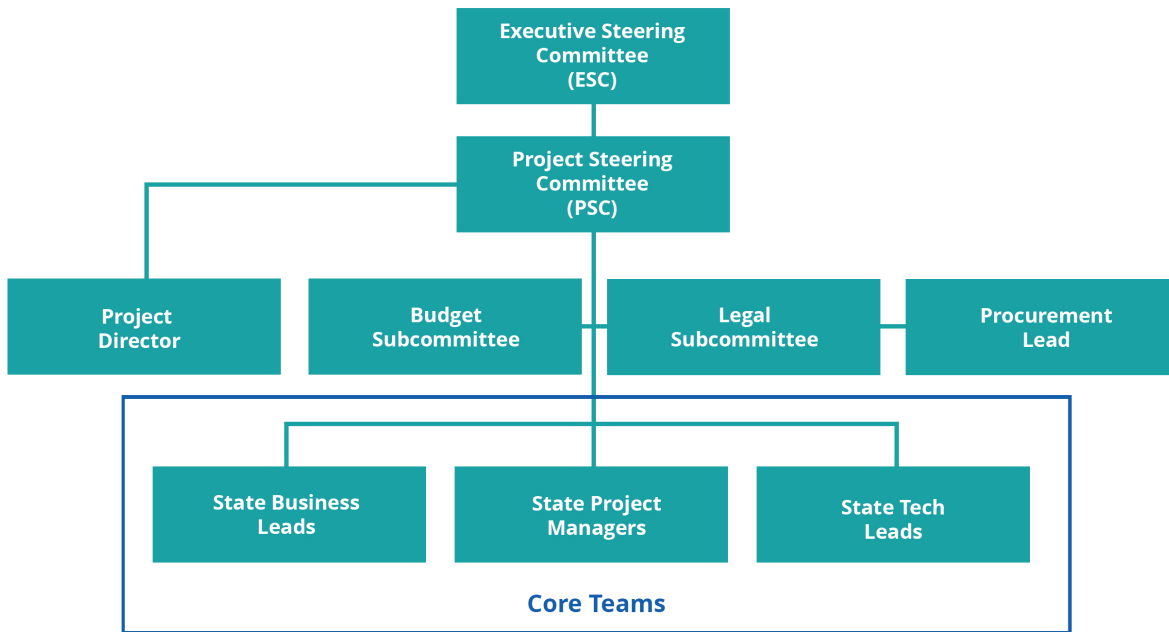
The objective was to create a user-friendly system with convenient self-service options and real-time updates – all within a secure data environment and platform resilient against security threats and vulnerabilities. The new system aimed to retain online filing features from the legacy system while incorporating new functionalities requested by employers and agents to streamline UI tax filing and payment processes.

New features of NCSUITS include the ability to report out-of-state wages; provide multiple contacts for easier DES communications; schedule ACH debits; authorize agent services; upload documents; and submit supplement and amended reports.
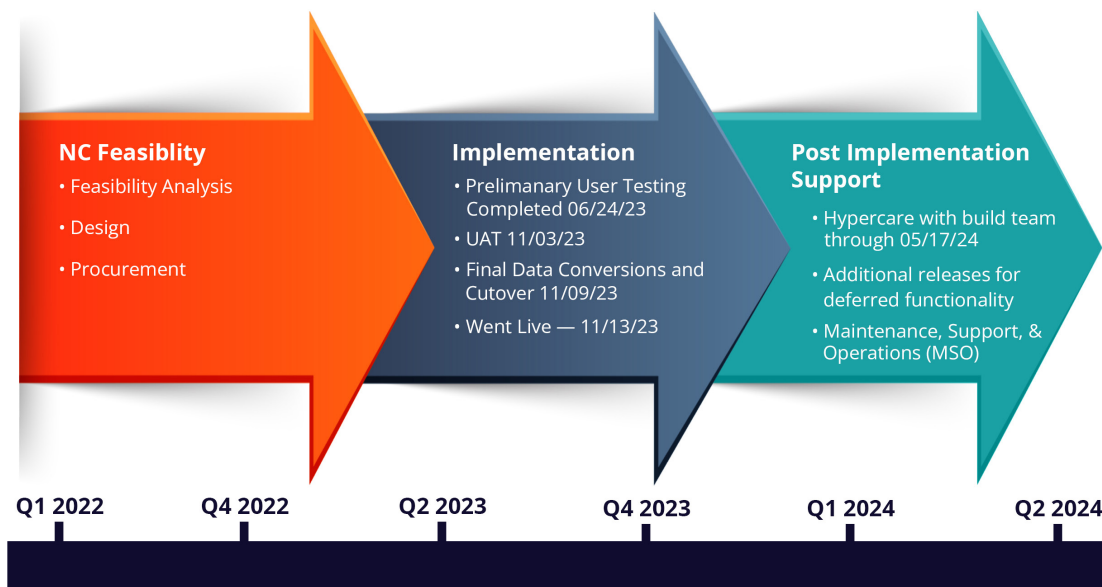
Implementation

