

A Best Practices Case Study

“We save time by displaying carrots in RPCs compared to unloading and stacking bags of carrots by hand.”

— Jerry Myers, Produce Manager at Food Maxx



It's difficult to earn a profit in the grocery business. A typical profit margin for grocery store chains is about 1%. Reusable plastic shipping containers (RPCs) offer grocers a chance to improve their profitability by reducing costs. The dairy, beverage, bakery goods and fast-food poultry industries have been using RPCs to cut costs for a long time. Based on the results of a recent study conducted for the Alameda County Source Reduction & Recycling Board (Recycling Board), the time is ripe for grocers to join other industries by using RPC's to ship and display produce.

THE STUDY

The Recycling Board commissioned an independent test which was conducted by Business Research and Consulting (BRC) to determine the feasibility of using reusable plastic containers. The primary purpose of the study was to determine if RPCs offer enough economic, performance, and environmental advantages to suggest that grocers should increase their use of these containers for shipping and displaying produce. Under the conditions of this particular test, the answer is “yes”.

The 19-week test was conducted at four grocery stores in Alameda County — two “Andronico's” supermarkets and two “Food Maxx” wholesale grocery outlets. The items tested were red grapes and baby carrots, grown and shipped from Southern California. A total of 32 in-store audits were conducted in the test stores. The purpose of the store audits was to collect weekly sales data and to interview managers and stockers regarding the advantages and disadvantages of using the RPCs. This included obtaining time estimates of handling and displaying produce in RPCs and monitoring adherence to test conditions.

Obtain a Copy of the Study

Call our Recycling Hotline to request a copy of the study or visit our website (www.stopwaste.org/reports) to download a copy of, “Plastic Containers (RPCs) for Shipping and Displaying Produce — a Feasibility Study.”



Improve Your Bottom Line: 1-877-STOPWASTE
www.stopwaste.org/partnership

“Putting produce on display in RPCs

doesn't affect sales, plus or minus.” — Bob Gates, Produce Manager at Andronico's

COST SAVINGS & PERFORMANCE ADVANTAGES

The produce department is already one of the most profitable departments in grocery stores, making up about 10% of sales and about 20% of profits. By reducing labor and waste disposal costs, RPCs can make this department even more profitable. RPCs can result in



labor savings from not having to unpack the shipping container and hand stack the retail display, and from reduced waste disposal costs. RPCs can be used to ship and display many products, not just produce. New United Motors Manufacturing in Fremont uses RPCs to ship almost all of their car and truck parts, saving them \$2.5 million each year.

RPCs also offer many performance advantages. RPCs

can be easier to handle because they are rigid, have a high stacking strength, come with handgrips, and aren't affected by moisture. Since they are easier to handle than corrugated paperboard (cardboard) boxes or foam containers, they can make shipping produce more efficient in the farmer's field, the distributor's warehouse and the grocery store. Another performance advantage of RPCs is that they are well ventilated. Farmers benefit from this improved ventilation because field heat is removed faster, improving produce freshness and lowering cooling costs. Increased ventilation can also help reduce spoilage and shrinkage throughout the entire shipping and display process.

THE EFFECT OF RPCS ON SALES

One of the main objectives of this study was to determine if using RPCs for display affects sales. It turned out RPCs had no positive or negative effect on sales. The study tracked weekly sales of grapes and baby carrots for five weeks before test stores began using RPCs for display in order to establish sales baseline data. Sales were monitored for 10 weeks when RPCs were in use. After the test stores stopped using RPCs, sales were monitored for another 4 weeks. Sales of the test commodities did not change when RPCs were in use. It appears that produce sellers can benefit from the advantages of RPCs without losing sales because of display changes.

THE ENVIRONMENTAL ADVANTAGE

RPCs offer opportunities to keep valuable materials out of our landfills, reduce pollution, and conserve resources used to manufacture new wood, foam, or paperboard containers. There are 18,000 tons of produce containers now used **each year** in Alameda County, much of which is currently



landfilled. Increased use of RPCs could also help the County fulfill State mandated goals of diverting 50% of its waste from the landfill, and a 75% countywide diversion mandate.

