Text to Connect

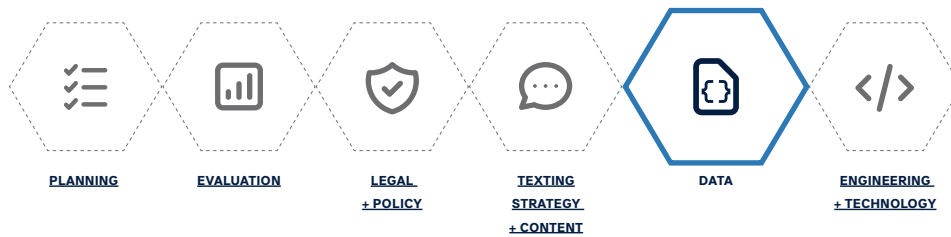**Data** collection considerations for using text message outreach to reduce SNAP churn

Data collection considerations for using text message outreach to reduce SNAP churn

Securing your data and ensuring client privacy are imperative. This is why – once you've identified your objectives, designed and established your evaluation plan, and started considering your texting strategy – you'll need to identify and secure the data to support your text messaging program. It can take time to understand what specific data you need, access it, and initiate file transfers, so it's important to start this workstream as early as possible. This guide is intended to help data engineers and analysts build the data pipeline and manage, analyze, and synthesize data by considering the questions below.

Types of Data	What type of data do we need to:
	Support the type of text messaging we're planning to do?
	Examples: client name, native language, SNAP recertification status and deadline
	Measure program outcomes and impact?
	Examples: Age, race/ethnicity
Cadence	How frequently do we need to update client data to send time-sensitive text messages, such as those that encourage clients to finish submitting verification documents or complete their interview?
	Examples: Case study updates to track progress
Data Storage and Access	Is all necessary client data stored in the same system or agency, or do we need to pull data from multiple systems to text clients with accurate information?
Data Sharing	What are the regulations around data use and sharing that we need to take into consideration?
	Do we need to set up a data sharing agreement?
Data Pipeline	What existing file transfer processes and protocols need to be considered?
	What is the capacity of the teams — both our own and the vendor's — to support developing and maintaining our data pipeline?
	Example: transferring and cleaning data for the program
Data Privacy	How are we communicating our privacy policy and the way we are using data to applicants?

PLANNING   EVALUATION   LEGAL
+ POLICY   TEXTING
STRATEGY
+ CONTENT   DATA   ENGINEERING
+ TECHNOLOGY

This guide is part of a series produced by the Beeck Center for Social Impact + Innovation at Georgetown University and the Benefits Data Trust, and is designed to help you implement a text messaging program to reduce SNAP churn. Click on any of the links in this graphic to see a different workstream. Access the entire guidebook.

Inside this document you'll find information on:

+   **Types of data** to initiate and evaluate your text messaging program

+   **Cadence** of data updates to support accuracy in time-sensitive messages

+   **Data sharing and data pipeline** considerations to ensure a seamless and secure flow of information

