

Using Text Message Outreach to Reduce SNAP Churn

SECTION 5

DATA

Getting the Data You Need

October 2021

By Katie Sullivan, Sara Soka, and Keith Barnes

beeckcenter
social impact + innovation

 **bd**t
BENEFITS DATA TRUST

About This Section

This is one section from the guidebook *Using Text Message Outreach to Reduce SNAP Churn*, produced by the [Beeck Center for Social Impact + Innovation at Georgetown University](#) and [Benefits Data Trust](#).

The goal of the guidebook is to give state and local government agencies practical advice on how to scope and design a text messaging program to support SNAP clients through the recertification process. You can develop and implement your text messaging program in-house or partner with a vendor, and we offer guidance based on both scenarios. While we focus on the use case of SNAP recertification, we hope this content might still be useful for anyone using text messaging to improve safety net benefits delivery in other ways.

To view or download the entire guidebook, as well as other individual sections, visit: <https://beeckcenter.georgetown.edu/report/using-text-message-outreach-to-reduce-snap-churn/>

Table of Contents

Getting the Data You Need

- Types of Data
- Cadence
- Data Sharing Agreement
- Data Pipeline
- Data Workstream Roadmap

Appendix

- Sample Data Sharing Agreement

Getting the Data You Need

Once you've identified your objectives, begun to plan evaluation, and started considering your texting strategy, you'll need to make sure you have the data to support these efforts. To do this, you should establish what data you need, where it lives, how you'll get data, and the cadence with which you need to receive it.

To ensure you get the data you need, ask yourself:

- **What type of data do we need** to support the type of text messaging we're planning to do (e.g., client names for personalized messages, preferred language, their SNAP recertification status and deadline)?
- **How frequently do we need to receive client data updates?** If you plan to send time-sensitive text messages, or text messages encouraging clients to finish submitting verification documents or complete their interview, you will need case status updates to know where they are in the process.
- **What type of data do we need to measure program outcomes and impact** (e.g., age, race/ethnicity)?
- **Where is the data we need stored?** Do we already have access to it? Is all the data we need to access to communicate with a client stored in the same system or agency? Sometimes components of client cases are stored in different systems, meaning you may need to pull data from multiple systems to text clients with accurate information.
- **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?
- **What existing file transfer processes and protocols need to be considered?**
- **What is our** (or your partner's, if working with a vendor) **data/engineering team's capacity** to support developing and maintaining our data pipeline (i.e. transferring and cleaning the data for the program), if you need one?

Because data is the foundation for your texting program, you will want to bring your data team into the planning process as early as possible and create strong lines of communication with the policy, legal, program operations, user research, evaluation, and engineering teams, along with any partners (e.g., if you need client data from another department or agency). It can take time to understand what specific data you need, get access to it, and set up file transfers, so start this workstream as soon as possible.

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., state-wide data warehouse IDs, statewide client IDs, national IDs like Social Security number, etc.)

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.

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>

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

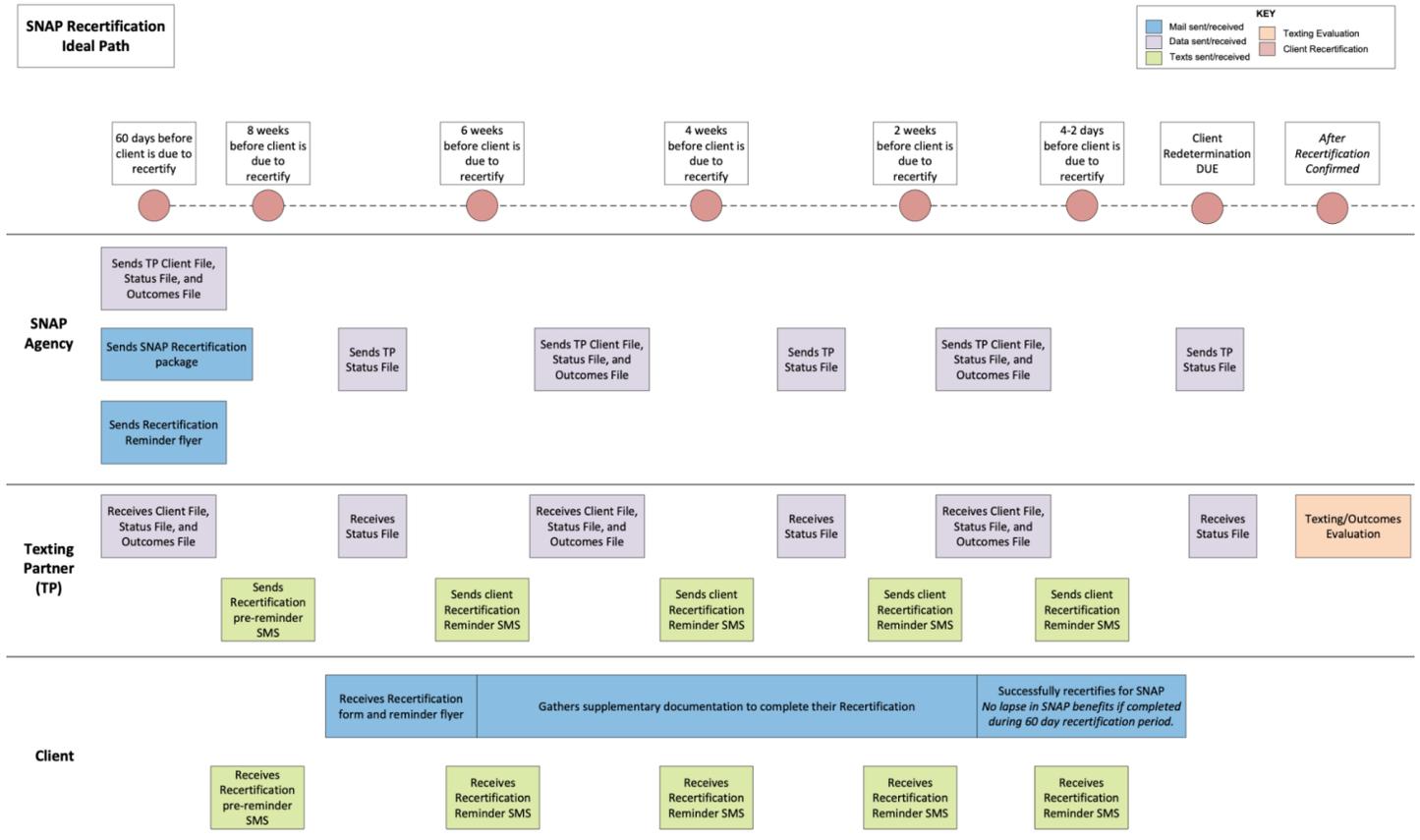
- SNAP recertification outcome (approved, denied, withdrawn, etc.)
- Recertification completed online or via paper application
- Reason for recertification failure

