DEPARTMENT OF AGRICULTURE

Agricultural Marketing Service

7 CFR Parts 1000, 1001, 1005, 1006, 1007, 1030, 1032, 1033, 1051, 1124, 1126, and 1131

[Doc. No. AMS–DA–23–0031]

Milk in the Northeast and Other Marketing Areas; Proposed Amendments to Marketing Agreements and Orders

AGENCY: Agricultural Marketing Service, USDA.

ACTION: Proposed rule.

SUMMARY: This decision proposes to amend the pricing provisions in the 11 Federal Milk Marketing Orders (FMMOs).

DATES: Written exceptions and comments to this proposed rule must be submitted on or before September 13, 2024.

ADDRESSES: Written exceptions should be filed with the Office of the Hearing Clerk, U.S. Department of Agriculture, 1400 Independence Ave. SW, Stop 9203, Room 1031, Washington, DC 20250–9203; Fax: (844) 325–6940 or via the internet at *https://www.regulations.gov.* All comments should reference the docket number and the date and page number of this issue of the **Federal Register**. Comments will be made available for public inspection in the Office of the Hearing Clerk during regular business hours or can be viewed at *https://www.regulations.gov.* A plain-language summary of this proposed rule is available at *https://www.regulations.gov* in the docket for this rulemaking.

FOR FURTHER INFORMATION CONTACT: Erin Taylor, USDA/AMS/Dairy Programs, Order Formulation and Enforcement Branch, STOP 0231–Room 2530, 1400 Independence Avenue SW, Washington, DC 20250–0231, Telephone: (202) 720–7183, Email address: *Erin.Taylor@usda.gov.*

SUPPLEMENTARY INFORMATION: This recommended decision proposes amendments to five categories of milk pricing:

1. *Milk Composition Factors.* Update the factors to 3.3 percent true protein, 6 percent other solids, and 9.3 percent nonfat solids.

2. *Surveyed Commodity Products.* Remove 500-pound barrel cheddar cheese prices from the Dairy Products Mandatory Reporting Program (DPMRP) survey and rely solely on the 40-pound block cheddar cheese price to determine

the monthly average cheese price used in the formulas.

3. *Class III and Class IV Formula Factors.* Update the manufacturing allowances to: Cheese: $0.2504; Butter: $0.2257; Nonfat Dry Milk (NFDM): $0.2268; and Dry Whey: $0.2653. This decision also proposes updating the butterfat recovery factor to 91 percent.

4. *Base Class I Skim Milk Price.* Update the formula as follows: the base Class I skim milk price would be the higher-of the advanced Class III or Class IV skim milk prices for the month. In addition, adopt a Class I extended shelf life (ESL) adjustment equating to a Class I price for all ESL products equal to the average-of mover, plus a 24-month rolling average adjuster with a 12-month lag.

5. *Class I and Class II differentials.* Keep the $1.60 base differential and adopt modified location specific Class I differential values.

In conjunction with this Recommended Decision, the Agricultural Marketing Service (AMS) conducted a Regulatory Economic Impact Analysis to determine the potential impact of amending FMMO pricing formulas on producer revenue and marketwide pool values. AMS used a static analysis incorporating actual data reported from January 2019 to December 2023 to determine the estimated price impacts of the package of amendments included in this Recommended Decision. The full text of the Regulatory Economic Impact Analysis may be accessed at *https://www.regulations.gov* or *https://www.ams.usda.gov/rules-regulations/moa/dairy/hearings/national-fmmo-pricing-hearing.*

Prior Documents in This Proceeding

Notice of Hearing: Published July 24, 2023 (88 FR 47396).

Notice of Reconvened Hearing: Published November 6, 2023 (88 FR 76143).

Notice of Reconvened Hearing: Published December 29, 2023 (88 FR 90134).

This administrative action is governed by sections 556 and 557 of title 5 of the United States Code and, therefore, is excluded from the requirements of Executive Orders 12866, 13563, and 13175.

The amendments to the rules proposed herein have been reviewed under Executive Order 12988, Civil Justice Reform. They are not intended to have a retroactive effect. If adopted, the proposed amendments would not preempt any state or local laws, regulations, or policies, unless they

present an irreconcilable conflict with this rule.

The Agricultural Marketing Agreement Act of 1937, as amended (7 U.S.C. 601–674) (AMAA), provides that administrative proceedings must be exhausted before parties may file suit in court. Under section 608c(15)(A) of the AMAA, any handler subject to an order may request modification or exemption from such order by filing a petition with the USDA stating that the order, any provision of the order, or any obligation imposed in connection with the order is not in accordance with the law. A handler is afforded the opportunity for a hearing on the petition. After a hearing, USDA would rule on the petition. The AMAA provides that the district court of the United States in any district in which the handler is an inhabitant, or has its principal place of business, has jurisdiction in equity to review USDA's ruling on the petition, provided a bill in equity is filed not later than 20 days after the date of the entry of the ruling.

Civil Rights Impact Analysis

AMS has reviewed this rulemaking in accordance with USDA Departmental Regulation 4300–004, Civil Rights Impact Analysis, to identify any major civil rights impacts the rule might have on FMMO participants on the basis of race, color, national origin, disability, sex, gender identity, political beliefs, age, marital, family/parental status, religion, sexual orientation, reprisal, or because of an individuals' income is derived from any public assistance program. Based on the review and analysis of the rule and all available data, issuance of this proposed rule is not likely to negatively impact low and moderate-income populations, minority populations, women, Tribes or persons with disabilities, by virtue of their age, race, color, national origin, sex, disability, or marital or familial status. No major civil rights impact is likely to result from this proposed rule.

Regulatory Flexibility Act and Paperwork Reduction Act

In accordance with the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 *et seq.*), the AMS has considered the economic impact of this action on small entities. Accordingly, AMS has prepared this initial regulatory flexibility analysis. The purpose of the RFA is to fit regulatory actions to the scale of businesses subject to such actions so that small businesses will not be unduly or disproportionately burdened. Marketing orders and amendments thereto are unique in that they are normally brought about through

group action of essentially small entities for their own benefit. A small dairy farm as defined by the Small Business Administration (SBA) (13 CFR 121.201) is one that has an annual gross revenue of $3.75 million or less, and a small dairy products manufacturer is one that has no more than the number of employees listed in the chart below:

NAICS code	NAICS U.S. industry title	Size standards in number of employees
311511	Fluid Milk Manufacturing	1,150
311512	Creamery Butter Manufacturing	750
311513	Cheese Manufacturing	1,250
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing	1,000

To determine which dairy farms are "small businesses," the $3.75 million per year income limit was used to establish an annual milk marketing threshold of 18.3 million pounds. Although this threshold does not factor in additional monies that may be received by dairy producers, it should be an accurate standard for most "small" dairy farmers. Based on the U.S. 2023 average yield per cow and 2023 NASS average All-Milk price, a dairy farm with approximately 780 cows or fewer would meet the definition of small business. In 2022, the most recent year with statistics available, there were 24,470 dairy farms with milk sales, of which approximately 19,576 had milk regulated on an FMMO for at least one month of the year. Based on the 2022 Census of Agriculture, Milk Cow Herd Size by Inventory and Sales, an estimated 89 percent of operations with milk sales are likely to be small businesses.

To determine a handler's size, if the plant is part of a larger company operating multiple plants that collectively exceed the 750-employee limit for creamery butter manufacturing; the 1,000-employee limit for dry, condensed, and evaporated dairy product manufacturing; the 1,150-employee limit for fluid milk manufacturing; or the 1,250-employee limit for cheese manufacturing; the plant was considered a large business even if the local plant does not exceed the 750, 1,000, 1,150, or 1,250-employee limit, respectively.

In 2022, the following number of plants were regulated for at least one month of the year in each FMMO: 66 plants on the Northeast, 19 plants on the Appalachian, 9 plants on the Florida, 20 plants on the Southeast, 58 plants on the Upper Midwest, 32 plants on the Central, 43 plants on the Mideast, 24 plants on California, 17 plants on the Pacific Northwest, 26 plants on the Southwest, and 8 plants on Arizona. According to the 2022 Census of Agriculture, approximately 86 percent of fluid milk manufacturing plants, approximately 96 percent of cheese plants, approximately 82 percent of dry

products plants, and approximately 78 percent of butter plants met the SBA definition of small businesses.

How FMMO Pricing Provisions Currently Operate

The amendments recommended for adoption in this decision cover five milk pricing subject areas: Milk Composition Factors, Surveyed Commodity Products, Class III and Class IV Formula Factors, base Class I skim milk price (Class I mover), and Class I and II Differentials. This decision proposes to amend provisions in all five pricing subject areas. The amendments are intended to update formulas and factors in response to industry changes over time, many of which have not been updated since the provisions were adopted on January 1, 2000, to ensure USDA is carrying out the purposes of the AMAA.

Milk Composition Factors. FMMO milk prices are based on three primary components—protein, other solids, and nonfat solids. Skim milk composition factors in the current price formulas codified in the FMMO regulations were adopted in 2000: 3.1 percent protein, 5.9 percent other solids, and 9 percent nonfat solids. The proposed amendments would increase milk composition factors to 3.3 percent protein, 6.0 percent other solids, and 9.3 percent nonfat solids. Actual component tests of skim milk have increased since 2000, with more significant increases beginning in 2016. The amendments are intended to more accurately represent component levels in milk produced.

Surveyed Commodity Products. Milk prices under FMMOs are related to wholesale prices for butter, cheese, nonfat dry milk, and dry whey. The formulas use USDA-surveyed average wholesale prices to calculate milk component prices (butterfat, protein, nonfat solids, and other solids) that are converted to Class III and IV milk prices. The protein value in cheese is a component of the Class III price. Currently, the prices of commodity cheddar cheese packaged in 40-lb blocks ("blocks") and 500-lb barrels ("barrels") are collected weekly by AMS through

the DPMRP survey. A monthly average of those prices is used to represent commodity cheese in the Class III price formula. The butterfat value in commodity salted butter is the driver of the butterfat price used in all classified prices. The proposed amendments would eliminate 500-lb barrels from the DPMRP survey and rely solely on the monthly average survey price for 40-lb cheddar blocks. The amendment is intended to provide for more orderly marketing through a survey of only one product.

Class III and IV Formulas Factors. Make allowances are a factor in the FMMO pricing formulas representing the cost of converting raw milk into the four manufactured dairy products surveyed by USDA (butter, cheese, nonfat dry milk, and dry whey). Make allowances were last updated in 2008 following a rulemaking proceeding in 2007. The proposed amendments would update the make allowances in the FMMO Class III and IV formulas to the following: $0.2504 for cheese; $0.2257 for butter; $0.2268 for NFDM; and $0.2653 for dry whey. The proposed amendments would also update the butterfat recovery factor in the Class III formula to 91 percent. The amendments are intended to update the formula factors to be more representative of current costs and butterfat recovery observed in dairy product manufacturing.

Class I mover. The Class I mover is the base price for the skim milk portion of raw milk used in the production of Class I products. The Agriculture Improvement Act of 2018 (2018 Farm Bill) amended the Class I skim milk price mover from the "higher of" Class III or Class IV skim prices to a simple average of the two classes plus $0.74, referred to as the "average of" mover. The proposed amendments would return the base Class I skim milk price calculation to the higher-of Class III or Class IV skim prices. The proposed amendments would also adopt a rolling monthly Class I ESL adjustment equating to a Class I price for all ESL products equal to the average-of the Class III and Class IV advance prices,

plus a 24-month rolling average adjuster, with a 12-month lag. The monthly Class I ESL adjustment would be calculated as the average of the differences between the higher-of and the average-of calculations for the prior 13 to 36 months. The amendments are intended to provide for more orderly marketing by returning to the higher-of mover; while the Class I ESL adjustment would provide better price equity for ESL products whose marketing characteristics are distinct from other Class I products.

Class I and II Differentials. FMMO Class I prices are calculated as the average of the advanced Class III and Class IV prices, plus $0.74, plus a location-specific differential referred to as a Class I differential. As the value of milk varies by location, Class I differentials have been determined for every county in the continental U.S. Current Class I differential levels were implemented January 1, 2000, with updates to the differentials in the three southeastern orders taking effect May 1, 2008. The proposed amendments would retain the $1.60 base differential and adopt modified location-specific Class I differential values. The amendments are intended to recognize the evolution of the dairy industry since 2000 and the increased cost of servicing the Class I market given current transportation costs and plant and producer locations.

This decision finds these amendments are necessary. The evidentiary record reflected testimony from a broad range of stakeholder views that updates are necessary in all five pricing subject areas to reflect current market conditions.

Impact on Small Businesses

An economic analysis has been performed on impacts the proposed amendments will have on industry participants, including producers and handlers. It can be found on the AMS website at *https://www.ams.usda.gov/ rules-regulations/moa/dairy/hearings/ national-fmmo-pricing-hearing.* The proposed amendments would be applied identically to all proprietary and cooperative handlers regulated by FMMOs, regardless of their size. The proposed amendments would implement prices that more accurately reflect current market conditions, providing for more orderly marketing for both small and large producers and handlers.

AMS considered alternatives to each of the recommended amendments. Over 49 days of hearing, dozens of witnesses from 9 industry stakeholder groups presented testimony and evidence on 21 proposals in the 5 pricing subject areas.

AMS considered all evidence and testimony, including alternative proposals presented, in making its recommendations.

A review of reporting requirements was completed under the Paperwork Reduction Act of 1995 (44 U.S.C. Chapter 35). It was determined that these proposed amendments would have no impact on reporting, recordkeeping, or other compliance requirements because they would remain identical to the current requirements. No new forms are proposed, and no additional reporting requirements would be necessary.

This proposed rule does not require additional information collection that requires clearance by the Office of Management and Budget (OMB) beyond currently approved information collection. The primary sources of data used to complete the forms are routinely used in most business transactions. Forms require only a minimal amount of information which can be supplied without data processing equipment or a trained statistical staff. Thus, since the information is already provided, no new information collection requirements are needed, and the current information collection and reporting burden is relatively small. Requiring the same reports for all handlers does not significantly disadvantage any handler that is smaller than the industry average.

AMS is committed to complying with the E-Government Act, to promote the use of the internet and other information technologies to provide increased opportunities for citizen access to Government information and services, and for other purposes.

No other burdens are expected to fall on the dairy industry as a result of this rulemaking. This rulemaking does not duplicate, overlap, or conflict with any existing Federal rules.

Preliminary Statement

A public hearing was held upon proposed amendments to the marketing agreement and the orders regulating the handling of milk in all 11 Federal milk marketing areas. The hearing was held pursuant to the provisions of the AMAA, as amended (7 U.S.C. 601–674), and the applicable rules of practice and procedure governing the formulation of marketing agreements and marketing orders (7 CFR part 900).

The proposed amendments set forth below are based on the record of a public hearing held in Carmel, IN, from August 23–October 11, 2023, November 27–December 8, 2023, January 16–19, 2024, and January 29–31, 2024, pursuant to a notice of hearing

published July 24, 2023 (88 FR 47396), a notice of reconvened hearing published November 6, 2023 (88 FR 76143), and a second notice of reconvened hearing, published December 29, 2023 (88 FR 90134).

The hearing was held to receive evidence on 21 proposals submitted by dairy farmers, handlers, and other interested parties. A total of 165 witnesses testified over the course of the 49-day hearing. Witnesses provided an overview of the complexity of the U.S. dairy industry and submitted 511 exhibits containing supporting data, analyses, and historical information.

The material issues, related to FMMO pricing formulas, presented on the record of hearing are as follows:
1. Milk Composition Factors
2. Surveyed Commodity Products
3. Class III and Class IV Formula Factors
4. Base Class I Skim Milk Price
5. Class I and Class II differentials

Summary of Testimony

Milk Composition

Two proposals seeking to amend the milk composition standards are being considered in this rulemaking. Proposal 1, submitted by the National Milk Producers Federation (NMPF) seeks to increase the skim component factors, with a 12-month implementation lag. The proposed standards are as follows: increase the nonfat solids assumption from 9.0 to 9.41 per hundredweight (cwt) of Class IV skim milk; increase the protein assumption from 3.1 to 3.39 per cwt of Class III skim milk; and increase the other solids assumption from 5.9 to 6.02 per cwt of Class III skim milk. Proposal 1 also contains an updating methodology that would automatically update the standards no more than once every three years once the nonfat solids component for the prior three years changes by at least .07 percentage points.

Proposal 2, submitted on behalf of National All-Jersey (NAJ), is identical to Proposal 1, except for the automatic update methodology. The proposal would update the standards annually using the previous year's weighted averages, with a 12-month implementation lag.

A witness from NMPF, a trade association representing dairy farmer-owned cooperative marketing associations throughout the United States, testified in support of updating the skim milk price milk component factors, as contained in Proposal 1. The witness explained how the U.S. dairy industry has undergone dynamic structural change since 2000, while FMMO product price formulas have

generally remained static. The witness stated dairy farmers have responded to component pricing by significantly increasing the butterfat, protein, and other solid levels in their milking herds. According to the USDA's National Agricultural Statistics Service (NASS), said the witness, average butterfat tests have increased 10.9 percent from 2000 to 2022, and USDA's Economic Research Service (ERS) reported average skim milk solids content of U.S. milk production increased 0.31 percent during the same period. The witness said 2022 FMMO average protein, other solids, and nonfat solids (NFS) in pooled milk were 3.39 percent, 6.02 percent, and 9.41 percent, respectively.

The NMPF witness asserted the static component levels contained in the formulas result in underpayments to producers in all FMMO's for the value of their Class I skim milk. Therefore, NMPF proposes to increase the milk composition factors in skim milk to 2022 levels. The NMPF witness analyzed 2013–2022 FMMO product prices and concluded adoption of Proposal 1 would have increased the Class III skim price by $0.80 per cwt and the Class IV skim milk price by $0.41 per cwt. An increase from the 2022-based skim milk component factors by the proposed 0.07 percentage point threshold level, the witness added, would have increased the Class III and Class IV prices by $0.14 and $0.07 per cwt, respectively.

Another NMPF witness testified the announced FMMO Class III and Class IV skim milk values do not reflect the current component levels of producer milk, resulting in announced prices being lower than actual market values. The witness said this leads to a misalignment of fluid and manufacturing milk, possibly leading to disorderly marketing conditions. This occurs because the Class I Mover skim milk price is calculated based on skim milk component levels based on 2000 levels, narrowing the difference between Class I prices and manufacturing milk prices (Classes III and IV) and resulting in more instances of price inversions and depooling.

Several NMPF dairy farmer witnesses testified in support of Proposal 1. The witnesses stated improved genetics and feed quality have caused component levels in the milk they market to increase. The witnesses stated component levels in the pricing formulas should be updated to reflect the additional protein produced.

An NMPF witness testified regarding their work as a business consultant with dairy farmers. The witness said dairy farming costs have been consistently increasing due to higher feed prices, overall inflation, interest rate increases, and rising costs associated with labor and environmental regulations. The witness estimated the average margin per cwt of milk produced over the past decade was less than $1, or approximately 4 to 7 percent of the average milk price. It was the witness's opinion that financially sustainable margins are necessary to avoid further consolidation in the industry.

An NMPF dairy farmer witness testified that monthly pay price volatility has increased since 2000. According to the witness, in 2000 their pay price varied $0.52, from a high of $12.95 to a low of $12.43. In the 12 months prior to August 2023, the witness said the variance was $7.46, ranging from $22.50 to $15.04, while costs continued to rise, including the price of corn and soybean meal more than doubling. The witness said that during the same 12-month period their milk output rose over 10,000 pounds. The witness attributed improvements in cow comfort, genetics, and feed quality to the increases in milk output and component levels but opined low component standards were depressing producer price differentials (PPDs) and discouraging milk from supplying the Class I market.

NMPF, in their post-hearing brief, offered additional support for Proposal 1. The brief credited significant advances related to animal genetics, farm management, and cow nutrition as contributing to rising skim milk component levels. NMPF reiterated hearing testimony regarding the static component levels in the formulas leading to a narrowing of the difference between Class I and manufacturing milk prices resulting in more price inversions, larger volumes of depooled milk, and resulting in disorderly marketing. NMPF stated higher skim milk component levels have value in the competitive manufacturing dairy market, which is the basis for determining Class I values. NMPF stated that increasing the skim milk components in the formulas to reflect current levels would recognize the current average value of producer milk used for manufacturing dairy products and result in a Class I price that properly reflects base milk values. Additionally, NMPF argued delayed implementation of updated component level factors is necessary because of dairy farmers' use of risk management programs. Such a delay would allow for the completion of most transactions placed prior to announcement of the change.

A Dairy Farmers of America, Inc. (DFA) witness, appearing on behalf of NMPF, testified the failure to delay an update in skim component standards would cause financial harm to dairy farmers, milk plants, end users, and others who entered into risk-management transactions. DFA is a dairy farmer cooperative and owns and operates 14 manufacturing plants which produce liquid whey, Italian cheese, skim milk powder, whole milk powder, American-style cheese, condensed milk, cream, nonfat dry milk, milk protein concentrate (MPC), sweetened condensed milk, and dry whey. The witness testified that failure to delay implementation would affect the basis, or the profit margin for milk being hedged. The witness testified that 35 to 45 percent of the U.S. milk supply was hedged by dairy farmers and there is a growing demand for risk management services among larger-sized dairies.

A witness representing the American Farm Bureau Federation (AFBF), a farmer advocacy organization with approximately 6 million members throughout the U.S., testified in support of Proposal 1. The witness estimated that raising the skim component standards would increase the Class I price by an average of $0.70 per cwt, based on 2022 data. Consequently, raising the skim component standards would help bring the Class I, III, and IV prices in alignment, reduce the frequency of negative PPDs, and reduce the incentives for depooling, which the witness said undermines orderly marketing. The witness stated that raising the value of the skim milk in the manufacturing classes for the skim and butterfat markets would reduce the incentive of manufacturing plants in the multiple component pricing (MCP) orders to pool milk, which would lower the producer's price and discourage milk from entering a milk deficit region. The witness testified that updating component standards would address some price misalignment issues and is preferred to prevent handlers from depooling.

AFBF offered support in their post-hearing brief stating Proposal 1 would more accurately define the market value of skim milk pooled on FMMOs. The brief asserted the resulting increase in Class I prices would reduce the incidences of price misalignment with Class III and IV prices, reduce the size and frequency of negative PPDs, and reduce depooling incentives. AFBF supported periodic adjustments to component levels, as contained in Proposal 1, to account for the continuing increases in the component levels, but specified these levels should

only be changed in the positive direction. In AFBF's opinion, more frequent updates, as contained in Proposal 2, would be disruptive.

A witness representing NAJ, an organization representing the interests of Jersey cattle breeders, testified in support of Proposal 2, which proposes the same milk composition levels as Proposal 1, with automatic annual updates. The witness said many factors have contributed to increased component levels, including improved genomics, increased use of gender-selected semen, and volume-based programs such as base/excess programs. The witness testified an annual update would provide improved accuracy because of the recently accelerated pace of component increases and would have better alignment with pricing between butterfat/skim and multiple component pricing FMMOs. Additionally, the witness stated a 1-year lag on implementing these updates would allow for greater risk management which is becoming increasingly more important to producers and processors.

NAJ's post-hearing brief reiterated their support for Proposal 2, arguing record evidence shows protein and other solids levels in producer milk have progressively and significantly increased since FMMO reform in the late 1990s. NAJ stated the trend of higher solids components in skim milk was expected to continue due to economic signals to producers from component values and improved production techniques. NAJ argued amendments of standard skim milk composition factors is necessary to help avoid periods of price inversions, depooling, undervaluing Class I milk, milk supply inefficiency, and disincentives to supply milk for Class I use. NAJ stated a change to the skim milk component levels should be announced at least 11 months in advance of implementation due to risk management practices used by producers and processors. NAJ argued annual updates better serve risk management practices because it would lead to smaller incremental changes and less adverse impact on risk management contracts with more than 12-months open interest at the time component changes are announced.

A witness representing Edge Dairy Farmer Cooperative (Edge), a Wisconsin-based dairy milk test verification cooperative, testified in support of Proposals 1 and 2. The witness recommended increasing the implementation lag to 15.5 months to support longer contract hedging. The witness was of the opinion the standard butterfat test also should be updated

from 3.5 percent to 4.06 percent, the 2022 average butterfat for all markets combined as published by the USDA's AMS. According to the witness, this would more accurately reflect current butterfat levels and better align the butterfat to protein ratio used in the formula, ensuring more effective risk management tools, as farmers' ability to manage their gross pay price risk would improve.

Edge, in their post-hearing brief, reiterated hearing testimony that failure to adjust the butterfat level when updating skim component levels would cause disorderly milk marketing, as it undermines effective risk-management tools for dairy farmers. Edge argued that without the corresponding change, producers hedging milk revenue using risk management products based on Class III milk or Class IV milk prices, will tend to be under protected against the decline in butterfat prices. Edge added that changing the butterfat level would not affect handler obligations to the producer settlement fund, PPDs, or uniform producer prices.

A witness representing the International Dairy Foods Association (IDFA) testified in opposition to Proposals 1 and 2, stating that updating the component standards would increase the Class I skim price by $0.60 per cwt, a value that cannot be recovered in the marketplace. IDFA is a trade organization representing dairy manufacturers of milk, cheese, ice cream, yogurt, cultured products, and dairy ingredients. The IDFA witness testified consumers choose finished Class I products based on desired fat level, freshness, and price, not higher nonfat solids levels. The witness estimated that updating component levels in the formulas would result in manufacturing handlers in butterfat/skim FMMOs paying an additional $0.40 to $0.80 per cwt, even though the component levels of milk delivered to those plants was less than those proposed. The witness cited National Dairy Herd Information Association (DHI) data showing 2020 to 2022 average skim protein levels in butterfat/skim FMMOs below the levels contained in Proposals 1 and 2. The witness attributed the lower observed component levels to the fact that producer payments in these orders are made on the basis of the fat and skim content of their milk, leaving no financial incentive to produce higher component milk.

A witness from Saputo Cheese USA (Saputo), appearing on behalf of IDFA, also testified in opposition of Proposals 1 and 2. Saputo is a dairy processor and manufacturer operating 29 plants

throughout the U.S. The witness said Saputo operates three plants located in the skim/fat orders, and in 2022 the average NFS level of milk received at those plants was 9.1070 percent, which is less than what is proposed in Proposals 1 and 2. The witness explained Saputo purchases skim solids to add to its skim milk in order to ensure the Class II products it manufactures contain the skim solids necessary to meet standard of identity requirements for those products. Updating the component levels in the formula would only result in Saputo paying for skim solids not received, but it would not lower the amount of skim solids Saputo must purchase, explained the witness.

A post-hearing brief submitted by IDFA reiterated its opposition to Proposals 1 and 2, arguing that increased component levels have no financial benefit or economic value to Class I handlers who would be the primary entities impacted by adoption of these proposals. IDFA stated the current FMMO system of pricing Class I milk on a skim/fat basis versus Classes II, III, and IV milk on a component basis does not create disorderly marketing.

The Milk Innovation Group (MIG) is a group of fluid milk processors and producers that market value added dairy based products. MIG's members include Anderson Erickson Dairy (AE), Aurora Organic Dairy (Aurora), Crystal Creamery, Danone North America (Danone), fairlife, HP Hood LLC (HP Hood), Organic Valley/CROPP Cooperative (Organic Valley), Shamrock Foods Company (Shamrock), Shehadey Family Foods LLC (Shehadey), and Turner Dairy Farms (Turner Dairy). Crystal Creamery is a California fluid milk processor producing Class I, II, and IV conventional and organic milk products. Danone is a food and beverage company operating seven plants in the U.S. Fairlife is a fluid milk processor of ultra-filtered lactose free milk, and other high protein products. Organic Valley is a dairy farmer-owned organic cooperative producing more than 30 percent of the organic milk sold in the U.S.

Seven witnesses representing MIG, including witnesses from HP Hood, Shehadey, Saputo, Shamrock, AE, Turner Dairy, and Aurora, testified in opposition to Proposals 1 and 2. HP Hood is a fluid milk processor operating five ESL plants and four high-temperature, short-time (HTST) plants in the Northeast and California. Shehadey operates four manufacturing plants in California, Nevada, and Oregon, producing Class I and Class II products. Shamrock is a fluid milk

processor of HTST and ESL products with processing facilities in Arizona and Virginia, and a 20,000-head dairy farm located in Arizona. AE is an Iowa fluid milk processor producing both Class I and II products. Aurora is a vertically integrated organic milk supplier with four organic dairy farms located in Colorado and Texas. Turner Dairy is a small fluid milk processor with full or partial ownership of two fluid milk plants, as well as a standalone Class II plant, all located in western Pennsylvania.

Six witnesses testified their plants regularly receive milk with components below the proposed levels. One witness offered that component levels received ranged from 3.09 to 3.63 percent protein, 5.83 to 6.10 percent other solids, and 8.92 to 9.65 percent NFS. MIG members testified that increasing the component levels in the formulas would increase their raw milk costs, requiring them to pay for milk components not received. One witness stated that adoption of Proposals 1 and 2 would increase costs between $0.60 and $0.75 per cwt. All MIG witnesses claimed that fluid milk processors, even if they did receive higher component milk, are unable to convert those higher components into additional market revenue as Class I products are sold on a volume, not component basis.

Another MIG witness testified on a survey conducted of MIG members plus two additional large grocery retailers who own their own fluid milk processing plants. According to the witness, using component data from 32 out of the 36 plants surveyed, these plants frequently received milk with components below the proposed levels. As data was confidential, no specific data was provided. The witness also noted the data showed component levels changed due to seasonality and geographics, demonstrating inconsistent levels received by plants. The witness testified the adoption of Proposals 1 or 2 would raise Class I prices and make it more challenging for these plants to recover costs. Should USDA decide to change the standard component levels in the pricing formulas, the witness testified component minimums should be used instead of averages because FMMOs are meant to provide minimum prices.

A post-hearing brief filed on behalf of MIG argued it would be disorderly for Class I fluid milk processors, the only mandatory participant of FMMOs, to be forced to pay for component levels regardless of what is actually received. MIG opined consumers do not value additional skim component levels in fluid milk products, therefore Class I

processors are unable to recoup additional revenue out of the market. MIG was of the opinion no record evidence was provided at the hearing that the current skim component formula factors are causing disorderly marketing and added that although they oppose Proposals 1 and 2, if any part of these proposals are adopted there should be a 12-month implementation delay.

A witness representing the CME Group (CME) testified to explain various dairy risk management tools offered through the exchange, including futures and options contracts. The witness explained the CME is a derivatives marketplace offering a range of futures exchanges to meet private risk management needs. The witness explained a futures contract is a legally binding agreement to buy or sell a standardized asset on a specific date or during a specific month. An option on a futures contract is the right, but not the obligation, to buy or sell the underlying futures contract at a predetermined price on or before a given date in the future. The witness stated 97.43 percent of contracts in the futures and options market are for 12-month periods, and in a previous change to futures contracts there was an 18-month lag on implementation to be beyond open interest. The witness testified that Dairy Revenue Protection (DRP) is one of many programs that rely on CME markets and advocated USDA to consider futures and options markets when establishing implementation plans.

In its post-hearing brief, CME reiterated its neutrality on all proposals under consideration. They stated any change modifying the current Class III and Class IV formulas would be considered a material change affecting current contracts. CME stressed the importance of sufficient and transparent notice of any changes.

A post-hearing brief was submitted on behalf of Select Milk Producers (Select), a dairy-farmer owned cooperative which owns and operates eight processing plants in Texas, New Mexico, and Michigan, manufacturing ESL fluid milk products and a variety of cheese, butter, and NFDM products. Select offered support for Proposal 1 and took exception to the assertion there is no value in higher protein levels in Class I products, as it is belied by the success of specialty fluid milk products such as fairlife, and the higher milk solids required for California fluid milk. Although Select supported adoption of Proposal 1, they do not support a delay in implementation, nor the annual update as contained in Proposal 2.

Lamers Dairy Inc. (Lamers), a Wisconsin based HTST fluid milk processor, submitted a post-hearing brief in opposition to Proposals 1 and 2. Lamers stated component levels can vary both regionally and from farm to farm. Lamers opined that USDA is statutorily required to conduct a study of component levels before any change could be made and argued adoption of Proposals 1 and 2 should not be considered.

New Dairy OPCO LLC (New Dairy), a fluid milk processor operating four fully regulated distributing plants (three of which are located in the southeastern U.S.), submitted a post-hearing brief in opposition to Proposals 1 and 2. New Dairy offered support for arguments made by IDFA and MIG that fluid milk processors would be unable to recoup the additional cost of components should Proposals 1 or 2 be adopted. They purport that charging fluid milk processors for components not actually received would be disorderly. New Dairy said raising component levels in the formulas would harm its southeastern plants as they pay on a skim/fat basis which provides no incentive to producer to increase components to match the national average.

In its post-hearing brief, NMPF opposed the annual updating feature contained in Proposal 2. NMPF stated that by limiting changes to the standard component levels to a periodic basis and relying on 3-year weighted average, Proposal 1 is more likely to produce accurate component values and avoid disruption from more frequent changes.

Surveyed Commodity Products

This rulemaking proceeding considers four proposals, and a modified proposal submitted during the hearing, that would add or remove a variety of products in the DPMRP survey, which are then reported in the National Dairy Product Sales Report (NDPSR) and used to establish FMMO classified prices. The proposals are as follows:

Proposal 3, submitted by NMPF, seeks to eliminate the Cheddar cheese barrel price from the cheese price formula.

Proposal 4, submitted by AFBF, seeks to add Cheddar cheese 640-pound block price series to the cheese price formula.

Proposal 5, submitted by AFBF, seeks to add unsalted butter to the butterfat and cheese price formulas.

Proposal 6, submitted by the California Dairy Campaign (CDC), seeks to add a price series for mozzarella to the cheese price formula.

Edge offered a proposal modification during the hearing to adopt different weighting methodology which would

reweigh 40-pound blocks and 500-pound barrels in the DPMRP survey by all U.S. cheddar block and barrel production volumes.

NMPF witnesses from Foremost Farms USA (Foremost), Ellsworth Cooperative Creamery (Ellsworth), Land O'Lakes (LOL), and DFA testified in support of Proposal 3. Foremost is a cooperative with 850 members located in Wisconsin, Michigan, Iowa, Minnesota, Indiana, Ohio, and Illinois, and operating eight manufacturing plants producing cheese and butter.

Ellsworth is a Wisconsin-based cheese manufacturer producing a significant volume of barrel cheese and a variety of specialized cheeses and cheese curds from 250 dairy-farmer members. LOL is a dairy farmer-owned cooperative with more than 1,000 dairy farmer members, primarily producing butter and cheese.

The witnesses explained the current cheese price formula includes both block and barrel cheese in the computation. They asserted the cheese price formula provides for orderly marketing if the difference, known as the ''spread,'' in the respective market prices of blocks and barrels remains close to the assumed $0.03 per pound cost difference, which occurred from 2000 to 2016. However, since 2017 the spread between the block and barrel prices has been volatile. One witness stated the weighted average spread published in the weekly NDPSR during January 2017 through July 2023 was $0.120 per pound, with a much wider and more volatile range per pound. The LOL witness opined that the DPMRP survey could continue to include and publish prices of 500-pound barrel cheese without necessitating its inclusion in the Class III protein price calculation.

An NMPF witness testified the CME block cheddar price is used as a pricing index for most cheese produced in the U.S., including cheddar, 40-pound block, 640-pound block, mozzarella, other American-type cheese, and other cheese including cream cheese, and Hispanic cheese. They estimated 90 percent of natural cheese produced in the U.S. is sold using the CME 40-pound block cheddar price as a pricing index. The witness estimated the CME barrel cheese price is used to price only about 9 percent of total domestically produced natural cheeses, including barrels themselves. They said DPMRP survey volumes of barrel cheese between 2013 and 2022 ranged from 44 to 52 percent, resulting in an overrepresentation of 500-pound barrels compared to the actual volume of cheese that is priced off of barrels. The witness testified that since 2017, the significantly wider and

increasingly volatile block-barrel spread has caused instability in the cheese market. Consequently, the witness said, dairy farmer revenue has been reduced as the over representation of 500-pound barrels lowered the Class III price. The Foremost witness estimated the undervaluation represented $2 billion since 2017, opining the value would have been greater if not for the large volume of Class III milk not pooled in 2020 and 2021.

The NMPF witness testified eliminating 500-pound barrel prices from the Class III price would create more orderly marketing in FMMOs by reducing the financial uncertainty for dairy producers and manufacturers and ensuring the cheese price in the protein component formula represents the single commodity cheddar cheese product. The witness described how barrel cheese manufacturers are harmed when they must account to the pool at an FMMO cheese price higher than the revenue generated from barrel cheese product. The witness said eliminating the 500-pound barrels would have increased the Class III price by $0.41 per cwt, using average product prices for 2017 to 2022.

An NMPF witness testified that removing 500-pound barrels had been addressed in prior rulemakings, but denied by USDA in the rulemaking. However, current market conditions have significantly changed, necessitating a re-evaluation. The witness attributed the increased volatility in the block-barrel price spread since 2017 to a variety of factors, including increased 500-pound barrel production capacity that may be due to increasing values of its white whey by-product.

NMPF witnesses testified eliminating 500-pound barrel cheese from the protein component price (PCP) formula would still provide adequate volume of cheddar cheese for price discovery purposes as 40-pound block cheese surveyed represents approximately 16 percent of total U.S. natural cheddar cheese production. The witness also said this methodology change would bring the cheese price into conformity with the price for butter, NFDM, and dry whey, which utilize only one surveyed product for price discovery purposes.

The witness testifying on behalf of Ellsworth stated 40-pound blocks and 500-pound barrels are not interchangeable products. The witness said while 40-pound block cheddar has many markets and uses, 500-pound barrel cheddar is used for processed cheese, a market driven by few processors and purchasers. As a result,

the witness said, surveying barrel cheese prices skews the FMMO cheese price towards a smaller market which is not representative of the rest of the cheese market. The witness estimated the volatility in the block-barrel spread since 2017 cost Ellsworth producers $0.84 per cwt. The witness said barrel cheese manufacturers would adjust to the elimination of barrel prices from the survey and eventually transition to prices based on the 40-pound block cheese price.

Witnesses representing IDFA, Leprino Foods Company (Leprino), and Associated Milk Producers, Inc. (AMPI) testified in opposition to Proposal 3. Leprino operates nine plants in the U.S., manufacturing mozzarella cheese, whey products, and NFDM. AMPI owns and operates eight manufacturing plants processing cheese, butter and powdered dairy products from member farms in Wisconsin, Minnesota, Iowa, Nebraska, South Dakota, and North Dakota.

The witnesses said sales of both block and barrel cheddar cheese are robust and each play a significant role in setting the market value of cheddar cheese. They argued eliminating 500-pound barrels would reduce by more than half the cheese market price contained in the survey and would result in a distorted picture of the total commodity cheddar market. The witness said opposition to removing barrels was not related to the presumed effect on the Class III price as the NDPSR weighted average cheese price (reflecting block and barrel cheese) was higher than the 40-pound block price in 9 of 14 years from 2009 to 2022. One witness opined additional cheddar block plant capacity is coming on-line in the next couple of years, increasing 40-pound block volumes, and would reduce the block-barrel spread to historical levels under normal supply-demand behavior.

The IDFA witness speculated cheddar barrel manufacturers may opt not to pool milk if the barrel price is no longer surveyed because they would be unable to garner sufficient market revenue in order to account to the pool and the Class III price.

Two Leprino witnesses testified eliminating 500-pound barrels from the Class III price formula removes the product most closely reflecting the supply and demand balance. They were of the opinion that removing 500-pound barrels would both shrink the survey volume and likely result in greater production of cheddar blocks as a way to clear the market. The witnesses testified this would add volatility to the block market, cause unnecessary stress to the U.S. marketplace, and make U.S.

cheese a less attractive option for global buyers.

The Leprino witnesses said dropping 500-pound barrels from the survey would create a presumption within the Class III formula that all cheese, including barrels, would then be priced off blocks. The witnesses asserted barrels and blocks have different supply and demand functions, and eliminating barrels from the Class III formulas would force barrels to be priced off blocks, adding dysfunction to the barrel market. The witnesses were of the opinion barrels are the market-clearing cheese, and instead 40-pound blocks should be eliminated from the price formula to be more consistent with the minimum pricing provisions.

In its post-hearing brief, NMPF reiterated testimony regarding price differences between 40-pound blocks and 500-pound barrels becoming more volatile since 2017. Historically, NMPF wrote, using both block and barrel prices in the Class III pricing formula increased the volume of cheddar cheese reported in the NDPSR. However, the increased price spread has caused instability in the cheese market and reduced revenue for dairy farmers as the barrel price is a disproportionately large share when compared to its volume in the cheese market. NMPF estimated 90 percent of the natural cheese produced in the U.S. is priced using the CME 40-pound block price, while the remaining is priced off of the CME barrel cheese price. As a result, NMPF wrote, the Class III milk price has been undervalued and lowered producer revenue.

Leprino submitted a post-hearing brief reiterating the important balancing function barrels provide and opined removing them would push 40-pound blocks into the balancing role and would increase price volatility for cheddar blocks.

Select submitted a post-hearing brief in support of Proposal 3, arguing 500-pound barrels no longer represent the commodity cheddar market and 40-pound blocks are an appropriate commodity to establish the protein price. According to Select's brief, current formulas dramatically over weights the price of barrels relative to the markets actual use barrels and the cheese priced off of them.

The AFBF submitted a post-hearing brief in support of Proposal 3 reiterating hearing testimony that barrels represent roughly 50 percent of the NDPSR volume but is used to set prices for only 10 percent of the cheese in the U.S. market. The AFBF stressed use of barrels in the cheddar cheese price formula creates a price not

representative of the value of 90 percent of cheddar cheese produced.

IDFA, in their post-hearing brief, opposed Proposal 3 as they argued its adoption would make 500-pound barrel production uneconomical, resulting in barrel makers going out of business or switching to block production which would destabilize the block market. IDFA wrote that 40-pound blocks and 500-pound barrels serve materially different functions in the market and the failure to include both in the survey would distort the commodity cheddar cheese market.

NAJ submitted a post-hearing brief in opposition to Proposal 3. NAJ cited hearing evidence showing the market price of block and barrel cheese has diverged significantly since 2017, with barrel cheese priced about $0.11 per pound less than block cheese from 2017–2022. NAJ stated blocks and barrels have different uses, different buyer markets, and limited substitutability. With an expected increase in block production in the coming years, NAJ wrote, there may be many months in which barrels are more per pound and should remain part of the cheese price formula.

A witness representing the AFBF testified in support of adding 640-pound cheddar blocks to the Class III formula, as contained in Proposal 4. The witness said adding 640-pound blocks would expand the volume of cheese surveyed and better reflect U.S. block and barrel production volumes. The witness was of the opinion there has been a pronounced production shift from 40-pound blocks to 640-pound blocks and adding 640-pound blocks would provide more survey volume to avoid future rulemaking to address the dwindling 40-pound block survey volume. The witness testified that 40-pound and 640-pound blocks are largely interchangeable in price, use, and storage, and therefore it is appropriate those prices be reflected in the Class III price.

A witness representing IDFA testified in opposition to Proposal 4. The witness said the DPMRP cheese survey encompassed more than 1.34 billion pounds of sales in 2022, divided almost evenly between 40-pound blocks and 500-pound barrels. The witness testified the data set is sufficient to determine prices in the market and, since 640-pound blocks typically trade off the 40-pound block price, its addition would provide little additional price discovery information. The witness opined that only a small percentage of the 640-pound block market would meet survey specifications because of the nature of

how the product is manufactured and sold.

The two Leprino witnesses argued it would be inappropriate to add 640-pound blocks as the market is largely make-to-order and the lack of equipment to handle 640-pound blocks limits sales to a narrow group of buyers. The witnesses noted the 640-pound block market is balanced through the cutting down of 640-pound blocks into 40-pound blocks, so the 40-pound block cheddar market is already reflected in its pricing.

A witness representing Glanbia PLC (Glanbia), testified in opposition to Proposal 4. Glanbia owns four dairy plants in Idaho and partially owns two joint venture plants in New Mexico and Michigan, processing 34 million pounds of milk daily into barrel cheese, block cheese, whey protein concentrates, proprietary protein blends, and lactose. The witness testified Glanbia plants manufacture 40-pound and 640-pound-blocks, both priced off the CME 40-pound block price and opined that adding 640-pound blocks would not add new information to the survey.

A witness representing the Wisconsin Cheese Makers Association (WCMA), whose 81 members include cheese manufacturers making 40-pound blocks, 640-pound blocks, and 500-pound barrels, testified in opposition to Proposal 4. The witness testified the industry uses the 40-pound block price to price 640-pound blocks, and since 40-pounds blocks are already used in the protein formula, adding 640-pound blocks would add no new price information.

A DFA witness representing NMPF, testifying in opposition to Proposal 4, said the 40-pound block volume provides an adequate dataset and the sole inclusion of 40-pound blocks is sufficient for cheese price discovery, making adoption of Proposal 4 unnecessary. The witness stated the daily CME cash block cheese market is widely recognized by market participants as heavily influencing the price of cheese. The witness concluded that because annual CME block cheese traded volumes are not as large as NDPSR block survey volumes, the volume of 40-pound blocks reported in the NDPSR is more than adequate to determine the FMMO cheese price. The witness testified that incorporating 640-pound blocks into the NDPSR data set could promote the same disorderly market conditions currently observed with the inclusion of 500-pound barrels.

The AFBF reiterated their support of Proposal 4 in their post-hearing brief. The AFBF indicated 640-pound blocks are priced identically, or nearly

identically, to 40-pound blocks, and are a standardized commodity cheddar cheese product. Including the 640-pound blocks in the NDPSR survey, they argued, would help make the survey more robust.

Select, in their post-hearing brief, expressed support for Proposal 4 agreeing with proponents that its inclusion would increase DPMRP survey volume. Select mentioned that with new cheese processing capacity starting in upcoming years in Minnesota, New Mexico, Michigan, and Texas, 640-pound blocks would become a larger proportion of the commodity cheddar market and it would be prudent to incorporate their prices and volume in the survey.

IDFA reiterated opposition to Proposal 4 in its post-hearing brief. IDFA highlighted evidence describing how 640-pound blocks are typically made to customer order as there is only a small number of cheese buyers who are able to purchase and process them. Since manufacturers of 640-pound blocks often balance the 640-pound block market by cutting them down to 40-pound blocks, IDFA said no new price information would be gained from including 640-pound blocks in the survey.

WCMA also expressed opposition to Proposal 4 in their post-hearing brief and wrote that because 640-pound blocks do not have a unique price discovery mechanism, they would add no new price information to the formulas.

A witness representing the AFBF testified in support of Proposal 5, seeking to add unsalted butter to the DPMRP butter survey. The witness said because of the growing volume of unsalted butter production and use in the U.S., the DPMRP salted-only butter price collection increasingly underrepresents the value of U.S. butter. According to the witness, the amount of butter captured by the NDPSR as a percentage of total butter production has been declining, from 16 percent in 1999 to 9.4 percent in 2022. The witness expected this trend to continue without the addition of unsalted butter.

Citing USDA voluntarily graded salted and unsalted butter volumes, the AFBF witness said one reason for declining butter survey volumes is the increase in U.S. unsalted butter production. The AFBF witness testified the exclusion of unsalted butter is unnecessarily restrictive for the purposes of the DPMRP survey. The witness cited U.S. butter export data showing 2,000 metric tons exported in 2000, to over 65,000 metric tons in 2022, estimating almost all the exports

were unsalted. The witness said incorporating unsalted butter prices into the FMMO butterfat formula would make the survey more representative of the evolving butter market, allow for better market transparency, and provide for more orderly marketing of butter and milk. The witness claimed salted and unsalted butter are production substitutes, as the same production line can be used for both without substantial interruption. The witness clarified Proposal 5 is not intended to change the current 80 percent butterfat reporting standard for butter, and therefore exported unsalted butter at 82 percent butterfat would continue to be excluded.

A witness representing CDC expressed support for Proposal 5, without additional testimony. The CDC represents dairy farmers throughout California and is a state chapter of the National Farmers Union.

A witness representing IDFA testified in opposition to Proposal 5. The witness testified there is no uniform specification for unsalted butter, so it is impossible to derive a uniform price for purposes of an FMMO pricing formula. The witness explained unsalted butter does not store as well compared to salted butter, rendering unsalted butter less capable of providing useful uniform price information. The witness also testified unsalted butter tends to be priced off the CME Grade AA salted butter price, and therefore does not bring any new pricing information. As substantial quantities of unsalted butter are exported through premium-assisted sales, which would not be included in the DPMRP survey, emphasizing unsalted butter should not be relied on for determining the market price of butter. Moreover, the witness considered the current volume of salted butter reported in the DPMRP to be a robust quantity of butter sales.

A witness representing the Dairy Institute of California (DIC) testified in opposition to Proposal 5. The DIC is a trade association, representing fluid milk and dairy product processing plants in California. The witness asserted most unsalted butter is 82 percent butterfat and exported and should be considered substantively different from domestically consumed butter which contains 80 percent butterfat. The witness referenced a lack of clarity on how subsidies on exported butter would be handled in the product price reporting as another reason for their opposition.

A California Dairies, Inc. (CDI) witness, representing NMPF, testified in opposition to Proposal 5. CDI is a California dairy farmer-owned

cooperative with 258 members producing and marketing 41 percent of California's total milk production and operating six butter and milk powder manufacturing facilities in the state. The witness disagreed with the assertion that salted butter at 80 percent butterfat no longer represents an adequate survey volume. The witness testified CDI manufactures both types of butter, and unlike salted butter, unsalted butter is manufactured exclusively for customer order. The witness argued sales of the two types of butter are not interchangeable. The witness stressed the addition of salt allows salted butter to be stored for long periods, making it a market clearing product, whereas the nature of unsalted butter requires it to be sold and consumed in a significantly shorter period of time. The witness was of the opinion introducing unsalted butter into the survey may result in volatility in the relationship between salted and unsalted butter similar to the current volatile relationship between 40-pound block and 500-pound cheddar barrels. The witness said it was preferable to have one product generate the singular commodity reference price for purposes of calculating the minimum FMMO prices.

In post-hearing briefs, the AFBF offered additional support for Proposal 5, stating the growing volume of unsalted butter production and use in the U.S. markets results in a salted-only butter price collection in the NDPSR survey which increasingly underrepresents the value of U.S. butter. The AFBF argued the declining trend in butter survey volume as a percent of actual production would continue, as butter survey volume has fallen from 16 percent of total production in the 1999 to 9.4 percent in 2022.

Select expressed opposition to Proposal 5 in its post-hearing brief. Select argued that despite the growth of unsalted butter products, it should not be included in the survey because it lacks a uniform specification, is typically produced for special orders, has no active commodity market, is often made with 82 percent butterfat versus 80 percent, and is viewed as a higher-value product.

IDFA's post-hearing brief reiterated their opposition to Proposal 5 stating the Grade AA salted butter survey volume is robust and the product is traded on the CME. IDFA wrote that a majority of unsalted butter is exported through government or private assisted sales, such as Dairy Export Incentive Program or Cooperatives Working Together, which would disqualify such sales from being reported. IDFA also stated unsalted butter does not store as

well as salted butter, making it more likely to be made to order to a particular buyer's specifications.

A witness representing the CDC testified in support of adding mozzarella prices to the FMMO cheese price, as contained in Proposal 6. The witness was of the opinion adding mozzarella would make the FMMO Class III price more reflective of all U.S. cheese production. The witness asserted that because the volume of mozzarella production significantly exceeds cheddar production it should be reflected in the FMMO cheese price to improve price transparency and increase dairy farmer revenue. The CDC witness also stated mozzarella production is the largest category of cheese produced today and deserves a standard specification determined by the volume of mozzarella produced today.