+   **Data workstream** planning

+   **Appendix**, including a sample data sharing agreement
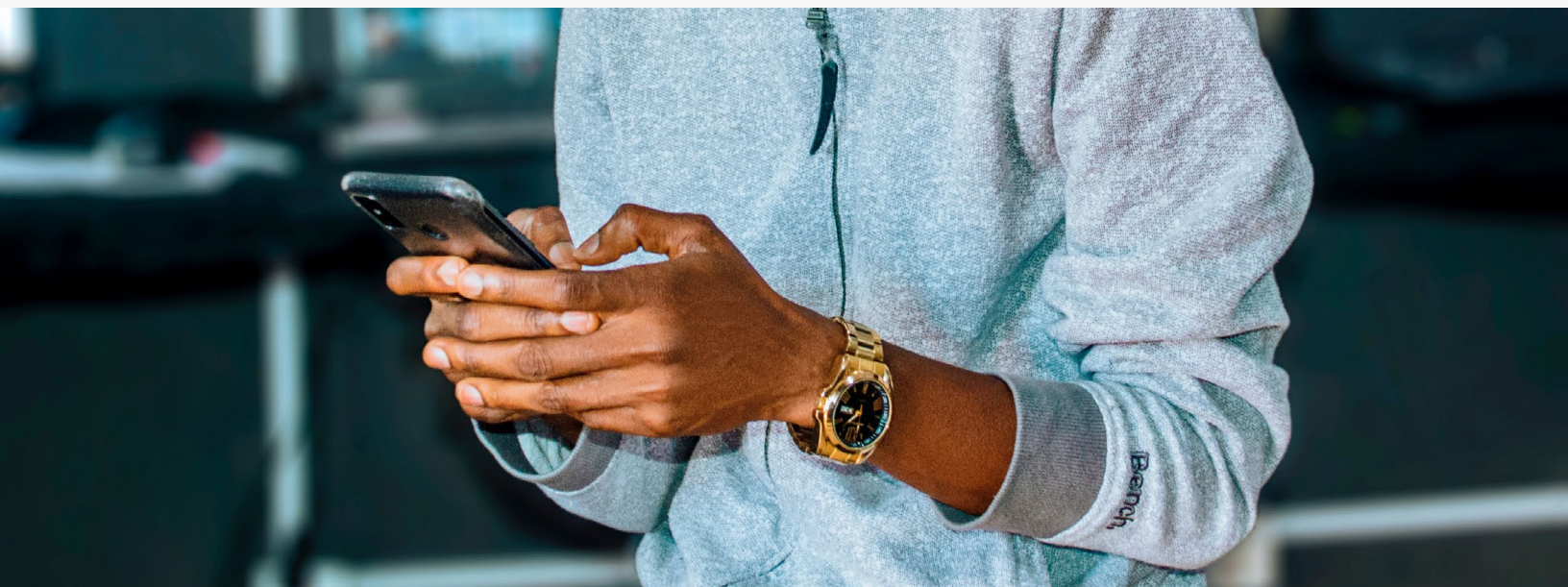
Types of Data

You can launch a text messaging program with a very limited data set. The benefit to this is that you can get a pilot or program up and running quickly. The tradeoff of having the bare minimum data about clients is that you don't know anything about who you are reaching, which can limit your program's potential impact and impede evaluation.

Core client data

+ Cell phone number

+ SNAP program/case identifier

+ SNAP recertification deadline

> Client data reflects heads of households, since that is who you'll be targeting for texting outreach

The more you know about a client, the more you can personalize outreach, which strengthens trust and the relevance of your texts. Code for America has found that using a client's first name can improve response rates by nearly 25%.[1] If you know a client's preferred language, you can send messages in that language. Knowing the status of where a client is in the recertification process means you can send them timely and actionable notifications. Demographic and case information is also useful for understanding the effectiveness of your text messaging program—including where you're seeing the greatest gains and where gaps remain. These insights can be used to make adjustments that further improve program impact and close equity gaps.

Recommended client data

+ First + Last name

+ Date of birth (or age)

+ Address (or city, county, ZIP code)

+ Email address

+ Sex

+ Race/ethnicity

+ Primary language

+ Income bracket

+ Number of household members and children enrolled in SNAP

+ Case details (e.g., SNAP recertification status, deadline, interview date, etc.)

+ Case manager identifier (if relevant)

+ Cross-system identifiers (e.g., statewide data warehouse IDs, statewide client IDs, national IDs like Social Security number, etc.)

1.Code for America. (2020). Integrated Benefits Initiative: Best Practices in Texting. http://s3-us-west-1.amazonaws.com/codeforamerica-cms1/documents/IBI-Best-Practices-in-Texting.pdf

Because demographic and personally identifiable information—including phone numbers—are highly sensitive, they'll require stronger protections and additional approvals if you are working with a vendor. Make sure you're involving your policy and legal teams to advise on the precedents for sharing and using this data to anticipate and account for potential issues early on.