Following the successful feasibility study in Q3 2022, DES awarded the contract to Sagitec in September 2022 to implement a modern tax system. The project implementation was structured into nine logical iterative functional groups, with clearly defined roles and responsibilities distributed among the various involved teams.

Understanding the pivotal role of project governance, DES established an Executive Steering Committee to oversee project implementation, ensuring effective oversight and timely decision-making. Furthermore, multiple committees and teams were established to tackle critical system areas, consisting of diverse subcommittees and stakeholder groups.

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                    Executive Steering
                        Committee
                          (ESC)
                            |
                     Project Steering
                        Committee
                          (PSC)
     |_____|_____|_____|
  Project         Budget            Legal          Procurement
  Director      Subcommittee     Subcommittee         Lead

  ┌──────────────────────────────────────────────────────┐
  │    State Business     State Project      State Tech   │
  │       Leads             Managers           Leads      │
  │                      Core Teams                        │
  └──────────────────────────────────────────────────────┘
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On November 13, 2023, the new North Carolina State Unemployment Insurance Tax System (NCSUITS) went live following extensive user testing and data conversions.

NC Feasiblity
- Feasibility Analysis
- Design
- Procurement

Implementation
- Prelimanary User Testing Completed 06/24/23
- UAT 11/03/23
- Final Data Conversions and Cutover 11/09/23
- Went Live — 11/13/23

Post Implementation Support
- Hypercare with build team through 05/17/24
- Additional releases for deferred functionality
- Maintenance, Support, & Operations (MSO)

| Q1 2022 | Q4 2022 | Q2 2023 | Q4 2023 | Q1 2024 | Q2 2024 |

To ensure a smooth transition to the modernized system, an extensive education/training campaign was conducted before and after implementation. Its goal was to inform employers, agents, and DES staff about the new system's capabilities. Comprehensive training materials and sessions were created to train DES's internal staff through a Train-the-Trainer process over a span of four weeks. A practice environment (sandbox) was also established to allow staff to receive hands-on experience as functionalities were modified. Additionally, a unique logo was created for NCSUITS to enhance brand recognition.

Various resources, such as guidance documents, instructional videos, newsletter articles, social media messages, and tips, were distributed across digital and print platforms, totaling at least five channels. This comprehensive communication and training strategy, along with a detailed application framework, facilitated the system's introduction. DES hosted interactive webinar sessions, with more than 3,700 employers and users participating. The initiative ensured that North Carolina's employers and agents were not only knowledgeable about NCSUITS's capabilities but also equipped with the necessary resources to navigate through the new system effectively.

The implementation phase comprised of comprehensive testing, encompassing around 3,500 functional test cases. A crucial aspect of this process was the conversion of data from the legacy platform to the modernized system. To ensure accuracy, a robust data conversion plan was devised, meticulously mapping data, applying transformations, and validating routines. Multiple iterative mock conversion runs were conducted until predetermined accuracy thresholds were met.

Another critical component involved the development of interfaces with state, federal, and third-party entities. Approximately 90 interfaces were constructed, with rigorous testing conducted in close collaboration with our partners throughout the project phase.
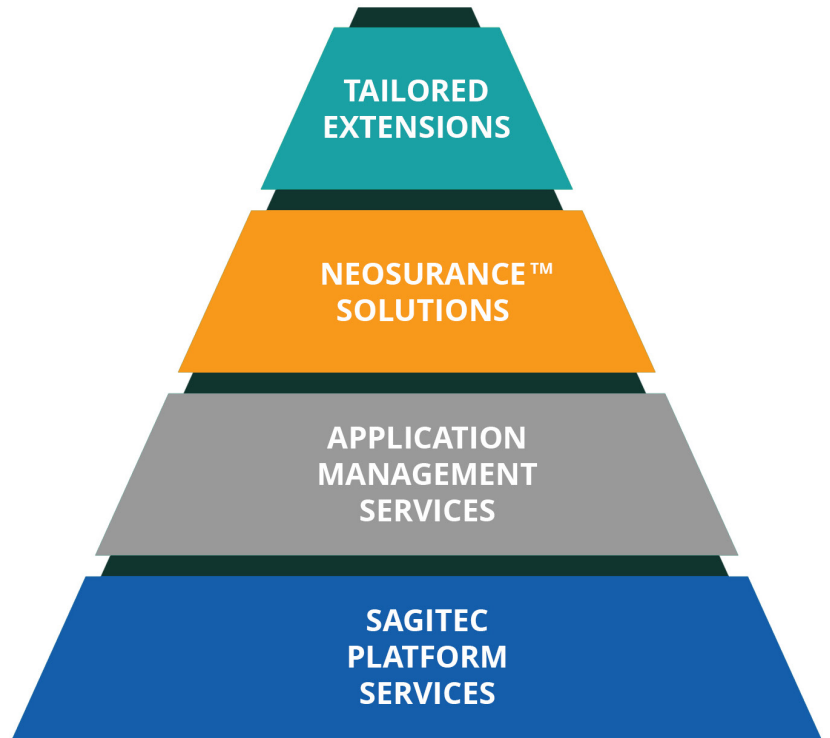
NCSUITS Architecture Overview:

