U.S. Conventional Egg Cost of Production and Prices

August 6, 2024



Compiled by

Maro Ibarburu

Sponsored in part by:



The Egg Industry Center Market Reports & Industry Analysis are compiled in the memory of their creator, Don D. Bell, Poultry Extension Specialist Emeritus - UC Davis.

COST of GROWING CONVENTIONAL PULLETS TO 16 WEEKS of AGE BY REGION (\$/bird) - 2024

Month	Southeast	Northeast	Midwest	South Central	4-region average
Jan	4.15	4.18	4.06	4.12	4.13
Feb	4.10	4.12	4.01	4.07	4.07
Mar	4.08	4.12	4.01	4.06	4.07
Apr	4.08	4.13	4.02	4.07	4.08
May	4.17	4.21	4.10	4.16	4.16
Jun	4.14	4.17	4.08	4.13	4.13
Jul	4.05	4.10	4.02	4.08	4.06
Aug					
Sep					
Oct					
Nov					
Dec					
7 Month Avg.	4.11	4.15	4.04	4.10	4.10
Region/US avg.	1.00	1.01	0.99	1.00	

Source: Egg Industry Center Non-feed cost was adjusted using the Consumer Price Index until we receive new survey answers.

Assumptions: estimated as the median value of egg farmer surveys which median age was 16 weeks

11.7 lbs. of feed consumed per pullet for conventional systems (from egg farmer surveys)

pullet feed price 7% more expensive than layer feed

chick cost = 111 cents/baby chick for conventional systems (including services)

moving cost = 19 cents/pullet for conventional systems (from egg farmer surveys)

all other costs = 137 cents/pullet for conventional systems (from egg farmer surveys)

All non-feed cost are assumed to be the same for all regions, because the number of survey responses wasn't large enough to estimate non-feed cost per region. There was a wide range of costs between survey responses even within the same region. Note: "4-region average" is the simple average of the NE, SE, SC, and MW regions.

COST of GROWING CONVENTIONAL PULLETS TO 19 WEEKS of AGE (start of lay) BY REGION (\$/bird) - 2024

TABLE 2

Month	Southeast	Northeast	Midwest	South Central	4-region average
Jan	4.73	4.77	4.62	4.69	4.70
Feb	4.66	4.69	4.55	4.63	4.63
Mar	4.64	4.69	4.55	4.62	4.63
Apr	4.65	4.70	4.57	4.63	4.64
May	4.74	4.80	4.67	4.73	4.74
Jun	4.71	4.75	4.64	4.71	4.70
Jul	4.60	4.66	4.57	4.64	4.62
Aug					
Sep					
Oct					
Nov					
Dec					
7 Month Avg.	4.68	4.72	4.60	4.66	4.67
Region/US avg.	1.00	1.01	0.99	1.00	

Source: Egg Industry Center Non-feed cost was adjusted using the Consumer Price Index until we receive new survey answers. Assumptions: 14.2 lbs. of feed consumed per pullet for conventional systems.

pullet feed price 7% more expensive than layer feed

chick cost = 111 cents/baby chick for conventional systems (including services)

moving cost = 19 cents/pullet for conventional systems

all other costs = 163 cents/pullet for conventional systems

All non-feed cost are assumed to be the same for all regions, because the number of survey responses wasn't large enough to estimate non-feed cost per region. There was a wide range of costs between survey responses even within the same region. Note: "4-region average" is the simple average of the NE, SE, SC, and MW regions.

A 25 miles increase in the average feed transportation distance, would result in a \$0.047/pullet increase on the cost of growing pullets to 16-weeks of age, and a \$0.057/pullet increase on the cost of growing pullets to 19-weeks of



ESTIMATED CONVENTIONAL PULLET COST BY REGION under 1-cycle systems (Cents/doz.) - 2024

Month	Southeast	Northeast	Midwest	South Central	4-region average
Jan	12.10	12.18	11.84	12.00	12.03
Feb	11.93	12.00	11.67	11.85	11.87
Mar	11.89	12.00	11.67	11.84	11.85
Apr	11.90	12.02	11.72	11.85	11.87
May	12.13	12.26	11.95	12.10	12.11
Jun	12.05	12.15	11.88	12.04	12.03
Jul	11.79	11.94	11.71	11.87	11.83
Aug					
Sep					
Oct					
Nov					
Dec					
7 Month Avg.	11.97	12.08	11.78	11.94	11.94
Region/US avg.	1.00	1.01	0.99	1.00	

Source: Egg Industry Center

Assumes 412 eggs per hen housed under 1-cycle systems for 1-cycle systems up to 90 weeks of age (using egg farmer suveys) There was a wide range of costs between survey responses even within the same region

A 25 miles increase in the average feed transportation distance, would result in an increase in the pullet cost of approximately 0.14 cents/dozen eggs.