The CDC witness proposed adding mozzarella to the FMMO protein price based on the Van Slyke cheese yield formula, a formula for predicting cheddar cheese yields from milk on the basis of its fat and casein content. The witness submitted numerous USDA Specifications of Mozzarella Cheese for the Department to consider when determining an acceptable moisture and fat content of mozzarella cheese to be surveyed. The specification detailed requirements for six variations of mozzarella types in four forms (loaf, sliced, shredded, or diced). The witness testified that 5 to 6-pound loaves of mozzarella would be representative of a wholesale commodity mozzarella product and reasonable for inclusion in the survey.

A California dairy farmer testified in support of Proposal 6. The witness said including mozzarella in the survey would create a Class III price that more accurately reflects the value of the current cheese market. The witness attributed the ongoing decline in the number of California dairy farms to negative margins and price volatility and stressed the urgency in capturing the additional value of mozzarella. A Wisconsin dairy farmer also supported inclusion of mozzarella for similar reasons.

A witness representing IDFA testified in opposition to Proposal 6. The witness described the difficulty in selecting appropriate mozzarella product specifications, yield assumptions, and manufacturing costs to include in the formulas whose factors currently reflect only cheddar production. The witness also testified the commercial mozzarella cheese market contains wide product variability, including varying fat and moisture parameters demanded by

mozzarella customers. The witness testified that unlike bulk cheddar products, mozzarella is not a market-clearing product, is often sold to meet the customer specifications, is not traded on the CME, and is not storable for extended periods.

Witnesses from Leprino and Glanbia testified in opposition to Proposal 6, asserting the proposal lacked critical details making it difficult to interpret and evaluate. The witnesses explained the equipment, production, and yield difference between mozzarella and commodity cheddar. The witnesses said Proposal 6 does not define the type of mozzarella to be surveyed or how USDA should address the diversity of mozzarella cheese types and packages. The witnesses stated significant volumes of mozzarella are manufactured into value-added forms, whether as shred, string, or smaller retail or foodservice loaves by the primary manufacturer. The witnesses also noted most mozzarella is not market-clearing and is stored in refrigerated form with limited shelf life reducing its role as a market clearing product. The witnesses added that the volume of mozzarella production sold by the primary manufacturer in bulk format is comparatively small, in contrast to cheddar, in which most shredding, processing into consumer packaging, and conversion to other forms is performed by different companies rather than the original manufacturer. The witnesses opined cheddar remains the most appropriate Class III cheese product.

Leprino reiterated their opposition to Proposal 6 in their post-hearing brief. Leprino argued mozzarella cheese is a grouping or collection of similar products with diverse specifications, and that the assumption mozzarella production volume represents a single defined bulk product is incorrect. Leprino further stated mozzarella has different manufacturing processes, costs, and product yields. Therefore, if mozzarella was added to the Class III pricing formula, the formula would become substantially more complicated with little incremental benefit.

A Foremost witness, testifying on behalf of NMPF, testified in opposition to Proposal 6, urging USDA to only utilize one commodity price series to represent each of the four dairy prices: cheese, butter, NFDM, and dry whey, to ensure orderly marketing. The witness noted the many mozzarella composition types, and purported deriving a 40-pound block cheddar equivalent price would be difficult. The witness added mozzarella manufacturing costs are different and no data exists to determine

how those costs should be reflected in the cheese make allowance. The witness said including mozzarella pricing into the protein price calculation would not enhance price discovery as mozzarella prices already move with the 40-pound cheddar market. Other NMPF witnesses testified to the appropriateness of limiting the cheese price to one survey product, cheddar. Witnesses representing the AFBF and WCMA opposed the inclusion of mozzarella due to the lack of standard format that could be surveyed.

Select's post-hearing brief opposed Proposal 6 because no workable framework for incorporating mozzarella into the price formula was provided on the record.

IDFA's post-hearing brief reiterated their opposition of Proposal 6 as mozzarella lacks uniformity in compositional specifications and yields and is not traded on the CME. IDFA wrote the U.S. Food and Drug Administration (FDA) Standards of Identity provide four different variants of mozzarella cheese, with a wide variety of fat and moisture levels. IDFA also stated that while proponents advocated use of the Van Slyke formula to determine yields, the record lacked evidence as to how the formula should be revised to incorporate mozzarella cheese.

WCMA opposed Proposal 6 in their post-hearing brief. WCMA members argued that there is no FDA Standard of Identity for mozzarella and are concerned over the vast variety of forms and functionality of each mozzarella manufacturer.

A witness testifying on behalf of the CME offered information regarding its dairy futures and options markets which utilize FMMO prices. The witness did not appear in support of or in opposition to any proposal under consideration. The witness testified that the CME dairy product portfolio, which began in 1996, includes Class III and Class IV milk futures and options, cash-settled cheese, 40-pound block cheese, cash-settled butter, NFDM, and dry whey. The witness said the relationship between Class III and Class IV milk futures can serve as a mechanism to manage both input and output costs and provide the dairy trading community with an opportunity to provide liquidity to the market while managing risk. The witness testified any changes to FMMO formulas, or underlying DPMRP survey methodology could result in a material change to the valuation of the contracts. A post-hearing brief filed by CME reiterated its hearing testimony and stressed that the Department consider the impact to futures and options

markets when determining the implementation timeframe for any FMMO price formula changes.

A witness representing Edge offered the modified proposal that would reweight 40-pound blocks and 500-pound barrels by U.S. production volumes, not DPMRP survey volumes. The witness said this alternative weighting methodology would reduce the weight of barrel cheese as most cheddar cheese is manufactured into blocks. The witness explained that since a significant volume of block cheddar cheese does not qualify for inclusion in the NDPSR, barrels have a weight disproportionate to their true market share of the cheddar market. The witness was of the opinion the protein price should primarily reflect the block cheddar cheese market as it is estimated 70 to 75 percent of all cheddar cheese is produced into 40-pound or 640-pound blocks.

The Edge witness predicted that the block-barrel spread could invert in 2025 due to the growth of block cheese production. The witness expects cheese manufacturers who can make either blocks or barrels will react to profitable opportunities, thus reducing the spread between block and barrel prices by altering their production schedules. The

witness argued that, given the anticipated trends over the next 3 to 5 years, it would be more prudent to reduce the weight of barrels today and revisit the topic of removing barrels in 5 years.

Edge reiterated their support for the weighting methodology in its post-hearing brief, as an alternative to eliminating barrel cheese or adding 640-pound blocks to the survey. Edge explained that, in practice, the Department would survey all barrel cheese production volume on an annual basis, including forward contracted cheese volumes, to determine the percentage of barrel cheese produced in relation to the NASS total U.S. cheddar cheese production estimates. Edge proposed the percentage be rounded to the nearest 5 percent, and the inverse would be assumed to represent block production. This calculated weight would be announced by September 15 and be applicable for the following calendar year. Survey prices would then be weighted by these percentages to determine weighted average cheese prices.

IDFA, in their post-hearing brief, opposed Edge's modified proposal, arguing that it ignores market clearing, minimum pricing principles. IDFA

opposed the idea of Class III prices being predominantly determined through a 40-pound block cheddar price.

A post-hearing brief submitted by NMPF opposed Proposals 4, 5, 6, and Edge's modified proposal on the grounds the proposals perpetuate the problem Proposal 3 seeks to fix, which is to have only one product surveyed to determine a wholesale commodity price.

Class III and Class IV Formula Factors

a. Make Allowances

Proponents submitted three proposals to amend the make allowances in the Class III and IV formulas. Proposal 7, submitted by NMPF, seeks to update make allowances to the following: cheese, $0.2400; dry whey, $0.2300; NFDM, $0.2100; butter, $0.0210. WCMA and IDFA submitted Proposal 8 and identical Proposal 9, respectively, to update make allowances as described in the below table. The proposals contain a four-year implementation schedule with 50 percent of the increase implemented in year 1 and the remaining 50 percent implemented evenly across the remaining 3 years.

IDFA/WCMA PROPOSED MAKE ALLOWANCES

Product	Year 1	Year 2	Year 3	Year 4
Cheese	$0.2422	$0.2561	$0.2701	$0.2840
Dry Whey	0.2582	0.2778	0.2976	0.3172
NFDM	0.2198	0.2370	0.2544	0.2716
Butter	0.2251	0.2428	0.2607	0.2785

A former University of Wisconsin economics professor testified regarding separate manufacturing cost surveys they conducted on behalf of USDA and IDFA in 2021 and 2023, respectively. Each survey collected data submitted voluntarily from plants producing commodity cheddar cheese, dry whey, butter, and NFDM. The witness previously conducted similar surveys used by the Department in determining make allowance levels. The witness did not testify in support or opposition to any manufacturing allowance proposals under consideration.

The witness explained that only plants manufacturing commodity products meeting DPMRP product specifications were eligible to participate. As plant participation was voluntary, the sample of plants and respective volumes varied by product and between surveys, with increasing cost variation between plants over time. The witness noted more observed cost

variation across plants can occur due to newer automation technology employed in some plants, varying utility costs over time, and economies of scale achieved by some plants who negotiate input costs. The witness explained that dairy-based raw product costs, such as raw milk or purchased cream, are excluded, while costs of non-dairy ingredients needed to transform the raw milk into a manufactured product, such as salt and enzymes, are collected and included in the survey results. The witness said costs, such as labor and utility, through the product-packaging stage are incorporated, but post-packaging costs, such as long-term storage or distribution and sales costs, are not. The witness explained an economic depreciation factor, not consistent with taxable depreciation, is incorporated to cover consumed capital, and the asset's return on investment is included to capture opportunity costs.

The witness explained two different methodologies used for allocating costs in multi-product plants that could not be associated with a specific product (unallocated costs). The witness said the 2021 survey utilized a degree-of-transformation factor to allocate costs based on degree of transformation raw milk must undergo in order to be manufactured into the wholesale product. Transformation factors were assigned subjectively, based on knowledge of manufacturing processes. As a result, the witness said, unallocated costs were weighted towards heavily transformed products, such as NFDM, while products undergoing less transformation, for example, butter, were assigned a lower portion of the unallocated costs. Due to questions from the industry regarding this methodology, the witness said the 2023 survey reverted to allocating costs on a solids basis, a methodology more familiar to industry stakeholders. The

witness said the 2021 survey showed more variation of costs when compared to current make allowance levels, ranging from an 18 percent decrease in butter costs to a 75 percent increase in NFDM costs. The 2023 survey results revealed a more consistent cost change when compared to current FMMO levels, ranging from a 65 percent increase in NFDM costs to a 72 percent increase in butter costs.

The witness attributed much of the survey result differences to the plant samples. For NFDM, the 2021 survey had 27 participating plants, whereas the 2023 survey had 15, with larger average volume per plant, according to the witness. For cheese, the 2023 survey included 18 cheddar cheese plants compared to 10 in the 2021 survey, and the witness elaborated that the cheese plants surveyed were much larger on average and represented a significant proportion of the NDPSR volume when compared to the 2021 survey.

The witness testified the data on butter highlighted the importance of sample composition. Both surveys sampled a similar numbers of butter plants, 13 in 2023 and 12 in 2021, and represented roughly the same total volume. However, the witness stated the 2023 survey had more variation in production volumes whereas in the 2021 survey, butter plants were more similarly sized. Finally, the witness testified the dry whey surveys had similar numbers of participating plants, 9 in 2023 and 8 in 2021, but the surveyed volume in the 2023 survey was nearly 50 percent more than that contained in the 2021 survey.

NMPF offered Proposal 7 as one option for amending FMMO make allowance levels. Eleven NMPF witnesses, representing the manufacturing interests of cooperatives, testified in support of Proposal 7. The witnesses testified the current FMMO make allowances do not resemble manufacturing costs currently experienced in their plants. The witnesses provided detailed testimony on the impact of inadequate make allowances, which consisted of similar themes. First, they were of the opinion inadequate make allowances cause the FMMOs to overvalue raw milk. Consequently, the witnesses said many cooperatives have reblended cooperative revenues to members as a way of recouping manufacturing costs not covered by current FMMO make allowances. Second, the witnesses said insufficient make allowances disincentivize plant investment, whether it be in current or potential new plants.

The NMPF witnesses testified the industry lacks consensus on reliable data to determine make allowances due to inconsistencies in cost allocation and reporting across operations. The witnesses were of the opinion the available manufacturing cost surveys are not comprehensive or reliable enough to justify large make allowance increases. The witnesses all stressed increasing make allowances to levels above actual costs could cause untenable financial harm to producers, putting many out of business and jeopardizing the milk supply. One NMPF witness described how an informal manufacturing cost survey of some NMPF members was used in the development of Proposal 7.

A CDI witness testified regarding the impact insufficient make allowances have had on their member farms and six butter and milk powder manufacturing facilities. The CDI witness testified the NFDM and butter make allowances in Proposal 7 are transformations of the 2021 survey results, using the combined costs and yields of the two products. An LOL witness testified inadequate make allowances have led to disorderly market conditions, including lack of investment in manufacturing plants to process and balance milk supplies and inequitable producer pay prices between producers of different cooperatives and between cooperative and nonmember producers.

An Agri-Mark witness said current make allowances overvalue producer milk and make it difficult for cooperatives with manufacturing facilities to remain profitable and pay the FMMO blend price. Consequently, the witness said, cooperatives must re-blend proceeds in order to recoup manufacturing costs, resulting in producer pay prices often less than FMMO blend prices. Agri-Mark is a dairy farmer-owned cooperative located in the Northeastern U.S. with over 550 members, 3 cheese manufacturing plants and 1 butter-powder plant in the region.

A Foremost witness attributed higher operating costs seen in their plants to inflation since 2008, adding that in the last 2 years, they have experienced particularly acute price increases in all categories. A witness representing FarmFirst Dairy Cooperative (FarmFirst), a cooperative operating in the Upper Midwest with 2,600 dairy farmer members, testified negotiated over-order premiums have diminished by 24 percent since 2020 due to their processor's compressed margins, partly a result of inadequate make allowance levels. In addition to reducing premiums, the FarmFirst witness attested the current make allowances

overvalue producer milk and have contributed to an oversupply of milk in the Upper Midwest, resulting in milk dumping, negative PPDs, depooling, and milk selling at below Class III prices.

A Northwest Dairy Association (NDA) witness testified in support of Proposal 7. NDA is a dairy farmer-owned cooperative located in the Pacific Northwest with approximately 295 members, whose subsidiary (Darigold) operates 5 fluid milk bottling plants and 7 manufacturing plants making butter, cheese, dry whey, and dry milk products. The witness testified Darigold's manufacturing costs increased 80 percent between 2008 and 2022. The witness said inadequate or delayed investment in manufacturing plant capacity increases transportation costs, which are borne by producers, since milk must be shipped farther distances to find an available manufacturing market. A witness representing Maryland and Virginia Milk Producers Cooperative, Inc. (MDVA), a dairy farmer-owned cooperative located in the Mid-Atlantic that operates three pool distributing plants and two pool supply plants manufacturing bulk butter and NFDM, testified costs had increased compared to 2008 levels, with NFDM conversion costs increasing 64 percent over the period. According to the MDVA witness, Proposal 7 would reduce, but not eliminate, the manufacturing losses incurred in balancing their milk supply. A witness representing Lone Star Milk Producers (Lone Star), a dairy-farmer owned cooperative marketing milk on the Appalachian, Southeast, Central, and Southwest FMMOs, testified that manufacturing costs at their butter and NFDM plant have risen since commencing operation in 2017. A witness representing Ellsworth testified to the increasing costs of production at their cheese and dry whey operation. Lastly, a DFA witness testified in support of Proposal 7 and provided dairy farm cost of production data, arguing this data should be considered when determining make allowances.

A dairy economist from the University of Missouri, appearing on behalf of NMPF, testified on the estimated economic impact of Proposal 7. Using an econometric model, the witness estimated the proposed make allowances would lead to a $0.30 decline in the All-Milk Price and a 200-million-pound milk production decline in the first year of implementation, with a further milk production decline of 400 million pounds in the second year. In the long run, the witness forecasted the decline in the All-Milk Price would

moderate to $0.04 as markets adjusted to lowered milk production.

A dairy farm accountant, testifying on behalf of NMPF, presented various statistics related to their dairy farmer clientele. The witness testified average total income from their clients' operations was $5.50 per cwt in 2022, with a break-even milk price of $19.78 per cwt. The witness said the average net income from 2006 to 2023 was $1.23 per cwt, on an average milk production of 995,115 cwt, yielding an average net income of approximately $1.2 million. The witness later stated that a 3,300-milking cow herd would require an investment of approximately $40 million.

An economist from Cornell University, testifying on behalf of NMPF, testified on the topics of dairy farm profitability, cost of production measures, and farm data from the Cornell Dairy Farm Business Summary, Michigan State University, and the University of Wisconsin. The witness warned that setting make allowances "too high" would lead to unwarranted investments in processing facilities while setting make allowances "too low" would lead to insufficient plant investments and cooperative deductions on member milk checks.

Numerous dairy farmers testified in support of Proposal 7, recognizing the need for increased make allowances despite what they acknowledge would be a decrease in FMMO producer prices. These witnesses testified to recent decreased farm margins due to a declining All-Milk Price, falling net pay prices, higher feed costs, and increased production costs, leading to near negative operating incomes. The witnesses said that while make allowance increases would hasten this trend, Proposal 7 accounts for these factors, balancing producer and processor needs. Multiple witnesses expressed doubt in the available manufacturing cost survey data due to its voluntary and unaudited nature, as well as observations of cheese manufacturing profitability and continued investment.

Dairy farmer witnesses testified that inadequate make allowances have disadvantaged dairy farmer-members of cooperatives who own manufacturing plants compared to dairy farmer-members of cooperatives who own no plants. Several dairy farmer witnesses said that the prevalence of market adjustment deductions from their member milk check signifies negative returns on the cooperatives manufacturing assets due to inadequate make allowances. Another dairy farmer testified processing costs for Agri-

Mark's four manufacturing plants producing cheese, butter, NFDM, and whey have increased by an average of 20 percent since 2008, and insufficient make allowances have resulted in deductions to member milk checks to cover processing costs. According to the Agri-Mark witness, this has led to disorderly market conditions, which impair plant investment and disadvantage cooperative members. A CDI dairy farmer witness testified to the financial difficulties of operating CDI's balancing plants given current make allowance levels.

A witness representing the Milk Producers Council (MPC), an organization representing California dairy farms, testified Proposal 7's proposed make allowances balance producer and processor needs. The witness said the cost survey information entered into evidence is of limited value due to its voluntary, unaudited nature and the lack of transparency in cost allocation for multi-product plants. The witness argued differences between the All-Milk Price and the Mailbox Price indicates a need for increased make allowances and a guideline to the resulting impact on producer pay prices, currently estimated at $0.75 per cwt.

In its post-hearing brief, NMPF reiterated its arguments for adopting the make allowance levels contained in Proposal 7, writing it is the only option accounting for an increased cost in manufacturing while protecting producer pay prices. NMPF stated there has never been a make allowance adjustment greater than $0.35 per cwt, and the changes contained in Proposal 7 would decrease farmer milk prices by approximately $0.50 per cwt.

NMPF presented in its brief the aggregated costs cooperatives with manufacturing capacity shared on the record, to emphasize the increases across cost categories since make allowances were last updated. While the need to update make allowances to reflect higher costs is necessary, NMPF stated the data on the record is not sufficiently comprehensive, verifiable, or unambiguous to determine make allowances above those offered in Proposal 7. In its post-hearing brief, Agri-Mark reiterated support for Proposal 7 as the most balanced approach to updating make allowances, despite acknowledging the proposed levels are not sufficient to cover all manufacturing costs.

Opponents to Proposal 7, primarily representatives for IDFA or WCMA, echoed similar concerns from cooperative manufacturers regarding inadequate make allowances, claiming the inability to recover manufacturing

costs on wholesale commodity products has led to a lack of investment in manufacturing capacity. These witnesses testified on the importance of make allowances fully covering manufacturing costs, rather than a portion of costs as proposed in Proposal 7. Witnesses testified that continued capital investment in plant yield and efficiency gains have not fully countered the effects of insufficient make allowances as costs have continued to increase. Without make allowances accurately reflecting costs, the witness said, manufacturers receive inaccurate financial signals, which impact investments, capital distribution, and FMMO pooling decisions. Additionally, they said the competitive advantage gained by manufacturing plants not regulated by an FMMO lead to more investments into operations unaffiliated with the FMMO system. Only an increase in make allowances reasonably covering commodity product manufacturing costs, according to these witnesses, can counteract these effects.

In its post-hearing brief, IDFA reiterated opposition for Proposal 7, writing that the proposed make allowance levels are inadequate and not grounded in observed data. IDFA stressed that make allowances are defined as covering the entire cost of converting raw milk to a given dairy product, not a portion. In its brief, IDFA pointed to NMPF's recognition that Proposal 7's make allowances do not fully cover actual costs but instead represent a balance dairy farmers can withstand. IDFA objected to the consideration of farm production costs when determining make allowance levels. IDFA reiterated FMMOs are not a price support or income support program, and the prices must reflect the market price of end-dairy products. IDFA explained manufacturers cannot raise the prices of commodity dairy products to offset higher manufacturing costs because the wholesale prices are captured in the NDPSR and would raise the reference price by the same amount. AMPI reiterated in its post-hearing brief opposition for Proposal 7 as failing to reflect 2022 manufacturing costs. AMPI argued that USDA should not delay increasing make allowances on the possibility that legislation will give USDA the authority to conduct a mandatory audited survey.

A witness from DIC testified in support of Proposals 8 and 9. The witness testified that setting minimum prices too high incentivizes excess milk production, while a low minimum price through higher make allowances allows for over-order premiums to set a competitive market price. The witness

argued Class III and IV prices should allow manufacturing plants to clear the market and operate profitably.

The DIC witness entered data concerning its 2022 California dairy manufacturing cost forecast (2022 CA Forecast). The witness testified the 2022 CA Forecast used a combination of 2003–2016 California Department of Food and Agriculture (CDFA) data, state and national indices, and market developments to measure how changes in labor, utility, and other costs historically moved the actual CDFA cost data. The model then used that information to forecast California-specific 2017–2022 manufacturing costs, according to the witness. The witness said while the model forecasts costs, the range of actual costs around those forecasts could be relatively wide given the relatively few observations (14 years) used to estimate the model. For example, the expert witness elaborated that CDFA only collected dry whey costs until 2006, when they surveyed fewer than three dry whey plants, which is why the CA analysis did not forecast dry whey costs. The DIC witness opined the best approach to determine manufacturing allowance levels is using observed cost data but offered the 2022 CA Forecast as another methodology for use with the other cost surveys and testimony presented.

An IDFA witness testified in support of Proposals 8 and 9, stating make allowances should be updated to reflect increased costs in manufacturing dairy products. The witness said that while end-product-prices change monthly to reflect the current market, make allowances are fixed at 2006 cost levels, forcing dairy manufacturers to lose money or stop production. The witness stressed the need for relief from the current inadequate make allowances that do not reflect rising industry costs, adding losses are not sustainable for plants or dairy farmers who depend on these manufacturing outlets for their milk. The witness explained IDFA's proposed make allowances are simple averages of the 2023 survey and 2022 CA Forecast plus a $0.0015 marketing cost.

The IDFA and WCMA witnesses asserted accurate make allowances need to be adopted quickly as current make allowances are based on 2005/2006 cost data. The IDFA witness clarified their staggered implementation proposal, which would implement proposed year 1 levels shortly after the final decision is published. Both IDFA and WCMA witnesses said the staggered implementation is designed to recognize the impact significant make allowance increases would have on producer

prices. However, if there is any delay in implementing changes, both witnesses stressed the staggered implementation approach should be abandoned and the proposed year 4 levels should be implemented.

The WCMA witness stated the use of audited California manufacturing cost data in the 2022 CA Forecast should alleviate any data validity concerns and the 2023 survey methodology follows precedent used to determine the current make allowance levels. The witness noted the risk of using a simple average of the 2022 CA Forecast and the 2023 survey to determine proposed make allowances is the potential of the result being skewed towards California costs, since California plants are represented in both surveys.

A dairy farmer witness, who is a member of AMPI, testified on behalf of IDFA and expressed support of Proposals 8 and 9. The witness testified that AMPI, who participated in the 2023 survey, experienced cheese manufacturing costs close to the study average despite plant sizes that were smaller than the survey average plant size. The witness said their manufacturing costs of bulk cheese products are 47 percent higher and general plant expenses are up 62 percent in 2022, compared to 2008.

Several dairy manufacturer witnesses representing Hilmar Cheese Company (Hilmar), Glanbia, Saputo, and Leprino testified in support of Proposals 8 and 9. Hilmar is a cheese and whey manufacturer with processing locations in California and Texas. These witnesses testified dairy processing costs have increased, particularly of late because of inflation, noting Hilmar's natural gas costs were 45.1 percent above the 20-year average. The Saputo witness echoed testimony on increasing costs, citing the St. Louis Federal Reserve data series for labor, energy, packaging, and maintenance costs. The witness said these costs, comprising 20 percent of the total cost to manufacture a finished cheese product, rose 60 percent, on average since 2006. According to the witness, Saputo's manufacturing costs align with the 2021 and 2023 survey results. The Hilmar witness testified their manufacturing cost increases correlate with the results of the 2022 CA Forecast. The Leprino witness stated the 2021 survey and 2023 survey had robust participation, and the 2022 CA Forecast, which used CDFA audited mandatory data, leveraged a widely accepted statistical modeling approach. All four witnesses stressed the urgency of updating make allowances. The manufacturer witnesses generally agreed that inaccurate make

allowances distort pricing signals for farmers, processors, and ultimately consumers.

Witnesses representing Nasonville Dairy and Cedar Grove Cheese, two proprietary specialty and commodity cheese manufacturer members of WCMA, testified to rising manufacturing costs by outlining costs in a similar manner to the 2021 and 2023 surveys. According to the witnesses, their costs have risen $0.3226 and $0.77 per pound, respectively, far beyond the fully implemented Proposal 8 levels. The witnesses testified that insufficient make allowances negatively impact cheese processing investments and increase the production of higher-cost specialty products unable to play the same balancing or foodservice roles as commodity products. They added current make allowance levels impair the ability of proprietary manufacturers to participate in the FMMO pool and deprives producers the benefits of having their milk pooled.

In their post-hearing briefs, WCMA and IDFA reiterated their support for Proposals 8 and 9. IDFA wrote that USDA has consistently set make allowances to reflect the most recent and reliable actual cost data, using multiple surveys, as in Proposals 8 and 9. Further, IDFA stressed in its brief the 2023 survey is the most robust of all of the author's previous surveys used to set make allowances. IDFA refuted the notion the 2022 CA Forecast is inappropriate to use for determining make allowances, explaining the underlying data is robust audited California manufacturing data and the econometric techniques are widely accepted. IDFA contended that the 2022 CA Forecast and 2023 survey averages are lower than the cooperative manufacturing costs shared on the record. Even if inflation has subsided since 2022, IDFA added in its brief, there would have to be deflation to arrive below pre-2022 levels.

IDFA clarified in its brief the proposed schedule for phasing in make allowance changes, which is designed to accommodate farmers. When addressing implementation timing, IDFA refuted the CME's points about incorporating risk management in the timing of implementation, arguing that CME's interests do not necessarily align with those of the broader dairy industry because of the fee revenue they generate.

In its brief, IDFA emphasized the destabilizing effect of current make allowances on processors and farmers. IDFA shared charts from the hearing, showing how the Mailbox Price is in close proximity to FMMO blend price,

which it says indicates FMMO prices are too high. IDFA refuted NMPF's argument that Proposals 8 and 9 will result in a $1.42 per cwt decrease in the All-Milk Price because FMMO prices are minimum prices and don't reflect premiums received. Further, IDFA wrote in its brief that dairy farmers whose cooperatives own processing facilities are receiving depressed prices when make allowances are too low.

IDFA said the best method to update make allowances is through a mandatory and audited USDA survey; however, USDA does not currently have the authority and IDFA estimates it would take approximately five years before new make allowances could be adopted once the authority was granted. IDFA reiterated arguments that make allowances under-representing actual costs harm both dairy farmers and manufacturers.

In its post-hearing brief, AMPI reiterated support for the make allowance levels in Proposals 8 and 9, contending they accurately reflect the changes in costs. AMPI added it supports immediate implementation, rather than the phased 4-year approach. AMPI wrote the 2023 survey had the largest product volumes of any previous surveys and highlighted other manufacturing cooperative testimony describing increased manufacturing costs. AMPI opined continued high manufacturing costs and farm bill delays have made make allowance updates more urgent.

Leprino's post-hearing brief reiterated its support of Proposals 8 and 9, emphasizing the importance of implementing make allowance changes immediately. Leprino stressed 2023 cost levels have continued to climb and offered its own updated cost increases, compared to 2022: 11 percent for labor, 17 percent for property insurance, and 9 percent for liability insurance.

A witness representing the AFBF testified in opposition to Proposals 8 and 9, opining the 2021 and 2023 survey data may be biased due to its unaudited nature and the known potential to be used for rulemaking, stating the incentive to overestimate reported costs for commodity goods disqualifies this voluntary data. The witness testified only the 2016 CDFA survey results can be verified as accurate enough to be used for determining make allowances. According to the witness, the relatively complicated 2022 CA Forecast model using a small number of observations (14 years) to forecast 2022 costs (6 years out from the actual data) could be overfitted to the 2000–2016 data and unreliable to predict future costs.

Numerous dairy farmer witnesses testified in opposition to Proposals 8 and 9, focusing on the negative effect significant make allowance increases would have on producer pay prices. A DFA farmer witness from New Mexico testified the make allowance increases contained in Proposals 8 and 9 would result in negative operating income over the next 10 years, making continued operation of their farm unsustainable. The witness said any make allowance increases would severely and disproportionally impact producers in the southwest due to the share of milk going into manufacturing products. A LOL dairy farmer testified significant increases in make allowances would be difficult for farms in California to absorb, where water scarcity has led to high forage costs. According to the witness, large make allowance increases would put adequate milk supply at risk, all the while guaranteeing profit for commodity manufacturers and leading to over production of manufactured dairy products.

Two dairy farmer witnesses, a member of the CDC and a small Maryland dairy farmer, testified against increases in make allowances due to the impact on producer pay prices and lack of accounting for dairy farm production costs. According to the witnesses, while processors can pass on costs to customers up the supply chain, producer margins are too thin to sustain substantial price decreases from increased make allowances. The witnesses testified that further declines to producer margins will cause more producer exits and disruption to the milk supply. A dairy farmer representing Edge testified any change in make allowances should require a 15.5-month delay, be restrained by the impact on producer pay prices, and cover only the most efficient plants.

In its post-hearing brief, NMPF reiterated its arguments in opposition to Proposals 8 and 9. NMPF argued that these proposed changes would decrease dairy farmer milk prices by approximately $1.45 per cwt, further narrowing producer margins and causing disorderly marketing.

NMPF cited ongoing plant investment as an indication current make allowances are not too low as portrayed by proprietary manufacturers. NMPF emphasized proprietary manufacturers are not required to be regulated and, thus, can choose not to participate in the FMMO and avoid paying minimum prices they contend are too high because of inadequate make allowance levels. NMPF opined about the lack of evidence to merit raising make allowances to levels contained in Proposals 8 and 9.

In its brief, NMPF refuted the studies used as a basis for Proposals 8 and 9. NMPF cited hearing testimony regarding the insufficiency of some plant sample sizes in the 2023 survey. Further, NMPF argued the 2023 survey does not capture how manufacturing costs are skewed by plants that serve a balancing role. NMPF stated if make allowances are set too high, balancing plants would be incentivized to run at maximum capacity, rather than running at less than full capacity to provide critical balancing services to the market. NMPF voiced concerns with the 2022 CA Forecast, noting the proposed make allowances in Proposals 8 and 9 are duplicative since the 2023 survey included California data. Further, NMPF opined that the 2022 CA Forecast is of little utility as it did not account for basic changes to the California dairy manufacturing sector since 2016, such as plant openings and closings and productivity improvements.

In its post-hearing brief, Select also opposed Proposals 8 and 9, on the basis of the 2022 CA Forecast being inappropriate to use in determining make allowances. Select echoed NMPF's argument that use of the forecast would be duplicative of California data. Further, Select argued indexing does not account for improvements to plant efficiencies and the Department has not previously used indexing to determine make allowances.

In its brief, the AFBF opposed any increase to make allowances, instead advocating they only be increased once a mandatory, audited cost survey was administered by the Department. The AFBF opined that both the 2021 and 2023 surveys were biased because there was a clear intention the surveys would be used in a rulemaking proceeding. The AFBF opposed the use of indexing to set make allowances, as was done in the 2022 CA Forecast, because it fails to recognize productivity improvements over time. The AFBF echoed other brief arguments that continued processor investment is evidence that make allowances are not too low.

The Midwest Dairy Coalition (MDC), an alliance of six dairy farmer-owned cooperatives operating in the Midwest, filed a post-hearing brief stating make allowance updates are long overdue, but took the position the Department should be granted legislative authority to conduct a mandatory and audited cost survey. MDC did not offer support or opposition to any make allowance related proposals. In its post-hearing brief, Edge also did not support or oppose any make allowance related

proposals but cautioned against setting make allowances too high. Until there is a mandatory and audited USDA-administered survey, Edge stated, the Department should err on the side of caution to not subsidize commodity manufacturing.

In its post-hearing brief, Select offered an alternative methodology for determining the make allowance levels using what Select argued was the most reliable record data. Select suggested taking the average of the 2021 survey and 2023 survey, subtracting the current make allowance level, and taking half that difference to add to current make allowance levels. As a result, Select proposed the following: cheddar cheese, $0.2281; butter, $0.2004; NFDM, $02260; and dry whey, $0.2498.

In its post-hearing brief, CME noted any make allowance changes would be considered material changes, and USDA should consider an implementation timeframe that mitigates risks to those involved in futures and options trading.

b. Yield Factors

Submitted by Select, Proposal 10 seeks to amend the cheese price formula by increasing the butterfat recovery rate in the cheese yield, from 90 to 93 percent. A Select witness testified in support of Proposal 10 and clarified a butterfat recovery rate of 93 percent would also necessitate an increase in the butterfat yield factor in the protein price formula from 1.572 to 1.624. According to the witness, these changes would result in a modest increase in the Class III price, estimated at $0.04 per cwt. The witness stressed USDA should not be guided by price impacts but rather by achieving formulas to better reflect manufacturing realities and the actual value of raw milk. Select reiterated support for this proposal in its post-hearing brief.

An independent expert witness, retained by Select, testified advancements in vat technology, coagulants, and curd handling have enabled manufacturers to achieve recovery rates higher than the currently assumed 90 percent. The witness described how modern, horizontal vats attain butterfat recoveries far exceeding both open and enclosed horizontal vats, and how most commodity cheddar manufacturers use advancements in coagulants and curd handling to attain greater than 93 percent butterfat recovery. Additionally, the witness said, whey cream can be reintroduced into the cheesemaking vat to increase cheese yield and revenue, ultimately increasing butterfat recovery.

The AFBF wrote in its brief that it also supports Proposal 10 to increase

the butterfat recovery factor. The AFBF pointed to evidence on the record of increasing plant efficiencies, justifying updating the butterfat recovery factor to the level in Proposal 10.

Six witnesses, representing Glanbia, Leprino, IDFA, CDI, DIC, and MPC, testified in opposition to Proposal 10. The Glanbia witness described a broad range of industry fat recovery based on plant age and processing techniques, and acknowledged many modern plants, including Glanbia plants, can achieve 93 percent cheddar fat recovery. The witness testified Proposal 10 is being offered to enhance prices while ignoring other parts of the formula that overvalue milk. The witness contended lost solids within the manufacturing plant and the discounted price of whey cream, should they be considered, outweigh the effects of Proposal 10 on milk prices. The Leprino witness testified any changes to the yield factor should only occur after a comprehensive review of all yield assumptions. The witness agreed 93 percent butterfat retention is achievable in some plants but does not believe it is possible across the entire industry.

The IDFA witness contended Proposal 10 takes a piecemeal approach to changes in the yield formula and selectively focuses on dairy farmer revenue enhancements only. The witness opined whey cream is overvalued in the current formula, as butterfat not going into cheese is currently valued as Grade AA butter despite regulation that whey cream cannot be used in Grade AA butter. The witness claimed whey cream is discounted 20 percent or more compared to fresh cream. In addition, the witness said in-plant milkfat losses are not recognized in the current formula, something that should be considered when evaluating yield factor changes. The witness testified any decreases in the Class III prices that result from accurately accounting for both processing losses and whey cream values would more than offset the increases in Class III prices proposed by Select.

A witness from the Center for Dairy Research (CDR), appearing on behalf of IDFA, testified to observing improvements in butterfat retentions over the past 40 years, mostly due to improved vat design and technology. The CDR, with a dairy plant on the University of Wisconsin-Madison campus, supports the U.S. dairy industry with expertise in cheese, dairy ingredients, cultured products, dairy beverages, quality/safety, and dairy processing. The witness noted a range of butterfat losses at the cutting stage including 9 to 10 percent fat loss in

open vats, 7 percent fat loss in Double O vats, 6 percent fat loss in horizontal vats, and 5 percent fat loss in modern vats. The witness testified that while large modern plants are installing newer, more efficient vats, old, less efficient vats are not leaving production, and are being repurposed and installed in medium and small plants throughout the country. The witness noted there is still a large variety of vats being using in the industry, and stressed the latest vat design does not ensure optimal butterfat retention, as the experience of the cheesemaker and product handling practices could also lower butterfat recovery.

Based on current observations and work within the industry, the CDR witness provided best estimates for fat recoveries in cheddar cheesemaking as 91 to 93 percent retention in well-run factories with modern vats, 90 to 92 percent retention in well-run factories with vertical Double O vats, and 88 to 91 percent retention in factories with open vats. The witness said, based on their experience, 91 percent could be considered the industry average butterfat recovery for cheddar cheese plants.

A CDI witness, appearing on behalf of NMPF, testified to the lack of yield data available to support the proposed recovery rate contained in Proposal 10. The witness supported a tempered update to the cheese make allowance that does not include an update to the yield factor. A witness representing DIC testified the current 90 percent butterfat recovery rate is reasonable because, despite some newer, more efficient plants achieving higher fat recovery, older plants may not be able to achieve the higher rates. The DIC witness stated fat recovery data is lacking across the industry and further asserted the current 90 percent butterfat recovery should be retained. The witness representing MPC testified the current formula should remain in place until the industry tackles the mechanics of the Class III formula, and the big issue is how butterfat not being retained in the cheesemaking process is valued.

A witness representing AMPI provided testimony supporting the improvement seen in butterfat recovery due to new vat technology. The witness said AMPI installed cheesemaking equipment that facilitates the recovery of fat; however, they did not provide specific data.

Submitted by Select, Proposal 11 seeks to eliminate farm-to-plant shrinkage from the yield factors in the FMMO Class III and IV price formulas. A witness appearing on behalf of Select testified USDA's decision to include

shrinkage in the formula was premised on the concept that such losses were not in the handler's control and are unavoidable and common. The Select witness was of the opinion producers, cooperatives, and handlers do have the ability to address and stem losses in the transportation of milk from the farm to the plant. The witness said historically, as the number of farms on a milk route increased, the probability for discrepancies between farm weights and plant weights also increased, as each stop offered potential for spillage, loss within piping, and errors in measurement. The witness shared statistics on the increasing size of U.S. dairy farms, stating that in 2016, three-quarters of all U.S. milk production came from farms that could fill a full tanker, whereas in 2000, less than half of U.S. production came from farms filling a full tanker. The witness estimated 80 percent of the current milk volume in the U.S. comes from farms able to fill full tankers on every-other-day pickup schedules. Consequently, said the witness, the occurrence of shrinkage is decreasing. As an example, explained the witness, Select's members are large enough to ship full tanker loads of milk, meaning Select does not experience the same risks of milk loss which occur on multi-stop routes.

Other than milk losses occurring with hoses, the Select witness was unaware of any inherent, unavoidable, farm-to-plant losses that could occur within the pick-up process. The witness said even farms without the ability to fill a tanker can adopt farm scales, flow measurement, and other technologies to minimize imprecision and inaccuracy. The witness testified the cost of implementing these improvements would be offset by the anticipated price impacts of adopting Proposal 11, which the witness estimated to be $0.07 per cwt.

A second Select witness presented an analysis of Select plant data from August 2022 to July 2023, representing 171,240 milk shipments and a total of 9.8 billion pounds. The witness stated approximately half of their customers do not report plant weights back to Select. For those plants who do report, the witness said reported plant weights exceeded farm weights about half of the time. The witness stated non-shrink factors, such as scale calibration or weather, typically cause the large discrepancy between farm and plant weights. The witness concluded that for the subset of loads where differences occurred between farm and plant weights, the net variance across all loads was less than 0.1 percent.

A witness testifying on behalf of Continental Dairy Facilities (CDF) and Continental Dairy Facilities Southwest (CDF SW), two wholly owned subsidiary plants of Select in Michigan and Texas, manufacturing NFDM, butter, and buttermilk powder, presented farm-to-plant loss data to support Proposal 11. The witness analyzed farm-to-plant losses in milk deliveries to the two CDF facilities from August 2022 through July 2023, comprised of both single and multi-farm pickups. The witness stated in total, plant weights averaged 0.15 percent lower than farm weights for CDF and 0.10 percent lower for CDF SW. The discrepancies ranged from a negative 0.32 percent (plant weights were 0.32 percent lower than farm weights) to 0.67 percent (plants weights were 0.67 percent lower than farm weights). Since many of the non-Select shipments to CDF are multi-farm pickups, the witness said management for farm-to-plant shrink is not unique to Select or larger farms, generally. The witness described improperly calibrated scales, input or transposition errors by milk haulers, changes in equipment or personnel when weighing loads, or snow settled on scales or tanks when weighing, as reasons for weight discrepancies. The witness testified these variances are not inherent and that they can be addressed. Select reiterated its arguments supporting Proposal 11 in its post-hearing brief.

The AFBF expressed support for Proposal 11 in its post-hearing brief. The AFBF contended that data on farm-to-plant shrinkage contained in evidence is similar to what was used to determine the original farm-to-plant shrinkage factor. The AFBF argued that this issue does not merit a formal data collection, but a one-time adjustment to reflect that farm-to-plant shrinkage is much less significant than it used to be.

Five witnesses representing IDFA, Leprino, CDI, DIC, and MPC testified in opposition to Proposal 11. The witnesses asserted Select's minimal farm-to-plant shrinkage is not the reality for much of the dairy industry, noting the lack of industry-wide data on farm-to-plant shrinkage and the differing nature of measuring components at the farm, rather than at the plant, are reasons Proposal 11 should not be adopted. The witnesses further testified FMMO yield factors should not be based on one company's experience, especially one, they argued, that was an industry leader in this area.

The Leprino witness testified that while Select has been able to limit their own farm-to-plant loss through increasing herd sizes and improvements in milk weighing and sampling, this is not a representation of the nationwide dairy industry. Additionally, the witness argued the scientific characteristic of milk fat clinging to the walls of stainless steel has not changed; as such, volume and fat loss still occur, even at the most innovative plants. The IDFA witness claimed less than 10 percent of all farms produce enough milk to fill entire tanker loads, so it is reasonable to conclude the losses experienced when the formulas were adopted are still happening today. According to the witness, failure to account for the diversity of farm size may further incentivize manufacturers to prefer larger farms over smaller farms.

Submitted by Select, Proposal 12 recommends amending the nonfat solids price formula by increasing the NFDM yield factor from 0.99 to 1.03. A Select witness testifying in support of Proposal 12 said it would correct the NFS yield factor by including the value of milk solids utilized in buttermilk powder, as producers are not currently paid accurately from a price calculated on NFDM prices alone. According to the witness, a proper yield factor for NFDM should account for all milk solids, including the milk solids remaining in cream after separation and used in butter or buttermilk. The witness stressed the initial NFS formula, correctly adopted in 2000, included buttermilk powder.

A witness representing CDF and CDF SW testified on price alignment and processing differences between NFDM and buttermilk powder. The witness stated sales and regional prices observed at the two plants for buttermilk powder and low-heat NFDM are closely aligned, as well as consistent with prices reported by AMS' Dairy Market News (DMN) from January 2023 through June 2023. The witness further testified that the process of drying buttermilk utilizes the same equipment as that of drying skim milk but requires a thorough cleaning of equipment when changing product lines, higher temperature, and additional drying time due to buttermilk's higher butterfat content. The witness said this leads to increased utility costs of approximately $0.02. The witness testified the NFS yield factor should consider all powder products, including buttermilk powder whose yield is lower than NFDM. Select reiterated its arguments in support of Proposal 12 in its post-hearing brief.

In its post-hearing brief, the AFBF expressed support for Proposal 12 as it believes it reflects the long-term market shift toward valuing buttermilk near the NFDM price. The AFBF stated that a formal extensive data collection is not

necessary for this proposal to be adopted because there is a clear record of buttermilk values.

Two witnesses, representing Leprino and IDFA, testified in opposition to Proposal 12. The witnesses testified Proposal 12 is based upon a theoretical yield approach which assumes a perfect system with no in-plant component losses in the conversion of NFS to NFDM. The witness said in-plant losses exist even in the most modern and efficient manufacturing facilities and should be recognized in the price formulas. The witnesses gave an example of the portion of NFS remaining in cream after separation, which cannot be processed into NFDM. The Leprino witness argued the FMMO system is predicated on the notion processors should pay for milk based on the revenue they can derive from selling products manufactured from that milk. The witness said milk routinely lost in processing does not end up in finished products, which should continue to be accounted for in the formulas. The IDFA witness testified product yields should incorporate manufacturing losses, and overestimating the quantity of NFDM manufactured from NFS by accounting for buttermilk powder would overvalue the market-clearing of NFDM and contribute to disorderly marketing.

A witness from CDI testified on behalf of NMPF in opposition to Proposal 12. The witness testified CDI supports evaluating all factors in the Class III and IV formulas, and yield factors should only be updated once industry-wide data on product yields are available. The witness stated the NFS price formula is based on NFDM and the yield factor correctly reflects the yield of NFDM only, without an adjustment for buttermilk powder. The witness said Proposal 12 would adjust the NFDM yield factor to represent a composite yield for multiple products which differ in terms of component composition, uses, cost of manufacture, and market prices. While acknowledging buttermilk powder's processing costs are likely higher than NFDM's, the CDI witness testified there was not enough data to quantify the difference in processing costs; further, data presented from DMN and by Select witnesses are not sufficient to determine the alignment of prices between buttermilk powder and NFDM. The witness clarified that buyers of butterfat and NFS must account for all solids utilized at the minimum component prices, regardless of whether the solids are used in the surveyed products of butter and NFDM or in other Class IV products such as buttermilk powder.

A witness from the DIC testified in opposition to Proposal 12. According to the witness, while NFDM yields are likely higher than the current yield factor of 0.99, not all NFS in producer milk end up in NFDM, with some NFS from cream remaining in buttermilk. The DIC witness claimed the lower yield factor is to compensate for generally lower buttermilk powder prices compared to NFDM but acknowledged DMN data suggested a buttermilk powder price discount relative to NFDM narrowing in recent years. A witness from MPC testified in opposition to Proposal 12, stating they were opposed largely due to a lack of adequate data.

In their post-hearing briefs, IDFA and NMPF opposed Proposals 10, 11, and 12. IDFA argued the three proposals are not representative of industry-wide experience, but rather on what is possible given modern technology and equipment. NMPF echoed IDFA's opposition in its brief, citing insufficient data to justify the proposed changes. IDFA specifically objected to Proposal 11, stating it would place an unfair burden on small farms that cannot fill a tanker and, thus, continue to experience shrinkage. Proposal 11 was also opposed by WCMA in its post-hearing brief. Lastly, IDFA contended Proposal 12 should be rejected because it overvalues buttermilk powder.

Base Class I Skim Milk Price

Six proposals to amend the base Class I skim milk price were considered in this proceeding. Proposal 13, submitted by NMPF, seeks to return the base Class I skim milk price to the higher-of the Class III or Class IV advanced skim milk price, referred to as the "higher-of" mover. Proposal 14, submitted by IDFA, would use an average of the advanced Class III and Class IV skim milk prices, plus an adjuster that resets every January. The adjuster would be the higher of either: (1) $0.74; or (2) the 24-month average difference between the higher-of and the average-of the advanced Class III and Class IV skim milk pricing factors. The 24-month calculation would run from August of the three years prior to July of the previous year. Proposal 15, submitted by MIG, would amend the current average-of mover from a $0.74 adjuster to a monthly rolling average adjuster calculated as the difference between the higher-of and the average-of, for 24 months, with a 12-month lag. Proposal 16, referred to as "Class III plus," submitted by Edge, would start with the announced Class III price and incorporate a 36-month rolling adjuster averaging the monthly differences

between the higher-of the advanced Class III or advanced Class IV skim milk prices, and the Class III skim milk price. The proposal would eliminate advanced prices. Proposal 17, also submitted by Edge, would return to the higher-of mover but would use announced rather than advanced prices. Proposal 18, submitted by the AFBF, would return to the higher-of mover and would eliminate the advanced pricing of Class I skim milk, Class I butterfat and Class II skim milk.

An NMPF witness testified in support of Proposal 13. The witness reviewed the 2000 Federal Order Reform (Order Reform) rulemaking and summarized the higher-of methodology as accurately reflecting the value of the different milk use categories and ensuring shifts in demand for any one manufactured product does not lower Class I prices. The witness said the Department determined during Order Reform that the higher-of mover addresses disorderly marketing by reducing volatility in milk prices, reducing class price inversions and depooling, and assisting Class I handlers in competing for a milk supply.

The NMPF witness testified the 2019 change to the average-of was designed to facilitate price risk management strategies for fluid milk processors, which, the witness stated, is not an objective of FMMOs. The witness said the intent of the change was to be roughly revenue neutral, while allowing handlers to better manage volatility in monthly Class I skim milk prices using Class III and Class IV milk futures and options contracts. The witness claimed the 2019 change has not functioned as intended or anticipated by NMPF, has exacerbated disorderly marketing conditions, has not been revenue neutral, and will continue to have deleterious effects on the dairy industry. The witness described the asymmetrical risk to producers which was not anticipated when the mover change occurred. The witness explained the higher-of exceeds the average-of calculation whenever the Class III and IV advanced skim milk pricing factors differ by more than $1.48 per cwt, regardless of which factor is higher. The witness noted the reverse is true when the advanced skim pricing factors differ by less than $1.48 per cwt.

A witness from Southeast Milk, Inc. (SMI), a NMPF cooperative member with 114 dairy farmer members, testified that when the two advanced skim milk pricing factors are equal, the maximum amount by which the average-of can exceed the higher-of Class I mover is $0.74 per cwt, but there is no limit by which the average-of can

fall below the higher-of Class I mover. The NMPF witness testified that in 2020 and 2022, there were instances when the average-of mover fell below what the higher-of mover would have been, in which the difference was at times significant. The witnesses testified the maximum divergence recorded between the current average-of mover and the higher-of mover was a $5.19 lower average-of mover in December 2020, when Classes II, III, and IV skim prices differed by approximately $11 per cwt. In comparison, the witness said, the maximum gain during that time was capped at $0.74. The SMI witness said because the upside is capped, but the downside is not, it is difficult to ever return to revenue neutrality under the average-of mover.

The SMI witness testified the average-of mover has lowered dairy farmer revenue compared to what they would have received under the higher-of mover, with estimated cumulative market losses totaling $998.3 million from May 2019 through August 2023. The witness said that for the same period, the average-of mover decreased revenue to the southeastern FMMO producers by more than $192 million. The NMPF witness reviewed data during periods of relative price stability, revealing the average-of mover generated modest gains over the higher-of mover. However, in periods of price volatility, there were substantial revenue losses in months when the average-of mover was less than the calculated higher-of mover, which resulted in significant cumulative losses to producers over time.

