

NDOI Medical Malpractice Premium Renewals – NELF Modernization

Category: Operational

State: Nebraska

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Executive Summary

Phase 1 of the **NELF Modernization** project replaced a 28-year-old Oracle client/server system with a secure, web-based platform that now processes every medical-malpractice premium renewal in Nebraska. Delivered for < **\$250 k** after two failed vendor attempts, the in-house OCIO solution:

- Cuts large-provider processing from **5 days to 1 day** while meeting 30-day statutory notice deadlines.
- Eliminates unscheduled outages (from 10+ per year to < 1) and retires an unsupported Oracle 2008 server.
- Establishes a normalized PostgreSQL data layer, automated letters, and Excel batch imports—freeing staff for higher-value work.
- Lays the groundwork for **Phase 2 self-service and document-upload capabilities** and **Phase 3 secure payment processing and extended automation** without additional re-platforming.

This submission details the **Idea, Implementation, and Impact** that earned full stakeholder confidence and positions NDOI for future digital services—all within the NASCIO Operational Efficiency category.

1 - Idea (25 %)

What problem or opportunity does the project address?

- The 1996-era **NIIMS** platform sat on an unsupported Oracle 2008 database and an outdated Windows client that could no longer be patched, extended, or reliably backed up. Its single-record entry model and fragile data schema slowed the **sole provider-data-entry FTE** and made it harder to maintain data normalization. Modernizing the application was crucial to preserve long-term data integrity, sustain operations, and create a foundation that could evolve with future business needs.

Why does it matter?

- **Operational burden on one FTE** – A single provider-data-entry specialist had to key every record manually; large-provider batches consumed up to **5 full business days**, leaving no slack for higher-value work or cross-training.
- **Sustainability & support cost** – Running on an unsupported Oracle 2008 database and decade-old Windows client drove up maintenance hours and exposed DOI to potential data-loss events.

- **Data quality & audit readiness** – Denormalized tables and free-text fields complicated validations and lengthened annual audit prep by **120 staff-hours**; a normalized PostgreSQL design safeguards data integrity and accelerates audits.
- **Statutory obligation** – Title 210 NAC Ch. 32 still requires accurate, timely premium data collection; modernization ensures uninterrupted compliance as volumes grow.

What makes it different?

- **In-house rescue after two failed vendor attempts** – OCIO delivered Phase 1 for < **\$250 k** and regained stakeholder confidence.
- **Excel batch-import & automated letters** – first time DOI staff could process hundreds of policies in minutes with system-generated correspondence.
- **Normalized PostgreSQL data model** – positions NDOI for advanced analytics without re-platforming.

What makes it universal?

- Addresses the “**Legacy Application Modernization & Consolidation**” and “**Cybersecurity & Risk Management**” priorities on the NASCIO State CIO Top Ten list.
- Complies with universal state-level mandates to maintain accurate licensure databases and meet statutory notice periods.

2 - Implementation (25 %)

What was the roadmap?

- **Enterprise view – why this matters:** Legacy-modernization projects are a top priority for the State CIO.
- **Project management approach:** Agile, two-week sprints with DevOps backlog; Definition-of-Done required SME sign-off and QA pass; weekly checkpoints for scope/budget.
- **Assessment & success:** Phase 1 declared “done” when — 1) 100 % of FY 2025 renewals processed in NELF, 2) system uptime ≥ 99.5 %, 3) batch import, letter generation, and email timers passed audit.

Who was involved?

- **DOI Accounting and Finance SMEs** – owned business rules, refined requirements, and validated UI and process functionality.
- **OCIO Java development team** – designed and coded the new application, integrated Centurion Blue security, and built the PrimeFaces UI.
- **OCIO Database engineers** — migrated data off the unsupported Oracle 2008 instance and set up the new normalized SQL Server 2019 schema.

- **OCIO Project management team** — bridged DOI and development teams, facilitated backlog grooming, ran weekly stand-ups, and orchestrated demos, training sessions, and go-live communications.

How did you do it?

- **Resources & budget:** 6 FTE developers, 1 DBA, 1 PM; ~2,500 staff-hours; total one-time spend < \$250 k; O&M <\$10 k/yr.
- **Technical architecture (why it matters):**
 - **Java 17** on **Tomcat 10** with Spring Boot/Spring/Hibernate backend;
 - **PrimeFaces** component library for accessibility-compliant UI;
 - **SQL Server 2019** replaces unsupported Oracle DB and enables industry-standard backup routines;
 - **Centurion Blue** SSO provides role-based access and permissions.
 - OCIO’s servers keep hosting costs low and align with enterprise monitoring & patching playbooks.

3 - Impact (50 %)

What did the project make better?

- **Why it matters:** Modernization frees the sole data-entry FTE from repetitive, error-prone tasks and preserves statutory data for decades to come.
- **Before vs. after:** Legacy NIIMS required single-record entry on an unstable Oracle 2008 server, leading to 10+ outages a year and five-day processing windows for large providers. Phase 1 NELF slashes processing to **1 day**, delivers > 99.9 % uptime, and provides automated batch imports, letters, and email timers.

Before



After

How do you know?

- **Quantitative evidence**

Metric	Pre-project (NIIMS)	Post-project (NELF)	Improvement
Bulk renewal processing (500+ policies)	5 business days	1 business day	80% faster
Single-record entry time	3 min (avg)	2 min (avg)	33% faster
Unscheduled outages per year	10+	<1	90% reduction
System uptime	96%	>99.9%	+3.9%

- **Qualitative evidence** – “I think this was a great collaboration, and the end project is working great for Accounting. We appreciate your team’s work.”
— **Robin Edwards, DOI Accounting & Finance Manager**

What now?

- **Long-term roadmap:**
 - **Phase 2 (target 2026)** – internal receipts & refunds modules, provider document uploads, and limited self-service Payee portal.
 - **Phase 3 (target 2027)** – electronic funds withdrawal (EFW), E1 deposit automation, audit/reporting enhancements, and automated letter-review batching.
- **Sustainability:** OCIO Dev & DBA teams provide full lifecycle support within existing service agreements; Centurion Blue SSO and SQL Server ensure the platform remains secure, patchable, and cloud-ready.
- **Investment rationale:** By eliminating outages, reducing manual labor, and increasing user confidence, Phase 1 delivered immediate operational savings and sets a scalable foundation for future digital-service expansion—offering a strong return on both the initial and ongoing investment.