See the Evaluation section in the full guidebook 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



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 on page 11.

Data Pipeline

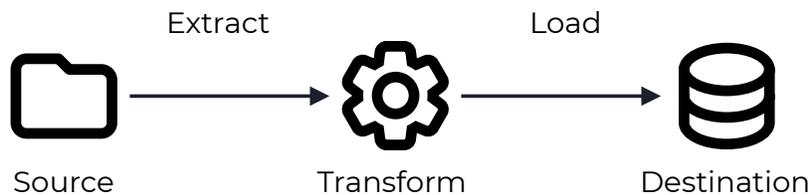
The data pipeline describes the process of transferring the data you need from the source (or sources) where it lives to your program database and cleaning it up to be in the format you need to make a successful transfer. If you already have texting capabilities built into your existing system, you may 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.



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.

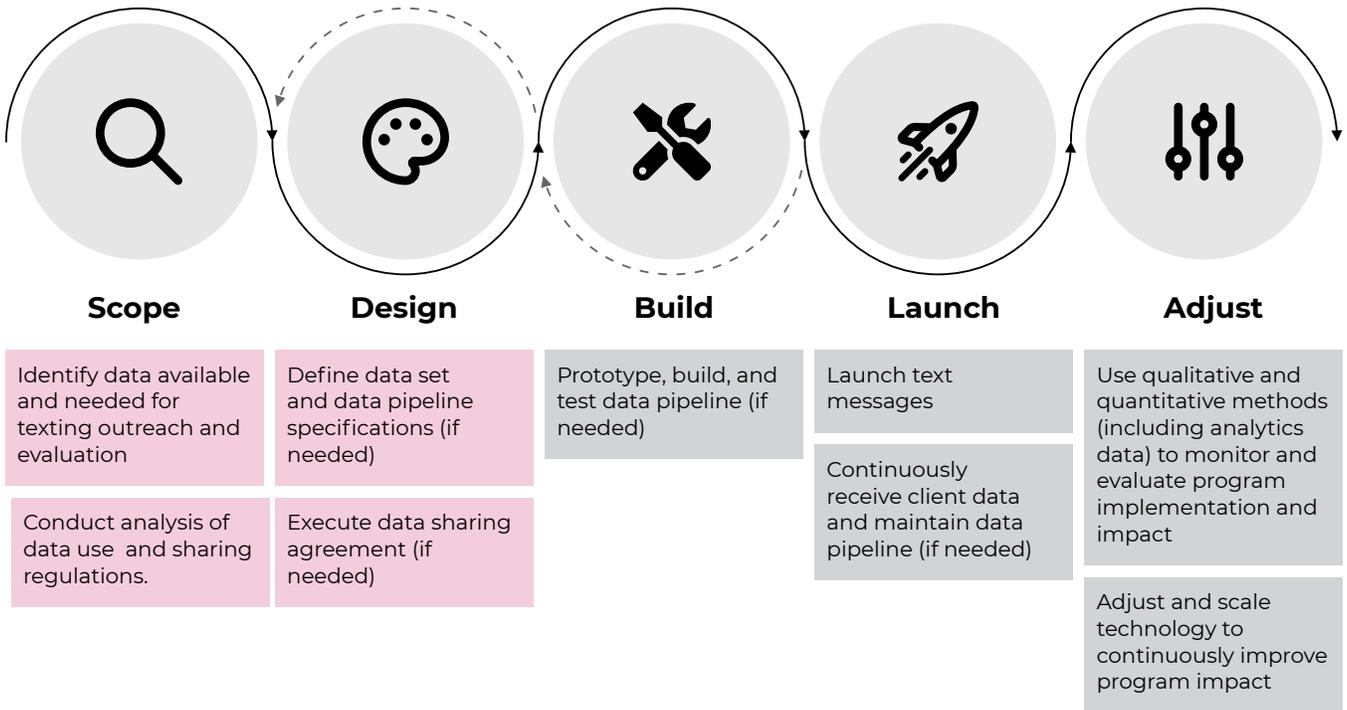
Load: This is the process of transferring the clean data into the program database. It can be either a manual or automated process. Like extraction, you'll want to consider file transfer and security protocols associated with the program database as well as the frequency that data is being ingested.

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.



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.
- BDT 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].

DATA SHARING AGREEMENT APPENDIX USE CASE: RECERTIFICATION DATA SHARE

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.