

Proposed GIPSA Rules Relating to the Chicken Industry: Economic Impact



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Introduction

In 2010 the United States Department of Agriculture (USDA), Grain Inspection, Packers and Stockyards Administration (GIPSA) proposed regulations that would affect chicken company contracts with independent chicken growers. These proposals would significantly expand both the scope of GIPSA oversight of grower contracts, and the legal definition of “unfair practices”. The purpose of this study revision is to update the likely economic impact of the 2010 GIPSA proposals on chicken companies, their independent contract growers, and consumers.

GIPSA’s Proposed Rules would alter long-standing contractual and business relationships between chicken companies and independent growers. The changes that are proposed are, in part, designed to broaden the scope of GIPSA authority, reduce the latitude to pay growers based on their performance, limit the ability of chicken companies to seek grower investments, and set new requirements for cessation or reduction of delivery of birds to growers. The most likely economic effects would be a reduction of performance-based competition among growers, a reduced rate of capital investment, a reduced rate of efficiency gains, higher chicken prices, and reduced chicken exports.

The GIPSA proposal has been put forward without meaningful evidence of harm done by current or historic practices. To the contrary, the current organization of the chicken industry has resulted in efficiency advances that benefit contract growers, chicken companies, and consumers. GIPSA also failed to present empirical evidence that the proposed rules would result in improved economic performance of the chicken industry. Indeed, based upon an analysis of the proposed rules and application of basic economic theory, it is likely that the proposed rules would increase production costs by reducing incentives for efficient chicken production, adversely affecting competition, chicken companies, efficient and effective chicken growers, and consumers.

GIPSA has also proposed new rules that specifically relate to pork and beef production, pricing and marketing practices. This study does not address those proposals. The proposals affecting chicken companies could also affect other types of poultry production. However, only the potential economic effects of the proposed rules on the chicken industry were considered in preparing this study.

Summary of the Proposed Rules

For purposes of this study, GIPSA’s proposed rules that would likely affect chicken industry economics materially will be grouped into six broad categories.

1. **Suspension of Bird Delivery:** A 90-day written notice for suspension of delivery of birds to growers would be required. In addition, written reason for the suspension of delivery, the length of the suspension of delivery, and the date the delivery of birds will resume would be required.

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2. **Required Records:** Several proposed changes are related to records that chicken companies would be required to maintain and make available to growers and/or GIPSA. These include:
 - a. A specific statistical basis for determining grower pay for each flock raised;
 - b. Justification for differentials in grower pricing and payment;
 - c. Provision to GIPSA of a copy of each unique contract to growers, and;
 - d. Furnishing growers with written documentation of expected costs and returns for many company-sought capital improvements to grower facilities.
3. **Limits on Base Pay and Tournament Compensation:** These proposed changes are designed to regulate compensation of growers by establishing:
 - a. A uniform grower base pay rate based on type and kind of poultry; and
 - b. Pay-for-performance sub-groups based on grower housing type.
4. **Capital Improvements:** The proposals are designed to affect the terms under which a chicken company may seek capital improvements to be made by growers to their facilities. The Proposed Rules would require:
 - a. Contracts of sufficient length for a grower to recover 80% of the cost of the improvement;
 - b. Capital improvements made as a result of poultry company coercion be deemed an unfair practice;
 - c. The age and upgrade history of a grower's facilities could be the basis for a finding of an unfair practice for capital improvements;
 - d. Growers be able to "reasonably expect" the recovery of the cost of capital improvements sought by poultry companies;
 - e. A prohibition on reduced placements or termination of a grower for refusing a capital improvement if the grower's facility is in "good working order"; and
 - f. A prohibition on poultry companies reducing or ending processing at a facility within 12 months of a bargained for capital improvement for any of the growers supplying that facility. Emergency relief from this rule would require GIPSA approval.
5. **Expanded Enforcement Authority:** GIPSA's proposals would significantly expand GIPSA's enforcement authority to include:
 - a. A broad definition of breach of contract;

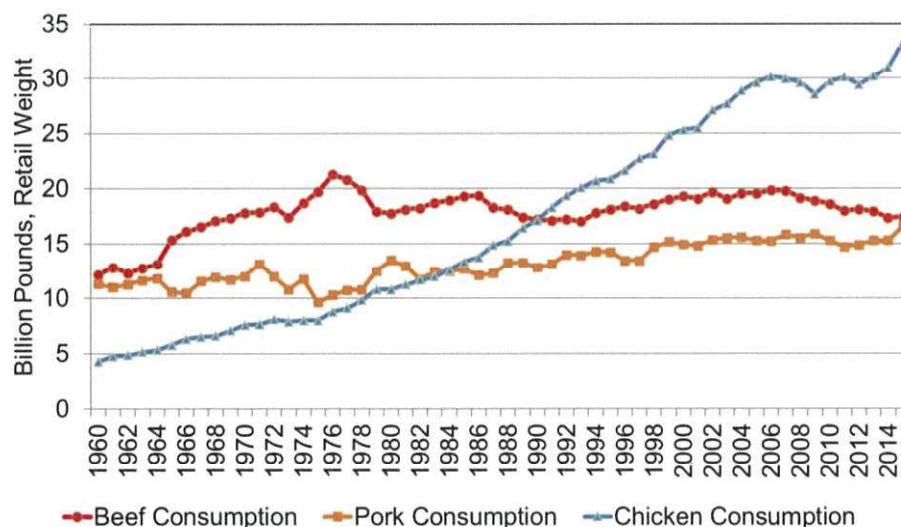
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- b. A broad definition of retaliatory action or omission,
 - c. A broad definition of fraudulent representation, by practice or omission, that would, or could, create competitive injury, or a “likelihood of competitive injury”; and
 - d. Expanded authority eliminating the test of competitive injury that applied to the Packers and Stockyards Act. Specifically, the Proposed Rules state “Conduct can be found to violate section 202(a) and/or (b) of the Act without a finding of harm or likely harm to competition.”
6. **Effective Date:** The Proposed Rules would apply to any poultry growing arrangement or contract entered into, amended, altered, modified, renewed or extended after the effective date of the final rule. Thus, flock-to-flock and expiring contracts would likely be immediately affected by the Proposed Rules. Longer term contracts may pose significant issues for implementation of the Proposed Rules as currently written.

Background – Chicken Industry Economic Performance

Market Performance: The U.S. chicken industry has an exemplary record of technological and management advances that have translated into lower real costs, lower real chicken prices, and increased chicken production and exports. As a direct result of innovation, since 1960 chicken has come from a distant #3 ranking in the U.S. meat industry to become the premier leader in both meat consumption and exports. To a great extent the growth of the industry can be attributed to its vertically integrated, effectively structured, production system. That system has enabled the chicken industry to compete aggressively with producers of beef and pork.

U.S. Consumption of Chicken, Beef and Pork, 1960-2015

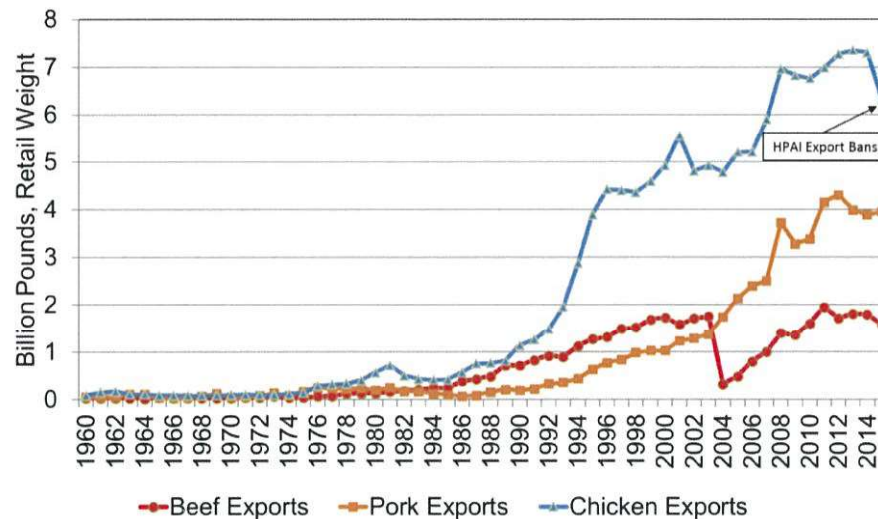


Source: USDA/FAS. PS&D database found at <http://www.fas.usda.gov/psdonline/psdQuery.aspx>. Accessed 4-20-2016.

