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# PORK PRICE REPORTING IMPROVEMENT INITIATIVE

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Memphis, Tennessee

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### I. INTRODUCTION

The US hog and pork industry has undergone dramatic changes over the past 10-15 years as all segments of the vertical pork chain have experienced consolidation and integration pressures. These changes have impacted the price discovery process at all levels of the industry and with it, has influenced the process by which hog and pork product prices are gathered and reported. Industry stakeholders reflected concerns to the American Meat Institute regarding a perceived decline in the level of participation by industry participants in the reporting of negotiated pork trades. Concerns were also expressed regarding the total non-reporting of formula based and/or export pork trades. As a result, the AMI Foundation contracted with the Sparks Companies to do an extensive survey and analysis of the pork industry with the intent of developing specific and actionable recommendations for a new, revitalized pork price reporting system that would increase industry price reporting participation and buyer/seller trust in pork prices as reported by the three major price reporting services. This report contains findings of this extensive industry survey and specific recommendations for change.

### 1) Project Objectives

As stated in the original Request for Proposal issued by AMI, the primary objective of this study was to define an improved pork industry price reporting system. This new system was envisioned to employ a format that more closely reflected the range of pork products being produced by packers and sold to processors, retailers and other end users. It was the desire of the contractor (AMI and industry stakeholders) to survey the industry with the aim of documenting a profile of pork industry practices (including product specifications, production, shipments, etc.) that would set the parameters for an active and viable pork price reporting system. It was specifically agreed that these practices should be those common to most industry participants and products. Several specific objectives were also identified in the RFP as follows:

- 1) Identify appropriate products to be reported.
- Develop product specifications that are reflective of current industry practices and that account for the bulk of the product movement.
- Identify other specific recommendations that would increase industry confidence and participation in price reporting, i.e., the inclusion of formula priced trades, export trades, etc.

### 2) Methodology

The primary methodology utilized in the fact finding process of this study employed both mail and personal, on-site surveys and interviews. In addition, phone interviews were employed to supplement returns from the mail survey. An objective of this methodology was to provide all industry participants an equal opportunity to provide input and raise

concerns about the current price reporting process and to provide assistance in identifying changes that would be supported by market participants and that would lead to an improved pork price reporting system. Since this project was funded by several pork industry stakeholders, an informational focus group session was conducted at the outset of the project to solicit ideas and opinions about the project goals, objectives and study methodology.

### II. MAIL SURVEY FINDINGS

In cooperation with the contractor, a detailed mail survey was designed and distributed to over 400 pork industry market participants; most of whom were identified as being actively involved on a day-to-day basis in the buying and selling of pork products. A copy of the survey is provided in Appendix A. Initial response to the survey was less than desired so a second mailing to the industry was made roughly four weeks after the initial mailing with the intent of increasing the response rate to at least 25%. This was accomplished as the final number of returned surveys totaled fifty-seven (57).

There is concern that participation in the AMI survey may have been negatively influenced by a similar survey conducted by Urner Barry just weeks before the AMI survey was mailed. While no evidence exists that Urner Barry subscribers failed to respond to the AMI survey, and while SCI contacted companies known to be Urner Barry subscribers to solicit participation, finite interpretation of some of the AMI survey questions must at least occur with the knowledge that the results may be skewed.

Generally speaking, participants in the mail survey were very open and candid with respect to what they do or do not want and/or think of the current pork price reporting system. Most questions showed anything but a consensus in the market place on the key contentious issues facing the pork industry regarding price discovery and price reporting but this divergence in opinion was not unexpected.

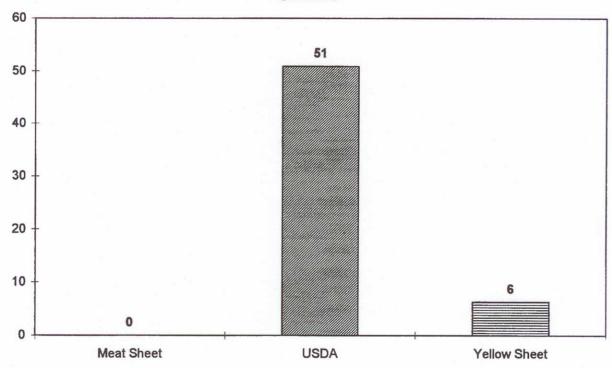
Following is a graphic presentation of the responses for each question in the mail survey. Below each graph is a summary of key findings relative to each question asked and pertinent comments from industry respondents for those questions that specifically asked for opinions and ideas.

### **Survey Question 1):**

What percentage of your pork sales or purchases do you presently report to the price reporting services? Meat Sheet \_\_\_\_\_% USDA \_\_\_\_\_% Yellow Sheet \_\_\_\_\_%

If you do not report your transactions, why not?

### Weighted Average Percent of Company Purchases/Sales Reported to Services



 By far, the majority of reported pork trade transactions for the survey respondents are reported to the USDA's "Blue Sheet"--51%. Only 6 percent of trades were reported to Urner Barry's "Yellow Sheet" and respondents indicated "no" reporting of any trades to the Meat Sheet--"Pink Sheet".

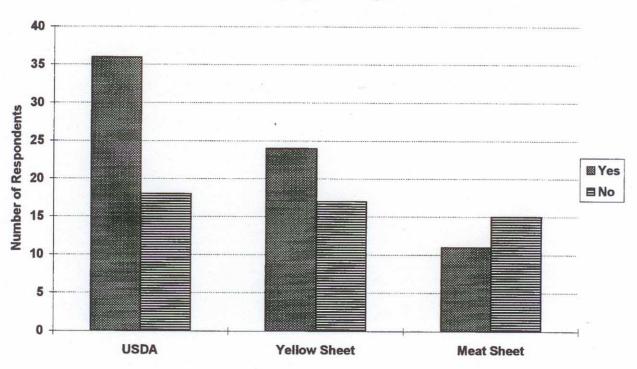
- Product traded not covered by reporting services.
- Product bought/sold on formula.
- Not contacted by reporting services for purchase confirmations.
- Won't report until industry standards are developed.
- No advantage to be gained by reporting.
- Buy mostly in LTC (less than carload) lots.
- Reporting systems too subjective--no substance and vulnerable to abuse.
- Lack of believability/integrity in pork price discovery system.
- Most buying done too far out front for current reporting system.

### Survey Question 2):

Does the current list of pork products reported adequately reflect what your company is buying or selling? (Y/N) USDA \_\_\_\_\_ Yellow Sheet \_\_\_\_ Meat Sheet \_\_\_\_

If no, please explain!

# Does the Current List of Pork Products Reflect What Your Company is Buying or Selling?



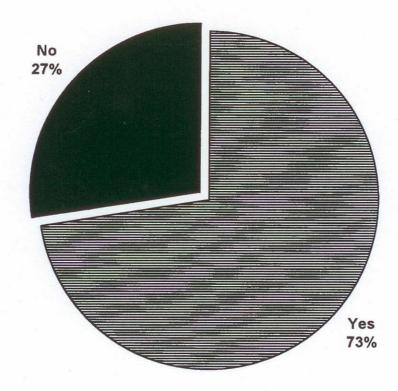
For both the USDA and Yellow Sheet, respondents answered "Yes" more often than
"No" to the issue of whether or not the list of pork products reported adequately
reflected what that respondent was trading. The "No" responses were consistent
across the three reporting services with 15-18 surveys reflecting this answer.

- Buying/selling products that are not reported; i.e., boneless hams, rind off bellies, smoker trimmed short shanked picnics, etc.
- Reporting services do not report value added products.
- · Report more products with leaner trims.

### Survey Question 3):

Should detailed pork product specifications be adopted for reporting purposes? (Y/N)\_\_\_\_\_

# Should Detailed Pork Product Specifications be Adopted for Reporting Purposes?



• There was a strong indication from respondents that they would prefer to have detailed pork product specifications adopted for price reporting purposes--73%.

- There needs to be an attempt made to develop standard specifications for major pork items traded.
- Impossible due to wide range in packer specifications.
- Need to strive for common specifications representative of majority of product volume traded.
- Standard specifications fully understood by market participants would encourage broader price reporting.

### **Survey Question 4):**

What other pork products would you like to see reported?

- 1) Smoker Trimmed Picnics, Short Shank
- 3) Pork Hocks (picnic sized)
- 5) Boneless Ham Muscles
- 7) 72% Ham Trim
- 9) Export Loins and Bellies
- 11) St. Louis Style Ribs
- 13) Retail Trim Picnics
- 15) 20-23 Select Hams
- 17) 1/8" Trimmed Loins
- 19) Export Skins
- 21) 95% Visual Lean Pork
- 23) 20/Down Pork Loins
- 25) Lips, Pancreas Glands
- 27) 5% Trim
- 29) Cushion pork

- 2) Rindless Trimmed Bellies
- 4) Offals
- 6) Wider Range of Back Ribs
- 8) Canadian Back Loins
- 10) Pork Tenderloins 1.5# up
- 12) Retail Trim Ribs
- 14) Steak Ready Pork Butts
- 16) 23-27 Select Hams
- 18) 1/8" Neck-off Butts
- 20) 20) Bacon ends and pieces
- 22) Green Shoulders
- 24) 4-10# Boston Butts
- 26) Thyroid Glands, Bungs
- 28) Blade Meat

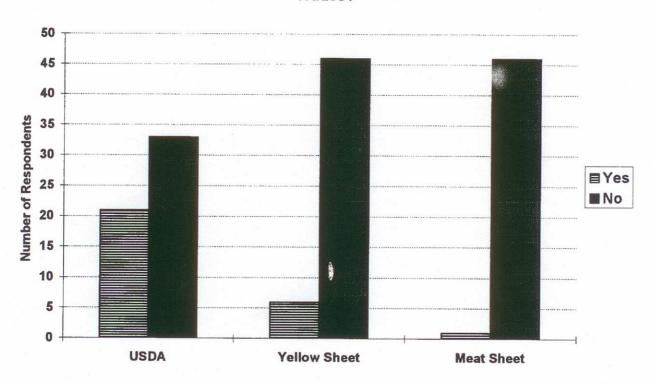
Survey respondents had a lengthy wish list of products they would like to see reported. Suggests that market participants are looking for a benchmark indication of market value across a wide range of commodity and value added products.