TABLE 4
ESTIMATED FEED COST BY REGION FOR CONVENTIONAL EGGS under 1-cycle systems (Cents/doz.) - 2024

Month	Southeast	Northeast	Midwest	South Central	4-region average
Jan	38.28	39.02	35.96	37.44	37.67
Feb	36.83	37.45	34.49	36.11	36.22
Mar	36.44	37.45	34.49	35.95	36.08
Apr	36.50	37.62	34.94	36.08	36.29
May	38.58	39.71	36.97	38.33	38.40
Jun	37.88	38.70	36.35	37.80	37.68
Jul	35.53	36.85	34.85	36.28	35.88
Aug					
Sep					
Oct					
Nov					
Dec					
7 Month Avg.	37.15	38.11	35.44	36.86	36.89
Region/US avg.	1.01	1.03	0.96	1.00	

Source: Egg Industry Center

Estimated based on feed costs (\$/ton) shown in table 3. Assuming 3.23 lbs. of feed/dozen eggs for 1-cycle systems up to 90 weeks of age (using egg farmer suveys).

A 25 miles increase in the average feed transportation distance, would result in an increase in the feed cost of approximately 1.22 cents/dozen eggs.

A correction to the corn prices and the feed transportation cost was included on March 2024.

Please see the "U.S. Feed Cost by Region" report (notes below tables 1 and 4).



ESTIMATED TOTAL COSTS BY REGION FOR CONVENTIONAL EGGS under 1-cycle systems (cents/doz.) - 2024 *

Month	Southeast	Northeast	Midwest	South Central	4-region average
Jan	78.32	79.15	75.74	77.39	77.65
Feb	76.71	77.40	74.11	75.91	76.03
Mar	76.28	77.41	74.11	75.74	75.88
Apr	76.34	77.59	74.61	75.88	76.11
May	78.66	79.92	76.88	78.38	78.46
Jun	77.89	78.79	76.18	77.79	77.66
Jul	75.27	76.74	74.51	76.10	75.66
Aug					
Sep					
Oct					
Nov					
Dec					
7 Month Avg.	77.07	78.14	75.16	76.74	76.78
Region/US avg.	1.00	1.02	0.98	1.00	

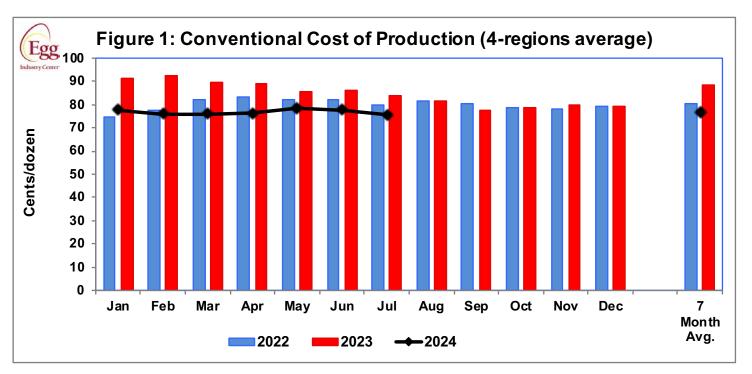
Source: Egg Industry Center. Non-feed cost was adjusted using the Consumer Price Index until we receive new survey answers.

There was a wide range of production costs between survey responses even within the same region. The number of survey responses wasn't large enough to estimate differences in non-feed cost between regions.

Higher labor costs might exist in certain regions. Newer, more efficient farms, would probably use less labor but have higher equipment costs.

A 25 miles increase in the average feed transportation distance, would result in an increase in the total cost of produccion of approximately 1.36 cents/dozen eggs.

A correction to the corn prices and the feed transportation cost was included on March 2024. Please see the "U.S. Feed Cost by Region" report (notes below tables 1 and 4).



Note: "4-Region average" is the simple average of the NE, SE, SC, and MW regions. The West region is not considered for the average because of the different production requirements.



^{*} These estimations are based on feed costs (cents/dozen) shown in table 4, and pullet costs (cents/dozen) shown in table 3. Building and equipment, labor, interest and miscellaneous costs are assumed to be 28 cents/dozen for all regions and months.