The Sagitec UI Tax solution employs a multi-layered architecture that is object-oriented, database-agnostic, optimized for cloud hosting, and powered by Microsoft .NET technology. The Sagitec Framework serves as the foundational layer of the solution that consists of both "Sagitec Platform Services" and "Application Management Services" in the below diagram.

The Neosurance solution layer is the base UI product built with the standard capabilities for a UI agency to serve their employers and agents. Neosurance is designed to be adaptable, as it can be personalized to align with diverse UI programs and business workflows without the need for intricate software programming. The "Tailored Extensions" are the custom development/configurations for DES needs.

The solution's robust technology framework model ensures that it remains at the forefront of technological advancements, effectively sidestepping the pitfalls of technical obsolescence. Leveraging XML-based rapid development methodologies, Sagitec was able to streamline the design and deployment of screens and correspondences. Furthermore, using a rules engine allows the system to configure intricate business rules with precision and flexibility. By harnessing the power of this engine, the solution facilitates the optimization of operational processes and enhanced decision-making capabilities and ensures compliance with regulatory standards.

Left diagram — Application architecture layers:

Experience Rating and Benefit Charges	Employer Registration	Wage Processing and Tax Reports
Employer Account Maintenance	Monetary Determinations	Program Integrity and Compliance
Field Audit	Claims	General Ledger
Adjudication	Appeals	Collections
Benefit Payments	Alerts and Messages	Reporting
Employer and 3rd Party Administrator Self-Service		3rd Party Aministrator Account Maintenance
Claimant Self-Service		
Report/Analytic Services	Content/MS Office Services	SharePoint Services
Imaging Services	Administrator Services	File Processing Services
Audit Services	Directory Services	Security Services
Testing Services	Workflow Services	Batch Services
Correspondence Engine	Meta Data Cache Engine	Business Services Engine
Persistence Engine	Presentation Engine	Data Cache Engine
Rules Engine	Workflow Engine	Batch Engine
.NET Foundation Services		

Right diagram — Pyramid (top to bottom):

- TAILORED EXTENSIONS
- NEOSURANCE™ SOLUTIONS
- APPLICATION MANAGEMENT SERVICES
- SAGITEC PLATFORM SERVICES

NCSUITS prioritizes scalable hosting and security measures to safeguard sensitive data and ensure compliance. Authentication is fortified through Optimal IDM integration, bolstered by comprehensive role-based authorization with full audit capabilities. Compliance with Publication 1075 for safeguarding sensitive data and adherence to Soc 2 Type 2 security controls framework are rigorously maintained, complemented by a FedRamp-certified hosting environment on Microsoft Azure GovCloud. The DES Security team also oversees security controls, processes, and measures to uphold system integrity and fortify defenses against potential threats.

The extensive collaboration between DES and Sagitec culminated in the rollout of NCSUITS on November 13, 2023, marking the dawn of a new technological era aimed at enhancing the delivery of services and support for North Carolina's UI tax system, with minimal impacts to existing customers.

Impact

With the successful implementation of NCSUITS, DES has achieved its intended goal of modernizing its UI systems, effectively serving both employers and claimants. This journey began with the UI Benefits System in September 2018 and concluded with the completion of the UI Tax system in November 2023.

The NCSUITS Tax Modernization project streamlined three separate systems into a unified, modernized system, effectively replacing a mainframe application and its accompanying subsystems, which had been in use for more than 30 years. The resulting solution is more accessible and customer friendly as well as robust, scalable, secure, and resilient. It has enhanced efficiency through automation and process reengineering. This marks a substantial advancement in better serving North Carolina's nearly 300,000 employers.