### Question 5):

Are market reporters regularly calling your firm to pick up and confirm trades? (Y/N)

Yellow Sheet \_\_\_\_\_ Meat Sheet \_\_\_\_ USDA \_\_\_\_

## Are Market Reporters Regularly Calling to Pick Up and Confirm Trades?



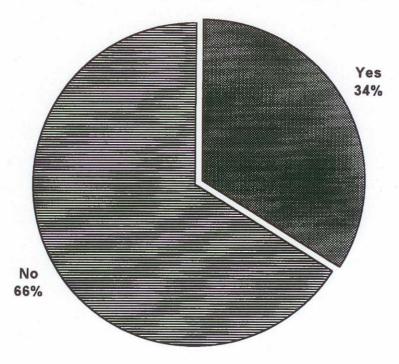
- Based on responses, the two private reporting services appear to be least active in soliciting pricing information from pork buyers/sellers.
- While USDA market reporters clearly made more contacts with this sample group than did the private services, there were still more "No's" to this question than affirmative answers.

### Comments:

USDA calls only 2-3 times per year.

### Survey Question 5 continued):

Is the Current System of Reporting and Confirming Adequate?



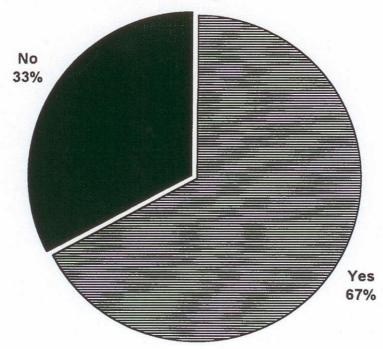
Two thirds of respondents indicated that the current system of reporting is inadequate.

- Too many games being played-- half loads and irregular reporting is a big problem.
- Quoted prices don't reflect true value as "overages" are added on top of quote.
- A larger volume of trade needs to be reported so prices can be "trusted".
- Too many confirmations from packer to broker and not the end user.
- Report trimmed product only--don't back into commodity base price.
- Need more accuracy by reporters.
- Should require proof of the transaction for it to be included.
- Should take all trades.
- Without more voluntary and objective reporting, mandatory reporting could be forced on the industry.
- System is manipulated by large packers.

### Survey Question 6):

Should there be a policy in place to drop the high or low price from the reported range if such price is well outside of the range of the majority quotes as defined by a consensus of the reported trade of similar products for the day? (Y/N)\_\_\_\_\_

Should a High or Low Price be Dropped if it is Outside the Consensus Range of Quotes?



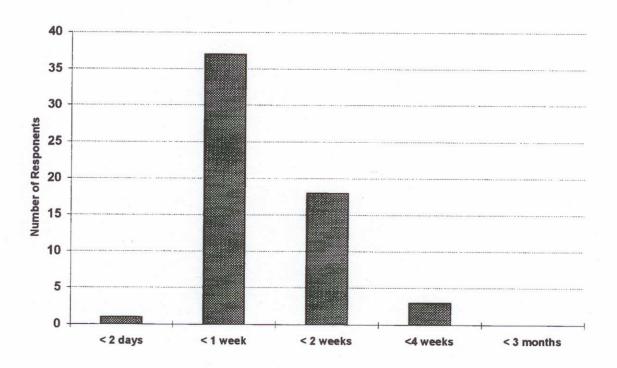
 Two-thirds of the survey respondents agree there should be a policy to drop "high" and "low" trades that are well outside the range of the majority of trades for that day.

- If only comparable items are reported for each product, an exclusion policy should not be needed.
- Dropping outliers would improve integrity of system and not unduly impact weighted average.
- Use majority of trade and weighted average; delete others.
- If item truly was sold, it should be included.

### Survey Question 7):

What shipment period after transaction should be allowed for trades to be utilized?

What Shipment Period Following Transactions Should be Allowed for Trades?



Most respondents indicated that shipment period of less than two (2) weeks and/or
one (1) week should set the parameters for inclusion of trades in price reporting
system.

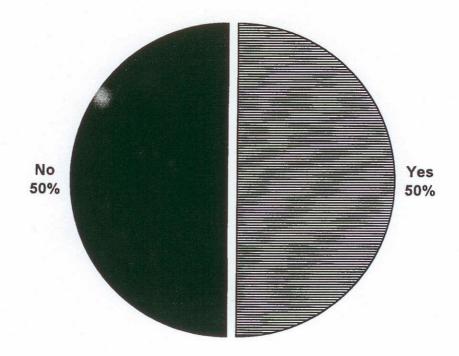
### **Comments:**

 One respondent suggested one week or less for inclusion of processing materials; two weeks for retail type items.

### **Survey Question 8):**

Is the current system of overages adequately establishing and/or reflecting the value of your sales or purchases? (Y/N)\_\_\_\_\_

Is the Current System of Overages Adequately Reflecting the Value of Your Sales or Purchases?



 No consensus surfaced from survey as to whether or not the current system of "overages" adequately establish and reflects true value of sales/purchases.

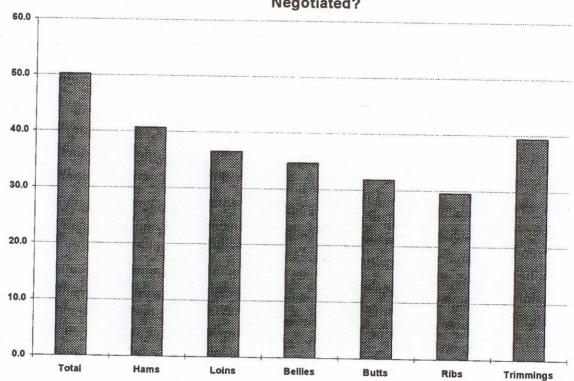
- Some respondents suggested establishing representative specifications and then reporting actual sale price to these specifications thus eliminating need for overages.
- Much confusion on "overage" issue--confuses price reporting.
- "Overages" should not be part of the market report--price paid FOB the packer should be the printed market.
- "Overages" presumably reflect differential values for yields and trim levels and need to be maintained.

### Survey Question 9):

On what percentage of your trades are you negotiating (bid/ask) prices? Total\_\_\_\_%

Hams \_\_\_\_% Loins \_\_\_\_% Bellies \_\_\_\_% Butts \_\_\_\_% Ribs \_\_\_\_% Trimmings

# On What Percentage of Your Trades are Bid/Ask Prices Negotiated?



- Respondents indicated that 50% of their trades were price negotiated.
- On individual products, negotiated trades ranged from roughly 30-40% of trades.

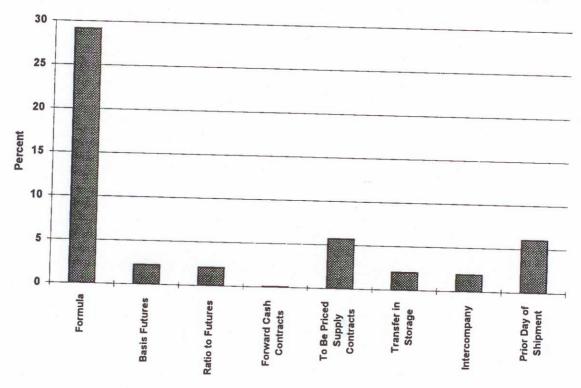
### Comments:

A retailer indicated that trades were negotiated only on ad items (loins and butts).
 Remainder traded on formula.

### Survey Question 10);

What other methods do you use to establish prices for trades?



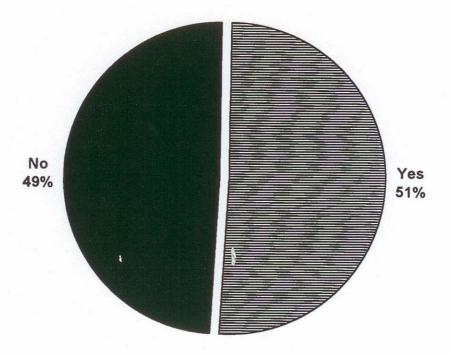


- Apart from negotiated trades, formula pricing was the next most common method of establishing prices accounting for slightly less than 30%.
- Six percent of respondents utilized "to be priced supply contracts' and "prior day of shipment" pricing.
- Other pricing methods accounted for 3% or less of trades.

### Survey Question 11):

Do you believe that formula trades should be part of the price reporting system? (Y/N)

Do You Believe that Formula Trades Should be Part of the Price Reporting System?



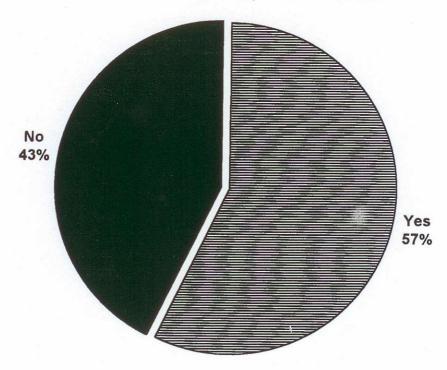
 Respondents were about evenly split as to whether or not formula trades should be part of the price reporting system.

- Some suggested that they should be reported reflecting a weighted average formula price for each item.
- They should be reported separately from negotiated trades.
- Most value added products are formula priced--need to find a methodology for including these trades in the reporting system as they are part of the price discovery process.

### Survey Question 11 continued):

Would you be willing to report such trades? (Y/N)

Would You be Willing to Report Such Trades?

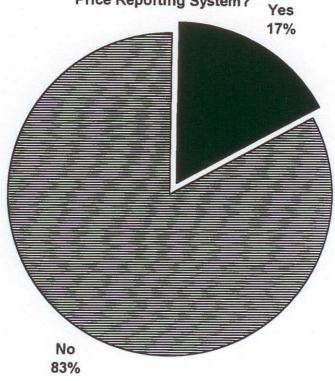


 Fifty-seven (57) percent of the survey respondents indicated a willingness to report formula trades to the reporting services if they were accepted as part of the price reporting service.

### Survey Question 12):

Do you believe that inter company trades should be part of the price reporting system? (Y/N)

Do You Believe that Inter-Company Trades Should be Part of the Price Reporting System?



 A majority of respondents indicated that inter-company trades should not be part of the price reporting system.

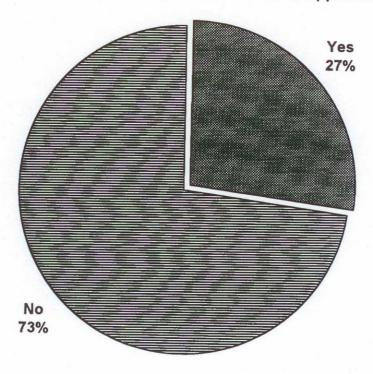
### Comments:

Too easily manipulated--would not be trustworthy.