ESTIMATED TOTAL COSTS OF CONVENTIONAL PRODUCTION vs. some loss in production efficiency (Cents/doz.) - 2024

month				TOTAL Cost	(cents/dozen)			
	Average	5% higher feed conv.	5% higher pullet feed	Lower eggs	/hen-housed	A and B	A, B, and C	A, B, and D
		Α	В	С	D			
Jan	77.65	79.54	77.86	79.68	81.08	79.75	80.39	81.79
Feb	76.03	77.85	76.24	78.06	79.45	78.05	78.68	80.08
Mar	75.88	77.69	76.09	77.91	79.30	77.89	78.53	79.92
Apr	76.11	77.92	76.31	78.13	79.53	78.13	78.76	80.16
May	78.46	80.38	78.68	80.49	81.89	80.60	81.24	82.64
Jun	77.66	79.55	77.88	79.69	81.09	79.76	80.40	81.80
Jul	75.66	77.45	75.86	77.68	79.07	77.65	78.28	79.68
Aug								
Sep								
Oct								
Nov								
Dec								
7 Month Avg.	76.78	78.62	76.99	78.81	80.20	78.83	79.47	80.87

Source: Egg Industry Center, based on USDA Marketnews published prices of corn and soybean meal



[&]quot;Average" is estimated using the egg farmer suveys results for 17 to 90 weeks of age.

[&]quot;5% higher feed conv." is the estimated cost if the feed conversion were 5% higher than the survey results (using 3.39 lbs./dozen instead of 3.23 lbs./dozen)

[&]quot;5% higher pullet feed." is the estimated cost if the feed used to grow pullets were 5% higher than the survey results (using 12.3 lbs./pullet instead of 11.7 lbs./pullet)

[&]quot;lower eggs/ hen-housed" is the estimated cost if the number of eggs per hen-housed were 5% lower than the survey results (using 391 eggs/hen-housed instead of 412 eggs/hen-housed):

C = the effect of producing less eggs per hen-housed as a result of shortening the laying period was estimated as depreciating the cost of growing the pullet in less eggs

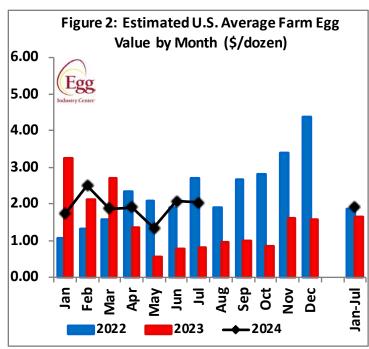
D = the effect of producing less eggs per hen-housed as a result of a lower hen-day production but keeping the length of the period equal was estimated as D plus the effect on the non-feed costs (assuming that the non-feed costs increase at the same proportion as the productivity decrease)

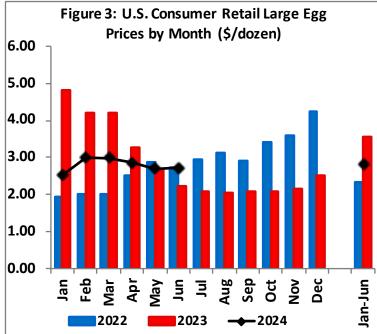
U.S. RETAIL EGG PRICE for LARGE WHITE CONVENTIONAL EGGS (\$/DOZEN)

TADI	7	

		Midwest	(\$dozen)		National (\$/dozen)			
month	2022	2023	2024	Change	2022	2023	2024	Change
Jan	1.79	4.44	2.34	-2.10	1.93	4.82	2.52	-2.30
Feb	1.89	3.75	2.91	-0.84	2.01	4.21	3.00	-1.22
Mar	1.86	3.16	2.76	-0.40	2.01	4.21	2.99	-1.22
Apr	2.43	2.86	2.59	-0.27	2.52	3.27	2.86	-0.41
May	2.87	2.36	2.46	0.10	2.86	2.67	2.70	0.03
Jun	2.61	2.08	2.62	0.54	2.71	2.22	2.72	0.50
Jul	2.75	1.99			2.94	2.09		
Aug	2.81	1.93			3.12	2.04		
Sep	2.81	1.98			2.90	2.07		
Oct	3.15	2.07			3.42	2.07		
Nov	3.39	2.06			3.59	2.14		
Dec	4.11	2.39			4.25	2.51		
Jan-Jun	2.24	3.11	2.61	-0.49	2.34	3.57	2.80	-0.77
12 Month Avg.	2.70	2.59			2.85	2.86		-