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Over the last 25 years chicken export volume has grown rapidly to about equal the combined total of beef and pork exports. Chicken export growth is a direct result of vertical integration, innovation, improved genetics, and investments that have made the U.S. chicken industry a premier competitor on the global market. Exports in 2015 were reduced by Avian Flu issues.

U.S. Exports of Chicken, Beef and Pork, 1960-2015



Source: USDA/FAS. PS&D database found at <http://www.fas.usda.gov/psdonline/psdQuery.aspx>. Accessed 4-20-2016

Chicken Price Trends: Since 1990, retail chicken prices have declined about 30 percentage points against both beef and pork (chart, next page). The decline in relative price was a significant factor behind the increased volume of U.S. chicken consumption relative to beef and pork. The fact that prices have declined relative to beef and pork is a direct function of a faster rate of cost-reducing innovation in chicken production. Innovation in chicken production has also driven increased rates of innovation in beef and pork, and helped lower their costs and prices as well. This result is exactly what economic theory would suggest in a well-functioning, highly competitive, marketplace.

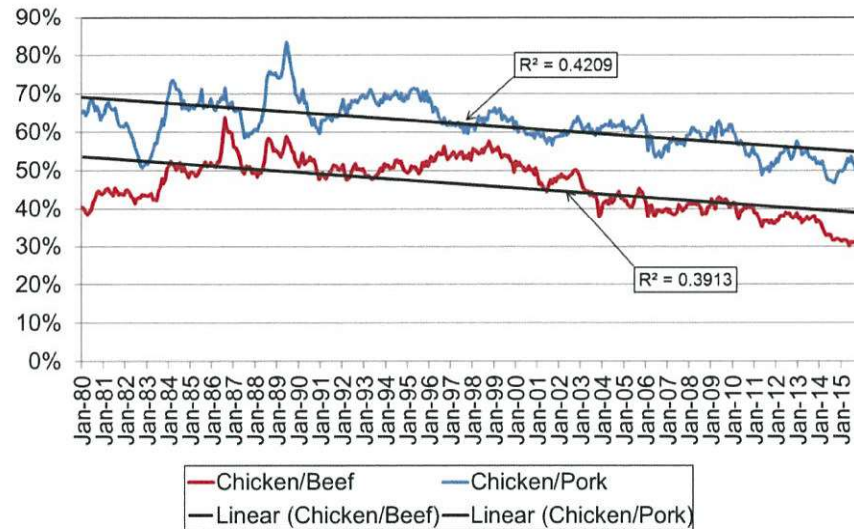
Retail chicken prices, in 1982-84 constant dollars, declined from about \$1.20 per pound in 1980 to only about \$0.80 in 2015. The only way real prices can decline to this extent is the adoption of cost reducing, innovative, technology in a highly competitive market where cost reductions are passed along as lower consumer prices. Real chicken prices are likely to decline further if feed costs remain at the lower level seen since 2012-13.

The chart on the next page showing constant dollar retail chicken prices demonstrates that the primary beneficiary of increased chicken industry efficiency has been the U.S. consumer. Real retail chicken prices have declined by 33% in the last 30 years, while chicken company profitability has not changed significantly. Cost-saving technology and investments that chicken companies and their contract growers have deployed since 1980 have been competitively transferred to consumers via lower real retail prices. Again, this result is consistent with

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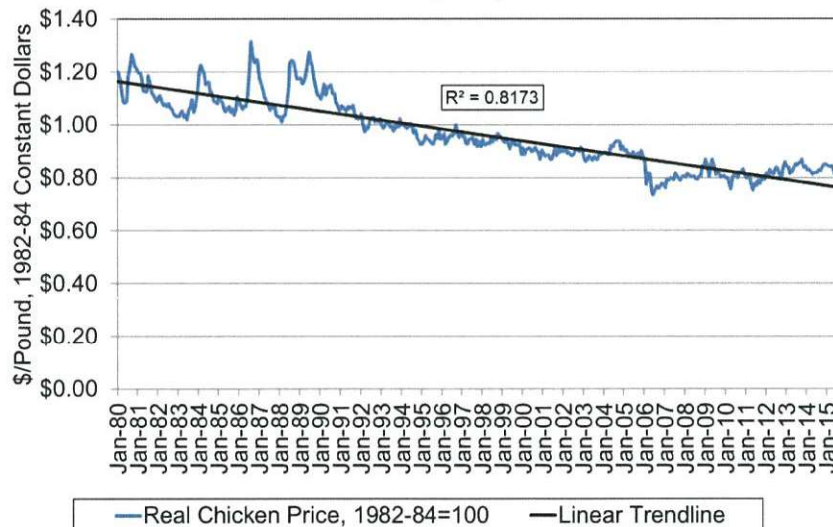
economic theory. In competitive markets, as real costs decline the benefit is passed along to consumers in the form of lower real prices and expanded output.

USDA/ERS Monthly Retail Chicken Prices Relative to Beef and Pork



Source: Retail meat data found at <http://www.ers.usda.gov/Data/meatpricespreads/>. Accessed 4-20-2016.

Retail Constant Dollar (Real) Chicken Prices



Sources: Chicken, beef and pork prices found at <http://www.ers.usda.gov/Data/meatpricespreads/>. Consumer Price Index, base years 1982-1984, found at <http://data.bls.gov/cgi-bin/dsry>. Accessed 4-20-2016.

Value of Innovation: One way to approximate the actual savings of chicken sector value chain innovation is to calculate the actual retail value of chicken production (average retail price times volume produced) versus retail value calculated as if average retail prices had increased with inflation. The gap between the two total retail values is what would have happened if

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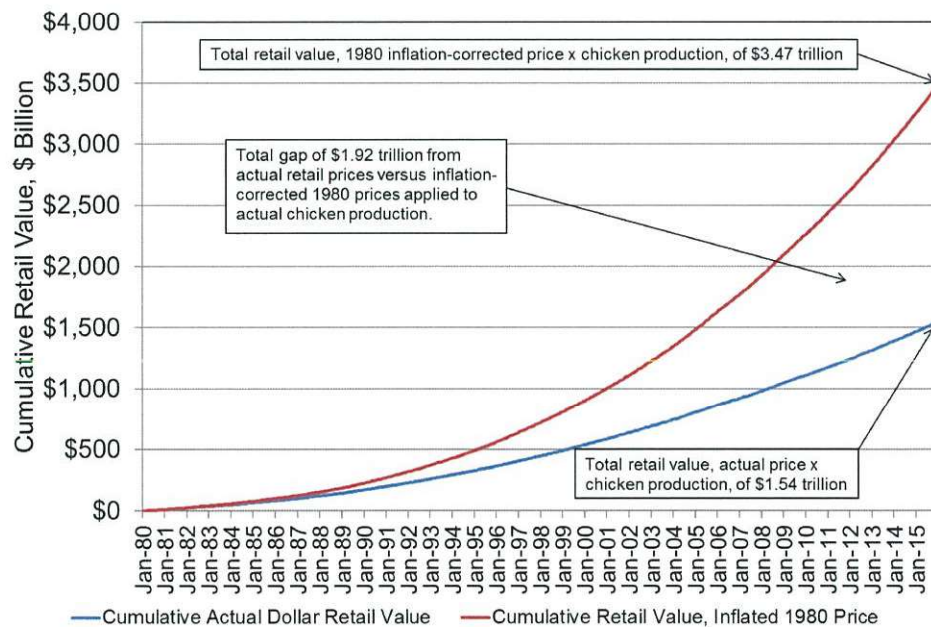
innovation had not kept increases in costs and prices to below the rate of general inflation, versus what actually happened with innovation-driven prices.

Had retail chicken prices since 1980 increased with general inflation, the actual value of production would have increased much faster than was the case with lower actual prices that capture the value of cost-reducing innovation. The value gap is shown in the chart below.

The total 1980 to August, 2015 value gap between inflation-corrected 1980 and actual retail prices is \$1.92 trillion. In other words, since 1980, chicken consumers have saved almost \$2 trillion from the lower retail prices made possible by investments in cost reducing technology.

Not all of those savings were due to investments made by chicken companies. Investments in crop production, feed processing and optimization, grower housing, genetics, chicken processing equipment, distribution, and many other areas involved in chicken production all contributed to the decline in costs and prices relative to overall consumer price inflation. Improved efficiency of live chicken production has been one key driver in these overall cost savings.

