



GENERAL INSTRUCTIONS FOR PLU MAPPING FRESH PRODUCE

Updated September 2024

Michigan WIC does not keep a list of Universal Product Codes (UPCs) for fresh fruits and vegetables, nor is the list of WIC-approved PLUs on our Approved Products List (APL) comprehensive.

Therefore, PLU mapping, or the process of linking UPCs and store-specific fresh produce PLUs to WIC-eligible PLUs, is a necessary step to redeem fresh produce without error.

Failure to map PLUs means a WIC client cannot buy the item at your store.

What is the difference between a UPC and a PLU?



Scanning a UPC on its own will only work with WIC if your store has mapped the item to the correct PLU.

How do you map items to the correct PLU?

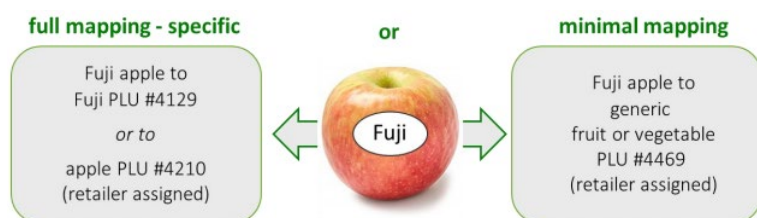
Step 1: Find who is responsible for mapping produce.

Some stores or store headquarters have dedicated produce managers, scanning coordinators, or a technical lead who ensures all items are mapped. For other stores, general managers will keep a list of items needing to be mapped and contact their POS provider to complete the mapping process.

Step 2: Choose whether your store will do full mapping or minimal mapping.

Full mapping is when all fresh produce UPCs are mapped to product-specific PLU codes that identify each fruit and vegetable by name. The full list of Michigan WIC-approved PLU codes can be found in our public posting of Michigan's [List of PLU codes](#). This method benefits your store and the state of Michigan because we can see exactly what items are being purchased with WIC.

Minimal mapping is when all produce UPCs and any store-specific PLUs are mapped to the generic code 4469.



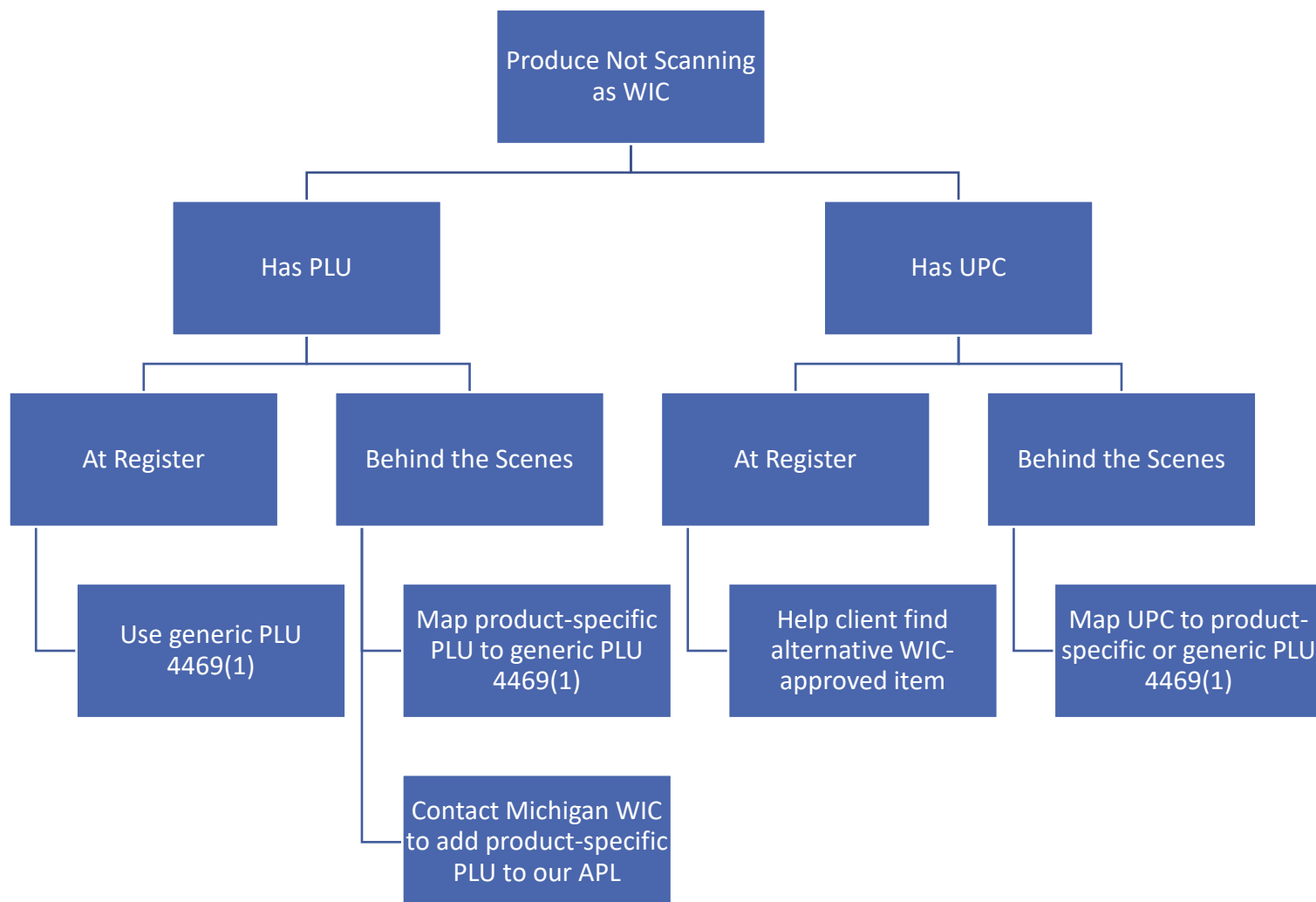
Step 3: Train cashiers to troubleshoot WIC transactions and report produce items for mapping.