AVERAGE COST SAVINGS FROM USING RPCS

Labor savings per item	\$1,250
Disposal savings per item	\$ 500

Total annual savings per item **\$1,750**

(Store savings may vary significantly depending on sales, hauling fees and labor costs.)



“I think

RPCs for grapes are a winner. They are easy to handle, look fine, and cut way down on the waste bill.”

— Bob Gates, Produce Manager at Andronico’s

WILL RPCS WORK FOR YOU?

RPCs make the most sense under certain conditions. A major conclusion of this study is that the effectiveness of RPCs varies significantly depending on the produce item, the type of container being replaced, the dimensions and adaptability of the store’s display fixtures, and the grocer’s disposal system. Grocers will realize the most benefit from RPCs if they are used for products that take full advantage of their ease of handling, durability, high stacking strength, and reusability. When considering a switch to RPCs keep in mind that the containers work best for:

- **Controlled distribution channels** (e.g. “closed” or captive distribution channels). When trucks go back to the distribution center after making a delivery it is easier for RPCs to be returned for reuse.
- **Short shipping distances and/or frequent delivery.** The further RPCs have to travel between production points, the more costly it is to get them back to the distributor for reuse. Goods that have a high inventory turnover will benefit most from RPCs ease of handling. Frequent delivery also means frequent pick-up of empty RPCs, reducing the amount of storage space needed for empties.
- **Stores that have the ability to make operational changes.** While RPCs offer many bene-

fits, there is a learning curve involved in their use. During our study, store reaction to RPCs grew more positive as their experience with the containers increased.



- **Perishable products.** Since RPCs protect their contents and are well ventilated, they can provide many benefits to perishable products.
- **A narrow product line.** RPCs work best if multiple products can be shipped and displayed in the same size container. The fewer sizes and types of containers needed the easier it will be to store empty containers and to coordinate the logistics of reusing the RPCs with the distributor.
- **Products that require containers to be water resistant, durable, and have a high stacking strength.** While RPCs are made of plastic and do not lose strength when wet, corrugated paperboard boxes become soggy and may collapse.
- **Store displays that can accommodate their modular sizes.** If an RPC is going to be used for display it has to fit existing store displays or new displays may be necessary.

“RPCs are very easy to pull off a pallet; there’s no slippage and they look good.”

— Bob Gates, Produce Manager at Andronico’s



The Waste Management Authority and the Source Reduction and Recycling Board is an integrated agency dedicated to achieving the most environmentally sound waste management program for the people of Alameda County.

TAKING THE NEXT STEP

Following is a list of “next steps” you can take if you want to switch to RPCs.

- Identify which products and distribution channels closely fit the factors listed on the previous page.
- Estimate cost savings from using RPCs in your operation. How much time do your stockers spend unpacking produce and making displays by hand? Are your waste bills high because of the disposable containers filling your dumpster?
- Encourage your wholesalers and growers/suppliers to work with you in testing and to consider packing their products in RPCs.
- Determine if it makes most sense for your store to own, lease, or pool RPCs. The ownership model that will work the best for your store depends on the size of your operation, and the preferences of your distributors and growers.
- Bring up RPC use in public forums, industry sessions, or private conversations with suppliers, other grocers, waste management companies, and others that might have a stake in the future use of these containers.

The four stores that participated in the Recycling Board study favored the use of RPCs. They offer many performance advantages over corrugated paperboard boxes, wooden lugs, or foam containers. They are more durable, easier to handle and stack, can reduce spoilage, are better for the environment, and often reduce labor and waste disposal costs. While this study focused on using RPCs for produce, they could be used for a variety of products including many different types of food, office supplies, general merchandise, and auto supplies. It’s time to consider using RPCs in your operation.



For a copy of the study, call 1-877-STOPWASTE or visit www.stopwaste.org/reports

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