The NMPF witness claimed the change to the average-of mover increased disorderly marketing by reducing Class I prices relative to the other classes and creating greater incentives for handlers to depool milk. The witness said that in 2020, the enhanced demand for cheese relative to the demand for butter and NFDM widened the spread between Classes III and IV well beyond $1.48, substantially lowering Class I prices compared to what they would have been under the higher-of mover. The SMI witness testified that between May 2019 and June 2023, the Class III skim value exceeded the Class IV skim value by over $1.48 per cwt in 16 months, and the Class IV skim value exceed Class III skim value by $1.48 or more per cwt in 11 months. In 2023, according to the SMI witness, the average-of continued to be lower than the higher-of in some months, which had a more significant impact to dairy farmers because it occurred during a time of extremely low dairy farm margins. The witness said

they expect to see more volatility and larger spreads between Class III and Class IV prices in the future because of anticipated higher butterfat prices which will lower the Class III skim value.

The NMPF witness testified that adoption of the average-of mover created class price inversions and resulted in significant volumes of depooled Class III milk during the second half of 2020. Class price inversions occurred again in 2022 and 2023, said the witness, resulting in price volatility and substantial depooling of Class IV milk. The witness opined a wide variety of market conditions have proven capable of generating market volatility, driving a wedge between Class III and IV skim milk prices, and resulting in an average-of mover of more than $1 per cwt below what the higher-of mover calculation would have been.

The NMPF witness said the average-of mover has not resulted in increased risk management activity at a value to handlers anywhere near the losses experienced by dairy farmers. Numerous witnesses testified their fluid milk customers have shown very little interest in hedging milk since the average-of mover was implemented.

NMPF witnesses testified other Class I mover proposals under consideration in this proceeding use the higher-of mover calculation as the benchmark for determining adequate Class I skim milk price revenue. They testified those proposals provide producers revenue in an after-the-fact-manner that fails to maintain the maximum monthly separation between advanced Class I prices and the manufacturing class prices, a goal expressed by the Department when it recommended the higher-of mover during Order Reform.

The SMI witness testified that because of the change to the average-of mover, the southeastern FMMOs experienced disproportionately large reductions in blend prices due to the higher Class I utilization in the region, making it harder to attract supplemental milk the region requires to meet fluid demand. The witness noted that using an average-of mover to establish a Class I skim price makes it more difficult for Class I handlers to procure milk from plants with higher-value manufactured products because the price difference is not large enough to draw milk away from manufacturing. The witness opined a Class I skim mover should provide for orderly marketing by ensuring an adequate supply of raw milk for fluid plants, producer price equity including prompt and uniform payments to farmers and cooperatives, and stability for dairy farms. The

witness argued the current average-of mover makes it more difficult for FMMOs to achieve those purposes.

An NMPF consultant witness testified the higher-of mover is necessary to transmit market signals in real time. The witness said a higher Class I milk price relative to other class prices sends market signals to move milk from surplus to deficit regions to ensure adequate fluid milk supplies. Additionally, the witness continued, disorderly marketing caused by prolonged depooling occurs when the Class I price is lower than Class II, III, or IV prices. The witness asserted prolonged periods of depooling create market disorder. Since the change in 2019, claimed the witness, the Class I mover has facilitated persistent long-term periods of depooling because there is no guarantee Class I prices will exceed the other class prices over time. In contrast, the witness asserted that under the higher-of mover, if Class III and IV advance skim prices increased, the Class I price would remain higher and depooling would moderate.

The NMPF witness presented data to demonstrate the objective of adopting the average-of mover, to allow for greater risk management, has not been accomplished, and prolonged periods of depooling have made it difficult for producers to hedge their farm margins. The witness stated that when milk is not pooled, producer hedging losses cannot be offset by gains on milk checks because revenue from the higher valued manufacturing milk is not shared with the marketwide pool. The witness asserted risk-management performance is relatively similar under the higher-of and average-of movers, entering data they believed showed how Class III futures contracts would similarly mitigate risk. The witness contended other proposals do not adequately replicate the higher-of price in future periods; nor do they share equally among dairy producers and others, necessitating periodic recalibration. Rather than recognize the average-of limitations, the witness said, other proposals seek to align the average-of and higher-of performance. The witness testified an average-of mover with an adjuster causes past market conditions to influence current prices, sending pricing misinformation to the market and causing disorderly marketing. The witness concluded that without immediate market signals from the advanced Class III and IV milk prices, any of the average-of or Class III plus movers would struggle to replicate the higher-of mover performance.

An NMPF witness representing Prairie Farms testified producer revenue

has been significantly reduced, without recovery, since the change to the average-of mover. Prairie Farms is an Illinois based farmer-owned milk cooperative with over 600 dairy farmer members operating fluid milk processing and manufacturing facilities that produce a variety of fluid and manufactured dairy products. Increased depooling in the last few years because of the average-of mover has resulted in increased price volatility, the witness said. The witness testified that with the average-of mover either Class III or Class IV milk is not pooled, depending on which class is higher, because the manufacturer is able to keep the additional market revenue instead of sharing it among pooled producers.

The Prairie Farms witness testified dairy producers want a pricing system that gives real-time market signals, which is accomplished with the higher-of mover. The witness testified Prairie Farms supported the change to the average-of mover believing it would facilitate their customers' ability to hedge Class I milk. However, Class I processors have generally not increased their use of hedging, said the witness, while dairy producers have taken on additional risk by giving up a higher Class I price. The witness stated one reason they believe their customers do not utilize hedging is because of fear of incurring a price disadvantage compared to their competitor. The witness added that of the Prairie Farms dairy farmer members engaged in risk management, there has been a decrease in the use of forward contracting since the implementation of the average-of mover because of negative PPDs, as they create a negative basis dairy producers are unable to account for in their risk management decisions. The witness presented data showing negative PPDs have become larger and more frequent under the average-of mover, which has increased the volume of depooled milk and significantly reduced revenue to farmers.

Another NMPF witness representing Upstate Niagara Cooperative (Upstate Niagara) testified the average-of mover has not operated as intended, has negatively impacted producer revenue, and has exacerbated disorderly conditions. Upstate Niagara is a dairy farmer-owned cooperative marketing the milk of approximately 250 members and operating eight fluid processing and manufacturing plants in New York and Pennsylvania. According to the witness, under the average-of mover, producers pooled on FMMOs with higher Class I utilization were most severely impacted due to the depressed Class I milk prices and no ability to benefit from the higher

priced manufacturing milk. Similar to other witnesses, the Upstate Niagara witness described the asymmetric price risk of the average-of mover.

From interactions with fluid milk customers, the Upstate Niagara witness said there is widespread acceptance of prices based on FMMO monthly price announcements by their conventional customers. The witness said conventional customers have been less interested in pursuing a fixed price if there was any chance it could result in a competitive disadvantage in any given month. The witness recognized there may be some processors or end users in specialized Class I product channels that may utilize hedging but contended it is a relatively small portion of total Class I sales.

A University of Missouri professor testifying on behalf of NMPF presented results of an analysis conducted to evaluate the impact of adopting Proposal 13. The witness testified, under the higher-of mover, Class I prices would increase every year between $0.32 and $0.50 per cwt; the Class II price would be between $0.08 and $0.12 per cwt less annually; the Class III price would be between $0.06 and $0.13 per cwt less annually; the Class IV price would be between $0.08 and $0.12 per cwt less annually; and the all-milk price would be between $0.01 or $0.02 per cwt higher annually, except for a more significant increase of $0.06 per cwt in the first year. The witness said the model forecasted the effect on the all-milk price to moderate over time as production expands.

Twenty dairy farmers testified in support of Proposal 13. Many dairy farmers testified blend prices have been lower and their milk prices have been reduced since the average-of mover was implemented. They said only when Class III and Class IV prices are within a narrow range of each other is the average-of mover equal to or outperforming the higher-of mover. The witnesses said their experience supports NMPF's assertion that farmers' milk prices have been reduced by $950 million, and the reduction is not just a COVID-era anomaly. Dairy farmer witnesses said the losses demonstrate the goal of revenue neutrality with the change to the average-of has not been achieved. One witness asserted that in 29 of the 52 months since the average-of was adopted, Class I prices averaged $1.30 per cwt less than what the price would have been under the higher-of mover. In comparison, said the witness, in the remaining 23 of the 52 months the average-of returned a price only $0.42 higher per cwt. The witnesses testified to near-universal support by

dairy farmers for a return to either the higher-of or, under the average-of, a mechanism to be equal to the higher-of over a period of time, such as 24 months.

Several dairy farmers urged a return to the higher-of mover, claiming a need for financial relief as dramatic shifts in milk markets since implementation of the average-of mover have caused significant financial losses to dairy farmers. Dairy farmers reiterated the average-of mover change affects 100 percent of pooled producer milk while it is unlikely fluid milk processors are covering 100 percent of their products with risk management tools. A dairy farmer testified they were assured the change to the average-of would be net neutral or net positive, but it has not been. Many dairy farmer witnesses described losses to dairy farmers under the average-of compared to what the Class I mover would have been under the higher-of and testified to receiving lower blend prices. The dairy farmers were concerned about receiving a delayed value of milk from a Class I mover with a rolling average methodology because they believe they cannot afford to wait months or years for the added revenue. They testified restoring the higher-of mover through adoption of Proposal 13 would help to reduce the volatility in monthly milk prices, bringing more stability and predictability to farmer income.

Dairy farmers of all sizes testified to relying on risk-management tools, such as Dairy Margin Coverage (DMC), Dairy Revenue Protection (DRP), and CME futures and options markets because it is difficult to manage their farms through periods of significant price volatility. Dairy farmers' testimonies described a range of contract periods, anywhere from 3–18 months, depending on the individual farmers' risk-management strategy and risk tolerance. In its post-hearing brief, NMPF reiterated hearing testimony arguing the average-of mover does not meet the standards set forth in Order Reform, and the change has not been revenue neutral as originally assumed. NMPF restated that under the average-of mover, price inversions, volatility, and depooling have increased, and Class I prices have been less effective at incenting milk to fluid processors relative to manufacturing. NMPF reiterated the asymmetrical risk borne by dairy farmers with the average-of mover and the frequency of which the difference between Class III and IV prices exceeded $1.48 per cwt, effectuating that risk.

NMPF reiterated the average-of mover failed to send appropriate market

signals to participants because the fixed adjuster could not maintain the maximum monthly separation between the advanced Class I and the manufacturing class prices. NMPF wrote this increased the likelihood manufacturing classes would have a higher value than milk used in Class I and resulted in increased volumes of depooled milk. Under the higher-of mover on the other hand, NMPF argued, when a particular manufacturing class price is rising, the Class I price also rises and tends to maintain Class I as the highest priced class. To dampen the effect volatility in the manufacturing classes has on Class I, the highest priced manufacturing class should provide the foundation for ensuring the Class I price remains above the manufacturing classes almost every month, reducing the incentive to depool, which is disorderly.

The demand for Class I hedging is not clear, NMPF asserted in its brief, and no evidence was presented to suggest more than a small minority of the overall fluid market utilizes hedging, especially beyond ESL handlers. NMPF argued in its brief that while facilitating risk management for fluid processors may have merit, it is not an objective of FMMOs. In regulating processors, the AMAA only considers price uniformity to processors, NMPF asserted. Finally, NMPF restated in its brief the widespread support of producers for a return to the higher-of mover.

The Dairy Cooperative Marketing Association, Inc. (DCMA), a Capper-Volstead Marketing Agency in Common with nine cooperative members in the southeastern U.S., submitted a post-hearing brief in support of Proposal 13. In its brief, DCMA argued the change to the average-of mover has not been revenue neutral to dairy farmers, nor provided benefits to the industry as originally intended. According to DCMA, the hearing record demonstrates that little Class I hedging occurs, especially on HTST milk, and includes no evidence that the use of hedging is more prevalent now than prior to the change. DCMA stated most testimony demonstrated HTST milk is sold based on FMMO announced prices each month plus a fixed margin. Because revenue on packaged milk sales flows back to the processor in step with the monthly changes in the FMMO announced prices, there is no price risk to the Class I processor under this system, according to DCMA. In its brief, DCMA described the pronounced losses in the southeastern region as a result of the change to the average-of mover.

The MDC submitted a post-hearing brief in support of Proposal 13,

expressing the importance of making the changes as part of the FMMO reform process underway. MDC conveyed in its brief the importance of ensuring all reforms are considered in concert since all changes have ripple effects throughout the entire system and across all classes of milk.

In its post-hearing brief in support of Proposal 13, Select reiterated the proposal would support the priorities expressed by the Department in Order Reform, the rationales of which remain true today. Select cited billions of dollars lost to producers, an increase in depooling, and a lack of Class I handlers hedging their milk costs as reasons the average-of has failed.

In both witness testimony and briefs, IDFA and MIG strongly opposed a return to a higher-of mover. A majority of their opposition was contained in supporting testimony and evidence for Proposals 14 and 15, as detailed below.

A witness representing IDFA testified in support of Proposal 14. The witness said the goal of Proposal 14 is to keep producer Class I revenue consistent with what would be experienced under the previous higher-of mover, while allowing for effective and affordable Class I risk-management strategies.

The IDFA witness claimed that in the long-run, the proposed Class I mover would never fall below what the Class I skim milk price would have been under the higher-of mover. According to the witness, Proposal 14 would have paid more than the higher-of mover in 13 of the past 21 years. The witness asserted dairy farmers are ''made whole'' as compared to the higher-of mover over time through the annual adjuster calculation. The witness presented data from 2003 through 2019 showing Proposal 14 would have yielded a Class I price $0.08 greater than the higher-of mover. For 2004 through 2023, the witness said Proposal 14 would have yielded a Class I price $0.05 higher, due to the $0.74 floor.

The IDFA witness entered data and analysis to show the volume of milk not pooled would be slightly less under Proposal 14 than Proposal 13, and the Class I price would be lower than Class III or Class IV prices in nearly the same number of months under both proposals. The IDFA witness presented an analysis showing Proposal 14 would have reduced price volatility with the only exception of very high cheese prices in 2020. According to the witness, volatility equates to greater price risk, which increases hedging costs, and ultimately higher consumer prices.

The IDFA witness countered claims the higher-of mover sends important

price signals to dairy farmers through the Class I price, instead claiming the blend price sends more important price signals because it is the price farmers receive. The witness alleged there is little difference between signals sent by the blend price under Proposals 13 and 14, arguing that from 2012 to 2022, Proposal 13 would average 31.9 percent of the Class I value in the blend price while Proposal 14 would average 31.8 percent. As the impact on the blend prices is very similar, over time there is little difference in price signals between the proposals, the witness said.

Regarding the delay incorporated by the rolling adjuster and farmers possibly not receiving the make-up payments, the IDFA witness noted farmers go out of business for many reasons, and some may go into the business or expand and benefit from higher payments. The witness said this issue is no different than handlers going out of business before the make allowances are raised.

The IDFA witness testified hedging is a critical tool for the subset of innovation and value-added milk manufacturers to remain competitive with alternative beverages. In the few growing segments of the milk market, especially ESL and higher value-added products, retailers are demanding processors provide long-term fixed price contracts, rather than contracts with fluctuating monthly prices, the witness said. Since processors cannot enter into a fixed purchase price for raw milk with their milk suppliers, hedging allows processors to take on the risk of entering into a fixed sales price for its finished products and cover the risk of raw milk prices rising during the contract period, the witness testified.

The IDFA witness noted several ESL processors formed and quickly implemented risk management plans in anticipation of the change to the average-of mover. The witness noted ESL processors are interested in hedging because of the longer product shelf-life. According to the witness, a risk management plan allows a processor to level out what could otherwise be very different costs of milk products that could have been produced at significantly different times but are being sold to the customer at the same point in time. The witness noted more hedging of HTST products is done by end users, such as foodservice customers, not processors. The witness testified that while risk management is not a stated objective of the AMAA, a stable price, promotion, and growth of the sale of milk are, and the ability to use risk management tools results in stable prices and increased sales.

The witness testified IDFA would support a rolling average longer or shorter than 24 months, but the 12-month implementation lag is essential to allow for hedging. The witness testified Proposal 14 calculates the adjuster from August through July because long term Class I sales contracts between processors and retailers are often negotiated and entered into during the final months of the calendar year. To allow for effective hedging for those contracts, Class I processors would need to know at the time of the contract negotiations what the adjuster would be for the next calendar year. The witness supported Proposal 15 as an acceptable alternative to Proposal 14.

A dairy processor witness representing Schreiber Foods (Schreiber) testified in support of Proposal 14 or 15. Schreiber is a fluid milk processor primarily manufacturing Class II and Class III products, with approximately 5 percent of their products sold as ESL Class I products. The witness testified that over the past 20 years risk management has become a necessary tool for companies with exposure to dairy market volatility. The witness said that only since the change to the average-of mover in 2019 have milk processors had a viable way to manage risk. The witness testified that, in response to requests from foodservice and retail customers to manage Class I costs, Schreiber has offered Class I forward contracts since 2019. Prior to 2019, the witness said creating an effective hedge for Class I milk was challenging as it was unknown whether Class III or Class IV would be the mover. The witness stressed the change to the average-of allows purchasers to use a combination of Class III and Class IV hedge positions, which gives everyone in the supply chain the ability to control their market risk in a way that was not previously possible under the higher-of.

According to the witness, Schreiber hedges price risk for its ESL production through a combination of Class III and IV futures and swaps, and Class I swaps, which typically go out 12 to 18 months. Under Proposal 14, the witness explained, market participants will know the fixed adjuster in advance of the calendar year in order to conduct their hedging analyses for the coming year. If the Class I mover were to revert to the higher-of, the witness testified they would have to either find a different way to hedge or cease offering forward contracts on their ESL products.

A witness representing Nestlé USA (Nestlé) testified in support of Proposal 14. Nestlé is a fluid milk processor operating one plant regulated by the FMMO system. Nestlé procures milk

from cooperatives using contract agreements, the witness testified, and offers its customers an annual fixed price contract for their primary Class I product, an ESL product. The witness stressed the importance of hedging to manage risk and compete in the market against nondairy beverages. The witness stated Nestlé did not use hedging for Class I under the higher-of mover because not knowing which class price would be higher caused uncertainty. The witness testified Nestlé currently hedges all its Class I milk purchases using Classes III and IV futures contracts, and while they have an 18-month outlook they typically hedge Class I milk 6 months out. If USDA returns to the higher-of mover, the witness testified, Nestlé would not be able to continue hedging its Class I milk. The witness testified price volatility has specific impacts on ESL products, as it is challenging for retailers to set different prices due to monthly milk price fluctuations for two identical products sold at the same time but produced in different months.

A witness representing Lamers testified in support of Proposals 14 and 15 stating those proposals would help smooth out the volatility in the pricing of Class III and Class IV.

In its post-hearing brief, IDFA reiterated the importance of hedging to processors for managing price risk and volatility and claimed effective hedging could only be achieved with an average-of mover. IDFA noted that when price uncertainty does not allow fluid milk processors to manage risk 6 to 12 months out, they risk losing shelf space to plant-based and other alternative beverage products that can offer fixed prices. IDFA argued that the choice for a fluid milk processor, especially with respect to ESL products, higher value-added products, and foodservice, is increasingly between offering stable pricing and long-term contracts demanded by customers or losing shelf space to competing beverages. Pricing stability and long-term contracting are facilitated by hedging, according to IDFA. IDFA stressed the growing need for Class I hedging because of increased volatility between the manufacturing classes.

In response to criticism of Proposal 14, IDFA wrote the average-of mover does not create price inversions or lead to milk not being pooled, arguing depooling occurs because of the price relationships between classes, and is caused by negative PPDs and pooling requirements. IDFA also wrote that the average-of mover does not increase price volatility, unlike a higher-of mover which routinely and unpredictably

switches between Class III and Class IV. Finally, IDFA asserted the value of Class I products is not necessarily related to the value of Class III or IV products, thus, the higher-of does not better reflect the value of milk than the average-of mover.

NAJ submitted a post-hearing brief in support of Proposal 14, arguing it better protects long-term producer milk revenue, provides less Class I price volatility, and preserves equitable risk-management opportunities for Class I handlers who are required to participate in the FMMO system. NAJ noted the perception a return to the higher-of mover would produce higher producer Class I revenues is based on highly divergent Class III and IV price movers and an expectation this will continue in the future. However, NAJ argued in its brief this price divergence analysis does not account for composition factor amendments nor potential Class I differential amendments. With revised composition factors, NAJ asserted, a restored manufacturing to Class I price spread would mitigate price inversion and depooling.

A MIG witness testified in support of Proposal 15 seeking to amend the average-of mover from a $0.74 adjuster to a rolling 24-month adjuster with a 12-month lag. The witness claimed the movers contained in Proposals 14 and 15 provide similar base Class I skim milk prices and have similar effects on producer prices. The witness explained in certain years Proposal 15 would return more money to farmers than the higher-of, and even if farmers do not experience the benefits of a high manufacturing price immediately, they will over time through the lagged adjuster. The witness presented data comparing the monthly average base Class I skim milk price calculated under the current mover, the higher-of mover, and Proposal 15 from 2003 to 2022 to show Proposal 15 would be revenue neutral in the long run.

The MIG witness testified Proposal 15 preserves risk-management opportunities for both producers and Class I processors, which is part of orderly marketing. The ability to hedge Class I milk became effective in 2019, followed by the pandemic and regulatory uncertainty as to whether the average-of would remain, and time, resources, and lack of knowledge slowed the adoption of Class I risk-management strategies, the witness testified.

Five MIG member witnesses representing fairlife, HP Hood, Turner Dairy, Shehadey, and Crystal Creamery testified on the importance of hedging Class I milk. The fairlife and HP Hood

witnesses said they primarily process ESL products, which they hedge using CME Class III and IV component and commodity futures. The HP Hood witness stated they do not hedge HTST milk because it is primarily sold through direct store delivery where the standard business practice is monthly pricing. However, ESL products are distributed primarily through grocery warehouses and buyers expect 60 to 90 days' notice for any price changes, the witness said. The HP Hood witness stated the ability to hedge has not changed their ESL pricing strategy but has allowed for fewer price increases. In earlier testimony a witness representing Shamrock, also a MIG member, said they manufacture both HTST and ESL products and hedge milk used in their ESL products.

A processor witness representing Shehadey testified contracts with retailers such as grocery stores use a fixed formula that changes monthly, quarterly, or semi-annually, and are based on FMMO prices. The witness testified Shehadey has only HTST Class I milk products and they do not use any form of risk-management tools to hedge their risk. The Turner Dairy and Crystal Creamery witnesses said their companies primarily process HTST Class I milk products which they currently do not hedge. Both witnesses expressed value in hedging HTST milk sold to foodservice, as foodservice customers prefer to know prices months to years in advance. The fairlife and HP Hood witnesses testified hedging under the higher-of mover was difficult due to price volatility and uncertainty, but the average-of mover allows them to offset the risk. The witnesses also testified it takes time to develop a robust hedging program. The HP Hood witness stated Class I hedging is primarily used by more sophisticated operators, but as Class I hedging becomes more accepted, the market should become more liquid, and more processors will likely use this risk-management tool. The fairlife witness said fairlife typically hedges its ESL Class I products, mainly 0 to 6 months out, but contracts could extend up to 12 months.

A MIG witness explained that the adoption of Proposal 15 would allow for less price volatility throughout the market and support industry growth by stabilizing the cost of milk for retailers and consumers. Hedging, the witness said, is important to offering customers and consumers a more stable price, which could stem the declines in fluid milk as fluid milk competes with many beverages in the market. The fairlife witness testified that price certainty translates to price stability for both the

retailer and the consumer. The HP Hood witness testified the goal of hedging is not to make a higher return, but instead to act as price risk insurance by removing some input price volatility and increasing margin certainty for end-product sales. The Turner Dairy witness testified the average-of mover results in more price stability which is beneficial to the Class I market. The witness said under the higher-of formula, the Class I price went up with every spike in butter, cheese, or powder markets, even though short-term changes in those product prices have no direct effect on the actual Class I market. The witness argued the price spikes necessitated raising prices to cover cost, without a market-based explanation to provide to customers.

The MIG and fairlife witnesses testified in support of the 12-month lagged adjuster contained in Proposal 15, stating it is critical to allow Class I processors to mitigate risk and hedge successfully. Knowing the adjuster 12 months in advance allows companies who hedge to reduce or eliminate basis risk, the witness said, while the 24-month rolling adjuster updates and provides dynamic market signals. The witnesses said Proposal 15 would stabilize prices by moving gradually and make fluid milk products a more reliable and steady purchase for customers. Proposal 15 has no floor or ceiling, as the witness testified MIG members believe floors and ceilings can create price distortions. The witnesses testified a lookback of less than 24 months would create more volatility, while a longer lookback does not transfer market signals well over time. The fairlife witness testified the 12-month lag is necessary to be able to buy futures 12 months out. The 24-month rolling average adjuster allows the system to recognize the difference between Class III and Class IV prices and what the higher-of mover would have been, the witness said, allowing the industry to know definitively what the premium structure is going to look like associated with the adjuster 12 months into the future.

In its post-hearing brief in support of Proposal 15, MIG argued USDA should first assess whether the current average-of formula has resulted in disorderly marketing. MIG wrote the current average-of mover ensures the market has sufficient milk for both fluid and manufacturing uses and there is not disorderly competition for fluid market access. MIG argued a return to the higher-of under Proposal 13 would not provide higher returns to farmers, estimating a minimal impact of a $0.01 to $0.02 per cwt increase in the long

term. However, MIG argued in its brief, the return to the higher-of mover would have significant negative impacts on the Class I market and the entire dairy industry. There is no asymmetrical risk inherent in Proposal 15, MIG argued in its brief, unlike the present average-of mover formula.

According to MIG, the use of risk management developed primarily after the average-of formula was adopted and is likely to grow in the future. MIG stated Class I processors do currently use risk-management tools to hedge ESL products, as this sector has historically utilized more fixed pricing, meaning hedging can be more easily adopted. MIG stated many HTST customers, such as grocery stores, have become accustomed to the monthly fluctuations of pass-through pricing, but HTST customers, such as school lunch programs or USDA feeding programs, would benefit from the increased price certainty that comes with an average-of calculated mover. The industry has not yet had time to widely adopt risk management, MIG reiterated in its brief, and regulatory uncertainty due to this proceeding has caused processors to hesitate further use of risk-management tools.

MIG noted in its brief that even though the AMAA does not specifically provide for hedging, a Class I formula that supports hedging helps serve the enumerated purpose of the AMAA of avoiding unreasonable price fluctuations and reducing milk price volatility. When Class I processors can better manage risk, they can offer more stable prices to customers and consumers, MIG argued in its brief.

In its brief, MIG reiterated hearing testimony that use of an average-of mover best ensures an orderly market, and sufficient supply of milk for fluid use, including the most accurate pricing signals for dairy farmers in a longer, and more appropriate, time. MIG took exception to arguments that the Class I price be used to address price inversions and depooling. Using a California pool example, MIG argued that record evidence shows the Department would have to increase the Class I price an impractical amount to incentivize both manufacturing classes to remain pooled. MIG reiterated many factors cause depooling and negative PPDs, and neither the Class I price nor use of an average-of mover drive those results. Rather, according to MIG, the main drivers of depooling in the months reviewed in testimony were the Class III/IV spread and advanced pricing.

In its brief, MIG argued a return to the higher-of mover will not help Class I handlers in competing for milk supply

as a higher pool obligation detracts from the incentive to service Class I plants. MIG reiterated hearing testimony that the current marketplace is sufficiently served using an average-of formula.

Lamers submitted a post-hearing brief in support of retaining an average-of mover. Lamers argued that because of the small percentage of Class IV use in the market, Class IV prices should not be a main driver for setting the Class I price, as an average-of mover is more representative of the entire manufacturing market. Lamers preferred the lower of the Class III and IV prices should be used when setting the mover as they believe the higher-of artificially raises Class I prices to consumers.

NMPF presented numerous witnesses who testified in opposition to the continuation of the average-of mover, embedded in the summary of their testimony and post-hearing brief presented above. An SMI witness opposed a modified average-of mover, testifying it would result in revenue losses to dairy farmers because the Class I price is paid back to dairy farmers over time and would not compensate dairy farmers that have exited the business.

Select expressed opposition to Proposals 14, 15, and 16 in its post-hearing brief. Select wrote that the higher-of more accurately reflects the value of milk in manufacturing classes, better manages shifts in demand for any one manufactured product, helps reduce milk price volatility, better addresses class price inversions and depooling, and makes it more difficult to draw milk away from Class I uses for manufacturing. Select noted most Class I handlers have not engaged in milk hedging under the average-of mover, and the average-of mover creates and exacerbates opportunistic depooling when Class III and IV prices diverge significantly. Select opined the average-of mover results in market disorder which they believe would continue until the higher-of mover is restored.

In its post-hearing brief, the AFBF opposed Proposals 14 and 15, arguing they do not address the key issue of class price misalignment. The AFBF believes handlers of all sizes can find alternative methods of managing risk under a higher-of mover.

A witness representing Edge testified in support of Proposals 16 and 17. The witness advocated for the adoption of Proposal 16, referred to as a Class III plus proposal, because the Class III price is typically higher than the Class IV milk price. In times of rapidly declining dairy prices brought on by a decrease in demand, the witness said, government recovery efforts typically prioritize more perishable products,

usually Class III. The witness said this would result in higher Class III prices in relation to Class IV, and consequently a base Class I skim price under Proposal 16 approximately equal to the higher-of mover. According to the witness, in situations where the Class IV skim milk price is higher than the Class III skim milk price, any lost revenue would be redistributed to producers over the next three years through the adjuster and would better support dairy farmers during years of lower profitability. The witness testified risk management under Proposal 16 is easy to implement and less expensive due to high liquidity of Class III milk futures, creating more predictable prices and making fluid milk products competitive with plant-based beverages. The witness testified Edge would support a monthly rolling adjuster in place of an annual adjuster.

The Edge witness testified that as Class I utilization rates continue to fall, advanced pricing would continue to cause disorderly marketing conditions such as opportunistic depooling. The witness said advanced prices are antiquated and anti-competitive and their elimination would encourage fluid plants to use risk management. The Edge witness entered data showing the contribution of various factors to negative PPDs. The witness testified that while the change to the average-of mover tended to make PPDs more negative, advanced prices and the spread between Class III and IV influenced pooling decisions, not the adoption of the average-of mover. The witness testified that if the Class I price was announced at the same time as the Class III and Class IV prices, it would prevent a for-profit Class I trading relationship between Class III and Class IV, and the CME group would be more likely to create a Class I futures contract. The witness expressed a strong preference for Proposal 16, which they argue balances producer, processor, and consumer needs and supports risk management which they said was critical for the success of the nation's dairy farmers, particularly fluid sector innovators.

The Edge witness also testified in support of Proposal 17, returning to the higher-of mover without advanced pricing. The witness said the proposal would allow the Class I futures price to be equal to the greater of the Class III futures price and the Class IV futures price. Risk management players would have minimal risk in providing liquidity to Class I hedgers by spreading their position between Class I and the higher-of Class III or IV futures. The witness testified dairy producers may prefer the higher-of mover without advanced

pricing, such as Proposal 17, as it provides real-time maximum income for Class I milk, whereas Proposal 16 is more of a compromise.

The Edge witness stated that since 2010, total fluid milk sales have been steadily declining, adding more instability and difficulties hedging under the higher-of mover. The witness entered data showing how much more risk and costs were involved to hedge under the higher-of mover than the average-of mover. The witness concluded a person hedging with futures contracts under the higher-of mover would have significant difficulties, but hedging under the average-of mover meets effectiveness standards required for hedge accounting.

Nine dairy farmer witnesses, located in Wisconsin, Minnesota, Iowa, and South Dakota, testified in support of Proposals 16 and 17. The dairy farmers opined Proposals 16 and 17 would decrease the frequency of negative PPDs and depooling, and enhance their ability to manage price risk through hedging and other risk-management programs. One witness said using only the Class III skim price to set the Class I skim price is the best option because Class III milk futures carry more liquidity than Class IV and better represent Class I prices. The witnesses testified Proposal 16 would help keep prices steady, benefitting both plants and customers.

In its post-hearing brief, Edge objected to what it believes are goals of some proponents to maximize FMMO Class I handler obligations in order for the additional revenue to be used to offset the negative producer impact of increasing make allowances. Edge argued the Department should consider the following factors in its decision: there have not been any significant shortages in the supply of beverage milk to retail stores; Congress' reason for changing to the average-of mover to facilitate risk management by fluid milk processors which fluid milk processors testified is still relevant; advanced pricing is outdated and no longer necessary to facilitate supply chain coordination but instead facilitates opportunistic depooling; a mover resulting in the highest fluid milk price when the Class IV price substantially exceeds Class III is not in the best interest of consumers; and a mover resulting in the highest fluid milk price when the Class IV price substantially exceeds Class III is not in the best interest of all dairy farmers. Edge argued dairy farmers located where Class I utilization is low may be worse off under a higher-of mover than an

average-of or Class III-based pricing as proposed by Edge.

Edge reiterated Proposal 16 would facilitate risk management by fluid milk manufacturers and large commercial buyers, eliminate outdated advanced pricing and reduce the incidence and magnitude of opportunistic depooling, and best serve both producer and consumer interests.

A witness representing the AFBF testified in support of Proposal 18. The witness said the AFBF believes orderly pooling is the key to orderly marketing, and this is best accomplished by the proper alignment of the four class prices. The witness claimed advanced Class I pricing leads to increased Class III component values, a common factor contributing to negative PPDs. The witness said advanced prices reflect market conditions that are 25 to 40 days older than final prices, which are announced after the close of the month. When a market rally occurs between the announcement of advanced and final prices, the witness said it leads to low or negative PPDs and creates incentives for handlers to depool milk. The witness stated depooling results in elevated component prices not being shared with the pool, further depressing the PPD and undermining the FMMO principle of uniform producer prices. The witness testified advanced pricing may also cause price inversions when manufacturing prices are rising rapidly, making it difficult for Class I handlers to attract adequate milk supplies. The witness entered data showing the effects of advanced pricing on class price alignment from May 2019 to May 2023 under the current average-of, and under Proposals 13, 17, and 18. The witness said this data showed many months under the current average-of mover and Proposal 13 in which the manufacturing class prices exceeded the Class I price, testifying this created disorderly marketing conditions. On the other hand, according to the witness, the data showed elimination of advanced pricing under Proposals 17 and 18 resulted in more consistent alignment of class prices.

The AFBF witness testified the frequency of published commodity data allows handlers to estimate price changes regardless of when prices are announced, and as more products are available on the CME or other exchanges, processors and manufacturers will have information needed to hedge and manage risk. The witness opined that the elimination of advanced pricing would allow for the introduction of Class III and IV spread options, providing an additional way to hedge Class I milk when both are used

in combination. Three dairy farmers testified in support of Proposal 18, stating the proposal would reduce the incentive to depool brought on by low and negative PPDs.

The AFBF witness also testified that while they support the elimination of advanced pricing, they oppose Proposal 16 because it would delink Class I prices from Class IV prices, which they anticipate being higher than Class III in the future due to better export markets. The witness said tying the Class I price to only the Class III price could operate more like a ''lower-of'' formula. The witness stated the AFBF supports Proposal 17 because it is identical to Proposal 18 if combined with Proposal 13.

In its post-hearing brief, the AFBF reiterated its support for a return to the higher-of mover, which it argued would support class price alignment and substantially decrease negative PPDs and depooling.

The AFBF reiterated its hearing testimony that volatility has and continues to increase, contributing to price inversions and rapidly changing markets, resulting in competitive inequalities among dairy farmers. The AFBF said the CME has indicated a willingness to provide contracts catering to industry demand, and the fact that the industry is used to advanced pricing should not be a driving reason for its retention. The AFBF argued disorderly marketing conditions are present when producers do not receive uniform prices because of frequent depooling, and its proposals lead to the realignment of class prices, which encourage consistent pooling and uniform pricing.

An SMI witness, appearing on behalf of NMPF, testified in opposition to elimination of advanced pricing as contained in Proposals 16, 17, and 18. The witness said 90 percent of packaged fluid milk is highly perishable HTST milk which is processed, packaged, distributed, and sold in a relatively short period. The witness said these marketing characteristics require the price of the product to be known at the time of purchase, which advanced pricing of Class I milk provides. According to the witness, most HTST packaged fluid milk is priced monthly by fluid processors to their customers based on monthly FMMO Class I prices. This is materially different from cheese and butter products, the witness said, the prices of which are typically based on CME daily cash prices. According to the witness, advanced pricing enables retailers to set store milk prices at the beginning of a month, allowing the fluid processor to know the price the plant would receive for the packaged fluid

milk prior to the raw milk being processed, packaged, and sold.

The SMI witness also testified that if advanced pricing was eliminated, retailers would not know their fluid milk costs until the end of the month when FMMO Class I prices are announced. This would mean most fluid milk purchased by retailers would be sold during the month without knowing its minimum regulated price which, the witness said, from a retailer's perspective is not orderly marketing. The witness claimed that if there were significant month-to-month increases in the Class I price, retailers could seek price relief from the processor, and ultimately, cooperative suppliers, opening the potential for fluid milk processors in the same marketing area to have inequitable raw milk costs and non-uniform payments to producers. In its post-hearing brief, NMPF reiterated its opposition to the elimination of advanced pricing.

A witness representing IDFA opposed Proposals 16, 17 and 18. The witness objected to the elimination of advanced pricing as it would result in Class I handlers pricing milk products to their customer before knowing the minimum regulated milk price and impact a handler's ability to hedge. In its post-hearing brief, IDFA supported the feature of Proposal 16 that would create a predictable Class I price that could be hedged based off a hedged Class III price plus a known adjuster. However, IDFA maintained its opposition to the elimination of advanced pricing, arguing it is essential for non-hedging Class I handlers to know their milk cost before the start of the month. It is also an important part of planning for fluid milk retail customers to market milk, IDFA stated. IDFA noted in its brief that traditional fluid milk retail customers are not yet using hedging sufficiently to permit a regulatory change eliminating advanced pricing. IDFA reiterated their total opposition to Proposals 17 and 18 in that they would return to a higher-of mover and, according to the brief, eliminate any practical ability to hedge.

A MIG witness testified in opposition to eliminating advanced pricing. The witness said the industry is not yet using hedging sufficiently to permit this regulatory change, as advanced pricing remains critical for the dominant share of the fluid market as retailers expect to know the price in advance. The witness also opposed Proposal 16, which would price Class I milk solely off the Class III price. The witness said the proposal would delink the fluid milk supply and demand from Class IV which MIG believes is critical for balancing. The witness opposed Proposals 17 and 18 as

they limit risk-management opportunities for Class I processors. In its post-hearing brief, MIG reiterated its opposition to any proposal (Proposals 16, 17, and 18) seeking to eliminate advanced pricing, which MIG claimed is critical to Class I processors. MIG further argued that eliminating advanced pricing would negatively impact those market segments. With respect to Proposal 16, MIG expressed concern with pricing Class I milk solely off Class III prices as it would be a significant departure from the current practice and completely divorce fluid milk supply and demand from the Class IV market. According to MIG, the record contains testimony from cooperatives that Class IV remains the ultimate balancing utilization.

In testimony and in its post-hearing brief, MIG opposed a return to the higher-of mover under Proposals 13, 17, and 18 as it would severely limit risk-management opportunities. MIG argued in its brief that a return to the higher-of is unnecessary and not supported by the facts as the industry has acknowledged the higher-of does not work. Dairy farmers' concerns are not about the average-of, MIG asserted, but rather the fixed $0.74 addition. USDA should support moving the industry forward, not revert to an outdated policy because it is familiar, MIG stated.

MIG argued NMPF introduced no evidence the average-of mover hinders a sufficient supply of milk for fluid uses. Rather, MIG wrote, a return to the higher-of mover would result in disorderly marketing as larger spreads between Classes III and IV would lead to higher prices under the higher-of mover and raise the uniform price, incentivizing the lower-priced manufacturing milk to remain pooled. In that situation, MIG argued, FMMOs should not be raising the uniform price paid out to the lower-priced manufacturing class, thus, encouraging it to remain pooled. This compensation, argued MIG, overvalues the lower-priced manufacturing milk in the marketplace and incentivizes milk to move to the lower manufacturing class instead of to a higher performing class. According to MIG, the average-of mover would better move milk between the manufacturing classes as the market needs. MIG argued the FMMOs are designed to ensure processors have sufficient milk supplies for fluid use, but FMMOs should not be drawing milk away from Class III or IV when a manufacturing use would be the highest and best value for the milk. According to MIG, Class I does not need more milk, and FMMOs should not be disrupting the market to pull milk for fluid

utilization. MIG argued in its brief that revenue neutrality is not a valid policy consideration without evidence to establish revenue neutrality is necessary to ensure a sufficient supply of fluid milk.

A witness representing Lamers testified in opposition to the elimination of advanced pricing in Proposals 16, 17, and 18. The witness stated Class I handlers need to know prices in advance so they can set wholesale pricing with their retail customers.

In its post-hearing brief, Select opposed the elimination of advanced pricing set forth in Proposals 17 and 18, arguing that testimony at the hearing made clear that the majority of producers prefer using the higher-of, and the majority of handlers prefer to maintain advanced pricing which Select believes is in the best interest of stability in the Class I market.

Class I and Class II Differentials

Numerous witnesses appeared on behalf of NMPF testifying in support of increasing the Class I differentials as provided for in Proposal 19. Witness testimony centered around the themes of increased hauling costs, changes in milk supply and demand locations, changes in supply patterns resulting in longer hauls, and insufficient over-order premiums to cover the full cost of servicing the Class I market. The witnesses said the outdated assumptions embedded in the current Class I differentials threaten the willingness of milk suppliers to serve the Class I market.

An NMPF witness argued current differentials are antiquated, since, other than the three southeast FMMOs, they have not been updated in almost 25 years. In that time, they said, fuel costs and hauling distances have increased due to changes in supply and demand locations. The witness stressed over-order premiums should not be considered an effective substitute for FMMO prices because they are very difficult to obtain and maintain at levels adequate to cover the cost of servicing the Class I market. The witness argued inadequate Class I differentials contribute to price inversions and incentives to depool, which further jeopardize the availability of milk to meet Class I demand.

The NMPF witness described the methodology used to arrive at the proposed differential levels. According to the witness, NMPF requested an update of the U.S. Dairy Sector Simulator Model (USDSS) which was used during Order Reform as a basis for the differential levels adopted January 1, 2000.

The USDSS model owners testified on the USDSS methodology, the updated data and parameters, and explained the results. They explained the USDSS model evaluates the geographic value of milk at fluid milk processing plants across the U.S by finding the lowest cost solution of assembling milk at farms and delivering it to plants. They said the model accounts for approximately 90 percent of the U.S. dairy processing and manufacturing plant capacity, and considers such factors as milk supply locations, transportation costs (both variable and fixed) associated with raw milk assembly, final and intermediate product distribution, per capita demand by county population, and road weight limits. In the model, plant capacity, products produced, and milk components demanded at each plant are constrained by a variety of government and private sources. The resulting values, said the witnesses, represent the value of an additional load of milk at a specific plant location (otherwise known as the ''marginal value'').

The witnesses said two sets of USDSS results were provided to NMPF, May and October 2021, to provide marginal values for both flush and deficit months. According to the witnesses, the results suggest considerable differences between the values of milk at fluid plants derived from spatial economic modeling and current Class I differential values, with differences as large as $3.00 per cwt in some locations. The witnesses attributed these differences to changes in the location of milk production, the composition of dairy product demand, changes in the location of dairy product demand from regional population shifts, and the cost of transportation. Both witnesses discussed how modeling, even though complex, is a simplification of reality and that there may be unaccounted factors in some areas that would justify deviations from the model results, including local traffic congestion, geography, infrastructure restrictions, and price alignment across orders. The witnesses said the model does not account for other factors, such as existing business relationships and FMMO regulations, because they could cause a departure from a market efficient solution. Lastly, the witnesses noted the USDSS does not produce a base differential value; it merely provides the additional value needed to move milk to a particular location.

While NMPF cooperative member witnesses testified on how they used the USDSS results to arrive at the proposed differentials, NMPF witnesses stated they followed the same iterative process applied during Order Reform, starting

with USDSS results and adjusting for milk movements, plant locations and historic price relationships.

One witness said NMPF started with a base differential assumption of $1.60 per cwt, as currently contained in the Class I differentials. The witness said the costs embedded in the base differential (Grade A maintenance, balancing, and a competitive factor) are still applicable and those costs have not decreased over the past 25 years. The witness said the base differential should also serve to limit class price inversions, incentivize Class I milk deliveries, and ensure class price alignment. To accomplish these goals, the witness said that in some parts of the country the base differential is recommended to increase to $2.20 per cwt.

One NMPF witness testified regarding the dairy farmer cost of maintaining Grade A status. The witness said that in order to participate in the FMMO program, dairy farmers incur costs associated with obtaining and maintaining Grade A licenses. The witness was of the opinion partial cost reimbursement for maintaining a Grade A license, which currently represent $0.40 per cwt in the base differential, should continue to be provided. The witness detailed standards for maintaining Grade A status, which include various infrastructure maintenance and sanitation requirements, and estimated a total current cost of $1.30 per cwt to meet those requirements.

A series of NMPF witnesses testified on the regional considerations factored into the proposed Class I differentials contained in Proposal 19. During their testimony they also touched on balancing costs faced by NMPF cooperative members and the continued need to include a competitive factor in the base differential. One witness described how the average of the May and October 2021 results was used as a starting point. From there, NMPF formed regional committees to evaluate the USDSS average results and use their local market knowledge to derive the final proposed differential values. According to the witness, a series of 19 anchor cities were selected for their proximity near the border of where two regions abutted. The regional committees used these anchor cities as common starting points to design a final Class I differential surface that ensured price alignment between orders. Each committee looked at current price relationships between plant locations and consumer demand areas, compared those to the USDSS averages, and designed a Class I differential structure that accounted for factors NMPF

members thought were not adequately addressed in the USDSS results.

Northeast

A DFA witness testifying on behalf of NMPF discussed the changes in the Northeast marketing area, including increased hauling costs, changes in the milk production and location of farm and fluid processing plants, and an overall increase in production costs. The witness said milk production in 11 of the 12 northeast states declined from 2000 to 2022, except for New York which saw a 31.4 percent increase, resulting in a small overall increase in the region's milk production of 2.2 percent. During this time, the witness said the resident population increased by 9.1 percent. The witness noted the geographic shift in where milk is processed due to the closure of fluid plants in urban areas since 2000. The witness surmised local milk supplies in the northeast are used to meet increasing Class II and Class III needs, necessitating milk to travel farther distances to meet fluid demand. The witness estimated transportation costs paid by producers in the region have increased $0.70 per cwt.

An Agri-Mark witness also testified regarding the changing marketing conditions in the northeast region and described some of the proposed differential differences from the USDSS model. The witness opined that if the USDSS averages were adopted for Maine, it would incent producers in Maine to service Massachusetts, instead of remaining available to meet local demand. Therefore, the witness said NMPF is proposing to flatten the differentials in Maine to maintain current competitive relationships. NMPF is also proposing lower differentials in northern Vermont and New York in order to incent milk movements south and east. The witness said these changes from the USDSS average results are needed to preserve current milk movements and to maintain competitive relationships.

Mid-Atlantic

An MDVA witness representing NMPF testified regarding the proposed differentials in the Mid-Atlantic region. The witness said MDVA operates two balancing plants in the region that help balance the market's reserves in both the Northeast and Appalachian FMMOs. According to the witness, there are large seasonal swings in milk delivered to those balancing plants, which result in significant cost to the cooperative and its members. The witness was of the opinion the base Class I differential should provide some balancing cost

reimbursement to its members through its distribution through the marketwide pool. Transportation costs have also increased significantly, the witness said, to a point where Class I differentials are less effective in attracting milk from reserve supply areas to Class I plants. In order to meet fluid demand, the witness said cooperative members must pay for the additional cost through milk check deductions without any additional compensation through the Class I differential.

The MDVA witness compared current and USDSS average values for multiple plant locations in the region. According to the witness, the regional committee focused on the need to cover additional transportation costs of servicing the fluid market and maintaining current price relationships as principles when determining deviations from the USDSS average results. One example cited two plants in Landover, Maryland and Frederick, Maryland, located approximately 55 miles apart with a current difference in differential values of $0.10. The witness said the USDSS average would have resulted in a $0.35 difference and created an artificial regulated cost advantage for the lower zoned plant in Frederick, Maryland. Another example was in the southeastern region where two Virginia plants located 15 miles apart and currently in the same differential zone would have seen a $0.10 differential difference under the USDSS model average scenario. In this case, said the witness, the committee decided to propose the same differential value for the two plants in order to preserve their competitive relationship.

Southeast

A DFA witness representing NMPF testified on the proposed differentials in the southeast region. Similar to other witnesses, their testimony centered on the decline in dairy farmers and the closure of fluid processing plants which necessitate longer milk hauls at a greater expense to dairy farmers, particularly cooperative members. The witness spoke to the unique marketing conditions in the southeast region, with a growing population, local fluid demand, and a significant milk supply deficit requiring supplemental milk supplies to be acquired from outside the region. The witness said the supplemental milk supplies are obtained at great expense to DFA cooperative members. The witness stated it is typical for supplemental loads to travel between 500–650 miles or more, and while the transportation credits in the Southeast FMMO provide partial reimbursement, the fund is

inadequate to cover the full cost. The witness said the proposed differentials contained in Proposal 19 would assist in covering transportation costs and support dairy farmers who supply the region.

Florida

An SMI witness representing NMPF testified on the proposed differential for the Florida FMMO. The witness said there is an inadequate milk supply available in Florida to meet its Class I needs, necessitating significant volumes of milk deliveries from outside the marketing area, notably Georgia. According to the witness, Florida milk production is quickly shrinking, declining more than 10.9 percent in 2022, and necessitating more than 24 percent of its milk needs to come from other states.

The witness discussed Florida's significant population increase and high Class I utilization, which has averaged greater than 82 percent since 2000. The witness described significant seasonal swings in fluid milk needs and SMI's efforts to balance those needs through purchasing additional milk tankers, marketing milk to non-pool plants at below FMMO values when needed and buying supplemental loads at above FMMO values during other times of the year. The witness said weather and the seasonal population influx also complicate the region's milk balancing efforts. These dynamics make supplying the Florida region particularly expensive, estimating that SMI balancing costs for the first half of 2023 were $1.33 per cwt.

The SMI witness testified the proposed Florida differentials maintain the historical differential slope while more adequately reimbursing for transportation costs, which the witness estimated has more than doubled in the past 20 years, from $2.31 in 2002 to $5.98 in May 2023. The witness said the Florida differentials contained in Proposal 19 are similar to the averages of the May and October 2021 USDSS results but were adjusted to preserve current competitive relationships. As a result, the witness concluded the region would be assured an adequate supply of milk for fluid use and fluid milk buyers would be better assured of equal raw product costs.

The SMI witness was of the opinion the differentials should not be adjusted to reflect recently enacted Distributing Plant Delivery Credits in the Florida FMMO, as both are needed to ensure adequate supplies of fluid milk for the region.

Southeast/Southwest

A Lone Star witness representing NMPF testified regarding the differentials between the southwest and southeast regions. The witness said the eastern portion of the Southwest FMMO and the three southeastern FMMOs are milk deficit regions. The witness emphasized the differential recommendations are designed to provide proper financial incentives through a steeper differential slope to move milk into and within those regions. The witness said other factors considered included keeping current city to city price relationships as well as competitive relationships between plants often clustered around metropolitan areas. While differentials in some areas were increased relative to the USDSS average to reflect NMPF member knowledge of milk movements and related transportation costs in the region, other differentials were lowered. The witness noted NMPF members believe the USDSS overestimated balancing costs for parts of Virginia and the Carolinas, and subsequently is proposing muted differential increases for those regions.

