



# Rip, Replace, Revitalize!

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## *Project TR3*

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**NASCIO Award Category:** Digital Government: Government to Business

**Submitting State:** State of Tennessee

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## Executive Summary

Tennessee's Strategic Technology Services (STS) works in partnership with the state's departments and agencies to advance a customer-focused government and foster a business-friendly environment. The Tennessee Department of Revenue (TDOR) is the primary revenue collecting agency for the state of Tennessee with a mission to fund public services through tax compliance by providing education, fair enforcement, and excellent customer service. Tax administration technology underpins the ability of TDOR to administer Tennessee tax policies and laws in a fair, efficient, and transparent manner.

Project TR3 (Tennessee Revenue Registration and Reporting) came to fruition when TDOR and STS realized that the needs of the Department and the citizens of Tennessee could not be met with the legacy system and external portals. The TR3 system and the accompanying e-services portals, the Tennessee Taxpayer Access Point (TNTAP); the Business Tax Portal (BTP); and the Revenue External Portal (REP) are the solution to this realization.



Project TR3 was a full 'rip and replace' of the core legacy tax system, multiple offline standalone Access and Excel applications, several independent taxpayer portals, and various interfaces. The overall objective was the implementation of a single system that incorporated e-services that encompassed all taxes and fees administered by TDOR.

TR3 and its forward facing e-service portals have reduced processing time by moving to transaction-based real time technology with greatly enhanced taxpayer self-service capabilities. For compliant taxpayers, the online self service functions and real-time processing create a system which is easier and faster. This advanced the initiative of customer-focused government and fosters a business-friendly environment. These same functions gave TDOR divisions the ability to allocate personnel to high-value activities through the elimination of manual and redundant tasks. Real-time access to data improved operations and performance analytics, making TDOR more efficient and effective. For the non-compliant taxpayer, this business-centric solution offers automated information technology that enhances how TDOR enforces tax laws already on the books and uncovers those taxpayers who have not remitted their correct tax liability.

In short, Project TR3 envisioned a new landscape for the future that included a more effective use of technology and brought together state agencies and local governments. This innovation and collaboration has significantly improved all dimensions of customer service and enabled Tennessee to increase revenues.

## **Concept**

Modern tax administration technology is integral to revenue collections and disbursement, and excellent customer service. TDOR collects approximately 87 percent of total state revenue, along with taxes for local, county, and municipal governments. The Department also apportions revenue collections for distribution to various state funds and local governments. Prior to Project TR3 only a select number of taxes administered by TDOR had an e-services portal. In addition to electronic filing needs, there are high expectations from taxpayers, tax professionals, and employees for real-time access to tax information and other data.

TDOR's legacy system was an older mainframe system. While generally stable, it was no longer cost effective to maintain. It was developed in the early nineties and used an outdated computer language. The system lacked the functionality to integrate, process, and update information in real-time. This lack of real-time functionality made data extraction cumbersome and resource intensive. Minor changes could require costly programming and take a significant amount of time. A rapidly dwindling pool of people with the skills to maintain the legacy system compounded the problem.

TDOR employees spent a large proportion of their time compiling, organizing, and reconciling tax data due to limitations in the legacy system. Commitment to these tasks reduced the available resources for auditing, examining, analyzing, and forecasting. In some areas, these administrative tasks comprised close to 40 percent of employee time. In addition, TDOR utilized multiple offline systems for data storage, manipulation, calculation, reporting, and reconciliation. Many of these databases and spreadsheets contained data that would better serve the department if maintained in a central system.

Delinquent tax collections were, for all intents and purposes, manual. Collectors entered field data into three separate systems in order to maintain accurate tracking. Only a fraction of outstanding delinquencies were collected. Customer service suffered because system limitations impeded the employee's ability to provide a complete view of a taxpayer's accounts, activities, and status. These limitations frustrated taxpayers and reflected poorly on the Department and the state of Tennessee.

Sharing data between state agencies and local jurisdictions was a frequent need that could not be addressed with the legacy system and side applications. Numerous hours were spent on manual processes in an attempt to provide these in-state customers with the information they required to do business.

