



pennsylvania
DEPARTMENT OF HUMAN SERVICES

Mass Text Messaging for Human Services Recipients

**NASCIO Category:
Information Communications
Technology (ICT) Innovations**

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Project Completed: October 2021

Commonwealth of Pennsylvania
Office of Administration
Health and Human Services Delivery Center
Sandra Patterson, CGCIO, ITIL v3 | Chief Information Officer
Phone: 717.772.6445

Executive Summary

The Pennsylvania Department of Human Services (DHS) administers programs and services that support over 3 million of the commonwealth's most vulnerable individuals and families, including Medical Assistance, Cash Assistance, Home Energy Assistance, Home Water Assistance, Supplemental Nutrition Assistance, Child Support, Child Welfare, home and community services and developmental programs.

The department is legally required to communicate most information to benefit recipients via U.S. mail, resulting in approximately 14 million pieces of correspondence each year indicating benefit outcomes, actions required or simply for awareness purposes. DHS also offers electronic notices as an opt-in service to recipients through their online accounts.

During the COVID-19 pandemic, health and human service agencies were required to adapt to fluid and rapidly changing guidance from federal and state government agencies, furthering the need for timely and effective communication benefit recipients. Through the Mass Text Messaging initiative, DHS aims to enhance correspondence capabilities through real-time, targeted messaging that can enable benefit recipients to take actions to keep their current program benefits open and active, as well as provide necessary verification documents after initial application.

DHS established opt-in, opt-out and targeted reminder capabilities delivered via text message. Once a constituent has opted into text communications through the Commonwealth of PA Self Service Portal (COMPASS), they can receive trigger-based reminders around benefit renewals and verification reminders. Since the inception of the Mass Text Messaging project, over 450,000 recipients have opted into the service and DHS has delivered over 600,000 text messages. The department has seen more than a 30% increase in the submission of online renewals using the self-service portal¹. This drives efficiencies and cost-savings for the department, as it eliminates the need to process paper renewals that would otherwise be mailed and require subsequent data entry and processing.

Based on the positive outcomes realized for the initial two messaging use cases, DHS plans to expand the Mass Text messaging capabilities in the future with new message triggers and is exploring broadcast and two-way communication capabilities. As consumer metrics continue to point to greater use of mobile devices and rapid increase in text messaging adoption, DHS is positioned with capabilities and use cases to drive greater client correspondence and improve business and operational outcomes for Pennsylvania.

¹ Medical Assistance renewals have been excluded from this metric as a result of the Public Health Emergency (PHE).



Idea

Text messaging is a ubiquitous and widely popular form of communication. In 2019, the average American checked their phone 96 times per day, sent 13 text messages and replied to text messages within 1-2 minutes after receiving them. Americans with incomes less than \$30,000 relying on smartphones for access to online services have doubled since 2013, according to PEW Research Center². Based upon these trends, DHS recognized that texting would be a convenient way to perform outreach and improve responsiveness to ultimately drive improved outcomes. Human services agencies like DHS have an extremely high burden with correspondence. DHS sends over ten million pieces of correspondence each year to applying individuals and roughly four million pieces to benefit recipients. In addition to mailed correspondence, email and electronic notices are available as an optional service for specific programs, thus reducing printing and mailing costs for the department. Correspondence consists of the various letters, notices and renewal packets which are legally required to be sent to the benefit recipient. In addition to indicating benefit outcomes and informational purposes, many of these items require direct action from the household, such as sending in verification documents to support their benefit authorization. Another action which each household must take is renewing their benefits on a yearly basis based on changing incomes, household composition or other eligibility factors.

When households fail to respond in a timely manner, their benefits may be closed, or they may fail to be authorized for a new program or benefit. When this happens, the resulting burden is placed on County Assistance Office (CAO) workers, who carry out actions to renew the household's benefit or do direct outreach for the missing information. Through the Mass Text Messaging initiative, DHS can supplement existing mailed correspondence and electronic notices with timely notifications around specific scenarios and outcomes for the benefit individual or household. This method of outreach is targeted at increasing the likelihood of communications being reviewed and action taken, if needed, which in turn can increase the effectiveness of the communication and the corresponding business outcomes.

While text messaging is not intended to reduce the volume of correspondence, DHS has a direct interest in using text messaging to improve outcomes and actions taken on the mailed and emailed correspondences that are sent today. The advocate community has also encouraged DHS the use of this medium to communicate with the families served.

