AGRICULTURAL MARKETING SERVICE

DAIRY DIVISION

Summary Report on Class I Pricing Options for Federal Milk Marketing Order Reform

SUMMARY OF PRICING OPTIONS

Several options for modifying Class I pricing under the Federal milk market order program, representing a spectrum of views, are discussed in this summary report. The accompanying technical report summarizes all of the comments and proposals received by the Department related to Class I pricing under Federal orders.

Most Class I pricing concepts that were suggested would continue to employ a market-driven basic formula price (BFP), with an added differential. Differentials are a composite of one or more of the following elements: (1) a fixed component, (2) a location adjustment, (3) an adjustor relating to utilization, or (4) the cost of balancing the market. Based on the pricing concepts received, the following options were developed.

Option 1A **Location-Specific Differential** -- $1.60 per hundredweight fixed differential for three surplus regions (Upper Midwest, West, and Southwest) within a nine-zone national price surface, plus for the other six zones, an added component that reflects regional differences in the value of fluid and manufacturing milk.

Option 1B **Modified Location-Specific Differential Option** -- $1.00 per hundredweight fixed differential plus an added component that reflects the cost of moving bulk milk to deficit markets.

Option 2 **Relative Use Differential** -- $1.60 per hundredweight fixed differential plus a formula-based differential driven by the ratio of Class I milk to all other uses of milk.

Option 3A **Flat Differential Option** -- $1.60 per hundredweight flat differential, uniformly applied across all orders to generate an identical minimum Class I price.

Option 3B **Flat Differential Modified by Class I Use** -- $2.00 per hundredweight differential in markets where Class I utilization is less than 70 percent on an annual basis and a differential equal to $2.00 + $0.075(Class I use % - 70%) in markets where the Class I utilization is equal to or exceeds 70 percent.

Option 4 **Demand-Based Differential** -- $1.00 per hundredweight fixed differential plus a transportation credit based on location of reserve milk supplies.

Estimated Class I differentials are presented for each option to provide a preliminary basis for determining impacts that may occur. The report provides estimated differentials for the suggested 10 consolidated orders and for the current 32 Federal milk marketing orders.

The report concludes by soliciting comments on the options presented and poses a series of questions for the public to address when submitting comments back to the Department on the issue of Class I pricing.

INTRODUCTION & OVERVIEW

This summary report outlines the broad Class I pricing concepts under consideration by the Department of Agriculture for reforming the Federal milk marketing order program. The technical report that accompanies this summary report was designed to be conceptual in nature and, as such, broadly presents various pricing concepts for consideration. Both this summary report and the technical report are based on input from the public and from University working groups. The purpose of this and other reports on classification and identical provisions is to stimulate further public thinking, discussion, and input. **These reports are not indicative of any Departmental decision or position.**

The following points should help to provide a context to evaluate the options presented in this report:

- The Agricultural Marketing Agreement Act of 1937 (1937 Act), authorizing Federal milk marketing orders, requires that the Secretary of Agriculture establish milk prices that reflect supply and demand conditions and ensure a sufficient supply of fluid milk for consumption. To meet these requirements under the options presented, the Class I milk price is established utilizing a base price that reflects supply and demand conditions for manufactured products. A Class I differential specific for each order is added to the base price to provide an incentive to move milk from supply areas to demand centers. Criteria used to establish the Class I differentials are:

  - ➔ Additional costs of meeting Grade A sanitary regulations;
  - ➔ Costs of transporting milk from areas of production to areas of consumption;
  - ➔ Cost of producing milk in the supply area; and
  - ➔ Supply and demand for milk, including the cost of alternative supplies.

- Under the current order system, location adjustments are made within each order area to provide price alignment. With the exception of the flat differential option, the options presented assume that similar location adjustments would be made to provide price alignment among and within marketing areas.

- In addition to the above criteria, the following assumptions were used or are considered important in the development of a Class I price structure:

  - ➔ Orderly marketing is represented by the equalization of market power between dairy farmers and milk buyers that fosters reasonable terms of

commerce, and a degree of inter- and intra-order equity among dairy producers and handlers.

- ➔ Market interference is limited to the extent necessary to achieve the objectives set out by the 1937 Act.

- ➔ Minimum prices are established for milk at a location for handlers and producers.

- Consolidation is not a criterion in determining the basic national Class I price structure; likewise, the national Class I price structure is not a criterion for consolidating marketing orders. Although consolidation and the basic price surface are developed independently, for illustrative purposes, this summary report overlays the suggested 10-market consolidation map (report released December 1996) with the various Class I pricing structure options to provide preliminary indications of intra-order and inter-order price alignment.

  More information than is currently available is required to estimate the impacts of the December suggested order consolidations on dairy farmers, handlers, and consumers. At a minimum, specific order provisions (i.e., performance standards, number of classes) and order data (production, utilization) are necessary.

Table 1 provides selected annual data for the current Federal milk marketing orders for 1995**.** These data may be used by the public as a baseline to evaluate the various Class I pricing options. Market Administrators and Dairy Division personnel will work with the public to fill other reasonable data requests.