Late in 2014, Department administration decided that a new system would allow TDOR to perform better, collect more taxes, and implement new laws more effectively. In collaboration with STS they performed extensive market research, read white papers and feasibility studies, issued a Request for Information, evaluated responses, conducted interviews with multiple

states, and made firsthand observations of systems. After careful consideration a commercial off-the-shelf (COTS) system was purchased from Fast Enterprises LLC (FAST) in 2015. Work to build the infrastructure began immediately and Project TR3 officially kicked off in January, 2016. A small reporting function for Licensed Distributor Reports went live two weeks later. The first set of taxes went live in March, 2017; the second set in May, 2018; and the third set in May, 2019.

Successful execution of the project required close collaboration between STS, TDOR, and the vendor, FAST. Approximately 60 people made up a team of STS developers, TDOR business professionals, and FAST developers. Divided into functional sub-teams, (for example returns and payments, registration, and compliance), each unit was responsible for defining business objectives, developing solutions, and verifying that the solutions met the objectives. TDOR provided a business project director who worked in collaboration with the STS IT director and the FAST project director. The integrated team was seated together in one location. This arrangement allowed for iterative development and for the business to see early and frequent progress. The iterative methodology was a key component to the on time delivery of the software. It also enabled business users to interact daily with developers, provide feedback, and continuously improve results. These same business users were quickly able to navigate TR3 and demonstrate progress to department personnel not on the project.

STS and TDOR strive to maintain the confidentiality of taxpayer data and to protect it against unauthorized access while ensuring that authorized access is appropriately provisioned. TR3 is secured by functional groups with rights of least privilege. TNTAP requires two-factor authentication and at least two identifiable pieces of information to gain access to accounts. Federally transmitted information (FTI) is completely masked unless the user has permission from the TDOR disclosure officer.

The implementation of TR3 had a tremendous effect on all users both internally and externally. Communications for these groups of stakeholders were thoughtfully planned and executed. Internally, a newsletter called *Up to Speed* was written and distributed monthly. It contained articles about the project throughout development. The newsletters also included bios of all team members and messages from members of executive leadership. Designed to build buy in and find another avenue for improvement, the newsletters had a link to a virtual "suggestion box". *Up to Speed* reached all 1,000 department users located across the country. Later in the project a TR3 update email was formulated as a way to inform these same users of changes and improvements made from their suggestions.

In addition, the project business professionals had weekly meetings with their business divisions to share project updates, decisions, and receive feedback. Open houses and brown bag lunches were regularly scheduled to allow users to 'dive into the weeds' of TR3 and TNTAP. Training occurred on site in Nashville with all Department personnel, including those

employees from outside Tennessee. Trainers from each divisional unit within the Department came to the project for about six months prior to go live, developed a curriculum, and taught their peers. Those trainers then went back to their divisions as expert users.

Prior to the launch of each rollout, short videos were sent to all TDOR employees explaining the sequence of events and what to expect. Deskside support was provided to users by the project team after each go live. Members wore an easily identifiable vest and were dispatched to each division for up to four weeks after launch. A dedicated hotline support number was established for users to have a direct link to a team member if one was not within eyeshot.

An external communications group was formed to create a communications plan for the external stakeholders and their organizations. An overall messaging guide was developed as well as a social media plan. Comprised of business subject matter experts, FAST, and STS, the goal was to use all means of communication to spread the message about TNTAP. Changes created by the introduction of TNTAP touched diverse groups, some of which were previously unable to file electronically and none who had access to view their account information. These groups were identified and then a campaign of letters, articles for their association's newsletters, short videos/tutorials, brochures, posters, and presentations were created to span a variety of communication avenues. To further expand the audience, TDOR attended business association chapter meetings and conferences. An independent usability study was also conducted to ensure that TNTAP was customer friendly and intuitive.

As part of the social media plan specific to TNTAP, the Department launched "TNTAP Tuesday", which sends a brief informative update or piece of information the customer might find useful. TDOR partnered with STS to better utilize the Department website. A webpage dedicated to TNTAP information was created ([www.tntapinfo.com](http://www.tntapinfo.com)). Easily found on the Department's website, the page became a one stop shop for information about TNTAP and what the customer would need to access and update their accounts.

### **Significance**

Project TR3 promoted the Governor's priorities of fiscal strength, customer focused and efficient government by expanding tax compliance, increasing the scope and quality of tax programs, and improving customer service with access to view and edit their accounts. Successful execution of this project positively and significantly impacted TDOR, other Tennessee state agencies, taxpayers, businesses, and local governments.

Best practices were used to design security of customer data and outside access to the system. Personally identifiable information (PII) such as federal employer identification numbers (FEINs) and social security numbers (SSNs) are masked when viewed in TR3, TNTAP, the BTP, and the REP. Many mailings that included PII have been eliminated because of the e-services capabilities now available to every TDOR customer.

