

MARYLAND

SUN Bucks MatchBot



Project Description

Maryland developed an AI-driven “MatchBot” solution to accelerate and improve the accuracy of data-matching for the state’s Summer EBT (SUN Bucks) program, which helps families with school-aged children who receive free or reduced-price school meals purchase groceries during the summer. By leveraging generative AI, this initiative is streamlining enrollment for eligible families across data from the Maryland Department of Human Services (DHS), Maryland Department of Health (MDH), Maryland Health Benefit Exchange (MHBE), and Maryland State Department of Education (MSDE).

For records that cannot be matched automatically, Maryland’s current process requires case managers to manually compare the data values in records about single individuals. When customer records are incomplete or have limited information, the matching process becomes less accurate and can mistakenly merge records or fail to identify records that belong to the same person. This project extends the search to use family households to complement matches on individual demographic information. Generative AI ranks the matches and case managers use an improved user interface to complete the process.

The project is aligning data and services across the Maryland SUN Bucks Program, Supplemental Nutrition Assistance Program (SNAP), Temporary Cash Assistance (TCA), Medicaid, Foster Care, and Free and Reduced Priced Meals (FARMS) to reduce manual intervention, minimize errors and ensure timely and accurate benefit delivery for families.

Objectives

1. Implement a fully developed AI-driven MatchBot to improve the accuracy of Summer EBT data-matching
2. Inform improvements to the SUN Bucks MatchBot’s design and implementation through user feedback from SUN Bucks applicants, certified customers, and partners
3. Prevent spikes in data-matching errors and administrative burden on staff through AI integration

Logic Model

Purpose: Maximize data-matching accuracy to reduce errors and processing delays, ensuring eligible customers receive timely benefit determinations and are not incorrectly denied assistance.

Constraints	Activities	Outputs	Outcomes
Current data-matching is rigid “Exceptions” require extra time and money and have negative customer impacts Loss of key data points like sex and date of birth from applicants due to federal regulations	Enhance comparison of application data with existing state record databases from DHS, MDH, MHBE, and MSDE by considering entire households, not just individuals. Conduct customer and partner stakeholder feedback sessions User Acceptance Testing (UAT) of the SUN Bucks MatchBot Maintain a comprehensive audit trail for compliance and quality control	Reliable / accurate data matches The MatchBot will be more likely to surface correct results and rank them more accurately. Data mapping documentation and implementation guides Report on customer and partner feedback, focusing on insights used to influence MatchBot’s design and implementation	Streamlined direct certification and application processing workflows for SUN Bucks Lower errors Better user experience for case workers Accurate benefits delivery for families

Background & Context

The core partner agencies collaborating on the SUN Bucks initiative include state human services, education, and healthcare authorities.

- ⚙️ Maryland Department of Human Services (DHS): Administers food assistance programs (SNAP, SUN Bucks) and operates the central Eligibility & Enrollment (E&E) system.
- ⚙️ Maryland State Department of Education (MSDE): Oversees free/reduced-price school meal programs (FARMS) and provides student Direct Certification and Universal Enrollment data files.
- ⚙️ Maryland Health Benefit Exchange (MHBE): Transmits Medicaid/Medical Assistance (MA) files and Master Data Management (MDM) identifiers for cross-agency matching.
- ⚙️ Maryland Department of Health: Oversees Medicaid data use by DHS and MHBE.

Past Partnership Context: These agencies maintain an established data-sharing partnership to streamline benefit delivery across Maryland programs. MSDE and MHBE routinely feed student enrollment and healthcare coverage records directly into the Maryland Master Data Management (MDM) database. This ongoing collaboration allows the state to automatically clear and enroll the vast majority of eligible recipients participating in SNAP, Medicaid, or school lunch programs without requiring manual application processing.

Problem Identification & Target Population

Despite Maryland's success in providing \$70.59 million in federally funded grocery benefits to over 586,000 children in the 2024 launch of the SUN Bucks Program, a key challenge remains in seamlessly integrating data for an automatic enrollment process for families already receiving benefits like SNAP, TCA, Medicaid, Foster Care, and Free and Reduced Price Meals (FARMS). While over 90% of eligible children were directly certified through data sharing in summer 2025, the process required significant manual intervention to address data quality issues and inconsistencies.

Starting in 2026, USDA's update in its Summer EBT Questions and Answers (Q&A) guidance series allows applicants to omit key identifying information, such as sex and date of birth, reducing the effectiveness of current automated data-matching process and make the manual data match process more complex. As a result, Maryland will need a more robust and automated matching approach to maintain accurate data integration, reduce administrative burden, and support timely delivery of benefits to children and families.

The project will help reduce the stress and burden on families and contribute to improved health, well-being, and educational success for thousands of Maryland families who might otherwise experience greater food insecurity. By increasing automated enrollment and ensuring accurate, timely benefit delivery, eligible families will consistently receive the financial support needed for groceries during critical summer months. It will also create a more seamless customer experience across state programs, reduce barriers to access, and strengthen trust in public services.

Project Implementation Plan

Maryland will utilize an AI-driven solution called “SUN Bucks Matchbot” to automate and significantly improve the accuracy of Summer EBT data matching across DHS, MDH, MHBE, and MSDE.

 Plan	 Collaborate
Compare application data for SUN Bucks with existing state record databases from DHS, MDH, MHBE, and MSDE Review contextual data of the applicant to enhance matching accuracy Suggest possible data matches to help a second-level human reviewer resolve discrepancies, remove duplicates, and correct other common errors	Conduct customer and partner stakeholder feedback sessions to ensure the solution is truly customer centered Engage APHSA’s Community Impact Council (CIC) to inform customer experience of work and help co-design solutions
 Implement	 Evaluate
Integrate MatchBot within Maryland Benefits, the cloud-based platform home to the state’s Eligibility and Enrollment application Weave insights and priorities identified by community members during the state’s Economic Mobility Summit into the MatchBot’s design and workflow adjustments	% reduction in processing time and manual review for SUN Bucks direct certifications and applications % increase in eligible children automatically enrolled in SUN Bucks following full MatchBot deployment % improvement in cross-agency data-matching accuracy and reduction in caseworker processing time

Long-Term Goals



The SunBucks Matchbot is envisioned as a model for how technology can overcome inter-agency data challenges and will be integrated into Maryland Benefits, the state's existing statewide benefits platform. To ensure sustainability, Maryland will embed the MatchBot within existing IT infrastructure and workflow processes of DHS and its partners.

At the conclusion of the 12-month project, success will be marked by the full deployment of the AI-driven MatchBot, significantly increasing automated SUN Bucks enrollment and enhancing the accuracy and efficiency of Maryland's cross-agency data-matching process. Maryland anticipates a substantial reduction in administrative burden on caseworkers, allowing them to focus on complex cases and direct service to Marylanders. The system will be designed to effectively manage data-matching even with the planned changes to data collection (loss of sex and date of birth), ensuring program continuity and integrity. Eligible families will receive benefits without unnecessary delays.

Maryland plans to continue their collaborative engagement process with customers and community-based organizations to iteratively improve the process for future SUN Bucks programs beyond summer 2026. This commitment to continuous feedback and improvement, combined with capacity building for agency staff, will secure the project's long-term success.