Table 1. Selected 1995 Federal Milk Marketing Order Statistics.

Federal order	Producers (number)	Milk Delivered (mil lbs)	Class I (mil lbs)	Class I Use (percent)	Class I Price ($/cwt)[1]	Blend Price ($/cwt)[1]
New Eng	4,102	5,370	2,574	47.9	14.87	13.32
NY - NJ	11,352	11,935	4,804	40.3	14.77	13.27
Mid Atlantic	4,967	6,210	2,774	44.7	14.66	12.96
Carolina	1,641	2,591	1,993	76.9	14.70	14.04
Tenn Valley	1,601	1,437	1,058	73.6	14.39	13.70
Southeast	4,220	5,332	4,067	76.3	14.78	14.05
Up. Florida	217	720	603	83.6	15.13	14.55
Tampa	261	1,091	936	85.8	15.56	15.08
SE Florida	110	989	914	92.4	15.81	15.54
Michigan UP	95	63	48	76.3	12.98	12.69
S Michigan	3,749	4,642	2,072	44.6	13.37	12.43
E OH-W Penn	3,983	3,476	1,794	51.6	13.63	12.73
Ohio Valley	2,910	2,877	1,577	54.8	13.67	12.86
Indiana	1,801	1,944	1,175	60.5	13.53	12.83
Chicago Reg	17,577	14,249	2,517	17.7	13.03	12.06
C Illinois	227	203	139	68.4	13.24	12.82
S IL-E MO	2,222	2,259	1,152	51.0	13.55	12.78
Louis-Lex-Ev	1,468	1,113	811	72.8	13.74	13.14
Upper MW	12,090	9,259	1,595	17.2	12.83	11.90
Iowa	3,301	2,892	980	33.9	13.18	12.26
Neb-W Iowa	1,512	1,700	598	35.2	13.38	12.27
Gr KS City[2]	602	666	444	66.6	13.55	13.13
SW Plains	3,276	4,031	1,514	37.6	14.39	12.88
Texas	2,071	6,565	3,118	47.5	14.78	13.18
E Colorado[2]	529	1,766	784	44.4	14.35	13.02
SW Idaho	416	2,159	179	8.3	13.12	11.91
Gr Basin	660	2,403	839	34.9	13.53	12.53
C Arizona	135	2,253	1,037	46.0	14.14	12.76
N MX-W TX	179	1,862	693	37.2	13.97	12.39
Pacific NW	1,334	6,388	2,089	32.7	13.52	11.89

[1] Average prices. [2/] To protect handler confidentiality, the data for Greater Kansas City, Eastern South Dakota, and Black Hills are combined under Greater Kansas City and the data for Eastern Colorado and Western Colorado are combined under Eastern Colorado. Source: Federal Milk Order Market Statistics, 1995 Annual Summary

OPTIONS FOR A CLASS I PRICE SURFACE

Currently, Class I differentials specific to a location are added to the most recent basic formula price. The basic formula price is the average price that plants in Minnesota and Wisconsin pay for unregulated milk used to produce manufactured products updated monthly by changes in certain dairy product prices to reflect current supply and demand conditions. This price is used to obtain the minimum price for milk used in fluid milk products in the upcoming month. Thus, milk used in Class I products is priced in advance.

Most Class I pricing concepts suggested by interested parties continue the advance pricing component by employing a market-driven basic formula price to which is added a differential. Differentials are a composite of one or more of the following elements: (1) a fixed component, (2) a location adjustment, (3) an adjustor relating to utilization, or (4) the cost of balancing the market. Based on the pricing concepts received, the following options were developed.

Option 1A **Location-Specific Differential** -- $1.60 per hundredweight (cwt) fixed differential for three surplus regions (Upper Midwest, West, and Southwest) within a nine-zone national price surface, plus for the other six zones, an added component that reflects regional differences in the location value of fluid and manufacturing milk.

Option 1B **Modified Location-Specific Differential Option** -- $1.00 per cwt fixed differential plus an added component that reflects the cost of moving bulk milk from surplus production areas to deficit markets.

Option 2 **Relative Use Differential** -- $1.60 per cwt fixed differential plus a formula-based differential driven by the ratio of Class I milk to all other uses of milk.

Option 3A **Flat Differential Option** -- $1.60 per cwt flat differential, uniformly applied across all orders to generate an identical minimum Class I price.

Option 3B **Flat Differential Modified by Class I Use** -- $2.00 per cwt differential in markets where Class I utilization is less than 70 percent on an annual basis and a differential equal to $2.00 + $0.075(Class I use percent - 70 percent) in markets where the Class I utilization is equal to or exceeds 70 percent.

Option 4 **Demand-Based Differential** -- $1.00 per cwt fixed differential plus a transportation credit based on location of reserve milk supplies.

OPTIONS IN DETAIL

Option 1A *Location-Specific Differential*

The fixed Class I price surface in this option is based, in part, on the results from a Cornell University model that recognizes production, processing, and demand for dairy products at more than 600 locations in the United States. The model analyzes the optimum location for processing and manufacturing in order to minimize the total costs of hauling raw milk, interplant transfers of intermediate dairy products, processing and manufacturing, and the distribution of finished dairy products to final consumption.