### Survey Question 12 continued):

Would you be willing to report such trades if applicable? (Y/N).

Would You Be Willing to Report Such Trades if Applicable?

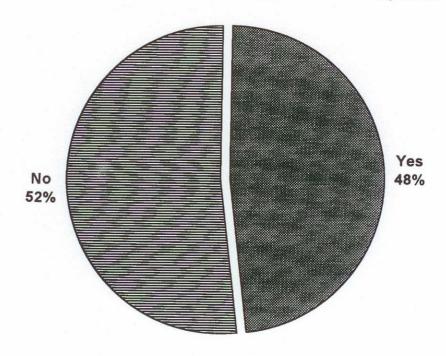


 Majority of respondents indicated they would not be willing to report inter-company trades even if they were part of the price reporting system.

### Survey Question 13):

Should there be a standard set of conversion factors used to convert value added products back to a regular commodity base? (Y/N)\_\_\_\_\_

Should There be a Standard Set of Conversion Factors used to Convert Value Added Products to a Regular Commodity Base?



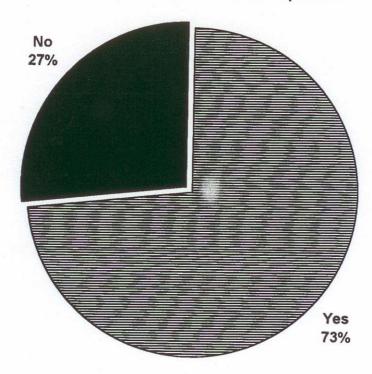
 Respondents were about evenly split as to whether or not a standard set of conversion factors should be developed and used to convert value added products back to a regular commodity or some other specified product base.

- Value based items have greater cost fluctuations-- hard to standardize.
- Could publish yield factors and credits from sub-primals.
- Not necessary if standard specifications are used as a pricing base.
- Value added products should be reported as is if ample trade volume of product exists.
- Too complicated; Impossible to do.
- Conversion factors could give the base commodity a distorted value.

### Survey Question 13 continued):

Should value added products be reported? (Y/N).

Should Value Added Products be Reported?



 Seventy-three (73) percent of respondents agreed that value added products should be reported. Major question was "HOW".

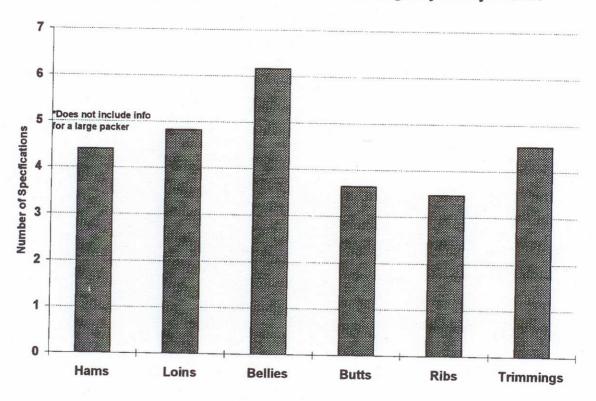
- If company specific--NO!
- Would be very helpful in comparing true value added products.
- Value added products are going to represent the future success of meat proteins.
- Explore feasibility--differentiate from commodity.
- Value added products should be reported if they are converted back to a commodity base.
- Impossible to encompass hundreds of value added products with different specifications.

### Survey Question 14):

How many specifications of the following do you purchase/buy or sell?

Hams	Loins	Bellies	Butts	Ribs
Trimmings				

### How Many Specifications of the Following do you Buy or Sell?



- All major pork items are bought and sold with multiple specifications by market participants responding to this question.
- The average number of specifications ranged from about six for pork bellies to 3-4 for pork butts and ribs; 4-5 for other items.

### **Survey Question 15):**

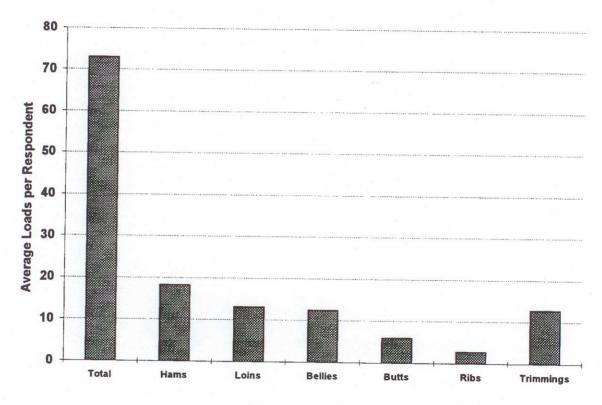
How many loads of pork do you buy or sell each week? Total\_\_\_\_\_

Hams (Bone-In Equivalent)\_\_\_\_\_ Loins (Commodity Equivalent)\_\_\_\_\_

Bellies (Skin-On Equivalent)\_\_\_\_\_ Butts (Commodity Equivalent)\_\_\_\_\_

Ribs \_\_\_\_\_ Trimmings \_\_\_\_\_

### How Many Loads of Pork do you Buy or Sell Each Week?

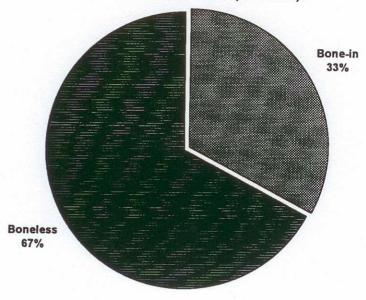


- Based on responses from 57 surveys, an average of 72 loads of pork were traded each week by these participating firms.
- The average trade volume was largest for hams followed by loins, bellies and trimmings.
- Least trade was noted for butts and ribs.

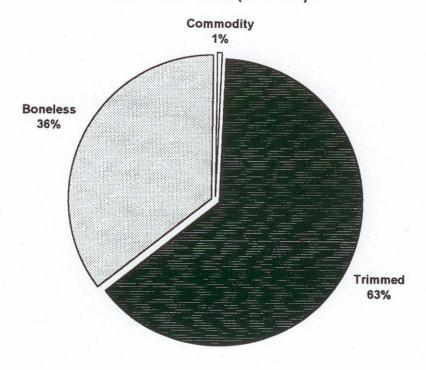
### Survey Question 16):

What percentage of your trades are commodity versus value added?

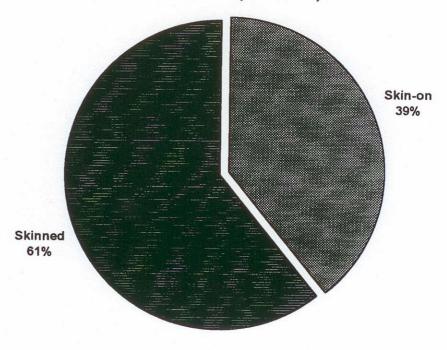
What Percentage of Your Trades are Commodity versus Value-Added (for Hams)?



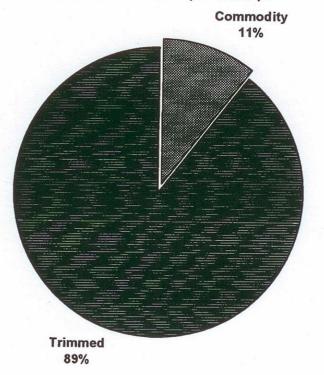
What Percentage of Your Trades are Commodity versus Value-Added (for Loins)?



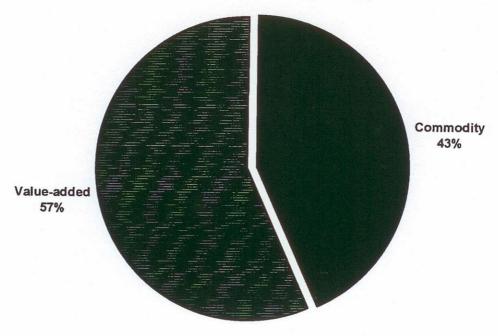
What Percentage of your Trades are Commodity versus Value-Added (for Bellies)?



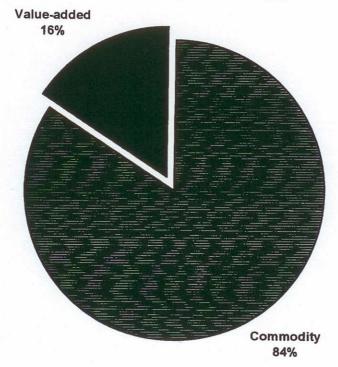
What Percentage of Your Trades are Commodity versus Value-Added (for Butts)?



What Percentage of Your Trades are Commodity versus Value-Added (for Ribs)?



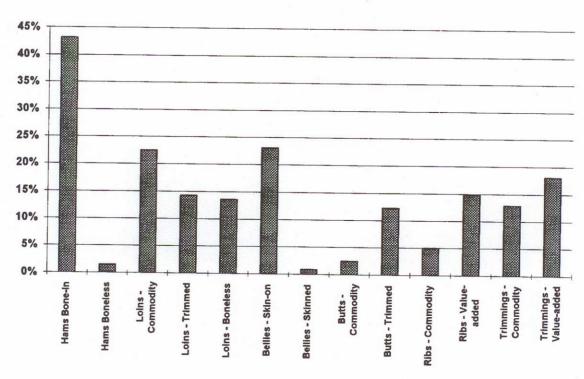
What Percentage of Your Trades are Commodity versus Value-Added (for Trimmings)?



### Survey Question 17):

What percentage of your commodity and value added trades do you report?

What Percentage of Your Commodity and Value-Added Trades do you Report?



- Respondents indicated wide variations in the percent of product specific trade reported.
- The largest percent of traded product reported was for bone-in hams at 44%.
- Commodity loins and skin on bellies were reported on 22-23% of the trade.
- All other items reflected <20% of trades being reported ranging down to 1% for skinned bellies.