Source: Bureau of Labor Statistics (Dept. of Commerce)







U.S. ESTIMATED FARM EGG VALUE FOR ALL WHITE CONVENTIONAL EGG SIZES (\$/dozen)

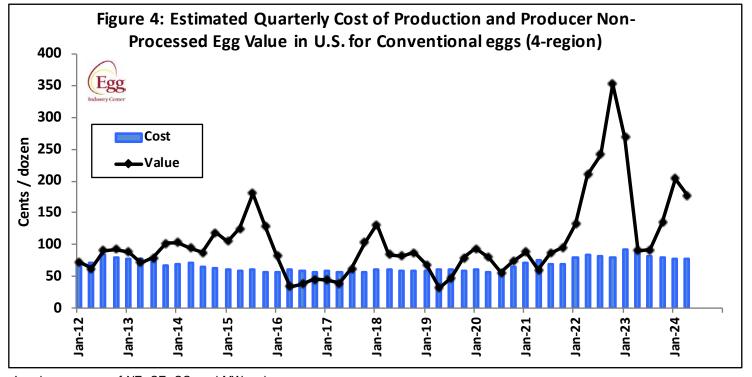
	4-region (NE, SE, SC and MW) average (\$/dozen)									
month	2018	2019	2020	2021	2022	2023	2024	Change		
Jan	0.94	0.76	0.53	0.71	1.06	3.23	1.72	-1.51		
Feb	1.19	0.70	0.69	0.91	1.33	2.11	2.51	0.40		
Mar	1.82	0.58	1.60	1.02	1.56	2.71	1.87	-0.84		
Apr	1.16	0.37	1.31	0.66	2.34	1.35	1.90	0.56		
May	0.62	0.21	0.60	0.58	2.07	0.57	1.35	0.78		
Jun	0.74	0.37	0.50	0.56	1.89	0.79	2.07	1.28		
Jul	0.92	0.29	0.51	0.71	2.69	0.80	2.04	1.24		
Aug	0.84	0.57	0.52	0.92	1.89	0.96				
Sep	0.71	0.56	0.64	0.96	2.68	0.98				
Oct	0.79	0.47	0.84	0.76	2.83	0.86				
Nov	0.93	1.07	0.81	0.88	3.38	1.63				
Dec	0.88	0.81	0.56	1.22	4.37	1.56				
Jan-Jul	1.06	0.47	0.82	0.74	1.85	1.65	1.92	0.27		
12 Month Avg.	0.96	0.56	0.76	0.82	2.34	1.46				

4-region: average of NE, SE, SC, and MW regions

Source: Estimated using Urner Barry's price quotations by regions

For this report, the value to egg farmers for each size eggs is estimated by subtracting an "adjustment factor" from Urner Barry quotations of prices by region. The "adjustment factor" is estimated as the sum of the following costs estimated in the latest PCT study: carton cost + case cost + finishing cost + processing cost + cost of delivering to store door + loss from store returns. Each month is adjusted based on the latest PCT study results. For example: starting on March 2023 the adjustment is 52.39 cents/dozen, and from June 2022 to February 2023 it was 46.83 cents/dozen.

The average value of all eggs is estimated using the proportions of Jumbo, Extra-large, Large, Medium, Small and Undergrades. These proportions are the estimated using the weighted average of the reponses to the PCT studies published in 2021, 2022 and 2023.



4-region: average of NE, SE, SC, and MW regions

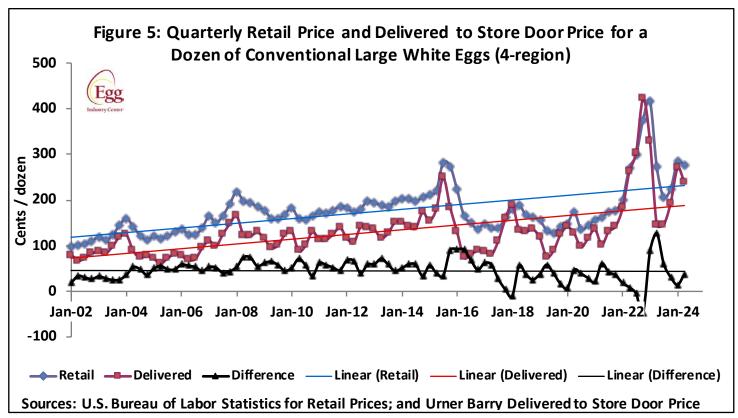


CONVENTIONAL LARGE WHITE SHELL EGGS PRICES TO WAREHOUSES (dollars per dozen)