The model results provide a framework for determining the relative differences in the value of milk by geographic location. Model runs from annual, flush (spring) and short (fall) month data imply a location value (pricing surface) for milk that is different for fluid and manufacturing purposes.

To complete the Class I pricing surface in this option, a fixed differential of $1.60 per cwt was used at each location. With the basic formula price reflecting the second previous month's manufacturing values, and given the degree of variation in monthly milk values, a $1.60 fixed Class I differential was deemed necessary in the principal surplus areas to assure that sufficient incentives exist each month to attract milk away from manufacturing uses.

Nine preliminary broad pricing zones are identified as a basis for establishing a price structure. These nine zones were identified based on knowledge of current supply and demand conditions and marketing conditions (i.e., fluid vs. manufacturing use, urban vs. rural areas, surplus vs. deficit markets). In the three zones containing identified surplus areas, the differential ranges reflect the estimated incentive needed to attract milk for fluid use to the primary consumption areas in each of those zones. For the remaining zones, the range of prices reflects the location value of milk for fluid use. The range of differentials and general location for each zone are as follows:

Zone 1	**West**	**$1.60 - $1.90**
Zone 2	**Southwest**	**$1.60 - $2.65**
Zone 3	**Upper Midwest**	**$1.60 - $1.80**
Zone 4	**South**	**$2.65 - $3.65**
Zone 5	**MidCentral to Northeast**	**$2.00 - $3.00**
Zone 6	**Southeast**	**$3.00 - $3.75**
Zone 7	**Florida**	**$3.75 - $4.30**
Zone 8	**Central to MidEastern**	**$1.80 - $2.00**
Zone 9	**East Coast**	**$3.00 - $3.35**

Figure 1. Option 1A--Location Specific Differentials for 9 Pricing Zones

This version of the report is text only. Click Figure 1 to view/print this graphic.

Although developed independently, the suggested 10 consolidated orders can be overlaid onto the preliminary price structure map to estimate the impacts of this option on Class I differential ranges. Table 2 outlines the estimated impacts on Class I differential ranges of this option.

However, the comparison is not precise at this time because exact location-specific differentials have not been identified. If a consolidated order includes more than one zone within its boundaries, the price range for the entire zone has been stated for the consolidated order although the highest or lowest range in that zone may not apply. For example, in the Mideast order the new Class I differential range is stated as $1.80 to $3.00, even though the Mideast order encompasses only the northern tier of the $2.00 to $3.00 range. Because the ranges developed by this option present the lowest and highest differentials for a given order, the differentials in the current orders with location adjustments are used for comparison purposes.

Table 2. Estimated Location-Specific Differentials under Option 1A

Suggested Consolidated Order[1]	Current Differential[2] ($/cwt)	New Class I Differential[3] ($/cwt)	Difference [4] ($/cwt)
Northeast	2.20 - 3.24	2.00 - 3.35	-.20 to .11
Appalachian	2.11 - 3.23	2.00 - 3.75	-.11 to .52
Southeast	2.26 - 3.40	2.00 - 3.75	-.26 to .35
Florida	3.58 - 4.18	3.00 - 4.30	-.58 to .12
Mideast	1.68 - 2.19	1.80 - 3.00	.12 to .81
Central	1.28 - 2.73	1.60 - 3.00	.32 to .27
Upper Midwest	1.04 - 1.40	1.60 - 1.80	.56 to .40
Southwest	2.20 - 3.91	1.60 - 3.65	-.60 to -.26
Western	1.50 - 2.00	1.60 - 2.65	.10 to .65
Pacific NW	1.75 - 1.90	1.60 - 1.90	-.15 to 0

[1/] Based on the ten suggested orders announced on December 3, 1996. [2/]Range reflects current differentials with location adjustments, for comparison purposes. [3/]Entire zone ranges included in new differentials. [4/] Represents maximum differences in differentials.

Figure 2. Projecting Option 1A over
Suggested 10 Consolidated Orders

This version of the report is text only. Click Figure 2 to view/print this graphic.

Discussion Points

- A range of differentials is presented in this option because the exact location-specific differentials have not been developed at this time. The general flow of differential levels will most likely have a west to east and north to south pattern dependent upon the location.

- Currently, the lowest "location-adjusted" differential under the orders is $1.04 and the highest differential is $4.18, for a difference of $3.14 per cwt. Under this option, the lowest differential is $1.60 and the highest differential is $4.30, for a difference of $2.70.

- Since blend prices reflect Class I utilization, in addition to the Class I price level, this option may not significantly change differences in blend prices across markets.