Regarding Florida, the witness said the NMPF members accepted the USDSS model average output of $7.90 as the differential for Miami, Florida. They then worked up through the state with a priority of maintaining competitive relationships between plants. The only deviation the witness noted was Myakka City, Florida, whose current differential is $0.40 higher than plants in the Tampa-Orlando corridor. The witness was of the opinion the spread was too large, and consequently Proposal 19 recommends the spread be reduced to $0.20.

In the southwest region, the Lone Star witness said, milk must move significant distances from the supply region in the Texas panhandle and eastern New Mexico to the demand centers in east Texas. The witness said milk routinely travels anywhere from 400–650 miles to service the fluid needs of the state and stressed the current differentials in the region are inadequate in covering transportation costs for these routine milk movements. Consequently, Proposal 19 generally contains higher proposed differentials than the USDSS model average, with greater increases moving northwest to southeast to incent milk to move where needed. The witness added there is a single differential level proposed for New Mexico, reflecting what the witness said was primarily a captive in-state market for milk.

Mideast

A DFA witness representing NMPF testified in detail on hauling assembly costs associated with the Mideast marketing area. The witness described the region's principal supply areas as central and northeast Michigan, northern Indiana and northwestern Ohio, and fluid demand areas centering around the region's large cities of Detroit, Grand Rapids, Indianapolis, Columbus, and Pittsburgh. The fluid plants compete for a milk supply with the numerous small to medium-sized cheese plants in northeast Ohio, two large cheese plants in central and western Michigan and one large cheese plant in western Pennsylvania, explained the witness.

The DFA witness testified the Mideast region has increased milk production 20 percent over the last 23 years, while simultaneously seeing a 66 percent reduction in dairy farms. The region's Class I utilization was 37 percent in 2022, supplied by approximately 33 distributing plants, down from 57 in 2000. The consolidation in both the supply and demand sectors, increased hauling distances to fluid plants, along with a robust manufacturing sector, has created challenges in encouraging milk to meet fluid demand.

The DFA witness estimated that Ohio assembly and delivery costs have increased approximately 69 percent from 2006 to 2023, attributing most of the increase to fuel, labor and equipment costs. The witness said current differentials do not provide enough financial incentive to move milk from supply regions to Class I plants. As a result, said the witness, the cost of supplying fluid milk needs is largely borne by cooperatives and their members.

For the Mideast area, the DFA witness said the committee concentrated on a selected group of larger cities in the region to analyze the relative value differences. The overall objective was to determine the value needed to encourage milk to move from milk supply areas in the north and west to areas of demand. The committee started with Chicago, Illinois, and determined that even though no fluid plants operated in the Chicago region, its differential should align with prices of locations that supply packaged milk, which are Grand Rapids, Michigan, Cedarburg Wisconsin, Rockford, Illinois, and Dubuque, Iowa. The committee ultimately determined a $3.10 differential appropriate for Chicago (Cook County). From there, the witness reviewed a series of city pairs and provided justification for why the

proposed differentials were adjusted from the USDSS model average. Reasons given for the changes centered on distance from larger population centers and/or milk supply areas and providing enough financial incentive, in the committee's opinion, to encourage milk to move where needed. The witness mentioned another consideration was the willingness of milk haulers to deliver, referring to resistance of milk haulers to make the long hauls needed to deliver milk to central Ohio, for example.

The DFA witness also detailed considerations for proposed differentials in western Pennsylvania, centering around plants in the Pittsburgh area, and plants in southwest Ohio and eastern Indiana. They said differentials were adjusted in those areas to account for what the committee believed were current competitive relationships. The witness said that, ultimately, the committee recommended more slope than the USDSS model by reducing the differential increases in the milk surplus areas of Michigan and increasing the slope when moving to the south and east.

Another DFA witness spoke to increased hauling costs in the Mideast area. The witness said that as the number of dairy farms in the area has declined, so has the number of available milk haulers. Compounding the issue is competition with other industries who also rely on commercial haulers. As a result, milk hauling rates have increased as the fewer number of milk haulers must travel farther distances to assemble and deliver milk loads. The witness presented data on various factors that contribute to overall transportation costs, such as wages, diesel fuel prices, and equipment purchase costs.

A witness from the Michigan Milk Producers Association (MMPA) testified on the unique Michigan marketing conditions that resulted in deviations from the USDSS model output. The witness said Michigan has experienced significant milk production growth, accounting for 68 percent of the region's growth. Michigan milk production serves as a reserve supply for states south and east, which are considerably longer routes than when the differentials were adopted in 2000, said the witness. They testified current differentials are no longer adequate to cover current transportation costs and highlighted how the large flat differential zone in Michigan, covering 525 miles, makes it difficult to encourage milk to travel farther distances to supply fluid demand instead of satisfying local manufacturing plant demand. Therefore, NMPF

proposed more, smaller pricing zones within the state to better reflect the cost to move milk. The witness estimated MMPA's hauling cost for transporting milk from mid-Michigan to eastern Ohio, approximately 287 miles, was $1.06 per cwt per 100 miles.

The MMPA witness testified that is has been more difficult to obtain over order premiums to cover increased costs because national retailers with more bargaining power have replaced local independent stores. Consequently, the witness said, national retailers with a wider geographic footprint and higher milk volume needs have put downward pressure on premiums. The witness concluded that increasing Class I differentials to better reflect the cost of supplying the fluid market would be more equitable than an increasing reliance on a dairy farmer's ability to negotiate over-order premiums in a magnitude large enough to fully cover costs.

Upper Midwest

A Prairie Farms witness representing NMPF explained the proposed Minnesota and Wisconsin differentials. The witness said the USDSS results had too much slope between the states that would have created too much financial incentive to move milk out of Minnesota, creating difficulties for Minnesota plants to compete for a milk supply. Consequently, the witness said NMPF is proposing fewer differential zones in the Upper Midwest region to ensure a local supply could be maintained. Further, in that region, NMPF was cognizant to propose differential levels that would minimize negative impacts on producer blend prices. This witness opined the differentials contained in Proposal 19 would not fully cover the cost of moving milk the long distances required to service the fluid market in regions where they operate. However, they said, the proposed differentials would encourage the availability of adequate milk supplies to support milk demand in distant markets.

Central

The Prairie Farms witness also testified on the proposed Class I differentials in the Illinois, Iowa, Missouri, and Nebraska areas. The witness said that in the last 20 years the cooperative has become more dependent on supplemental milk supplies to serve markets in Illinois and Missouri, while Iowa has lost milk processing capacity in the eastern half of the state due to plant closures. In addition, the decline of milk production in southeast Iowa has made it more

difficult for Prairie Farms to stair step milk into the Appalachian and Southeast FMMOs to meets its supplemental milk needs. All these factors have contributed to changes in the region's milk movements and increased producer hauling costs, stressed the witness. The witness reviewed several equidistant Prairie Farms hauling routes and highlighted the disparity in differential gains. For example, some routes traveling approximately 300 miles may see a differential gain of $0.90, while other routes traveling a similar distance may only see a gain of $0.25. The witness stated the region's differentials need to be adjusted to remove some of the disparity and provide adequate financial incentive to supply fluid plants located in the south and east. The Prairie Farms witness said their cost to move milk to its four southern and southeastern fluid plants was approximately $5.25 to $5.50 per loaded mile, and costs to supply plants in central Illinois is similar.

A DFA witness also testified to differentials proposed for the Central FMMO region. The witness echoed other testimony regarding decreased farm numbers, longer distances traveled, and increased hauling expenses. The witness estimated DFA hauling costs in the region have increased 151 percent from 2005 to 2022. The witness spoke to the proposed differential increases in the region. Proposal 19 would increase the current differential values by $1.35 in Kansas City, $1.15 in Omaha and $1.65 in Wichita. The witness elaborated that the higher increase in Wichita reflects the area's lack of an adequate local milk supply. More specifically, the witness stated that only 27 percent of Wichita's demand is delivered from within a 150-mile radius, while in Kansas City and Omaha, 47 percent and 55 percent, respectively, comes from within 150 miles.

Numerous NMPF witnesses testified about the proposed Colorado differentials. One DFA witness testified the USDSS model overestimated the amount of milk in Colorado available to meet the State's fluid needs because of private contractual relationships with manufacturing plants. Consequently, NMPF recommends deviations from the model to recognize current competitive relationships, said the witness. The witness also discussed population, milk production, and fluid demand similarities between Denver and other regional cities to justify increasing the Denver area differentials to more closely align with differentials in those cities. The witness said adoption of the USDSS model output for Colorado, without adjustments, when combined with other

changes that could result from this rulemaking would result in significant, unsustainable decreases in producer pay prices and, thus, blend price equity must be considered when making differential adjustments.

Other DFA witnesses spoke in more detail on the potential producer price impact on Colorado dairy farmers. The witnesses testified hauling and feed costs in Colorado are higher than other parts of the region, which they believe were not properly reflected in the USDSS model. One witness said producer prices in Colorado currently exceed those of the FMMO's base zone, however, if the USDSS model average were adopted, it would result in producer blend prices lower than prices announced at the base zone, causing significant financial harm to Colorado dairy farmers.

Arizona

A United Dairymen of Arizona (UDA) witness representing NMPF testified in support of Proposal 19. UDA is a dairy farmer-owned cooperative association, with 36 cooperative members and a manufacturing plant located in Arizona. The witness cited many factors, such as weather, climate, transportation, fuel, and increased costs of producing Grade A milk as challenges for Arizona dairy farmers. The witness stressed the costs of maintaining Grade A status in the State exceeded $2.35 per cwt. According to the UDA witness, the proposed Arizona Class I differentials: generally follow the USDSS model, with deviations made to reflect local market conditions; maintain current price relationships between handlers within Arizona and the surrounding states; and establish a smooth differential transition from surrounding areas.

The witness noted UDA operates a plant in Tempe, Arizona, that serves as a balancing plant for the market. The witness said the cost of operating the plant does increase in the summer months as less milk volume is run through the plant when milk supplies are lower.

California

A CDI witness testified on the process for determining the proposed California differentials. The witness said the goal of the California differentials was to recognize regional cost drivers and local market conditions unique to servicing California urban areas, and to maintain price relationships with surrounding states. In the witness' opinion, the USDSS model did not account for the impact on producer prices, which could alter pool stability and incentives to supply the Class I market, and region-

specific cost drivers such as geography or traffic. Those considerations form the basis for the deviations from the USDSS model output NMPF proposed.

The CDI witness provided an overview of the similarities between the California Central Valley and Upper Midwest milksheds to justify the position that the lowest differential in both regions should remain similar. For that reason, said the witness, NMPF proposes a minimum differential zone of $2.50 in California, which is similar to the lowest Upper Midwest differential zone of $2.55. The witness also discussed dwindling milk supplies, increased population, pervasive traffic congestion, and the closure of manufacturing plants in southern California as reasons for making adjustments. The witness described changes made in three California regions (Central Valley, Bay Area, and Southern California) to provide incentives for dairy farmers to serve the Class I market in the urban areas.

A DFA witness also testified on California and Northern Nevada proposed Class I differentials. The witness advocated the maintenance of competitive equity between Class I and manufacturing plants in northern Nevada and California counties. The witness was of the opinion the USDSS model fell short in adequately capturing the cost of producing milk in California. The witness said the current 10-cent difference in zones is not sufficient as it does not reflect the actual movements of milk or unique California State regulations, taxes, geography, and high milk production costs. The witness stated the current differentials do not cover the hauling costs in a state with high gas prices, heavy traffic, and road weight limits. The witness supported testimony from the CDI witness justifying the proposed California differentials. The DFA witness also expressed northern Nevada counties have a historic competitive relationship with northern California, which should be preserved. The witness noted that Proposal 19 recognizes this dynamic by proposing a $2.90 differential for the region.

Pacific Northwest

A witness representing Northwest Dairy Association (NDA) testified on behalf of NMPF regarding the proposed differentials in the Pacific Northwest (PNW) region, which includes the States of Washington, Oregon, Idaho and Montana. NDA is a dairy farmer-owned cooperative that markets the milk of approximately 295 dairy farmers in Washington, Oregon, Idaho, and Montana, and conducts all processing

and marketing operations through the wholly owned subsidiary Darigold. The witness described regional competitiveness at the farm level, ensuring incentives to service Class I markets, and geographic and population-influenced cost factors were the primary reasons the proposed differentials deviate from the USDSS averages. The witness was of the opinion proposed differentials in the PNW FMMO urban areas should mirror those of the Central FMMO, as the urban areas of the two regions operate similarly. To ensure competitive equity and the balancing needs of distinct areas within the region, the witness said Proposal 19 recommends fewer pricing zones than produced by the USDSS model.

The NDA witness also described market changes similar to those of other witnesses: declining milk production, increased population, longer haul distances, and increased transportation costs. The witness estimated NDA transportation costs for servicing PNW Class I plants has increased $1.10 per cwt in the last 15 years.

In regard to the unregulated areas of the Northwest, the witness used King County, Washington, as the base at $3.00 per cwt, and kept the zones the same as they currently exist. In counties with little to no milk production, the differential was reduced to as low as $2.20 in Idaho. For areas with higher milk production, the differentials are proposed at $2.55, reflecting the same level of differentials in South Dakota.

In its post-hearing brief, NMPF emphasized adoption of Proposal 19 was necessary to ensure Class I differentials would be more reflective of the current costs of supplying the Class I market. NMPF maintained that the proposal would result in Class I differentials below actual costs, keeping with the FMMO principle of minimum pricing. NMPF reiterated testimony given at the hearing regarding the continued relevancy of the costs associated with the base differential, and stressed the costs have increased since it was first adopted in 2000. NMPF reviewed its own testimony at the hearing on what it believes were the appropriate regional considerations used to propose deviations from the USDSS results. According to NMPF, adoption of Proposal 19 would only raise the regulated cost of Class I milk under FMMOs by slightly less than 8 percent.

NMPF reiterated the importance of Class I prices remaining the highest priced class to ensure producers move surplus milk to deficit regions to meet Class I demand. Without such pricing

hierarchy, NMPF stated, milk in the higher-valued use class would not be pooled and it would result in non-uniform prices to producers.

A witness representing the AFBF testified in support of Proposal 19. The witness concurred with NMPF testimony on the increased costs of servicing the market since the differentials were adopted in 2000. In offering support for the differential adjustments, the witness said the purpose of the USDSS model was to mimic an ideal market solution, so it would be expected that actual market costs are higher. The witness mentioned that given the seasonality of milk demand, it could be considered more appropriate to start with the USDSS October 2021 results, rather than the average. In its post-hearing brief, the AFBF stressed that regulated Class I differentials provide for long-term stability; something that cannot be assured if a larger portion of milk prices is negotiated through over-order premiums.

A witness representing IDFA testified in opposition to Proposal 19. The witness was of the opinion NMPF did not use a consistent methodology when determining differential level adjustments from the USDSS model results. Additionally, stressed the witness, some of the factors NMPF considered are not relevant and/or are unevenly applied (dairy farm production costs, private business relationships, blend price impacts, and regional dairy farm competitiveness), or were already factored into the USDSS model (transportation costs and maintaining handler equity). The witness was of the opinion that if milk suppliers and cooperatives experienced transportation costs higher than those provided for in the differentials, the additional cost reimbursement should be negotiated through over-order premiums with milk buyers. The witness also took issue with what they deemed an undefined base differential, which was proposed at $1.60 in some areas and $2.20 in other areas, with what they saw as no cost justification for the difference.

The IDFA witness argued the purpose of Class I differentials is to bring forth an adequate supply of milk for fluid use. According to the witness, with an FMMO Class I utilization of 27 percent, the current milk supply is more than adequate to serve Class I needs and there is no justification for increasing Class I differentials. The IDFA witness cited a recent retail milk demand study that found milk demand is elastic and, thus, the quantity demanded is sensitive to price changes. The witness argued

any increase in price would not only hurt Class I sales, but also increase government purchase costs for milk used in nutrition and feeding programs. The witness stressed retail fluid milk sales have been declining and USDA should not hasten the decline by increasing Class I prices. The witness also added that eliminating or reducing the depooling of milk should not be a consideration when evaluating Class I differential levels. The witness said depooling is a necessary tool for manufacturing handlers when the Class III or Class IV price exceeds the blend price. They estimated that in some FMMO areas the Class I differential would have to increase to $41.32 per cwt in order to disincentivize depooling.

The IDFA witness was of the opinion that if USDA recommends differential increases, they should not be increased in the three southeastern FMMOs as those provisions already require fluid milk handlers to pay transportation credits and distributing plant delivery credit assessments to encourage producers to service Class I demand in those deficit markets. The witness estimated those assessments already account for approximately 42 to 46 percent of the differential increases contained in Proposal 19.

The IDFA witness also argued the $0.40 portion of the base differential attributed to maintaining Grade A status is no longer relevant given over 99 percent of all milk currently produced is Grade A. Consequently, said the witness, there is no longer a need to incentivize farms to become Grade A in order to service the Class I market and the base differential should be lowered to $1.20 per cwt.

Two witnesses representing IDFA, Saputo and Plains Dairy, testified in opposition to Proposal 19 and offered support for the arguments put forth by the IDFA witness. The Saputo witness said increasing fluid milk prices may reduce the retail price spread between fluid milk and plant-based products, further depress fluid milk sales, and ultimately force fluid plants to switch from HTST to ESL processing. The witness speculated a further decline in HTST facilities will force cultured products to be made elsewhere and increase costs to consumers. In regard to obtaining milk supplies, the witness said Saputo pays over-order premiums when necessary. The witness also opposed any increases in minimum regulated prices on the grounds that nonuniform increases would put some of its plants at a cost disadvantage. The Plains Dairy witness stated the increase from the model average results would

impact consumer prices by $0.07 per gallon. Plains Dairy is a fluid milk processing facility in Texas.

A witness representing MIG also testified in opposition to Proposal 19 for many of the same reasons articulated by the IDFA witness. The MIG witness said NMPF failed to cost-justify any elements of the base differential, either at the $1.60 or $2.20 level, to support why it should be maintained. In echoing IDFA's arguments, the MIG witness also objected to NMPF's use of the USDSS averages as a starting point. As the FMMO system provides for minimum prices, the witness was of the opinion any evaluation of differential changes should start with the USDSS May model results, which represent the flush season for milk production. The witness said Proposal 19's problems are compounded because NMPF failed to use a consistent set of principles to justify its deviations from the USDSS results. In addition, many of the factors used to justify deviations, the witness said, were already factors considered by the model and, thus, are being double counted.

The MIG witness characterized the NMPF deviations as substantial and presented a series of maps to visualize the magnitude of the disparate changes. The witness also pointed to areas where price changes are more dramatic between neighboring counties, and suggested such price disparities could create incentives for disorderly marketing. The witness deemed the Proposal 19 differentials to be significantly different from current differentials, and argued the increases are being proposed despite a lack of evidence from NMPF that there is a shortage of milk available to meet Class I demand. Class I differentials should reflect the minimum cost of serving Class I milk, stressed the witness. If there are additional transportation costs not provided for under the current differential as alleged by NMPF, the witness testified, those would be reflected in negotiated over-order premiums in the market. Instead, many areas of the country have no over-order premiums, which the MIG witness interpreted as an indication that FMMO prices are not minimums, but price enhancing. Similar to the IDFA witness, the MIG witness was of the opinion no changes should be made to the differentials in the three southeastern FMMOs until the full impact of the recent amendments to the transportation credits and establishment of the distributing plant delivery credits are known.

Three witnesses representing Organic Valley testified in opposition to

Proposal 19. Organic Valley consists of 1,600 farmer-owners who produce certified organic milk, three dairy manufacturing facilities which make Class III and IV products and utilizes a network of co-packers to process and distribute Class I products. The witnesses opposed the NMPF proposed differentials as they would increase Organic Valley's obligation to FMMO marketwide pools.

The Organic Valley witnesses described the differences between the organic and conventional milk markets (both at the producer and processors level). They were of the opinion Proposal 19 fails to account for these differences and would result in inefficient milk movements if adopted. The witnesses countered arguments that the conventional market balances the organic market, claiming only around 2 percent of organic milk finds its way into conventional products.

A witness from Aurora testified in opposition to Proposal 19. Aurora is a vertically integrated organic milk supplier with four organic dairy farms located in Colorado and Texas. The witness was of the opinion no justification exists to increase Class I differentials as the areas surrounding the Aurora plants have adequate organic milk supplies, something that was not accounted for in the USDSS model. The witness explained the organic milk market and argued its structural differences from the conventional milk market make any change to the Class I differentials as applied to organic milk unwarranted. Similar arguments were made by a MIG witness on behalf of Danone and Crystal Creamery.

A witness for Maple Hill Creamery (Maple Hill) testified in opposition to Proposal 19. Maple Hill purchases grass-fed organic milk for processing and national distribution but does not own a fluid milk plant. The witness opposed the proposed Class I differentials and estimated their Class I marketwide pool obligation could increase up to 80 percent as a result. The witness made arguments similar to other organic processors and concluded that increasing Class I differentials would result in a choice between paying a lower organic fixed price to its dairy farm suppliers and jeopardizing supply, or raising retail prices and jeopardizing sales.

A witness representing Shamrock, a member of MIG, testified in opposition to Proposal 19. The witness said adoption of Proposal 19 would increase their raw milk costs anywhere from 29 to 62 percent. The witness testified Shamrock pays over-order premiums which they believe cover any additional costs associated with servicing their plants in excess of the Class I differential value. The witness noted an inconsistency in NMPF methodology, as the differential for their Virginia plant is proposed at the USDSS model average, while the differential at their Arizona plant is $0.65 greater than the average.

A witness for AE, a MIG member, also testified in opposition to Proposal 19. The witness was of the opinion NMPF had not provided justification for the Class I differential increases. They specifically objected to the Class I differential changes that would, in the witness' opinion, give its nearest competitor a $0.15 greater advantage than currently exists.

A MIG member witness for HP Hood testified in opposition to Proposal 19. HP Hood also operates four standalone Class II plants in the northeast. Similar to the AE witness, the HP Hood witness testified the proposed Class I differentials would create competitive disadvantages for their plants in relation to nearby cooperative owned plants. The witness criticized what they believe was the lack of uniformity used by NMPF in developing differentials that deviated from USDSS results. The witness said there are ample milk supplies to meet Class I needs and any increase in the Class I price would only serve to decrease fluid milk sales.

A witness from Turner Dairy, a MIG member, testified in opposition of Proposal 19. The witness objected to the continued relevance of the three base differential components. The witness said Turner Dairy has not had difficulty finding adequate milk supplies through its independent dairy farm supply. The witness said any Class I differential increases would be paid into the FMMO marketwide pool, not to its direct suppliers. The witness said this would make it harder to compete for dairy farm suppliers, particularly with competitors in the unregulated area to their east. Similar to other witnesses, the Turner Dairy witness detailed how the proposed Class I differentials would create competitive disadvantages for their plants relative to nearby cooperative plants, as well as decrease fluid milk consumption.

A MIG witness testifying on behalf of fairlife opposed Proposal 19. The witness argued that if more money is needed to attract fluid milk supplies, it should be negotiated in the marketplace, not mandated in FMMO pricing provisions. The witness said fairlife regularly pays over order premiums for even day receiving, transportation costs, and quality attributes. In the witness' opinion, there are ample fluid milk supplies and any increase in differential would only serve to create market winners and losers.

A witness from Shehadey, testified in opposition to Proposal 19. Shehadey operates four manufacturing plants in California, Nevada, and Oregon, producing Class I and Class II products. The witness argued the Class I differentials proposed for their plant locations should not be increased as the local milk supply is adequate to meet their fluid needs. The witness took particular objection with the disproportionate increase by the Fresno, California, plant in relation to their competitors located farther from the state's primary milk supply in the Central Valley. The witness added that their Oregon plant has a more distant milk supply relative to their other plants, and over-order premiums are used to compensate dairy farmers for the additional costs of servicing the plant.

A witness representing United Dairy, Inc. (United) testified in opposition to Proposal 19. United is a fluid milk processor operating three plants in West Virginia, Ohio, and Pennsylvania, which are primarily supplied by independent dairy farms. The witness testified their plants receive adequate milk supplies and pay over-order premiums when needed to ensure their milk needs are met. The witness opined the market should depend on over-order premiums, not unduly high regulated prices, to direct milk where needed. Similar to other witnesses, the United witness argued FMMO prices should not be increased because it would negatively impact Class I sales. The witness objected to the uneven application of differential increases, highlighting the differential increases for the United plants are higher than every other plant in the region, even when United has had no milk supply shortages. A West Virginia independent dairy farm supplier of United also testified in opposition to Proposal 19. The witness expressed concern the proposed differential increases would ultimately lead to the closure of the independent fluid milk processors in the State, leaving local dairy farmers with few, if any, local market outlets, and would widen the nutritional gap that already exists in the Appalachian area as higher prices would reduce fluid milk consumption.

A witness representing Lamer's testified in opposition to Proposal 19. The witness said increasing Class I differentials would not benefit consumers or processors as higher prices would lead to a decline in fluid milk consumption and the closure of more fluid milk plants. The witness was

of the opinion that limiting or disallowing the depooling of manufacturing milk would be a more beneficial change for all dairy stakeholders. A post-hearing brief filed by Lamers contended the hearing record contains no evidence of Class I demand not being fulfilled, thus any increase in Class I prices is not justified. The brief argued that if additional transportation costs of moving milk to Class I plants exist, they should be negotiated through over-order premiums.

A series of academic researchers testified regarding milk price elasticity. One researcher testified on behalf of NMPF regarding the potential impact to fluid milk demand as a result of regulated price changes. The witness referred to this as price elasticity, which estimates the percentage change in demand (quantity) due to a 1 percent change in price. The witness said any price elasticity less than the absolute value of 1 is considered price inelastic— a 1 percent change in price would result in less than a 1 percent change in demand—implying increased revenue due to the price change would more than offset the decreased revenue from fewer sales.

The NMPF witness reviewed 38 empirical studies, conducted between 1964 and 2022, measuring milk price elasticity at the retail level. The witness found the study average elasticity of 0.35 percent, and a median of 0.2 percent, concluding milk demand is inelastic. The witness said consumers remain price insensitive because milk continues to be considered a staple food. To illustrate its price inelasticity, the witness elaborated the real price of milk relative to all goods and services has declined 7 percent since 2013, during which time milk demand has decreased 18.3 percent. If milk was elastic, said the witness, a decline in price should have resulted in an increase in demand. The witness reviewed other factors which they believe are driving decreased milk consumption, including increased competition in the beverage market from new products and alternative beverages, an increase in the amount of food consumed away from home, and the lower proportion of young kids in the population.

The NMPF witness evaluated the average increase in differentials contained in Proposal 19, $1.49 or an 8.6 percent Class I price increase, to estimate the impact on demand. Assuming a 55 percent retail price transmission rate (1 percent change in the Class I price would cause a 0.55 percent change in the retail price), the witness estimated Proposal 19 would

lead to a 1.6 percent decrease in demand. The witness concluded the decrease in demand would be lower than the increase in Class I revenue, resulting in a net increase of dairy farmer revenue.

Another researcher testified on behalf of IDFA. The witness presented the results of a study evaluating the impact milk price changes have on the consumption of milk (in five disaggregated varieties) and various alternatives, including soft drinks, bottled, water, juices, and for the first time considered plant-based alternatives. The witness utilized weekly scanner data from 2017 through August 2023 to evaluate three distinct time periods (pre-COVID, COVID and post-COVID). The witness estimated the data represented approximately 84 percent of the milk volume sold at retail outlets, or 64 percent of overall milk volume. The witness attributed the remaining 36 percent to milk sales through untracked retail, foodservice, schools, and shrinkage. The witness noted it is likely the elasticity for the unaccounted milk volume was highly inelastic.

The IDFA witness said the study found the own-price elasticities for traditional white, flavored, and lactose-free milk to be elastic, and when all five categories of milk were combined, it had an elasticity of -1.26 in the post-COVID time period. Utilizing some of the NMPF researcher's assumptions (8.6 percent increase in Class I prices and a retail price transmission rate of .55 percent), the witness estimated adoption of Proposal 19 would result in an overall 5.98 percent decrease in fluid milk sales and a 2.1 percent increase in gross dairy farmer revenue. The witness concluded this study revealed retail fluid milk sales are more sensitive to price changes than previously thought. The witness also noted other demand studies that utilize AMS estimated fluid milk sales, not weekly scanner data, do not reflect the current retail marketplace because they incorporate highly inelastic sales to schools, colleges and universities, long-term care and senior living facilities, hospitals, and correctional institutions.

A third academic researcher, also testifying on behalf of IDFA, provided results of a study evaluating the market effects of Proposal 19. Looking at milk production, fluid milk consumption, and producer price statistics since 2000, the witness concluded there are sufficient milk supplies nationally to meet Class I demands. The witness was also of the opinion sufficient milk supplies, at reasonable prices, exist for the high Class I utilization FMMOs (the

Appalachian, Southeast, and Florida), because retail prices in the three markets were below those of a 30-city average retail milk price when compared to other regions of the country. The witness commented that elasticity studies not accounting for non-dairy alternatives are not representative of the current retail market. The witness reviewed recent fluid demand studies and concluded adoption of Proposal 19 would increase fluid milk prices, decrease consumption, and result in more milk use in manufactured products.

A post-hearing brief submitted on behalf of Select supported increasing Class I differentials, but not to the levels contained in Proposal 19. Select contended deviations from the USDSS results made by NMPF may be appropriate but disagreed with the type and extent of those included in Proposal 19. Select took exception to the proposed adjustments in the mideast and southwest regions where they have member farms. Select noted reasons for making deviations were not applied uniformly, especially in areas that have similar supply and demand environments. Select stated increased transportation costs and shifts in milk production and processing locations justify increasing Class I differentials and offered support for using the average of the May and October 2021 USDSS results, with minor adjustments and smoothing of the surface as the USDA would find appropriate.

A post-hearing brief submitted on behalf of MIG opposed adoption of Proposal 19, arguing hearing evidence supports lowering, not raising, Class I differentials. MIG cites the abundance of milk available to serve the Class I market and FMMO adjustments to shipping percentages as evidence to deny Proposal 19. MIG reiterated its objection to the methodology used and deviations made by NMPF in developing the proposed differentials. The brief contended raising Class I differentials would be disorderly because it would lower Class I demand and aggravate challenges already faced by fluid milk processors. MIG also noted Class I differential changes should not be considered until the impact of recent changes to transportation cost-related provisions in the Appalachian, Florida, and Southeast FMMOs were known.

A post-hearing brief submitted on behalf of IDFA opposed Proposal 19 on the grounds its adoption would cause market disorder by raising fluid milk prices, decreasing fluid milk consumption, harm consumers, and divert milk into manufacturing uses. IDFA reiterated hearing testimony in its

brief regarding the price elasticity of fluid milk and concluded adopting Proposal 19 would reduce fluid milk consumption by 5.98 percent, resulting in over 2.2 billion pounds of milk being diverted to manufacturing uses.

Similarly, IDFA objected to NMPF's methodology in determining the differential levels offered in Proposal 19. IDFA objected to NMPF's use of dairy farm production costs to justify increases to the Class I differentials and referenced existing milk production as more than adequate to meet fluid milk demand. IDFA maintained Class I differentials should instead be lowered by $0.40 per cwt because the Grade A maintenance cost consideration is obsolete and inaccurate.

A MIG witness testified in support of Proposal 20, seeking to reduce the base differential to $0.00. The witness' testimony centered around the continued relevance of the cost components currently provided for in the base differential: Grade A maintenance, balancing, and Class I incentive costs. The witness was of the opinion the base differential results in market enhancing prices that induce overproduction and reduce fluid milk consumption. The witness said that since almost all U.S. produced milk meets Grade A standards, it is no longer necessary to provide compensation through Class I differentials for those costs as they are not unique to producers supplying the Class I market. They argued these costs are already provided for in market-clearing Class III and IV prices where most of the U.S. milk supply is utilized.

The MIG witness said the balancing cost factor is no longer justified as fluid milk processors have either invested in infrastructure to balance their own milk supply or pay over-order premiums to their suppliers for balancing services. The witness was of the opinion incorporating balancing costs within the Class I price results in processors paying for balancing services they do not receive or paying twice for such services—once through the Class I price and again in an over-order premium. Lastly, the MIG witness argued the $0.60 Class I incentive cost factor is no longer necessary to attract adequate supplies of fluid milk given the low, and continually declining Class I utilization.

Witnesses from MIG member companies testified in support of Proposal 20. MIG's members echoed the previous MIG testimony on the relevance of the base differential cost factors in the current market environment. In particular, the MIG witnesses argued that through plant investments, particularly ESL processing or additional milk silos, combined with over-order premiums paid to their milk suppliers, they are directly paying for their individual milk balancing needs. The witnesses all opined that through the base differential they are being double charged for such services. All MIG members testified that if additional monies are needed for balancing services or to obtain adequate milk supplies, it is more appropriate for those costs to be negotiated in the marketplace and paid directly to their milk suppliers, rather than as part of a regulated minimum price shared with all pooled producers.

Another MIG witness testified regarding the relevancy of the base differential in the current marketplace. The witness was of the opinion the base differential should be reduced to $0.00, and if cost recovery is needed by producers, it can be negotiated with milk buyers. The witness utilized the USDSS model to compare the value of Class I and Class III milk at the county level. The witness presented the results and explained in some parts of the country, where Class III milk is more valuable, it would take additional incentives to service a Class I plant rather than remain at the higher valued manufacturing plant. In other areas of the country, namely the southeast, northeast, and California, the value of Class I is higher, representing the cost to balance the region's Class I demand. The witness said the national average value of the differences was negative $0.38, indicating nationally, it is more valuable for milk to service Class III plants. The witness drew the conclusion this analysis supports the argument for lowering the base differential to $0.00 and allowing fluid plants to negotiate and pay premiums directly to their milk suppliers.

A post-hearing brief submitted on behalf of MIG reiterated its witnesses' testimony that the base differential is no longer economically justified. MIG stated the current oversupply of Class I milk is caused, in part, from high FMMO blend prices. According to MIG, adoption of Proposal 20 would correct this disorder by allowing a greater proportion of fluid milk costs to be negotiated and paid directly to suppliers. The brief reviewed MIG witness testimony on the relevancy of the costs associated with the base differential and the steps taken by its fluid milk processor members to balance and obtain a milk supply.

A Lone Star witness, appearing on behalf of NMPF, testified in opposition to Proposal 20. The witness argued a base differential of $0.00 would result in the elimination of any Class I differential for large portions of the U.S., amounting to approximately $650 million annually, with no guarantee the money could be recovered through over-order premiums. Additionally, said the witness, the lower differentials would lead to disorderly marketing conditions through increased occurrences of negative PPDs, higher volumes of depooled milk, and reduced or eliminated incentives to supply the Class I market. The witness stressed that costs to maintain Grade A status and balance the market's milk supply are real and significant. The witness said adoption of Proposal 20 would be akin to adopting individual handler pools in much of the country, an idea which they said has been found to cause disorderly marketing conditions.

The NMPF witness maintained milk has an inelastic demand, so any reduction in Class I prices will not have a significant impact on Class I sales. The witness also said that despite opposition testimony regarding the perils of setting regulated prices too high, there are also negative consequences for setting the regulated price too low. In the witness's opinion, dairy farmers still face a market power imbalance when negotiating prices above FMMO minimums, reiterating previous testimony on the difficulty cooperatives have faced when negotiating and maintaining over-order premiums.

The NMPF witness concluded by emphasizing the objective of the FMMO system is to set prices to ensure a sufficient quantity of milk for fluid use. The witness stressed providing for prices that reflect the current costs of supplying the market as demonstrated through NMPF testimony should be a priority of this proceeding.

In their post-hearing brief, NMPF argued Proposal 20 incorrectly assumes the cost of servicing Class I demand has not increased and reiterated witness testimony on the continued relevancy and need for the base differential. NMPF stressed that costs recognized in the base differential continued to be incurred by dairy farmers in servicing the Class I market and took exception with the position such costs could be adequately recovered through over-order premiums. NMPF maintained Class I demand is inelastic and reiterated the need for Class I prices to continue to be the highest priced class in order to ensure an adequate supply.

The AFBF witness also expressed opposition to Proposal 20. The witness testified the cost factors provided for in the base differential are still relevant and in fact higher than when the differential was adopted. The witness

suggested the Department consider raising the base differential and provided current cost estimates for each of the three factors, which would result in a base differential increase of approximately $0.60 per cwt. The witness stressed the importance of the base differential in contributing to the proper alignment of classified prices which they considered a critical element of orderly marketing. The AFBF's post-hearing brief reiterated its witnesses' hearing testimony and concluded adoption of Proposal 20 would lead to disorderly marketing conditions.

A post-hearing brief filed by Lamers offered support for Proposal 20. Lamers stated its adoption would better reflect the real value of milk and all four classes would have a closer price relationship. Lamers asserted high Class I differentials are no longer needed to supply the fluid market given that 98 percent of milk produced is Grade A. A post-hearing brief submitted by New Dairy also offered support for Proposal 20.

Select's post-hearing brief expressed opposition to Proposal 20 and asserted a base differential of $1.60 should be maintained. Select opined the cost of maintaining Grade A status still exists and has increased, as have the costs associated with balancing and competing for a milk supply.

A post-hearing brief submitted by Edge, while not offering support or opposition to Proposals 19 or 20, did contend Class I milk prices should not be raised beyond necessary levels and not be raised merely to offset the negative producer impact of increasing make allowances.

The AFBF witness also testified in support of Proposal 21, seeking to increase the Class II differential from $0.70 to $1.56 per cwt. The witness explained the proposed differential reflects updated drying costs based on the current NFDM make allowance. The witness did not believe the proposed increase would lead to the substitution of Class IV powders in lieu of Class II fresh milk. The witness estimated that adoption of Proposal 21 would increase annual FMMO marketwide pool values by $122 million and reduce the likelihood of negative PPDs and depooling. These views were reiterated in AFBF's post-hearing brief.

Several witnesses representing MIG including Turner Dairy; HP Hood; AE; Shamrock; CROPP; Aurora; Shehadey; Crystal Creamery; and fairlife testified in opposition to Proposal 21. The MIG witnesses indicated adoption of Proposal 21 would result in Class II standalone plants choosing not to

participate in the FMMO system, putting fully regulated Class I plants with Class II production at a competitive disadvantage. This sentiment was emphasized by witnesses from Turner Dairy and Shehadey, whose fully regulated Class I plants also produce notable volumes of Class II products. The witness from Crystal Creamery provided an analysis of CME NFDM and Class II nonfat solids prices, projecting an increase of 20 to 50 percent in the use of Class IV nonfat solids if Proposal 21 was adopted. Lastly, a witness from fairlife predicted adoption of Proposal 21 would cause some manufacturers to reformulate products in order to avoid paying the higher Class II price.

In its post-hearing brief, MIG reiterated hearing testimony and added that cream, a Class II product, must be made with fluid milk in accordance with the standards of identity established by the U.S. Food and Drug Administration. As such, according to MIG, a pooled Class II manufacturer of cream could not reformulate and, further, would experience an estimated 3.5 percent increase in its FMMO marketwide pool obligations.

Several witnesses representing IDFA, including Saputo, Galloway, and Lakeview Farms, also testified in opposition to Proposal 21. The witness for Saputo indicated the demand for Class II skim solids is likely to decrease if Proposal 21 is adopted, as alternative milk solids would have a greater substitution value. Further, according to the witness, costs to consumers for cream would likely increase.

The witness for Galloway testified that adoption of Proposal 21 would not increase blend prices or limit depooling and negative PPDs, as alleged, because Class II manufacturers would instead utilize more Class IV powder ingredients in lieu of fresh milk. In the witness' opinion, increasing the Class II differential would only serve to promote disorderly marketing through the displacement of the local milk supply and permanent investment of equipment to enable the use of Class IV ingredients. The witness said once a manufacturer makes the costly capital investment decision, they do not switch back to use fresh milk in the future. The witness estimated adoption of Proposal 21 would result in a $99.4 million loss to producers through the use of lower valued Class IV ingredients. A witness from Lakeview Farms supported the statements of other witnesses, emphasizing the likely increase in costs to the customer. This witness added that innovation of more oil-based formulations to offset the price volatility

of dairy fat would lead to a disruption in the dairy supply chain.

In its post-hearing brief, IDFA reiterated testimony from the hearing which stressed that there is already an adequate supply of milk for Class I and Class II needs, and opined the current Class II price formula is working well as is. As such, according to IDFA, there is no evidence that suggests a need to increase the Class II differential. IDFA argued further that farmers are likely to receive lower net prices as a result of Proposal 21 due to the anticipated substitution of lower cost Class IV NFDM for Class II nonfat solids. Lastly, IDFA focused on the likely disproportionate impact of Proposal 21 on Class I handlers that also manufacture Class II products. Without the ability to depool, these handlers could not take advantage of lower NFDM prices, IDFA wrote.

An MMPA witness appearing on behalf of NMPF also testified in opposition to Proposal 21. The witness' testimony mirrored other witnesses cautioning that adoption could cause substitution with Class IV powder ingredients. The witness said not only does the Class II and Class IV price difference need to be considered, but so does the significantly lower transportation cost of powder versus fresh milk. Under the current Class II differential, Class II milk already has an incentive not to be pooled, said the witness. Increasing the differential would only heighten the incentive and create competitive disadvantages for Class I plants making Class II products, while simultaneously lowering marketwide pool values. In its post-hearing brief, NMPF added that adoption of Proposal 21 may incent the practice of substituting less expensive milk powder for fresh milk to make Class II products. NMPF also elaborated on its members' concerns regarding the likely increase in depooling of Class II milk if Proposal 21 was adopted.

USDA received post-hearing briefs related to Proposal 21 from three additional stakeholders: New Dairy; Select; and Lamers. New Dairy expressed its opposition to the AFBF's Proposal 21, emphasizing that the current milk supply is sufficient, and it shared the concerns of other hearing participants regarding the potential competitive disadvantages for Class I handlers manufacturing Class II products. Select explained that the AFBF's proposal deviates from the rationale and methodology USDA utilized to establish the Class II differential during Order Reform and, thus, according to Select, Proposal 21 likely overstates an appropriate Class II

differential. Further, Select was of the opinion increasing the Class II differential would discourage the use of fresh milk and cream in lieu of Class IV ingredients. Lastly, Lamers expressed its concern that the adoption of Proposal 21 would lead to disorderly marketing and stated no evidence was presented to suggest a need to increase the Class II differential.

Discussion and Findings

An FMMO (or ''order'') is a regulation issued by the Secretary of Agriculture (Secretary) that places certain requirements on the handling of milk in a defined geographic marketing area. FMMOs are authorized by the AMAA. The declared policy of the AMAA is to ''. . . establish and maintain such orderly marketing conditions for agricultural commodities in interstate commerce. . . .'' 7 U.S.C. 602(1). As specified by the AMAA, the principal means of meeting the objectives of the FMMO program are through classified milk pricing and the marketwide pooling of returns. This rulemaking concerns and is limited to classified milk pricing.

FMMOs announce prices each month for milk received by plants during that month, according to its use classification. Since 2000, the FMMO program has used product price formulas that rely on the wholesale price of bulk products to determine the minimum classified prices handlers pay for raw milk in the four classes of utilization. Class III and Class IV prices are announced on or before the 5th day of the following month to which they apply. The Class III and Class IV price formulas form the base, also known as the mover, from which Class I and Class II prices are determined.

The Class I price is announced in advance of the applicable month. It is determined by adding the Class I differential assigned to the plant's location, plus the average of advanced Class III and Class IV prices (computed by using the most recent two weeks' DPMRP data released on or before the 23rd of the preceding month), plus $0.74. The Class II skim milk price, announced at the same time as the Class I price, is determined by adding $0.70 per cwt to the advanced Class IV skim milk price. Thus, the advanced prices pertaining to milk marketed in a particular month use the same formulae as the calculation of Class III and IV prices for milk marketed in that same month, but the specific data are from different time periods. The Class II butterfat price is announced at the end of the month, at the same time as the Class III and Class IV prices, by adding

$0.007 per pound to the Class IV butterfat price.

Component prices are based on prices for the selected bulk products collected through the AMS-administered DPMRP, which collects weekly wholesale prices for four manufactured dairy products in various bulk package sizes (cheese, butter, NFDM, and dry whey powder). Weekly average prices for cheddar cheese (the weighted average of block and barrel prices), butter, NFDM, and dry whey are reported in the NDPSR.[1] Butterfat prices for milk used in products in each of the four classes is determined through surveyed butter prices. Protein and other solids prices for milk used in Class III products are derived from surveyed cheese and dry whey prices, respectively. The nonfat solids price for milk used in Class II and Class IV products is calculated from surveyed NFDM product prices.

The butterfat, protein, other solids, and nonfat solids prices are derived through the weighted average monthly NDPSR survey prices of each corresponding commodity, minus a manufacturing (make) allowance, multiplied by a yield factor. The make allowance factor represents the fixed and variable processing costs manufacturers incur in making raw milk into one pound of product. The yield factor represents the approximate quantity of product that can be made from a cwt of milk received at the plant, assuming a certain component composition of the milk and the final products. Among other factors used to determine yield, the milk received at a plant is adjusted to reflect farm-to-plant shrinkage compared to farm weights. This relates to the basic question of how much milk is required to make a pound of product.

This product pricing system was implemented as a part of Order Reform on January 1, 2000. 64 FR 70868 (Dec. 17, 1999). While individual pieces of the price formulas have been updated occasionally since that time, this proceeding is the first time since their adoption that the Department is considering a comprehensive update to all four classified price formulas 68 FR 7063 (Feb. 12, 2003); 71 FR 78333 (Dec. 29, 2006); 78 FR 24334 (Apr. 25, 2013).

The objective of this proceeding is to evaluate whether market or other economic conditions have changed and if the price formulas need to be updated to reflect current conditions, including

economic and technological factors related to processing, transportation, and other relevant market functions or services. Twenty-one proposals, divided into five main topic areas, were considered: milk composition factors— two proposals; surveyed commodity products—four proposals; Class III and Class IV formula factors—six proposals; base Class I skim milk price (often referred to as the ''higher of'')—six proposals; and Class I and Class II differentials—three proposals.

The record supports the findings that some price formula factors should be amended to reflect current market conditions that were evidenced in this proceeding. The recommended changes, which are discussed in detail below, include:

1. *Milk Composition Factors:* Update the factors to 3.3 percent true protein, 6 percent other solids, and 9.3 percent nonfat solids.

2. *Surveyed Commodity Products:* Remove 500-pound barrel cheddar cheese prices from the DPMRP survey and rely solely on the 40-pound block cheddar cheese price to determine the monthly average cheese price used in the formulas.

3. *Class III and Class IV Formula Factors:*

a. Update the manufacturing allowances as follows:

i. *Cheese:* $0.2504;

ii. *Butter:* $0.2257;

iii. *NFDM:* $0.2268; and

iv. *Dry Whey:* $0.2653.

b. Update the butterfat recovery factor to 91 percent.

4. *Base Class I Skim Milk Price:* updating the formula as follows:

a. *Class I milk used in ESL products:* The average of the advanced Class III and Class IV skim milk prices, plus a rolling monthly adjuster. The rolling monthly adjuster would be equal to the average of the difference between the higher-of and the average-of, for 24 months, with a 12-month implementation lag period.

b. *Milk used in all other Class I products:* the higher-of the advanced Class III or Class IV skim milk prices for the month.

5. *Class I and Class II differentials:* Update the Class I differentials to generally reflect the United States Dairy Sector Simulator May results contained in evidence.

Milk Composition Factors

Milk composition factors contained in the product price formulas represent assumed component levels of skim milk on a cwt basis. These factors were adopted on January 1, 2000. Currently, the formulas assume 3.1 pounds of true

protein, 5.9 pounds of other solids, and 9 pounds of nonfat solids in 100 pounds of skim milk.

The level of assumed components in milk ultimately impacts minimum regulated prices paid by handlers, although the impact varies since there are variations in how components are used to value milk between FMMOs. All handlers regulated by the Arizona, Southeast, Florida, and Appalachian FMMOs pay for milk used in all four classes on a volume (cwt) basis, regardless of the components contained in the skim milk (referred to as skim/fat pricing). Simply put, handlers pay for the pounds of skim and pounds of butterfat in milk they purchase from dairy farmers. In the remaining seven FMMOs, handlers pay for manufacturing milk based on the actual pounds of components in milk they purchase (referred to as multiple component pricing). Milk used in fluid milk products (Class I) is paid based on the skim and butterfat pounds delivered, regardless of the components contained in the milk. Changing the milk component factors primarily impacts Class I minimum prices paid by fluid milk processors in all 11 FMMOs, and to a lesser extent manufacturing handlers purchasing milk for Class II, III, and IV uses on skim/fat FMMOs.

Proponents of changing the milk component factors argue actual average milk component levels in farm milk have increased since January 1, 2000, and milk should be priced to buyers to reflect the value of those components. NMPF proposes (Proposal 1) component levels at observed 2022 levels (3.39 true protein, 6.02 other solids, and 9.41 pounds of nonfat solids). NMPF also proposes an updated methodology whereby components could be updated once every three years, without a rulemaking proceeding, if the nonfat solids levels in FMMO producer skim milk changed by 0.07 percentage points or more from the level stated in regulation. In its proposal, NAJ seeks an automatic annual update, with no change threshold to be met (Proposal 2).

Both NMPF and NAJ argue that because component levels in producer milk have risen but are still accounted for in the price formulas at 2000 levels, the difference between Class I prices and manufacturing milk prices (Class III and IV) has narrowed. Put another way, milk used in manufacturing in the multiple component FMMOs is paid based on actual component levels, so producers are paid for all component pounds delivered to manufacturing plants (approximately 85 percent of FMMO manufacturing milk is pooled on the 7 multiple component orders).

Consequently, payments for milk delivered to manufacturing plants increase as component levels delivered to those plants increase. However, milk delivered to Class I plants is paid on a fat/skim basis whose formulas contain the assumed component levels at issue in this proceeding. Thus, as milk component levels have risen, Class I plants have continued to pay for milk based on the static component levels contained in the formulas. Proponents argue the result has been a narrowing between fluid and manufacturing prices causing marketing challenges, especially in the milk deficit markets in the southeastern region that must compete to procure a supplemental Class I milk supply with manufacturing milk demands in multiple component orders. Proponents also stressed the narrowing of the difference between Class I and manufacturing milk prices increases the occurrence of price inversions and depooling.

The record of this proceeding reveals FMMO component levels in raw milk have increased since January 1, 2000, most notably since the mid-2010s. Milk component data is not available before 2000 because the prior methodology for pricing milk did not require milk composition-level assumptions. The Order Reform decision did not address specifically why these assumptions were adopted. However, since component levels observed in FMMO skim milk in 2000 were 3.1 percent true protein, 5.9 percent other solids, and 9.0 percent nonfat solids, it is reasonable to assume they were set at those levels because at the time they were representative of all pooled milk in the FMMO system. Evidence reveals that from 2000, component levels were relatively flat with only a slight increase through the mid-2010s. Beginning in 2016, observed data show a marked increase in component levels. The data also clearly show component levels throughout the country vary by season, with levels lower in the spring and summer, and higher in the fall and winter. Hearing testimony revealed numerous reasons for the recently observed milk component increases, including genomics in dairy cattle selection and breeding, higher cull rates of less productive cattle, and improvements in cattle nutrition and animal husbandry.

