



## Negotiated Hog Purchase Matrix

USDA's Agricultural Marketing Service  
Livestock, Poultry and Grain Market News

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Hog purchasing methodologies have evolved over time with most hogs today being priced on a carcass basis. Fat and muscling play an important role in carcass value determination as these factors closely correlate with the lean meat yield. For that reason, some packers collect various measurements such as backfat and loin eye depth to use in their buying programs and to make future production adjustments. In addition to backfat measurements at the carcass split, buying programs may also include a percent lean value determined with the use of an electronic instrument or carcass weight. These buying methods are then combined with a carcass weight differential and reported base prices to generate the Negotiated Hog Purchase Matrix.

Similar to the [pork carcass cutout](#), the Negotiated Hog Purchase Matrix is based on a 215-pound hog carcass and includes backfat measurements between 0.5-0.8 inches and loin eye depth measurements between 2.0-2.7 inches. It has been identified that hogs falling within these backfat and loin eye depth measurements capture the vast majority of industry trade and ultimately current industry practices. These reported measurements are used in conjunction with packer base carcass prices, carcass weight differential, and premiums/discounts for lean values to produce a matrix price range. The values are calculated each reporting period for participating packers using only reported negotiated purchase data for which a total low-high range is determined and published. This Negotiated Hog Purchase Matrix price range represents what a producer could expect to receive for a net price for its hogs if it participated in the negotiated market on that day.

Below is an example of a single day's reported negotiated purchases as well as the resulting generated Negotiated Hog Purchase Matrix (see Figure 1). The final net price range for a 215-pound carcass in this example is \$35.00 - \$45.00.

The table in Figure 2 demonstrates how this number was reached using 3 example companies. Companies 1 and 3 do not have a percent lean buying program based on carcass measurements, while company 2 does. However, all companies in this example have a carcass weight differential for a 215-pound carcass. Since companies 1 and 3 do not have percent lean adjustments, the only adjustment they do have is the carcass weight differential. Company 2 has a percent lean adjustment that ranges from **-\$1.00** to \$4.00. It also has a \$4.00 carcass weight differential. This accounts for the expected net price range of \$40.00 to \$45.00 for company 2. Accounting for all company adjustments from their respective base prices, we can see how the final range of possible net pricing is reached.



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Figure 1

### Volume and Price Range For Barrows and Gilts Purchased Swine (Including Packer Sold)

Negotiated (Carcass)	National	Iowa/Minnesota	Western Cornbelt	Eastern Cornbelt
	LM_HG200	LM_HG204	LM_HG208	LM_HG207
On a National basis, compared to the previous day's weighted average (LM_HG200), 0.80 higher				
Head Count	6,200			
Lowest Base Price	33.00			
Highest Base Price	42.00			
Weighted Average Price	37.00	*	*	*
5 Day Rolling Average	36.00	*	*	*

National Daily Direct Negotiated Hog Purchase Matrix  
Representing Individual Packer Carcass Merit Buying Programs  
based on Weight (215 lb Carcass), Backfat (0.5 - 0.8 inches), and Loin Depth (2.0 - 2.7 inches)

Range of possible net pricing: \$35.00 - \$45.00

#### Carcass Weight Differentials

145#	-25.00	-10.00	175#	-4.00	1.00	205#	1.00	4.00
155#	-25.00	-6.00	185#	-1.00	1.00	215#	-1.00	4.00
165#	-10.00	-3.00	195#	0.00	3.00	225#	-1.00	2.00

Figure 2

	Company 1	Company 2	Company 3
Low Negotiated Base Price	33.00	37.00	42.00
High Negotiated Base Price	35.00	37.00	44.00
Lowest % Lean Adjustment	NA	-\$1.00	NA
Highest % Lean Adjustment	NA	\$4.00	NA
Carcass Weight Differential at 215 lbs.	\$2.00	\$4.00	-\$1.00
Expected Net Price Range	\$35.00 - \$37.00	\$40.00 - \$45.00	\$41.00 - \$43.00