Option 1B ***Modified Location-Specific Differential***

This option is also based, in part, on the Cornell University model and reflects the cost of moving milk from surplus to deficit markets. Unlike option 1A, however, this option ignores the location value of milk used in manufacturing within the model. Five preliminary broad pricing zones and their differentials are identified as follows:

Zone 1	**West, Southwest, Upper Midwest, Central to MidEastern**	**$1.00 - $1.50**
Zone 2	**South, Mid Central to Northeast**	**$1.50 - $2.00**
Zone 3	**Southeast**	**$2.00 - $2.75**
Zone 4	**Florida**	**$2.75 - $3.50**
Zone 5	**East Coast**	**$2.00 - $2.50**

Figure 3 illustrates these 5 zones, and table 3 compares current location-adjusted Class I differential ranges for the 10 suggested consolidated orders to the Class I differentials resulting from this option. As with option 1A, the comparison is not precise because exact location-specific differentials have not been identified at this time. Figure 4 projects these pricing ranges onto the suggested 10-order consolidation map.

Figure 3. Option 1B--Modified Location-Specific Differentials

This version of the report is text only. Click Figure 3 to view/print this graphic.

Table 3. Estimated Location-Specific Differentials under Option 1B

Suggested Consolidated Order[1]	Current Differential[2] ($/cwt)	New Class I Differential[3] ($/cwt)	Difference [4] ($/cwt)
Northeast	2.20 - 3.24	1.50 - 2.50	-.70 to -.74
Appalachian	2.11 - 3.23	1.50 - 2.75	-.61 to -.48
Southeast	2.26 - 3.40	1.50 - 2.75	-.76 to -.65
Florida	3.58 - 4.18	2.00 - 3.50	-1.58 to -.68
Mideast	1.68 - 2.19	1.00 - 2.00	-.68 to -.19
Central	1.28 - 2.73	1.00 - 2.00	-.28 to -.73
Upper MW	1.04 - 1.40	1.00 - 1.50	-.04 to .10
Southwest	2.20 - 3.91	1.00 - 2.00	-1.20 to -1.91
Western	1.50 - 2.00	1.00 - 1.50	-.50 to -.50
Pacific NW	1.75 - 1.90	1.00 - 1.50	-.75 to -.40

[1/] Based on the ten suggested orders announced on December 3, 1996. [2/] The range presented reflects current differentials with location adjustments and is reported for comparison purposes. [3/] Entire zone ranges included in new differentials. [4/] Represents maximum differences in differentials.

Figure 4. Projecting Option 1B over
Suggested 10 Consolidated Orders

This version of the report is text only. Click Figure 4 to view/print this graphic.

Discussion Points

- A range of differentials is presented in this option because the exact location-specific differentials have not been developed at this time. The general flow of differential levels will most likely have a west to east and north to south pattern dependent upon the location.

- Currently, the lowest "location-adjusted" differential under the orders is $1.04 and the highest differential is $4.18, for a difference of $3.14 per cwt. Under this option, the lowest differential is $1.00 and the highest differential is $3.50, for a difference of $2.50.

- Since blend prices reflect Class I utilization, in addition to the Class I price level, this option may slightly reduce differences in blend prices across markets.

Option 2 ***Relative Use Differential***

Under this option, Class I differentials would vary with changing market conditions. Increased demand for fluid milk relative to the supply of milk would increase the relative use ratio and raise the differential. This would provide an incentive to attract additional milk to the fluid market. Likewise, if milk supplies increased, but there were no commensurate increase in Class I sales, the ratio would decline, signaling to producers and handlers that milk supplies are increasing relative to fluid demand.

To prevent widely fluctuating differentials and prices, a percentage limit (e.g., 25 percent) could be placed on changes in the differential to temper adjustments based on supply and demand conditions. The relative use ratio could be computed on a quarterly, annually, or some monthly moving average basis.

Relative use differentials that vary with changing market conditions can generate more timely, market-appropriate price signals. Formula-based pricing also addresses concerns that differentials are administratively established and inflexible.

Illustration of a Relative Use Formula for Determining Class I Differentials

a. Divide Class I use by milk used in all other uses to determine the ***relative use ratio***.

b. The Class I differential equals $1.60 per cwt plus the relative use ratio x $1.00 to equal a relative use differential, and for illustrative purposes, the new differential shall not be greater than 125 percent of the current Class I differential, nor less than 75 percent of the current Class I differential. A $1.60 basic differential was selected because it is the minimal value deemed necessary in the principal

surplus areas to assure that sufficient incentives exist each month to attract milk away from manufacturing uses.

Table 4 illustrates the Class I differentials under the suggested consolidated orders. However, at this time, it is undetermined at what specific location within the order this differential applies and whether or not this differential would be adjusted. To provide a basis for comparison within the suggested consolidated orders, a weighted average Class I differential has been calculated, based on October 1995 data. This is computed by multiplying the percentage of Class I milk in each of the current orders that comprise the consolidated order by the applicable current order differential and adding the resulting amounts. This weighted average differential is not location-specific.

Table 5 sets forth the relative use ratios that would have existed in the current 32 Federal milk orders based on 1995 annual data. These differentials would apply to the announced pricing location in the orders.