TABLE 9

	Northeast		Sout	heast	Mid	west	South Central	
month	2023	2024	2023	2024	2023	2024	2023	2024
Jan	4.12	2.11	4.22	2.18	4.08	2.05	4.27	2.21
Feb	2.52	3.07	2.61	3.15	2.48	3.01	2.67	3.17
Mar	3.02	2.32	3.11	2.41	2.97	2.27	3.16	2.43
Apr	2.15	2.42	2.15	2.50	2.09	2.37	2.25	2.53
May	0.92	1.67	0.96	1.75	0.86	1.61	1.00	1.77
Jun	1.16	2.48	1.21	2.57	1.11	2.43	1.25	2.59
Jul	1.16	2.41	1.21	2.49	1.11	2.36	1.25	2.52
Aug	1.28		1.32		1.22		1.36	
Sep	1.43		1.50		1.38		1.54	
Oct	1.21		1.27		1.16		1.32	
Nov	1.91		1.99		1.86		2.02	
Dec	1.95		2.04		1.90		2.06	
7 Month Avg.	2.15	2.35	2.21	2.44	2.10	2.30	2.26	2.46
2 Month Avg.	1.90		1.96		1.85		2.01	

Source: USDA AMS Poultry Market News



Note: the delivered to store door price is estimated from the Urner Barry quoted prices as the 4-region simple average (Northeast, Southeast, South Central, and Midwest). California and the Northwest are not considered for the average because of the different production requirements.



BREAKING STOCK AND CHECKS EGGS PRICES IN CENTRAL STATES (cents per dozen)

TABLE 10

		Breaki	ng Stock		Checks Eggs			
month	2021	2022	2023	2024	2021	2022	2023	2024
Jan	34.24	74.30	253.25	114.05	28.55	65.60	237.28	106.90
Feb	43.32	81.13	198.84	156.55	36.84	72.58	186.37	149.85
Mar	66.07	122.80	267.39	153.88	58.39	114.04	250.96	142.10
Apr	56.36	232.31	143.35	154.89	46.23	227.33	136.70	142.59
May	51.08	207.93	44.39	109.01	41.65	208.95	37.91	103.41
Jun	48.02	178.52	74.31	162.26	41.32	170.86	67.48	148.42
Jul	47.76	221.25	86.33	171.00	41.00	215.30	79.00	165.00
Aug	58.86	171.37	85.93		53.59	166.17	79.22	
Sep	65.45	208.67	86.33		58.76	204.05	80.80	
Oct	60.45	259.85	80.55		50.80	247.55	77.10	
Nov	61.80	259.85	107.73		50.55	254.25	101.35	
Dec	68.12	346.71	111.50		64.05	329.21	105.00	
7 Month Avg.	49.55	159.75	152.55	145.95	42.00	153.52	142.24	136.90
12 Month Avg.	55.13	197.06	128.32		47.64	189.66	119.93	

Source: USDA AMS Poultry Market News

Differences with respect to previous year and month

July 2	024 vs. July	2023 (cents/	doz.)	July 2	024 vs. June	e 2024 (cents	s/doz.)
Cost of Pr	Cost of Production Egg Producer Value		Cost of P	roduction	Egg Produ	ucer Value	
-9	-10%	+124 +156%		-2	-3%	-4	-2%

In July: the cost of production was 9 cents/dozen (10%) lower than July last year, and 2 cents/dozen (3%) lower than the previous month.

In July: the egg value was 124 cents/dozen (156%) higher than July last year, and 4 cents/dozen (2%) lower than the previous month.

Sources Acknowledgements (double click on the links below and you can go directly to the source):

USDA AMS Market News https://mymarketnews.ams.usda.gov/public data

https://www.marketnews.usda.gov/mnp/ls-report-config?category=Feedstuff

USDA WASDE http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1273

Urner Barry http://www.ubcomtell.com/

Bureau of Labor Statistics https://www.bls.gov/regions/mid-atlantic/data/AverageRetailFoodAndEnergyPrices USandMidwest Table.htm

USDA Cage-Free Shell Egg Report https://www.ams.usda.gov/mnreports/pymcagefree.pdf

Maro Ibarburu, EIC Business Analyst Iowa State University, Ames, IA

Phone (515) 509-1145

E-mail: maro@iastate.edu

ADVANCING SCIENCE FOR A BETTER FUTURE

https://www.eggindustrycenter.org/

