The newly revised Beef Cutout Calculator is an interactive web-based tool that allows users to view yields for selected carcass components, as well as current USDA-reported values for those cuts and a computed total carcass cutout value. Users may specify the type of carcass for which yields and values are to be reported, as well as the fabrication style to be used in breaking the carcass into component cuts.

The previous version of the Beef Cutout Calculator used statistical prediction equations to estimate the expected weights for cuts generated by a given carcass that was fabricated using a given cutting style (i.e., which cuts were generated from a given carcass), then values for each cut were determined using the estimated weights. Users could choose the cutout style they wanted to view for a hot carcass weight or live animal weight.

The newly revised and more refined version of the Beef Cutout Calculator relies on the use of actual weights for computations - cut weights determined to be likely via a large checkoff-funded research study to ascertain such yields. The system was upgraded to the extent that it now may compute cutout values for carcasses fabricated into a wider variety of cuts. Users now can also determine the type of animal (steer, heifer, dairy), USDA yield grade (1-5), USDA quality grade (Standard, Select, Choice, Branded) and live-weight category for beef animals to which values are to be assigned. Additionally, yields and prices for offal items and byproducts generated by the various classifications for carcasses now are used to compute drop values that are then added back to carcass cutout values to estimate current live cattle values. Computations of drop values were not included in the previous version of the Beef Cutout Calculator.

From the homepage (www.beefcutoutcalculator.colostate.edu), the user can choose two different options for how carcass cutout values may be determined. The default option is “Carcass Calculator” as shown below. (Figure 1)
From this front, default page, the user can select the live-weight range, the type (steer, heifer, dairy), the quality grade (Standard, Select, Choice, Branded) and the yield grade (1, 2, 3, 4/5). After the user selects the desired parameters, the **Beef Cutout Calculator** generates output similar to the following:

![Table of Beef Cutout Calculator](image)

**Figure 2. Output**
In the output generated on the front page (Figure 2) of the Beef Cutout Calculator, the user is provided with “Optimum” and “Minimum” values for cuts and the entire carcass, as well as the amount gained from optimizing the carcass cutout. In this output, the value of the entire fabricated carcass (i.e., the “carcass cutout value”) is maximized by generating the beef cuts for which a value is provided in the “Optimum” column. Conversely, the value for the entire fabricated carcass is minimized by generating the beef cuts for which a value is provided in the “Minimum” column. Hence, depending on the fabrication style used to disassemble a carcass, the Beef Cutout Calculator reports both the maximum and minimum values for the entire carcass (first row of results) based on yields and current market conditions for differing beef cuts. For example, in the display above (Figure 2), when a “Brisket (IMPS 120; ¼” trim)” is obtained from a carcass of the given characteristics (as opposed to other types of briskets), the estimated value is $48.51 per carcass and is thus the item that should be generated from this category of carcasses to optimize the overall carcass value. If the carcass brisket were further subdivided into “Flat 120 A” and “Point 120 B,” then the value of the total carcass would be reduced by about $12.35 ($48.51 - $27.56 - $8.60 = $12.35/hd) given current marketing conditions for the beef brisket. In the provided example, the difference in value returned per head is $253.33 in total carcass value when cuts are “Optimized” vs. when cuts are “Minimized” in value.

Users also may elect to “build their own” fabrication cutting style to rapidly compare cutting yields and the values generated, to better understand subprimal yields and their respective values, and to assist them in developing cutout strategies to meet their exact needs, maximizing the yield of individual value-added muscle cuts, and thereby maximizing the value of each individual carcass. This can be achieved by selecting (i.e., clicking on) the “Extended Value” button at the top of the home page or by clicking the “Build You Own Carcass Price” button. (Figure 3)

This page allows users to select a certain set of cutting styles to direct output for the same carcass characteristics described previously (i.e., grade, weight, gender/type, etc.). The example below is a view of what the user will see on this page. (Figure 4)
After the user selects the desired carcass characteristics and cutting styles to be listed and priced, the output will look like that shown below. (Figure 5)

![Figure 5. Build Your Own output](image)

In this example, the output will include the value for the items selected as well as the pounds per carcass generated for each item. This allows users to select specific cutting styles and compare beef cutout values between those different styles.

The new Beef Cutout Calculator has the ability to compute drop values on a carcass basis, something which was not included in the previous version of the Beef Cutout Calculator. Although further enhancements could be applied to the Beef Cutout Calculator (graphics which illustrate anatomical location of cuts, specifications for cut as well as additional muscle information), these updates provide users additional information when viewing carcass yields and pricing. Using actual yield data and current USDA pricing, the information presented is even more accurate than the previous version of the Beef Cutout Calculator.