Why does it matter?

Mass text messaging capabilities provide DHS with another avenue of communication to its roughly four million benefit recipients at a time when the department is facing ever changing priorities and direction from federal and state agencies. The COVID-19 public health emergency that prohibited households from being disenrolled from Medical Assistance is set to end in 2022, bringing a large influx of additional effort required by the 6,000+ County Assistance Office workers to evaluate the eligibility of households that have been maintained during the public health emergency.

During this time, the CAO offices will be placed under immense workloads and will be communicating to millions of households via mailed and electronic correspondences. Mass text messaging has the power to improve the readership of these mailed and digital correspondence documents, which will support greater worker efficiency and self-service.

² <https://www.pewresearch.org/fact-tank/2021/06/22/digital-divide-persists-even-as-americans-with-lower-incomes-make-gains-in-tech-adoption/>



Idea

What makes it different?

The Mass Text Messaging project pursued by DHS differs from traditional text messaging campaigns in its use of specific triggers to send a message at the appropriate time that a corresponding mailed or electronic notice will be sent.

For example, when a renewal packet is mailed, a text message is immediately sent to the head of household informing them that they can expect their renewal packet in the mail. This combination of time-based text messaging paired with physical mailed correspondence helps directly improve open rates and actions taken by the recipient.

What makes it universal?

The Mass Text Messaging project is applicable and transferrable to additional state HHS agencies that are responsible for administering federal and state benefit programs. The framework established for DHS around enterprise text messaging can be leveraged by other state programs in the future without a significant overhaul or effort required for integration. Every state HHS agency is responsible for recipient outreach, correspondence and communication. Text messaging provides a powerful tool to reach a given state's benefit population quickly and effectively for time-sensitive "nudging" to improve business outcomes.