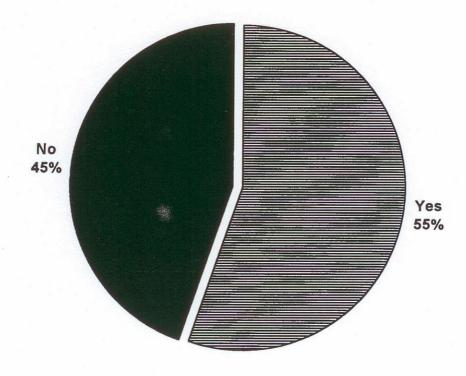
### Survey Question 18):

Do you buy or sell boneless ham muscles? (Y/N)\_\_\_\_\_

If so, what percentage would be trimmed to the blue? \_\_\_\_\_\_%

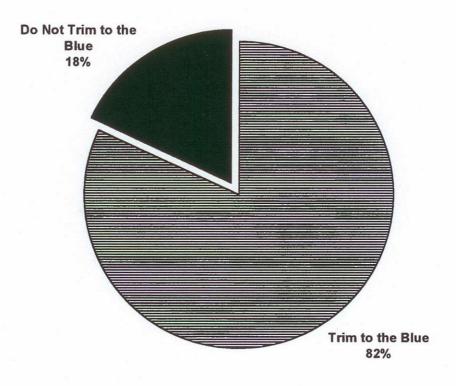
What percentage would be 1/8"-1/4" fat trim? \_\_\_\_\_\_%

Do You Buy or Sell Ham Muscles?

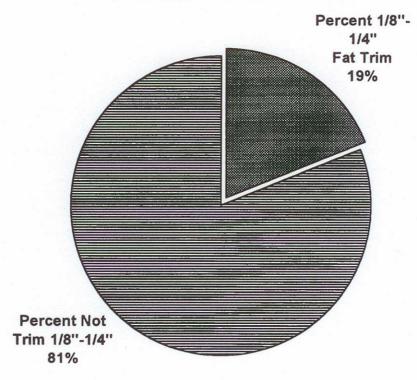


• Fifty-five (55) percent of the survey responses indicated that boneless ham muscles were traded.

What Percentage do you Trim to the Blue?



What Percentage Would be 1/8"-1/4" Trim?



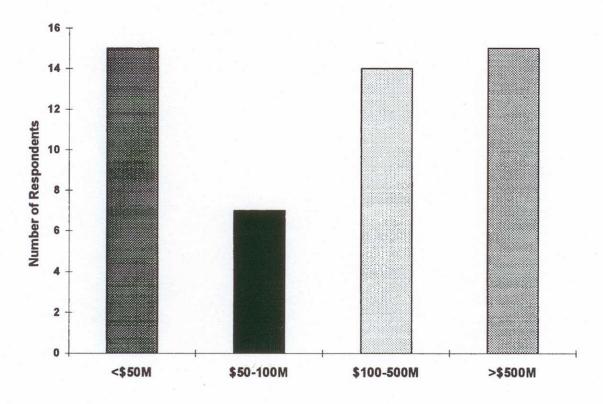
### Survey Question 19):

What is your company's main line of business?

What is your annual sales volume? < \$50M \_\_\_\_\_\_\_

\$100-500M \_\_\_\_\_\_ > \$500M

### What is Your Annual Sales Volume?



- Respondents to the survey represented meat/food companies at all levels of the vertical pork marketing chain.
- A relatively even distribution of respondents by sales volume was noted.

### III. PERSONAL INTERVIEW RESULTS

In addition to the primary information and data gathering procedure accomplished through the mail survey outlined and discussed above, SCI conducted extensive personal, on-site interviews with executives from several key commercial pork packing/processing operations and pork product merchandisers. The objective of these interviews was to not only get direct input and discussion on the mail survey questions but more importantly, to document production volumes and product flows from the major packers, processors and end users with the intent of delineating the product form and associated volumes of the bulk of the product moving through the vertical pork marketing chain.

In conjunction with the AMI and industry stakeholders funding this project, a list of key industry participants to be interviewed was developed. Following is a list of participating companies from both the seller and buyer side of the marketplace that were actually visited. The study team wishes to express their appreciation to these firms for being open and candid about their businesses as the success of this project could not have occurred without their fullest cooperation.

	Pork Suppliers		Pork Buyers
1)	Excel Corporation	1)	Oscar Mayer
2)	Farmland Foods	2)	Sara Lee Corp.
3)	Hormel Foods	3)	Armour-Swift Eckridge
4)	IBP	4)	Food Brands America
5)	Swift/Monfort	5)	Kroger Company
6)	Smithfield Foods	6)	Safeway

Due to the need for stringent confidentiality of firm specific data, all responses to questions and information provided to the study team were aggregated and then individual documents were destroyed. The following analysis and presentation of results has been designed carefully so as to limit any potential for inadvertent disclosure of individual company operating data or procedures.

### 1) Packers-Sellers

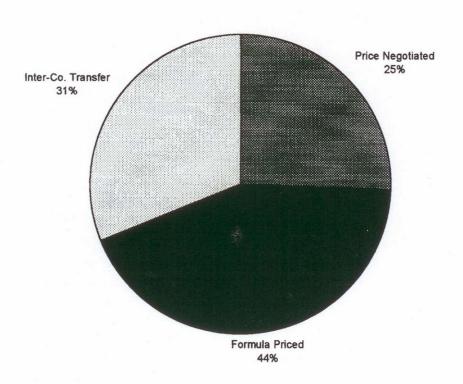
An aggregated summary of total volume produced (loads per week) for the six interviewed suppliers by major product category, pricing arrangements by category and the volume of trade reported to the reporting services is presented in Table III-1. An aggregation of the rated slaughter capacities for these six firms indicate that this data reflects production from roughly 75% of total weekly pork production in the US so the product category breakdowns should be highly representative of the total universe. For these six major packers, total weekly volume produced of the major pork items was 5,013 loads of which hams accounted for 1,390 loads, bellies 890 loads, loins 1,245 loads, butts 443 loads, ribs 238 loads, picnics 352 loads and trimmings 412 loads.

# On-Site Interview Matrix - Sellers

	Volume Produced	% Price	% Formula	% Inter-Co.	% Reported of	Reported	Price Negotiated
Product Specs	Loads per Week	Negotiated	Priced	Transfer	Price Negotiated	Loads	Loads
Hams	1390						
Bone-In	503	19%	44%	37%	40%	38	96
Boneless	887	11%	21%	32%	45%	40	95
Bellies	890						
Skin-On	536	20%	32%	47%	34%	37	
Skinned	354	%6	91%	%0	49%	15	31
Loins	1245						
14-18#	475	25%	48%	%0	21%	127	247
18-22#	770	2%	%6	84%	13%	9	20
Butts	443	21%	45%	1%	20%	127	
Ribs	238	47%	23%	%0	46%	51	111
Picnics	395						
Bone-In	43	21%	20%	29%	15%	ဇ	
Boneless	352	40%	43%	16%	36%	51	
Trimminas	412	29%	46%	26%	24%	64	
Total	5013					558	1277

Figure III-1 breaks down the total sales for these six suppliers by major selling practice. For the aggregate trade, 25% of sales are conducted on a price negotiated basis; 31% through inter-company transfers and the remainder, 44% by formula. This compares with the mail survey which showed negotiated trades accounting for 50% of the trades.

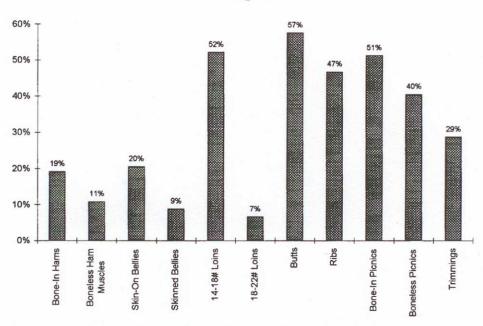
Figure III-1
Breakdown of Sellers Pricing



For the interviewed sellers, there was a wide range of negotiated pricing indicated across the various key product categories. By and large, there was a higher percentage of negotiated trades reported for the retail cuts (loins, butts, ribs and picnics) than there was for the processing items (hams, bellies and trimmings). More than 50% of trades were negotiated for loins, butts and bone-in picnics while negotiated trades on ribs accounted for 47% of the business. Hams and bellies showed the least activity from a price negotiated perspective at about 20% for bone-in hams and skin-on bellies and about 10% for boneless hams and skinned bellies. Figure III-2 provides a detailed percentage breakdown of the negotiated trade as reflected by the sellers.

Figure III-2

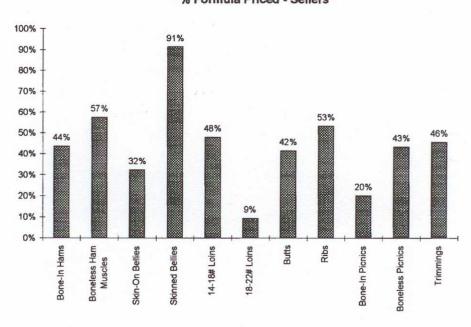




Not surprisingly, the profile of formula reported trades by category is virtually a mirror image of the negotiated trade as can be seen in Figure III-3. A higher percentage of the processed items are traded on formula with skinned bellies showing 91% of the volume traded in this manner. For retail items, the percentages traded on formula drop back below the 50% level. Boneless picnics and trimmings traded on formula were 43% and 46% respectively of the total trade.

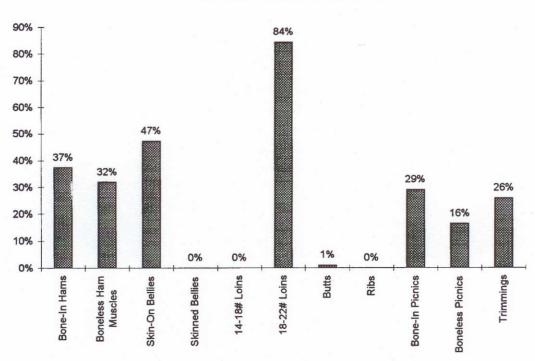
Figure III-3

### % Formula Priced - Sellers



The remainder of the product trade reported by the sellers fell into the inter-company transfer pricing category. For hams, 30-40% of all trades are of this nature and one would expect that with continued packer concentration and the trend to more value added production, a rising percent of trades will be categorized as inter-company. Fairly large volumes of picnics and trimmings are also priced on an inter-company transfer basis while retail cut pricing in this manner is limited. The 18-22# loin data should be interpreted carefully and it is SCI's opinion that the heavier loins actually trade closer to the breakdown in the 14-18# category than being heavily skewed to transfer pricing as reflected in Figure III-4.