Table 4. Class I Differentials in Suggested Consolidated Orders Based on October 1995 Data under Option 2--Relative Use

Suggested Consolidated Order [1]	Relative Use Ratio[2] (percent)	+ $1.60 = Class I Differential ($/cwt)	Weighted Average Differential ($/cwt)[3]	Maximum Differential Range (75%-125%)	New Differential ($/cwt)	Change in Differential ($/cwt)
Northeast	0.88	2.48	3.13	2.35 - 3.91	2.48	-0.65
Appalachian	4.71	6.31	2.97	2.23 - 3.71	3.71	0.74
Southeast	5.49	7.09	3.08	2.31 - 3.85	3.85	0.77
Florida	7.57	9.17	3.89	2.92 - 4.86	4.86	0.97
Mideast	1.37	2.97	1.93	1.45 - 2.41	2.41	0.48
Central	1.02	2.62	2.17	1.63 - 2.71	2.62	0.45
Up Midwest	0.52	2.12	1.32	0.99 - 1.65	1.65	0.33
Southwest	0.93	2.53	2.91	2.18 - 3.64	2.53	-0.38
Western	0.46	2.06	1.85	1.39 - 2.31	2.06	0.21
Pacific NW	0.57	2.17	1.90	1.43 - 2.38	2.17	0.27

[1/] Based on the 10 suggested orders announced on December 3, 1996. [2/] Relative use ratio = Class I ÷ all other uses. [3/] Weighted average differential for the consolidated orders is computed by summing the product of the percentage of Class I milk included from each of the current orders multiplied by the applicable current order differential.

Table 5. Current Order Differentials Based on 1995 Annual Data for Option 2--Relative Use

Order	Relative Use Ratio[1]	+ $1.60 = Class I Diff	Current Diff. ($/cwt)	Max. Range (75-125%)	New Differential ($/cwt)	Change ($/cwt)
New Eng	0.921	2.52	3.24	2.43 - 4.05	2.52	-0.72
NY - NJ	0.674	2.27	3.14	2.36 - 3.93	2.36	-0.78
Mid Atlantic	0.807	2.41	3.03	2.27 - 3.79	2.41	-0.62
Carolina	3.33	4.93	3.08	2.31 - 3.85	3.85	+0.77
Tenn Valley	2.79	4.39	2.77	2.08 - 3.46	3.46	+0.69
Southeast	3.22	4.82	3.08	2.31 - 3.85	3.85	+0.77
Up Florida	5.15	6.75	3.58	2.69 - 4.48	4.48	+0.90
Tampa	6.04	7.64	3.88	2.91 - 4.85	4.85	+0.97
SE Florida	12.19	13.79	4.18	3.14 - 5.23	5.23	+1.05
Michigan UP	3.20	4.80	1.35	1.01 - 1.69	1.69	+0.34
S Michigan	0.806	2.41	1.75	1.31 - 2.19	2.19	+0.44
E OH-W Penn	1.066	2.67	2.00	1.50 - 2.50	2.50	+0.50
Ohio Valley	1.213	2.81	2.04	1.53 - 2.55	2.55	+0.51
Indiana	1.527	3.13	1.90	1.43 - 2.38	2.38	+0.48
Chicago Reg	0.214	1.81	1.40	1.05 - 1.75	1.75	+0.35
C Illinois	2.172	3.77	1.61	1.21 - 2.01	2.01	+0.40
S IL-E MO	1.041	2.64	1.92	1.44 - 2.40	2.40	+0.48
Louis-Lex-Ev	2.685	4.29	2.11	1.58 - 2.64	2.64	+0.53
Upper MW	0.208	1.81	1.20	0.90 - 1.50	1.50	+0.30
Iowa	0.512	2.11	1.55	1.16 - 1.94	1.94	+0.39
Neb-W Iowa	0.543	2.14	1.75	1.31 - 2.19	2.14	+0.39
Gr KS City[2]	2.00	3.60	1.92	1.44 - 2.40	2.40	+0.48
SW Plains	0.602	2.20	2.77	2.08 - 3.46	2.20	-0.57
Texas	0.904	2.50	3.16	2.37 - 3.95	2.50	-0.66
E Colorado[3]	0.540	2.14	2.73	2.05 - 3.14	2.14	-0.59
SW Idaho	0.090	1.69	1.50	1.13 - 1.88	1.69	+0.19
Gr Basin	0.536	2.14	1.90	1.42 - 2.38	2.14	+0.24
C Arizona	0.853	2.45	2.52	1.89 - 3.15	2.45	-0.07
N MX-W TX	0.593	2.19	2.35	1.76 - 2.94	2.19	-0.16
Pacific NW	0.486	2.09	1.90	1.43 - 2.38	2.09	+0.19

[1]/ Relative use ratio = Class I ÷ All other uses. [2]/ The Greater Kansas City order differential is used in this comparison although the Greater Kansas City, Eastern South Dakota, and Black Hills are combined in FMOS for producer deliveries to mask restricted data.
[3]/ The Eastern Colorado Order differential is used in this comparison although the Eastern and Western Colorado orders are combined in FMOS for producer deliveries to mask restricted data.

Discussion Points

- In 5 of the suggested consolidated orders and 19 of the current orders, primarily in the Central and Southeast, the 25 percent limit on Class I differential changes limited the differential increases and in the current New York-New Jersey order, the limit restricted the differential decrease. The largest increases occurred in the Southeast and the largest decreases occurred in the Northeast.