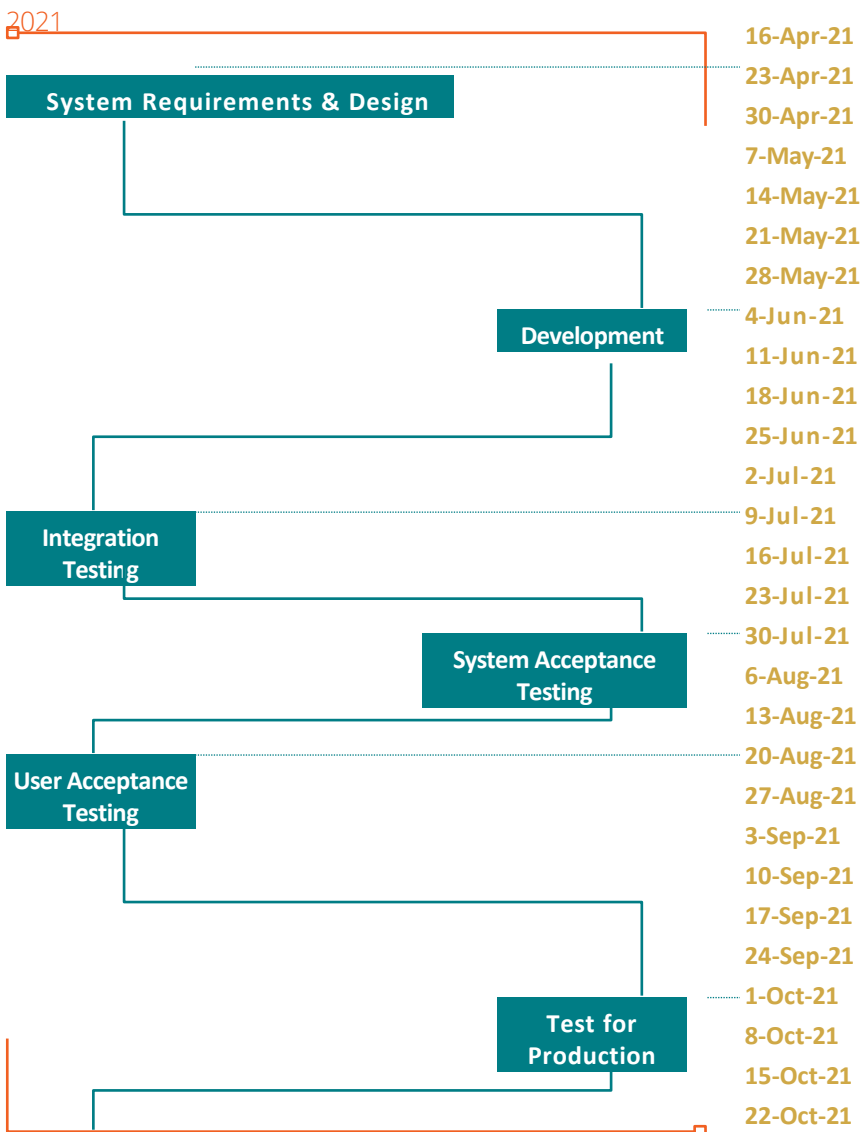




Implementation

The department continually assesses business priorities, technology upgrades and federal and state legislation, as well as operational / field data to determine its IT strategy and roadmap. This prioritization is continually evolving throughout the year as new and existing priorities are aligned to strategic software release windows in collaboration with the department's software vendor. Due to the complexity and scale of the department's suite of IT systems, software upgrades and releases are aligned to multiple weekend deployments throughout the calendar year, rather than a continuous deployment approach. For the Mass Text Messaging project, alignment to the October 2021 software release was determined to be most suitable given the available timeline for system design, development, testing and implementation. The solution provides configurability for future updates to modify or add messages without the need for a full software deployment.

DHS Mass Text Messaging—Project Runway



What was the roadmap?

The Text Messaging project was aligned to the October 2021 software release for the department. This release consisted of multiple projects tied to DHS priorities and was managed in a Waterfall Software Development Lifecycle. The Text Messaging project was initiated later in the October SDLC and **followed a 26-week timeline from project start to implementation.**

During project scoping and assessment, specific business outcomes and metrics were tied to the success of the Text Messaging project. Business outcomes were defined to measure the actual impact that the text message has on the corresponding physical action that the recipient would be expected to take based. These outcomes continue to be tracked post-implementation to measure project success and help DHS determine additional text messaging use cases for future software enhancements.

Who was involved?

Various stakeholder groups were critical to the success of this project. The DHS Office of Income Maintenance served as the primary sponsor for the project. The department's Technical Services vendor, Deloitte, served as the key facilitator for driving design sessions and capturing project scope and features. AT&T Global Smart Messaging Suite was chosen by DHS as the enabling software to interface between the eCIS system and the recipient's mobile device. Collaboration and coordination were required between key business stakeholders, Deloitte and AT&T during the initial design and development phases to keep the project timeline on track and mitigate risks. When moving into testing, DHS obtained guidance from federal and state authorities and provided collective direction, when necessary, around text messaging legal terms and conditions. Across the project, timely and open communication was a key component in keeping all stakeholders aware of decisions and plans prior to implementation.

How did you do it?

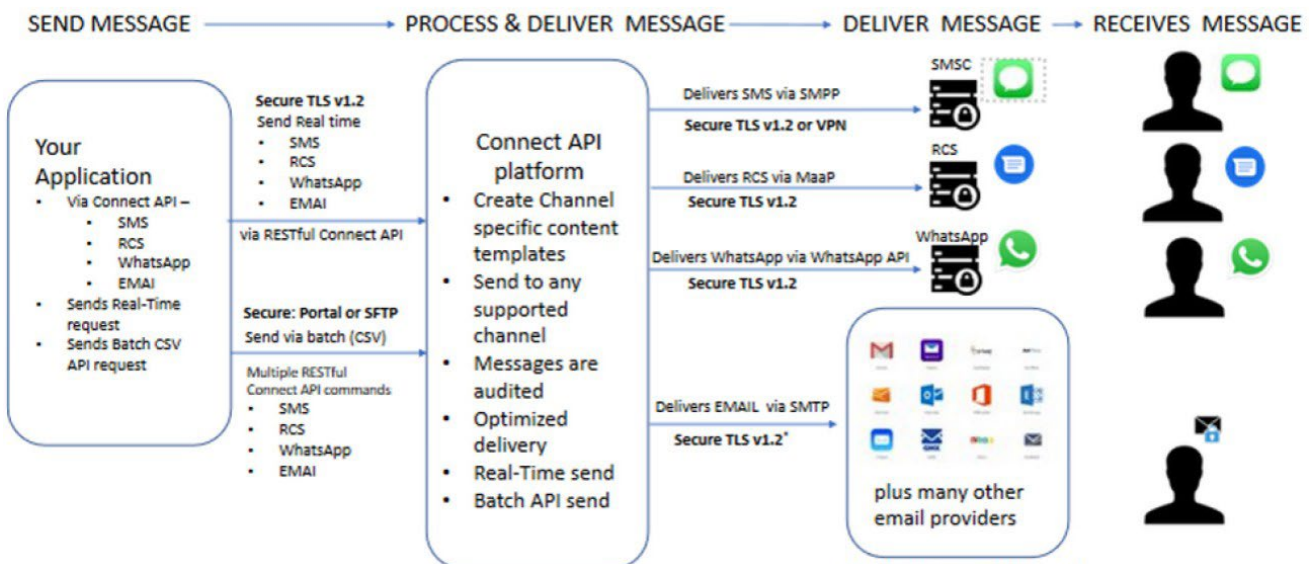
The Mass Text Messaging project was aligned to a 26-week timeline as part of the October 2021 release roadmap. In total, DHS involved over 50 individuals in the core stakeholder group to participate in requirement and design sessions.