Figure III-4
% Inter-Co. Transfer - Sellers

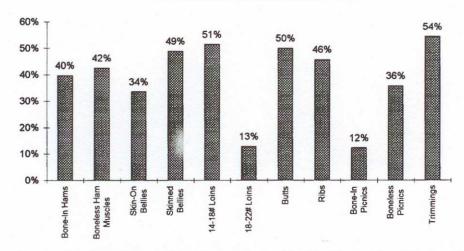


A key element of this project was to identify not only the volume flow of various products moving through the vertical pork chain under various pricing mechanisms but to also derive the magnitude of product pricing relative to the volume of negotiated trade for each of the major product categories. Figure III-5 provides such a derivation of the percentages of price negotiated trades reported based on seller data. The calculations are very interesting. Of the supply of bone-in hams whose price is negotiated on a bid/ask basis, 40% of these trades are reported to the various price reporting services according to the major sellers. For boneless hams, the percentage is even higher at 42% although in looking back at Table III-1, only 11% of the boneless hams are actually price negotiated as compared to 19% for bone-in product. To expand the reporting of hams, either more product needs to be priced on a negotiated basis while maintaining current reporting

percentages or else the percentage of currently negotiated trades needs to be expanded. There is certainly more leverage from the first option.

Figure III-5

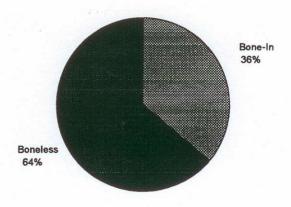
% of Price Negotiated Trades Reported - Sellers



For the other product categories, the percent of negotiated trades reported ranges from a high of 54% for pork trimmings to a low of 12% for bone-in picnics and 13% for 18-22# loins. As previously discussed, it is felt that the heavy loin data was potentially reported in error and that 40-50% of the negotiated trade is most likely reported. Reporting of negotiated trades for bellies is around 50% and ribs and butts roughly the same. All of these calculations indicate that the trade is doing an admirable job in reporting that portion of their business that is traded on a bid/ask basis. The real issue is that for many items, the volume traded in this manner is low and believed to be trending even lower which does put the volume of negotiated and reported trading in jeopardy.

For several key items, a further breakdown in the product form and pricing mechanism was undertaken. For hams, the six interviewed sellers indicated that 36% of their production was bone-in while 64% was boneless (Figure III-6). This matches very closely to the 33%/67% breakdown reported by those responding to the mail survey.

Figure III-6
Sellers Breakdown of Hams



Of the 36% of the hams traded on a bone-in basis, only 19% of these trades were negotiated while 44% were priced on formula and 37% were traded as inter-company transfers. For the 64% of the ham trade that was traded on a boneless basis, the pricing structure was even more concentrated in formula and inter-company transfers. Only 11% of the boneless ham muscles were traded on a negotiated price basis. Figures III-7 and III-8 graphically depict these pricing differences for hams.

Figure III-7

Breakdown of Seller Pricing
Bone-In Hams

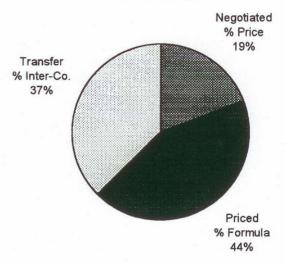
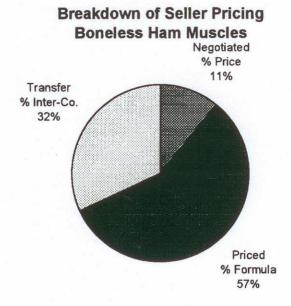
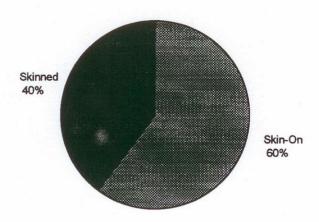


Figure III-8



A similar detailed product analysis was conducted on the bellies as indications from the mail survey and personal interviews suggested the need for price reporting category changes. Figure III-9 indicates that 60% of bellies traded by the major sellers were traded on a skin-on basis while 40% were traded skinned. These percentages are virtually reversed from the results of the mail survey where the percentages were 39% and 61% respectively.

Figure III-9
Sellers Breakdown of Bellies



There was a major difference in the pricing mechanism for skin-on bellies as compared to skin-off. For the skin-on bellies, sellers indicated that 20% were sold on a negotiated price basis, 32% by formula and 48% on inter-company transfer. This contrasts with the skinned bellies where only 9% were sold via negotiation and 91% on formula (see Figures III-10 and III-11). If a skinned belly is to be included in the price reporting system, it would seem imperative that steps be taken to encourage an increase in the volume of trade in skinned bellies priced on a negotiated basis so that a representative market quote can be made.

Figure III-10

Breakdown of Seller Pricing
Skin-On Bellies

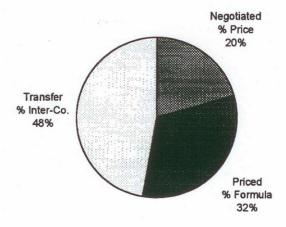
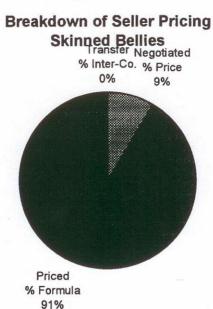


Figure III-11



Finally, a breakdown on the pricing of bone-in loins was investigated and as you will note in Figure III-12, sellers reflect a near even split in pricing between negotiated trades and formula based pricing. At present, sellers indicate no inter-company transfer pricing of loins but it is expected to become more common as the use of case ready product increases.

Figure III-12

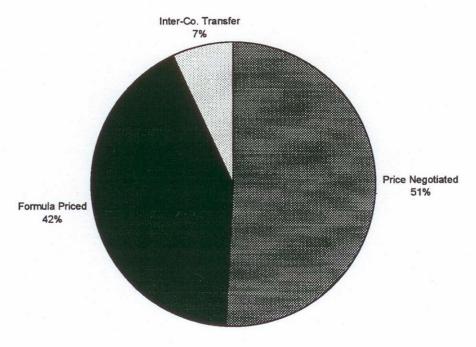


#### 2) Processors/Retailers--Buyers

In addition to the personal interviews conducted with six of the countries largest packers representing about 75% of total kill capacity, on-site interviews were also conducted with four major pork processors and two of the countries largest retailers. The primary purpose of these interviews was to get input on the breakdown of product being bought, to identify the range of specifications of product being bought, and to get direct input as to how the price reporting system could be improved and expanded from the buyers perspective.

A summary of the weekly volume of business being conducted by these operations is contained in Table III-2. On average, these six firms purchased 876 loads of pork each week of which 331 loads were hams, 146 bellies, 51 loins, 298 trimmings and the remainder, small quantities of other pork products. As shown in Figure III-13, from this select group of buyers, price negotiated trades accounted for 51% of total trade transactions while formula priced purchases accounted for 42%. The remaining 7% was traded as inter-company transfers. Since 51% of total trades were priced through a bid/ask process, the load count for buyer negotiated trades amounted to 445 loads.

Figure III-13
Breakdown of Buyers Pricing



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	Volume Produced	% Price	% Formula	% Inter-Co.	%	Reported	Price Negotiated
Product Specs	Loads per Week	Negotiated	Priced	Transfer	Reported	Loads	Loads
Hams	331						
Bone-In	105	22%	19%	24%	39%	23	
Boneless	226	32%	94%	4%	%6	9	73
Bellies	146						
Skin-On	36	72%	14%	14%	21%	13	N
Skinned	110	8%	95%	%0	19%	2	6
Loins	51						
Bone-In	39	95%	8%	%0	64%	23	
Boneless	12	100%	%0	%0	75%	6	12
Tenderloins, Backribs and Bnls							
Sirloin	e	100%	%0	%0	%09	7	
Butts	20	100%	%0	%0	82%	17	2
Ribs	6	94%	%9	%0	94%	8	8
Picnics	19						
Bone-In	8	100%	%0	%0	47%		8
Boneless	16	63%	%0	38%	44%	4	10
Trimmings & Variety	ky 298						
42% & Trace Lean	111	%09	35%	2%	%69	39	
72% & Extra Lean	n 173	%89	31%	%9	40%	44	110
Jowls, Cheeks	14	%89	32%	%0	%86		6
Total	876					200	0 445

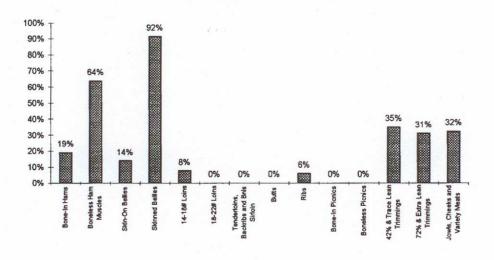
Based on the information provided by those buyers interviewed, a high percentage of most retail cuts are bought on a negotiated basis. As depicted in Figure III-14, loins, backribs, butts, ribs and bone-in picnics were virtually all purchased through a bid/ask process. Bone-in hams and skin-on bellies were also actively traded on a negotiated basis with 57% and 72% respectively of trades occurring in this manner. Negotiated trading ranged from 60% to 68% of all purchases for the trimming items. Only the value-added boneless ham muscles and skinned bellies showed negotiated trades at less than 50%. Skinned bellies were the lowest and this matches up nicely with the indications coming from the sellers side of the market.

Figure III-14



Formula pricing was the next most active form of pricing and as noted for the total pork trade, 42% was purchased on formula. By category, formula trades were virtually non existent for the retail cuts as virtually all of this product was bought on a negotiated basis. Skinned bellies were the dominant pork item bought on formula accounting for 92% of all trades. Boneless hams were also actively bought on formula with 64% of all purchases of ham muscles bought this way. For the trimmings, about one-third of the trades were formula based.

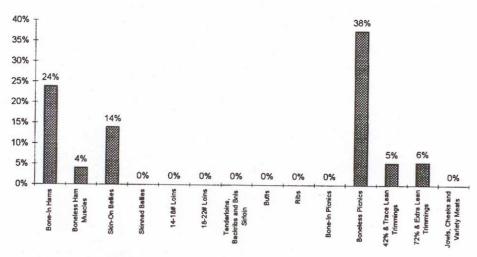
Figure III-15
% Formula Priced - Buyers



Inter-company transfer pricing accounted for a smaller percentage of buyer trades than for sellers and was confined to only a few items. As shown in Figure III-16, 24% of bone-in hams were priced in this manner and 4% of boneless muscles. Fourteen percent of skin-on bellies were internally transferred and priced while 38% of boneless picnics were so transacted.