In addition, you will want to collect data on how clients interact with text messages as well as their case outcomes. This information can help you measure the effectiveness and impact of your program at both the client and population levels.

Text message data

+ Number of messages sent and received

+ Delivery rates

+ Number of clients engaging with messages

+ Number of clients opting-out of receiving messages

+ Engagement rates by message

Case outcome data

+ SNAP recertification outcome (approved, denied, withdrawn, etc.)

+ Recertification completed online or via paper application

+ Reason for recertification failure

See the Evaluation guide for more detail about assessing impact and the need to coordinate types of data collected with the program's evaluation plan.
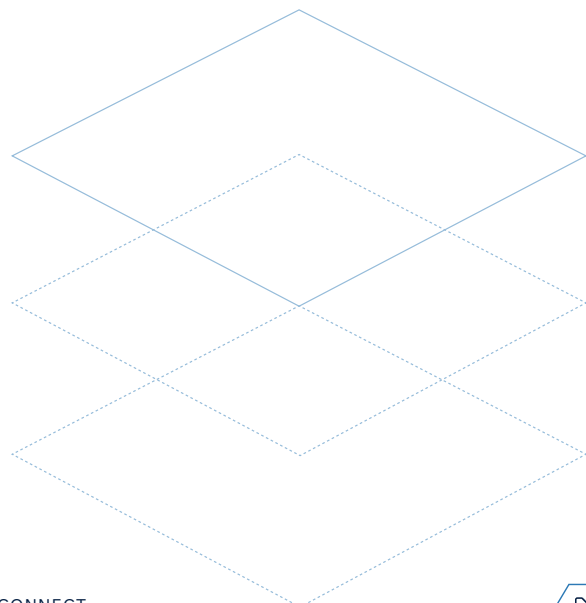
Cadence

In addition to identifying the data you need about clients, you'll also want to figure out the frequency with which you need to receive it. The more often you pull client data, the more likely it is to be up-to-date. This becomes increasingly important as your text messaging program becomes more sophisticated, but even simpler one-way messaging approaches will benefit from frequent data updates. For example, if you're sending clients time-sensitive nudges to guide them through different steps of recertification, you'll want to have an accurate understanding of where they are in the process. The more frequently a client's case status is updated in the database, the more you can tailor text messages to fit that client's needs. It allows you to remove clients who have completed the entire recertification process from this round of reminders, send a nudge to those who have recertified but still need to turn in verification documents, and so forth.
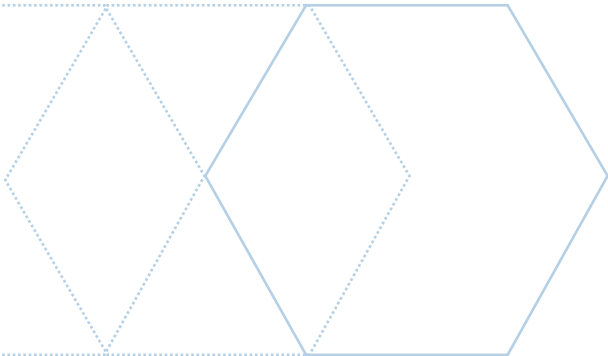
Sample swimlanes chart showing data transfer cadence when working with an outside vendor

SNAP Recertication Ideal Path

60 DAYS BEFORE client is due to recertify	8 WEEKS BEFORE client is due to recertify	6 WEEKS BEFORE client is due to recertify	4 WEEKS BEFORE client is due to recertify	2 WEEKS BEFORE client is due to recertify	4-2 DAYS BEFORE client is due to recertify	Client Redetermination DUE	AFTER RECERTIFICATION CONFIRMED

SNAP AGENCY

Sends TP Client File, Status File, and Outcomes File							
Sends SNAP Recertification Package		Sends TP Status File	Sends TP Client File, Status File, and Outcomes File	Sends TP Status File	Sends TP Client File, Status File, and Outcomes File	Sends TP Status File	
Sends Recertification Reminder Flyer							