In addition to the DHS stakeholders, the Technical Services vendor utilized a team of 15 individuals including technology consultants, software developers, architects, testers and implementation coordinators. AT&T utilized a team of four individuals to assist in product procurement and contract negotiations, as well as software support. The overall Mass Text Messaging project costs were \$660,000, including warranty and implementation support.

During the initial project kickoff, DHS worked closely with the vendor team to develop the approach to Mass Text messaging through COMPASS, including the opt in, opt out and message send process. AT&T offered both real-time and batch processes for distribution of text messages. Based on the business needs and the ability to send messages outside of peak operating hours for non-time sensitive texts, the group chose a combination of real-time service calls and a secure bulk file transfer process with AT&T. The real-time service gateway calls were utilized to send messages immediately to the benefit recipient's device for opt-in and opt-out messaging. The bulk file transfer was chosen for a nightly process to send the case-related text message notifications tied to triggers based on case circumstances (renewals and verifications).

AT&T Connect API Text Messaging Solution Leveraged for DHS Mass Text Messaging

Connect API multichannel delivery





Impact

In order to increase adoption and build constituent trust in the Text Messaging platform, DHS proactively performed outreach to existing recipients to highlight the benefit of text message notifications. This outreach resulted in the **successful 'opt-in' of more than 475,000 households within the first 6 months of the project implementation**. Through April 2022, **DHS has sent over 745,000 text message correspondences**. This outreach prior to program launch was critical to ensure that messages are viewed as trustworthy, impactful and relevant to the recipient.

What did the project make better?

The department analyzed a period prior to the October release of Text Messaging capabilities with a similar period post release once a significant population of households had opted in. The increased responsiveness and use of self-service for submitting renewals indicates **improved action taken by benefit recipients in a timely manner** and a **significant improvement in staff efficiency**. In using this new communication avenue, the department has seen more than a **30% increase³ in the submission of online renewals using the self-service portal**. This drives efficiencies and cost-savings for the department, as it eliminates the need to process paper renewals that would otherwise be mailed and require subsequent data entry and processing.

How do you know?

The Department analyzed a period prior to the October release of Text Messaging capabilities with a similar period post release once DHS reached a significant population of Opted In households. The increased responsiveness and use of self-service for submitting renewals indicates **improved action taken by benefit recipients in a timely manner and a significant improvement in staff efficiency**.

What now?

Based on the positive outcomes realized for the initial two messaging use cases, DHS plans to expand the Mass Text messaging capabilities in the future with new message triggers. Additional message triggers can be used to influence recipient actions to drive greater self-service and improve business outcomes. In addition to trigger-based events, DHS is looking into the opportunity to incorporate broadcast capabilities into the Text Messaging platform that would allow it to directly message specific recipient populations with time sensitive information around their benefits.

The COVID-19 pandemic has shown the importance of communicating critical information in near real time to DHS benefit populations and Text Messaging will be a key enabler in this area. Lastly, DHS is researching potential expansion into bi-directional communication capabilities which would enable CAO workers to receive short responses from the recipients around key case and benefit-related questions.

In closing, DHS views the Mass Text Messaging project as an incredible success, both in the use cases to initially launch the service and the enterprise-level text messaging capabilities for future growth and expansion.