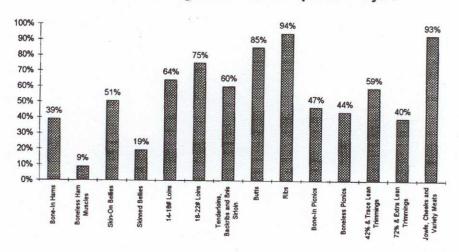
Figure III-16





Of those trades reported as being negotiated by the buyers interviewed, there was a wide range of reporting activity on these purchase transactions. Reporting was very active on most of the retail items ranging from a low of 60% for tenderloins, backribs and boneless sirloins to a high of 94% for ribs (Figure III-17). The volume of negotiated trades reported for jowls, cheeks and variety meats was also high at 93%. For hams, the results were rather poor. Thirty-nine percent of the bone-in hams price negotiated were reported while only 9% of the boneless ham muscles were picked up (presumably on a converted basis) in the reporting process. For bellies, a similar pattern existed with skin-on negotiated prices reported on 51% of the trades while only 19% of skinned bellies were reported. In summary, about 50% of commodity processing items priced in a bid/ask process were reported while value added products tended not to be reported even when the price was negotiated.

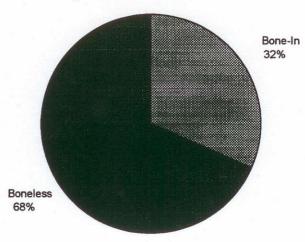
Figure III-17
% of Price Negotiated Trades Reported - Buyers



For the buyer group, an analysis was performed on the breakdown of hams into bone-in and boneless product and the pricing of each. As shown in Figure III-18, about 32% of the hams bought by this group were bone-in while 68% were boneless ham muscles. This was about the same as the breakdown reported by the sellers.

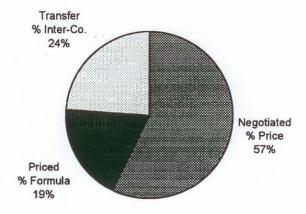
Figure III-18

Buyers Breakdown of Hams



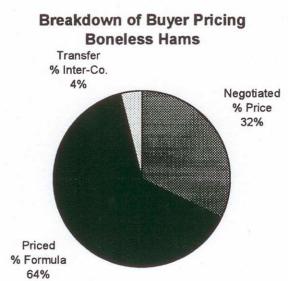
For bone-in hams, the pricing mechanism used by buyers still favored the negotiated process as 57% of hams were bought in a bid/ask manner (Figure III-19). Formula trades accounted for 19% of the purchases while the remainder, (24%), were priced on an intercompany transfer basis.

Figure III-19
Breakdown of Buyer Pricing
Bone-In Hams



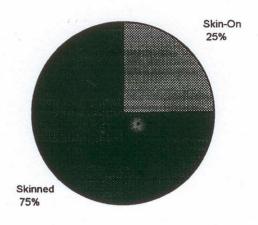
The pricing of boneless ham muscles was sharply different than for bone-in product as shown in Figure III-20. Only 32% of boneless hams were price negotiated while a large 64% was bought on formula. Inter-company pricing was relatively minor for the muscles accounting for only 4% of the trades. Once again, the buyer results were fairly similar to those noted for the sellers.

Figure III-20



A product category breakdown for bellies is provided in Figure III-21. For the buyers surveyed, 75% of their belly purchases were bought skinned while only 25% were bought skin-on. This is almost a reverse of the breakdown reported by the seller group and could easily have been influenced by specific business practices given the relatively small group of buyers interviewed.

Figure III-21
Buyers Breakdown of Bellies



For pricing purposes, the majority (72%) of the skin-on bellies were price negotiated while for skinned bellies, almost the entire trade was done on formula with only 8% of such bellies bought on a bid/ask basis (Figures III-22 and III-23).

Figure III-22

#### Breakdown of Buyer Pricing Skin-On Bellies

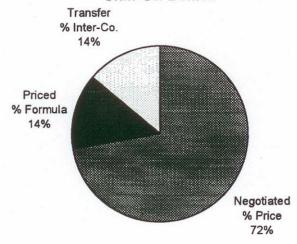
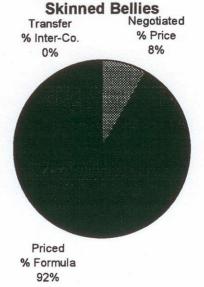


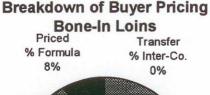
Figure III-23

# Breakdown of Buyer Pricing



Finally, Figure III-24 provides a look at the pricing breakdown for bone-in loins from the buyer's perspective. Most bone-in loins were bought on a negotiated basis. While specific supporting data is not included, indications were that substantial quantities of boneless loins were bought in this manner as well--at least by major market participants.

Figure III-24





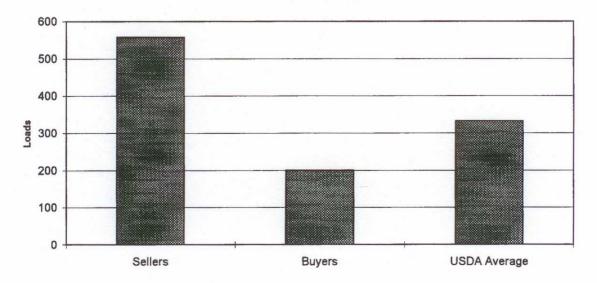
In summary, the personal interview process provided valuable information and what is believed to be a relatively accurate statistical measurement of the breakdown of pork product flowing through the vertical pork chain. There appears to be a growing trend to more value added functions being performed at the packer level and as a result, there is less homogeneity in product moving from the packers back door. This enhanced differentiation in product at low ends of the pork chain create serious price discovery and price reporting issues as standardization to an acceptable specification becomes extremely difficult.

Finally, Figure III-25 provides a comparison of calculated product load counts derived from the data and percentages shared by the "buyers" and "sellers" interviewed along with a weekly average load count reported by the USDA. You will note that the seller's reflection of load counts reported is substantially in excess of the load count confirmed and used by the USDA. This discrepancy can be accounted for by non-confirmation of trades by USDA and/or the reporting of these trades by the sellers exclusively to the "Yellow Sheet" and/or the "Pink Sheet".

One cannot totally rule out the possibility that sellers reflected a level of reporting activity on negotiated trade in excess of that which actually takes place. The calculations contained previously in this section of the report reflecting the percentage of negotiated trade reported were based on data provided by the participants in this study. If one accepts the breakdown of the total pork product loads price negotiated and then compares the volume of loads reflected in the USDA price reports relative to the calculated number of loads negotiated and eligible for reporting, the percentages approximate closer to 20% of eligible loads being reported rather than the 40-50% ranges as calculated from the "seller" data. In actuality, it is safe to say that somewhere between 25% and 50% of the

negotiated trade is being reported to the pricing services but not all of this is being confirmed.

Figure III-25
Weekly Load Counts Reported



#### IV. RECOMMENDED PRODUCT SPECIFICATIONS

As a component of the mail survey, industry participants were asked to identify pork products they would like to see price reported and which are not currently included in any of the three price reporting sheets. The objective was to give market participants an opportunity to help develop a prime list of possible additions to the pork price reporting system. Inclusion of items was to be ultimately determined by whether or not sufficient volume of trade was occurring so that a good, competitive market test could be gauged. The industry's wish list of products that they would like to see included in the price reporting mechansim is contained in the answer to mail survey question #4 on page 6 of this report.

During the personal interview portion of the study, both pork buyers and sellers were pushed hard to also identify areas of deficiency in terms of product price reporting coverage. Sellers were asked to provide production volumes by major product lines so that a statistical verification could be made regarding the "traded" volume of a particular item should it be included in the price reporting system.

Related to this process of trying to identify specific product candidates for inclusion or exclusion from the price reporting system, the development of a set of standard specifications that could serve as the basis for product value determination for reporting purposes was deemed desirable. In this section, specific specifications for a wide range of pork products are presented. From extensive discussion with both buyers and sellers of pork, it is felt that these specifications do adequately represent at least a majority of the product for each category moving through the vertical pork marketings chain. SCI fully accepts the views of many in the market that it is virtually impossible to develop a set of product specifications that fits all buyers and sellers needs. That was not the intent, nor the purpose, of developing the following set of major product specifications. Pork products do continue to have some commonality and for reporting purposes, the issue becomes one of whether or not something less than perfect is "better" than nothing at all.

Assuming that it is, SCI recommends that the following set of pork product specifications be adopted by the industry as a starting point for setting a "standard" for price reporting purposes.

# **Boneless Ham Muscles Trimmed to the Blue**

#### Ham Muscle Groups

#### Three Muscle Group

Inside - (Semimembranosus, gracilis)
Outside - (Biceps femoris and gluteus superficialis)
Knuckle - (Quadricaps femoris, rectus femoris)

#### Four Muscle Group

Inside - (Semimembranosus, gracilis)
Outside - (Biceps femoris and gluteus superficialis)
Knuckle - (Quadricaps femoris, rectus femoris)
Lite Butt - (Gluteus medius)

#### Five Muscle Group

Inside - (Semimembranosus, gracilis)
Outside - (Biceps femoris and gluteus superficialis)
Knuckle - (Quadricaps femoris, rectus femoris)
Lite Butt - (Gluteus medius)
Inner Shank - (Abductor)

#### **Specifications:**

- Boneless ham must be completely free of skin, bones, abscesses, blood clots, bruises.
- Boneless ham must be trimmed of fat with no fat areas greater than 3/8" x 3/8" by 1/32" thick and which are not translucent. Remove all seam fat that is greater than 1/8" thick or wide.
- Boneless ham must be trimmed free of gristle greater than 1/4" x 1/4" x 1/16" including the major butt cord and the "silver dollar" piece of gristle from the aitch bone side of the outside muscle.