Opponents of increasing component levels, primarily fluid milk handlers, argued three general reasons an increase is not justified. First, fluid milk handlers, who would be primarily impacted by these proposals, do not receive producer milk at the proposed component levels. They contend higher

component milk is delivered to manufacturing plants, leaving the lower component milk for fluid milk handlers. Second, fluid milk handlers testified they receive no additional market revenue for higher components in milk because their sales are on a volume basis (*i.e.,* gallons) not on the skim component levels in their fluid milk products. Therefore, they argued, they should not be charged for additional skim components that have no additional market value in their products. Third, opponents argued updating component levels also would unduly harm manufacturing handlers in the skim/fat orders who pay for milk based on a skim/fat basis, as explained earlier. They argue the proposed component levels are higher than those delivered to plants, both fluid and manufacturing, in the four skim/fat orders. An evaluation of the record evidence for each of these claims follows.

First, opponents of increasing component levels argued fluid milk handlers do not receive milk containing the levels of components proposed. Testimony from fluid milk handlers during the hearing was mixed. Some fluid milk handlers would not reveal component levels for the Department to consider, citing confidentiality concerns. Other fluid handlers, who did offer data, showed a range of average component levels in skim milk received: true protein ranged from 3.03 to 3.63 and other solids ranged from 5.83 to 6.10. Many producers who testified also discussed the rise in their farm component levels because of the decisions and investments made at the farm. While some producers could cite data, for example true protein tests ranged from 3.12 to 3.83, many who could not cite specifics did discuss a general increase in their component levels.

Second, opponents argued that because component levels have no bearing on the volume of milk sold, they should not be required to pay higher Class I prices for higher components that provide no additional market revenue. The record clearly shows fluid milk handlers sell fluid milk products based on volume, which is why prices are based on skim and butterfat pounds purchased. Proponents of changing the composition levels provided anecdotal evidence, such as marketing claims and product description, to assert fluid milk products can garner additional market revenue for higher component levels. However, no data were provided to prove there is a general industry-accepted norm or practice that allows handlers to recover a value for nonfat

milk solids in excess of the nutrition label claim.

Finally, opponents claimed that increasing component levels in minimum price calculations would unduly harm manufacturing handlers in the skim/fat orders. The record contains actual component tests of producer milk in the multiple component pricing orders because producers in those orders are paid based on the pounds of components sold. However, component data for the four skim/fat orders could only be estimated as producers in those orders are paid based on the volume of skim milk and butterfat produced, not component levels. Record evidence contains USDA estimated data showing component levels in milk have consistently been above the current assumptions in all four fat/skim orders. Estimated protein and other solids levels of skim milk pooled in the three southeastern orders have been above the assumed levels in most months since January 2018, and below the levels contained in Proposal 1 in all months. Estimated protein and other solids levels of skim milk pooled in the Arizona Order have been above the assumed levels in all months since January 2018, and above the levels contained in Proposal 1 some months. Dairy Herd Improvement Association component data offered at the hearing, although by no means all encompassing, is consistent with estimated data provided by USDA. In the four skim/fat orders, average protein levels from 2020–2022 were above the current formula assumptions but below those contained in Proposal 1.

This decision considers how the price formulas should be updated to reflect current market conditions. Milk composition levels are only one piece of the formulas being addressed. However, as with all the factors adopted at the time of Order Reform and updated through subsequent rulemakings, the question before the Department is what level is representative of current supply and demand conditions as required by the AMAA. Some parties argued milk composition factors should not be changed because not all milk would meet the levels proposed by NMPF. Price formulas in the FMMO system have never had factors that assumed all milk was identical. Since FMMOs utilize a national pricing system, price formulas have always relied on averages to set levels representative of market conditions. The nature of an average means some milk will fall above or below the specified level. This was true with the milk composition levels that were adopted in 2000, and similar to other factors, such as make allowances,

survey commodity prices, and butterfat recovery percentages.

With sufficient data showing increasing milk composition levels, the record supports updating the formulas to reflect current market conditions. The question becomes what levels best represent the entire U.S. market. The review of record evidence described earlier reveals many factors should be considered: the average component levels of pooled producer milk, the variability in milk components regionally and seasonally, the discrepancy in milk component levels received by fluid milk handlers compared to manufacturing handlers, and the variability of component levels from farm to farm. These factors were not specifically mentioned as being considered in the Order Reform decision when the current levels were set. However, given the evolution of the dairy industry in the past 24 years, they are relevant for consideration in this proceeding.

Fluid milk handlers argued the component levels should not be increased because Class I plants do not receive component levels as high as proposed. While the record does not contain a comprehensive data set of milk component levels received at fluid milk plants, it does contain data on milk component levels of all milk pooled on the FMMOs, as well as evidence submitted by producers on the component levels in their milk, and information from fluid milk handlers on the component levels they receive. Importantly, many fluid plant operators testified the milk components received at their respective plants are higher than currently assumed in the formulas, but less than what has been proposed.

While this decision finds milk composition levels should be increased, the levels in Proposal 1 are not appropriate, assumed component levels applicable to the raw milk whose price is impacted by these assumptions. Given the variability and seasonality of component level information contained in the record, this decision finds an average of component levels in skim milk over a recent time period appropriate. Based on evidence that component levels have been increasing at a more rapid rate since the mid-2010s, this decision finds the average component levels from 2016–2022 the most appropriate time period to represent producer milk currently priced on a skim/fat basis. Accordingly, this decision recommends the following: 3.3 percent true protein, 6.0 percent other solids, and 9.3 percent nonfat solids. Estimated data for the three southeastern orders show

component levels exceeding these proposed levels in recent months, thus addressing opponents' claims that manufacturing handlers in the southeastern orders receive lower component milk than other FMMOs. The recommendation balances the cumulative body of evidence and testimony presented at the hearing.

During the hearing and in their post-hearing brief, Edge proposed, in addition to updating skim component levels, that the assumed butterfat level of 3.5 percent should also be updated to facilitate risk management. Updating butterfat levels is outside the scope of this proceeding as no proposal contained in the hearing notice offered such a change. As risk management programs utilizing FMMO prices are maintained in the private sector, such programs can adapt as necessary to facilitate the use of updated price formulas.

NMPF and NAJ also proposed alternative updating and implementation schedules for the milk composition levels. NMPF proposed the composition levels be updated once every three years, but only if there was a 0.07 percent or greater change in nonfat solids levels, compared to what was in regulation. For example, if Proposal 1 was adopted, milk composition factors could only be updated three years later if the average nonfat solids levels in pooled FMMO milk was 9.48 percent (9.41 × 1.007). NAJ proposed the levels be updated annually, regardless of the magnitude of increase. Both proponents requested a 12-month implementation lag because of the implications such a change could have on producer risk management positions. Edge proposed a longer implementation lag of 15½ months because of risk management positions tied to the DRP.

The development and use of dairy risk management tools is relatively new, and the Department has never before been asked to delay implementation of FMMO changes in consideration of risk management. However, testimony made clear producers' concern regarding the negative financial impact that could occur if regulatory changes did not account for the growing use of risk management tools.

Producers testified to the use of numerous market-based risk management tools, including the CME futures and options, and the two USDA-Risk Management Agency approved insurance products, DRP and Livestock Gross Margin—Dairy (LGM-Dairy). Use of risk management tools by producers testifying at the hearing varied sharply, with some not using any tools, some

only enrolling in the DMC program, and fewer using DRP insurance or the CME hedging tools. The record reflects 32 percent of U.S. milk production was covered in 2022 under DRP, and with a much smaller use of LGM-Dairy. Producers testifying were particularly concerned with the implementation schedule for the initial change, as risk management positions could be as far out as 18 to 24 months. Evidence shows that from 2018 through 2022, almost all CME contracts, 97.34 percent, expired within 12 months. According to producers, any change to the milk composition level assumptions during the contract period could result in basis risk to producers not covered by the hedge. A CME witness testified they saw a 54 percent drop in contracts with expiration dates over 360 days in 2022 as compared to 2018, which the CME attributed to the industry already anticipating a regulatory change based on the outcome of this hearing.

Record evidence depicted the concern regulatory changes could have on risk management tools, particularly the impact on the usability of these tools during a transition period. Risk management usage must be considered against the interest of other producers who do not use risk management tools, since it would delay recognition of the higher components in producer milk. While risk management use is not a factor in determining what the milk component levels should be, it is appropriate when determining an implementation timeframe to attempt to mitigate potential financial harm to producers who utilize risk management tools. Accordingly, this decision finds a 12-month implementation lag appropriate, beginning when other changes from this proceeding become effective. This delayed implementation should cover hedge positions for the vast majority of producers utilizing these tools. In addition, as this recommended decision indicates the Department's initial position, producers making risk management decisions are aware of the potential changes, should they be approved by producers.

Lastly, this decision does not support an automatic update of the milk composition levels, as contained in Proposal 1 or Proposal 2. It is clear from the record that many factors, as described earlier, should be considered when making a change. Those factors can only be considered through the course of a rulemaking.

Surveyed Commodity Products

USDA administers the DPMRP to gather weekly wholesale prices of four manufactured dairy products. Average survey prices are released weekly in the NDPSR, and monthly average commodity prices are released by AMS on or before the 5th of the following month. The monthly product prices are then used in the FMMO price formulas to determine component values in raw milk. The same four commodities have been surveyed since 2000. NASS administered the survey from 2000 to 2012; submitting data was voluntary until 2008, and then mandatory and verified from 2008 to 2012. AMS has administered the survey since 2012 with the data being mandatory and audited 73 FR 34175 (June 17, 2008).

This proceeding is considering four proposals that would add or remove a variety of products in the DPMRP survey. Because FMMOs enforce minimum raw milk pricing, the overarching question for the Department in this decision is whether the current surveyed commodities are an appropriate representation of market clearing, wholesale commodity products whose prices provide an accurate reflection of the minimum value of raw milk. DPMRP currently surveys cheddar cheese, butter, nonfat dry milk, and dry whey. Proposals submitted in this proceeding offer changes to the cheese survey (Proposals 3, 4, and 6) and changes to the butter survey (Proposal 5). No proposals seek changes to the NFDM or dry whey surveys.

Cheese Survey

Currently, FMMOs utilize a weighted average DPMRP survey price of 40-lb cheddar cheese blocks and 500-lb cheddar cheese barrels to determine the protein price used in the Class III price formula. Although both products meet the definition of cheddar cheese, the different package styles reflect that their intended uses are different. Cheddar cheese barrels are intended to be further processed into processed cheeses. Cheddar cheese blocks can also be used for that purpose, but they are produced with the intention of use in a natural cheese with minimal further processing (for example cutting into consumer packages or shredding.) DPMRP weights the cheese price by the volume of surveyed blocks and barrels, which according to record evidence, is typically around 50 percent blocks and 50 percent barrels.

Proposal 3 seeks to drop barrels from the survey and solely rely on a survey of 40-lb blocks. Proponents offered a few reasons for dropping barrels. First, they believe barrels are overrepresented in the survey because the weighting methodology is based on the production percentages included in the survey and not actual production across the entire cheddar cheese market. Proponents believe the percentage of cheddar cheese manufactured and priced off 40-pound block prices is significantly higher than 50 percent of the U.S. natural cheese market. Second, proponents argue that having what amounts to two products in the survey results in an average price that is not representative of either blocks or barrels. They say this has been particularly evident since 2017, when market prices between blocks and barrels began to significantly diverge, both in magnitude and direction, from the historical average difference of $0.03. Barrel prices were even occasionally higher than blocks (historically, block prices have been higher than barrel prices). Proponents argued that when barrel prices have been well below the assumed $0.03 difference, the current weighting methodology results in a lower average cheddar price than would have been if the two prices were weighted in accordance with actual, total production of each product. Members of NMPF testified a block-only survey would contain adequate survey volume to be representative of the cheese market.

Opponents of dropping barrels asserted: (1) it is not appropriate to eliminate approximately half of the current cheese survey volume; (2) barrels are a market-clearing product and should continue to be included in the survey; and (3) blocks and barrels together represent the national cheese market as they are both commodity products with different commercial uses. Opponents also disputed the claim that most cheese is priced off the block market.

During the hearing, Edge offered an alternative that would reweight the survey average price based on the U.S. production volume of blocks and barrels as determined by NASS, instead of volume from respondents to the AMS survey. They opined barrels should not be removed from the survey because in months where the barrel price exceeded blocks, the Class III price would have been lower than it otherwise was, and consequently producer revenue would be less. Instead, Edge argued a better solution to the issue of overweighting barrels was to use a weighting methodology reflective of actual U.S. cheddar cheese production.

Proposal 4, submitted by AFBF, seeks to add 640-lb blocks of cheddar cheese to the survey. This type of cheddar cheese is made using the same process as 40-lb blocks and differs only in the final container for the cheese curd. Both sizes represent an intermediate product requiring further processing before it

can be consumed. The proponent's primary justification is the additional survey volume that would be added. The AFBF agreed with NMPF that barrels are overrepresented in the survey, and their proposed solution is to add survey volume through the addition of 640-lb blocks. This argument implicitly assumes the accuracy of milk valuation is improved when a larger volume of cheese is surveyed.

Opponents to adding 640-lb blocks argued: (1) most 640-lb blocks are already priced off 40-lb blocks, so their inclusion would not enhance price discovery; and (2) 640-lb blocks are typically customer-specific which would exclude those blocks from the survey. The opposition is premised on the additional survey volume not adding new price information either because the prices are already reflected in the 40-pound block price, or because the customized products are value-added and should not be included for minimum pricing.

Proposal 6, offered by CDC, seeks to add mozzarella cheese to the survey. Proponents argue mozzarella is the largest volume of cheese produced in the U.S., and revenue from mozzarella products should be captured in the survey and ultimately reflected in prices paid by Class III handlers. Further, proponents argued a higher Class III price should be reflected in producer prices to offset increasing farm production costs.

Opponents argued there is no one standard of identity for mozzarella cheese, making it difficult to delineate what mozzarella product would have a substantial volume of reportable sales to represent the market value of mozzarella cheese. In addition, opponents stated no manufacturing cost data is available to be evaluated for inclusion in the manufacturing allowance calculation for cheese. Lastly, opponents asserted mozzarella is not a market-clearing product and therefore should not be considered when determining minimum prices.

While there were three proposals offering changes to the cheese survey, two of them lack data and evidence to support adoption. First, the addition of mozzarella is not supported by the record. The record reveals multiple standards for different mozzarella cheese products, but no evidence was presented to show which of those would be appropriate to survey as an improvement in finding a minimum value for milk. Furthermore, no evidence was presented on what would define a commodity mozzarella product, rather than a value-added product, which is a general rule for inclusion in

the DPMRP. Proponents offered information on mozzarella in consumer sized packages (*e.g.,* mozzarella sticks), but little to no evidence on what should be considered a commodity mozzarella product. Evidence shows that a majority of what is considered mozzarella production is driven by customer specification and would not meet any of the standards of identities offered, indicating it would be considered a value-added product and excluded from the survey. Lastly, the record indicates mozzarella products are already typically priced based on the 40-pound cheddar cheese block price. Therefore, adoption of Proposal 6 would only result in significant costs associated with determining a commodity mozzarella product to be surveyed and the ongoing cost of surveying said product, without adding measurable new price information to the DPMRP cheese survey. Accordingly, Proposal 6 is denied.

The record lacks evidence to support adoption of Proposal 4, adding 640-lb blocks. The record reflects widespread industry consensus that 640-lb blocks are typically priced off 40-lb blocks. Because of this price relationship, numerous industry witnesses testified that no new price information would be captured by including 640-lb blocks. In addition, several witnesses testified 640-lb blocks are largely made-to-order on long-term price contracts which would exclude the sales from the survey because of these marketing characteristics. No data was presented to evaluate whether any additional price information gained through inclusion of 640-lb blocks would offset the burden (lack of efficiency) to both the industry and USDA for their inclusion. Accordingly, Proposal 4 is denied.

The Department considered the idea presented by Edge to reweight blocks and barrels in the survey to reflect total U.S. cheddar cheese production volumes by packaging type, instead of survey volumes. However, the record lacks evidence regarding the market dynamics of barrel production to analyze how this idea would be implemented, or the impact it may have on prices, to evaluate whether it would result in a more appropriate cheese price. In addition, as is made clear below, this decision finds that surveying two cheese products is no longer an appropriate method for providing orderly marketing in today's marketplace, rendering further discussion of a more proper weighting methodology unnecessary.

What is left to consider is whether 500-lb barrels should remain in the survey. When determining which

products are appropriate to be included in surveys, the Order Reform Final Decision is instructive. As described in the decision, ''The importance of using minimum prices that are market-clearing for milk used to make cheese and butter/nonfat dry milk cannot be overstated. The prices for milk used in these products must reflect supply and demand and must not exceed a level that would require handlers to pay more for milk than needed to clear the market and make a profit.'' 64 FR 16026, 16094 (April 2, 1999). To effectuate that objective, FMMOs use survey prices of market-clearing commodity products.

In the Order Reform decision, both block and barrel cheese were included in the survey to increase the sample size and give a better representation of the cheese market. Since Order Reform was implemented, an evaluation of which products should be included in the cheese survey has occurred twice. In 2000, shortly after implementation of Order Reform, the Department considered both the addition and subtraction of cheese products into the survey, which at that time was administered by the NASS. 65 FR 20094 (April 14, 2000) In 2007, the Department again considered changing the products in the cheese survey, including the removal of 500-lb cheddar cheese barrels. 72 FR 6179 (Feb. 9, 2007) In both proceedings, the Department maintained that inclusion of both 40-lb blocks and 500-lb barrels was representative of the cheese market at the time.

While not contained in the hearing notice of the 2000 proceeding, there was testimony at the hearing for incorporation of other cheeses in addition to cheddar. The idea was denied because ''If the survey included other descriptions of cheddar and other types of cheese, such as mozzarella, it would not be possible to consider the reported price as representative of the value of any particular product.'' 67 FR 67906, 67926 (Nov. 7, 2002) This reasoning illustrates an important consideration of which products should be contained in the survey; products whose resulting prices are representative of a distinct product.

For all other product pricing formulas (butter, nonfat dry milk, and dry whey), DPMRP only surveys one product. The butter survey collects prices of 80 percent salted Grade AA butter, the NFDM survey collects prices of USDA Extra Grade NFDM, and the dry whey survey collects prices for USDA Extra Grade dry whey. While all three of these products can be in varying bulk packaging sizes as specified in regulation, the product itself is

essentially the same. 7 CFR 1170.8 Consequently, the resulting survey prices represent single, distinct products.

The same cannot be said of the two cheddar cheese products surveyed. Forty-pound block cheddar cheese is typically colored, and primarily sent for further processing into consumer type packages such as "cut and wrap" and shredded products. Barrel cheese, on the other hand, is typically white (uncolored) and used primarily for processed cheese and cheese-flavored products. The hearing record demonstrates the two products are not interchangeable but rather are produced for two distinctly different uses which have their own supply and demand factors. These fundamental qualities have not significantly changed since Order Reform. At the time of Order Reform, and during the subsequent two rulemakings considering changes to the cheese survey, the prices of blocks and barrels were relatively close, and it was determined the additional volume added with the inclusion of barrels was a benefit to orderly marketing as it ensured a robust survey sample.

Testimony and evidence presented showed the historical price alignment of the two products, estimated at $0.03 per pound, until 2017. Proponents argued the market changed significantly in 2017 when there was a dramatic increase in price volatility both within each product and in the relationship between the two products. To determine statistical validity of that claim, the differences in the monthly average block and barrel prices from 2001–2023 were analyzed to identify breaks in the structure of the block-barrel spread. The analysis found December 2016 to be a statistically significant month, indicating the period between 2001 to 2016 and 2017 to 2023 were statistically different in terms of the block-barrel spread volatility. Historically, prices for blocks and barrels were similarly priced. From 2001–2016, the block-barrel spread averaged $0.01 per pound, while from 2017–2023 the spread significantly increased to $0.115 per pound.

When surveying prices of two products that recently are so divergent, the resulting average cheese price does not represent either of the products surveyed. For example, in October 2020, cheddar block prices averaged $2.5692 per pound and cheddar barrel prices averaged $0.6052 per pound lower at $1.9640 per pound. The weighted average cheese price for October used to compute FMMO component prices was $2.2921, a price reflecting neither of the two survey products. Accordingly, after

careful analysis of the record, this decision finds the DPMRP cheese survey should only include 40-lb cheddar cheese blocks. Evidence reveals a clear and statistically significant shift in the cheddar markets occurred in 2017, which witness testimony attributed to a number of market factors including plant investments and increased production of white whey. As a result, inclusion of both blocks and barrels in the cheese survey has resulted in average cheese prices used in FMMO formulas that are not representative of any one cheese product. Therefore, this decision recommends adoption of Proposal 3.

There was significant testimony regarding how cheddar barrel makers would be impacted if 500-lb barrels were no longer surveyed. It was clear there was no industry consensus, not even between barrel makers, on the impact. What is paramount to any rulemaking is to ensure FMMO provisions provide for orderly marketing conditions, as required by the AMAA. The ultimate consideration is which set of bulk, market-clearing, commodity type dairy products provide the most accurate and efficient means of determining the minimum value of milk components. One facet of this is to ensure prices used in the formula best represent the fundamental products selected for their purpose. As described above, that goal is not being met by using both blocks and barrels in the survey.

One concern expressed by some barrel cheese manufacturers is that the Class III price resulting from a block-only calculation would often be too high to ensure a profitable return to barrel cheese makers. Multiple considerations are worth noting. One, there are numerous styles of cheese represented in Class III. Manufacturers of each have no guarantees on their net returns, and, hence, manage their business by taking minimum pricing into account. To that end, there are many steps remaining in this rulemaking process, including publication of a final decision, producer referendum, and if passed, an implementation period. These steps should allow barrel manufacturers ample time to determine if changes are needed in their business practices to adjust to the prices that would result from this recommended price survey. As FMMOs only enforce minimum regulated prices on pooled milk, it should not be overlooked that barrel manufacturers choose whether to pool milk subject to minimum prices.

Butter Survey

Currently, FMMOs utilize the monthly average DPMRP survey price of 80 percent salted Grade AA butter in 25-kilogram and 68-pound boxes to determine the butterfat price used in all 4 classified pricing formulas. Proposal 5 seeks to add unsalted butter to the survey. Proponents argue the volume of U.S. butter production captured by the survey has been decreasing, and adding unsalted butter would increase the sample size and yield more robust survey results.

Testimony in opposition to Proposal 5 asserted the production of unsalted butter is mostly manufactured to a particular customer order. Because the lack of salt results in a shorter shelf life, unsalted butter is generally not manufactured unless its sale is imminent. On the other hand, because salted butter can be stored, when milk needs to clear the market and butter manufacturers lack a buyer, they will make salted butter to store and sell later. Opponents also noted unsalted butter is typically exported, often facilitated through premium-assisted sales, rendering those sales unreportable.

The record lacks evidence to support adoption of Proposal 5. Although data was entered showing the amount of unsalted butter graded by the USDA Dairy Grading Program tripled between 2005 and 2022, the USDA butter grading program is voluntary; hence, the data does not give a complete picture of the U.S. butter market. Furthermore, there was no indication regarding what percentage of the graded butter volume would be reportable given testimony noting the structure of the unsalted butter market would likely make a large share of it nonreportable. No data was presented to evaluate whether any additional price information gained through inclusion of unsalted butter would outweigh the burden to both the industry and USDA for its inclusion. In fact, the record demonstrates that unsalted butter is not a market clearing product given its shorter shelf-life and on-demand production.

The record evidence supports salted butter as the market clearing butter product and continuation as the only butter product in the survey. In addition, as discussed in evaluating the cheese survey, having two commodity products surveyed (such as blocks and barrels) can have the unintended consequence of resulting in a component price that does not represent either product produced. As no price information was entered into evidence to evaluate how salted and unsalted butter prices compare, the Department

could not determine if a similar situation might occur by adding unsalted butter to the survey. Accordingly, Proposal 5 is denied.

Class III and Class IV Formula Factors

The Class III and IV formula factors include four distinct elements— manufacturing (make) allowance, butterfat recovery, farm-to-plant shrinkage, and nonfat solids yield.

a. Make Allowances

Make allowances represent the costs of converting raw milk into the four manufactured dairy products surveyed by USDA. The current make allowance levels were determined through a 2007 rulemaking that became effective October 1, 2008, and are as follows ($/ per pound): cheese—0.2003; butter— 0.1715; NFDM—0.1678; and dry whey— 0.1991. The 2007 rulemaking used an average of two surveys: a voluntary, unaudited 2006 nationwide cost survey conducted by the Cornell Program on Dairy Markets and Policy (CPDMP), and a mandatory, audited 2006 cost survey of plants located in California conducted by the CDFA. This proceeding must determine whether manufacturing costs have increased such that a change from the current levels is warranted, and if so, what are appropriate levels.

Four manufacturing cost data sets were entered into the record for consideration in this proceeding. The first was conducted by the University of Wisconsin, on behalf of USDA, and was a voluntary survey of manufacturing plants throughout the U.S. (2021 survey). This survey was similar to the 2006 CPDMP survey used to determine current make allowances, as the primary researcher authored both. The 2021 survey collected cost information provided from manufacturing plants of cheese (10 plants), butter (12 plants), NFDM (27 plants) and dry whey (8 plants). Annual data submitted by plants primarily represented calendar year 2019, and included labor, utilities, non-labor processing, packaging, general and administrative, and return on investment cost categories. The 2021 survey results were presented as total averages, and high and low-cost plant averages.

The 2021 survey methodology was similar to the 2006 study, except for the allocation of non-allocated costs. Some fixed or overhead costs could not be allocated directly. Some costs were inherently direct costs but were not collected in a manner that allowed them to be assigned to a particular processing activity or product. When that occurred in previous studies, unallocated costs

were allocated on a solids basis, which testimony revealed to be a common practice, according to some manufacturers. In some facilities making multiple products, such as butter and powder plants, not all plant operators had the infrastructure to allocate costs to the different products. A common example was plant utilities wherein the plant only had a single electric meter. If an operator utilized 70 percent of the solids received at the plant in butter, then 70 percent of the unallocated costs (*e.g.,* electricity) were allocated to butter production, and the remaining 30 percent were allocated to NFDM production. This allocation method was referred to by the study author as the ''non-transformation'' method.

In the 2021 survey, the author used what they believed to be a better method for addressing costs the manufacturer could not directly allocate. Unallocated costs were allocated based on an estimation of the degree of processing transformation the raw milk underwent to transform into a manufactured product. On a scale from 1 to 10, products with minimum processing (liquid whey) were assigned a 1, while products with a high degree of transformation (whey protein concentrate) were assigned a 10. The survey author argued this somewhat subjective and ordinal measure of costs could provide a more logical allocation of certain costs that were inarguably not properly attributed through the non-transformation cost allocation method. The most obvious example was the highly energy consuming process of drying for NFDM powders. For example, operating a milk dryer requires significant energy, resulting in an assumption that it was more appropriate for a higher percentage of the plant's energy costs to be attributed to its powder production.

A second data set was a survey conducted by the same author, administered on behalf of IDFA, seeking to capture more current costs and increase the number of respondents. This survey, referred to as the 2023 survey, was similar to the 2021 survey except for two elements. First, the plants that voluntarily submitted data were different in number and type: 18 cheese, 13 butter, 15 NFDM, and 9 dry whey plants participated. The survey author explained that while the number of participating plants were similar for butter and whey across both surveys, the structure of the plants was noticeably different. Consequently, most of the variability in average costs between the 2021 and 2023 surveys is attributed to the plant sample, rather than actual cost increases over time. For

example, the 2021 butter plants surveyed tended to be larger than the 2023 butter plants surveyed, accounting for a significant portion of the cost difference between the two surveys. Some witnesses at hearing also noted the 2023 survey captured 2022 costs, a time of historically high inflation which has since moderated.

The second notable difference was the 2023 survey used the non-transformation methodology of allocating unallocated costs on a solids basis. The survey author indicated mixed industry feedback on the transformation allocation methodology used in the 2021 survey, as many participants stated allocating costs on a solids basis is standard practice. To facilitate comparison of the two surveys the author also presented updated 2021 survey results using the non-transformation allocation methodology.

In support of a separate data set, mandatory and audited 2004–2016 California manufacturing cost survey results, conducted by the CDFA, were entered. These surveys formed the historical data used to forecast current costs in the CA Forecast described below. The 2006 CDFA study was used by USDA when determining the current FMMO make allowances.

The fourth data set, entered on behalf of IDFA, was a result of a statistical model that used data from the 2004– 2016 California manufacturing cost surveys and other known input prices and productivity data (for example, the producer price index) to project future California manufacturing costs, referred to hereinafter as the CA Forecast. The study author testified the model predictions were a better estimate of costs than a simple trend analysis since they accounted for the impacts of other factors, such as accelerating inflation, that are known to describe changes in manufacturing costs in California. Unlike the 2021 and 2023 surveys which evaluated six cost categories (processing labor, utilities, packaging, non-labor or utilities processing, general and administrative, and return on investment), the CA Forecast only estimated three cost categories (labor, utility, and other). Other costs were defined as the remaining costs after labor and utility costs were deducted. Inasmuch as the CDFA results were used by USDA when previously amending make allowances, proponents argued this statistical estimation of what CA manufacturing costs might have been for 2022 would be a helpful indicator to validate other manufacturing cost data entered into the record.

These data sets were the basis of the manufacturing allowance levels proposed by stakeholders at the hearing.

Two sets of make allowance levels were offered ($/pound):

Product	Proposal 7	Proposals 8 and 9			
	NMPF	IDFA/ WCMA year 1	IDFA/ WCMA year 2	IDFA/ WCMA year 3	IDFA/ WCMA year 4
Cheese	0.2400	0.2422	0.2561	0.2701	0.2840
Dry Whey	0.2300	0.2582	0.2778	0.2976	0.3172
NFDM	0.2100	0.2198	0.2370	0.2544	0.2716
Butter	0.0210	0.2251	0.2428	0.2607	0.2785

NMPF asserted that their proposed levels take a balanced approach between recognizing increased manufacturing costs and the impact to producers if there is a significant increase from current levels. They testified that while they evaluated the 2021 survey when developing their proposal, the levels they ultimately proposed were a consensus judgment of all NMPF members. By their own description, the proposal is not intended to reflect the entirety of current manufacturing costs. NMPF witnesses argued that their proposal would update make allowances to be a closer reflection of manufacturing costs, but further increases could not be justified because of the potential impact to producers. They argued that until a mandatory cost survey can be conducted to provide assurances of accuracy in the calculation of manufacturing costs, any increases larger than they proposed would reduce producer revenue, lower already slim (if any) margins, and negatively impact the availability of adequate supplies of milk for fluid use. They considered such consequences disorderly.

NMPF stressed current make allowances are too low and have resulted in cooperative reblending as a method of sharing losses among cooperative members who own manufacturing plants. NMPF witnesses also testified to receiving reduced premiums from manufacturing plant customers as they attempt to recoup costs not covered by the current make allowance levels. Reduced and/or deferred plant investment caused by inadequate make allowances was also a theme discussed by many witnesses. Cooperative witnesses spoke of the disproportionate burden on cooperatives with balancing plants, which inherently have higher manufacturing costs as they do not operate continuously at full capacity because of the market-wide balancing role they necessarily assume.

NMPF cooperative witnesses and dairy farmer members presented evidence on increasing farm production costs and slim farm margins. They opined that the impact to producers should be considered when determining appropriate make allowance levels.

WCMA and IDFA offered separate, but identical proposals. Their proposed make allowance levels were derived from the average of the 2023 study and the CA Forecast, plus a $0.0015 marketing cost factor. The proposals contained a 4-year implementation schedule with 50 percent of the increase implemented in year 1 and the remaining 50 percent implemented evenly across the next 3 years. Proponents offered a phased implementation schedule in recognition of the impact that sudden, large increases in make allowances would have on producer revenue.

WCMA and IDFA witnesses asserted there are limits to a manufacturing handler's ability to lower costs through efficiencies. As make allowances have not been increased in over 15 years, the witnesses stated plants have reached the limit on capturing cost efficiencies, and inadequate make allowances are now impacting innovation and capital investments. Manufacturing handlers testified their costs of manufacturing have increased and are in line with the 2021 and 2023 survey results. As a consequence of inadequate make allowances, the witnesses said classified prices are overvaluing raw milk. To substantiate the claim, witnesses compared producer mailbox prices with FMMO blend prices. In regions where mailbox prices (which contain premiums and deductions reflecting reblending) are below blend prices, the witnesses asserted regulated prices are too high, as manufacturers have lowered market premiums to make up for high manufacturing costs.

The record clearly demonstrates that make allowance levels are not reflective of the costs manufacturers incur in processing raw milk into the finished bulk products of cheese, butter, NFDM, and dry whey. This was one of the only facts to which all participating parties agreed and offered evidence in support, as discussed above. However, there were divergent views on what should constitute adequate make allowance values going forward.

Since 2000, when product pricing was adopted, FMMO decisions have consistently relied on surveys of observed manufacturing costs to determine proper make allowance levels. Previous make allowances have been derived in whole, or in combination with, surveys conducted by CPDMP, CDFA, and the USDA Rural Business Cooperative Service. The importance of relying on actual, observed costs cannot be overstated. FMMO price formulas determine the classified prices handlers pay to dairy farmers. It is important that all variables reflect actual market conditions.

While the use of modeling is helpful for policy analysis, the evidentiary record of this proceeding contains adequate observed market data to determine make allowance levels without the need to rely on model assumptions. Modeling involves a host of assumptions made by the modeler, as was described by the CA Forecast author, which result in estimates with a wide confidence interval. In other words, cost estimates could have a wide range of possible values consistent with the model. The confidence interval for the cost estimates widens when some indexes used to forecast are not specific to dairy manufacturing. Economic modeling was considered and rejected during Order Reform as a replacement for the Basic Formula Price. This decision affirms the Department's long-held position that this type of modeling, requiring extensive assumptions, is not an appropriate methodology for determining make allowances when superior information is available. As it is common for participants to not reveal confidential information such as manufacturing costs, the cost surveys contained in evidence provide the best available information on observed costs for this proceeding. Accordingly, this decision does not find justification for

using the CA Forecast in determining appropriate make allowances levels.

In opposition to Proposals 8 and 9, cooperatives and dairy farmer members offered substantial testimony regarding the potential impact to dairy farmers should make allowances be significantly increased. Accordingly, they recommend adoption of the NMPF proposal as it attempts to temper the impact to producers.

FMMOs are designed to provide for orderly marketing through classified prices paid by handlers and marketwide pooling to determine average minimum blend prices paid to producers. As FMMO formulas are market-oriented, the product prices that drive classified prices are chosen to reflect current supply and demand conditions. This was last reiterated by the Department in 2013, writing ''when the supply of milk is insufficient to meet the demand for Class III and Class IV products, the prices for these products increase as do regulated minimum milk prices paid to dairy farmers; because the milk is more valuable and the greater value is captured in the pricing formulas.'' 78 FR 9248 (Feb. 7, 2013). Further, the Secretary is expressly authorized in the AMAA to set prices to reflect ''. . . the price of feeds, the available supplies of feeds, and other economic conditions which affect market supply and demand for milk or its products. . . .'' 7 U.S.C. 608c(18). This concept was discussed and validated by a Federal court and is relevant to this proceeding. *Bridgewater Dairy, LLC et al.* v. *USDA,* No. 3:07–cv–104, 2007 WL 634059 (N.D. Ohio, 2007). Therefore, the potential impact to producers remains an inappropriate factor in determining make allowance levels. While many stakeholders look to the FMMO program to provide stability,

it is not within FMMO authority to support dairy farmer income.

Accordingly, record evidence does not support adoption of Proposal 7, whose make allowances levels are not reflective of observed costs provided in evidence and is designed to dampen the impact to producers.

A vast majority of hearing participants supported a USDA-administered, mandatory, and audited survey as the most appropriate method for obtaining observed cost data to determine make allowance levels. Some witnesses asserted make allowances should not be changed until such a survey is administered and results published. Conducting such a survey is not currently authorized by law. The lack of a mandatory survey has not been reason to delay two previous updates to make allowance levels, and its continued lack of existence now is not a reason for delaying such an update in this proceeding. As discussed, the record of this proceeding clearly demonstrates manufacturing costs have increased since make allowance levels were last changed. Given the body of evidence, this decision finds it appropriate to increase make allowances to ensure the price formulas better reflect manufacturing costs and provide for more orderly marketing conditions.

The record reveals the voluntary, unaudited nature of the 2021 and 2023 surveys are met with reluctance by some stakeholders, particularly the producer community. Questions regarding plant sampling, cost allocation methodology, and capturing of a high-cost time period expressed on the record are legitimate considerations. Issues with the results of voluntary, unaudited surveys are not new to the process of determining make allowances. Similar situations occurred in both the 2006 and 2007 rulemakings. In both instances, make allowances

were determined by using parts of different survey results. The record of this proceeding supports the same considerations.

What remains for this recommended decision to determine are proper make allowance levels given the survey data contained in evidence: the 2021 survey; the 2023 survey; and the 2016 CA survey. The record does not support consideration of the 2021 survey results that relied on the transformation cost allocation method for allocating unallocated costs. Hearing participants expressed skepticism of this method as it is standard industry practice to allocate costs on a solids basis. Although the study author explained how the transformation numbers were assigned to products, the record does not contain sufficient evidence to validate the new methodology. Whether or not the transformation methodology is theoretically more accurate is not relevant. What is germane is that manufacturers allocate costs, manage their plants, and make marketing and pricing decisions in accordance with the traditional method of allocating fixed and unallocated costs on a pro-rata basis of milk solids in the final products. Accordingly, the 2021 survey results utilizing this methodology were not considered when determining the levels recommended in this decision. The revised 2021 and 2023 surveys, using non-transformed survey results, and the 2016 CA survey results were used in determining the make allowances recommended in this decision. Relying on a combination of these survey results provides a consensus set of data to determine appropriate make allowance levels and is superior to relying only on one survey.

Cheese

	2021 Non-transformed	2023 Non-transformed	2016 CA survey	Current	USDA proposed
Low Cost		$0.2201			
High Cost		$0.3181			
Average	$0.2365	$0.2643	$0.2454	$0.2003	$0.2504
# Plants	10	18	4		

This decision recommends a $0.2504 per pound cheese make allowance, derived from the average of the 2021 and 2023 non-transformed survey results. The 2023 survey incorporates a representative sample size, accounting for 55.6 percent of NASS cheddar cheese production. The record indicates the 2023 survey, which collected cost data primarily from 2022, covered a period of relatively high inflation and

rising input costs. An example is packaging costs—lumber and corrugated materials—which testimony indicates have receded since peaking in 2022. Absent any other data on the record, this decision finds it appropriate to utilize an average of the 2023 and 2021 non-transformed survey results to ensure the recommended cheese make allowance is not disproportionately affected by higher 2022 costs that have

since moderated. The decision finds use of the 2021 and 2023 surveys provides a manufacturing allowance reflective of the national cheddar cheese market. In 2022, California cheddar cheese production represented approximately 6.9 percent of reported NASS cheddar cheese production. As incorporation of the 2016 CA survey would result in an over representation of California cheese

manufacturing costs, this decision does not support its consideration.

Butter

	2021 Non-transformed	2023 Non-transformed	2016 CA survey	Current	USDA proposed
Low Cost	....	$0.2616	$0.1838	....	....
High Cost	....	$0.4210	$0.2149	....	....
Average	$0.1338	$0.3176	$0.1938	$0.1715	$0.2257
# Plants	12	13	7	....	....

This decision recommends a $0.2257 per pound butter make allowance, derived from the average of the 2021 and 2023 non-transformed survey results. While the 2021 and 2023 surveys had roughly the same number of reporting plants and represented roughly the same volume of NASS U.S. butter production (approximately 80–82 percent), the plant samples differed significantly. The study author claimed sampling was the main driver for the notably different survey results. The 2023 survey captured data from both smaller and larger plants while the 2021 survey consisted of a more homogenous sample of larger and more efficient plants. The record indicates the 2023 survey, which collected cost data primarily from 2022, covered a period of relatively high inflation and rising input costs. According to the Producer Price Index for All Commodities (PPI), published by the Bureau of Labor Statistics, prices have moderated since their June 2022 peak. Thus, this decision finds it appropriate to average the 2023 and 2021 non-transformed surveys to ensure the recommended butter make allowance is not disproportionately affected by higher 2022 input costs that have since moderated and account for the differences in plant sampling. The decision finds use of the 2021 and 2023 surveys provides a manufacturing allowance reflective of the national butter market, as both surveys represent over 80 percent of 2022 NASS butter production volumes. This decision does not support incorporating the 2016 CA survey in the calculation as it would overrepresent California butter manufacturing costs.

NFDM

	2021 Non-transformed	2023 Non-transformed	2016 CA survey	Current	USDA proposed
Low Cost	....	$0.2302	$0.1854	....	....
High Cost	....	$0.3247	$0.2786	....	....
Average	$0.2454	$0.2750	$0.2082	$0.1678	$0.2268
# Plants	27	15	8	....	....

This decision recommends a $0.2268 per pound NFDM make allowance, derived from the average of the 2021 non-transformed survey and 2016 CDFA cost of processing survey results. In 2022, California represented 43.7 percent of U.S. NFDM production. This supports hearing testimony describing the importance of California manufacturing facilities in the total U.S. production of NFDM powder. Therefore, this decision finds it appropriate to place more emphasis on California NFDM plant costs considering the dominant share of NFDM production by California plants. As 2016 was the last CDFA study published, and it contains audited data, unlike the 2021 and 2023 surveys, it is appropriate to use as one of the surveys to determine the recommended average make allowance. As stated previously, given all the cost surveys contained in the evidentiary record have shortcomings, this decision finds it appropriate to use an average of two surveys when recommending make allowances. Regarding a NFDM make allowance, what remains is consideration of either the 2021 or 2023 survey. In the 2023 survey, significantly fewer plants participated and record evidence suggests at least one large NFDM manufacturer did not participate. The record reveals the 2021 survey to be a better representation of plants producing NFDM in the U.S. than the 2023 survey. Additionally, as NFDM production is heavily energy dependent, the 2023 survey captured the historically high energy costs, particularly natural gas, that have since moderated. Utilizing the 2021 survey figures moderates the influence of the high inflationary period experienced in 2022, particularly for energy and utilities.

Dry Whey

	2021 Non-transformed	2023 Non-transformed	2016 CA survey	Current	USDA proposed
Low Cost	....	$0.2848	....	....	....
High Cost	....	$0.3952	....	....	....
Average	$0.2457	$0.3361	....	$0.1991	$0.2653
# Plants	8	9	....	....	....

This decision recommends a $0.2653 per pound dry whey make allowance, derived from the 2021 non-transformed survey and 2023 non-transformed low-cost survey result. Similar to NFDM, dry whey production is heavily energy dependent, and the same concerns regarding the 2023 survey results exist for dry whey. The record reflects incrementally higher drying costs are incurred when drying whey compared to NFDM due to the higher moisture content in whey. Natural gas prices increased substantially between 2019 and 2022. The Henry Hub Natural Gas Spot Price increased 153 percent between 2019 and 2022. However, prices declined in 2023, with the spot

price falling by 61 percent. Natural gas prices in 2023 were comparable to prices in 2019, with the spot price one percent lower than in 2019. Compared to 2016, natural gas prices were slightly lower in 2023, with spot prices about 4 percent below 2016 levels. These data suggest natural gas prices are similar to price levels observed during the Stephenson 2021 survey. Absent any other data on the record, this decision finds it appropriate to utilize the 2023 non-transformed low-cost average ($0.2848) with the 2021 non-transformed survey to ensure the recommended dry whey make allowance is not disproportionately affected by higher 2022 energy and utilities costs that have since moderated.

The record does not support inclusion of a $0.0015 per pound marketing cost for any of the four make allowances. While supported by a few participants in both testimony and post-hearing briefs, no data was provided to validate $0.0015 as an appropriate estimation of marketing costs.

The make allowances recommended in this decision are more representative of manufacturing costs than current make allowances, which were last changed in 2008. Record evidence clearly supports updates; however, as previously mentioned, each of the surveys of observed costs has weaknesses. The recommended make allowance levels are the best approximation of manufacturing costs given publicly available data and evidence contained in this proceeding's record. In accordance with long-standing practice, this decision does not recommend delaying the implementation of make allowances determined to best reflect current conditions. Should these make allowances be approved by producers, they would be implemented through the publication of a final rule.

b. Butterfat Recovery

Currently, the Class III formulas contain a 90-percent butterfat recovery assumption. This represents the percentage of butterfat in raw milk that can be recovered during the cheesemaking process, recognizing that for both theoretical and practical reasons, 100% of utilization of butterfat (or any other raw milk component) in the production of a dairy product is impossible. Proposal 10 seeks to increase the butterfat recovery assumption to 93 percent. Proponents claimed modern cheesemaking equipment and better cheese handling techniques make a higher butterfat

recovery not only attainable, but common in practice.

Opponents mainly consisted of manufacturers asserting that while some cheese plants attain butterfat recovery percentages in excess of 90 percent, yield assumptions that increase producer revenue, such as butterfat recovery, should not be amended outside a comprehensive review of all assumptions that determine yield factors. Multiple opponents mentioned the overvaluation of whey cream as an example of a potential issue.

This rulemaking proceeding sought to consider changes to the FMMO pricing formulas. Industry participants were invited to submit proposals concerning the current pricing provisions of the FMMOs. Those opposing changes to the butterfat recovery percentage had an opportunity to submit proposals on any of the yield factors, as they fall within the provisions of the pricing formulas. None, other than those submitted by Select, were received. This decision does not find it appropriate to deny consideration of any yield related proposal presented in this proceeding on the basis of a potential future evaluation of all yield factors.

The record contains testimony from several expert witnesses explaining the cheesemaking process and use of more modern cheese equipment and technology, including improvements in coagulants and curd handling, allowing handlers the ability to capture a larger percentage of butterfat in cheese. As butterfat recovery numbers are considered confidential information, the record does not contain a well-developed picture of recovery levels in U.S. cheese plants. The record indicates the age of equipment and technology used in cheese plants varies widely. While evidence was submitted describing high butterfat retention rates that are achievable using new equipment, it does not demonstrate those rates are reflective of the general industry conditions. Other than a few new, very modern plants, the record does not support a 93 percent butterfat recovery factor as attainable by most cheese plants.

The record contains considerable testimony estimating current butterfat recovery rates in the universe of cheese plants with varying ages of equipment and technology. Expert witnesses estimated butterfat recovery in cheddar plants ranged from 88 to 93 percent, attributing much of the difference to cheddar vat equipment. It is important that the product price formulas reflect current, not theoretical, conditions for the general population of plants. Experts generally offered that most commodity

cheddar cheese plants can obtain greater than 90 percent recovery, but few obtain 93 percent, with a 91 percent butterfat recovery rate considered the industry average. Accordingly, this decision recommends a 91 percent butterfat recovery rate. Such an increase necessitates a change to the butterfat yield factor in cheese from 1.572 to 1.589.

c. Farm-to-Plant Shrinkage

Currently, the FMMO formulas assume a farm-to-plant shrinkage factor of 0.25 percent. This represents normal milk losses that occur when milk is delivered from the farm to a plant. Under the FMMO system, most handlers purchase milk from producers based on farm weights and tests. The shrinkage factor recognizes that when milk is pumped from a farm bulk tank to a milk tanker, and then from milk tanker to the plant silo, milk sticks to the sides of the pipes and tanks. Milk can also be lost in the milk hauling process when milk haulers must make multiple farm stops to fill a load. As a result, plants often physically receive less milk than was measured at the farm. In recognition of this reality, the yields are slightly reduced to reflect the amount of milk actually available to make a product, as compared to the amount of milk picked up on farms.

The proponents asserted that producers shipping full tanker loads is common in the Southwest where they operate. They testified to and provided cooperative data regarding the steps they have taken to reduce shrinkage. Proponents said increased average farm size results in fewer stops by the milk hauler to fill up a load, thus lowering overall shrinkage. They opined shrinkage should no longer be a reality for farms as losses can be managed on any size farm through adoption of farm scales, flow measurements, and other technologies to improve accuracy.

Opponents argued only a small percentage of dairy farms are able to produce enough milk to fill an entire tanker load. While the number of large farms has grown, opponents testified removing the shrinkage factor could further incentivize manufacturers to prefer large over small farms. Consequently, they opined the farm-to-plant shrinkage factor should remain.

Record evidence reveals most dairy farms are unable to fill a tanker load per day. According to the NASS, daily milk production per cow averaged 66.5 pounds in 2022. Assuming an average tanker load of milk is approximately 48,000 pounds, it would require a milking herd of 722 cows to fill a tanker. In 2022, of the 24,470 U.S. dairy farms

with milk sales, only 3,451 farms (approximately 14 percent) had 500 or more milk cows, and 2,013 (approximately 8 percent) had 1,000 or more milk cows.

For the approximately 90 percent of farms that are not able to ship full tanker loads of milk, the record indicates farm-to-plant losses remain a reality for most producers and cooperatives operating within the FMMO system. As most handlers pay producers based on farm weights and tests, it remains appropriate to provide recognition in the formulas for milk solids paid for but not physically received at the handler's facility. Accordingly, Proposal 10 is not recommended for adoption.

d. Nonfat Solids Yield

Currently, the FMMO Class IV price formula contains a NFDM yield factor of 0.99, representing the pounds of NFDM that can be made from one pound of nonfat solids of raw milk delivered from the farm. This factor is less than 1.0, as it recognizes both farm-to-plant shrinkage and the portion of nonfat solids utilized in NFDM.

Select offered Proposal 12 to adjust the NFDM yield factor to account for both the NFDM and buttermilk powder that can be manufactured from the same pound of nonfat solids, and proposed an NFDM yield factor of 1.02. Proponents claim producers are not compensated for nonfat solids that end up in buttermilk powder since such production is not accounted for in the yield factor.

A review of previous rulemakings reveals numerous changes to the NFDM yield factor both during and since Order Reform. The Order Reform recommended decision contained a nonfat solids yield factor of 0.96 as a divisor (equivalent to a 1.04 multiplier) in the nonfat solids price equation. It represented the percent of nonfat solids in a pound of NFDM. In other words, if a NFDM plant had 1 pound of nonfat solids, it could make 1.04 pounds of NFDM due to the moisture content in the final product. The factor was changed in the Order Reform final decision to 1.02 (equivalent to a 0.98 multiplier) as stakeholders commented it should represent both the NFDM and buttermilk powder that could be produced from one pound of nonfat solids.

The nonfat solids yield factor was again considered in a 2000 rulemaking. Initially, the factor was amended to 1.00. 65 FR 82832 (Dec. 28, 2000). During that proceeding, stakeholders argued the yield factor should reflect that more than one pound of NFDM can

be manufactured from one pound of nonfat solids, resulting in a divisor less than one, or a multiplier greater than one. Evidence from that proceeding was used to demonstrate a calculation using only the NFDM price, NFDM make allowance, and a multiplier of 1.00 would be equivalent to a more complex formula attempting to combine the NFDM and buttermilk net prices using corresponding yield factors.

The final decision in the 2000 rulemaking changed all yield factors, including the nonfat solids yield, from divisors to multipliers. 67 FR 67906 (Nov. 7, 2002). Keeping in line with only reflecting the nonfat solids used in NFDM, the nonfat solids yield multiplier changed from 1.0 to 0.99, with the incorporation of a farm-to-plant shrinkage factor of 0.25 percent. As calculated, for 1 pound of nonfat solids leaving the farm, 0.9975 pounds entered the plant $(1.00 - 0.0025 = 0.9975)$. Subtracting an estimated 0.0479 pounds of nonfat solids ending up in buttermilk powder left 0.9496 pounds of nonfat solids in NFDM $(0.9975 - 0.0479 = 0.9496)$. It was assumed NFDM is 96.2 percent nonfat solids, resulting in a NFDM yield factor calculation of $0.9496/0.962 = 0.9871$, which was rounded to 0.99. The final decision made clear the 0.99 should be considered a NFDM yield factor, no longer a nonfat solids yield factor as was the case when Order Reform was implemented.