Estimated Cumulative Retail Value of U.S. Chicken Production
1980 Inflation-Corrected Retail value versus Actual Retail Value



Sources: Retail chicken prices found at <http://www.ers.usda.gov/Data/meatpricespreads/>. Chicken production found at http://www.nass.usda.gov/QuickStats/Create_Federal_All.jsp. Consumer Price Index found at <http://data.bls.gov/cgi-bin/dsrv>. Accessed 4-20-2016.

Contract Grower Compensation: Contract growers have also benefited from improvements in chicken production efficiency. Actual records of inflation-adjusted average chicken company payments to growers, per square foot of their housing, show an increase since 1990 (table, next page). Those increased payments reflect, in part, returns on the investments made by growers

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that have increased the efficiency and value of their operations. Increased payments also reflect freely negotiated chicken company current dollar pay rate increases to offset increasing grower costs for construction, maintenance, and operation of their chicken growing facilities.

Contract Chicken Grower Pay: U.S. Industry Average, 1990 through 2015

(Average Grower Payment Inflation-Adjusted by Implicit GDP Price Deflator, 2009 Base Year)

Year	Average Grower Payment, Cents/Lb., Current Dollars	Average Grower Payment, Cents/Lb., \$2009	Live Young Chicken Production, Million Pounds	Total Grower Payments, \$2009, Million	% Change, \$2009 Grower Payments	Live Pounds Per Sq. Foot	Average Grower Payments, Per Sq. Foot, \$2009
1990	4.08	6.10	25,549,696	\$1,559,563	13.2%	33.12	\$2.02
1991	4.11	5.95	27,170,780	\$1,617,098	3.7%	33.44	\$1.99
1992	4.14	5.86	28,997,878	\$1,699,672	5.1%	33.77	\$1.98
1993	4.22	5.84	30,474,243	\$1,778,349	4.6%	34.09	\$1.99
1994	4.23	5.73	32,765,941	\$1,876,751	5.5%	34.77	\$1.99
1995	4.32	5.73	34,352,980	\$1,968,417	4.9%	34.93	\$2.00
1996	4.30	5.60	36,034,815	\$2,018,442	2.5%	34.75	\$1.95
1997	4.46	5.71	37,207,401	\$2,125,103	5.3%	34.87	\$1.99
1998	4.53	5.74	38,054,849	\$2,183,929	2.8%	35.26	\$2.02
1999	4.68	5.85	40,444,167	\$2,364,063	8.2%	36.09	\$2.11
2000	4.78	5.84	41,293,525	\$2,410,344	2.0%	36.23	\$2.11
2001	4.87	5.81	42,335,507	\$2,461,631	2.1%	36.03	\$2.09
2002	4.81	5.66	43,715,247	\$2,472,605	0.4%	34.64	\$1.96
2003	4.90	5.65	44,317,531	\$2,503,671	1.3%	37.22	\$2.10
2004	5.04	5.66	46,109,201	\$2,607,670	4.2%	38.56	\$2.18
2005	5.24	5.70	47,578,696	\$2,710,359	3.9%	39.15	\$2.23
2006	5.39	5.68	48,332,516	\$2,747,672	1.4%	38.97	\$2.22
2007	5.43	5.58	49,089,999	\$2,738,429	-0.3%	38.56	\$2.15
2008	5.64	5.68	49,780,767	\$2,829,764	3.3%	38.84	\$2.21
2009	5.62	5.62	47,613,466	\$2,675,877	-5.4%	38.19	\$2.15
2010	5.67	5.60	49,314,757	\$2,762,281	3.2%	38.48	\$2.16
2011	5.78	5.59	49,559,126	\$2,772,606	0.4%	39.40	\$2.20
2012	5.85	5.56	49,350,169	\$2,743,761	-1.0%	39.07	\$2.17
2013	5.93	5.55	50,357,463	\$2,792,535	1.8%	39.12	\$2.17
2014	6.19	5.69	51,225,964	\$2,917,261	4.5%	39.52	\$2.25
2015	6.27	5.71	53,168,160	\$3,036,603	4.1%	40.03	\$2.29
% Increase	53.7%	-6.4%	108.1%	94.7%	NA	20.9%	13.1%

Sources: Average grower payment and pounds/sq. foot: Agri Stats, 4/20/2016. Average grower payment is computed as total grower payments made by chicken companies to, or on the behalf of, growers, divided by total live pounds produced.

Live chicken production from USDA/NASS, found at <http://www.nass.usda.gov/QuickStats/>, accessed 4/20/2016.

1990-1992 and 2010 pounds/sq. foot estimated based on 1993-2009 trend.

Implicit GDP Price Deflator from Bureau of Economic Analysis found at <http://www.bea.gov/national/nipaweb/Index.asp>, accessed 4/20/2016

Although inflation-adjusted average pay rate per pound has declined slightly since 1990, inflation-adjusted payments per square foot of grower housing increased by an estimated 13.1%. Improved chicken performance, made possible largely by chicken company genetics investments, more than offset a decline in the inflation-adjusted pay rate per pound. As a result

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of improved bird performance the annualized average pounds marketed per square foot of a grower's house has increased almost 21%.

Since it accounts for the grower investment in housing space, inflation-adjusted pay rate per square foot is a better indicator of average grower return on housing than payment per pound.

Increased inflation-adjusted grower payments are what would be expected from a competitive market. Chicken companies, faced with increasing demand and production requirements, have increased average current dollar payment rates to offset increasing costs, and to encourage growers to expand and improve their facilities. Without the participation of their contract growers and improved chicken performance, chicken companies would not have been able to meet increasing demand, while simultaneously reducing real costs and retail prices.

Chicken companies and growers have shared the benefits of improved performance. To stimulate the necessary grower production and investment to meet increasing demand, chicken companies have not had to increase their current dollar average payment rate per pound as much as would have been needed without these performance gains. At the same time, due in large part to performance improvements made possible by chicken company investments in genetics, growers have received higher inflation-adjusted payments per square foot of their housing.

Economic Growth and Employment: Expansion of the U.S. chicken sector has enabled chicken companies to contribute to overall U.S. economic and job growth. Direct employment effects have been seen in the chicken companies themselves, and among their contract growers. The industry currently directly employs about 280,000 people in its U.S. operations. In addition, about 30,000 growers produce hatching eggs and live birds.

Indirect job and economic benefits from chicken company growth have occurred in food retailing, grain/soybean/feed ingredient production, export services, foodservice providers, equipment suppliers, packaging suppliers, transportation, animal health suppliers, and many other sectors.

Since 1960, chicken has been the fastest growing sector in both U.S. and global animal protein production. That growth is largely accounted for by an efficient and effective business model that has innovated, reduced costs, increased product quality, and dramatically increased product offerings.

Imposition of regulations that would reduce the industry's ability to innovate and increase efficiency would damage not only the chicken industry, but also live chicken producers and the entire U.S. economy. Growers would be asked to produce less chicken, consumers would pay higher prices, potential job creation would be lost, and export competitiveness would be at risk.

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GIPSA Proposed Rules – Estimates of Economic Impact

The GIPSA Proposed Rules would impose significant added costs on chicken companies. It is likely that the Proposed Rules would, in their individual parts and entirety, have a substantial adverse impact on costs and risks of raising live chickens under contract arrangements with independent growers, to the detriment of the entire chicken industry and consumers.

Potential costs can be broken out into the following categories (*Proposed Rules sections that are related to the effect*). These categories are illustrative, and not intended to be exhaustive.

1. *Reduced Rate of Efficiency Improvements:* Directly and indirectly, the Proposed Rules are very likely to have a negative effect on the level of future productivity gains, and could cause costs to increase above what they otherwise could have been in the absence of the Proposed Rules. To the extent that costs are higher than they would have been in the absence of the Proposed Rules, retail chicken prices will also be higher. **(201.215, Suspension of Delivery; 201.94, Required Records on Pricing Differentials and Contract Terms; 201.216, Capital Investment Requirements; 201.217, Capital Investment Requirements; 201.214, Tournament Compensation Requirements; 201.3, Expansion of Authority)**
2. *Increased Administrative Overhead:* The Proposed Rules would require significant additions to documentation for contract terms, grower payment rates, and negotiated capital improvements made to grower facilities. Tournament compensation systems would require additional documentation and increased overhead from segregation by housing type. Termination of a grower that fails to perform under a contract would entail additional documentation. All unique contracts would have to be submitted to GIPSA, with confidential information identified. All of these new requirements would add costs to chicken company overhead. **(201.94, Required Records on Pricing Differentials and Contract Terms; 201.210, Records Related to Contract Payments; 201.213, Contracts to be Submitted to GIPSA; 201.216, Capital Investment Requirements; 201.214, Tournament Compensation Requirements)**
3. *Increased Cost of Litigation:* The Proposed Rules contain numerous requirements and terms that are vague, poorly defined, or defined differently from long standing practice. The lack of clear definition of requirements and terms invites litigation. Even if litigation does not occur, uncertainty about the scope and meaning of the Proposed Rules create disincentives for investment or the introduction of innovative contractual arrangements. In addition, the Proposed Rules would extend USDA's enforcement authority well beyond its historical reach defined in numerous court decisions. The Proposed Rules would impose a set of requirements that may be impossible for chicken companies to meet without breaking and re-drafting existing long term grower contracts, inviting further litigation. The Proposed Rules contain rules and prohibitions in areas of activity that have never been regulated in any other sector of agriculture. Added litigation imposes an unknown, and unpredictable, added cost burden to the

