



One DHS Contact Center

One Call to Reach Them All -

The Rise of Smart Customer Service



NASCIO Award Category: Digital Experience: Agency/Program Solutions/Enhance user experience of tailored solutions

Submitting State: State of Tennessee

Contacts: Anthony Burwell, CIO, Tennessee Department of Human Services, Strategic Technology Solutions
Greg Turner, Business Domain Director, Health & Social Services Business Domain/Strategic Technology Solutions

Executive Summary

The Tennessee Department of Human Services (TDHS) faced significant challenges in providing a cohesive and efficient customer service experience for its 2.5 million supported residents. Initially, TDHS had approximately 30 different phone numbers published, forcing customers to navigate a complex landscape when inquiring about commonly overlapping DHS services such as Child Care, Supplemental Nutrition Assistance Program, and the Temporary Assistance for Needy Families (TANF) program. The fragmentation of the service infrastructure, compounded with limited self-service, led to frequent transfers, low first-call resolution rates, and high wait times. This led to frustration among customers, complaints, media escalations, and service barriers.

From the agency's side, TDHS operated 18 disparate customer service units. This led to inefficiencies and duplicative efforts. Manual and untracked processes were prevalent, diverting specialized state employees from their core competencies to handle basic inquiries. The technology infrastructure was inefficient, with the agency operating multiple instances for both phone and CRM technology.

While many government agencies have pursued digital transformation, the One DHS initiative is distinguished by its holistic approach to overhauling customer service, with the customer at the center. Rather than implementing isolated technology solutions, TDHS reimagined its entire service delivery model, integrating technology, process redesign, and workforce optimization to achieve a more comprehensive approach. This comprehensive strategy ensures that improvements are sustainable and centered around the customer's experience. Moreover, the initiative's focus on creating a shared, enterprise-wide customer service capability breaks down traditional programmatic silos. An emphasis on scalability and adaptability positions TDHS to respond effectively to future challenges and evolving resident needs.

Idea

The One DHS initiative provides a holistic approach to providing customer service at the highest level through one, centralized communication hub. TDHS pioneered an entirely new service delivery model, integrating technology, process redesign, and workforce optimization.

The One DHS project drives improvement for both the customer experience and agency operational imperatives. From an experience standpoint, it:

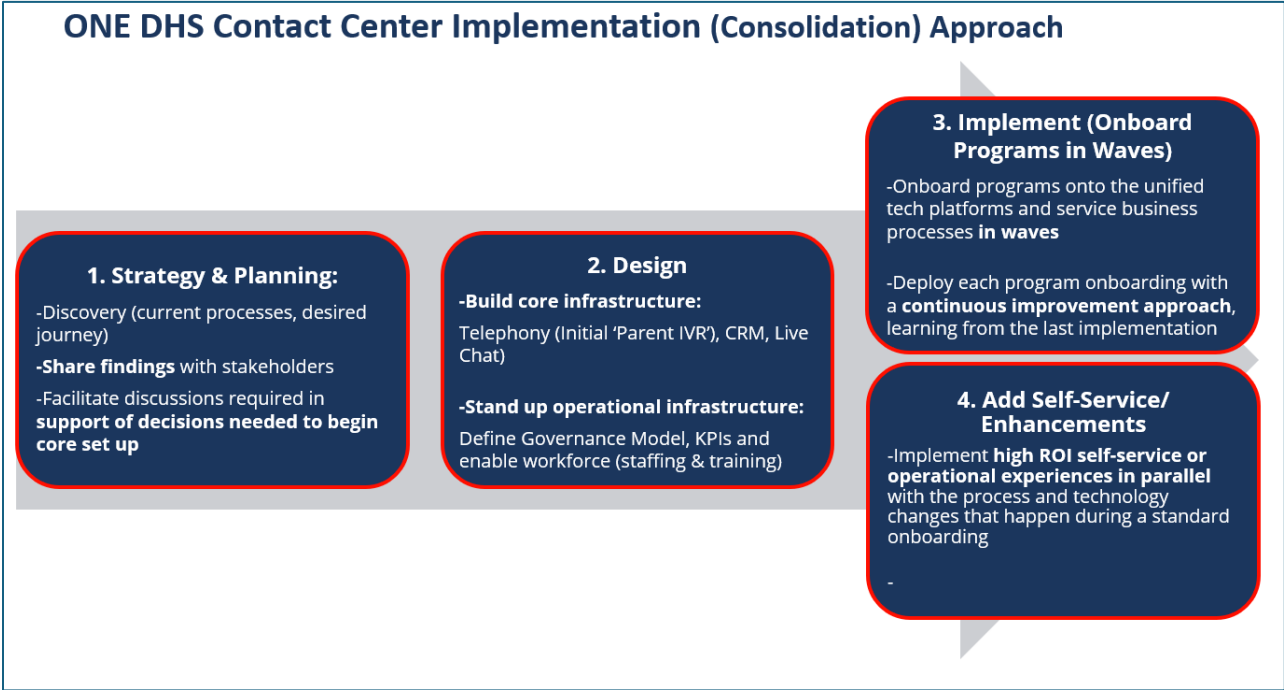
- Simplifies customer contact points
- Standardizes the customer experience
- Automates speech routing
- Provides more availability of self-service
- Services customers in their channel of choice
- Reduces silos and impersonalized service by establishing a true 360-degree view of the customer