Proposal 12 requests buttermilk powder again be incorporated into the NFDM yield. Proponents testified that without accounting for buttermilk powder, producers are not compensated for all the nonfat solids they sell to a Class IV manufacturer. Record evidence does not support such a claim. Class IV manufacturers are required to pay the nonfat solids price for pooled milk purchased, regardless of whether those nonfat solids end up in NFDM, butter, buttermilk powder, or any other Class IV product. The same can be said for other classified products whose component prices are computed similarly, even if there are numerous products in the category. For example, the other solids price is determined through a survey of dry whey prices and a dry whey make allowance. Manufacturers pay the other solids price even if they are making other products in the category, such as whey protein concentrate or whey protein isolate.

Additionally, while the rulemaking history of the NFDM and nonfat solids yield factors is complex, evidence does not support that attempting to reflect two products (buttermilk powder and NFDM) in the NFDM yield would

provide for more orderly marketing conditions. Recommendations are made throughout this recommended decision attempting to simplify, where possible, an already complex set of pricing formulas. As such, this decision finds it appropriate to maintain the current NFDM yield factor that only reflects one product. Accordingly, Proposal 12 is not recommended for adoption.

Base Class I Skim Milk Price

Currently, the base Class I skim milk price, also referred to as the ''Class I mover'' or ''mover,'' is the simple average of the monthly advanced Class III and Class IV skim milk pricing factors, plus an adjuster of $0.74 per cwt. This formula was implemented under the 2018 Farm Bill, which amended the AMAA to revise the provisions related to determining the monthly Class I skim milk price. Public Law 115–334, 132 Stat. 4490 § 1403. Congress exempted this amendment from the formal rulemaking process, and USDA implemented the change through a final rule. The formula has been in effect for milk marketed on and after May 1, 2019. 84 FR 8590 (March 11, 2019). Prior to the change, the base Class I skim milk price was the higher of the advanced Class III or Class IV skim milk prices (the ''higher-of''), announced on or before the 23rd of the prior month. The higher-of formula had been in effect since January 1, 2000.

Industry stakeholders offered six proposals to amend the Class I mover. Proposal 13 would return to the previous higher-of Class I mover. NMPF explained the change to the average-of was supported at the time by both NMPF and IDFA, as it was intended to be revenue neutral for producers and provide Class I processors the ability to utilize hedging for risk management.

IDFA and MIG proposed maintaining the average-of mover but recommended different calculations for the adjuster. Proposal 14, offered by IDFA, incorporates an adjuster that resets every January and would be the higher of either: (1) $0.74; or (2) the 24-month average difference between the higher-of and the average-of the advanced Class III and Class IV skim milk pricing factors. The 24-month calculation would run from August of three years prior to July of the previous year. For example: the 2024 adjuster would have been calculated by subtracting the average of the advanced Class III and IV skim pricing factors from the higher of the advanced Class III or Class IV skim pricing factor for each month of August 2021 through July 2023, then averaging the differences of the 24 months. The result for the August 2021 to July 2023

time period is $0.95, which is higher than $0.74, and thus would have been the adjuster effective January 1, 2024, for the calendar year. For the month of January 2024, the advanced Class III and IV skim pricing factors were $5.74 per cwt and $9.25 per cwt, respectively, averaging to $7.50 per cwt. With the addition of the adjuster, the January 2024 base Class I skim milk price would have been $8.45 per cwt ($7.50 + $0.95) under Proposal 14.

Proposal 15, offered by MIG, incorporates a monthly rolling average adjuster calculated as the difference between the higher-of and the average-of, for 24 months, with a 12-month lag. For example, the adjuster for January 2024 would have been $1.01 per cwt, calculated from the 24-month average difference of the higher of the advanced Class III or Class IV skim pricing factor less the average of the advanced Class III and IV skim pricing factors from January 2021 to December 2022. The January 2024 advanced Class III skim pricing factor was $5.74 per cwt and advanced Class IV skim pricing factor was $9.25 per cwt, resulting in an average of $7.50 per cwt. The average-of, with the addition of the adjuster, would result in a January 2024 base Class I skim milk price of $8.51 per cwt ($7.50 + $1.01) under Proposal 15.

Edge offered Proposals 16 and 17. The Class I mover in Proposal 16 would be the announced Class III skim milk price, plus an adjuster reflecting the 36-month average of the difference between the higher-of the advanced [2] Class III or Class IV skim milk prices and the announced [3] Class III skim milk price from August of four years prior to July of the previous year. The adjuster would be calculated annually and be effective January of each year. For example: The adjuster for 2024 would be $1.64 per cwt, calculated from the 36-month average difference of the higher of the advanced Class III or Class IV skim pricing factor and the announced Class III skim milk price from August 2020 to July 2023. The announced Class III skim milk price for January 2024 was $4.92 per cwt, and with the addition of the adjuster would result in a January 2024 base Class I skim milk price of $6.56 per cwt under Proposal 16. Proposal 17 would return to the previous higher-of calculation. Both Proposals 16 and 17 would eliminate advanced pricing for Class I and Class II milk. Edge preferred

Proposal 16, stating it would facilitate Class I hedging.

The AFBF offered Proposal 18, which is nearly identical to Proposal 17. Both Edge and the AFBF stressed the importance of eliminating advanced pricing as a means for limiting price inversions that result in significant volumes of milk not pooled.

NMPF presented testimony describing how the 2019 mover change was not revenue neutral, which is why they seek a return to the higher-of. NMPF and dairy farmers described volatile markets in response to the COVID–19 pandemic. Even as the COVID–19 pandemic has ended, prices have remained volatile, and stakeholders opined they expect volatility to continue. NMPF witnesses asserted that because of the current formula and volatile markets, there is no way for the impact to dairy farmers to be revenue neutral in the long term.

According to NMPF, an unanticipated consequence of the average-of mover is the asymmetric risk borne by dairy farmers. NMPF explained the static nature of the $0.74 adjuster means that dairy farmers only benefit from the average-of when the difference between the advanced Class III and Class IV skim milk prices is less than $1.48. When the difference is greater, producers are paid less, sometimes significantly less, than they would have been under the higher-of mover. During the 50-month period from May 2019–June 2023, the average-of mover was lower than the higher-of in 27 months. NMPF asserted when the average-of exceeded the higher-of, it did so by no more than $0.74, regardless of the magnitude of the difference between Class III and Class IV skim milk prices. However, when the average-of was lower than the higher-of, the reduction could be significantly more than $0.74. NMPF cited October 2022 as an example. At that time, the average-of was lower than the higher-of by $2.08. According to NMPF, from May 2019 to August 2023, producers were paid $998.3 million less than they would have if the higher-of mover had been in place.

Both IDFA and MIG asserted their adjusters would result in revenue neutrality to producers over time because of regular updates to better reflect current market conditions, whereas the current static $0.74 adjuster reflects market conditions from 2000–2018. IDFA further claimed the $0.74 floor contained in Proposal 14 ensures producers would receive Class I skim milk prices at least equating to what they receive under the current formula. MIG opined a rolling average adjuster would provide better dynamic market

signals while also stabilizing prices through more gradual monthly changes.

In justifying these methods to continue an average-of mover, IDFA and MIG witnesses stressed the importance of maintaining the ability for Class I processors to hedge their future prices. The use of an average-of mover would allow them to continue to spread risk by taking equal positions in the Class III and Class IV futures and options markets. IDFA and MIG maintained hedging is a critical tool for certain processors, particularly ESL, to remain competitive with alternative beverages, such as bottled water, juice, and milk alternatives that do not face the same regulatory pricing framework as fluid milk. The ability to lock in a future price makes their cost known and allows a longer price horizon. They further asserted promoting and growing the sale of milk is a goal of the AMAA, which can be achieved using hedging. Both proponents explained a processor's ability to hedge is not negatively impacted by the adjuster calculation (whether monthly or annually), so long as it is announced well in advance. IDFA was amenable to either adjuster calculation, so long as the average-of mover is maintained.

Proponents of maintaining an average-of mover argued Congress amended the AMAA to facilitate risk management for Class I, and as it directed the Department to adopt the average-of mover, the Department must now continue that policy and refrain from taking action that would inhibit risk management. However, in the 2018 Farm Bill, Congress stipulated the average-of mover must be maintained for a period of not less than two years, at which time the formula could be modified through the standard FMMO amendment process. Congress did not direct that risk management consideration must be maintained beyond the two years following implementation of the 2018 Farm Bill.

To evaluate the NMPF claim regarding asymmetric risk, AMS analyzed May 2019–December 2023 prices (56 months). The analysis found the current average-of mover to be greater than the higher-of mover in 23 months, resulting in $334 million in additional revenue paid to producers in those months. The two movers were equal in 2 months, and in the remaining 31 months, the average-of mover was less than the higher-of mover, resulting in $1.4 billion less in revenue paid to producers in those months than would have been without the mover change. The net result to dairy farmers during those 56 months was negative $1.066 billion. Further, in months when the

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[2] Advanced refers to prices announced on or before the 23rd of the prior month.

[3] Announced refers to prices announced on or before the 5th of the following month.

average-of was more than the higher-of mover, the difference was never greater than $0.74 and, mathematically, could never be greater than that amount under the current average-of system. However, in months when the average-of was less than the higher-of mover, the difference was as great as $5.19. This analysis supports NMPF's assertion of the asymmetric risk borne by producers under the current mover calculation.

The record reveals the $0.74 static adjuster was adopted because, at the time, it represented the additional value paid to producers through the higher-of versus what would have been the average-of mover from 2000–2017. Evidence shows $0.74 is no longer representative of the additional higher-of value to producers as Class III and IV prices have become significantly more divergent in recent years. A comparison of advanced Class III skim and Class IV skim milk prices from January 2000–April 2019 and from May 2019–December 2023 illustrates the increased volatility. From January 2000–April 2019, when the Class I skim milk price was determined by the higher-of mover, the monthly difference in advanced prices ranged from $0 to $6.77. From May 2019 through December 2023, the range was $0 to $11.86, equating to an increase of slightly more than 75 percent.

Testimony described rapidly changing Class III and IV prices resulting not only in months when the Class I mover was significantly lower than it would have been under the higher-of formula, but times when the Class I price (announced before the month) was less than the Class III and/or Class IV price (announced after the month). As handlers have the option to pool Class III and Class IV milk, this price inversion led to many months when the higher-valued manufacturing milk was not pooled. Testimony on the record described several consequences: (1) manufacturing handlers opted out of pool participation, keeping the higher market revenue instead of sharing it with all pooled producers; (2) instances when a manufacturing handler opted out of pool participation, and the historically high market revenue was not shared with their own producer suppliers; and (3) significant disparity in payments to pooled and nonpooled producers in some months.

Testimony detailed the conditions in 2020 when the demand for cheese relative to butter rapidly widened the spread between Class III and Class IV Prices. For example, the base Class I skim milk price for June 2020 (announced May 20, 2020) was $7.08 (based on an $6.68 advanced Class III

skim milk price and an $5.99 advanced Class IV skim milk price). Cheese prices rose rapidly during the month, resulting in a $15.06 Class III skim milk price and $6.62 Class IV skim milk price. According to record evidence, high volumes of Class III milk were not pooled in order to avoid paying the higher valued Class III price into the marketwide pool.

Record data reveals a significant increase in the estimated volume of milk not pooled in 2020 and 2021, which NMPF attributed to price volatility. Data shows milk volumes not pooled in 2020 and 2021 were approximately 60 percent greater than in 2019. Testimony and evidence pointed to pronounced price volatility being considered the norm, not the exception, going forward.

Record evidence also shows how the lower average-of mover value resulted in muted blend prices in some regions of the county, making it difficult to attract milk supplies for fluid use. This was particularly a concern in the southeastern FMMOs which experienced a disproportionate reduction in blend prices relative to other FMMOs because of their high Class I utilization. Testimony described how blend prices between the Southeast FMMO and nearby orders narrowed, making it difficult to attract supplemental milk to meet the fluid demand in the milk deficit region.

During Order Reform, the Department considered numerous options for determining Class I prices as it evaluated an appropriate Class I pricing system. In the Order Reform recommended decision, several variations of an average mover were considered, including a moving average and a declining average weighted most heavily by the current month's price, along with a higher-of option based on the second preceding month's prices. When considering its recommendation, the Department evaluated each option's ability to improve price stability while maintaining appropriate producer price signals to ensure an adequate supply of milk for fluid use.

The Department initially recommended a 6-month declining average of the higher-of the Class III and Class IV skim milk prices. The goal was to ''decrease monthly Class I price volatility while minimally affecting the long-run price.'' 63 FR 4802, 4886 (Jan. 30, 1998). Analysis of that option compared to the higher-of option showed only a two-cent difference based on data from 1992–1997, thus supporting the notion an average-of price would not impact prices in the long run. Public comments in response

to the recommended decision cautioned the Class I price should be closely and directly linked to manufacturing prices. Commenters opposed a six-month declining average because it would delay the linkage with the Class I price, resulting in counter-cyclical pricing—something noted in the final decision, which stated that, for example, if Class I prices are undervalued, ''it reduces producers' pay prices at a time when the producers should be receiving a positive price signal.'' 64 FR 16026, 16102 (Apr. 2, 1999). Analysis conducted for the Order Reform final decision evaluated prices post-1998 and found using a 6-month average mover during times of increased price volatility would have led to price inversions. The decision explained how price inversions could lead to depooling under which disorderly marketing conditions may arise. As a result, the final decision also articulated, on the same page as the most recently noted quotation, ''because handlers compete for the same milk for different uses, Class I prices should exceed Class III and Class IV prices to assure an adequate supply of milk for fluid use.'' Accordingly, the final decision recommended the higher-of mover which remained in place until May 2019.

Record evidence clearly shows that the price inversions and depooling predicted in the Order Reform final decision occurred after the average-of mover was implemented in 2019. The principle of maintaining a proper link between Class I and manufacturing prices to avoid price inversions and depooling remains an important consideration in evaluating change to the Class I mover in this rulemaking.

Proponents offering modifications to the average-of mover acknowledge price inversions and depooling have occurred with greater frequency and duration. However, they maintain hedging is a critical risk management tool that should be preserved and cannot be achieved using the higher-of mover. Record evidence highlights that although both HTST and ESL are fluid milk products, there are notable differences between HTST and ESL processing and sales. ESL products require unique processing techniques and packaging that significantly increase product shelf-life. The record indicates ESL products have a shelf-life of at least 65 days; some ESL processors stated their products have a shelf-life of 120 days or more.

ESL processors described marketing differences between the two types of products. ESL products: (1) have a longer shelf-life which facilitates a wider distribution; (2) are typically

shipped to centralized retail warehouses (distribution centers) and from there are distributed to individual stores by the store owners; and (3) are sold to retail customers who prefer long-term contracts and a long lead time for any price changes, often 60–90 days or more. This is significantly different than HTST products that: (1) have a significantly shorter self-life (common range is 14–21 days) necessitating more local distribution; (2) are typically distributed through direct-store-delivery (DSD); and (3) whose retail customers are accepting of FMMO Class I prices that vary monthly.

ESL processors explained the average-of mover has enabled them to meet customer demand for long-term price-fixed contracts by using the futures and options market to hedge the risk associated with changes in monthly FMMO Class I prices. They credit the ability to manage risk as a factor in the growth of ESL products. Before adoption of the average-of mover, processors of ESL products took on a significant amount of price risk to meet the long-term, fixed price contracts required by customers because they had no way of knowing when they negotiated contracts whether the advanced Class III or Class IV price would become the base Class I skim milk price. The record contains no similar evidence that HTST processors face the same constraints. In fact, record evidence shows advanced Class I pricing with monthly sales negotiations was, and remains, standard practice for these products.

Given all the record evidence, this decision must determine the best method for determining Class I skim milk prices that ensure adequate fluid milk supplies and orderly marketing conditions. The earlier discussion of record evidence clearly highlights the disorderly marketing conditions that occurred as a result of the average-of mover. However, when considering how to provide for more orderly marketing conditions, this decision cannot ignore how the Class I market has evolved since 2000.

Prior to FMMO Reform, fluid milk products were almost exclusively HTST, which have a shorter shelf-life and move from farm to retail in a relatively short time. Advanced pricing ensures equity among fluid milk handlers, allowing them to know their regulated minimum raw milk cost at the time they negotiate prices with their buyers and ensure equal raw milk cost between similarly situated handlers.

The record reflects significant development and growth of ESL products since Order Reform. The

record also highlights marketing ESL products is significantly different than HTST products. Evidence shows the different distribution pattern (*warehouse* v. *DSD*) and longer shelf-life (65–120 days) facilitates wider geographic, rather than local, marketing and distribution. In addition, it is common for competing ESL products being sold in the same month to have been processed during a range of previous months. As a result, processors of ESL products do not necessarily have the same regulated minimum raw milk prices for products sold during the same month. This undermines handler equity between processors of ESL products as they do not have equal raw milk costs for products competing for sales in the same month. This decision supports a hybrid solution that will ensure adequate supplies of milk for fluid use, while also accounting for the inequities between processors of ESL products.

FMMOs are tasked with ensuring minimum prices reflect supply and demand conditions, which is accomplished, in part, through weekly surveys of wholesale bulk commodity products. Weekly survey prices provide signals to market participants on the changing value relationships between dairy product markets. FMMOs do not control those market-based relationships. As monthly average prices are determinants of Class III and IV prices, it is expected there will be periods when Class III values will be higher, and other times when Class IV values will be higher. Under a monthly pricing system that allows for voluntary pooling of manufactured milk and advanced Class I pricing, there will be occasions when these value differences are large enough to have price inversions and/or incentivize handlers to not pool milk during a particular month. The record clearly shows such situations occurred prior to May 2019. However, record data highlights the shift in duration and magnitude of these occurrences since the average-of mover was adopted. The record reveals large and prolonged value differences can cause significant differences in pay prices between producers and reduced willingness to supply the Class I market. The record of this proceeding supports returning to the higher-of Class I mover for HTST products. The higher-of would provide a better link between Class I and manufacturing prices and better ensure Class I prices remain the highest to bring forth an adequate supply of fluid milk. Therefore, this decision recommends adoption of Proposal 13 for HTST fluid milk products.

Returning to the higher-of mover for ESL products would deepen the pricing

inequity that naturally exists for those products, as described earlier. For example, under the higher-of mover, a handler processing and selling an ESL product in January 2023 would have faced a base Class I skim milk price of $11.62 per cwt. However, handlers who processed ESL products two or four months before, which are also being sold in January 2023, would have faced a base Class I skim milk price of $12.61 and $13.82 per cwt, respectively. This results in a difference of base raw milk costs of up to $2.20 per cwt for ESL products competing for sales during January 2023.

Given the marketing characteristics of ESL products, short of providing for fixed minimum prices, price differences between these competing products will always exist. However, this decision strives to recognize the evolution of the ESL market since Order Reform with a pricing structure for ESL products that would narrow differences, make them more predictable, and provide for more orderly marketing conditions. This decision finds pricing differences would be reduced through adoption of a Class I ESL adjustment that would equate to a Class I price for all ESL products equal to the average-of mover contained in Proposal 15. The Class I ESL adjustment will provide more long-run pricing equity for ESL product by better ensuring handlers whose ESL products compete for sales during the same month, but whose raw milk may have been purchased and processed during different time periods, have more similar costs.

In practice, the higher-of Class I mover would be announced on or before the 23rd of the prior month. A Class I ESL adjustment would be announced at the same time, and equal the difference between the higher-of mover and the average-of the advanced Class III and Class IV skim milk pricing factors plus a rolling monthly adjuster. The rolling monthly adjuster would be calculated as the average of the differences between the higher-of and the average-of calculations for the prior 13 to 36 months. All milk used in ESL products with a shelf-life no less than 60 days, regardless of the type of Class I plant [4] in which they are made, would be subject to the adjustment. The adjustment would be added to or subtracted from the handler's pool obligation applicable to the amount of milk used in ESL products. The rolling adjuster would be computed in advance and announced on or before the 23rd of the month 12 months in advance of its application (*i.e.* January 2023 rolling

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[4] 1xxx.7(a) or 1xxx.7(b).

adjuster would have been announced on or before December 23, 2021).

For example, the advanced Class III and IV skim pricing factors for January 2023 were $9.54 per cwt and $11.62 per cwt, respectively.

• The average-of the two factors (applicable to ESL milk) would have been $10.58 plus the rolling adjuster reflecting the average of the differences between the higher-of and the average-of from January 2020 to December 2021 ($1.58 per cwt), for a total of $12.16 per cwt.

• The higher-of mover (applicable to HTST milk) would have been $11.62 per cwt.

• The January 2023 Class I ESL adjustment would have been $0.54 ($12.16 − $11.62), calculated by subtracting the higher-of announced price from the average plus rolling average calculation.

The effect of the adjustment would be a base Class I skim price for HTST milk of $11.62, and an effective base Class I skim milk price for ESL milk of $12.16. While this example computes a positive adjustment resulting in a higher effective price for ESL milk, it is to be expected in some months the adjustment will be negative, resulting in a lower effective price. The objective of the ESL adjustment is not to create a higher or lower effective Class I price, but rather to reduce the range of base Class I skim prices paid for milk used in ESL products being sold during a month. Evidence on the record indicates the Class I ESL adjustment will tend to moderate the price highs and lows, thus providing improved price equity between handlers of ESL products. The record indicates ESL products represent approximately 8 to 10 percent of the Class I market and would be subject to the Class I ESL adjustment.

This decision finds the Class I ESL adjustment, combined with the higher-of mover price for HTST products will provide for more orderly marketing and better ensure price equity for handlers of similar Class I products.

This decision also recommends maintaining advanced Class I pricing. Proponents of Proposals 16, 17, and 18 argued advanced pricing should be eliminated to prevent short term inversions between the monthly Class I price and Class III and/or IV prices, and subsequent incentives for depooling. Opponents, both independent and cooperative Class I processors along with a majority of producers, supported the continued use of advanced pricing. As discussed previously, advanced Class I pricing provides equity to regulated Class I processors by informing them of their regulated

minimum raw milk cost in advance of the sale of their product. This ensures all dairy processors have an opportunity to align their raw milk costs with the sale prices of their products, which are generally negotiated before the start of the month. In the case of Class I products and the nonfat solids portion of Class II products, this alignment is facilitated by advanced pricing. Accordingly, Proposals 16, 17, and 18 are denied.

Select argued USDA should omit a recommended decision on the Class I mover following a finding by the Secretary "on the basis of the record that due and timely execution of his functions imperatively and unavoidably requires such omission." (Select Post Hearing Brief, 2024, pp. 46–47) (citing 7 CFR 900.12(d)). The Secretary finds no sufficient information on the record to determine that skipping the recommended decision is unavoidable and is therefore issuing a recommended decision on the Class I mover.

Class I and Class II Differentials

a. Class I Differentials

The current Class I price structure was developed during the Order Reform process when Congress directed the Department to review the Class I price structure as part of larger FMMO consolidation efforts. Federal Agriculture Improvement and Reform Act of 1996, Public Law 104–127, 110 Stat. 888. The Department considered several objectives when determining an appropriate Class I price surface, including: being national in scope, while also accounting for local and regional conditions; recognizing the location value of milk; recognizing all uses of milk; and meeting AMAA requirements. The Department met AMAA requirements governing classified pricing by ensuring the price surface would "reflect enough of the milk value to maintain sufficient revenue for producers to maintain an adequate supply of milk and provide equity to handlers with regards to raw product costs." 64 FR 16026, 16109 (Apr. 2, 1999) [5] The Class I price surface adopted on January 1, 2000, met those objectives.

Class I milk pricing consists of two pieces: the base Class I mover applied uniformly to all Class I milk (as discussed previously) and a location specific differential which represents the location value of milk at a specific plant location. The differentials provide producers a financial incentive to supply the Class I market, which tends

to be closer to the population centers, rather than delivering milk to a manufacturing plant typically closer to the farm. The location specific differential consists of two parts: a base value (also referred to as the "base differential") applied uniformly to all Class I milk, and a location value.

The base differential is currently $1.60 per cwt, representing three costs whose values were determined to reflect market conditions during the late 1990s. First, the cost of maintaining Grade A farm status ($0.40) which includes costs associated with the labor, resources and utility expenses for maintaining required equipment and facilities, and adherence to certain management practices. Second, marketing costs (also referred to as balancing costs) ($0.60) which include, among other things, the costs associated with seasonal and daily reserve balancing of milk supplies and transportation to more distant processing plants. Lastly, a competitive factor ($0.60) is included to represent a portion of the competitive costs incurred by fluid plants to compete with manufacturing plants for a milk supply.

The location values were developed during the Order Reform process through an analysis conducted with the USDSS, maintained at the time by Cornell University. The USDSS was used to evaluate the geographic or "spatial" value of milk and milk components across the U.S. under the assumption of efficient markets. The model used 240 supply locations, 334 consumption locations, 622 dairy processing plant locations, 5 product groups, 2 milk components, and transportation and distribution costs among all locations to determine mathematically consistent location values for milk and components. Model results provided county specific information regarding the relationship of prices between geographic locations based on May and October 1995 data.

Since adoption on January 1, 2000, only differentials in the Appalachian, Florida, and Southeast FMMOs have been amended. The amendments, effective May 1, 2008, were the result of a region-specific rulemaking evaluating transportation costs in servicing those milk deficit orders. 73 FR 14153 (Mar. 17, 2008).

The record reflects consensus among hearing participants that the dairy marketplace has evolved significantly over the past 25 years. However, there remains strong disagreement on how the market changes should be interpreted and recognized in the Class I differentials. The producer community argued Class I differentials no longer reflect the cost of servicing fluid milk

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[5] Order Reform Final Decision.

demand and should be updated to reflect the current structure and significantly higher transportation costs through adoption of Proposal 19. The processing and manufacturing community argued certain cost factors contained in the differentials are no longer relevant and should be eliminated through adoption of Proposal 20. They stressed that if the costs of servicing the Class I market exceed those of the proposed reduced Class I differential values, they can be negotiated between buyers and sellers through over-order premiums.

Proposal 19 would increase the Class I differentials based in part on updated USDSS results reflecting the current dairy market structure and transportation costs. NMPF witnesses explained USDSS result averages were the foundation of their deliberations, and deviations were made to account for a variety of factors they believed were not accounted for, including producer price impacts, competitive relationships, blend price alignment, private supply arrangements, and unique local market conditions such as traffic or geography. Although NMPF began with results from a mathematical model, the process thereafter was primarily subjective. They started by selecting a series of cities, which they called "anchor cities," to represent areas which bordered multiple FMMO regions. Then, regional committees adjusted model-derived location values to better align location values and reflect local marketing and transportation conditions within their region, respecting the anchor cities as starting points. NMPF combined the independently derived regional results and made further refinements to ensure smooth pricing transitions between the regions. Ultimately, NMPF proposed that the lowest differential increase from $1.60 per cwt to $2.20 per cwt. NMPF maintains the cost factors provided for in the base differential value remain relevant and presented testimony from member cooperatives that such costs have increased.

Opposition to Proposal 19 centered on several areas. First, opponents argued there is more than an adequate supply of milk nationally to meet Class I needs, therefore adoption of Proposal 19, or any increase to Class I differentials, is not warranted. Second, opponents contended raising Class I prices would be disorderly because it would further decrease already declining Class I consumption and, they argued, the FMMO objective of ensuring adequate milk supplies implies FMMOs should adopt provisions that encourage Class I consumption. One such opponent

presented an econometric study which found fluid milk demand is elastic, concluding that increasing Class I prices would decrease consumption and violate FMMO objectives. Third, opponents took exception to NMPF's proposal development process and what they considered a lack of unifying principles used to adjust the USDSS results, believing NMPF had failed to provide cost justification for maintaining a base differential. Independent fluid milk processors further argued the entire development process led to results with a favorable bias towards NMPF member-owned plants. Lastly, organic milk processors and some organic cooperatives argued organic milk should not be treated similarly to conventional milk in the FMMO program because it has different and unrelated market structures. In its post-hearing brief, MIG reiterated its position on organic milk and further argued that because NMPF did not demonstrate current Class I differentials create disorderly marketing conditions the evidentiary threshold for increasing differentials had not been met.

MIG offered Proposal 20, which would lower the base differential value to $0.00, contending FMMO Class I prices are too high and have resulted in an oversupply of milk that they believe is disorderly. According to MIG, there is more than an adequate supply of milk to meet fluid demand. Given 99 percent of U.S. milk production meets Grade A standards, MIG argued compensation for Grade A maintenance is already provided for in manufacturing milk prices and therefore the $0.40 Grade A factor is no longer justified.

Additionally, MIG members' testimony detailed efforts they have adopted to balance their own milk supply, including infrastructure investments, creating more uniform receiving and processing schedules, and paying over-order premiums. Organic and ESL MIG members testified their fluid milk products function as wholly distinct markets with their own balancing and supply challenges. Therefore, MIG concluded the balancing cost and Class I competitive factors should no longer be recognized in the Class I price. Lastly, MIG and its members argued that if additional money is needed to compensate dairy farmers and cooperatives for balancing costs or to incentivize milk to serve Class I plants, those costs should be negotiated between the buyer and seller and paid through over-order premiums, not as part of the regulated price.

A vast majority of producers and their cooperatives opposed Proposal 20. They maintained, both in witness testimony

and post-hearing briefs, there is relevancy of costs associated with the base differential. NMPF stressed the costs, while difficult to precisely quantify, are still relevant and have increased since adopted in 2000. NMPF described the disorder that would arise if the base differential was reduced to $0.00 and a greater portion of market-wide cost reimbursement was forced to be negotiated in the market. While some NMPF members testified to receiving over-order premiums, they stressed establishing and maintaining premiums is difficult because there remains a market imbalance of power between milk sellers and buyers.

Opponents of any change to Class I prices, either through a change to Class I differentials or other FMMO amendments, raised several overarching objections. First, they alleged disorderly marketing must first be proven to justify any changes to FMMO provisions. They cited a lack of instances of fluid demand not being met as an indication disorder is not present in the fluid milk market.

The declared policy of the AMAA is to ". . . establish and maintain such orderly marketing conditions for agricultural commodities in interstate commerce. . . ." FMMOs accomplish this mandate through the classified pricing of milk products and marketwide pooling of those classified use values. Through these mechanisms, orderly marketing conditions are provided so handlers are assured of uniform minimum raw milk costs and producers receive minimum uniform payments for their raw milk, regardless of its use. While previous FMMO amendatory proceedings may have found market disorder to warrant changes to provisions, the AMAA does not contain an express or implied declaration that a finding of disorderly marketing conditions is required before an order can be amended. Second, opponents argued Class I prices cannot be amended until the FMMO system is modified to recognize the organic milk sector. However, potential amendments that would adopt disparate treatment of organic milk were not within the scope of this proceeding, as defined in the hearing notice.

Third, Class I processors and manufacturers argued the Department should consider the impact to Class I sales when evaluating changes as they allege the AMAA objective of ensuring adequate milk supplies implies the FMMO should encourage fluid consumption. They further argue that demand for fluid milk is elastic and, therefore, raising Class I differentials would be disorderly as it would result in a decline in Class I sales. The AMAA

authorizes FMMOs to provide for orderly marketing conditions and ensure an adequate supply of milk for fluid use. It does not explicitly state nor imply FMMO provisions should encourage Class I sales. FMMOs are charged with ensuring adequate supplies of fluid milk, regardless of the quantity demanded.

As to whether or not fluid milk has an inelastic or elastic demand, numerous studies were entered into the record, some drawing opposite conclusions. An econometric study entered on behalf of MIG found the retail level demand for fluid milk to be elastic. The study looked at cross sectional data over relatively short periods of time. In contrast, an NMPF witness reviewed numerous studies published within the last 20 years that evaluated time series data, concluding the studies support the assertion that fluid milk demand remains inelastic with respect to prices for those products. An analysis of the MIG study indicates that other than product prices and quantities, no other variables were considered that could explain changes in demand. Such variables which are generally recognized to be determinants of demand outside of price include, but are not limited to, household income, demographics, and measures of preferences. While the MIG study found retail price affects retail milk demand, it did not demonstrate price was the only factor that impacts demand. By design, the study estimated that only prices for milk and competing products could account for changes in quantities sold. Certainly, more study may be warranted given the evolution of the dairy industry in the last 25 years. However, a conclusion of the long-term demand elasticity of fluid milk cannot be drawn from one study of cross-sectional data, given the overwhelming body of studies contained in this hearing record which found otherwise.

Finally, opponents opined that milk is typically more valuable when used in Class III products, rather than Class I, and therefore the record lacks justification to increase Class I differentials. Testimony was given comparing USDSS model results (utilizing 2016 data) showing, outside of the southeastern region, higher marginal location values for milk used at Class III manufacturing locations than for milk used in Class I processing in the same locations. No evidence was presented as to how the Class III location values could or should be implemented to achieve the purposes of the AMAA. Unlike estimated Class I location values which have been historically relied upon to determine Class I differentials,

this was the first time the USDSS model results were utilized to calculate location values for Class III milk, and the first time testimony was offered to suggest how the correlation between Class III and Class I location values should impact pricing decisions. The record lacks evidence to validate the interpretation of Class III location values, as further indicated by the differing views of the study authors as to whether this would be an appropriate interpretation of the various sets of USDSS results.

The record of this proceeding indicates the cost of servicing the Class I market is no longer sufficiently reflected by existing Class I differentials. This was evident in the USDSS results and validated through firsthand testimony of cooperative milk suppliers who described increased servicing costs. Current Class I differentials were established based on 1995 data. In the nearly thirty years since, the record reflects the market has substantially changed in size and structure. While milk production has increased approximately 45 percent from 1995 until 2022, during the same time period the number of dairy farms has decreased by approximately 74 percent, and the average herd size has increased from 68 to 261 cows.

Consolidation has also occurred on the processing and manufacturing side. The record describes plant closures, particularly on the fluid processing side, and plant investment, especially in large manufacturing plants. Considerable testimony and evidence were given describing increased distances milk must travel to find a market outlet. Because of the greater distances between supply locations and fluid processing plants, cooperative witnesses testified to increasing costs to ensure fluid demand is met. The witnesses also described in detail how the increasing costs are disproportionately borne by cooperative members who often see deductions on their milk checks to cover increased organizational and individual transportation costs, which some witnesses attested more than doubled in the past 20 years.

There was little to no rebuttal to the claim the market has consolidated on both the producer and processor side, resulting in increased transportation costs. The USDSS study authors themselves attributed the observed differences in the 2022 results, when compared to the current differentials, to four primary factors: change in milk production locations, change in compositions of dairy product demand, change in demand locations, and increased transportation costs per mile.

What is at issue is the justification for increasing Class I differentials. While only one witness described a situation in which they were unable to procure enough milk to meet the demand of their fluid milk processor, the record is full of testimony on the difficulty cooperatives have faced to ensure fluid milk demand is met. Cooperative witnesses discussed needing to reach out to more distant supply locations to find available milk supplies willing to serve the Class I market instead of remaining at a manufacturing plant, and the inability to recoup a large portion of the additional transportation costs through over-order premiums.

FMMOs were established in the 1930s when the market contained many sellers and few buyers of milk. The highly perishable nature of raw milk resulted in producers engaging in pricing behavior that lowered farm prices as producers undercut one another in order to find a market outlet, a condition generally described as destructive competition. This unavoidable competitive behavior was among the reasons producers petitioned Congress to authorize a marketing order program to provide orderly marketing through known terms of trade and the pooling of market returns, which in turn provided a more equitable balance of power between buyers and sellers.

While the record of this proceeding reveals continued consolidation on both the producer and processing sides of the market, it also contains evidence the fundamental elements that were the genesis of the FMMO program still exist. Raw milk remains a highly perishable product, produced every day, that cannot be stored for any significant length of time and incurs high costs when transported over long distances. No substantive evidence was presented to indicate there is no longer an imbalance of market power between buyers and sellers. Processors spoke of the abundance of milk produced as a reason Class I prices should not be increased. However, that reality also highlights how the dairy marketplace continues to place processors in a price setting role. As a price taker, the record reflects considerable testimony attesting to the difficulty dairy farmers have had and continue to have in obtaining and maintaining over-order premiums at levels sufficient to cover actual and/or opportunity costs.

It is natural for buyers of milk to want to pay less and for sellers of milk to want to be paid more. The role of FMMOs is to determine minimum prices that provide for orderly marketing conditions that balance these natural competitive desires. The AMAA

expressly authorizes marketwide pooling of classified prices as a tool for accomplishing orderly marketing. In determining appropriate classified prices, the Department cannot place an undue reliance on over-order premiums which diminish the role of marketwide revenue pooling and can lead to disorderly marketing conditions. Accordingly, this decision recommends changes to the Class I differentials to better reflect the various aspects of the current marketplace.

The first step in evaluating appropriate Class I differential levels is the base differential. While the USDSS model is appropriate to show the value differences of milk between two fluid plant locations, as will be discussed later, it is not designed to inform the level of the minimum value needed to service Class I plants. Proposal 20 seeks to reduce the base differential to $0.00 on the premise the costs represented either are no longer relevant (Grade A maintenance) or should be left up to negotiation with the fluid milk processor and their supplier (balancing and Class I incentive cost). While the record does not precisely describe how much the cost components of the base differential have increased, it lacks evidence to demonstrate those costs have decreased. In fact, discussion of various costs throughout the proceeding indicates that costs have instead increased. Given the lack of clear record evidence specific to costs accounted for in the base differential, this decision recommends continuation of the $1.60 base differential.

Despite arguments Grade A maintenance costs should no longer be covered because 99 percent of U.S. milk production is Grade A, this decision continues to find it appropriate to recognize the additional costs for maintaining Grade A status in a regulatory pricing system requiring Grade A standards be met for participation. When the Grade A factor was incorporated into the base differential, it was specifically for Grade A maintenance costs, not costs associated with conversion to Grade A status. Proponents argue that because almost all milk meets Grade A standards, it is no longer necessary to provide a recognition of that cost in the base differential. Whether 99 percent of milk production today is Grade A, or 96 percent as it was at the time of Order Reform, is irrelevant. The record demonstrates dairy producers incur costs to maintain Grade A standards which are a requirement for participating in the FMMO system. As only Class I milk is required to participate and raw milk used in fluid

milk products is required to meet Grade A standards, it is appropriate for the Class I price to continue to recognize those costs.

The record does not demonstrate the remaining two base differential factors, balancing costs and additional monies needed to compete for a milk supply, are no longer relevant. All parties testified to their continued existence. Proposal 20 would require those costs to be negotiated in the market.

Proponents of Proposal 20 argued they have made capital investments to balance their supply and/or pay over-order premiums to their suppliers to meet their milk needs, and/or provide balancing services. While their testimony acknowledges these costs exist, proponents argued the FMMO is making them pay twice for such services—once through the regulated price and again through their negotiated over-order premium. They further argued that if cost reimbursement is needed for such services, they should be able to pay that value to their suppliers directly through over-order premiums, not into the marketwide pool.

Cooperative witnesses testified at length on the costs associated with ensuring daily, weekly, monthly, and seasonal fluctuating needs of the fluid market are met. While their balancing costs were considered confidential information, cooperative witnesses testified to the overall increase in costs associated with providing those services. In particular, cooperative witnesses spoke to the higher costs incurred to operate regional balancing plants. These plants often do not run at full capacity year-round in order to ensure capacity to balance excess supply during flush periods or provide additional milk to fluid processing plants during months of increased demand. The record reflects these marketing costs are incurred for the benefit of balancing the entire market's milk supplies, thus providing for the orderly marketing of milk for fluid use. It has always been the case that an individual processor may find it necessary and/or advantageous to pay premiums above the minimum value to suit their individual and fluctuating needs. FMMO pricing balances the value needed to be reflected in the minimum regulated prices, without an over-reliance on over-order premiums that can undermine marketwide revenue pooling and lead to unequal raw product costs between similarly situated handlers and non-uniform payments to producers.

An additional function of the base differential, as described in the Order Reform Recommended Decision, is to

generate the additional monies necessary for the FMMO pools to balance the reliance on over-order premiums. This was of particular concern in marketing orders with low Class I differentials and low Class I utilization, for which the decision noted ''there is a risk that handlers may not face equal raw product costs for various reasons. Thus, having a larger proportion of the actual value of Class I milk in the market order pool in these areas, than is now the case, should promote pricing equity among market participants.'' 63 FR 4802, 4909 (Jan. 30, 1998). As this decision seeks to update Class I differentials, maintaining the balance of what proportion of the value of Class I should be reflected in the marketwide pool remains a consideration. Negotiations for over-order premiums are not conducted in a vacuum, but are done with the benefit of both parties knowing minimum FMMO values and the costs represented in the minimum values the plant is responsible for paying. If Class I processors believe they are being double charged, they can use that information in their over-order premium negotiations.

Maintaining the $1.60 base differential would ensure Class I prices typically remain the highest, which is of particular importance in locations where the base differential is the effective differential. Without a base differential value in these locations, there would be little difference between the Class I price and the manufacturing price, and thus no financial incentive to serve the fluid market would exist to ensure the FMMO policy objective is met. Accordingly, this decision finds a $1.60 base differential remains an appropriate minimum value to ensure Class I demand is met.

While the Department appreciates the effort put forth to submit a comprehensive option in Proposal 19, the record of this proceeding does not support its adoption. Proposal 19 contains a base differential of $2.20, which is an increase of $0.60 from the current level. However, the record lacks data to quantify costs in excess of the $1.60 base value.

Proponents described using the average of the USDSS May and October results as a starting point for consideration but did not provide evidence as to why, under a minimum pricing system, the average rather than the minimum values observed in the May results was appropriate or preferable. Furthermore, the record does not contain evidence to support how the deviations made from the USDSS averages are appropriate. Proponents

described their own marketing expertise but presented insufficient evidence to determine if the proposed differentials would result in Class I prices in excess of what is appropriate for a minimum pricing system. Accordingly, this decision does not recommend adoption of Proposal 19.

However, this decision finds evidence to support raising the Class I differentials from the current levels. The record of this proceeding reveals the cost of servicing the Class I market has increased since the Class I differentials were adopted in 2000 and amended in the southeastern FMMOs in 2008. Evidence reflects the market structure of Class I plants and the milk supply have changed considerably in the last 25 years. That was supported in witness testimony, as well as USDSS model results, which clearly show the location value of milk has changed. The Department continues to find the USDSS model the best available tool for determining the location value of milk given the vast array of factors that contribute to how milk is produced, transported, processed, and distributed in the U.S.

When the differentials were adopted during Order Reform, testimony reflects the Department used USDSS model results as a starting point and made adjustments for various reasons. The Order Reform Recommended Decision described several options the Department considered. Of the differential surface ultimately adopted, AMS wrote, ''Nine differential zones provide the basis for establishing the price structure. These zones were established based on results of the USDSS model, knowledge of current supply and demand conditions, and recognition of other marketing conditions such as fluid versus manufacturing markets, urban versus rural areas, and surplus versus deficit markets.'' 63 FR 4802, 4905 (Jan. 30, 1998). The decision went on to outline additional reasons for adjustments including ensuring price alignment with neighboring zones and adequate marketwide pool draws.

The USDSS model estimates results for an efficient milk supply and distribution network, provided at its lowest cost. The USDSS study authors acknowledged when using the model results to determine Class I differentials, adjustments would be appropriate as there are factors unaccounted for in the model, such as FMMO provisions, abnormal traffic patterns, and competitive relationships.

Accordingly, this decision recommends Class I differentials be changed to better reflect the current cost

of serving the Class I market. When determining appropriate levels, the Department began with the USDSS May results, referred to hereinafter as ''May results.'' The May results are the lower of the two months provided in evidence, which is an appropriate starting point for determining minimum prices. The Department then evaluated the results on a regional basis and made adjustments based on three principles and two additional considerations.

First, adjustments were made where necessary to better align Class I handler equity. This means the proposed Class I differentials should not give one handler an uneconomic cost advantage relative to an actual or potential competing handler. Second, adjustments were made to maintain producer equity and prevent uneconomic rewards or penalties to producers who deliver or could deliver milk to the same plant or market. Third, adjustments were made to ensure the marketwide pools continue to provide orderly marketing conditions. The combination of handler and producer equity goals is further achieved through the size and shape of pricing zones. The USDSS values are determined at specific locations, or ''nodes,'' in the model. Model results can be displayed on a map or in a list of counties to convey the price surface, but the methodology for doing so, as explained by the study authors, was a mathematical tool which interpolated values between distances. Additional information about markets can be added to the model results through knowledge about the economic or geographic (roads, natural barriers, etc.) conditions in specific locations. This may lead to a decision to change the shape or contours of the pricing surface that is estimated from the model results. Lastly, adjustments were made to reflect unique challenges associated with servicing dense urban environments. The changes by regions are described below.

The general process began with roughly $0.20 differential bands generated from the May results. The May and October results formed a soft boundary for differential adjustments. The current differentials formed a hard lower boundary, which were rounded to the nearest dime to eliminate $0.05 differences between zones, consistent with the USDSS model results which were in $0.10 increments.

Northeast

The recommended differentials in the Northeast region largely follow the May results with minimal changes. The differential for Portland, Maine, was

raised to $4.50 to match the results in Concord, New Hampshire, to ensure handler equity. Albany County, New York, and Rensselaer County, New York, were moved to the same differential by increasing the Albany differential $0.10 to meet the Rensselaer differential, as plants in those counties are located just across a bridge from one another but were assigned different prices by the model. Differentials in most New Jersey counties are proposed to be $0.10 to $0.20 above the May results, but within the May and October range, to reflect testimony on the cost of servicing urban areas and transportation concerns. The differential for Washington, DC, is also proposed to be $0.10 above the May result to reflect testimony on servicing an urban area.

Appalachian

The variation between the model results in May and October are more significant in the three southeastern orders. As discussed by several witnesses, this region experiences unique marketing conditions with high Class I utilization and deficit local milk supply. Due to the substantial seasonality of the local milk supply, it requires significant but variable volumes of supplemental milk supplies from outside the region as well as changes in milk movements of regular suppliers to the market throughout the year. The Transportation Credit Balancing Fund (TCBF) and the recently implemented Distributing Plant Delivery Credit (DPDC) are programs to compensate handlers for some of the additional and variable transportation costs associated with supplying the Class I markets in these orders during different periods of the year. The reimbursement rates for these programs include adjustments for any gain in Class I differentials from supply point to receiving plant. Therefore, any changes in difference in Class I differentials would be reflected in the calculated rate for eligible payments in both the TCBF and DPDC in all three southeastern orders.

The recommended differentials in the Appalachian region are largely formed in $0.20 and $0.30 bands based on the May results starting with $3.70 in Southern Indiana and, moving southeast, increasing to $6.00 along the Carolina coast. In most areas, the proposed differentials are within $0.10 (+/−) of the May results. There are a few exceptions where the proposed differentials are $0.20 less than the May results to better align handler equity. For example, in Spartanburg County, South Carolina, the proposed differential is $5.60, $0.20 less than the

May results. This maintains the current competitive relationship between this area and the Atlanta, Georgia area, and with the competing handlers in North Carolina.

Southeast

The proposed differentials in the Southeast FMMO start at $3.20 in southwest Missouri and increase moving southeast to $6.00 in southeast Georgia. The proposed differentials follow the May results closely, within $0.10 (+/−), with a few modifications. The East Baton Rouge Parish differential was reduced by $0.20 from the May results to be consistent with the May result of $5.20 for competing areas such as Lafayette Parish. Tangipahoa Parish was placed in the $5.40 zone, or $0.30 below the May result. These decreases are meant to ensure handler equity while still acknowledging the thinner and steeper surface reflected in the May results in the southeastern U.S.

Rutherford County, Tennessee, is also proposed to be modified to be consistent with neighboring Davidson County, Tennessee, at $4.60 ($0.20 below the May result) to provide for handler equity. In Missouri, Webster County was placed in the $3.20 zone to match the Greene, Hickory, and Polk County differentials. This addresses handler equity concerns and results in a $0.10 proposed decrease for Webster County from the May result.

Florida

The proposed differentials for Florida largely follow the May results with modification to address handler equity concerns. The differentials start at $6.00 in the Florida panhandle region and increase going south with mostly $0.40 bands ending at $7.40 in south Florida. Processing plants in central Florida were placed in the same $6.80 band to match the May result in Volusia County due to handler equity concerns. This necessitated decreases from the May results of $0.10 in Orange County, $0.10 in Hillsborough County, and $0.20 in Polk County. For similar handler equity concerns, Broward County is proposed to match the May result in Dade County of $7.40 in the southernmost part of Florida.

Upper Midwest

In the Upper Midwest region, deviations from the May results are proposed to ensure producer equity and ensure the marketwide pool provides for orderly marketing. The Upper Midwest FMMO is unique in its low Class I utilization, which creates challenges in setting a differential surface that sends the proper signals to producers supplying the Class I market while also ensuring producer equity and orderly marketing among producers supplying the region's plants. Estimates indicate a large differential range in the region would not result in equity between producers and could result in disorderly marketing. Therefore, the differential surface was flattened from the May results, in general, by raising the differentials in the western part of the region—in the eastern Dakotas and much of Minnesota—and lowering the differentials in the eastern part—in northern Illinois, southeastern Minnesota, and Wisconsin.

Differentials in five counties, Dakota, Hennepin, Ramsey, Scott, and Washington, in the Minneapolis/St. Paul metropolitan area of Minnesota, are raised $0.10 higher than neighboring counties to reflect higher costs of serving an urban area and incentivize Class I service relative to surrounding manufacturing plants. In addition, they are set at the same differential of $2.90 to promote handler equity among fluid processing plants in the metropolitan area. The new differential for these counties, except for Hennepin, are $0.10 to $0.20 above the May results. The differential for Hennepin, $0.30 above the May results, is set the same as its peer counties to ensure that handlers in this county are able to compete for available milk supplies on an equitable basis.

Differentials in the regions supplying the Chicago, Illinois, area are adjusted to ensure handler equity. Generally, the differentials in this area are set at $3.10 to $3.20. The record reflects bottling plants in eastern Iowa, northern Illinois, southeastern Wisconsin, northern Indiana, and southwest Michigan all compete for Class I sales into the Chicago area. Thus, Class I differentials in northern Illinois are lowered $0.20 and $0.10 in Kane and Winnebago counties, respectively, from the May results. Similarly, comparisons and adjustments were made to the May results to align with northern Indiana and southwest Michigan counties supplying the Chicago area.

Central

The proposed differentials in the Central FMMO start at $2.30 in western Colorado and increase moving east to $4.00 in southern Illinois. The proposal aligns the production area of northern Colorado with the large production areas of New Mexico, the Texas Panhandle, and southwest Kansas at $2.50. This required increasing the differential in Weld, Boulder, and Morgan counties of Colorado by $0.10 to $0.20 from the May model results. In order to encourage milk to service Class I demand, some counties in the greater Denver area, including Colorado Springs, are proposed at the May results of $2.70, while others are proposed to increase as much as $0.20 above the May results to provide for handler equity.

In southern Illinois, testimony reflects plants compete for sales within a similar distribution area. Therefore, counties were grouped into a $3.60 zone. This represents an increase of $0.10 for some plants, while others remained at the May result of $3.60. In Iowa, all counties with distributing plants are set at the May result of $2.70.

Douglas County, Nebraska, and Minnehaha County, South Dakota, proposed differentials are $2.70 and $2.60, an increase of $0.20 and $0.10, respectively, from the May results. These increases recognize handler equity both to the east with Polk County, Iowa, and to the north with Cass County, North Dakota.

In Kansas, the two counties with distributing plants, Reno and Sedgwick, are proposed to be $2.90, as they are neighboring counties, and the same differential levels would provide for handler equity. This increase also provides handler equity and price alignment with Oklahoma plants to the south.