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industry. More significantly, the risk of litigation is a disincentive for investment and innovation in the production of live chickens by contract growers. *(All sections of the Proposed Rules are included in this cost category.)*

1. Reduced Rate of Efficiency Improvements

Several historical productivity and efficiency trends in live chicken production are shown in the tables on the next page. Improvements in feed conversion, average daily gain, live production per square foot of grower house and mortality are major driving forces behind growth in chicken production, and lower real costs and prices for chicken products. Productivity gains have come primarily from improvements in genetics, feeds, and grower housing.

Feed Conversion (FCR): Feed accounts for most of the cost of raising live chickens. Chicken companies have made significant investments in genetics and feed formulations in order to increase the efficiency of feed conversion and chicken production. Feed conversion is highly correlated with other performance measures. As a result, compared to 1925, in 2015 the amount of feed required to produce a pound of live chicken is less than half, daily gain has increased by more than 5 times, and mortality dropped from 18% to 4.8%.

U.S. Live Chicken Performance, 1925 to Present

Year	Average Days to Market	Market Weight, Pounds, Live	ADG, Grams	FCR	Feed/Bird, Pounds	Mortality, Percent
1925	112	2.50	10.12	4.70	11.75	18
1935	98	2.86	13.24	4.40	12.58	14
1940	85	2.89	15.42	4.00	11.56	12
1945	84	3.03	16.36	4.00	12.12	10
1950	70	3.08	19.96	3.00	9.24	8
1955	70	3.07	19.89	3.00	9.21	7
1960	63	3.35	24.12	2.50	8.38	6
1965	63	3.48	25.06	2.40	8.35	6
1970	56	3.62	29.32	2.25	8.15	5
1975	56	3.76	30.46	2.10	7.90	5
1980	53	3.93	33.63	2.05	8.06	5
1985	49	4.19	38.79	2.00	8.38	5
1990	48	4.37	41.30	2.00	8.74	5
1995	47	4.67	45.07	1.95	9.11	5
2000	47	5.03	48.54	1.95	9.81	5
2005	48	5.37	50.75	1.97	10.58	5
2010	47	5.70	55.01	1.95	11.12	4.0
2011	47	5.82	56.17	1.96	11.41	3.9
2012	47	5.95	57.42	1.91	11.36	3.7
2013	47	6.01	58.00	1.88	11.30	3.7
2014	47	6.12	59.06	1.89	11.57	4.3
2015	48	6.24	58.97	1.89	11.79	4.8
%1925-2015	-57%	150%	482%	-60%	0%	-73%
2020 est	48	6.57	62.08	1.85	12.15	4.0

*2020 estimated 4/20/16. Source: National Chicken Council, found at 4/20/2016

<http://www.nationalchickencouncil.org/about-the-industry/statistics/u-s-broiler-performance/>

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Chicken companies supply chicks and feeds to contract growers. Chicken companies are able to take advantage of economies of scale, and reduce costs of feed production, chick production, and genetics research. Independent growers could not duplicate chicken company cost economies or genetics research programs. Chicken companies also offer a stable market for their growers' chickens, and assume all risks of feed cost variation. In recent years that risk has been substantial.

Contract growers supply labor, housing, feeders, water, and the utilities to operate their chicken growing houses. This partnership has resulted in lower costs and increased efficiency for the entire industry.

To realize the potential efficiency of genetics and feeds supplied by the chicken companies, housing and related equipment used to raise live chickens must be regularly improved. However, chicken companies generally contract with growers who own the housing and equipment in it. Thus, chicken companies do not directly determine the quality of facilities or equipment that they depend on to efficiently convert feed into chicken meat, and optimize investments in improved genetics.

To encourage growers to improve their facilities, most chicken companies have put incentives in their contract compensation plans that reward improved feed conversion. In many cases, improving feed conversion has required capital investment in grower housing. In some cases, chicken companies have bargained for improvements in housing as a term in their contracts with independent growers. Growers have also benefited from improved feed conversion. With improved conversion comes higher daily gain. Improved gains increase the pounds per year that a grower can raise in a house, increasing the grower's gross income potential. Since 1990 the average pounds raised per square foot of grower house space has increased by 20.9%.

25 Years of Chicken Company Live Bird Efficiency Improvements

Year, Item	Market Age, Average Days	Market Weight, Pounds, Liveweight	Average Daily Gain, Grams	Feed Conversion, Pounds of Feed for 1 Pound of Broiler, Liveweight	Live Pounds Produced Per Square Foot of Grower House	Mortality, Percent
1990 Actual	48	4.37	41.30	2.00	33.1	5
2015 Actual	48	6.24	58.97	1.89	40.0	4.8
Actual 1990-2015 Difference	0	1.87	17.6714	-0.11	6.9	-0.4
Actual % Difference	0%	43%	43%	-6%	20.9%	-8%
2015 Performance at 1990 Liveweight	34	4.37	58.97	1.51	--	--
Difference	-14	0.00	17.67	-0.49	--	--
% Difference	-29%	0%	43%	-25%	--	--

Sources: NCC performance history and Ross 708 days and feed conversion ratio performance standards found at http://en.aviagen.com/assets/Tech_Center/Ross_Broiler/Ross-708-Broiler-PO-2014-EN.pdf

As chickens gain weight the efficiency of feed conversion declines. Actual gains in average feed conversion have thus been significantly masked by the trend in increasing average market

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weights. As shown in the table above, at the 1990 average market weight of 4.37 pounds, the 2015 feed conversion standard is about 1.5 pounds of feed per pound of live gain, much lower than the actual average of 1.89 at an average 6.24 pounds of market weight. Over time, feed conversion has improved significantly across the entire spectrum of chicken market weights. Competition among chicken companies has translated these gains into consumer benefits of lower inflation-corrected chicken prices, and increased chicken production.

Summary: Since 1990, and corrected for constant market weights, the improvements in both gain rates and improved feed conversion have been significant. Compared to 1990, raising a 6.24 pound live bird now takes 14 (29%) fewer days. Feed conversion has declined from 2.0:1 to 1.89:1 (-6%; lower is better) for a much heavier 6.24 pound market weight chicken. Average daily gains increased by 43%. Live pounds produced per square foot of grower house increased by almost 21%. These increases in efficiency benefited contract growers (increased gross income per pound and per square foot, and more live pounds produced), chicken companies (lower feed costs and increased sales volume), and consumers (lower inflation-adjusted chicken prices and more chicken consumption).

Gain from Feed Conversion Improvement: Feed consumption per bird is calculated as feed conversion times live weight. In 1990 it took 8.74 pounds of feed to produce a 4.37 pound chicken. In 2015 it took only 6.56 pounds of feed to produce that same live weight chicken, 24.9% less. The difference of 2.18 fewer pounds of feed has a current cost of about 27 cents per 4.37 pound bird (at a feed cost of \$260/ton), or 6.2 cents per pound of live chicken.

Had the improvements in feed efficiency in the table on the prior page not occurred, the current conversion rate would be about 25% higher than the actual 2015 of 1.89, or about 2.36 at a 6.24 pound live weight. At 2015 feed costs of about \$260 per ton, improved feed conversion since 1990 will save \$3.3 billion in 2015 feed expense. This cost reduction is a direct result of chicken company innovation and investment. Savings of this magnitude would not have been possible without ongoing improvements in contract grower-owned facilities. The primary beneficiaries of lower costs have been chicken consumers who have enjoyed lower inflation-corrected prices and expanded chicken production. However, chicken growers have also benefited from increased production per square foot of their houses.