# Select Ham

#### Average Weight Ranges:

17-20#

20-23#

23/27#

Pork Leg (Fresh Ham). The leg is separated from the side by a straight cut approximately perpendicular to a line parallel to the shank bones. The cut passes through a point which is not less than 1.5" (3.8 cm) from the anterior edge of the aitch bone. The foot shall be removed at or slightly above the hock joint. The tail, vertebrae, flank muscle (rectus abdominis), cutaneous trunci, prefemoral lymph gland, and any other exposed lymph glands shall be removed. The skin and collar fat over the cushion (semimembranosus) shall be smooth and well rounded such that the innermost curvature of the skin is trimmed back at least half the distance from the stifle joint to the posterior edge of the aitch bone. The skin overlying the medial side (inside) of the quadriceps femoris shall be removed. A select ham is a grade that will produce a maximum boning yield. The fat cover should be less than 1/2".

# **Commodity Ham**

#### **Average Weight Ranges:**

14-17#

17-20#

20-26#

26-32#

32# and Up

Pork Leg (Fresh Ham). The leg is separated from the side by a straight cut approximately perpendicular to a line parallel to the shank bones. The cut passes through a point which is not less than 1.5" (3.8 cm) and not more than 3.5" (8.8 cm) from the anterior edge of the aitch bone. The foot shall be removed at or slightly above the hock joint. The tail, vertebrae, flank muscle (rectus abdominis), cutaneous trunci, prefemoral lymph gland, and any other exposed lymph glands shall be removed. The skin and collar fat over the cushion (semimembranosus) shall be smooth and well rounded such that the innermost curvature of the skin is trimmed back at least half the distance from the stifle joint to the posterior edge of the aitch bone. The skin overlying the medial side (inside of the quadriceps femoris shall be removed.

# **Skinless Bellies**

#### **Average Weight Ranges:**

Skinless from	Rind On
9-11#	<10-12>
10-13#	<12-14>
12-14#	<14-16>
14-15#	<16-18>

#### **Specifications:**

- Bellies must be free of bone, cartilage, bruises, skin, hair roots, abscesses, dark red or black seeds, pizzle pocket, leaf fat and milky mammary tissue.
- Bellies must not have any areas in which thickness has been excessively reduced due to skin patching.
- Bellies will be cut reasonably square at both ends. There should be no more than
   deviation in length between the fatback edge and flank edge of the shoulder.
- 4. There should be no more than 1" deviation or less than 3/4" between the teat line and fat back edge. The teat side must be longer.
- 5. The boot jack V should not exceed 1.5".
- 6. If cut, the teat line must be in a straight line from shoulder end to flank end.
- 7. The fatback cutoff may be made within a maximum of 2.5" from the scribe mark where the mark and cut are closest together. This cut must be made with the width of the belly not to exceed 13". Length: The belly must be no less than 16 inches long. Thickness: The belly thickness should not be more than 1.5" or be less than 1/2" at any location
- Snowball dimensions should not exceed 3 square inches.

# **Rind-On Belly**

#### **Average Weight Ranges:**

10/12#

12/14#

14/16#

16/18#

18/20#

20/25#

The belly is prepared from the side after removal of the leg, shoulder, loin, fat back and spareribs. All bones and cartilage shall be removed. All leaf fat shall be removed. The fat back shall be removed by a straight cut from the outermost dorsal curvature of scribe line as long as sufficient lean meat is exposed. The anterior (shoulder) and posterior (leg) ends of the belly shall be reasonably straight and parallel. No side of the belly shall be more than 1.0 inches longer than its opposing side. The width of the flank muscle (rectus abdominis) shall be at least 25 percent of the width of the belly on the leg end. The boot jack shall not exceed 1 1/2". The area ventral to the scribe line shall be free of scores and "snowballs" (exposed areas of fat) which measure 6 square inches or more. The belly shall be free of enlarged soft, porous, dark, or seedy mammary tissue. The scribe line is not considered a score but shall be not more than 1/8" (3 mm.) in depth at any point.

# Bone-In Loin

#### Average Weight Ranges:

14-18#

18-22#

22# Up

The loin is that portion of the side remaining after removal of the shoulder, leg, belly, and fat back leaving a portion of the blade bone, its overlying lean and fat. The shoulder shall be separated from the loin by a straight cut, which is reasonably perpendicular to the split surface of the backbone. The outer tip of subscapularis muscle shall not extend past the center of the base of the medial ridge of the blade bone. The belly side shall be removed by a slight dorsal curvature cut. Surface fat shall be trimmed to an average of 1/4"  $\pm 1/8$ " or 1/8"  $\pm 1/16$ " or a commodity trim no fat max. in depth or less except in the hip bone area. The hip bone area is defined as the area contained within two (2) parallel lines, 1" (5.0 cm) on either side of the anterior end of the hip bone and associated cartilage. Fat in the hip bone area shall be trimmed to the same contour as the rest of the trimmed fat surface on the loin. At least 2" (5.0 cm) of the false lean shall be exposed. Lumbar and pelvic fat shall be trimmed to 1/2" (13 mm) or less in depth. The tenderloin shall remain intact. The diaphragm and hanging tender shall be removed.

# **Boneless Loins**

#### Average Weight Ranges:

5-9# Strap On

5-9# Strap Off

All bones, cartilage's, the tenderloin, and lean and fat overlying the blade bone shall be removed. The leg end of the loin shall be exposed by a straight cut which shows no evidence of the quadriceps femoris or the longissimus.

On the shoulder end, the loin eye shall be equal to or larger than the combined areas of the splenius and semispinalis capitis. The strap may be removed by a cut from the point ventral to but not more than 2" (5.0 cm) from the longissimus at the shoulder end to a point on the leg end, no more than 1" (25 mm), ventral to the longissimus and/or gluteus medius (a slight dorsal curvature is acceptable). Surface fat shall not exceed 1/8"  $\pm 1/16$ " in depth, except in the hip pocket which shall be trimmed to the same contour as the rest of the trimmed fat surface.

# **Trimmed Butts**

#### Average Weight Ranges:

Commodity 9# and Down

1/4" Trim 9# and Down

1/8" Trim 9# and Down

Commodity 9# and Up

The butt is to be separated from the picnic by a straight cut which is perpendicular to the outside skin surface and approximately parallel to the breast side of the shoulder at approximately 1" above the ball joint and scapula junction. The external fat covering shall be trimmed to a smooth and uniform thickness. Traces of false lean shall be exposed. Product to be free of skin, hair roots, fat as specified below. Product should not be seared. Edges trimmed of any loose appendages of meat or fat. Cut surfaces must be neatly beveled to approximate the lean flesh at the edges on all sides.

#### Fat not to exceed

1/2" +/- 1/8" for commodity

1/4" +/- 1/8" for 1/4" trim

1/8 +/- 1/16" for 1/8" trim

**Trimmed Butts, Square-Cut** 

Average Weight Ranges:

1/4" Trim 9# and Down

1/8" Trim 9# and Down

The butt is to be separated from the picnic by a straight cut which is perpendicular to the

outside skin surface and approximately parallel to the breast side of the shoulder at

approximately 1" above the ball joint and scapula junction. The neck end shall be

squarely removed to expose the half moon muscle immediately adjacent to the main body

muscle. The external fat covering shall be trimmed to a smooth and uniform thickness.

Traces of false lean shall be exposed. Product to be free of skin, hair roots, fat as

specified below. All exposed glands shall be removed. Product should not be seared.

Edges trimmed of any loose appendages of meat or fat. Cut surfaces must be neatly

beveled to approximate the lean flesh at the edges on all sides. Butts shall be square-cut

and uniform in appearance.

Fat not to exceed

1/4" +/- 1/8" for 1/4" trim

1/8 +/- 1/16" for 1/8" trim

56

#### Ribs

#### Average Weight Ranges:

4# and down

4-5#

Shall contain at least 11 ribs and associated costal cartilage's and may include portions of the sternum and diaphragm. Any portion of the diaphragm not firmly attached shall be removed close to the inside surface of the ribs and the membranous portion of the diaphragm must be removed close to the lean. The lean shall not exceed more than 2 inches beyond the curvature of the last rib and costal cartilage. All loose trim and fat will be removed. Heart fat should not exceed 1/4 inch average depth. Product to be free of any leaf fat over the diaphragm and transverse abdominis.

### Picnic - Smoker Trim

#### **Average Weight Ranges:**

Regular Shank

4-8#

Short Shank

4-8#

The butt shall be removed from the picnic by a straight cut, dorsal to the shoulder joint, at a right angle to the belly side. The jowl shall be removed by a straight cut approximately parallel with the belly side which is not more than 1" (25 mm) anterior from the half moon muscle measured on the butt side. The foot shall be removed just slightly above the knee joint by a straight cut approximately perpendicular to the shank bone to produce a regular shank smoker trim picnic. To produce a short shank smoker trim picnic, the foot shall be removed approximately 1 1/2" above to the knee joint.

The fat and skin shall be beveled to meet the lean on the dorsal edge.

#### V. RECOMMENDATIONS

#### 1) Product Specific

- Adopt, for <u>reporting purposes</u>, a set of detailed product specifications (such as those developed by SCI) for the major pork items which account for the bulk of the value of the hog carcass. Sellers and buyers would attempt to reflect prices on trades as close to these specifications as possible.
- Add boneless ham muscles (3, 4 and 5 muscle groups), derind bellies and square cut butts to the current list of reported items. The recommendation to add these items is supported by numerous references to their desired inclusion in the mail survey and during the on site interviews. While an industry consensus will be difficult to reach on one specification for ham muscles and skinned bellies, there is sufficient volume of these items being traded to justify adding them to the price reporting system..
- Maintain reporting on remaining items currently included in the various reporting sheets. The only items currently reported on the sheet which do not actively trade are regular commodity loins and butts and they are recommended as being candidates for deletion although many market participants continue to price off this converted commodity base.
- Break out select hams into separate 20-23 and 23-27 pound categories. Maintain reporting of 17-20 select hams. Most of the companies interviewed and some responding to the mail survey suggested this change be made.

#### 2) Reporting Procedure

- Report net prices FOB the plant exclusive of freight and packaging but including overages. The current system of overages seems to be somewhat confusing with about half of the companies surveyed stating that the current system does not accurately reflect the value of their sales and purchases. With an attempt being made to more accurately define what is trading, the price reporting system should also reflect the actual price that product trades for.
- There was a consensus that a policy should be adopted to drop unusually "low" or "high" trades from the reporting system. Unfortunately, a history of intra-day price data for pork products does not exist even though it is gathered each day for the

purpose of generating a daily weighted average price. SCI recommends that USDA collect and maintain intra-day price data for a 12 month period for the spectrum of pork cuts so that a calculation of the intra-day standard deviation of prices can be assessed. These calculations would then set the parameters for defining the appropriate range of acceptable trades to be used as a guideline for future reporting purposes. Previous analysis of inter-day data conducted by SCI suggests that prices falling outside a + or - 2 standard deviation range on each days trade should be excluded.