In Oklahoma, Lincoln, Cleveland, and Grady counties are proposed at the same differential of $3.30. Lincoln and Cleveland counties are proposed at the May results, while this represents a $0.20 increase for Grady County. The $3.30 differential for these three counties provides for handler equity and price alignment both to the north in Kansas and the south in Texas.

Mideast

Differentials in the Mideast region were evaluated on a state-by-state basis. Michigan differentials are set at the May results, $3.00 in the upper peninsula and $3.30 in the lower peninsula, because there were no additional producer or handler equity issues to address. Indiana is divided into three differential zones moving north to south ($3.30, $3.60, and $3.70) which align with the May results. The differentials for Lake and Huntington counties are proposed to be lowered by $0.40 and $0.10, respectively, from the May results to provide handler equity in the northern Indiana zone. The differentials in Madison and Wayne counties are proposed to increase $0.10 and $0.20, respectively, from the May results to provide handler equity in the central Indiana zone of $3.60. Southern Indiana

counties are proposed at the May result of $3.70.

Proposed differentials in Ohio generally follow the May results within $0.10 (+/−) and zones were determined based on handler equity concerns. Moving northwest to southeast, proposed differential zones are $3.30, $3.60, $3.80, $4.00, and $4.30. The five differential zones align within a $0.10 (+/−) range of the May results. The exception is Cuyahoga County with a proposed $0.20 decrease from the May result to provide for hander equity with Wayne and Stark counties.

Proposed differentials in western Pennsylvania are generally consistent with the May results to provide for handler equity, either in a $3.90 or $4.00 zone. Butler, Fayette, Lawrence, and Mercer counties are proposed to be lowered by $0.10 from the May results to the $4.00 zone. West Virginia differentials range from $4.00 to $4.80, moving northwest to southeast, consistent with the May results as there were no additional producer and handler equity to address.

Southwest

The proposed differentials in the Southwest FMMO start at $2.30 in northwest New Mexico and increase moving southeast to $4.80 in southeast Texas. Bernalillo County, New Mexico, is proposed to increase $0.30 from the May result to provide for handler and producer equity with nearby manufacturing plants. Testimony reflects the Texas Panhandle and southeastern New Mexico regions contain mostly manufacturing plants and draw milk from the same supply region in the Panhandle. For producer equity concerns, these regions are proposed to be in a $2.50 zone. This matches the May results for the eastern New Mexico plant locations, necessitating a proposed increase of $0.10 to $0.30 in counties within the Panhandle region to reach a uniform $2.50 zone. In Lubbock County, Texas, the differential is proposed at $2.60, a decrease of $0.20 from the May result, recognizing handler equity in the Panhandle region and producer equity considerations with manufacturing plants competing for milk supplies. Dallas County, Texas, is proposed at the May result of $3.70 and a $0.10 increase is proposed for Tarrant County to maintain handler equity. Bexar County, Texas is proposed at $4.30, a $0.10 increase from the May result, and Harris and Montgomery counties are proposed at $4.80, a $0.20 increase from the May result to reflect difficulties in servicing congested urban areas.

Arizona

In Arizona, the metropolitan area of Phoenix encompasses both Maricopa and Pinal counties. The differentials for these counties are proposed to increase $0.30 and $0.20, respectively, above the May results to reflect the higher cost of servicing an urban area, in addition to providing handler equity with Clark County, Nevada. The differential for Yuma County is proposed at $2.50, an increase of $0.40 from the May result to maintain handler equity between Maricopa County, Arizona, and Los Angeles, California.

California

For California, testimony was given regarding additional transportation costs from excessive traffic congestion and geographic obstacles in southern California that were not accounted for in the model. Accordingly, the differential in San Diego is proposed to increase $0.20 from the May result to $2.80. To maintain handler equity within the southern California region, the differentials for Orange, Riverside, and Los Angeles counties are proposed to be $2.80. This is $0.40, $0.50 and $0.60 above the May results in Orange, Riverside, and Los Angeles counties, respectively. Ventura County is proposed to increase $0.40 from the May result, to $2.60, to address producer equity concerns and ensure price alignment with the surrounding counties. For Kern County, the primary milk supply area for much of this region, the differential is proposed to be $2.50. This also serves to encourage Kern County milk to move south to distributing plants, rather than north to manufacturing plants where the proposed differential is $2.20.

The differentials in the remaining San Joaquin Valley counties, Tulare, Kings, Fresno, Madera, Merced, Stanislaus, and San Joaquin, are proposed to be $2.20 based on testimony indicating these counties are considered one supply area. Of these counties, Madera County has the highest increase from the May result, $0.40, to maintain handler equity as well as maintain producer equity for the producer milk in this area.

The proposed $2.20 differential zone is then carried into the Sacramento Valley counties of Sacramento, Yolo, Colusa, and Glenn, an increase of $0.20 to $0.30 from the May results. These counties, along with those in the San Joaquin Valley, supply milk for distributing plants in the San Francisco Bay area. The proposed differentials for Alameda, Contra Costa, Solano, Napa, Marin, and Sonoma counties are set at $2.40 to encourage milk to service the

San Francisco Bay area. This represents an increase of $0.40 to $0.50 from the May model results for these supply counties to maintain handler equity.

San Francisco and counties south along the central California coast are further from a milk supply. The differentials in that area are proposed at $2.50 and include San Francisco, San Mateo, Santa Cruz, Santa Clara, San Benito, Monterey, San Luis Obispo, and Santa Barbara counties, representing increases from the May results of $0.20 to $0.50.

Similar to the Sacramento Valley, the differentials for the counties of Mendocino, Lake, and Humboldt, which are located along the northeast California coast and supply the San Francisco Bay area, are proposed to be $2.20 to provide for producer equity.

Western Unregulated States

Differentials in Nevada generally follow the May results, except for a few modifications. In northern Nevada, to provide for handler equity, Washoe County is proposed to increase $0.10 from the May result to align with the neighboring $2.00 California zone. Eureka, Nye, and Esmerelda counties are proposed at $2.20, resulting in changes from the May results of plus or minus $0.10.

The proposed differentials in Utah start at $2.00 in the north and increase moving south up to $2.50 in the southwest part of the State. While most of the proposed differentials are aligned with the May results, the counties of Davis, Morgan, Salt Lake, Tooele, Utah, and Weber are recommended at $2.20, an increase of $0.10. This aligns those counties with counties to the north and west, ensuring both producer and handler equity.

The proposed differentials in the state of Montana start at $1.70 and increase to $2.40 in the southeast part of the state. Most of the proposed differentials are aligned with the May results. The only county with a proposed differential more than $0.10 different from the May result is Golden Valley which is lowered $0.20 to ensure handler equity with the counties to its north and south.

The proposed differentials in the unregulated portions of the state of Idaho start at $1.70 and increase to $2.20. While most of the proposed differentials are within $0.10 of the May results, the county of Cassia is decreased $0.20 for handler equity with plants to the south into Utah. This brings the unregulated Idaho counties in alignment with counties to the north and south, ensuring both producer and handler equity with those areas.

Lastly, the proposed differentials in Wyoming generally follow the May results as there were no producer or handler equity concerns to address. Except for Laramie, Wyoming, which is proposed at $2.50 to align with neighboring Northeast Colorado. This represents a $0.20 increase compared to the May results.

Pacific Northwest

In the Pacific Northwest, the proposed differential in Seattle was increased $0.30 above the May result to reflect unique geography and the cost of serving an urban market. Likewise, the proposed differential in Portland, Oregon, was increased from the May result to align with Seattle to provide for producer and handler equity. Testimony reflected both cities are equidistant to milk supplies in south central Washington, and both have similar supply issues. The remaining proposed differentials reflect a $0.20 banding around the May results.

Summary

In total, the differentials proposed by this decision reflect a simple average $0.01 higher than the USDSS model May results ($3.81 versus $3.80) for the 3,108 counties in the contiguous U.S.

The following is a general description of the changes from the USDSS model May results:

Number of counties	Range of difference	Number of plants
5	−$0.40 to −$0.60	1
224	−$0.20 to −$0.30	12
2,652	−$0.10 to +$0.10	172
190	+$0.20 to +$0.30	35
37	+$0.40 to $0.60	22

An analysis shows the proposed differentials, on a weighted average basis for FMMO Class I milk (2019–2023), increased $1.24/cwt. Based on pooled Class I milk during 2019–2023, the current weighted Class I differential was $2.63 per cwt. The proposed differentials would have increased the weighted average to $3.87 per cwt.

Other Issues

In post-hearing briefs, some stakeholders objected to NMPF's use of producer costs of production for proposing updated Class I differential levels. As described above, such costs were not considered in the development of the Class I differentials recommended in this decision.

Another argument made in post-hearing briefs centered on the amended TCBF provisions in the Appalachian and Southeast FMMOs and newly established DPDC provisions in the Appalachian, Florida, and Southeast FMMOs. These provisions became effective March 1, 2024, and were a result of a regional rulemaking proceeding to address the chronic milk supply issues of those regions. 89 FR 6401 (Feb. 1, 2024). As the proceeding resulted in increased transportation cost related assessments on Class I handlers, some stakeholders argue no changes should be made to the Class I differentials until the impact of these regional changes can be observed.

The Appalachian, Florida, and Southeast FMMOs adopted marketwide service payment provisions that authorize year-round assessments on Class I milk, paid by handlers, for payment to handlers for Class I deliveries made to their plants according to the TCBF and DPDC provisions. Under the marketwide service provisions of the AMAA, marketwide service programs are only authorized to pay monies to handlers. 7 U.S.C. 608c(5)(J). Therefore, it would not be appropriate to delay consideration of Class I differential levels, monies which are paid to producers (both cooperative and independent), for TCBF and DPDC payments which are made only to handlers. If Class I differential levels are changed as a result of this proceeding, thus impacting the market conditions which led to the creation of the marketwide service programs, stakeholders could petition USDA to make changes to the TCBF and DPDC provisions.

b. Class II Differential

The FMMO system currently prices milk used in Class II products uniformly. The Class II skim milk price is computed as the advanced Class IV skim price plus $0.70 per cwt. The Class II butterfat price is the Class III butterfat price for the month, plus the same amount expressed as $0.007 per pound. The $0.70 differential between the Class IV and Class II skim milk prices, adopted in the Order Reform Final Decision, was based on an estimate of the cost of drying condensed milk and re-wetting the solids for use in Class II products, which was seen as an economic, upper-bound constraint on the use of fresh milk in Class II processing.

Proposal 21, submitted by AFBF, seeks to update the Class II differential to $1.56 per cwt. AFBF derived the proposed level by updating the factors originally used to determine drying cost. Those include the NFDM make allowance and the nonfat solids yield factor used in the FMMO formulas, and butterfat and nonfat solids levels in FMMO pooled milk. As rewetting solids, the practice of first reconstituting powdered milk with water, is no longer a common practice, AFBF argued such cost no longer needs to be considered. AFBF opined a $1.56 Class II differential would not be high enough to incentivize the substitution of Class IV products for fresh milk. AFBF claimed the additional Class II value added to the marketwide pool because of the higher differential would reduce the occurrence of negative PPDs and depooling.

Opponents of Proposal 21 argued such a large Class II differential increase would incentivize the substitution of Class IV products in the manufacture of Class II products. Class I processors, who also have Class II production, argued such an increase would put them at a competitive disadvantage with standalone Class II manufacturers. They indicated processors who produce both products are required to pool all milk received at the plant but processors who only produce Class II products can opt to pool milk.

Record evidence does not support adoption of Proposal 21. Mathematically, the formula used by AFBF to compute an updated Class II differential mimics the calculation from Order Reform. However, it is clear from record testimony that more than doubling the current Class II differential, as proposed by AFBF,

would result in handler equity issues and increased substitution of Class IV products in lieu of fresh fluid milk in Class II products. Class II production is unusual, if not unique, among dairy processing facilities as some products are produced at Class I plants, and others at standalone Class II plants. Because all milk received at Class I plants is required to be pooled, regardless of use, this can result in the same products having different regulatory burdens depending on the type of plant where it was produced. That phenomenon has existed since 2000. However, the record shows that instances of milk in Class II products produced from Class II plants not being pooled could dramatically increase with adoption of Proposal 21. The result would be a competitive disadvantage for Class I plants by creating a pricing inequity that would produce disorderly marketing conditions. Accordingly, Proposal 21 is denied.

Conforming Changes

Proposal 22, authored by AMS, would authorize changes, where necessary, in the respective marketing orders to conform with any amendments resulting from this proceeding. The record contains no opposition to the proposal. Accordingly, this decision recommends a series of conforming changes to ensure the proposed amendments to the uniform pricing formulas applicable to the respective marketing orders can be effectuated. The proposed changes are as follows:

1. Amending 7 CFR 1000.43 to remove references to 1135.11, as the order is no longer in effect. Also adding 7 CFR 1000.43(e) which would define skim milk used in ultra-pasteurized or aseptically processed and packaged fluid milk products eligible for the Class I ESL adjustment be limited to available Class I producer milk classified pursuant to the allocation process contained in Section1000.44(a);

2. Amending 7 CFR 1000.50 to remove all references to NASS and replace them with AMS;

3. Amending the following counties (and FIPS code) in 7 CFR 1000.52, to be consistent with the Federal Information Procession Series maintained by the Federal Communication Commission: Yellowstone, MT (30113) has been merged into Gallatin and Park Counties, MT (30031) (30067), Shannon, SD (46113) has been renamed Oglala Lakota, SD (46102), Bedford City, VA (51515) has been merged into Bedford County, VA (51019), and Clifton Forge City, VA (51560) has been merged into Alleghany County, VA (51005). Additionally, amending the FIPS code

for Pierce, WA (53053) as it was original printed incorrectly.

4. Amending 7 CFR 1000.76, provisions governing partially regulated distributing plants to add "applicable" to references to the Class I price throughout the section to indicate application of a Class I ESL adjustment, when applicable, and remove the reference in 7 CFR 1000.76(b)(1)(i) to 7 CFR 1135.11 as the latter is no longer in effect;

5. Amend the introductory paragraphs of 7 CFR 1001.60, 1005.60, 1006.60, 1007.60, 1030.60, 1032.60, 1033.60, 1051.60, 1124.60, 1126.60, and 1131.60, sections which calculate the handler's value of milk in each FMMO. Section .60 of each order would be revised with the addition of an instruction to compute an adjustment to a handler's producer milk obligation for Class I producer milk eligible for the Class I ESL adjustment. The adjustment would be calculated by multiplying the monthly Class I ESL adjustment by the monthly pounds of eligible Class I skim milk. The instruction would be inserted prior to the instruction regarding reconstituted milk for each order. Other paragraphs are proposed to be redesignated to reflect the insertion;

6. Further amending 7 CFR 1005.60(g), 1006.60(g)–(i), and 1007.60(g) to remove language pertaining to transportation cost reimbursement during the months of January 2005 through March 2005 and September 2017, which is no longer in effect; and

7. Amending 7 CFR 1005.51, 1006.51, and 1007.51 to remove Class I price adjustments in the Appalachian, Florida, and Southeast FMMOs. The order language would no longer be necessary with the proposed amendments to the Class I differentials.

Rulings on Proposed Findings and Conclusions

Briefs, proposed findings, and conclusions were filed on behalf of certain interested parties. These briefs, proposed findings, conclusions, and the evidence in the record were considered in making the findings and conclusions set forth above. To the extent that the suggested findings and conclusions filed by interested parties are inconsistent with the findings and conclusions set forth herein, the claims to make such findings or reach such conclusions are denied for the reasons previously stated in this decision.

General Findings

The findings and determinations hereinafter set forth supplement those that were made when the Northeast,

Southeast, Appalachian, Florida, Upper Midwest, Central, Mideast, California, Southwest, Pacific Northwest, and Arizona FMMOs were first issued and when they were amended. The previous findings and determinations are hereby ratified and confirmed, except where they may conflict with those set forth herein.

The following findings are hereby made with respect to the aforenamed marketing agreements and orders:

a. The tentative marketing agreements and the orders, as hereby proposed to be amended, and all of the terms and conditions thereof, will tend to effectuate the declared policy of the Act;

b. The parity prices of milk as determined pursuant to section 2 of the Act are not reasonable with respect to the price of feeds, available supplies of feeds, and other economic conditions that affect market supply and demand for milk in the marketing area, and the minimum prices specified in the proposed marketing agreements and the orders are such prices as will reflect the aforesaid factors, ensure a sufficient quantity of pure and wholesome milk, and be in the public interest; and

c. The proposed marketing agreements and the orders will regulate the handling of milk in the same manner as and will be applicable only to persons in the respective classes of industrial and commercial activity specified in, the marketing agreements upon which a hearing have been held.

d. All milk and milk products handled by handlers, as defined in the marketing agreements and the orders as hereby proposed to be amended, are in the current of interstate commerce or directly burden, obstruct, or affect interstate commerce in milk or its products.

Recommended Marketing Agreements and Orders

The recommended marketing agreements are not included in this decision because the regulatory provisions thereof would be the same as those contained in the orders, as hereby proposed to be amended. The following orders regulating the handling of milk in Northeast, Appalachian, Florida, Southeast, Upper Midwest, Central, Mideast, California, Pacific Northwest, Southwest, and Arizona marketing areas are recommended as the detailed and appropriate means by which the foregoing conclusions may be carried out.

List of Subjects in 7 CFR Parts 1000, 1001, 1005, 1006, 1007, 1030, 1032, 1033, 1051, 1124, 1126, and 1131

Milk marketing orders.

For the reasons set forth in the preamble, AMS proposes to amend 7 CFR parts 1000, 1001, 1005, 1006, 1007, 1030, 1032, 1033, 1051, 1124, 1126, and 1131 as follows:

PART 1000—GENERAL PROVISIONS OF FEDERAL MILK MARKETING ORDERS

■ 1. The authority citation for 7 CFR part 1000 continues to read as follows:

Authority: 7 U.S.C. 601–674, and 7253.

■ 2. Amend § 1000.43 by removing the words ''and § 1135.11 of this chapter'' from paragraph (a) and paragraph (b) introductory text and the words ''or § 1135.11 of this chapter'' from paragraph (b)(2) and by adding paragraph (e) to read as follows:

§ 1000.43 General classification rules.

*   *   *   *   *

(e) Any skim milk used in ultra-pasteurized or aseptically processed and packaged fluid milk products shall be allocated in combination with Class I milk and the quantity of producer milk eligible to be priced shall be limited to available Class I producer milk classified pursuant to § 1000.44(a).

■ 3. Revise and republish § 1000.50 to read as follows:

§ 1000.50 Class prices, component prices, and advanced pricing factors.

Class prices per hundredweight of milk containing 3.5 percent butterfat, component prices, and advanced pricing factors shall be as follows. The prices and pricing factors described in paragraphs (a), (b), (c), (e), (f), and (q) of this section shall be based on a weighted average of the most recent 2 weekly prices announced by the Agriculture Marketing Service (AMS) before the 24th day of the month. These prices shall be announced on or before the 23rd day of the month and shall apply to milk received during the following month. The prices described in paragraphs (g) through (p) of this section shall be based on a weighted average for the preceding month of weekly prices announced by AMS on or before the 5th day of the month and shall apply to milk received during the preceding month. The price described in paragraph (d) of this section shall be derived from the Class II skim milk price announced on or before the 23rd day of the month preceding the month to which it applies and the butterfat price announced on or before the 5th day of the month following the month to which it applies.

(a) *Class I price.* The Class I price per hundredweight, rounded to the nearest cent, shall be 0.965 times the Class I skim milk price plus 3.5 times the Class I butterfat price.

(b) *Class I skim milk price.* The Class I skim milk price per hundredweight shall be the adjusted Class I differential specified in § 1000.52, plus the higher of the advanced pricing factors computed in paragraph (q)(1) or (2) of this section rounded to the nearest cent.

(c) *Class I butterfat price.* The Class I butterfat price per pound shall be the adjusted Class I differential specified in § 1000.52 divided by 100, plus the advanced butterfat price computed in paragraph (q)(3) of this section.

(d) *Class II price.* The Class II price per hundredweight, rounded to the nearest cent, shall be .965 times the Class II skim milk price plus 3.5 times the Class II butterfat price.

(e) *Class II skim milk price.* The Class II skim milk price per hundredweight shall be the advanced Class IV skim milk price computed in paragraph (q)(2) of this section plus 70 cents.

(f) *Class II nonfat solids price.* The Class II nonfat solids price per pound, rounded to the nearest one-hundredth cent, shall be the Class II skim milk price divided by 9.3.

(g) *Class II butterfat price.* The Class II butterfat price per pound shall be the butterfat price plus $0.007.

(h) *Class III price.* The Class III price per hundredweight, rounded to the nearest cent, shall be 0.965 times the Class III skim milk price plus 3.5 times the butterfat price.

(i) *Class III skim milk price.* The Class III skim milk price per hundredweight, rounded to the nearest cent, shall be the protein price per pound times 3.30 plus the other solids price per pound times 6.00.

(j) *Class IV price.* The Class IV price per hundredweight, rounded to the nearest cent, shall be 0.965 times the Class IV skim milk price plus 3.5 times the butterfat price.

(k) *Class IV skim milk price.* The Class IV skim milk price per hundredweight, rounded to the nearest cent, shall be the nonfat solids price per pound times 9.30.

(l) *Butterfat price.* The butterfat price per pound, rounded to the nearest one-hundredth cent, shall be the U.S. average AMS AA Butter survey price reported by the Department for the month, less 22.57 cents, with the result multiplied by 1.211.

(m) *Nonfat solids price.* The nonfat solids price per pound, rounded to the nearest one-hundredth cent, shall be the U.S. average AMS nonfat dry milk survey price reported by the Department for the month, less 22.68 cents and multiplying the result by 0.99.

(n) *Protein price.* The protein price per pound, rounded to the nearest one-hundredth cent, shall be computed as follows:

(1) The U.S. average AMS survey price for 40-lb. block cheese reported by the Department for the month;

(2) Subtract 25.04 cents from the price computed pursuant to paragraph (n)(1) of this section and multiply the result by 1.383;

(3) Add to the amount computed pursuant to paragraph (n)(2) of this section an amount computed as follows:

(i) Subtract 25.04 cents from the price computed pursuant to paragraph (n)(1) of this section and multiply the result by 1.589; and

(ii) Subtract 0.91 times the butterfat price computed pursuant to paragraph (l) of this section from the amount computed pursuant to paragraph (n)(3)(i) of this section; and

(iii) Multiply the amount computed pursuant to paragraph (n)(3)(ii) of this section by 1.17.

(o) *Other solids price.* The other solids price per pound, rounded to the nearest one-hundredth cent, shall be the U.S. average AMS dry whey survey price reported by the Department for the month minus 26.53 cents, with the result multiplied by 1.03.

(p) *Somatic cell adjustment.* The somatic cell adjustment per hundredweight of milk shall be determined as follows:

(1) Multiply 0.0005 by the weighted average price computed pursuant to paragraph (n)(1) of this section and round to the 5th decimal place;

(2) Subtract the somatic cell count of the milk (reported in thousands) from 350; and

(3) Multiply the amount computed in paragraph (p)(1) of this section by the amount computed in paragraph (p)(2) of this section and round to the nearest full cent.

(q) *Advanced pricing factors.* For the purpose of computing the Class I skim milk price, the Class II skim milk price, the Class II nonfat solids price, and the Class I butterfat price for the following month, the following pricing factors shall be computed using the weighted average of the 2 most recent AMS U.S. average weekly survey prices announced before the 24th day of the month:

(1) An advanced Class III skim milk price per hundredweight, rounded to the nearest cent, shall be computed as follows:

(i) Following the procedure set forth in paragraphs (n) and (o) of this section, but using the weighted average of the 2 most recent AMS U.S. average weekly survey prices announced before the 24th

day of the month, compute a protein price and an other solids price;

(ii) Multiply the protein price computed in paragraph (q)(1)(i) of this section by 3.30;

(iii) Multiply the other solids price per pound computed in paragraph (q)(1)(i) of this section by 6.0; and

(iv) Add the amounts computed in paragraphs (q)(1)(ii) and (iii) of this section.

(2) An advanced Class IV skim milk price per hundredweight, rounded to the nearest cent, shall be computed as follows:

(i) Following the procedure set forth in paragraph (m) of this section, but using the weighted average of the 2 most recent AMS U.S. average weekly survey prices announced before the 24th day of the month, compute a nonfat solids price; and

(ii) Multiply the nonfat solids price computed in paragraph (q)(2)(i) of this section by 9.30.

(3) An advanced butterfat price per pound rounded to the nearest one-hundredth cent, shall be calculated by computing a weighted average of the 2 most recent U.S. average AMS AA Butter survey prices announced before the 24th day of the month, subtracting 22.57 cents from this average, and multiplying the result by 1.211.

(r) *Class I Extended Shelf Life (ESL) adjustment.* The Class I ESL adjustment, rounded to the nearest cent, shall be computed as follows:

(1) Compute the simple average of the advanced pricing factors computed in paragraphs (q)(1) and (2) of this section;

(2) Add the following:

(i) Determine the higher of the advanced pricing factors computed in paragraphs (q)(1) and (2) of this section, for each of the preceding 13 to 36 months;

(ii) Calculate the average of the advanced pricing factors computed in paragraphs (q)(1) and (2) of this section,

for each of the preceding 13 to 36 months;

(iii) For each of the preceding 13 to 36 months, subtract the amount computed in paragraph (r)(2)(ii) of this section from the amount computed in paragraph (r)(2)(i) of this section; and

(iv) Compute the average of the differences computed in paragraph (r)(2)(iii) of this section.

(3) Subtract the higher of the advanced pricing factors computed in paragraphs (q)(1) and (2) of this section.

■ 4. Revise and republish § 1000.52 to read as follows:

§ 1000.52 Adjusted Class I differentials.

The Class I differential adjusted for location to be used in § 1000.50(b) and (c) shall be as follows:

County/parish/city	State	FIPS code	Class I differential adjusted for location
Autauga	AL	01001	5.80
Baldwin	AL	01003	5.80
Barbour	AL	01005	5.80
Bibb	AL	01007	5.60
Blount	AL	01009	5.40
Bullock	AL	01011	5.80
Butler	AL	01013	5.80
Calhoun	AL	01015	5.60
Chambers	AL	01017	5.60
Cherokee	AL	01019	5.40
Chilton	AL	01021	5.60
Choctaw	AL	01023	5.80
Clarke	AL	01025	5.80
Clay	AL	01027	5.60
Cleburne	AL	01029	5.60
Coffee	AL	01031	5.80
Colbert	AL	01033	4.90
Conecuh	AL	01035	5.80
Coosa	AL	01037	5.60
Covington	AL	01039	5.80
Crenshaw	AL	01041	5.80
Cullman	AL	01043	5.40
Dale	AL	01045	5.80
Dallas	AL	01047	5.80
DeKalb	AL	01049	5.40
Elmore	AL	01051	5.80
Escambia	AL	01053	5.80
Etowah	AL	01055	5.40
Fayette	AL	01057	5.40
Franklin	AL	01059	5.20
Geneva	AL	01061	5.80
Greene	AL	01063	5.60
Hale	AL	01065	5.60
Henry	AL	01067	5.80
Houston	AL	01069	5.80
Jackson	AL	01071	5.20
Jefferson	AL	01073	5.60
Lamar	AL	01075	5.40
Lauderdale	AL	01077	4.90
Lawrence	AL	01079	5.20
Lee	AL	01081	5.80
Limestone	AL	01083	5.20
Lowndes	AL	01085	5.80

County/parish/city	State	FIPS code	Class I differential adjusted for location
Macon	AL	01087	5.80
Madison	AL	01089	5.20
Marengo	AL	01091	5.80
Marion	AL	01093	5.20
Marshall	AL	01095	5.40
Mobile	AL	01097	5.80
Monroe	AL	01099	5.80
Montgomery	AL	01101	5.80
Morgan	AL	01103	5.40
Perry	AL	01105	5.60
Pickens	AL	01107	5.40
Pike	AL	01109	5.80
Randolph	AL	01111	5.60
Russell	AL	01113	5.80
Shelby	AL	01117	5.60
St. Clair	AL	01115	5.60
Sumter	AL	01119	5.60
Talladega	AL	01121	5.60
Tallapoosa	AL	01123	5.60
Tuscaloosa	AL	01125	5.60
Walker	AL	01127	5.40
Washington	AL	01129	5.80
Wilcox	AL	01131	5.80
Winston	AL	01133	5.40
Arkansas	AR	05001	4.60
Ashley	AR	05003	4.90
Baxter	AR	05005	3.60
Benton	AR	05007	3.20
Boone	AR	05009	3.30
Bradley	AR	05011	4.60
Calhoun	AR	05013	4.60
Carroll	AR	05015	3.30
Chicot	AR	05017	4.90
Clark	AR	05019	4.00
Clay	AR	05021	4.30
Cleburne	AR	05023	4.00
Cleveland	AR	05025	4.60
Columbia	AR	05027	4.30
Conway	AR	05029	4.00
Craighead	AR	05031	4.30
Crawford	AR	05033	3.30
Crittenden	AR	05035	4.60
Cross	AR	05037	4.30
Dallas	AR	05039	4.30
Desha	AR	05041	4.90
Drew	AR	05043	4.60
Faulkner	AR	05045	4.00
Franklin	AR	05047	3.60
Fulton	AR	05049	4.00
Garland	AR	05051	4.00
Grant	AR	05053	4.30
Greene	AR	05055	4.30
Hempstead	AR	05057	4.00
Hot Spring	AR	05059	4.30
Howard	AR	05061	4.00
Independence	AR	05063	4.00
Izard	AR	05065	4.00
Jackson	AR	05067	4.30
Jefferson	AR	05069	4.60
Johnson	AR	05071	3.60
Lafayette	AR	05073	4.30
Lawrence	AR	05075	4.30
Lee	AR	05077	4.60
Lincoln	AR	05079	4.60
Little River	AR	05081	3.60
Logan	AR	05083	3.60
Lonoke	AR	05085	4.30
Madison	AR	05087	3.30
Marion	AR	05089	3.60
Miller	AR	05091	4.00
Mississippi	AR	05093	4.30

County/parish/city	State	FIPS code	Class I differential adjusted for location
Monroe	AR	05095	4.60
Montgomery	AR	05097	4.00
Nevada	AR	05099	4.30
Newton	AR	05101	3.60
Ouachita	AR	05103	4.30
Perry	AR	05105	4.00
Phillips	AR	05107	4.60
Pike	AR	05109	4.00
Poinsett	AR	05111	4.30
Polk	AR	05113	3.60
Pope	AR	05115	3.60
Prairie	AR	05117	4.30
Pulaski	AR	05119	4.30
Randolph	AR	05121	4.00
Saline	AR	05125	4.30
Scott	AR	05127	3.60
Searcy	AR	05129	3.60
Sebastian	AR	05131	3.60
Sevier	AR	05133	3.60
Sharp	AR	05135	4.00
St. Francis	AR	05123	4.60
Stone	AR	05137	4.00
Union	AR	05139	4.60
Van Buren	AR	05141	4.00
Washington	AR	05143	3.30
White	AR	05145	4.30
Woodruff	AR	05147	4.30
Yell	AR	05149	3.60
Apache	AZ	04001	2.30
Cochise	AZ	04003	2.40
Coconino	AZ	04005	2.40
Gila	AZ	04007	2.40
Graham	AZ	04009	2.40
Greenlee	AZ	04011	2.40
La Paz	AZ	04012	2.50
Maricopa	AZ	04013	2.60
Mohave	AZ	04015	2.50
Navajo	AZ	04017	2.30
Pima	AZ	04019	2.40
Pinal	AZ	04021	2.60
Santa Cruz	AZ	04023	2.40
Yavapai	AZ	04025	2.40
Yuma	AZ	04027	2.50
Alameda	CA	06001	2.40
Alpine	CA	06003	1.80
Amador	CA	06005	1.80
Butte	CA	06007	2.00
Calaveras	CA	06009	1.80
Colusa	CA	06011	2.20
Contra Costa	CA	06013	2.40
Del Norte	CA	06015	2.20
El Dorado	CA	06017	1.80
Fresno	CA	06019	2.20
Glenn	CA	06021	2.20
Humboldt	CA	06023	2.20
Imperial	CA	06025	2.50
Inyo	CA	06027	2.20
Kern	CA	06029	2.50
Kings	CA	06031	2.20
Lake	CA	06033	2.20
Lassen	CA	06035	2.00
Los Angeles	CA	06037	2.80
Madera	CA	06039	2.20
Marin	CA	06041	2.40
Mariposa	CA	06043	1.80
Mendocino	CA	06045	2.20
Merced	CA	06047	2.20
Modoc	CA	06049	2.00
Mono	CA	06051	2.00
Monterey	CA	06053	2.50
Napa	CA	06055	2.40

County/parish/city	State	FIPS code	Class I differential adjusted for location
Nevada	CA	06057	2.00
Orange	CA	06059	2.80
Placer	CA	06061	2.00
Plumas	CA	06063	2.00
Riverside	CA	06065	2.80
Sacramento	CA	06067	2.20
San Benito	CA	06069	2.50
San Bernardino	CA	06071	2.60
San Diego	CA	06073	2.80
San Francisco	CA	06075	2.50
San Joaquin	CA	06077	2.20
San Luis Obispo	CA	06079	2.50
San Mateo	CA	06081	2.50
Santa Barbara	CA	06083	2.50
Santa Clara	CA	06085	2.50
Santa Cruz	CA	06087	2.50
Shasta	CA	06089	2.00
Sierra	CA	06091	2.00
Siskiyou	CA	06093	2.00
Solano	CA	06095	2.40
Sonoma	CA	06097	2.40
Stanislaus	CA	06099	2.20
Sutter	CA	06101	2.20
Tehama	CA	06103	2.20
Trinity	CA	06105	2.00
Tulare	CA	06107	2.20
Tuolumne	CA	06109	1.80
Ventura	CA	06111	2.60
Yolo	CA	06113	2.20
Yuba	CA	06115	2.00
Adams	CO	08001	2.70
Alamosa	CO	08003	2.50
Arapahoe	CO	08005	2.70
Archuleta	CO	08007	2.30
Baca	CO	08009	2.50
Bent	CO	08011	2.50
Boulder	CO	08013	2.50
Broomfield	CO	08014	2.50
Chaffee	CO	08015	2.50
Cheyenne	CO	08017	2.50
Clear Creek	CO	08019	2.50
Conejos	CO	08021	2.50
Costilla	CO	08023	2.50
Crowley	CO	08025	2.70
Custer	CO	08027	2.70
Delta	CO	08029	2.30
Denver	CO	08031	2.70
Dolores	CO	08033	2.30
Douglas	CO	08035	2.70
Eagle	CO	08037	2.50
El Paso	CO	08041	2.70
Elbert	CO	08039	2.70
Fremont	CO	08043	2.70
Garfield	CO	08045	2.30
Gilpin	CO	08047	2.50
Grand	CO	08049	2.50
Gunnison	CO	08051	2.50
Hinsdale	CO	08053	2.30
Huerfano	CO	08055	2.70
Jackson	CO	08057	2.50
Jefferson	CO	08059	2.70
Kiowa	CO	08061	2.50
Kit Carson	CO	08063	2.50
La Plata	CO	08067	2.30
Lake	CO	08065	2.50
Larimer	CO	08069	2.50
Las Animas	CO	08071	2.50
Lincoln	CO	08073	2.70
Logan	CO	08075	2.50
Mesa	CO	08077	2.30
Mineral	CO	08079	2.50

County/parish/city	State	FIPS code	Class I differential adjusted for location
Moffat	CO	08081	2.30
Montezuma	CO	08083	2.30
Montrose	CO	08085	2.30
Morgan	CO	08087	2.50
Otero	CO	08089	2.70
Ouray	CO	08091	2.30
Park	CO	08093	2.70
Phillips	CO	08095	2.50
Pitkin	CO	08097	2.50
Prowers	CO	08099	2.50
Pueblo	CO	08101	2.70
Rio Blanco	CO	08103	2.30
Rio Grande	CO	08105	2.50
Routt	CO	08107	2.50
Saguache	CO	08109	2.50
San Juan	CO	08111	2.30
San Miguel	CO	08113	2.30
Sedgwick	CO	08115	2.50
Summit	CO	08117	2.50
Teller	CO	08119	2.70
Washington	CO	08121	2.50
Weld	CO	08123	2.50
Yuma	CO	08125	2.50
Fairfield	CT	09001	5.00
Hartford	CT	09003	4.80
Litchfield	CT	09005	4.80
Middlesex	CT	09007	4.80
New Haven	CT	09009	4.80
New London	CT	09011	4.80
Tolland	CT	09013	4.80
Windham	CT	09015	4.80
District of Columbia	DC	11001	4.70
Kent	DE	10001	4.60
New Castle	DE	10003	4.40
Sussex	DE	10005	4.80
Alachua	FL	12001	6.40
Baker	FL	12003	6.40
Bay	FL	12005	6.00
Bradford	FL	12007	6.40
Brevard	FL	12009	6.80
Broward	FL	12011	7.40
Calhoun	FL	12013	6.00
Charlotte	FL	12015	7.00
Citrus	FL	12017	6.80
Clay	FL	12019	6.40
Collier	FL	12021	7.40
Columbia	FL	12023	6.40
DeSoto	FL	12027	7.00
Dixie	FL	12029	6.40
Duval	FL	12031	6.40
Escambia	FL	12033	5.80
Flagler	FL	12035	6.80
Franklin	FL	12037	6.00
Gadsden	FL	12039	6.00
Gilchrist	FL	12041	6.40
Glades	FL	12043	7.00
Gulf	FL	12045	6.00
Hamilton	FL	12047	6.40
Hardee	FL	12049	7.00
Hendry	FL	12051	7.40
Hernando	FL	12053	6.80
Highlands	FL	12055	7.00
Hillsborough	FL	12057	6.80
Holmes	FL	12059	6.00
Indian River	FL	12061	7.00
Jackson	FL	12063	6.00
Jefferson	FL	12065	6.00
Lafayette	FL	12067	6.40
Lake	FL	12069	6.80
Lee	FL	12071	7.00
Leon	FL	12073	6.00

County/parish/city	State	FIPS code	Class I differential adjusted for location
Levy	FL	12075	6.40
Liberty	FL	12077	6.00
Madison	FL	12079	6.00
Manatee	FL	12081	7.00
Marion	FL	12083	6.80
Martin	FL	12085	7.00
Miami-Dade	FL	12086	7.40
Monroe	FL	12087	7.40
Nassau	FL	12089	6.40
Okaloosa	FL	12091	5.80
Okeechobee	FL	12093	7.00
Orange	FL	12095	6.80
Osceola	FL	12097	6.80
Palm Beach	FL	12099	7.40
Pasco	FL	12101	6.80
Pinellas	FL	12103	6.80
Polk	FL	12105	6.80
Putnam	FL	12107	6.40
Santa Rosa	FL	12113	5.80
Sarasota	FL	12115	7.00
Seminole	FL	12117	6.80
St. Johns	FL	12109	6.40
St. Lucie	FL	12111	7.00
Sumter	FL	12119	6.80
Suwannee	FL	12121	6.40
Taylor	FL	12123	6.40
Union	FL	12125	6.40
Volusia	FL	12127	6.80
Wakulla	FL	12129	6.00
Walton	FL	12131	6.00
Washington	FL	12133	6.00
Appling	GA	13001	6.00
Atkinson	GA	13003	6.00
Bacon	GA	13005	6.00
Baker	GA	13007	5.80
Baldwin	GA	13009	5.80
Banks	GA	13011	5.60
Barrow	GA	13013	5.80
Bartow	GA	13015	5.60
Ben Hill	GA	13017	6.00
Berrien	GA	13019	6.00
Bibb	GA	13021	5.80
Bleckley	GA	13023	5.80
Brantley	GA	13025	6.00
Brooks	GA	13027	6.00
Bryan	GA	13029	6.00
Bulloch	GA	13031	6.00
Burke	GA	13033	6.00
Butts	GA	13035	5.80
Calhoun	GA	13037	5.80
Camden	GA	13039	6.00
Candler	GA	13043	6.00
Carroll	GA	13045	5.60
Catoosa	GA	13047	5.40
Charlton	GA	13049	6.00
Chatham	GA	13051	6.00
Chattahoochee	GA	13053	5.80
Chattooga	GA	13055	5.40
Cherokee	GA	13057	5.60
Clarke	GA	13059	5.80
Clay	GA	13061	5.80
Clayton	GA	13063	5.80
Clinch	GA	13065	6.00
Cobb	GA	13067	5.60
Coffee	GA	13069	6.00
Colquitt	GA	13071	6.00
Columbia	GA	13073	5.80
Cook	GA	13075	6.00
Coweta	GA	13077	5.80
Crawford	GA	13079	5.80
Crisp	GA	13081	5.80

County/parish/city	State	FIPS code	Class I differential adjusted for location
Dade	GA	13083	5.40
Dawson	GA	13085	5.60
Decatur	GA	13087	6.00
DeKalb	GA	13089	5.80
Dodge	GA	13091	5.80
Dooly	GA	13093	5.80
Dougherty	GA	13095	5.80
Douglas	GA	13097	5.60
Early	GA	13099	5.80
Echols	GA	13101	6.00
Effingham	GA	13103	6.00
Elbert	GA	13105	5.80
Emanuel	GA	13107	6.00
Evans	GA	13109	6.00
Fannin	GA	13111	5.60
Fayette	GA	13113	5.80
Floyd	GA	13115	5.60
Forsyth	GA	13117	5.60
Franklin	GA	13119	5.60
Fulton	GA	13121	5.80
Gilmer	GA	13123	5.60
Glascock	GA	13125	5.80
Glynn	GA	13127	6.00
Gordon	GA	13129	5.60
Grady	GA	13131	6.00
Greene	GA	13133	5.80
Gwinnett	GA	13135	5.80
Habersham	GA	13137	5.60
Hall	GA	13139	5.60
Hancock	GA	13141	5.80
Haralson	GA	13143	5.60
Harris	GA	13145	5.80
Hart	GA	13147	5.60
Heard	GA	13149	5.60
Henry	GA	13151	5.80
Houston	GA	13153	5.80
Irwin	GA	13155	6.00
Jackson	GA	13157	5.80
Jasper	GA	13159	5.80
Jeff Davis	GA	13161	6.00
Jefferson	GA	13163	5.80
Jenkins	GA	13165	6.00
Johnson	GA	13167	5.80
Jones	GA	13169	5.80
Lamar	GA	13171	5.80
Lanier	GA	13173	6.00
Laurens	GA	13175	5.80
Lee	GA	13177	5.80
Liberty	GA	13179	6.00
Lincoln	GA	13181	5.80
Long	GA	13183	6.00
Lowndes	GA	13185	6.00
Lumpkin	GA	13187	5.60
Macon	GA	13193	5.80
Madison	GA	13195	5.80
Marion	GA	13197	5.80
McDuffie	GA	13189	5.80
McIntosh	GA	13191	6.00
Meriwether	GA	13199	5.80
Miller	GA	13201	5.80
Mitchell	GA	13205	5.80
Monroe	GA	13207	5.80
Montgomery	GA	13209	6.00
Morgan	GA	13211	5.80
Murray	GA	13213	5.40
Muscogee	GA	13215	5.80
Newton	GA	13217	5.80
Oconee	GA	13219	5.80
Oglethorpe	GA	13221	5.80
Paulding	GA	13223	5.60
Peach	GA	13225	5.80

County/parish/city	State	FIPS code	Class I differential adjusted for location
Pickens	GA	13227	5.60
Pierce	GA	13229	6.00
Pike	GA	13231	5.80
Polk	GA	13233	5.60
Pulaski	GA	13235	5.80
Putnam	GA	13237	5.80
Quitman	GA	13239	5.80
Rabun	GA	13241	5.60
Randolph	GA	13243	5.80
Richmond	GA	13245	6.00
Rockdale	GA	13247	5.80
Schley	GA	13249	5.80
Screven	GA	13251	6.00
Seminole	GA	13253	6.00
Spalding	GA	13255	5.80
Stephens	GA	13257	5.60
Stewart	GA	13259	5.80
Sumter	GA	13261	5.80
Talbot	GA	13263	5.80
Taliaferro	GA	13265	5.80
Tattnall	GA	13267	6.00
Taylor	GA	13269	5.80
Telfair	GA	13271	6.00
Terrell	GA	13273	5.80
Thomas	GA	13275	6.00
Tift	GA	13277	5.80
Toombs	GA	13279	6.00
Towns	GA	13281	5.60
Treutlen	GA	13283	6.00
Troup	GA	13285	5.60
Turner	GA	13287	5.80
Twiggs	GA	13289	5.80
Union	GA	13291	5.60
Upson	GA	13293	5.80
Walker	GA	13295	5.40
Walton	GA	13297	5.80
Ware	GA	13299	6.00
Warren	GA	13301	5.80
Washington	GA	13303	5.80
Wayne	GA	13305	6.00
Webster	GA	13307	5.80
Wheeler	GA	13309	6.00
White	GA	13311	5.60
Whitfield	GA	13313	5.40
Wilcox	GA	13315	5.80
Wilkes	GA	13317	5.80
Wilkinson	GA	13319	5.80
Worth	GA	13321	5.80
Adair	IA	19001	2.70
Adams	IA	19003	2.90
Allamakee	IA	19005	2.90
Appanoose	IA	19007	2.90
Audubon	IA	19009	2.70
Benton	IA	19011	2.90
Black Hawk	IA	19013	2.90
Boone	IA	19015	2.70
Bremer	IA	19017	2.90
Buchanan	IA	19019	2.90
Buena Vista	IA	19021	2.60
Butler	IA	19023	2.90
Calhoun	IA	19025	2.70
Carroll	IA	19027	2.70
Cass	IA	19029	2.70
Cedar	IA	19031	3.10
Cerro Gordo	IA	19033	2.90
Cherokee	IA	19035	2.60
Chickasaw	IA	19037	2.90
Clarke	IA	19039	2.90
Clay	IA	19041	2.60
Clayton	IA	19043	2.90
Clinton	IA	19045	3.10

County/parish/city	State	FIPS code	Class I differential adjusted for location
Crawford	IA	19047	2.60
Dallas	IA	19049	2.70
Davis	IA	19051	2.90
Decatur	IA	19053	2.90
Delaware	IA	19055	2.90
Des Moines	IA	19057	3.10
Dickinson	IA	19059	2.70
Dubuque	IA	19061	3.10
Emmet	IA	19063	2.70
Fayette	IA	19065	2.90
Floyd	IA	19067	2.90
Franklin	IA	19069	2.70
Fremont	IA	19071	2.70
Greene	IA	19073	2.70
Grundy	IA	19075	2.90
Guthrie	IA	19077	2.70
Hamilton	IA	19079	2.70
Hancock	IA	19081	2.70
Hardin	IA	19083	2.70
Harrison	IA	19085	2.60
Henry	IA	19087	2.90
Howard	IA	19089	2.80
Humboldt	IA	19091	2.70
Ida	IA	19093	2.60
Iowa	IA	19095	2.90
Jackson	IA	19097	3.10
Jasper	IA	19099	2.90
Jefferson	IA	19101	2.90
Johnson	IA	19103	2.90
Jones	IA	19105	3.10
Keokuk	IA	19107	2.90
Kossuth	IA	19109	2.70
Lee	IA	19111	3.10
Linn	IA	19113	2.90
Louisa	IA	19115	3.10
Lucas	IA	19117	2.90
Lyon	IA	19119	2.60
Madison	IA	19121	2.70
Mahaska	IA	19123	2.90
Marion	IA	19125	2.90
Marshall	IA	19127	2.90
Mills	IA	19129	2.70
Mitchell	IA	19131	2.80
Monona	IA	19133	2.60
Monroe	IA	19135	2.90
Montgomery	IA	19137	2.70
Muscatine	IA	19139	3.10
O'Brien	IA	19141	2.60
Osceola	IA	19143	2.70
Page	IA	19145	2.90
Palo Alto	IA	19147	2.70
Plymouth	IA	19149	2.60
Pocahontas	IA	19151	2.70
Polk	IA	19153	2.70
Pottawattamie	IA	19155	2.70
Poweshiek	IA	19157	2.90
Ringgold	IA	19159	2.90
Sac	IA	19161	2.60
Scott	IA	19163	3.10
Shelby	IA	19165	2.60
Sioux	IA	19167	2.60
Story	IA	19169	2.70
Tama	IA	19171	2.90
Taylor	IA	19173	2.90
Union	IA	19175	2.90
Van Buren	IA	19177	2.90
Wapello	IA	19179	2.90
Warren	IA	19181	2.70
Washington	IA	19183	2.90
Wayne	IA	19185	2.90
Webster	IA	19187	2.70

County/parish/city	State	FIPS code	Class I differential adjusted for location
Winnebago	IA	19189	2.70
Winneshiek	IA	19191	2.80
Woodbury	IA	19193	2.60
Worth	IA	19195	2.80
Wright	IA	19197	2.70
Ada	ID	16001	1.70
Adams	ID	16003	2.00
Bannock	ID	16005	2.00
Bear Lake	ID	16007	2.20
Benewah	ID	16009	2.40
Bingham	ID	16011	2.00
Blaine	ID	16013	1.80
Boise	ID	16015	1.70
Bonner	ID	16017	2.40
Bonneville	ID	16019	2.00
Boundary	ID	16021	2.40
Butte	ID	16023	2.00
Camas	ID	16025	1.80
Canyon	ID	16027	1.70
Caribou	ID	16029	2.00
Cassia	ID	16031	1.70
Clark	ID	16033	2.00
Clearwater	ID	16035	2.00
Custer	ID	16037	1.80
Elmore	ID	16039	1.70
Franklin	ID	16041	2.00
Fremont	ID	16043	2.00
Gem	ID	16045	1.70
Gooding	ID	16047	1.70
Idaho	ID	16049	2.00
Jefferson	ID	16051	2.00
Jerome	ID	16053	1.70
Kootenai	ID	16055	2.40
Latah	ID	16057	2.20
Lemhi	ID	16059	1.80
Lewis	ID	16061	2.00
Lincoln	ID	16063	1.70
Madison	ID	16065	2.00
Minidoka	ID	16067	1.70
Nez Perce	ID	16069	2.00
Oneida	ID	16071	2.00
Owyhee	ID	16073	1.80
Payette	ID	16075	1.70
Power	ID	16077	2.00
Shoshone	ID	16079	2.20
Teton	ID	16081	2.00
Twin Falls	ID	16083	1.70
Valley	ID	16085	1.80
Washington	ID	16087	1.70
Adams	IL	17001	3.20
Alexander	IL	17003	4.00
Bond	IL	17005	3.60
Boone	IL	17007	3.10
Brown	IL	17009	3.40
Bureau	IL	17011	3.40
Calhoun	IL	17013	3.60
Carroll	IL	17015	3.20
Cass	IL	17017	3.40
Champaign	IL	17019	3.60
Christian	IL	17021	3.60
Clark	IL	17023	3.60
Clay	IL	17025	3.60
Clinton	IL	17027	3.60
Coles	IL	17029	3.60
Cook	IL	17031	3.20
Crawford	IL	17033	3.60
Cumberland	IL	17035	3.60
De Witt	IL	17039	3.40
DeKalb	IL	17037	3.20
Douglas	IL	17041	3.60
DuPage	IL	17043	3.20