At 2015 feed cost per ton, every 0.01 improvement in feed conversion is worth about \$69 million in lower feed costs (table, below). Every loss of 1 point of feed conversion would increase feed costs by that same \$69 million

Value of 1 Point of Feed Conversion at 2015 Production and Costs

Item	Units	1 Point Higher		
		2015	Feed Conversion	Difference
Total Liveweight Production	Bill. Pounds	53.13	53.13	0
Feed Conversion	Ratio	1.89	1.9	0.01
Total Feed Used	Mill. Tons	50.20866	50.474317	0.266
Cost/Metric Ton	\$/Metric Ton	260	260	0
Feed Cost	Million Dollars	\$13,054	\$13,123	\$69

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Average Daily Gain and Pounds Raised per Square Foot of Grower House: The 43% increase in average daily gain since 1990 has also been important to lowering chicken production costs. Increasing gain rates by 43% has helped increase the average housing productivity by about 21% since 1990. Housing investments in ventilation, temperature control, feeders, water distribution and lighting were important contributors to the increase in pounds produced per square foot of grower house. Since growers are typically compensated based on pounds produced, the increase in daily gain has translated directly to improved inflation-corrected grower pay, and improved gross return on house investment.

Put another way, absent the improvement in average daily gain, 2015 chicken production level would require about 21% more housing than is actually the case. For both the grower and the chicken company, the increase in average daily gain has meant that housing is more productive, enabling more pounds of chicken to be raised per year, per square foot. Significant investment in building square footage of houses has been avoided. Both investment costs and the operating costs required for additional housing have also been avoided.

2015 Vs. 1990: Housing Cost Savings for a 20.9% Increase in Pounds Produced Per Square Foot *Based on recent building and operating costs for modern, tunnel ventilation housing*

Item	Live Production, 000 Kilos	Live Production, Kilos/Sq. Foot	Square Feet Required, 000
1990 Actual	25,549,690	33.12	771,428
2015 Actual	53,168,160	40.03	1,328,208
2015 at 1990 Kilos/Sq. Foot	53,168,160	33.12	1,605,319
Difference in 1,000 Square Feet Required for 2010 Production			277,111
Total Running Cost Savings at Estimated \$1.61/Sq. Foot (\$Million)			\$446
Investment Avoided at Estimated \$10.95/Sq. Foot (\$Million)			\$3,034

Source: Based on University of Maryland data found at <http://extension.umd.edu/lesrec/marylands-poultry/broiler-budget> Accessed 4/20/2016

A 2016 University of Maryland study (<http://extension.umd.edu/lesrec/marylands-poultry/broiler-budget> Accessed 4/20/2016) estimates that a modern, tunnel ventilation, broiler house costs \$10.95 per square foot to build and equip. At 1990 house productivity rates, it would take about an extra 277 million square feet of housing to produce the 2015 chicken supply. At current costs, adding those additional square feet would increase the investment cost for chicken housing needed in 2015 by over \$3 billion.

In addition, operating costs for that extra housing are also avoided. The University of Maryland study estimated \$1.61 per square foot for such costs. The estimated 2015 cost reduction for not requiring the additional square footage is about \$446 million.

Potential Impact of Specific Sections of the GIPSA Proposed Rules: Several areas of the Proposed Rules could adversely affect future chicken performance trends, and cause costs to be higher than would be the case under current practices. These are:

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201.215: Suspension of delivery. The Proposed Rules could make it more difficult to suspend or reduce delivery of birds to growers. In many instances suspensions and reductions promote the interests of both the grower and the chicken company. Hot summer weather, for example, may increase death loss and cause lower performance if birds are placed at normal density. Adverse business developments, such as the 2008-2009 recession or the 2012 drought, may indicate that placements for a company be reduced or suspended in order to better balance supply with expected demand. If the Proposed Rules force chicken companies to temporarily produce in excess of demand, the market value of chicken products could be reduced below cost. Producing chicken at a loss is not in the best interest of chicken companies, or contract growers.

201.94: Required records on pricing differentials and contract terms. The Proposed Rule could cause companies to change payment rates, contract terms and reduce incentive payments, all in order to avoid increased administrative costs and litigation risks. To the extent that current payment rate and contract terms promote increased growers' efficiency, those gains could be impinged.

201.216 And 201.217: Capital investments criteria. The Proposed Rules would add to the cost of capital improvements, and the risk of litigation by either growers or GIPSA. Companies would be required to maintain additional records on all capital improvements that are negotiated or requested by chicken companies. Chicken companies would also likely feel compelled by litigation risks to maintain additional records on suggested improvements. This section of the Proposed Rules would likely reduce investments by growers to upgrade their facilities. Restrictions and additional recordkeeping requirements add to the costs of improvements, and litigation risks increase if investments do not meet chicken company expectations made known to growers. In addition, restrictions on reducing bird deliveries contained in this section could endanger the welfare of birds, cause increased death loss, adversely affect grower payments to the best performing growers, and increase costs of production.

In summary, adding to costs and complexity of improvements would likely discourage the technical progress that led to the innovation, efficiencies, and cost savings shown above.

201.214: Tournament systems. Parts (a) and (b) of this proposed rule could significantly reduce incentives for chicken growers to invest in their facilities. Part (a) could cause substantial changes in payment rate schedules that could alter incentives and cause loss of goodwill between chicken companies and their growers. Part (b) could also mean that growers with less-efficient housing would not have to compete with more modern, efficient, facilities. The incentives for grower improvements could therefore be significantly reduced.

The Proposed Rules would distort market-based prices and terms contained in chicken company contracts with growers. The proposed rules could distort economic signals for both growers and chicken companies. The result would likely be reduced rates of efficiency improvements and innovation that benefit the entire chicken industry and consumers.

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201.94: Required records on pricing differentials and contract terms: The added cost burdens imposed by the Proposed Rules could cause chicken companies to make sub-optimal decisions on grower payments in order to avoid administrative costs and risks of having documented differentials litigated. That is, chicken companies may elect to reduce grower payment differentials in order to avoid administrative costs and potential litigation. To the extent that these differentials reflect true underlying costs and efficiencies, distortions caused by the Proposed Rules could cause payment rates that deviate from underlying costs of production. The most effective producers could be under-compensated, and the least effective could receive compensation in excess of the true market value of their services.

201.214: Tournament compensation requirements: The equal base pay requirements of this section would create incentives for chicken companies to change the definition of “Base Pay” from current use, often “expected pay for average performance”, to a minimum pay rate of the lowest performing grower. Under the PR all growers would likely see lower base payments. All growers would receive either the base pay, or base pay plus a premium.

Current payment scales have been established over many decades of negotiation between growers and chicken companies. Imposing regulatory rigidity and forcing the re-writing of base pay and performance payment scales could be difficult, and entail substantial investment in time and resources. Long standing relationships between growers and chicken companies could also be damaged.

Growers across a chicken company’s trade area may also face cost differentials for utilities, construction, land and other inputs. In the current environment, base pay is often adjusted to reflect these local cost differentials. The equal base pay requirement could cause growers with relatively high costs to be at a competitive disadvantage to growers in lower cost areas unless chicken companies document differentials and incorporate them into contracts.

Taken together, sections 201.94 and 201.214 could require detailed examination, documentation, and re-drafting, of all current grower contracts. The costs for these changes is expected to be substantial, and would likely result in litigation by those who feel that they have been damaged by changes in contract terms.

Potential Cost Impact: FarmEcon projects that reduced incentives for investment in grower housing, potential distortions caused by changes in tournament incentive systems, and increased risk of litigation could cause performance gains to slow, but not stop. Chicken companies will likely continue to improve genetics and feeds, but housing investment and grower management needed to optimize chicken performance improvement potential will suffer. Based on historic trends the following effects of the Proposed Rules are used to estimate the cost of lost performance:

1. For the first five years of Proposed Rules’ enforcement, feed conversion gains at forecast (increasing) market chicken liveweights are projected to slow from 1 point (0.01) per year under current conditions to 0.2 points (0.002) under the Proposed Rules.

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- The trend increase in pounds produced per square foot of grower housing could decrease from 0.32 pounds per year to 0.16 pounds per year, for the first five years of enforcement.
- Mortality could increase by 0.08% per year over the long term trend for the first five years of enforcement.

Impact on Feed Costs: The Proposed Rules' potential effect on live production feed costs, at \$260/ton cost of feed, is shown in the table below. In the 5th year additional feed costs would be \$318 million. The total feed cost impact over the first 5 years of enforcement is estimated to be \$923 million.

