



Supporting New SNAP EBT Chip Cards: Overview and Next Steps

Introduction

In response to increasing counterfeit card fraud and theft of benefits, multiple states are planning to replace their current SNAP EBT cards with new cards that will include an EMV Chip along with the traditional magnetic stripe. California and Oklahoma are planning to issue SNAP EBT chip cards beginning as soon as Summer 2024 and several other states plan to follow.

There will be a phased issuance of the new EBT EMV Chip cards. Merchants, Acquirers, and Financial Institutions should conduct testing as soon as possible to ensure that the new SNAP EBT Chip cards work at point of sale (POS) terminals throughout the network during the transition. If retailer POS systems have not yet been programmed to accept the EBT EMV Chip card, testing should be conducted to confirm the EBT Chip card will “fallback” to use of the magnetic stripe on the card. Merchants should contact their POS service provider or third party payments processor (TPP) for help conducting the fallback testing.

The USDA Food and Nutrition Service (FNS) has a webpage with detailed information about SNAP EBT chip cards including notices, implementation guides, and test cases:
www.fns.usda.gov/snap/ebt/modernization.

This document provides a high-level overview. Review the material on the [FNS webpage](#) for additional details.

Technical Overview Requirements for Retailers (before supporting the new SNAP EBT chip cards)

SNAP EBT chip cards will include a new service code (220) in the magnetic stripe informing the POS terminal that the card has a chip.

The payment application on the chip will use a new Application ID (AID): **A0000000044542**. POS providers, acquirers, and TPPs have all been notified of the new EBT AID and will be helping merchants update their POS devices and systems accordingly.

If an EBT chip card is swiped before a chip transaction is attempted, because of the 220 service code, the terminal will instruct the customer to insert/tap the card instead. If the merchant’s POS system has been updated for the EBT AID, the chip transaction should process successfully.

If the POS system has not been updated, the terminal should deliver an ECL (Empty Candidate List) error when the chip transaction is attempted, which instructs the customer to swipe the card. A magnetic stripe transaction after an ECL error should process successfully.

To describe this another way: most merchants currently accept other chip cards (e.g., credit and debit cards issued by a bank or credit union), but their POS terminals do not yet support the new AID for SNAP EBT chip cards. When a customer tries to insert a new SNAP EBT chip card, the terminal will identify that the card has a chip but it will not recognize the new AID on the chip. When this occurs, **the terminal**

must allow the card to proceed as a magnetic stripe transaction. The technical name for this is Empty Candidate List (ECL) Fallback. The cardholder should not have to make three attempts to insert the chip. Instead the terminal should display "Application not found," "Card Not Supported," or something similar and instruct the cardholder to swipe the card after the first unsuccessful chip transaction attempt.

If the card is swiped before the chip is attempted, the terminal should read the service code (220) in the magnetic stripe and prompt the cardholder to use the chip. When the subsequent chip transaction also fails, ECL fallback will allow the second attempt at a magnetic stripe transaction to proceed. **This is an important training point for employees working at checkout.**

Magnetic stripe EBT cards have a service code (120) in the magnetic stripe indicating that they are magnetic stripe only and should continue to function as they do today.

Depending on state preferences, SNAP EBT chip cards will be contact-only (insert) or dual-interface (insert and tap/contactless) cards. Merchants that support tap/contactless transactions should conduct tests by inserting the chip and by tapping the card.

The process of using SNAP EBT for customers should remain the same as it is today; whether magnetic stripe or chip card, the cardholder selects the tender type and enters a PIN to process the payment.

Testing Requirements and Test Cards

Please contact your POS service provider, Acquirer, or Third Party Processor (TPP) to request test cards and formal test certification scripts. EBT Host Processors have supplied merchant Acquirers with test cards to distribute. Test scenarios are also available on the [FNS webpage](#).

Next Steps:

- **Contact** your Acquirer and/or POS service provider to:
 - **Obtain test cards** to validate magnetic stripe fallback on EBT chip cards works
 - **Provide** your Acquirer and/or POS service provider the SNAP EBT Application Identifier (AID): **A0000000044542**.
 - **Once the EBT AID is installed on your POS device, ensure that your system is ready** to accept EBT chip payments and discuss other security upgrades, like contactless payments
- **Visit** the FNS webpage for current information: www.fns.usda.gov/snap/ebt/modernization
- **For Additional Support and/or Questions** you can contact the FNS SEMTAC team:
solutionscenter@nationalgrocers.org

*See the Technical Appendix below.

Next Steps: Technical Appendix: Additional EBT EMV Implementation Requirements

EBT will be implementing standard EMV defined by EMVCo. There will be **no changes** to liability, settlement processing, recon processing, dispute processing, cut-off times, or BIN updates.

- **BINs / IINs:**
 - List of all SNAP EBT BINs: [State-IINs-04-10-19.pdf](#)
- **Card Technology:**
 - California: Dual Interface Chip (insert or tap)
 - Oklahoma: Contact Only Chip (insert only)
- **AID:** A0000000044542
- **Application Name:** EBT
- **Quick Chip:** Supported
- **Application Name:** EBT
- **Transaction Routing and Processing:**
While transactions will continue to follow the same routing and processing rails, Acquirers will have technical changes to support the additional transaction data for chip cards.
Merchants should work directly with their Acquirer to obtain updated specifications and certification requirements.
- **Application Currency Code:** 0840—US dollars
- **Service Code:** 220
- **Contactless Kernel:** Mastercard C-2 contactless kernel
- **Floor Limits:** The floor limit for all EBT transactions is zero.
- **Offline Authentication:** Cards will not support offline transactions
- **CAPK index:** There will be no offline CAP keys required for the POS terminal
- **CVM:** All EBT transactions will still require an online PIN.
 - CVM: Online PIN
 - No PIN-bypass allowed
 - CD CVM will not be supported
- **Terminal Action Code (TAC) values:**
 - Contact:
 - TAC Denial 00 00 00 00 00
 - TAC Online B0 50 9C 80 00
 - TAC Default B0 50 9C 80 00
 - Contactless:
 - TAC Denial 00 00 80 00 00
 - TAC Online F4 50 04 80 0C
 - TAC Default F4 50 04 80 0C

Specification Changes: Work with your Acquirer and/or POS terminal vendor to ensure support for the additional transaction data and values required for chip transactions.