TEXTING PARTNER (TP)

| Receives Client File, Status File, and Outcomes File | | Receives Status File | Receives Client File, Status File, and Outcomes File | Receives Status File | Receives Client File, Status File, and Outcomes File | Receives Status File | Texting / Outcomes Evaluation |
| | Sends Recertification Pre-reminder SMS | Sends Client Recertification Reminder SMS | Sends Client Recertification Reminder SMS | Sends Client Recertification Reminder SMS | Sends Client Recertification Reminder SMS | | |

CLIENT

| | Receives Recertification Form and Flyer Reminder | Gathers Supplementary Documentation to Complete Their Recertification | | Succesfully Recertifies for SNAP No Lapse in SNAP Benefits if Completed During 60 Day Recertification Period | | | |
| | Recieves Recertification Pre-reminder SMS | Recieves Recertification Reminder SMS | Recieves Recertification Reminder SMS | Recieves Recertification Reminder SMS | Recieves Recertification Reminder SMS | | |

Legend
- Mail Sent / Received
- Data Sent / Recevied
- Texts Sent / Recevied
- Texting Evaluation
- Client Recertification

TEXT TO CONNECT

Data Sharing Agreement

If you'll be relying on a vendor not yet authorized to receive SNAP client data, you'll need to execute a data sharing agreement (DSA). A DSA is a contract that sets the terms around what data is being shared and how it can be used. DSAs are important for protecting personally identifiable information and personal health information, as well as other sensitive data about clients enrolled in benefits programs and ensuring compliance with regulatory requirements. The data included should match what's needed both to execute your text messaging strategy and conduct process and outcome evaluation.

Because a DSA precedes the transfer of data and may take weeks to months to execute, it's important to begin working on it early while other planning activities are underway. While every DSA will be customized, here are some best practices for getting a DSA developed, solidified, and repeated:

+ **Bring your legal counsel, policy, program, evaluation, data, and engineering teams to the table early in the process** so that the DSA and program design are closely aligned. This step also ensures that **privacy laws and other federal, state, and local regulations around protecting, sharing, and using personally identifiable information are considered** from the beginning.

+ Before you start from scratch, **find out if your agency has an existing, vetted DSA template that you can build from**. In most cases, your agency will either have a template or examples of current DSAs in place that you can use as a starting point.

+ **Think about the who, what, where, when, why, and how.** Make sure to specify the data that is being shared, who it is being shared with, and the purpose, which could be logistical or evaluative. An appendix that includes data specifications, data pipeline and security/privacy protocols, technology, and other resources can also be useful for whitelisting how shared data can be used.

+ Where possible, **build flexibilities into your DSA** so that you can make amendments without needing to go through an entire review/approvals process for every program modification. Creating a flexible DSA can save you weeks, if not months, of time during program design and development. In addition to agile development, it can also facilitate continuous improvement and program adaptations over time. The appendix can be a great tool for building flexibility into a DSA by preempting types of changes (e.g., data requirements and file structures, program design and expansion, etc.) that can be made without requiring additional approvals.

You can find a sample data sharing agreement in the Appendix.

Data Pipeline

The data pipeline describes the process of transferring the data you need from the source (or sources) where it lives to your program database and cleaning it up to be in the format you need to make a successful transfer. If you already have texting capabilities built into your existing system, you may be able to directly import data without the need for a data pipeline. However, if you'll be working with a partner or are running a separate program database (especially if it is built and maintained differently than the source database), this is something you'll need to plan for.

Getting the right data in the right format can take effort and time. But as the backbone of your text messaging program, it's important to get it right. So, you'll want to start this process early and budget enough time to do it well.