- The lowest current differential without location adjustment under the orders is $1.20 and the highest current differential is $4.18, for a difference of $2.98 per cwt. Under this option, the lowest relative use differential for the suggested consolidated orders is $1.65 and the highest differential is $4.86, for a difference of $3.21. Under this option, the lowest relative use differential for the current orders is $1.50 and the highest differential is $5.23, for a difference of $3.73.

- Since blend prices reflect Class I utilization, in addition to the Class I price level, it is projected that the Northeast and Southwest may experience lower blend prices while the Southeast will have higher blend prices.

Option 3A ***Flat Differential***

Under this option, an equal differential would be applied in all orders resulting in an identical *minimum* Class I price in every order. To be consistent with other options, $1.60 per cwt is used here, although some of the public comments received thus far proposed flat differentials of $2.00 or more per cwt.

A flat differential has the advantage of being simple to apply and use, and addresses concerns of regional inequities, although intra-regional inequity may be increased. A flat Class I pricing system would likely result in increases in over-order premiums in some markets and thus would place much greater reliance on the marketplace to generate the incentive to move milk and to yield returns to producers that reflect the value for milk in fluid uses, especially in markets where current Class I differentials are significantly above $1.60.

Table 6 compares a flat Class I differential in the suggested consolidated order to the applicable weighted average Class I differentials and Table 7 compares a flat Class I differential to the current orders' Class I differentials as announced in FMOS. No changes in over-order premiums are assumed in the following tables.

Table 6. Class I Differentials in Suggested Consolidated Orders Based on October 1995 Data under Option 3A--Flat Differential

Suggested Consolidated Order [1]	New Differential ($/cwt)	Weighted Average Differential ($/cwt)[2]	Change ($/cwt)
Northeast	1.60	3.13	-1.53
Appalachian	1.60	2.97	-1.37
Southeast	1.60	3.08	-1.48
Florida	1.60	3.89	-2.29
Mideast	1.60	1.93	-0.33
Central	1.60	2.17	-0.57
Up Midwest	1.60	1.32	0.28
Southwest	1.60	2.91	-1.31
Western	1.60	1.85	-0.25
Pacific NW	1.60	1.90	-0.3

[1/] Based on the ten suggested orders announced on December 3, 1996. [2/] Weighted average differential for the consolidated orders is computed by summing the product of the percentage of Class I milk included from each of the current orders multiplied by the applicable current order differential.

Table 7. Current Order Class I Differentials Based on 1995 Annual Data under Option 3B--Flat Differential

Order	New Differential ($/cwt)	Current Differential ($/cwt)	Change ($/cwt)
New Eng	1.60	3.24	-1.64
NY - NJ	1.60	3.14	-1.54
Mid Atlantic	1.60	3.03	-1.43
Carolina	1.60	3.08	-1.48
Tenn Valley	1.60	2.77	-1.17
Southeast	1.60	3.08	-1.48
Up Florida	1.60	3.58	-1.98
Tampa	1.60	3.88	-2.28
SE Florida	1.60	4.18	-2.58
Michigan UP	1.60	1.35	0.25
S Michigan	1.60	1.75	-0.15
E OH-W Penn	1.60	2.00	-0.40
Ohio Valley	1.60	2.04	-0.44
Indiana	1.60	1.90	-0.30
Chicago Reg	1.60	1.40	0.20
C Illinois	1.60	1.61	-0.01
S IL-E MO	1.60	1.92	-0.32
Louis-Lex-Ev	1.60	2.11	-0.51
Upper MW	1.60	1.20	0.40
Iowa	1.60	1.55	0.05
Neb-W Iowa	1.60	1.75	-0.15
Gr KS City[1]	1.60	1.92	-0.32
SW Plains	1.60	2.77	-1.17
Texas	1.60	3.16	-1.56
E Colorado[2]	1.60	2.73	-1.13
SW Idaho	1.60	1.50	0.10
Gr Basin	1.60	1.90	-0.30
C Arizona	1.60	2.52	-0.92
N MX-W TX	1.60	2.35	-0.75
Pacific NW	1.60	1.90	-0.30

[1/]The Greater Kansas City order differential is used in this comparison although the Greater Kansas City, Eastern South Dakota, and Black Hills are combined in FMOS to mask restricted data. [2/] The Eastern Colorado Order differential is used in this comparison although the Eastern and Western Colorado orders are combined in FMOS to mask restricted data.

Discussion Points

- With a flat differential, any additional value for milk in fluid uses would have to come from the market. Price incentives to service the fluid market would be negotiated between individual handlers and producers, and would not be shared among all producers in the market.

- In all but one of the consolidated orders and in all but five current orders, the Class I differential would be lowered with the largest decrease occurring in the Southeast. Producers located in the Northeastern, Southern, and Southeastern areas of the country could experience revenue losses based on order prices only. However, if producers in those areas are successful in bargaining for higher over-order premiums, they may be able to offset a portion of the decline in minimum order prices.

