



State Tax Appeal Enterprise Case Management Transformation

State: Commonwealth of Pennsylvania
Agency: Pennsylvania Treasury Department
Award Category: Cross-Boundary Collaboration
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Executive Summary

The [Pennsylvania Treasury Department](#) (Treasury) is an independent agency led by an elected State Treasurer. The department processes about 30 million payments totaling \$130 billion annually, as well as invests and manages more than 200 funds on behalf of the Commonwealth, and acts as the state's bank by safeguarding and investing taxpayers' public funds.

Established in 1929, the [Pennsylvania Board of Finance and Revenue](#) (BF&R) is an independent adjudicatory body responsible for ensuring fair, timely, and impartial resolution of tax appeals across the Commonwealth. Chaired by the State Treasurer and supported by two Governor-appointed members, the board provides taxpayers with a critical second level of review for approximately 2,500 cases per year valued more than a billion dollars, beyond the Department of Revenue (DOR). This work requires the BF&R team to work closely with Treasury and DOR to support businesses, citizens, and their tax representatives, as well as lawyers in the private sector.

Until recently, BF&R depended on a decade-old SharePoint system riddled with governance gaps, manual touchpoints, and security vulnerabilities. In 2025, Act 123 of 2024, a new pro-taxpayer law strongly supported by Treasurer Stacy Garrity, went into effect on January 27, 2025, allowing taxpayers filing appeals to also request a mediated settlement at no extra cost. To meet the new requirement and modernize the BF&R business processes to improve governance and transparency, Treasury launched the BF&R Modernization Project. The result is a four-component ecosystem comprised of a public-facing taxpayer portal, an administrative website, an automated data integration pipeline, and an OnBase Workflow/WorkView case management application that processes, tracks, and resolves tax appeal petitions.

Launched in January 2025, the new system delivered automated petition intake, case management, brief and order generation, and public portal integration. The early results - over 5,000 automated emails sent without human intervention, 43,000+ documents managed with full audit trails, 10,000 automatic status updates transmitted to the Department of Revenue's RAPS system, and approximately 90% reduction in manual drafting errors – are striking. The next phase of the system roadmap extends the platform with AI-powered full-text search of data spanning five decades using Retrieval-Augmented Generation (RAG) and automated PII redaction, positioning Pennsylvania as a national model for governed, compliant, citizen-facing administrative modernization.

Project Description

Idea

What problem or opportunity does the project address?

The Board of Finance and Revenue (BF&R) is the Commonwealth's independent tribunal for resolving tax disputes between Pennsylvania taxpayers and the Department of Revenue. Each year BF&R manages thousands of petitions through every stage of the administrative appeals lifecycle — intake, docketing, scheduling, briefing, hearings, orders, and final dispositions while coordinating data with the DOR's Revenue Accounting and Processing System (RAPS).

For over a decade, that work was managed in a SharePoint-based application that had outlived its purpose. Designed as a general-purpose collaboration tool, SharePoint could not enforce the data discipline, document governance, or security controls that high-stakes legal and financial case management demands. Enhancements were slow and costly to develop. Manual processes proliferated to compensate for system gaps — BF&R staff hand-keyed petition data into RAPS, manually assembled email lists for sensitive case communications, and reconstructed audit histories from fragmented records.

Why does it matter?

The constraints of the old system were not merely operational. Inconsistent metadata and loose file structures made audits difficult and time consuming. Manual transcription of petition data into RAPS created potential financial discrepancy risk in revenue-related filings resulted in labor intensive verification. Sensitive legal documents traversed "temporary" channels — unencrypted emails, manual clipboard transfers — creating security latency. And the absence of a governed audit trail meant that the "who, what, and when" of any case could only be reconstructed through labor-intensive manual review.

For a bureau dedicated to the impartial adjudication of tax disputes, fixing these constraints strengthens the integrity and defensibility of every case record — reinforcing not just operational efficiency, but the trust placed in our mission.

What makes it different?

Most government modernization projects migrate content from one document store to another. This project did something fundamentally different: it re-engineered the entire petition lifecycle as a governed, automated ecosystem. Rather than digitizing a paper process, the team engineered compliance directly into every workflow step — from a citizen's first online petition submission to the automatic transmission of final case status to the Department of Revenue.