The process isn't one-size-fits-all—it can be manual or automated, simple or complex—and will be customized based on factors like:

+ What data you need to run your text messaging program and the frequency you need that data to be inserted or updated in the program database

+ Where the data you need lives and if it is coming from one or multiple sources

+ Whether data variable names are easy to understand

+ How the data is formatted in the source database(s) and the format you need it in your program database

+ How the data can be pulled from the source and loaded into the program database, including any file transfer or security protocols

+ Whether or not you are sharing data with a vendor and the security/privacy consideration on both ends

+ How you plan to maintain your program database, including whether you plan to replace the full data set every time or just update the database with changes and additions, and whether updates to a client's case (e.g., case status changes) overwrite previous data in the source and program databases

+ Whether you plan to make your data pipeline bi-directional so that program data can transfer back to the source database to support evaluation efforts or make text message data available to field staff

Even though your data pipeline will be unique to your needs, the main steps are:

1. Extract the data from source(s) where it lives,

2. transform the data into the format you need it in, and

3. load the data into the destination (i.e. the program database) so you can use it for your program. This is often referred to as an "ETL" process.

Souce → Extract → Transform → Load → Destination

Source(s)

This is the database(s) where client data lives and the format the data comes in. To identify your sources, define what client data you need for the program. Then, you'll need to figure out where the data is stored and how it is structured.

Extract

This is the process of pulling the data you need from the source. Extraction can be manual or automated. As you figure out the best extraction method for your pipeline, consider the source(s), any file transfer and security protocols associated with those systems, and the frequency you need to ingest new data. As a best practice, use an automated and secure file transfer method whenever possible to reduce risk of human error and privacy concerns.

Transform

This is the process of cleaning up the data set to make sure everything is formatted correctly. Transformation can be manual or automated, and can range widely in complexity. To identify the changes you need to make, define how you want client data to be formatted in the program database and compare that to how the data appears after it is extracted from the source(s). You'll also want to account for factors like whether you're able to extract subsets of client data (i.e., changes and new additions since a specified date) or whether you need to re-import the entire data set with each extraction, and whether changes overwrite previous data or are stored in a historical format. If you have the technical capacity, it's best practice to automate your transformation process, especially if you are planning for a long-running text messaging program at scale.

Load

This is the process of transferring the clean data into the program database. It can be either a manual or automated process. Like extraction, you'll want to consider file transfer and security protocols associated with the program database as well as the frequency that data is being ingested.