Option 3B ***Flat Differential Modified by Class I Use***

Under this option, a basic differential of $2.00 per cwt would apply in an order if the Class I use is less than 70 percent. If Class I use equals or exceeds 70 percent, the Class I differential in an order would be $2.00 + $0.075*(Class I use percent - 70 percent). This option assumes markets with Class I use below 70 percent have an adequate reserve to meet fluid needs. Markets with Class I use above 70 percent, however, require additional supplies to meet fluid demand.

Table 8 illustrates the Class I differentials under the suggested consolidated orders. As with option 2, the estimated Class I differentials presented in Table 8 are not location-specific within the consolidated order. To provide a basis for comparison, a weighted average differential has been calculated based on current differentials for the consolidated orders based on October 1995 data. These differentials are also not location-specific. Table 9 sets forth the differentials that would exist under this option in the current 32 Federal milk orders based on 1995 annual data. These differentials apply to the announced pricing location in the orders.

Table 8. Class I Differentials in Suggested Consolidated Orders Based on October 1995 Data under Option 3B--Flat Differential Modified by Class I Use

Suggested Consolidated Order [1]	Class I Use (percent)	New Differential ($/cwt)	Weighted Average Differential [2] ($/cwt)	Change ($/cwt)
Northeast	46.7	2.00	3.13	-1.13
Appalachian	82.5	2.94	2.97	-0.03
Southeast	84.6	3.10	3.08	0.02
Florida	88.3	3.37	3.89	-0.52
Mideast	57.8	2.00	1.93	0.07
Central	50.6	2.00	2.17	-0.17
Upper Midwest	34.2	2.00	1.32	0.68
Southwest	48.3	2.00	2.91	-0.91
Western	31.7	2.00	1.85	0.15
Pacific NW	36.3	2.00	1.90	0.10

[1/] Based on the ten suggested orders announced on December 3, 1996. [2/] Weighted average differential for the consolidated orders is computed by summing the product of the percentage of Class I milk included from each of the current orders multiplied by the applicable current order differential.

Table 9. Current Order Class I Differentials Based on 1995 Annual Data under Option 3B--Flat Differential Modified by Class I Use

Order	Class I Use (percent)	New Differential[1] ($/cwt)	Current Differential ($/cwt)	Change ($/cwt)
New Eng	47.9	2.00	3.24	-1.24
NY - NJ	40.3	2.00	3.14	-1.14
Mid Atlantic	44.7	2.00	3.03	-1.03
Carolina	76.9	2.52	3.08	-0.56
Tenn Valley	73.6	2.27	2.77	-0.50
Southeast	76.3	2.47	3.08	-0.61
Up Florida	83.6	3.02	3.58	-0.56
Tampa	85.8	3.19	3.88	-0.70
SE Florida	92.4	3.68	4.18	-0.50
Michigan UP	76.3	2.47	1.35	1.12
S Michigan	44.6	2.00	1.75	0.25
E OH-W Penn	51.6	2.00	2.00	0.00
Ohio Valley	54.8	2.00	2.04	-0.04
Indiana	60.5	2.00	1.90	0.10
Chicago Reg	17.7	2.00	1.40	0.60
C Illinois	68.4	2.00	1.61	0.39
S. IL-E. MO	51.0	2.00	1.92	0.08
Louis-Lex-Ev	72.8	2.21	2.11	0.10
Upper MW	17.2	2.00	1.20	0.80
Iowa	33.9	2.00	1.55	0.45
Neb-W Iowa	35.2	2.00	1.75	0.25
Gr KS City[2]	66.6	2.00	1.92	0.08
SW Plains	37.6	2.00	2.77	-0.77
Texas	47.5	2.00	3.16	-1.16
E Colorado[3]	44.4	2.00	2.73	-0.73
SW Idaho	8.3	2.00	1.50	0.50
Gr Basin	34.9	2.00	1.90	0.10
C Arizona	46.0	2.00	2.52	-0.52
N MX-W TX	37.2	2.00	2.35	-0.35
Pacific NW	32.7	2.00	1.90	0.10

[1/] If Class I use ≥70%, then differential = $2 + $.075*(Class I use - 70%). [2/]The Greater Kansas City (GKC) order differential is used in this comparison although the GKC, E. South Dakota, and Black Hills are combined in to mask restricted data. [3/] The E.Colorado differential is used in this comparison although the East and West Colorado orders are combined in FMOS for producer deliveries to mask restricted data.

Discussion Points

- In only three of the suggested consolidated orders is the Class I ratio above 70 percent, thus warranting a differential above $2.00. In these 3 markets, the new differentials range from 52 cents below to 2 cents above the weighted average differential for the consolidated market.

- In only eight current orders, primarily in the Southeast, is the Class I ratio above 70 percent, thus warranting a differential above $2.00. Although above the $2.00 level, the new differential in 6 of these markets is up to 70 cents less than current levels and exceeds the current level in the remaining two markets. Due to the suggested consolidation, the Michigan Upper Peninsula order area would no longer have a utilization above 70 percent. As a result, under this option this area would have a $2.00 differential under consolidation instead of a $2.47 differential under the current orders.

