

V. Costs

A. Pre-printed Package Labels

This final rule does not mandate changes in the way meat or poultry products are produced. However, it does impose a new labeling requirement, for a limited time, on firms that manufacture and market products identified as pizzas that list meat or poultry components as part of the product name. When this rule becomes effective, all companies that produce products identified as pizzas that list a meat or poultry component as part of the product name will be required to modify their product labels by adding a statement contiguous to the ingredients statement that states the percent of meat or poultry in the product. Companies must consequently redesign their product labels by adding the required information to their existing label designs, or by applying a separate sticker with the required information to their existing labels. FSIS will permit companies to use their remaining packaging inventory before they will be required to comply with the new labeling requirement so that they will not have to discard any unused packaging.

Manufacturing of pre-printed packaging is generally contracted out to third-party firms. Costs to redesign product labels or add information to existing label designs are one-time costs and include costs associated with internal administrative activities, assessing the meat or poultry amounts,

altering the graphic design, conducting prepress activities, and changing engraving plates or cylinders.⁴

1. One-Time Costs

FDA's Labeling Cost Model was originally developed by researchers at RTI International for various consumer food products and was adapted for egg products, which are primarily shipped to foodservice and further food manufacturers. RTI adapted the model to determine the cost of the new regulation of placing the statements "keep refrigerated" or "keep frozen" on all egg products that require special handling to maintain their wholesome condition. Additionally such statements had to be printed on the principal display panel of the product. In determining the cost of the proposed egg products rule, the model was used to determine the cost of placing refrigeration labels, the cost of the labels, and the cost of the labeling equipment needed and the average size of the containers requiring the labels. FSIS believes that this is a reasonable and valid model to use to estimate the cost of the final rule for changing the labels on frozen meat and poultry pizzas.

Using the FDA Labeling Cost Model, the following table provides the costs associated with changing labeling information for frozen and refrigerated pizzas packaging using the offset lithography printing method⁵ for each universal product code (UPC) that needs to be changed. A UPC is a unique code

assigned to every consumer package good and is read by a scanner when purchased.⁶

TABLE 1.—ONE-TIME COSTS TO CHANGE LABELS FOR FROZEN AND REFRIGERATED PIZZAS, KITS, AND MIXES USING OFF-SET LITHOGRAPHY PRINTING METHOD

Cost Type	Per UPC Costs		
	Low	Medium	High
Administrative	\$132	\$308	\$484
Graphic Design ...	330	495	660
Total	462	803	1,144

Source: FDA Labeling Cost Model (Muth, Gledhill, and Karns, 2001).

¹ Estimated for 2001.

It is estimated that the cost per UPC will range from a low of \$462 to a high of \$1,144, with the more likely cost being \$803⁷ as depicted in the above table.

In 2001, there were 1,603 UPC's associated with refrigerated and frozen pizzas including a small percentage of pizza kits and mixes, of which 1,042 were from brand name labels and 561 were from private labels. When all these costs are considered, the estimated one-time cost to modify pre-printed pizza packaging labels for 1,603 UPC, as shown in the table below is \$741 thousand ($\$462 \times 1,603$ UPCs) to \$1.8 million ($\$1,144 \times 1,603$ UPC),⁸ with the more likely cost being \$1.3 million ($\$803 \times 1,603$ UPCs).

TABLE 2.—ONE-TIME COSTS, FROZEN AND REFRIGERATED PIZZAS, KITS, AND MIXES FOR ESTIMATED 1,603 UPC CHANGES¹

Cost Type	For Estimated 1,603 UPC Changes		
	Low	Medium	High
Administrative	\$211,636	\$493,636	\$775,997
Graphic Design	529,089	793,634	1,058,178
Total	740,725	1,287,270	1,834,175

Source: FDA Labeling Cost Model (Muth, Gledhill, and Karns, 2001).

¹ Estimated for 2001

⁴ In this analysis, there will be no costs associated with assessing the meat or poultry contents of pizzas because companies will be producing meat and poultry pizzas based on a formula. The final rule requires companies to calculate the weight of the meat or poultry toppings in relation to all components of the pizzas, which FSIS believes will result in no new incremental costs. There will not be any prepress activities and changing the engraving plates costs because these costs will be incurred during their normal business cycle.

⁵ The FDA Labeling Cost Model assumes that either the offset lithography or flexography printing method will be used. In this analysis the offset lithography printing method is assumed to be used

because of its relative advantages in quality, simplicity, and cost. The complexity of the label change determines the level of effort for artwork, stripping or image assembly, and engraving. It also determines the number of plates or cylinders that must be modified or replaced. Typically, when companies use offset lithography printing, many companies engrave new lettering onto an existing printing plate to save time and resources. Other companies, however, order new printing plates regardless of how minor the line copy change may be.

⁶ UPC is a 10 digit code where the first five digits are assigned to the vendor and the last 5 digits are specific to the item.

⁷ For each component of cost in this model, RTI obtained a range of estimates for each printing method. The lowest of these estimates is considered the limit of the low range, and the highest of the estimates is considered the limit of the high range. The low and high range of total cost is calculated by adding together all of the low and high range estimates of each component cost, so the low and high range estimates of this model are unlikely.

⁸ Source: Muth, M.K., E.C. Gledhill, and S.A. Karns. 2001. "FDA Labeling Cost Model." Prepared for the U.S. Department of Health and Human Services. Research Triangle Park, NC: RTI.