Some of the key functionalities in the new system include:

- Employer and Agent registration and maintenance.
- Wage submission and batch processing.
- Collection of important new data elements to support enhanced economic data analysis.
- Payment submissions and refunds.
- Tax assessments and dues.
- Collections (Lien, Levy, Payment Plan, Bankruptcy).
- Joint account maintenance and tax rating.
- Field audit and COMPAS integrations.
- Acquisitions and experience transfer.
- Federal reporting, tax performance system and protest.

The system was designed, tested, and implemented successfully in a record time of a little over a year with an added focus on customer readiness through proactive outreach, videos, and webinars. The implementation process adhered to a project management approach with an oversight, detailed project plan, budgeting, and weekly and monthly review sessions. Some of the key metrics include:

- Testing - 3,489 total functional test cases; 90 state, federal, and third-party interfaces.
- Training - 4 weeks of Train-the-Trainer sessions conducted on the system; 18,000 external users received webinar base training; 21 Videos developed with more than 9,500 views.
- Customer Readiness – more than 3,000 interactive employers and agents attended webinars sessions.
- Post Go-Live Daily Tracking Counts as of May 2, 2024.
  o Total users – 99,464
  o Total inquiries – 10,997
  o Total employer registrations – 20,975
  o Total wage submissions - 637, 559
  o Total number of payments and the collective amount – 279,320 for $241,199,398

The implementation of the NCSUITS system has significantly modernized numerous paper-based business processes, enhancing customer experience and streamlining cycle times. Key improvements include:

- Electronic submission of Waiver Requests, Refund Requests, POA forms, and Account Inquiries, replacing the previous paper-only methods.
- Electronic request and setup of Time Payment Plans, eliminating the need to contact Tax Auditors directly.
- Ability for employers to electronically upload amendment wage report files, expanding beyond the previous limitation of processing only original wage reports via file upload.
- Online access for employers to view copies of correspondences such as Tax Rate Notices and Billing documents, eliminating the necessity of contacting DES for paper copies.
- Empowered employers to grant or rescind agent authorizations independently, without requiring assistance from DES staff.

The below screens show a clear contrast of before and after view of the Experience Rating screen of an employer.


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CMD==>
XT157M1            CUMULATIVE EXPERIENCE RATING STATEMENT      DATE: 05/03/2024
        ACCOUNT NO:     -128 ,
TAX RATES FOR 2024 :   Q1:  0.740    Q2:  0.740    Q3:  0.740    Q4:  0.740
                                              PAYROLL              CREDITS
BEGINNING ACCOUNT BALANCE                                         19,722.97
TRUST FUND INTEREST                                                 192.69
PRIOR YEAR ADJUSTMENT                                               226.83
TRANSFERRED FROM PRED:    ERA BALANCE                                 0.00
     2ND PRECEEDING YEAR TAXABLE WAGES              0.00
     1ST PRECEEDING YEAR TAXABLE WAGES              0.00
           CURRENT YEAR TAXABLE WAGES              0.00
2ND PRECEEDING YEAR TAXABLE WAGES              499,781.11
1ST PRECEEDING YEAR TAXABLE WAGES              424,967.84
PAYROLL & TAX - 3Q                             141,810.26          1,531.55
PAYROLL & TAX - 4Q                             132,377.86          1,429.68
PAYROLL & TAX - 1Q                             143,102.29          1,259.30
PAYROLL & TAX - 2Q                             127,329.95          1,120.50
TAXES PAID UNTIMELY                                                   0.00
BENEFIT CHARGES                                                       0.00
ENDING ACCOUNT BALANCE                                            25,483.52
     PAYROLL FOR LAST 3 FISCAL YEARS           1,469,369.31   RATIO:   1.7
FINAL DATE FOR VOLUNTARY CONTR: 01/10/2024    DATE OF LAST REVISION:
MA +   a                                                          01/002
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Conclusion:

The implementation of the North Carolina State Unemployment Insurance Tax System (NCSUITS) represents a significant milestone in DES's journey to modernize its UI tax systems. By consolidating disparate systems into a unified, cloud-based platform, DES has achieved enhanced accessibility, security, and efficiency in UI tax administration. This achievement was made possible through meticulous planning, robust governance, and extensive education and training efforts, ensuring a smooth transition to the new system for employers, agents, and DES staff. NCSUITS not only addresses the immediate needs of DES but also sets a strong foundation for future enhancements and innovations in serving North Carolina's employers and workforce.