Destination

This is the database connected to your texting platform. Make sure you've defined the client data you need for your text messaging program and how that should be formatted so that you're extracting from the right sources and setting up a solid transformation process before loading it into the program database.
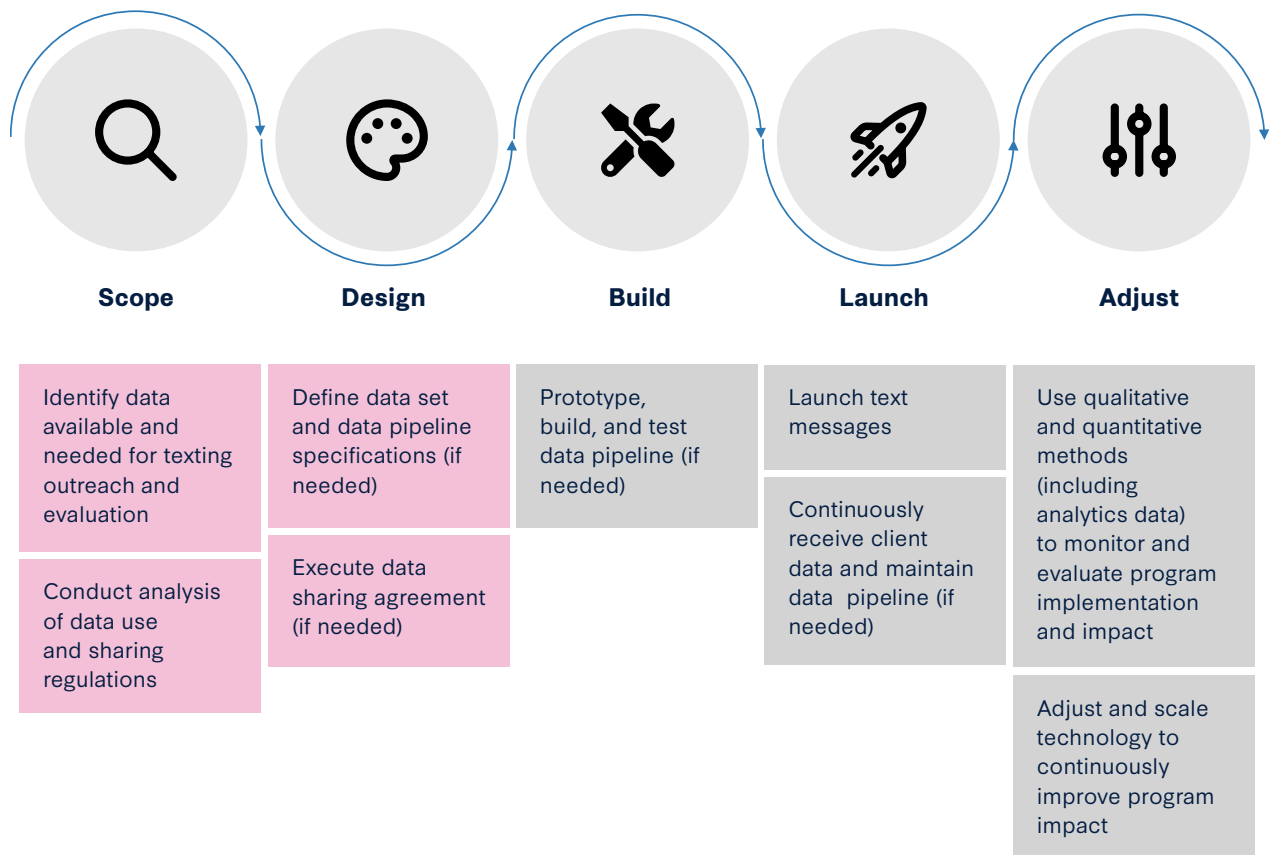
Since data pipelines typically process large volumes of data and can be computationally intensive, you'll want to plan for technical issues. Make sure that technical and non-technical stakeholders have open lines of communication as well as clear guidance and expectations related to issue monitoring, reporting, and resolution.

Data Workstream Roadmap

Below is a snapshot of what's involved in the data workstream over the project lifecycle. In pink are key scope and design activities, which ensure that you get the data you need for your text messaging program.

Scope	Design	Build	Launch	Adjust
Identify data available and needed for texting outreach and evaluation	Define data set and data pipeline specifications (if needed)	Prototype, build, and test data pipeline (if needed)	Launch text messages	Use qualitative and quantitative methods (including analytics data) to monitor and evaluate program implementation and impact
Conduct analysis of data use and sharing regulations	Execute data sharing agreement (if needed)		Continuously receive client data and maintain data pipeline (if needed)	Adjust and scale technology to continuously improve program impact

- Planning
- Evaluation
- Legal + Policy
- Texting Strategy + Content
- Data
- Engineering + Technology
- Multiple Workstreams

Appendix

Sample Data Sharing Agreement

**MEMORANDUM OF UNDERSTANDING BETWEEN
[STATE/COUNTY SNAP AGENCY] AND [VENDOR]**

This Memorandum of Understanding (MOU) sets forth the terms and conditions between [Vendor] and [State/County SNAP Agency] (collectively referred to as "the Parties"), to partner on SNAP Recertification Texting in [State/County].

Background
[State/County SNAP Agency] has contracted [Vendor] to conduct outreach to help residents apply for benefits under the Supplemental Nutrition Assistance Program (SNAP) and to assist in SNAP Recertification. Part of that assistance will be in the form of a texting outreach campaign for SNAP Recertification.

Purpose
The purpose of this MOU is to outline the roles and responsibilities of the Parties to conduct SNAP Recertification texting in [state/county].