For agency operations, One DHS:

- Helps focus constrained resources on application processing, instead of frequently asked questions service
- Deflects customer contacts to self-service, a more efficient channel than phone
- Will make call handling more efficient / faster
- Will automate connectivity between front-line agents and key back-office workers
- Helps reconcile technology infrastructure

This project addresses several CIO Top Ten priorities, including: artificial intelligence / machine learning / robotic process automation, digital government / digital services, legacy modernization, cloud services, and workforce. More simply put, as a Human Services agency, TDHS strives to connect customers to a seamless network of services. We recognize this challenge is common to agencies across the United States. This project encompasses all the pieces to deliver on this mission.

Implementation



The roadmap for this project followed four intentional phases. This approach allowed the ability to successfully sequence, deliver, and govern a cross-program service delivery model.

- 1. Plan (2022):** In a short sprint, the project team defined the vision for a new enterprise-wide customer support model, the value case for pursuing, and an implementation roadmap to gain executive sponsorship. This included the future business model and technical architecture. Gaining understanding and alignment from a diverse stakeholder set during this phase has been critical to the project's success thus far. Key stakeholder groups include the Commissioner, Program Executives, Technology Executives, Operational Contacts, Governing Bodies, and a System Integration (SI) Vendor Partner.
- 2. Design (2023):** The project team built the core technical infrastructure and defined business processes for launch. The technical architecture centers on NICE cloud telephony to support customer-agent interactions, and ServiceNow as a Customer Relationship Management tool (CRM). Amazon provides auxiliary features supporting the model. This streamlined architecture intentionally leverages TDHS investments and simplifies the tech stack. Business processes defined included governance structures, KPI-based reporting, communications planning, compliance review, and a cost allocation model to support a shared service approach across programs. Business

processes for customer service were also optimized, with auto-population and automated routing and customer look-up charted to replace previously manual steps.

3. **Implementation in Waves (2023-Present):** From mid-2023 to present, the project team has onboarded programs to the new service model in waves. Onboarding includes consolidating the program phone number, migrating the program telephony onto the centralized NICE instance, onboarding users to utilize the central CRM, routing FAQ program questions to the Tier 1 consolidated contact center via automation, and more. To date, Appeals & Hearings, Public Information, Child Care Payment Assistance, Vocational Rehabilitation, Tennessee Technology Access Program, Summer EBT, and Child Support are onboarded, with Family Assistance cutting over in July 2025. Following this, 90%+ on total agency contact volume will be onboarded.
4. **Self-Service & Enhancements (Ongoing; 2022-Present):** In parallel to baseline cutovers, high ROI self-service and channel optimization opportunities were implemented.
 - a. Launch of a Customer Portal, a digital interface creating connectivity between customers and the agency and allowing customers to complete key customer journeys online.
 - b. Addition & expansion of the chat channel. This allows customers to chat with AVA, a virtual agent, and strategically offer the ability to continue the conversation with a live agent, if required.
 - c. The ability to check the status of a Child Care or Family Assistance application directly in the Interactive Voice Response (IVR – phone), without ever speaking to a person.
 - d. The ability to elect to receive a text while waiting in the queue, linking customers directly to self-service locations on the portal (coming July 2025).
 - e. Ability to get personalized case-specific information for authenticated customers chatting with AVA (coming July 2025).