- Report less than carlot quantities where applicable. If carlot quantities are not regularly being reported then ½ and ¼ loads and maybe even case quantities should be accepted but classified as such. In some items, such as variety meats, full loads rarely are traded and several interview participants suggested that the reporting services need to put a higher priority on reporting smaller quantities in order to get more trades reported. If LTC trading is the common trade practice, then report it as such.
- Use all confirmed trades that are reported after the 3 p.m. Central time cutoff and report these trades (subject to the "outlier" analysis and policy described above) in the 11:15 a.m. report the following day. Several interview participants mentioned that some trades reported after 3 p.m. are never used when in fact they are legitimate trades which should be included in the next day's report. With reported volumes running less than most in the industry would like to see, an attempt needs to be made to include every trade reported.

#### 3) Reporting Enhancements

- Collect and report formula trades <u>separate</u> from price negotiated trades on the daily sheet. Report weighted average prices and load counts for formula trades as a supplement to the current price negotiated trades. About half of the companies responding to the mail survey indicated that formula trades should be part of the price reporting system. A very large percentage of pork products are being bought and sold on a formula off of the daily sheet and those formula trades need to be included in the daily report to increase the reported trade volumes. An attempt should be made to collect all formula trades which will be priced based on that day's sheet and report them on the same day. If they cannot be collected prior to the 3 p.m. Central time cutoff, then they should be reported the following day.
- Report prices on export product trade either in the comments section of the daily report or in a new export report if reported volumes warrant developing a new report. Several respondents to the mail survey and also interview participants indicated that they would like to see more emphasis placed on picking up export trades and with pork exports accounting for an ever increasing share of production, it would seem like a logical addition to the current report.

#### 4) Implementation

- It is specifically recommended that the pork pricing subcommittee of the AMI pork
  committee develop a consensus on the product specifications developed and also with
  respect to their formal utilization from a price reporting perspective. This consensus
  should be carried to the AMI's full pork committee for discussion and revision and
  from there to AMI's executive committee for further refinement and ratification.
- Since changes to the reporting system (including adoption of a set of standard specifications for reporting purposes) should be voluntary, a united industry effort to institute such changes will be needed. Cooperation between industry associations, the private and public price reporting services and pork industry participants will be essential and the industry stakeholders who financed this project are encouraged to remain actively involved in the implementation process.

#### VI. SUMMARY AND CONCLUSIONS

An extensive survey of the pork industry was conducted soliciting information, data and opinions regarding the current status of the US pork price reporting system. This input was developed through the conduction of both a mail survey to reach a broad cross section of the pork industry and also through intensive, on-site personal interviews with selected key players in the pork sector. The results of this investigation indicate that the current price reporting system does have some identifiable deficiencies and that changes could be adopted to improve and enhance the price reporting process. In general, however, the current system is far from being totally broken.

Much of the deficiency in price reporting is related to how the product is actually being traded (i.e., formula and inter-company transfers) rather than to a total lack of industry participant willingness to provide to the price reporting services pricing information on those trades that are price negotiated. While improvements in industry coverage should be a constant goal for the price reporting services, at present there would appear to be sufficient activity in the price gathering and reporting process to give a good reflection of market values. There were concerns raised by many survey respondents about the trustworthiness and objectivity of those pork product prices actually being reported but much of this concern seemed to be related to confusion about how price data was actually collected and to what specifications the prices were tied, rather than to concerns about deliberate mis-reporting or manipulation of the prices reported by either buyers or sellers.

The data developed by the interview team from visits to the major pork packers was cross referenced against reported trade volume data provided by the USDA in their daily price sheets. The major sellers indicated a level of product price negotiation and subsequent price reporting activity that represented volumes well in excess of the volume of confirmed trades reported by the USDA. The differences can be partially accounted for by the lack of buyer confirmation of trades and/or the fact that not all trades are reported solely to the USDA's "Blue Sheet". A possibility also exists that inflated reporting volumes were provided to the study team.

Based upon seller indications of reported trades, it was determined that across the various pork product categories, there is sufficient price reporting of those trades actually price negotiated to give a good reflection of "real" market values. Calculated percentages generally ranged from 30-50%. When analyzed using volume data as included in USDA's daily reports, the percentages of eligible trades reported drop into a 20%-30% range which may be getting close to borderline when it comes to reflecting "true" market value. Either way, the primary deficiency in the system would appear to be more related to the growing volume of pork business that is conducted outside of the bid/ask system of price discovery rather than to insufficient participation in reporting trades established through negotiation. All market participants involved in pricing product through negotiation should be encouraged to report these trades to the reporting services to bring as much credibility to the price reporting process as possible.

For most processed pork items (particularly hams and bellies), less than 20% of the volume of product produced is price negotiated--the bulk is sold on a formula or intercompany transfer basis. Trends in industry structure would suggest that such pricing activity will expand rather than contract which ultimately could result in a very thin price negotiated market for these items. Consequently, the issue on many of the processed pork items would appear to be related to finding methods of voluntarily incorporating such formula and inter-company pricing activity into the reporting system rather than excluding such activity as is now the case. Alternatively, more market participants should be encouraged to negotiate and report at least a modest percentage of their trades so that they can be active participants in the price discovery and reporting process.

A set of specific recommendations were developed based on the input provided by industry participants and upon the analysis of data derived from both the mail and personal Many of these recommendations will lack industry consensus as the interviews. investigation found a wide range of opinions on most contentious pricing issues and polarized thoughts on how or if these issues should be changed. For some in the industry, there are firm specific competitive advantages for maintaining the price discovery and reporting system as it exists today. One cannot argue against the position of those market participants who desire a status quo in the pricing system but such a position may not be in the best interest of the industry as a whole. All market participants need to be concerned about whether or not there will be a competitively structured pricing system 5-10 years from now and, if there is, whether there will remain in place a system for disseminating such pricing information to the broader market place. The challenge to the pork industry would seem to be one of making sure that a viable price discovery and reporting system is maintained for, if it isn't, one could certainly visualize political interference and possibly a mandatory price reporting system in the not-too-distant future.

Not withstanding the difficulties of creating a set of standard product specifications that could be utilized as a base for price reporting, industry participants also need to commit to making the reporting of prices relative to these standards a viable system. Once such a commitment is made, the ingenuity of marketplace participants will make the system work. Adoption of a set of standard specifications for reporting purposes and the inclusion of formula trades in the price reporting process would result in a price reporting system that would reflect sufficient industry volume that it could be used with confidence by all segments of the pork industry.

# APPENDIX A

# JOINT PORK INDUSTRY PRICE REPORTING IMPROVEMENT SURVEY

1.	What percentage of your pork sales or purchases do you presently report to the price reporting services? Meat Sheet% USDA% Yellow Sheet%
	If you do not report your transactions, why not?
2.	Does the current list of pork products reported adequately reflect what your company is buying or selling? (Y/N) USDA Yellow Sheet Meat Sheet
	If no, please explain!
3	Should detailed pork product specifications be adopted for reporting purposes? (Y/N)
٥.	Should detailed pork product specifications be adopted for reporting purposes? (1714)
4.	What other pork products would you like to see reported?
5.	Are market reporters regularly calling your firm to pick up and confirm trades? (Y/N)
	Yellow Sheet Meat Sheet USDA
	Is the current system of reporting and confirming adequate? (Y/N)
	Suggestions for improvement:

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5.	Should there be a policy in place to drop the high or low price from the reported range if such price is well outside of the range of the majority quotes as defined by a consensus of the reported trade of similar products for the day? (Y/N)
7.	What shipment period after transaction should be allowed for trades to be utilized? Please check
	< 1 week
	< 2 weeks
	< 4 weeks
	< 3 months
8.	Is the current system of overages adequately establishing and/or reflecting the value of your sales or purchases? (Y/N)
	Please explain
9.	On what percentage of your trades are you negotiating (bid/ask) prices? Total%
	Hams% Loins% Bellies% Butts% Ribs% Trimmings%
10	. What other methods do you use to establish prices for trades?
	Please Check All That Apply % of Total Volume
	Formula
	Basis Futures
	Ratio to Futures
	Forward Cash Contracts
	To be Priced Supply Contracts
	Transfer in Storage
	Intercompany
	Prior Day of Shipment A-2

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11. Do you believe that formula trades should be part of the price reporting system? (Y/N)
Would you be willing to report such trades? (Y/N)
12. Do you believe that inter company trades should be part of the price reporting system? (Y/N)
Would you be willing to report such trades if applicable? (Y/N)
13. Should there be a standard set of conversion factors used to convert value added products back to a regular commodity base? (Y/N)
Please explain
Should value added products be reported? (Y/N)
14. How many specifications of the following do you purchase/buy or sell?
Hams Loins Bellies Butts Ribs Trimmings
15. How many loads of pork do you buy or sell each week? Total
Hams (Bone-In Equivalent) Loins (Commodity Equivalent)
Bellies (Skin-On Equivalent) Butts (Commodity Equivalent)
Ribs Trimmings
16. What percentage of your trades are commodity versus value added?
Hams     Loins     Bellies     Butts       Bone-in     Commodity     Skin-On     Commodity       Boneless     Trimmed     Skinned     Trimmed       Boneless
Ribs Trimmings Commodity Commodity Value-added Value-added

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17. What percentage of your commodity an	nd value added tr	ades do you report?	
Hams Loins Bone-in Commodity Boneless Trimmed Boneless	Bellies Skin-On Skinned	Butts Commodity Trimmed	
Ribs Trimm Commodity Value-added Value-added	nings ————		
18. Do you buy or sell boneless ham muscl	les? (Y/N)	_	
If so, what percentage would be trimme	ed to the blue?	%	
What percentage would be 1/8"-1/4" fa	at trim?	_%	
19. What is your company's main line of b	business?		
What is your annual sales volume?	<\$50M		
	\$50-100M		
	\$100-500M		
	>\$500M		
Where are you located?			
Do you consider yourself a regional or	national firm?		
Optional: Name	C	ompany	