The seamless platform of TR3 handles all tax functions for all tax types, from the identification of taxpayers and the account types needed for their specific business to the final disposition of any outstanding liability (collection or refund), which greatly improves the Department's efficiency and effectiveness. Customers were immediately and positively impacted by the access to their data and the ability to directly manage their accounts.

Efficiencies were created by the facilitation of consistent operations such as:

- Streamlined and consolidated business processes aligned with best practices;
- Automation of high volume, routine tasks, eliminating re-keying the same data on three different systems;
- Consolidated billing across all accounts.

Effectiveness increased dramatically with real-time access to data which provided:

- Relevant and timely information for TDOR employees and customers;
- Systematic identification of taxpayers who fail to file as well as those who underreport or over report their tax liabilities;
- Improved performance and operations analytics;
- Ability to quickly incorporate tax law changes.

TNTAP provides taxpayers a system for secure online transactions with similar functionality to modern online banking systems. Enhanced online self-service functions include:

- Access their account 24 hours a day, seven days a week;
- Submit returns and payments;
- View correspondence;
- Print previous returns;
- Change their address;
- Request a refund;
- Update their accounts.

The BTP and the REP address state agency and local government needs by delivering a secure transparent view into their constituent's data. They can now receive line item details regarding distributions specific to the customers in their jurisdictions, obtain tax clearances real-time, and update customer data directly with TDOR.

### **Impact**

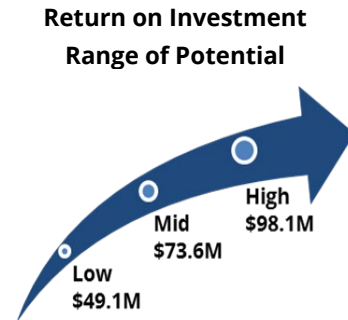
Project TR3 launched in March, 2017. Since then over 376,813 separate TNTAP logons have been created. That number rises every day as more businesses discover the ease of filing and paying online. More than \$32 billion in payments have been received. Over 3.2 million returns have been processed. Customers who previously only had the ability to file and pay via paper can now file electronically.

Local governments and municipalities now have their own e-services tools with the BTP and the REP. To date there are 2,157 users of these portals. Third parties such as CPAs and bookkeepers can now securely access their client's accounts from their own logon.

The increased e-services and centralized system allowed TDOR to reduce the numerous outside system contracts, resulting in savings of over \$2 million dollars annually. The reduction of paper volume has enabled the Department to transition over 15 people from the processing division to the call center, thus improving response time for calls. Dormant collections are now automated and have generated more than \$1.2 million dollars in collections in the last nine months. These accounts were previously untouched by the Department due to resource limitations.

Additional benefits to the Department and thus the state are:

- The electronic filing rate has increased across all tax types by over 6%
- Paper filings have been reduced by over 70%
- Payment by checks has decreased by 25%
- Over twenty five customer-facing, standalone portals were decommissioned



These benefits occur as a result of process automation and improvements, operational efficiencies, integration of discovery and compliance programs, and integrated workload management functions. Delinquent tax collections and audit discovery assessments represent a small portion of Tennessee revenues, but their automation present great opportunities for growth.

The legislature appropriated \$47.9 million dollars to the project. Tennessee stands to gain far more. Potential benefits are calculated using the State’s baseline number for delinquent collections and opportunities for better identification of non-compliant taxpayers. Other benefits like better customer service and operational efficiencies also contribute but are difficult to quantify. As shown in the chart, *Return on Investment: Range of Potential*, the estimated project benefits are between \$49.1 and \$98.1 million dollars in just the first year after implementation. Project costs are a one-time expenditure paid over time. The benefits, and in particular revenue increases, are recurring.

Taxes, by nature, are complex, dynamic, and challenging to administer. Project TR3 brought STS, TDOR, and FAST together to implement a system that would meet the ever-changing needs of the tax environment with a system that had built-in flexibility, real-time processing, and allowed customers access to their accounts. The state’s initiative to centralize information technology resources while providing the business exceptional support, was advanced by the cross functional collaboration between STS, TDOR business professionals, and FAST. This collaboration created a “Tennessee Tri-Star” for long term success.

From businesses to citizens to local governments and municipalities, Tennessee has improved the Government to Business working relationship on a magnificent scale.