Specific Responsibilities

[Vendor] will:
- Use [Vendor's] texting platform, and [state/county] level data shared by [SNAP Agency], to send a variety of text messages to clients who are due for their SNAP recertifications.
- [Vendor] will securely manage data and adhere to Appendix Use Case under its contract with [SNAP Agency]. A copy of Appendix Use Case is attached hereto and incorporated into this MOU.
- [Vendor] will create an engagement plan with messaging to include: Reminders to recertify, guidance on where to get started, and resources for those who are experiencing challenges.
- Use historical data provided by [SNAP Agency] to develop an evaluation plan.
- Determine pilot success based on outcome data provided by [SNAP Agency].

[SNAP Agency] will:
- Conduct user research with [state/county] field staff and clients to ensure the language and instructions in text messages make sense and resonate well.
- Provide [Vendor] historical data of SNAP recertifications from [comparison start date] to [comparison end date] and [intervention start date] through [intervention end date] to help estimate potential impact of pilot.

- Provide percentage of clients who returned their recertification packet form
  - % timely
  - % untimely
  - % late
- Provide how many/what percent were successfully recertified, denied, or did not recertify, and reason.
- Participate in meetings with [Vendor] and [SNAP Agency] as needed to discuss progress of the pilot.
- Participate in evaluation efforts by [Vendor].
- Provide [Vendor] with electronic files via an encrypted file through a File
- Transfer Protocol (FTP) secure account upon commencement of this project and on a twice per week basis moving forward.
- Provide [Vendor] with data file containing SNAP participants who are due for recertification in [state/county] every two weeks. The data file shall include data fields as indicated in the Appendix Use Case.
- Provide [Vendor] with monthly outcome determination data, containing data fields as indicated in Appendix Use Case.
- Provide policy related guidance as needed.

Duration

This MOU shall become effective upon signature by the undersigned authorized officials of the Parties and remain in effect until modified or terminated for convenience by either Party or by mutual consent. This MOU may be modified and/or extended by mutual agreement of the Parties. In the absence of an earlier termination or extension, this MOU shall expire on [date].

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DATA SHARING AGREEMENT APPENDIX
USE CASE: RECERTIFICATION DATA SHARE

</div>

I. Purpose

[SNAP Agency] administers the Supplemental Nutrition Assistance Program ("SNAP") programs for [state/county] and is responsible for accepting and processing applications for low-income clients.

[Vendor] nonprofit organization whose mission is to help people live healthier, more independent lives by creating smarter ways to access essential benefits and services.

[Vendor] seeks to use [SNAP Agency] data specified herein for the purpose of identifying individuals who are eligible for recertification of their SNAP benefits and conduct text-based outreach to such individuals by providing steps for timely recertification of SNAP, pathways for completing SNAP recertification and resources for individuals who need help, and confirm the enrollment of individuals due for recertification.

II. Authority

Federal regulations restrict use and disclosure of information obtained from SNAP applicants or recipients to certain persons, including persons directly connected with the administration or enforcement of the provisions of the Food and Nutrition Act or regulations, other Federal assistance programs, federally-assisted State programs

providing assistance on a means-tested basis to low-income individuals, or general assistance programs which are subject to the joint processing requirements. 7 C.F.R. 272.1(c)(1)(i).

Data Recipient, through its relationship with [SNAP Agency], is directly connected to the administration and enforcement of SNAP and shall use and share any information obtained from SNAP applicants and recipients solely for that purpose. Additionally, as an authorized recipient of SNAP information, Data Recipient shall adequately protect the information against disclosure for any unauthorized purposes as required by federal regulations. 7 C.F.R. 272.1(c)(2); and SNAP State outreach plan required under C.R.S. § 26-2-301(4) and SNAP State Outreach Plan criteria developed by FNS.