Impact

The One DHS project journey has gone beyond technology enhancement to revolutionize service delivery at large, delivering outcomes on both its customer-focused and agency-focused objectives. At the start of the project, the customer experience was a confusing web of phone numbers, frequent transfers, traversing multiple IVRs, and repeating their query to each person they spoke to in the service chain. This transformed to the benefits below.

Customer Benefits:

- Drastically simplified phone numbers, with all numbers associated with 9 onboarded programs consolidated into a single agency customer service phone number. Additionally, all 97 county office phone numbers will be consolidated into the model in July 2025.
- Lower wait times, with abandonment decreasing by 23% for one large program.
- Reduced transfers due to the ability for a Tier 1 Service team to answer questions about multiple topics, and approximately 30K monthly calls formerly manually triaged being routed based on speech automation.
- Ability to engage in their channel of choice, with customers opting to engage on the portal, in chat (over 2.2M virtual agent conversations and 45K live chat conversations), or via support form. Customers can engage with the agency asynchronously to get questions answered, which many prefer over carving out time for a phone call.
- Ability to access information via self-service. Approximately 1K and 4.2K customers check the status of their Child Care or Family Assistance application, respectively, via IVR automation each month. Customers can also conduct key actions online, such as applying, checking status, or submitting verifications.
- Feeling of familiarity. The customer feels like the agency knows who they are and isn't forgetting their problems. The universal CRM allows workers to see the context of all prior interactions, including calls, chats, or visits in person to an office. When a customer is transferred, all the context of prior conversations is automatically transferred to the new party, so the customer does not have to repeat themselves. Information known about the customer such as phone number and portal email are used to automatically identify them, and allow interactions to be personalized, such as the ability to refer to them by name upon answering the phone.

Although the customer benefits are far reaching, this program also drives a significant portfolio of agency benefits, detailed below.

Agency Benefits:

- Technology infrastructure optimization: The agency previously operated two instances of ServiceNow and has since consolidated into one, while drastically expanding the end user base. This has reduced monthly licensing costs significantly. On Nice cloud telephony, all programs onboarded to the model have been consolidated into a single environment, further reducing infrastructure cost and complexity.
- Capacity optimization: The new Tier 1, cross-program contact center fields 40% of onboarded contact volume. This allows specialized program workers to spend less time

answering FAQ questions and focus on higher-value tasks, including application processing. This rotation has directly impacted application backlog metrics positively. The agency also realizes economies of scale with a consolidated contact center, as customers with questions on multiple topics only require one conversation, reducing total effort to serve.

- **Channel efficiency:** Diversifying from a previously phone-concentrated channel mix unlocks channel efficiency. The automated conversations and the virtual agents, equate to approximately 25 agents' capacity and nearly 200K in monthly savings. The ability to handle multiple concurrent live chats simultaneously by a single agent further creates efficiency.
- **Contact Deflection:** The introduction of self-service opportunities on the portal, in the IVR, and coming soon in chat reduces the amount of inbound contact volume to the agency. All of the customers that successfully leverage self-service no longer reach out for support. For example, the Family Assistance self-service app status check deflects approximately 22% of inbound callers from needing to speak to a representative.
- **Reduced Manual Processes:** Much of the end-to-end customer service process has been optimized through the One DHS project, including automated call routing, workflow automation via the CRM, automating the data trail to follow the customer, customer look-up, and pre-population of customer records.

What Now

On the immediate horizon, TDHS looks forward to onboarding Family Assistance, its largest program, to the One DHS customer service model in summer 2025. In addition to onboarding to the technology and business processes, this phase of the project will integrate the contact center layer to the eligibility system, unlocking larger efficiencies. The project will also be deploying automated call summarization in 2025, reducing the amount of time spent documenting calls, and decreasing customer wait times.

The Next Frontier

The One DHS project to-date has achieved significant results but has also positioned the agency well to take advantage of recent technology advancements and propel service delivery into the next frontier. The program has already successfully prototyped Generative AI based automation and will be deploying these features in 2025. The intent is to expand this to further improve customer experience and operational efficiencies, including generative-based experiences for chat, knowledge management, quality assurance, and task execution.