All cashiers should know how to check WIC balances and the food guide to determine whether an item can be purchased by a WIC customer. They should also have a way to report issues with items to store management – for example, a form at their register.

Below you will find the following:

- 1) A flow map describing how to troubleshoot issues with transacting fresh fruits and vegetables both at the register to assist a client in the moment and at the back office with PLU mapping to prevent further issues.
- 2) A list of helpful acronyms when talking about PLU mapping.
- 3) Guidance on whether to PLU map foods with GTINs.
- 4) Guidance on whether to PLU map certain foods.

Fresh Produce Transaction Issue Flow Map



Acronyms

APL	Authorized Product List - UPC/PLU store file
CVB	Cash Value Benefit (CVB) - A fixed-dollar amount associated with the WIC EBT Card used by a WIC Participant to obtain authorized fruits and vegetables.
FNS	Food and Nutrition Service of the U.S. Department of Agriculture
GS1 Databar	The GS1 Databar is a stacked omnidirectional barcode created by the global standards organization, GS1. ¹ It is small enough to fit on a sticker put on a fruit or vegetable and can be scanned in the lane. Sometimes the GS1 Databar contains an embedded PLU code and it may contain weight or price information.
GTIN	Global Trade Item Number (GTIN) - A numbering scheme displayed at the bottom of and encoded in the GS1 compliant UPC bar codes. It is composed of the UPC Company Prefix assigned by GS1 to a manufacturer, an item reference number assigned by the manufacturer and a check digit.
IFPA	International Fresh Produce Association - International association serving the entire fresh produce and floral supply chain. Growers register with the IFPA and the IFPA maintains the list of GTINs assigned to all produce and floral.
IFPS	International Federation for Produce Standards - A coalition of fruit and vegetable associations from the around the globe that joined together in 2001 as equal partners to pursue the task of introducing a global standard for the use of international Price Look-Up (PLU) numbers
PLU	Price Look Up (PLU) code - a 4 or 5 digit code in the 3000 to 4999 range as defined by the International Federation for Produce Standards (IFPS). PLUs are used by a WIC Vendor to identify products that typically are of variable measure, e.g., meat, deli, seafood, fruits and vegetables or produce. Five digit PLUs with leading digit of 8 indicate a genetically modified product and those with a leading digit of 9 indicates organic products. The trailing four digits of conventional and organic products represent the standard PLU for a food item. A zero is the leading digit for conventional (standard non-genetically modified). Organic PLUs use 9 prior to the 4 digits (GS1 does not issue short PLUs).
Short PLU	Short Price Look Up (PLU) code are less than 4 digits. These are usually store generated PLU codes.
UPC	Universal Product Code (UPC) - A specific type of barcode used to identify products sold by the WIC vendor. The numbers shown in the barcode are entered on the APL file to identify authorized WIC food items.

¹ Definition from Produce Marketing Association website at [PMA Databar](https://www.produce.com/resources/pma-databar)

GS1 Databar Scanners

- Michigan WIC may include GTINs in its APL file in the future, but currently requires all GTINs also be mapped to WIC eligible PLUs.
- Barcode Scanning apps are used to easily identify the GTIN of a produce item.
- Scanning apps may or may not include the check digit.
- Establish settings parameters within the app. On a smartphone identify the barcode types/symbology settings/enable GS1 databar.
- Below are a few examples, but apps aren't limited to:
 - COGNEX app used to scan GTINs (free app)



Barcode Scanner
Cognex Corporation

- GS1 Barcode Scanner app (free app)



GS1 Barcode Scanner
Alexander Chaniotis
Contains ads



General Guidelines

Main Guideline is that Stores Should:

- Map a package that contains one or more fruits and/or vegetables.



Fruit and Vegetable Trays/Platters

Allowed:

- Convenience trays.
(Examples of allowed fruit/vegetable convenience trays.)



Not Allowed:

- Dips, dressings, or sauces
- Other food items, like cheese, meat, or crackers



Beans/Legumes

Allowed:

- **Fresh**, immature beans can be purchased with CVB.
 - Immature legumes or “fresh” legumes are edible pod beans and peas, and shell beans that have not yet been dried.
 - Examples include: green garbanzo beans, green beans, peas edamame beans and fresh lima beans.



Not Allowed:

- Added sugars, fats, oils, or meat.



Herbs and Spices

Allowed to Map:

- Be added to packaged fruits and/or vegetables as an ingredient/flavor enhancer to improve consumption.
- Fresh herbs.



Not Allowed to Map:

- Herb pastes, dried herbs, or spices.
- Anything with added sugars, fats, oils, or preservatives.

Pumpkins

Allowed to Map:

- Pumpkins fit for consumption



Not Allowed to Map:

- Pumpkins that are decorative, painted, or carved



Frozen or Canned Produce

Vendors shall **not map** frozen or canned produce. These items are approved by UPC. If there is an item you wish to see added to approved products list, you may send a [UPC Request](#).

Dried Produce

Vendors shall **not map** dried produce. Michigan WIC does not allow dried produce.