III. Contacts
A. The Primary Contact for [SNAP Agency], Provider, is [Name, Title, Contact]
B. The Primary Contact for [Vendor], Data Recipient, is [Name, Title, Contact]
C. The Data Governance Manager for [SNAP Agency], Provider, is [Name, Title,Contact]
D. The Data Governance Manager for [Vendor], Recipient, [Name, Title, Contact]

IV. Data Description
A. [SNAP Agency] shall provide [Vendor] with the resulting data file twice per week, containing SNAP clients who are due for recertification, limited to agreed upon counties. The data file shall include the following data fields:

      a. Name
      b. Address
      c. Phone Number
      d. Date of Birth
      e. Last 4 Digits of Social Security Number
      f. SNAP Case ID
      g. Recertification Due Date
      h. Case Status
      i. Primary Language
      j. Management Team — This will allow [Vendor] to send clients the correct contact information for questions about their recertification
      k. County — This will allow [Vendor] to track clients by county and send client county-specific resources for recertification
      l. Race — For evaluation and analysis purposes. This will allow [Vendor] to monitor project performance by demographic groups
      m. Ethnicity — For evaluation and analysis purposes. This will allow [Vendor] to monitor project performance by demographic groups

B. [SNAP Agency] shall provide electronic files via an encrypted file through a File Transfer Protocol (FTP) secure account upon commencement of this project and on a monthly basis moving forward. The data shall remain in the encrypted file during the transfer and while it is received and held by [Vendor].

C. [SNAP Agency] shall provide [Vendor] with monthly individual determination data via [government system], containing the following data fields:

      a. Government System User ID
      b. Government System Tracking ID
      c. Application Type
      d. Assistance Type
      e. Case ID
      f. Assigned County
      g. Date of Application
      h. Last Name of Applicant
      i. First Name of Applicant
      j. Home Phone
      k. Cell Phone
      l. Program Name
      m. Eligibility Status
      n. Eligibility Date
      o. SNAP Failure Reason (if relevant and available)
      p. Recertification Deadline — This allows [Vendor] to easily link an application to the relevant redetermination cycle

D. The Data comes from [government system(s)]

E. All unnecessary records shall be purged within 12 months from the time they were released, or sooner if it has been determined they no longer serve the stated purpose.

V. Applicable Regulations

The following protection regulations are applicable to the data being transferred:

A. 7 CFR 272.1 (C)(1)(i); 7 CFR 272.1 (C)(2)

B. [State statute number, if applicable]

VI. Authorized Users

C. [Vendor] Employees involved in data transfers are [Names, Titles, Contacts]

D. All Authorized Users are required to sign Individual Confidentiality Agreements. Data Recipient must maintain copies of signed agreements and furnish them to the Data Provider upon request.

About the Beeck Center for Social Impact + Innovation

The Beeck Center is an experiential hub at Georgetown University that trains students and incubates scalable, leading edge ideas for social change. We believe impact at scale requires the courage to think and behave differently. Our work centers on investing in outcomes for individuals and society. We equip future global leaders with the mindset to promote outcome-driven solutions, using the tools of design, data, technology, and innovation. We convene actors across the public, private, and civic sectors to advance new tools, frameworks, and approaches necessary to achieve these outcomes.

About Benefits Data Trust

Benefits Data Trust (BDT) is a national nonprofit organization based in Philadelphia that uses these modern approaches to support government agencies in transforming how their residents access the social safety net. In 2017, BDT began a SNAP recertification text messaging program in New York City, and now partners with several states to implement similar programs suited to their needs.

About This Guidebook

Together, the Beeck Center and BDT authored this guidebook to detail practices so more states and local agencies can use text messaging to reach the people they serve with important, timely, and easy to understand guidance so people don't lose their SNAP benefits when they need them most. While we focus on the use case of SNAP recertification, we hope this content might be useful for anyone using text messaging to improve safety net benefits delivery in other ways.

This guidebook is part of a larger initiative by the Beeck Center for Social Impact + Innovation at Georgetown University to document innovations in social safety net benefits delivery driven by human-centered service design, data-informed practices, and responsive technology with a goal of spreading proven practices more widely. You can find other resources on maintaining public benefits and more on the Digital Benefits Hub.

Please contact us with any thoughts, questions, or suggested additions to this guidebook. We can be reached via email at:
digitalbenefits@georgetown.edu
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