The platform combines four tightly integrated components — a public taxpayer web portal, an administrative interface, an automated data import pipeline (DIP), and an OnBase WorkView/Workflow case management application — into a single governed system. The addition of a next phase (summer 2026) AI layer using OpenSearch-powered Retrieval-Augmented Generation (RAG) and automated PII redaction places this project at the frontier of enterprise public-sector content management.

What makes it universal?

Tax appeal adjudication exists in every state. The challenges BF&R faced — aging case management platforms, manual inter-agency data transfers, governance gaps in legally sensitive workflows — are universal to administrative tribunals and quasi-judicial agencies across the country. The architectural patterns deployed here (WorkView relational case management, automated inter-agency API integration, AI-powered search layered on existing document repositories) are directly transferable to any state managing adjudicative, licensing, or benefits workflows.

NASCIO Priority

Treasury's project is in line with four of NASCIO's top 10 priorities: 1. Artificial Intelligence /GenAI, 4. Modernization, 5. Digital Government/Digital services, 6. Accessibility

Implementation

What was the roadmap?

The project was structured in two delivered phases with a third in active development:

- Phase 1: Public taxpayer portal (registration, petition filing, follow-up forms); BF&R staff case management matching and superseding current SharePoint functionality; automated petition intake from email; case assignment automation; brief and acknowledgment letter generation; mediated settlement form.
- Phase 2: Bulk email capability; automated redaction of published orders; reporting suite; REST API-enabled interactive public portal features; automated API-based RAPS data transfer replacing manual DOR input.
- Phase 3 (under unit testing, planned for summer 2026 go live): AI-powered full-text search (OpenSearch + Microsoft Copilot Studio + RAG); automated PII/PHI redaction; advanced DOR API integration; Freedom of Information Act discovery support.

By embracing the principles of Design Thinking alongside Agile methodology, we structured the project into multiple sprints. This allowed us to manage everything in a truly iterative and milestone-based manner, with clear acceptance criteria set at each phase gate to keep us on track.

This approach made it possible to adapt quickly to feedback and evolving requirements, ensuring each milestone was met efficiently. Success was measured on three key dimensions:

1. The project achieved functional parity with the legacy system, which helped make the transition easier for staff and minimized the learning curve,
2. We implemented quantifiable automation for many processes that were previously manual, delivering tangible improvements in efficiency,
3. From day one of go-live, we ensured audit-readiness for all case records, providing a solid foundation for compliance and transparency.

Who was involved?

The Treasury's Bureau of Information Technology Services (BITS) development team led all technical architecture, platform configuration, and integration efforts. True to its adaptable nature, BITS readily embraces new technologies that bring value to the Treasury. After determining through research that OnBase was the right solution, the team fully committed to the challenge. Remarkably, every team member was new to the OnBase platform and developed their expertise over the course of the project—demonstrating the team's strong aptitude for learning, innovation, and change.

BF&R program functional staff served as the primary subject matter experts and user acceptance testers, ensuring the new system faithfully captured every nuance of the appeals workflow. The Department of Revenue's RAPS team was engaged as a cross-agency partner for the inter-agency data integration work in Phase 2 and beyond. Hyland (OnBase) was engaged as the platform vendor. Stakeholders buy-in was secured through iterative demonstrations of working software, early involvement of BF&R staff in requirements definition, and clear communication of the governance and compliance benefits to agency leadership. The phased rollout approach allowed staff to build familiarity progressively rather than absorbing a single "big bang" transition.

How did you do it?

The technical architecture centers on four integrated components:

- **Public Web Portal:** A citizen-facing application enabling taxpayers to register, authenticate, file petitions, upload supporting documents, and submit follow-up forms (continuance requests, litigation holds, reconsideration filings, settlement submissions, representative changes) all of which were previously manual, paper-based, or email-driven processes. The Public Web Portal leverages Microsoft Entra ID as its authoritative identity provider, enforcing strong authentication through modern protocols (OIDC/OAuth2), MFA, Conditional Access, and continuous risk evaluation aligned to Zero Trust principles. This architecture centralizes identity assurance, enabling secure onboarding, federated access, and policy driven authorization across all petitions, document submission, and follow up workflows.
- **Administrative Web Portal:** Enables BF&R administrators to manage the public site, publish hearing calendars, and release redacted orders and hearing videos to the public.