- Currently, the lowest differential without location adjustments under the orders is $1.20 and the highest differential is $4.18, for a difference of $2.98 per cwt. Under this option, the lowest differential is $2.00 and the highest differential is $3.37 for the consolidated orders and $3.68 for the current orders, for a difference of $1.37 and $1.68, respectively. The Northeast experiences the greatest decline in differentials while the Upper Midwest has the greatest increase.

- Since blend prices reflect Class I utilization, in addition to the Class I price level, it is projected that the Northeast, Southwest, and Southeast would experience lower blend prices while the Upper Midwest would see little change in blend prices.

Option 4 ***Demand-Based Differential***

Under this option, an equal differential would be applied in all orders and in defined demand centers an additional component would be added to reflect the cost of transporting milk from reserve supply areas to demand centers. One possible option of a demand-based differential concept is to:

> Establish a fluid supply area for each market from which milk production around the major bottler locations is procured and a reserve supply area outside the fluid supply area from which milk production generally is not supplied to fluid handlers in the major fluid bottling locations.
>
> The Class I differential for the reserve area might be set at $1.00 per cwt. For fluid supply areas, the differential would be $1.00 plus transportation costs from

the reserve area to the fluid demand area. Fluid handlers in the fluid supply area would pay the higher differential, and transportation and balancing credits would be drawn from the market order pool.

Using this demand-based option, a market with a 100-mile supply area would have a differential of $1.00 + ($0.35 *1) = $1.35 (if the cost of transportation is 35 cents per 100 miles). A market with a 700-mile fluid supply area, on the other hand, would have a differential of $1.00 + ($0.35*7) = $3.45. Monies paid by Class I handlers through the second part of the Class I differential would be used to fund the order's system of transportation credits and balancing payments. These transportation credits and balancing payments would be provided to organizations that supply the order's fluid market.

Table 10 presents a few examples of the differentials that would apply to specific locations. These differentials are based on the furthest distance milk for fluid use is transported using the Cornell University model. These shipments do not account for alternative uses of milk in the same location. Such demand- based differentials would need to be established at every fluid milk processing location.

Table 10. Demand-Based Differentials for Selected Cities

Selected Location	Current Differential ($/cwt)	Demand-Based Diff. ($/cwt)	Change ($/cwt)
Miami, Florida	4.18	3.88	-0.30
Tampa, Florida	3.88	2.05	-1.83
Orlando, Florida	3.88	3.08	-0.80
Atlanta, Georgia	3.08	2.38	-0.70
New York City	3.14	1.80	-1.34
Chicago, Illinois	1.40	1.49	0.09
Minneapolis, MN	1.20	1.11	-0.09
Phoenix, Arizona	2.52	1.00	-1.52
Dallas, Texas	3.16	1.40	-1.76
Boise, Idaho	1.50	1.06	-0.44

Discussion Points

- Differentials established by this option do not appear to result in any particular price structure pattern. Prices are established at specific locations independently, although plants located in the same area would have the same price, resulting in a Class I price surface that may raise alignment issues.

- More precise impacts of this option on blend prices are not known because it is undetermined what portion of the Class I differential would be paid to producers, what portion would pay for transportation and balancing costs, and how or whether any residual differential value over costs would be returned to producers.

SUMMARY

This summary report has outlined major pricing options under consideration for reforming the Federal milk order program. This summary report illustrates various Class I differentials assuming no changes in production and consumption or over-order premiums. Another option under consideration is retention of the current system with some modifications.

This summary report and the accompanying technical report are intended to serve as stimuli for discussion purposes and are not indicative of any Department position. In addition to seeking comments on the options presented, as well as fully formulating and submitting other options not presented, the Department would like to receive comments on the following questions:

- Are the criteria and assumptions for developing a Class I price structure appropriate?

- What portion of the additional value of Class I milk should be included in a Federal order pool?

- Should Class I differentials encourage the pooling of large quantities of milk that are never needed by a market's fluid processing plants? Should pooling provisions allow such milk to be pooled?

- Should Class I differentials cover, and the pool pay, market balancing costs for:
  --transporting additional supplies to the market during deficit periods?
  --manufacturing plant give-up charges?
  --transporting surplus milk to distant manufacturing plants during flush periods?
  --maintaining balancing plants?

- Should the Class I price structure be designed to minimize price volatility?

- Should advance pricing of Class I be continued and, if so, how much advance notice is appropriate?

- Under each of the options presented, for each order and for the nation, what are the expected effects on milk production, use, blend prices, producer returns, consumer costs, and inter-order shipments of milk?

The Department requests comments on this summary report and the accompanying technical report by June 1, 1997, although comments will be accepted throughout the entire process. In addition, interested parties are invited to submit ideas or suggestions on any other aspect of the regulatory program by June 1, 1997. All ideas and suggestions should be mailed to the Dairy Division, AMS/USDA, Room 2968 South Bldg., P.O. Box 96456, Washington, DC 20090-6456 or e-mailed to *Milk_Order_Reform@usda.gov*.