Estimated Impact on Feed Conversion and Feed Expense

Year	Chickens Marketed	Average Liveweight, Pounds/Chicken	Live Marketings, Million Tons	No PR		FCR Loss	No PR Feed Consumed, Tons	PR Feed Consumed, Tons	Feed Cost/Ton	Cost of Lost FCR
				FCR	PR FCR					
2017	8,800,000,000	6.299018	27,715,679.20	1.910	1.918	0.008	52,936,947	53,158,673	\$260	\$57,648,613
2018	8,932,000,000	6.359018	28,399,374.39	1.900	1.916	0.016	53,958,811	54,413,201	\$260	\$118,141,397
2019	9,065,980,000	6.419018	29,097,344.40	1.890	1.914	0.024	54,993,981	55,692,317	\$260	\$181,567,429
2020	9,201,969,700	6.479018	29,809,863.66	1.880	1.912	0.032	56,042,544	56,996,459	\$260	\$248,018,066
2021	9,339,999,246	6.539018	30,537,211.59	1.870	1.910	0.040	57,104,586	58,326,074	\$260	\$317,587,001
Total 5 Year Cost										\$922,962,505

PR = Proposed Rules; FCR = Feed Conversion Ratio

Impact on Cost of Housing: Projected lower pounds produced per square foot of grower housing caused by the Proposed Rules would increase the housing area required. Based on the University of Maryland's study's estimated costs, variable housing costs would increase by about \$48 million per year in the 5th year of enforcement. In addition, about \$926 million in added grower capital investment would be required over the 5 years. All annual recurring costs for that investment are included in the estimated additional fixed and variable costs.

Estimated Impact on Housing Requirements, Expense and Grower Investment

Year	Live Chicken Production, Tons	No PR Live Pounds Per Sq. Foot	PR Live Pounds Per Sq. Foot	No PR Required Sq. Feet, Millions	PR Required Sq. Feet, Millions	Added Square Feet Required, Millions, Annual	Fixed and Variable Costs at \$1.61/Sq. Foot,	Grower Housing Investment at
2017	27,715,679	40.6	40.4	1,365	1,371	5.46	\$8.78	\$59.74
2018	28,399,374	40.9	40.6	1,388	1,399	11.05	\$17.79	\$120.98
2019	29,097,344	41.2	40.8	1,411	1,428	16.78	\$27.02	\$183.74
2020	29,809,864	41.6	40.9	1,434	1,457	22.65	\$36.47	\$248.05
2021	30,537,212	41.9	41.1	1,458	1,487	28.67	\$46.16	\$313.94
Total Added Cost and Grower Housing Investment						84.61	\$136.22	\$926.45

PR = Proposed Rules

Impact on Mortality Costs: The estimated 0.08% per year increase in mortality due to the Proposed Rules would increase live production bird mortality cost by about \$37 million in the 5th year of Proposed Rules enforcement. The estimated cost for increased mortality over 5 years is about \$110 million.

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Estimated Impact on Mortality and Costs

Year	Chickens Marketed	No PR Mortality, Percent	PR Mortality, Percent	Increased Mortality, Birds	Increased Mortality Cost @ \$1/Bird
2017	8,800,000,000	4.00%	4.08%	7,040,000	\$7,040,000
2018	8,932,000,000	3.90%	4.06%	14,291,200	\$14,291,200
2019	9,065,980,000	3.80%	4.04%	21,758,352	\$21,758,352
2020	9,201,969,700	3.70%	4.02%	29,446,303	\$29,446,303
2021	9,339,999,246	3.60%	4.00%	37,359,997	\$37,359,997
Total 5 Year Cost				109,895,852	\$109,895,852

PR = Proposed Rules

Total Bird Performance, Housing and Mortality Cost Impact: In the first 5 years of the Proposed Rules' enforcement, reduced bird performance and increased mortality are estimated to increase live chicken production costs by about \$1.2 billion.

Impact on Ownership of Housing: Due to capital investment costs, and the past performance of capable independent growers, chicken companies have been reluctant to own or lease live production assets. However, the Proposed Rules do not apply to fully integrated, company-owned or leased, live production facilities. Chicken companies, at some point, may find that owning, or leasing, their live production assets will more effective than contract production.

The extent of any conversion to company-owned facilities would depend on chicken company experience in the first few years of implementation of the Proposed Rules. Companies may choose to operate under the Proposed Rules, and still attempt to remain competitive. However, benchmarking and performance monitoring systems used by chicken companies would reveal any competitive disadvantage of operating under the currently Proposed Rules.

If companies determine that compliance with the Proposed Rules would cause a cost disadvantage, it is likely that some contract live production would move to company-owned or leased housing. For the most part, company housing would likely be larger, and more efficient, than contract houses replaced. To the extent that this conversion takes place, any impact of fully integrated housing investment would likely fall on smaller, lower productivity growers who depend on contracting for a secure and predictable income source.

If only 10% of 2015 production were to be moved from contract growers to company-owned facilities it would require about 3,700 modern chicken houses and about \$1.3 billion of invested capital. Most of the housing would likely be new construction to replace grower's older facilities, but some could also be purchased or leased from contract growers. Ongoing live production costs, and risks of litigation, would likely be somewhat reduced by the investment.

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2. Increased Administrative Costs

Under the Proposed Rules there are significant additions to the records that chicken companies would be required to generate and retain. Several specific sections of the Proposed Rules would likely increase administrative costs. The analysis below focuses on only the most significant of the potential costs.

201.94 (b): Records justifying pricing differentials: Chicken companies would be required to document, in writing, the business case for any differentials in payment rates or contract terms for their contract growers.

Administrative Cost Burden: Without detailed knowledge of all current chicken company records systems it is difficult to estimate the additional administrative costs. However, to the extent that chicken companies would choose to not pay growers based on the true value of their services, this requirement would likely impose a lost performance cost burden far in excess of any administrative burden.

201.210 (a) (3): Unfair, unjustly discriminatory and deceptive practices or devices: Chicken companies would be required to offer each grower, upon request, detailed statistical information documenting the calculation of payment rates for each delivery of birds. Though not entirely clear, required information would apparently include, but not be limited to, feed conversion, feed analysis and history of the breeder flock supplying the contractor.

Administrative Cost Burden: Most companies already offer detailed settlement statements, including feed conversion, which would come close to meeting most of the requirements for grower payments. However, feed analysis and breeder records are not generally included in the data available to growers. Assuming these items are required, the costs would be substantial.

Currently, chicken companies do not routinely assay feed loads delivered to growers. FarmEcon estimates that including a very basic feed assay for each load of feed delivered to a grower would cost about \$15 per sampled load for an assay, and \$2 for administrative expenses (table, next page). The average load of feed delivered to a grower is estimated to be a full truck, 24 tons. In some cases growers may receive partial truck loads, but 24 tons is the maximum allowed load normally delivered. The calculation in the table is for the minimum number of feed loads required for the estimated chicken production, and for a basic assay only. Partial feed loads, or a more extensive assay requirement, would significantly increase costs.

It is conservatively estimated that assay of every feed batch would increase industry costs by about \$40 million per year and almost \$200 million over the first 5 years of the new rules.

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Cost of Compliance with Proposed Rules Requirement for Delivery of Feed Analysis Data

Year	PR Feed		Feed Load		Administrative	
	Consumed, Tons	Average Feed Load, Tons	Samples to be Assayed	Assay Cost per Sample	Cost Per Feed Load	Total Cost
2017	53,158,673	24	2,214,945	\$15	\$2	\$37,654,060
2018	54,413,201	24	2,267,217	\$15	\$2	\$38,542,684
2019	55,692,317	24	2,320,513	\$15	\$2	\$39,448,725
2020	56,996,459	24	2,374,852	\$15	\$2	\$40,372,492
2021	58,326,074	24	2,430,253	\$15	\$2	\$41,314,303
Total 5 Year Cost						\$197,332,263

PR = Proposed Rules

Breeder history is available in many companies' records. Including those records in grower settlements would add a cost burden for revising the payment system to include that information. The administrative cost is not known, but would not be expected to be material. However, breeders typically produce chicks in a 40 life week cycle. Growers receiving chicks at the beginning of a cycle would have little or no history. Growers receiving chicks at later points in the cycle would have more history. The difference in records is unavoidable, and could lead to increased risk of litigation between growers and chicken companies. The Proposed Rules also do not define the exact details of the breeder or feed records to be made available, also possibly leading to litigation.

201.213 (a through e): Livestock and poultry contracts: Chicken companies would be required to submit to GIPSA a copy of every unique contract, with business-sensitive language indicated.

Administrative Cost Burden: The administrative costs of submitting contracts to GIPSA is not expected to be material to chicken companies, but publicly disclosing individual contract terms and formats could adversely affect competition.