- Data Integration Pipeline (DIP Console Application): Automated process that moves data from the public portal into the OnBase database via scheduled jobs, eliminating manual data re-entry.
- OnBase WorkView / Workflow Application: The core case management engine used to manage petition workflow, document relationships, brief and order generation from standardized templates, hearing scheduling, decision tracking, automated notifications, and status/verification data transfer to DOR. The BITS team mastered an entirely new enterprise OnBase platform in parallel with active development — a significant technical achievement given the platform's sophistication and the team's prior SharePoint orientation.

Impact

What did the project make better?

The transformation from a SharePoint filing environment to an OnBase governed ecosystem fundamentally changed how BF&R operates by shifting from a reactive, potentially error-prone, manually intensive model to a proactive, automated, audit-ready one.

Before the project: Petition data arrived by email, was manually sorted, and was hand-entered by BF&R staff into the DOR RAPS system. A daily feed from DOR transferred the data to the SharePoint system to make the data available the next business day. Briefs were drafted from scratch without template enforcement. Email lists for sensitive case communications were manually assembled and verified. Audit histories required manual reconstruction from disparate records. Sensitive documents traveled through uncontrolled channels during inter-agency transfers.

After the project: Taxpayers file petitions directly through a secure web portal. Documents are automatically ingested, related to the correct docket, and stored with full-text and keyword indexability from the moment of submission. Case assignments, brief generation, acknowledgment letters, and order creation are automated from approved templates. Status updates flow automatically to DOR's RAPS system via scheduled jobs. Every action in the case lifecycle is timestamped and attributed in a non-repudiable OnBase audit trail — defensible in court or regulatory review.

"Our transition to OnBase represents a fundamental shift in our risk posture. We didn't just automate a process — we governed the lifecycle. By replacing manual touchpoints with secure, content-driven workflows, we have transformed compliance from a 'check-the-box' activity into a built-in feature of our daily operations."

How do you know? — Key Metrics

Metric	Volume / Impact
Automated Email Correspondence	5,000+ emails generated — correct documents auto-attached, zero manual effort

Active Document Repository	43,000+ active documents; 170,000+ historical documents — all full-text & keyword searchable
Petition Records Managed	2,800+ recent petitions; 132,000+ historical petitions; 300+ MB of structured data
RAPS Status Updates	~10,000 automatic status updates and document transfers to DOR RAPS system
Public Portal Integration	Seamless automated integration with public-facing petitioner web portal
Brief/Order Error Reduction	~90% reduction in manual drafting errors via standardized template generation
Email Recipient Verification	~95% reduction in time spent manually verifying sensitive case recipient lists

Additional qualitative outcomes include: Elimination of security latency from documents transiting uncontrolled email or manual channels; Almost a 100% of outgoing legal documents generated from current, approved regulatory templates; audit preparation time reduced dramatically as structured OnBase audit logs replaced manual SQL reconstruction; and staff time freed from administrative "busy work" redirected to substantive case review and quality assurance.

What now?

Phase 2 completion brought bulk email capability, automated redaction of publicly released orders, a full reporting suite, and the REST API-enabled interactive public portal — further reducing staff overhead and improving the taxpayer experience.

Phase 3 will extend the platform with an AI-powered intelligent search layer: an OpenSearch-driven RAG chatbot, integrated with Microsoft Copilot Studio and .NET APIs, will transform the static document repository into a conversational knowledge system that spans more than 50 years of case history. Automated PII/PHI redaction will move the organization to a "Privacy by Design" model, proactively masking sensitive data before it exits the secure environment. DOR API integration will complete the inter-agency governance bridge — creating a fully auditable, automated, end-to-end data lifecycle across state agencies that currently lacks that transparency.

This investment is warranted on both financial and mission grounds. Since go live, the system has processed more than **2,000 petitions** valued at more than **\$1.6 Billion**. The volume of automation delivered — 5,000 emails, 43,000 documents, 10,000 RAPS updates — represents staff hours recaptured for higher-value work. The governance infrastructure built here will support BF&R's mission for a generation, with a platform extensible enough to absorb AI capabilities as they mature. Most importantly, the taxpayers who petition BF&R now interact with a system that respects their time, protects their information, and reflects the professionalism Pennsylvania's administrative adjudication demands.