201.214 (a) (b): Tournament systems: Chicken companies operating tournament pay incentive programs would be required to pay all growers the same base pay, and group growers by housing type. Administrative costs for re-drafting contracts and running several tournament sub-systems could be incurred.

Administrative Cost Burden: All contracts could need to be eventually re-drafted to accommodate Proposed Rules-specific arbitration language. However, the Proposed Rules would impose additional requirements that imply changing base pay. Incentive payment programs are also likely to be revised.

Companies could add specific guaranteed premiums to base pay for prior contractual agreements, especially for capital improvements and cost differentials. In fact, such documented premiums to base pay are likely required under the Proposed Rules.

Companies may also choose to make extensive changes in their incentive payments programs so as to avoid over-payment for below-average grower performance. Companies will likely

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decide to guarantee less of the grower payment as base pay, and make more subject to performance incentives.

An estimate of the cost of amending all contracts is on page 21.

201.216 (e through h) And 201.217 (a): Capital investments criteria: For any negotiated capital investment a chicken company would be required to maintain complex records to show the business case for the investment, and that the grower can be expected to recover at least 80% of the investment cost. Such a business case entails many factors, some of which are subject to variation beyond the control of both the chicken company and the contract grower.

Administrative Cost Burden: Most companies already present growers with estimates of expected costs and returns for both negotiated and suggested improvements. However, maintaining detailed records, including a business case and tracking actual results, for each capital improvement for each grower could entail a significant administrative cost burden.

201.3 (d) And 201.214 (a): Implementation Administrative Costs: As written, the Proposed Rules would also likely be difficult and expensive to implement. Existing contracts would apparently not come under the Proposed Rules until they are entered into, amended, altered, modified, renewed or extended. The provisions of the Proposed Rules are thus potentially tied to the various lengths of approximately 20,000 individual grower contracts.

To the extent that there are existing long term, multi-year, grower contracts the effect of the Proposed Rules would be potentially to spread out over a multi-year time horizon. For a considerable period of time chicken companies could have some growers that are covered by the Proposed Rules, and others that would operate under current rules.

For live production, some companies could need to operate their production programs as if they were two separate entities. One entity would operate under existing rules, the other under the Proposed Rules. As contracts meet the criteria for inclusion under the Proposed Rules, growers would move from the entity operating under current rules to one using the new rules. In the meantime, the chicken company would need to duplicate its live production contract compensation administrative systems and costs.

Growers and companies could mutually agree to amend long term contracts, and comply with the Proposed Rules, but there is no guarantee that this would be the case.

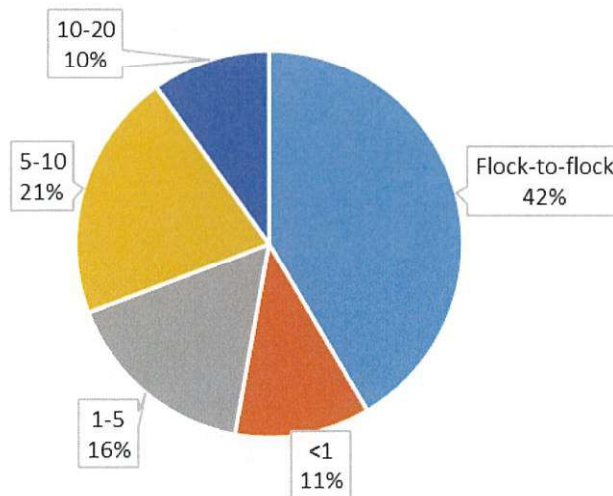
A 2015 National Chicken Council survey showed a wide range for length of grower contracts. Some existing contracts extend as far as 20 years, and almost 60% are longer than flock-to-flock. It is assumed that flock-to-flock contracts are construed to be “extended” when the next flock is delivered, and the Proposed Rules would become effective at that time.

Section 201.214 of the Proposed Rules poses a particularly difficult and significant set of implementation issues for chicken companies with diverse or multi-year contract lengths. This section of the Proposed Rules dealing with tournament incentive programs states:

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“If a live poultry dealer is paying growers on a tournament system, all growers raising the same type and kind of poultry must receive the same base pay. No live poultry dealer shall offer a poultry growing arrangement containing provisions that decrease or reduce grower compensation below the base pay amount.”

Lengths of Grower Contracts, in Years, September, 2015
(20 Companies, 92% of U.S. Production, 13,723 Contracts)



Source: National Chicken Council Survey, September, 2015

This Proposed Rule related to base pay clearly states that all growers raising the same type and kind of poultry will receive the same base pay. Elsewhere in the Proposed Rules, existing contracts with different pay rates are allowed to remain in effect until they are amended, altered, modified, renewed or extended. A chicken company attempting to implement the rule is faced with a contradiction. The company must either be in violation of the Proposed Rules, or amend existing long term contracts to bring them into compliance.

Assuming that contracts longer than flock-to-flock must be amended prior to expiration to be in compliance, for the 20 companies there are approximately 7,960 contracts (58% of 13,723 total contracts) affected. Each long term contract will require negotiation with a grower, and re-drafting to include grower-specific language pertaining to past negotiated payment differentials, and the new housing type segregation requirement. It is estimated that amending each contract will require 1 hour of attorney time at \$350 and 2 hours of administrative time at \$30 per hour, for a total cost of \$380 per contract. The one-time cost is estimated to be \$3.02 million.

In addition, approximately 5,765 flock-to-flock contracts would also need to be immediately re-drafted at an estimated administrative cost of \$350 each, for a total cost of \$2.02 million. The total cost of re-writing all grower contracts is estimated to be about \$5.04 million. To the extent

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that affected growers, or GIPSA, might perceive that amended contracts would not be as favorable as existing contracts, there is further increased risk of litigation and costs.

3. Increased Litigation Costs

Substantially increased litigation costs would likely be incurred by chicken companies as a result of the Proposed Rules. Those costs would come from a combination of proposed expansion of regulatory authority, ambiguous language and contradictory requirements. The cost of potential litigation is unknown, but likely to be material.

These specific sections of the Proposed Rules could materially increase litigation costs:

201.219: Arbitration rights, costs and limits. The proposed arbitration requirements would discourage the use of arbitration and substitute litigation for conflict resolution. Companies have frequently experienced higher costs for litigation than arbitration. In addition, only contract disputes could be arbitrated under the Proposed Rules. Disputes frequently involve both contract and non-contract issues. Even if arbitration was offered and accepted, litigation for non-contract issues would be necessary. The cost of potential litigation is unknown, but likely to be material.

201.94: Records justifying pricing differentials. The proposed requirement invites litigation for the purpose of examination of detailed chicken company records on contract payment terms, costs and payment rates. The cost of potential litigation is unknown, but likely to be material.

201.214: Tournament systems. The Proposed Rules would require significant adjustments in existing contract base pay, incentive pay, and tournament groupings. Growers who feel that they have been harmed by contract revisions are likely to seek remedy through the courts and through GIPSA. The cost of potential litigation is unknown, but likely to be material.

201.216 And 201.217: Capital investments criteria. Growers who see capital investment results that do not meet documented expectations are likely to litigate. The cost of potential litigation is unknown, but likely to be material.

201.3 Applicability of regulations. This section seeks to significantly enlarge the scope of GIPSA enforcement authority. It can be expected that this section of the Proposed Rules would engender substantial litigation. The costs of litigation are expected to be material.

Vague Language: The Proposed Rules incorporate vaguely defined new requirements using imprecise language that invites litigation to determine the limits of meaning of the Proposed Rules in the context of the chicken company/contract grower relationship. Terms that are not well-defined include, but are not limited to (*Relevant Section*):

- *201.20:* “reasonable person”: What is the definition and limit of reasonable? Because of changing context, determinations made by GIPSA or lay juries could effectively decide business questions on the basis of rough-cut judgments as to what is considered fair and

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equitable. Those decisions could vary by time and place, and thus fail to establish a meaningful standard.

- *201.94: “written records”*: What are the standards for details of these records? How extensive do they need to be?
- *201.214: “base pay”*: This term is redefined by the Proposed Rules from current common usage. The most common current definition is a pay rate based on average grower performance. Actual pay rates for individual growers may vary, and be above or below the current definition of base pay. The Proposed Rules redefine “base pay” as a minimum pay rate that all growers must be paid, regardless of performance. This redefinition is likely to result in litigation from disgruntled growers who might see their contract base pay reduced to accommodate the Proposed Rules.
- *201.214: “like house types”*: There is no current industry-wide standard definition for the term “house type”. The lack of a standard invites litigation to determine the limits of the meaning of the Proposed Rule.
- *201.216: “similarly situated”*: What is the limit on permissible differences that are in excess of “similar?” The lack of a standard invites litigation to determine the limits of the meaning of the Proposed Rules.
- *201.216: “reasonably be expected”*: Determination of “reasonably” will vary from time to time, and will depend on numerous, changing, assumptions. What are the limits of “reasonably?”
- *201.217: “reasonable time period”* Determination of “reasonable time” will vary from time to time. What are the limits of “reasonable time?”
- *201.217: “adequate compensation incentives”*: What is the definition of adequate? Is it 80%, 90%, 95%, or 110% of expected costs?
- *201.217: “good working order”* What are the limits of “good working order?” For example, if 90% of a house’s design ventilation is being achieved, is that “good working order”, or is it 85%, 95%, or 100%, or some other percentage?
- *201.218: “include, but are not limited to”*: What other criteria can be used to determine compliance? The Proposed Rules in several places do not clearly state the limits of the proposed regulations, inviting litigation to enlarge the scope of regulatory authority. The Proposed Rules invite GIPSA to enforce compliance based on criteria that are not written into the Proposed Rules.
- *201.219: “reasonable discovery”*: Determination of “reasonable discovery” may vary from time to time and case to case. What are the limits of “reasonable discovery” with respect to company records?

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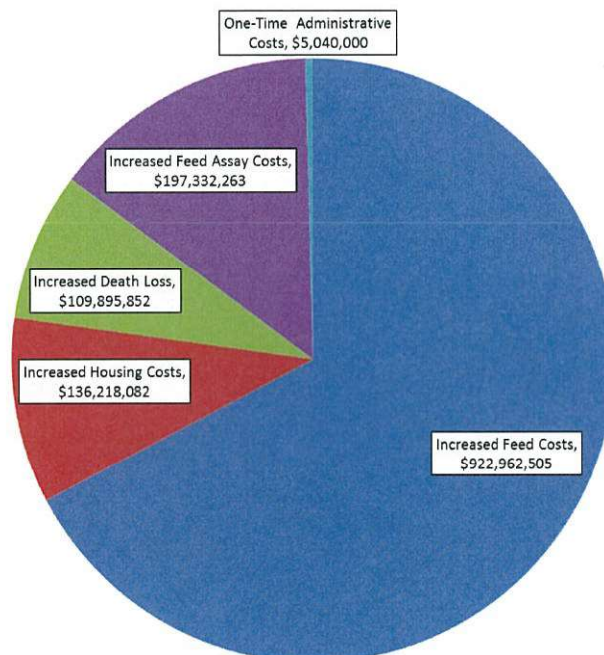
Cost Burden: If adopted in their current form the Proposed Rules would expose chicken companies and growers to large, unknown, and unknowable, risks of increased litigation costs. The business environment under the Proposed Rules would be one of greatly increased risk and uncertainty that discourages investment and innovation.

The Proposed Rules could also encourage chicken companies to escape GIPSA regulation altogether by investing in company-owned or leased growing facilities. The Proposed Rules may increase the incentives for chicken companies to make investments solely to escape the risks and cost burdens of the rules. Such decisions, driven by regulations, are not likely to be economically efficient to the extent that they are driven by other than market forces. Decisions to move to full vertical integration with company-owned or leased facilities are also likely to do significant harm to the very growers that the proposal is intended to protect.

Total Cost Burden:

Identified Cost Burden: The total identified Proposed Rules cost burden is shown in the table and pie chart below. The identified cost burden increases over time, reaching about \$442 million in 2021. The total identified cost over the first 5 years is about \$1.37 billion. Costs would continue to increase beyond the 5 year horizon of this study.

Identified Total 5 Year Cost Increases Associated With the GIPSA Proposed Rules



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The identified costs in the graph and the table below do not include an estimated \$926 million in capital investment required for additional housing during the first 5 years of the new rules.

Identified Cost Increases Associated with the GIPSA Proposed Rules

Year	Increased Feed Costs	Increased Housing Costs	Increased Death Loss	Increased Feed Assay Costs	One-Time Administrative Costs	Total
2017	\$57,648,613	\$8,783,836	\$7,040,000	\$37,654,060	\$5,040,000	\$116,166,509
2018	\$118,141,397	\$17,787,793	\$14,291,200	\$38,542,684		\$188,763,075
2019	\$181,567,429	\$27,015,716	\$21,758,352	\$39,448,725		\$269,790,222
2020	\$248,018,066	\$36,471,524	\$29,446,303	\$40,372,492		\$354,308,385
2021	\$317,587,001	\$46,159,212	\$37,359,997	\$41,314,303		\$442,420,512
Total	\$922,962,505	\$136,218,082	\$109,895,852	\$197,332,263	\$5,040,000	\$1,371,448,703

Unidentified Cost Burden: There are significant additional costs that are also likely to be imposed by the Proposed Rules. These costs either cannot be estimated at this time, or are beyond the scope of the comments.

Litigation costs: In addition to the identified costs above, the Proposed Rules would also impose substantial, but unknown, risks of increased litigation and attendant legal costs. The extent and cost of increased litigation is impossible to identify with any degree of certainty, but would very likely be material to the financial health of the entire industry. Higher litigation costs alone could have a negative effect on growers, chicken companies, USDA and consumers. Indirectly, the increased threat of litigation will have a chilling effect on innovation and investment. To the extent that the Proposed Rules slow innovation and investment, the entire chicken industry, including its growers, would suffer, and consumers will experience higher prices.

Reduced Competition in Related Product Markets: The Proposed Rules are likely to reduce competitive forces both among chicken companies and within the entire meat and poultry production system. Increased costs and reduced rates of chicken production innovation could lower the incentives that an efficient and price competitive chicken industry create for beef and pork producers. The result could be higher costs, and higher retail prices, of competing meats.

Reduced Competitiveness in Export Markets: To the extent that the Proposed Rules would unilaterally apply to only U.S. chicken producers, they would likely result in reduced global competitiveness, and long term loss of export market volume and value, and increased pressures for U.S. chicken imports. Export losses and/or import increases would reduce demand for, and production of, U.S. chicken. Lower exports and/or higher imports would damage the U.S. trade position and result in job losses in chicken production and allied industries. Included in those job losses would be fewer chicken growers. Brazil, our major chicken export competitor, would likely become the only major economic beneficiary of the Proposed Rules.

Summary: Unidentified cost burdens are likely to add significantly to the overall cost of the Proposed Rules. Higher costs could lead to higher consumer prices, loss of competitive

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advantage, and a substantial loss of U.S. chicken exports. Associated with these increased costs and lower exports, there likely would be a loss of jobs in the chicken industry, its supplier companies, and among its contract growers.

Summary and Conclusions

Without proof of economic harm, GIPSA has proposed a set of rules that basic economic analysis strongly suggests could result in significant increases in chicken production costs. In addition, GIPSA is proposing to significantly increase its enforcement powers beyond the “proof of competitive harm” limits that courts have applied to actions brought under the Packers and Stockyards Act.

The proposed rule changes are likely to slow the pace of innovation, increase the costs of raising live chickens, and result in costly litigation. Identifiable cost increases for lost performance, increased bird mortality, and feed assays total an estimated \$442 million in the 5th year of Proposed Rules enforcement. Total identifiable cost increases over the first 5 years of enforcement total \$1.37 billion. Higher costs would put upward pressures on chicken prices, and economic theory strongly suggests that consumers would ultimately bear those costs.

Additional, but unknown, costs could arise from increased litigation and difficulties in phasing in the new rules on a contract-by-contract basis. These added, but unknown, expenses would be forecast to be material to the industry, and ultimately consumers.

To the extent that the rate of introduction of cost reducing chicken production innovation would be slowed by the Proposed Rules, competitive pressures on other meat producers would also be reduced. Costs of producing competing meat could also be increased, harming those industries, consumers, and the U.S. trade balance.

The Proposed Rules place cost burdens and regulatory restrictions on U.S. broiler companies that do not apply to foreign competitors. To the extent that U.S. chicken company competitiveness in global markets is reduced, U.S. chicken net exports would likely decline. Export competitor countries such as Brazil could reap significant benefits from the Proposed Rules.

GIPSA has not identified any economic benefit gains, or cost reductions, that would arise from the Proposed Rules and justify changes in current grower contract arrangements. Neither has GIPSA identified any significant abuse of market power nor proof of harm that would justify increasing the reach of its regulatory authority beyond the damage to competition that courts have repeatedly, and consistently, ruled apply to the Packers and Stockyards Act.