County/parish/city	State	FIPS code	Class I differential adjusted for location
Edgar	IL	17045	3.60
Edwards	IL	17047	3.60
Effingham	IL	17049	3.60
Fayette	IL	17051	3.60
Ford	IL	17053	3.60
Franklin	IL	17055	3.60
Fulton	IL	17057	3.40
Gallatin	IL	17059	4.00
Greene	IL	17061	3.60
Grundy	IL	17063	3.40
Hamilton	IL	17065	3.60
Hancock	IL	17067	3.20
Hardin	IL	17069	4.00
Henderson	IL	17071	3.20
Henry	IL	17073	3.20
Iroquois	IL	17075	3.60
Jackson	IL	17077	3.60
Jasper	IL	17079	3.60
Jefferson	IL	17081	3.60
Jersey	IL	17083	3.60
Jo Daviess	IL	17085	3.10
Johnson	IL	17087	4.00
Kane	IL	17089	3.20
Kankakee	IL	17091	3.40
Kendall	IL	17093	3.20
Knox	IL	17095	3.40
La Salle	IL	17099	3.40
Lake	IL	17097	3.10
Lawrence	IL	17101	3.60
Lee	IL	17103	3.20
Livingston	IL	17105	3.40
Logan	IL	17107	3.40
Macon	IL	17115	3.40
Macoupin	IL	17117	3.60
Madison	IL	17119	3.60
Marion	IL	17121	3.60
Marshall	IL	17123	3.40
Mason	IL	17125	3.40
Massac	IL	17127	4.00
McDonough	IL	17109	3.40
McHenry	IL	17111	3.10
McLean	IL	17113	3.40
Menard	IL	17129	3.40
Mercer	IL	17131	3.20
Monroe	IL	17133	3.60
Montgomery	IL	17135	3.60
Morgan	IL	17137	3.40
Moultrie	IL	17139	3.60
Ogle	IL	17141	3.20
Peoria	IL	17143	3.40
Perry	IL	17145	3.60
Piatt	IL	17147	3.40
Pike	IL	17149	3.40
Pope	IL	17151	4.00
Pulaski	IL	17153	4.00
Putnam	IL	17155	3.40
Randolph	IL	17157	3.60
Richland	IL	17159	3.60
Rock Island	IL	17161	3.20
Saline	IL	17165	4.00
Sangamon	IL	17167	3.40
Schuyler	IL	17169	3.40
Scott	IL	17171	3.40
Shelby	IL	17173	3.60
St. Clair	IL	17163	3.60
Stark	IL	17175	3.40
Stephenson	IL	17177	3.10
Tazewell	IL	17179	3.40
Union	IL	17181	4.00
Vermilion	IL	17183	3.60
Wabash	IL	17185	3.60

County/parish/city	State	FIPS code	Class I differential adjusted for location
Warren	IL	17187	3.20
Washington	IL	17189	3.60
Wayne	IL	17191	3.60
White	IL	17193	3.60
Whiteside	IL	17195	3.20
Will	IL	17197	3.20
Williamson	IL	17199	4.00
Winnebago	IL	17201	3.10
Woodford	IL	17203	3.40
Adams	IN	18001	3.30
Allen	IN	18003	3.30
Bartholomew	IN	18005	3.70
Benton	IN	18007	3.60
Blackford	IN	18009	3.30
Boone	IN	18011	3.60
Brown	IN	18013	3.70
Carroll	IN	18015	3.60
Cass	IN	18017	3.30
Clark	IN	18019	4.00
Clay	IN	18021	3.60
Clinton	IN	18023	3.60
Crawford	IN	18025	4.00
Daviess	IN	18027	3.70
Dearborn	IN	18029	3.70
Decatur	IN	18031	3.70
DeKalb	IN	18033	3.30
Delaware	IN	18035	3.60
Dubois	IN	18037	3.70
Elkhart	IN	18039	3.30
Fayette	IN	18041	3.60
Floyd	IN	18043	4.00
Fountain	IN	18045	3.60
Franklin	IN	18047	3.70
Fulton	IN	18049	3.30
Gibson	IN	18051	3.70
Grant	IN	18053	3.30
Greene	IN	18055	3.70
Hamilton	IN	18057	3.60
Hancock	IN	18059	3.60
Harrison	IN	18061	4.00
Hendricks	IN	18063	3.60
Henry	IN	18065	3.60
Howard	IN	18067	3.60
Huntington	IN	18069	3.30
Jackson	IN	18071	3.70
Jasper	IN	18073	3.60
Jay	IN	18075	3.30
Jefferson	IN	18077	4.00
Jennings	IN	18079	3.70
Johnson	IN	18081	3.60
Knox	IN	18083	3.70
Kosciusko	IN	18085	3.30
LaGrange	IN	18087	3.30
Lake	IN	18089	3.30
LaPorte	IN	18091	3.30
Lawrence	IN	18093	3.70
Madison	IN	18095	3.60
Marion	IN	18097	3.60
Marshall	IN	18099	3.30
Martin	IN	18101	3.70
Miami	IN	18103	3.30
Monroe	IN	18105	3.70
Montgomery	IN	18107	3.60
Morgan	IN	18109	3.60
Newton	IN	18111	3.60
Noble	IN	18113	3.30
Ohio	IN	18115	3.70
Orange	IN	18117	3.70
Owen	IN	18119	3.60
Parke	IN	18121	3.60
Perry	IN	18123	4.00

County/parish/city	State	FIPS code	Class I differential adjusted for location
Pike	IN	18125	3.70
Porter	IN	18127	3.30
Posey	IN	18129	3.70
Pulaski	IN	18131	3.30
Putnam	IN	18133	3.60
Randolph	IN	18135	3.60
Ripley	IN	18137	3.70
Rush	IN	18139	3.60
Scott	IN	18143	4.00
Shelby	IN	18145	3.60
Spencer	IN	18147	4.00
St. Joseph	IN	18141	3.30
Starke	IN	18149	3.30
Steuben	IN	18151	3.30
Sullivan	IN	18153	3.70
Switzerland	IN	18155	4.00
Tippecanoe	IN	18157	3.60
Tipton	IN	18159	3.60
Union	IN	18161	3.60
Vanderburgh	IN	18163	3.70
Vermillion	IN	18165	3.60
Vigo	IN	18167	3.60
Wabash	IN	18169	3.30
Warren	IN	18171	3.60
Warrick	IN	18173	3.70
Washington	IN	18175	4.00
Wayne	IN	18177	3.60
Wells	IN	18179	3.30
White	IN	18181	3.60
Whitley	IN	18183	3.30
Allen	KS	20001	2.90
Anderson	KS	20003	2.90
Atchison	KS	20005	2.90
Barber	KS	20007	2.60
Barton	KS	20009	2.60
Bourbon	KS	20011	3.20
Brown	KS	20013	2.90
Butler	KS	20015	2.90
Chase	KS	20017	2.70
Chautauqua	KS	20019	2.90
Cherokee	KS	20021	3.20
Cheyenne	KS	20023	2.50
Clark	KS	20025	2.60
Clay	KS	20027	2.70
Cloud	KS	20029	2.70
Coffey	KS	20031	2.90
Comanche	KS	20033	2.60
Cowley	KS	20035	2.90
Crawford	KS	20037	3.20
Decatur	KS	20039	2.50
Dickinson	KS	20041	2.70
Doniphan	KS	20043	2.90
Douglas	KS	20045	2.90
Edwards	KS	20047	2.60
Elk	KS	20049	2.90
Ellis	KS	20051	2.50
Ellsworth	KS	20053	2.60
Finney	KS	20055	2.50
Ford	KS	20057	2.50
Franklin	KS	20059	2.90
Geary	KS	20061	2.70
Gove	KS	20063	2.50
Graham	KS	20065	2.50
Grant	KS	20067	2.50
Gray	KS	20069	2.50
Greeley	KS	20071	2.50
Greenwood	KS	20073	2.90
Hamilton	KS	20075	2.50
Harper	KS	20077	2.90
Harvey	KS	20079	2.90
Haskell	KS	20081	2.50

County/parish/city	State	FIPS code	Class I differential adjusted for location
Hodgeman	KS	20083	2.50
Jackson	KS	20085	2.90
Jefferson	KS	20087	2.90
Jewell	KS	20089	2.60
Johnson	KS	20091	3.20
Kearny	KS	20093	2.50
Kingman	KS	20095	2.90
Kiowa	KS	20097	2.60
Labette	KS	20099	3.20
Lane	KS	20101	2.50
Leavenworth	KS	20103	2.90
Lincoln	KS	20105	2.60
Linn	KS	20107	3.20
Logan	KS	20109	2.50
Lyon	KS	20111	2.90
Marion	KS	20115	2.70
Marshall	KS	20117	2.70
McPherson	KS	20113	2.70
Meade	KS	20119	2.50
Miami	KS	20121	3.20
Mitchell	KS	20123	2.60
Montgomery	KS	20125	3.20
Morris	KS	20127	2.70
Morton	KS	20129	2.50
Nemaha	KS	20131	2.70
Neosho	KS	20133	2.90
Ness	KS	20135	2.50
Norton	KS	20137	2.50
Osage	KS	20139	2.90
Osborne	KS	20141	2.50
Ottawa	KS	20143	2.70
Pawnee	KS	20145	2.50
Phillips	KS	20147	2.50
Pottawatomie	KS	20149	2.70
Pratt	KS	20151	2.60
Rawlins	KS	20153	2.50
Reno	KS	20155	2.90
Republic	KS	20157	2.60
Rice	KS	20159	2.60
Riley	KS	20161	2.70
Rooks	KS	20163	2.50
Rush	KS	20165	2.50
Russell	KS	20167	2.50
Saline	KS	20169	2.70
Scott	KS	20171	2.50
Sedgwick	KS	20173	2.90
Seward	KS	20175	2.50
Shawnee	KS	20177	2.90
Sheridan	KS	20179	2.50
Sherman	KS	20181	2.50
Smith	KS	20183	2.50
Stafford	KS	20185	2.60
Stanton	KS	20187	2.50
Stevens	KS	20189	2.50
Sumner	KS	20191	2.90
Thomas	KS	20193	2.50
Trego	KS	20195	2.50
Wabaunsee	KS	20197	2.90
Wallace	KS	20199	2.50
Washington	KS	20201	2.70
Wichita	KS	20203	2.50
Wilson	KS	20205	2.90
Woodson	KS	20207	2.90
Wyandotte	KS	20209	3.20
Adair	KY	21001	4.20
Allen	KY	21003	4.20
Anderson	KY	21005	4.20
Ballard	KY	21007	4.00
Barren	KY	21009	4.20
Bath	KY	21011	4.20
Bell	KY	21013	4.80

County/parish/city	State	FIPS code	Class I differential adjusted for location
Boone	KY	21015	4.00
Bourbon	KY	21017	4.20
Boyd	KY	21019	4.20
Boyle	KY	21021	4.20
Bracken	KY	21023	4.00
Breathitt	KY	21025	4.50
Breckinridge	KY	21027	4.00
Bullitt	KY	21029	4.00
Butler	KY	21031	4.20
Caldwell	KY	21033	4.00
Calloway	KY	21035	4.20
Campbell	KY	21037	4.00
Carlisle	KY	21039	4.00
Carroll	KY	21041	4.00
Carter	KY	21043	4.20
Casey	KY	21045	4.20
Christian	KY	21047	4.20
Clark	KY	21049	4.20
Clay	KY	21051	4.50
Clinton	KY	21053	4.50
Crittenden	KY	21055	4.00
Cumberland	KY	21057	4.50
Daviess	KY	21059	4.00
Edmonson	KY	21061	4.20
Elliott	KY	21063	4.20
Estill	KY	21065	4.20
Fayette	KY	21067	4.20
Fleming	KY	21069	4.20
Floyd	KY	21071	4.50
Franklin	KY	21073	4.00
Fulton	KY	21075	4.00
Gallatin	KY	21077	4.00
Garrard	KY	21079	4.20
Grant	KY	21081	4.00
Graves	KY	21083	4.20
Grayson	KY	21085	4.00
Green	KY	21087	4.20
Greenup	KY	21089	4.20
Hancock	KY	21091	4.00
Hardin	KY	21093	4.20
Harlan	KY	21095	4.80
Harrison	KY	21097	4.20
Hart	KY	21099	4.20
Henderson	KY	21101	4.00
Henry	KY	21103	4.00
Hickman	KY	21105	4.00
Hopkins	KY	21107	4.00
Jackson	KY	21109	4.20
Jefferson	KY	21111	4.00
Jessamine	KY	21113	4.20
Johnson	KY	21115	4.50
Kenton	KY	21117	4.00
Knott	KY	21119	4.50
Knox	KY	21121	4.50
Larue	KY	21123	4.20
Laurel	KY	21125	4.50
Lawrence	KY	21127	4.20
Lee	KY	21129	4.20
Leslie	KY	21131	4.50
Letcher	KY	21133	4.80
Lewis	KY	21135	4.20
Lincoln	KY	21137	4.20
Livingston	KY	21139	4.00
Logan	KY	21141	4.20
Lyon	KY	21143	4.00
Madison	KY	21151	4.20
Magoffin	KY	21153	4.50
Marion	KY	21155	4.20
Marshall	KY	21157	4.00
Martin	KY	21159	4.50
Mason	KY	21161	4.20

County/parish/city	State	FIPS code	Class I differential adjusted for location
McCracken	KY	21145	4.00
McCreary	KY	21147	4.50
McLean	KY	21149	4.00
Meade	KY	21163	4.00
Menifee	KY	21165	4.20
Mercer	KY	21167	4.20
Metcalfe	KY	21169	4.20
Monroe	KY	21171	4.50
Montgomery	KY	21173	4.20
Morgan	KY	21175	4.20
Muhlenberg	KY	21177	4.00
Nelson	KY	21179	4.20
Nicholas	KY	21181	4.20
Ohio	KY	21183	4.00
Oldham	KY	21185	4.00
Owen	KY	21187	4.00
Owsley	KY	21189	4.50
Pendleton	KY	21191	4.00
Perry	KY	21193	4.50
Pike	KY	21195	4.50
Powell	KY	21197	4.20
Pulaski	KY	21199	4.50
Robertson	KY	21201	4.20
Rockcastle	KY	21203	4.20
Rowan	KY	21205	4.20
Russell	KY	21207	4.50
Scott	KY	21209	4.00
Shelby	KY	21211	4.00
Simpson	KY	21213	4.20
Spencer	KY	21215	4.00
Taylor	KY	21217	4.20
Todd	KY	21219	4.20
Trigg	KY	21221	4.20
Trimble	KY	21223	4.00
Union	KY	21225	4.00
Warren	KY	21227	4.20
Washington	KY	21229	4.20
Wayne	KY	21231	4.50
Webster	KY	21233	4.00
Whitley	KY	21235	4.50
Wolfe	KY	21237	4.20
Woodford	KY	21239	4.20
Acadia Parish	LA	22001	5.20
Allen Parish	LA	22003	4.90
Ascension Parish	LA	22005	5.20
Assumption Parish	LA	22007	5.20
Avoyelles Parish	LA	22009	5.20
Beauregard Parish	LA	22011	4.90
Bienville Parish	LA	22013	4.60
Bossier Parish	LA	22015	4.30
Caddo Parish	LA	22017	4.30
Calcasieu Parish	LA	22019	4.90
Caldwell Parish	LA	22021	4.90
Cameron Parish	LA	22023	4.90
Catahoula Parish	LA	22025	5.20
Claiborne Parish	LA	22027	4.30
Concordia Parish	LA	22029	5.20
De Soto Parish	LA	22031	4.30
East Baton Rouge Parish	LA	22033	5.20
East Carroll Parish	LA	22035	5.20
East Feliciana Parish	LA	22037	5.20
Evangeline Parish	LA	22039	4.90
Franklin Parish	LA	22041	4.90
Grant Parish	LA	22043	4.90
Iberia Parish	LA	22045	5.20
Iberville Parish	LA	22047	5.20
Jackson Parish	LA	22049	4.60
Jefferson Davis Parish	LA	22053	4.90
Jefferson Parish	LA	22051	5.60
La Salle Parish	LA	22059	4.90
Lafayette Parish	LA	22055	5.20

County/parish/city	State	FIPS code	Class I differential adjusted for location
Lafourche Parish	LA	22057	5.60
Lincoln Parish	LA	22061	4.60
Livingston Parish	LA	22063	5.40
Madison Parish	LA	22065	5.20
Morehouse Parish	LA	22067	4.90
Natchitoches Parish	LA	22069	4.60
Orleans Parish	LA	22071	5.60
Ouachita Parish	LA	22073	4.90
Plaquemines Parish	LA	22075	5.60
Pointe Coupee Parish	LA	22077	5.20
Rapides Parish	LA	22079	4.90
Red River Parish	LA	22081	4.60
Richland Parish	LA	22083	4.90
Sabine Parish	LA	22085	4.60
St. Bernard Parish	LA	22087	5.60
St. Charles Parish	LA	22089	5.60
St. Helena Parish	LA	22091	5.40
St. James Parish	LA	22093	5.20
St. John the Baptist Parish	LA	22095	5.60
St. Landry Parish	LA	22097	5.20
St. Martin Parish	LA	22099	5.20
St. Mary Parish	LA	22101	5.20
St. Tammany Parish	LA	22103	5.60
Tangipahoa Parish	LA	22105	5.40
Tensas Parish	LA	22107	5.20
Terrebonne Parish	LA	22109	5.60
Union Parish	LA	22111	4.60
Vermilion Parish	LA	22113	5.20
Vernon Parish	LA	22115	4.60
Washington Parish	LA	22117	5.60
Webster Parish	LA	22119	4.30
West Baton Rouge Parish	LA	22121	5.20
West Carroll Parish	LA	22123	4.90
West Feliciana Parish	LA	22125	5.20
Winn Parish	LA	22127	4.60
Barnstable	MA	25001	5.10
Berkshire	MA	25003	4.50
Bristol	MA	25005	5.10
Dukes	MA	25007	5.10
Essex	MA	25009	5.10
Franklin	MA	25011	4.70
Hampden	MA	25013	4.70
Hampshire	MA	25015	4.70
Middlesex	MA	25017	5.10
Nantucket	MA	25019	5.10
Norfolk	MA	25021	5.10
Plymouth	MA	25023	5.10
Suffolk	MA	25025	5.10
Worcester	MA	25027	4.90
Allegany	MD	24001	4.10
Anne Arundel	MD	24003	4.60
Baltimore	MD	24005	4.40
Baltimore City	MD	24510	4.60
Calvert	MD	24009	4.80
Caroline	MD	24011	4.60
Carroll	MD	24013	4.40
Cecil	MD	24015	4.40
Charles	MD	24017	4.80
Dorchester	MD	24019	4.80
Frederick	MD	24021	4.40
Garrett	MD	24023	4.10
Harford	MD	24025	4.40
Howard	MD	24027	4.60
Kent	MD	24029	4.60
Montgomery	MD	24031	4.60
Prince George's	MD	24033	4.60
Queen Anne's	MD	24035	4.60
Somerset	MD	24039	4.80
St. Mary's	MD	24037	4.80
Talbot	MD	24041	4.60
Washington	MD	24043	4.20

County/parish/city	State	FIPS code	Class I differential adjusted for location
Wicomico	MD	24045	4.80
Worcester	MD	24047	4.80
Androscoggin	ME	23001	4.20
Aroostook	ME	23003	3.90
Cumberland	ME	23005	4.50
Franklin	ME	23007	4.20
Hancock	ME	23009	3.90
Kennebec	ME	23011	4.20
Knox	ME	23013	4.20
Lincoln	ME	23015	4.20
Oxford	ME	23017	4.20
Penobscot	ME	23019	3.90
Piscataquis	ME	23021	3.90
Sagadahoc	ME	23023	4.20
Somerset	ME	23025	3.90
Waldo	ME	23027	3.90
Washington	ME	23029	3.90
York	ME	23031	4.50
Alcona	MI	26001	3.30
Alger	MI	26003	3.00
Allegan	MI	26005	3.30
Alpena	MI	26007	3.30
Antrim	MI	26009	3.30
Arenac	MI	26011	3.30
Baraga	MI	26013	3.00
Barry	MI	26015	3.30
Bay	MI	26017	3.30
Benzie	MI	26019	3.30
Berrien	MI	26021	3.30
Branch	MI	26023	3.30
Calhoun	MI	26025	3.30
Cass	MI	26027	3.30
Charlevoix	MI	26029	3.30
Cheboygan	MI	26031	3.30
Chippewa	MI	26033	3.00
Clare	MI	26035	3.30
Clinton	MI	26037	3.30
Crawford	MI	26039	3.30
Delta	MI	26041	2.80
Dickinson	MI	26043	2.80
Eaton	MI	26045	3.30
Emmet	MI	26047	3.30
Genesee	MI	26049	3.30
Gladwin	MI	26051	3.30
Gogebic	MI	26053	2.80
Grand Traverse	MI	26055	3.30
Gratiot	MI	26057	3.30
Hillsdale	MI	26059	3.30
Houghton	MI	26061	3.00
Huron	MI	26063	3.30
Ingham	MI	26065	3.30
Ionia	MI	26067	3.30
Iosco	MI	26069	3.30
Iron	MI	26071	2.80
Isabella	MI	26073	3.30
Jackson	MI	26075	3.30
Kalamazoo	MI	26077	3.30
Kalkaska	MI	26079	3.30
Kent	MI	26081	3.30
Keweenaw	MI	26083	3.00
Lake	MI	26085	3.30
Lapeer	MI	26087	3.30
Leelanau	MI	26089	3.30
Lenawee	MI	26091	3.30
Livingston	MI	26093	3.30
Luce	MI	26095	3.00
Mackinac	MI	26097	3.00
Macomb	MI	26099	3.30
Manistee	MI	26101	3.30
Marquette	MI	26103	3.00
Mason	MI	26105	3.30

County/parish/city	State	FIPS code	Class I differential adjusted for location
Mecosta	MI	26107	3.30
Menominee	MI	26109	2.80
Midland	MI	26111	3.30
Missaukee	MI	26113	3.30
Monroe	MI	26115	3.30
Montcalm	MI	26117	3.30
Montmorency	MI	26119	3.30
Muskegon	MI	26121	3.30
Newaygo	MI	26123	3.30
Oakland	MI	26125	3.30
Oceana	MI	26127	3.30
Ogemaw	MI	26129	3.30
Ontonagon	MI	26131	2.80
Osceola	MI	26133	3.30
Oscoda	MI	26135	3.30
Otsego	MI	26137	3.30
Ottawa	MI	26139	3.30
Presque Isle	MI	26141	3.30
Roscommon	MI	26143	3.30
Saginaw	MI	26145	3.30
Sanilac	MI	26151	3.30
Schoolcraft	MI	26153	3.00
Shiawassee	MI	26155	3.30
St. Clair	MI	26147	3.30
St. Joseph	MI	26149	3.30
Tuscola	MI	26157	3.30
Van Buren	MI	26159	3.30
Washtenaw	MI	26161	3.30
Wayne	MI	26163	3.30
Wexford	MI	26165	3.30
Aitkin	MN	27001	2.80
Anoka	MN	27003	2.80
Becker	MN	27005	2.70
Beltrami	MN	27007	2.30
Benton	MN	27009	2.80
Big Stone	MN	27011	2.70
Blue Earth	MN	27013	2.80
Brown	MN	27015	2.80
Carlton	MN	27017	2.80
Carver	MN	27019	2.80
Cass	MN	27021	2.80
Chippewa	MN	27023	2.80
Chisago	MN	27025	2.80
Clay	MN	27027	2.70
Clearwater	MN	27029	2.30
Cook	MN	27031	2.30
Cottonwood	MN	27033	2.80
Crow Wing	MN	27035	2.80
Dakota	MN	27037	2.90
Dodge	MN	27039	2.80
Douglas	MN	27041	2.80
Faribault	MN	27043	2.80
Fillmore	MN	27045	2.80
Freeborn	MN	27047	2.80
Goodhue	MN	27049	2.80
Grant	MN	27051	2.80
Hennepin	MN	27053	2.90
Houston	MN	27055	2.80
Hubbard	MN	27057	2.70
Isanti	MN	27059	2.80
Itasca	MN	27061	2.30
Jackson	MN	27063	2.80
Kanabec	MN	27065	2.80
Kandiyohi	MN	27067	2.80
Kittson	MN	27069	2.30
Koochiching	MN	27071	2.30
Lac qui Parle	MN	27073	2.70
Lake	MN	27075	2.30
Lake of the Woods	MN	27077	2.30
Le Sueur	MN	27079	2.80
Lincoln	MN	27081	2.60

County/parish/city	State	FIPS code	Class I differential adjusted for location
Lyon	MN	27083	2.70
Mahnomen	MN	27087	2.60
Marshall	MN	27089	2.30
Martin	MN	27091	2.80
McLeod	MN	27085	2.80
Meeker	MN	27093	2.80
Mille Lacs	MN	27095	2.80
Morrison	MN	27097	2.80
Mower	MN	27099	2.80
Murray	MN	27101	2.70
Nicollet	MN	27103	2.80
Nobles	MN	27105	2.70
Norman	MN	27107	2.60
Olmsted	MN	27109	2.80
Otter Tail	MN	27111	2.80
Pennington	MN	27113	2.30
Pine	MN	27115	2.80
Pipestone	MN	27117	2.60
Polk	MN	27119	2.30
Pope	MN	27121	2.80
Ramsey	MN	27123	2.90
Red Lake	MN	27125	2.30
Redwood	MN	27127	2.80
Renville	MN	27129	2.80
Rice	MN	27131	2.80
Rock	MN	27133	2.60
Roseau	MN	27135	2.30
Scott	MN	27139	2.90
Sherburne	MN	27141	2.80
Sibley	MN	27143	2.80
St. Louis	MN	27137	2.30
Stearns	MN	27145	2.80
Steele	MN	27147	2.80
Stevens	MN	27149	2.80
Swift	MN	27151	2.80
Todd	MN	27153	2.80
Traverse	MN	27155	2.70
Wabasha	MN	27157	2.80
Wadena	MN	27159	2.80
Waseca	MN	27161	2.80
Washington	MN	27163	2.90
Watonwan	MN	27165	2.80
Wilkin	MN	27167	2.70
Winona	MN	27169	2.80
Wright	MN	27171	2.80
Yellow Medicine	MN	27173	2.70
Adair	MO	29001	3.20
Andrew	MO	29003	2.90
Atchison	MO	29005	2.70
Audrain	MO	29007	3.40
Barry	MO	29009	3.20
Barton	MO	29011	3.20
Bates	MO	29013	3.20
Benton	MO	29015	3.20
Bollinger	MO	29017	3.60
Boone	MO	29019	3.40
Buchanan	MO	29021	3.20
Butler	MO	29023	4.00
Caldwell	MO	29025	3.20
Callaway	MO	29027	3.40
Camden	MO	29029	3.40
Cape Girardeau	MO	29031	3.60
Carroll	MO	29033	3.20
Carter	MO	29035	4.00
Cass	MO	29037	3.20
Cedar	MO	29039	3.20
Chariton	MO	29041	3.20
Christian	MO	29043	3.30
Clark	MO	29045	3.20
Clay	MO	29047	3.20
Clinton	MO	29049	3.20

County/parish/city	State	FIPS code	Class I differential adjusted for location
Cole	MO	29051	3.40
Cooper	MO	29053	3.40
Crawford	MO	29055	3.60
Dade	MO	29057	3.20
Dallas	MO	29059	3.30
Daviess	MO	29061	3.20
DeKalb	MO	29063	3.20
Dent	MO	29065	3.60
Douglas	MO	29067	3.30
Dunklin	MO	29069	4.30
Franklin	MO	29071	3.60
Gasconade	MO	29073	3.60
Gentry	MO	29075	2.90
Greene	MO	29077	3.20
Grundy	MO	29079	3.20
Harrison	MO	29081	2.90
Henry	MO	29083	3.20
Hickory	MO	29085	3.20
Holt	MO	29087	2.90
Howard	MO	29089	3.40
Howell	MO	29091	3.60
Iron	MO	29093	3.60
Jackson	MO	29095	3.20
Jasper	MO	29097	3.20
Jefferson	MO	29099	3.60
Johnson	MO	29101	3.20
Knox	MO	29103	3.20
Laclede	MO	29105	3.30
Lafayette	MO	29107	3.20
Lawrence	MO	29109	3.20
Lewis	MO	29111	3.20
Lincoln	MO	29113	3.60
Linn	MO	29115	3.20
Livingston	MO	29117	3.20
Macon	MO	29121	3.20
Madison	MO	29123	3.60
Maries	MO	29125	3.60
Marion	MO	29127	3.20
McDonald	MO	29119	3.20
Mercer	MO	29129	2.90
Miller	MO	29131	3.40
Mississippi	MO	29133	4.00
Moniteau	MO	29135	3.40
Monroe	MO	29137	3.40
Montgomery	MO	29139	3.40
Morgan	MO	29141	3.40
New Madrid	MO	29143	4.00
Newton	MO	29145	3.20
Nodaway	MO	29147	2.90
Oregon	MO	29149	4.00
Osage	MO	29151	3.60
Ozark	MO	29153	3.60
Pemiscot	MO	29155	4.30
Perry	MO	29157	3.60
Pettis	MO	29159	3.40
Phelps	MO	29161	3.60
Pike	MO	29163	3.40
Platte	MO	29165	3.20
Polk	MO	29167	3.20
Pulaski	MO	29169	3.40
Putnam	MO	29171	2.90
Ralls	MO	29173	3.40
Randolph	MO	29175	3.40
Ray	MO	29177	3.20
Reynolds	MO	29179	3.60
Ripley	MO	29181	4.00
Saline	MO	29195	3.40
Schuyler	MO	29197	3.20
Scotland	MO	29199	3.20
Scott	MO	29201	4.00
Shannon	MO	29203	3.60

County/parish/city	State	FIPS code	Class I differential adjusted for location
Shelby	MO	29205	3.20
St. Charles	MO	29183	3.60
St. Clair	MO	29185	3.20
St. Francois	MO	29187	3.60
St. Louis	MO	29189	3.60
St. Louis City	MO	29510	3.60
Ste. Genevieve	MO	29186	3.60
Stoddard	MO	29207	4.00
Stone	MO	29209	3.30
Sullivan	MO	29211	3.20
Taney	MO	29213	3.30
Texas	MO	29215	3.60
Vernon	MO	29217	3.20
Warren	MO	29219	3.60
Washington	MO	29221	3.60
Wayne	MO	29223	4.00
Webster	MO	29225	3.20
Worth	MO	29227	2.90
Wright	MO	29229	3.30
Adams	MS	28001	5.20
Alcorn	MS	28003	4.90
Amite	MS	28005	5.40
Attala	MS	28007	5.20
Benton	MS	28009	4.90
Bolivar	MS	28011	4.90
Calhoun	MS	28013	5.20
Carroll	MS	28015	5.20
Chickasaw	MS	28017	5.20
Choctaw	MS	28019	5.20
Claiborne	MS	28021	5.20
Clarke	MS	28023	5.60
Clay	MS	28025	5.20
Coahoma	MS	28027	4.90
Copiah	MS	28029	5.40
Covington	MS	28031	5.60
DeSoto	MS	28033	4.60
Forrest	MS	28035	5.80
Franklin	MS	28037	5.20
George	MS	28039	5.80
Greene	MS	28041	5.80
Grenada	MS	28043	5.20
Hancock	MS	28045	5.80
Harrison	MS	28047	5.80
Hinds	MS	28049	5.40
Holmes	MS	28051	5.20
Humphreys	MS	28053	5.20
Issaquena	MS	28055	5.20
Itawamba	MS	28057	5.20
Jackson	MS	28059	5.80
Jasper	MS	28061	5.60
Jefferson	MS	28063	5.20
Jefferson Davis	MS	28065	5.60
Jones	MS	28067	5.60
Kemper	MS	28069	5.40
Lafayette	MS	28071	4.90
Lamar	MS	28073	5.80
Lauderdale	MS	28075	5.60
Lawrence	MS	28077	5.60
Leake	MS	28079	5.40
Lee	MS	28081	5.20
Leflore	MS	28083	5.20
Lincoln	MS	28085	5.40
Lowndes	MS	28087	5.20
Madison	MS	28089	5.40
Marion	MS	28091	5.60
Marshall	MS	28093	4.90
Monroe	MS	28095	5.20
Montgomery	MS	28097	5.20
Neshoba	MS	28099	5.40
Newton	MS	28101	5.60
Noxubee	MS	28103	5.40

County/parish/city	State	FIPS code	Class I differential adjusted for location
Oktibbeha	MS	28105	5.20
Panola	MS	28107	4.90
Pearl River	MS	28109	5.80
Perry	MS	28111	5.80
Pike	MS	28113	5.40
Pontotoc	MS	28115	4.90
Prentiss	MS	28117	4.90
Quitman	MS	28119	4.90
Rankin	MS	28121	5.40
Scott	MS	28123	5.40
Sharkey	MS	28125	5.20
Simpson	MS	28127	5.60
Smith	MS	28129	5.60
Stone	MS	28131	5.80
Sunflower	MS	28133	4.90
Tallahatchie	MS	28135	4.90
Tate	MS	28137	4.90
Tippah	MS	28139	4.90
Tishomingo	MS	28141	4.90
Tunica	MS	28143	4.60
Union	MS	28145	4.90
Walthall	MS	28147	5.60
Warren	MS	28149	5.20
Washington	MS	28151	4.90
Wayne	MS	28153	5.80
Webster	MS	28155	5.20
Wilkinson	MS	28157	5.20
Winston	MS	28159	5.40
Yalobusha	MS	28161	4.90
Yazoo	MS	28163	5.20
Beaverhead	MT	30001	1.80
Big Horn	MT	30003	2.40
Blaine	MT	30005	2.00
Broadwater	MT	30007	1.80
Carbon	MT	30009	2.40
Carter	MT	30011	2.40
Cascade	MT	30013	1.80
Chouteau	MT	30015	1.80
Custer	MT	30017	2.40
Daniels	MT	30019	2.30
Dawson	MT	30021	2.40
Deer Lodge	MT	30023	1.80
Fallon	MT	30025	2.40
Fergus	MT	30027	2.00
Flathead	MT	30029	2.00
Gallatin	MT	30031	2.00
Garfield	MT	30033	2.40
Glacier	MT	30035	1.80
Golden Valley	MT	30037	2.00
Granite	MT	30039	1.80
Hill	MT	30041	1.80
Jefferson	MT	30043	1.80
Judith Basin	MT	30045	2.00
Lake	MT	30047	2.00
Lewis and Clark	MT	30049	1.70
Liberty	MT	30051	1.80
Lincoln	MT	30053	2.00
Madison	MT	30057	1.80
McCone	MT	30055	2.40
Meagher	MT	30059	1.80
Mineral	MT	30061	2.00
Missoula	MT	30063	1.80
Musselshell	MT	30065	2.40
Park	MT	30067	2.00
Petroleum	MT	30069	2.40
Phillips	MT	30071	2.30
Pondera	MT	30073	1.70
Powder River	MT	30075	2.40
Powell	MT	30077	1.80
Prairie	MT	30079	2.40
Ravalli	MT	30081	1.80

County/parish/city	State	FIPS code	Class I differential adjusted for location
Richland	MT	30083	2.40
Roosevelt	MT	30085	2.30
Rosebud	MT	30087	2.40
Sanders	MT	30089	2.00
Sheridan	MT	30091	2.30
Silver Bow	MT	30093	1.80
Stillwater	MT	30095	2.40
Sweet Grass	MT	30097	2.00
Teton	MT	30099	1.70
Toole	MT	30101	1.80
Treasure	MT	30103	2.40
Valley	MT	30105	2.30
Wheatland	MT	30107	2.00
Wibaux	MT	30109	2.40
Yellowstone	MT	30111	2.40
Alamance	NC	37001	5.40
Alexander	NC	37003	5.60
Alleghany	NC	37005	5.40
Anson	NC	37007	5.80
Ashe	NC	37009	5.40
Avery	NC	37011	5.40
Beaufort	NC	37013	5.80
Bertie	NC	37015	5.60
Bladen	NC	37017	5.80
Brunswick	NC	37019	6.00
Buncombe	NC	37021	5.40
Burke	NC	37023	5.60
Cabarrus	NC	37025	5.60
Caldwell	NC	37027	5.60
Camden	NC	37029	5.60
Carteret	NC	37031	6.00
Caswell	NC	37033	5.40
Catawba	NC	37035	5.60
Chatham	NC	37037	5.60
Cherokee	NC	37039	5.40
Chowan	NC	37041	5.60
Clay	NC	37043	5.60
Cleveland	NC	37045	5.60
Columbus	NC	37047	6.00
Craven	NC	37049	6.00
Cumberland	NC	37051	5.80
Currituck	NC	37053	5.60
Dare	NC	37055	5.80
Davidson	NC	37057	5.60
Davie	NC	37059	5.60
Duplin	NC	37061	5.80
Durham	NC	37063	5.40
Edgecombe	NC	37065	5.60
Forsyth	NC	37067	5.40
Franklin	NC	37069	5.60
Gaston	NC	37071	5.60
Gates	NC	37073	5.60
Graham	NC	37075	5.40
Granville	NC	37077	5.40
Greene	NC	37079	5.80
Guilford	NC	37081	5.40
Halifax	NC	37083	5.60
Harnett	NC	37085	5.80
Haywood	NC	37087	5.40
Henderson	NC	37089	5.60
Hertford	NC	37091	5.60
Hoke	NC	37093	5.80
Hyde	NC	37095	5.80
Iredell	NC	37097	5.60
Jackson	NC	37099	5.60
Johnston	NC	37101	5.80
Jones	NC	37103	6.00
Lee	NC	37105	5.60
Lenoir	NC	37107	5.80
Lincoln	NC	37109	5.60
Macon	NC	37113	5.60

County/parish/city	State	FIPS code	Class I differential adjusted for location
Madison	NC	37115	5.40
Martin	NC	37117	5.80
McDowell	NC	37111	5.60
Mecklenburg	NC	37119	5.60
Mitchell	NC	37121	5.40
Montgomery	NC	37123	5.60
Moore	NC	37125	5.60
Nash	NC	37127	5.60
New Hanover	NC	37129	6.00
Northampton	NC	37131	5.60
Onslow	NC	37133	6.00
Orange	NC	37135	5.40
Pamlico	NC	37137	6.00
Pasquotank	NC	37139	5.60
Pender	NC	37141	6.00
Perquimans	NC	37143	5.60
Person	NC	37145	5.40
Pitt	NC	37147	5.80
Polk	NC	37149	5.60
Randolph	NC	37151	5.60
Richmond	NC	37153	5.80
Robeson	NC	37155	5.80
Rockingham	NC	37157	5.40
Rowan	NC	37159	5.60
Rutherford	NC	37161	5.60
Sampson	NC	37163	5.80
Scotland	NC	37165	5.80
Stanly	NC	37167	5.60
Stokes	NC	37169	5.40
Surry	NC	37171	5.40
Swain	NC	37173	5.40
Transylvania	NC	37175	5.60
Tyrrell	NC	37177	5.80
Union	NC	37179	5.80
Vance	NC	37181	5.40
Wake	NC	37183	5.60
Warren	NC	37185	5.40
Washington	NC	37187	5.80
Watauga	NC	37189	5.40
Wayne	NC	37191	5.80
Wilkes	NC	37193	5.40
Wilson	NC	37195	5.80
Yadkin	NC	37197	5.40
Yancey	NC	37199	5.40
Adams	ND	38001	2.40
Barnes	ND	38003	2.60
Benson	ND	38005	2.30
Billings	ND	38007	2.40
Bottineau	ND	38009	2.30
Bowman	ND	38011	2.40
Burke	ND	38013	2.30
Burleigh	ND	38015	2.40
Cass	ND	38017	2.70
Cavalier	ND	38019	2.30
Dickey	ND	38021	2.60
Divide	ND	38023	2.30
Dunn	ND	38025	2.40
Eddy	ND	38027	2.40
Emmons	ND	38029	2.40
Foster	ND	38031	2.40
Golden Valley	ND	38033	2.40
Grand Forks	ND	38035	2.30
Grant	ND	38037	2.40
Griggs	ND	38039	2.60
Hettinger	ND	38041	2.40
Kidder	ND	38043	2.40
LaMoure	ND	38045	2.60
Logan	ND	38047	2.40
McHenry	ND	38049	2.30
McIntosh	ND	38051	2.40
McKenzie	ND	38053	2.40

County/parish/city	State	FIPS code	Class I differential adjusted for location
McLean	ND	38055	2.40
Mercer	ND	38057	2.40
Morton	ND	38059	2.40
Mountrail	ND	38061	2.30
Nelson	ND	38063	2.30
Oliver	ND	38065	2.40
Pembina	ND	38067	2.30
Pierce	ND	38069	2.30
Ramsey	ND	38071	2.30
Ransom	ND	38073	2.60
Renville	ND	38075	2.30
Richland	ND	38077	2.60
Rolette	ND	38079	2.30
Sargent	ND	38081	2.60
Sheridan	ND	38083	2.40
Sioux	ND	38085	2.40
Slope	ND	38087	2.40
Stark	ND	38089	2.40
Steele	ND	38091	2.60
Stutsman	ND	38093	2.40
Towner	ND	38095	2.30
Traill	ND	38097	2.60
Walsh	ND	38099	2.30
Ward	ND	38101	2.30
Wells	ND	38103	2.40
Williams	ND	38105	2.30
Adams	NE	31001	2.60
Antelope	NE	31003	2.60
Arthur	NE	31005	2.40
Banner	NE	31007	2.40
Blaine	NE	31009	2.50
Boone	NE	31011	2.60
Box Butte	NE	31013	2.40
Boyd	NE	31015	2.50
Brown	NE	31017	2.50
Buffalo	NE	31019	2.50
Burt	NE	31021	2.60
Butler	NE	31023	2.60
Cass	NE	31025	2.70
Cedar	NE	31027	2.60
Chase	NE	31029	2.50
Cherry	NE	31031	2.40
Cheyenne	NE	31033	2.40
Clay	NE	31035	2.60
Colfax	NE	31037	2.60
Cuming	NE	31039	2.60
Custer	NE	31041	2.50
Dakota	NE	31043	2.60
Dawes	NE	31045	2.40
Dawson	NE	31047	2.50
Deuel	NE	31049	2.40
Dixon	NE	31051	2.60
Dodge	NE	31053	2.60
Douglas	NE	31055	2.70
Dundy	NE	31057	2.50
Fillmore	NE	31059	2.60
Franklin	NE	31061	2.60
Frontier	NE	31063	2.50
Furnas	NE	31065	2.50
Gage	NE	31067	2.70
Garden County	NE	31069	2.40
Garfield	NE	31071	2.50
Gosper	NE	31073	2.50
Grant	NE	31075	2.40
Greeley	NE	31077	2.60
Hall	NE	31079	2.60
Hamilton	NE	31081	2.60
Harlan	NE	31083	2.50
Hayes	NE	31085	2.50
Hitchcock	NE	31087	2.50
Holt	NE	31089	2.50

County/parish/city	State	FIPS code	Class I differential adjusted for location
Hooker	NE	31091	2.40
Howard	NE	31093	2.60
Jefferson	NE	31095	2.60
Johnson	NE	31097	2.70
Kearney	NE	31099	2.60
Keith	NE	31101	2.50
Keya Paha	NE	31103	2.50
Kimball	NE	31105	2.40
Knox	NE	31107	2.60
Lancaster	NE	31109	2.60
Lincoln	NE	31111	2.50
Logan	NE	31113	2.40
Loup	NE	31115	2.50
Madison	NE	31119	2.60
McPherson	NE	31117	2.40
Merrick	NE	31121	2.60
Morrill	NE	31123	2.40
Nance	NE	31125	2.60
Nemaha	NE	31127	2.70
Nuckolls	NE	31129	2.60
Otoe	NE	31131	2.70
Pawnee	NE	31133	2.70
Perkins	NE	31135	2.50
Phelps	NE	31137	2.50
Pierce	NE	31139	2.60
Platte	NE	31141	2.60
Polk	NE	31143	2.60
Red Willow	NE	31145	2.50
Richardson	NE	31147	2.70
Rock	NE	31149	2.50
Saline	NE	31151	2.60
Sarpy	NE	31153	2.70
Saunders	NE	31155	2.60
Scotts Bluff	NE	31157	2.40
Seward	NE	31159	2.60
Sheridan	NE	31161	2.40
Sherman	NE	31163	2.50
Sioux	NE	31165	2.40
Stanton	NE	31167	2.60
Thayer	NE	31169	2.60
Thomas	NE	31171	2.40
Thurston	NE	31173	2.60
Valley	NE	31175	2.50
Washington	NE	31177	2.60
Wayne	NE	31179	2.60
Webster	NE	31181	2.60
Wheeler	NE	31183	2.50
York	NE	31185	2.60
Belknap	NH	33001	4.50
Carroll	NH	33003	4.50
Cheshire	NH	33005	4.50
Coos	NH	33007	4.20
Grafton	NH	33009	4.40
Hillsborough	NH	33011	4.50
Merrimack	NH	33013	4.50
Rockingham	NH	33015	4.50
Strafford	NH	33017	4.50
Sullivan	NH	33019	4.50
Atlantic	NJ	34001	4.80
Bergen	NJ	34003	5.00
Burlington	NJ	34005	4.80
Camden	NJ	34007	4.70
Cape May	NJ	34009	4.80
Cumberland	NJ	34011	4.70
Essex	NJ	34013	5.00
Gloucester	NJ	34015	4.70
Hudson	NJ	34017	5.00
Hunterdon	NJ	34019	4.70
Mercer	NJ	34021	4.70
Middlesex	NJ	34023	4.90
Monmouth	NJ	34025	4.90

County/parish/city	State	FIPS code	Class I differential adjusted for location
Morris	NJ	34027	4.90
Ocean	NJ	34029	4.90
Passaic	NJ	34031	5.00
Salem	NJ	34033	4.70
Somerset	NJ	34035	4.90
Sussex	NJ	34037	4.70
Union	NJ	34039	5.00
Warren	NJ	34041	4.70
Bernalillo	NM	35001	2.40
Catron	NM	35003	2.30
Chaves	NM	35005	2.50
Cibola	NM	35006	2.30
Colfax	NM	35007	2.50
Curry	NM	35009	2.50
DeBaca	NM	35011	2.50
Dona Ana	NM	35013	2.50
Eddy	NM	35015	2.50
Grant	NM	35017	2.50
Guadalupe	NM	35019	2.50
Harding	NM	35021	2.50
Hidalgo	NM	35023	2.50
Lea	NM	35025	2.50
Lincoln	NM	35027	2.50
Los Alamos	NM	35028	2.40
Luna	NM	35029	2.50
McKinley	NM	35031	2.30
Mora	NM	35033	2.50
Otero	NM	35035	2.50
Quay	NM	35037	2.50
Rio Arriba	NM	35039	2.30
Roosevelt	NM	35041	2.50
San Juan	NM	35045	2.30
San Miguel	NM	35047	2.50
Sandoval	NM	35043	2.40
Santa Fe	NM	35049	2.40
Sierra	NM	35051	2.50
Socorro	NM	35053	2.40
Taos	NM	35055	2.50
Torrance	NM	35057	2.40
Union	NM	35059	2.50
Valencia	NM	35061	2.40
Carson City	NV	32510	1.90
Churchill	NV	32001	1.90
Clark	NV	32003	2.60
Douglas	NV	32005	1.80
Elko	NV	32007	2.00
Esmeralda	NV	32009	2.20
Eureka	NV	32011	2.20
Humboldt	NV	32013	1.90
Lander	NV	32015	2.00
Lincoln	NV	32017	2.50
Lyon	NV	32019	1.90
Mineral	NV	32021	2.00
Nye	NV	32023	2.20
Pershing	NV	32027	1.90
Storey	NV	32029	1.90
Washoe	NV	32031	2.00
White Pine	NV	32033	2.20
Albany	NY	36001	4.40
Allegany	NY	36003	3.90
Bronx	NY	36005	5.10
Broome	NY	36007	4.00
Cattaraugus	NY	36009	3.90
Cayuga	NY	36011	3.90
Chautauqua	NY	36013	3.90
Chemung	NY	36015	4.00
Chenango	NY	36017	4.00
Clinton	NY	36019	4.20
Columbia	NY	36021	4.40
Cortland	NY	36023	3.90
Delaware	NY	36025	4.20

County/parish/city	State	FIPS code	Class I differential adjusted for location
Dutchess	NY	36027	4.70
Erie	NY	36029	3.80
Essex	NY	36031	4.20
Franklin	NY	36033	4.10
Fulton	NY	36035	4.10
Genesee	NY	36037	3.80
Greene	NY	36039	4.40
Hamilton	NY	36041	4.10
Herkimer	NY	36043	4.00
Jefferson	NY	36045	4.00
Kings	NY	36047	5.10
Lewis	NY	36049	4.00
Livingston	NY	36051	3.80
Madison	NY	36053	3.90
Monroe	NY	36055	3.80
Montgomery	NY	36057	4.10
Nassau	NY	36059	5.10
New York County	NY	36061	5.10
Niagara	NY	36063	3.80
Oneida	NY	36065	3.90
Onondaga	NY	36067	3.90
Ontario	NY	36069	3.80
Orange	NY	36071	4.70
Orleans	NY	36073	3.80
Oswego	NY	36075	3.90
Otsego	NY	36077	4.10
Putnam	NY	36079	4.70
Queens	NY	36081	5.10
Rensselaer	NY	36083	4.40
Richmond	NY	36085	5.10
Rockland	NY	36087	5.00
Saratoga	NY	36091	4.20
Schenectady	NY	36093	4.20
Schoharie	NY	36095	4.20
Schuyler	NY	36097	3.90
Seneca	NY	36099	3.90
St. Lawrence	NY	36089	4.00
Steuben	NY	36101	3.90
Suffolk	NY	36103	5.10
Sullivan	NY	36105	4.40
Tioga	NY	36107	4.00
Tompkins	NY	36109	3.90
Ulster	NY	36111	4.40
Warren	NY	36113	4.20
Washington	NY	36115	4.20
Wayne	NY	36117	3.80
Westchester	NY	36119	5.00
Wyoming	NY	36121	3.80
Yates	NY	36123	3.80
Adams	OH	39001	4.00
Allen	OH	39003	3.30
Ashland	OH	39005	3.80
Ashtabula	OH	39007	3.80
Athens	OH	39009	4.00
Auglaize	OH	39011	3.60
Belmont	OH	39013	4.00
Brown	OH	39015	4.00
Butler	OH	39017	3.80
Carroll	OH	39019	3.80
Champaign	OH	39021	3.60
Clark	OH	39023	3.60
Clermont	OH	39025	4.00
Clinton	OH	39027	3.80
Columbiana	OH	39029	4.00
Coshocton	OH	39031	3.80
Crawford	OH	39033	3.60
Cuyahoga	OH	39035	3.80
Darke	OH	39037	3.60
Defiance	OH	39039	3.30
Delaware	OH	39041	3.60
Erie	OH	39043	3.60

County/parish/city	State	FIPS code	Class I differential adjusted for location
Fairfield	OH	39045	3.80
Fayette	OH	39047	3.80
Franklin	OH	39049	3.60
Fulton	OH	39051	3.30
Gallia	OH	39053	4.30
Geauga	OH	39055	3.80
Greene	OH	39057	3.60
Guernsey	OH	39059	3.80
Hamilton	OH	39061	3.80
Hancock	OH	39063	3.60
Hardin	OH	39065	3.60
Harrison	OH	39067	3.80
Henry	OH	39069	3.30
Highland	OH	39071	4.00
Hocking	OH	39073	4.00
Holmes	OH	39075	3.80
Huron	OH	39077	3.60
Jackson	OH	39079	4.00
Jefferson	OH	39081	4.00
Knox	OH	39083	3.80
Lake	OH	39085	3.80
Lawrence	OH	39087	4.30
Licking	OH	39089	3.80
Logan	OH	39091	3.60
Lorain	OH	39093	3.80
Lucas	OH	39095	3.30
Madison	OH	39097	3.60
Mahoning	OH	39099	4.00
Marion	OH	39101	3.60
Medina	OH	39103	3.80
Meigs	OH	39105	4.30
Mercer	OH	39107	3.30
Miami	OH	39109	3.60
Monroe	OH	39111	4.00
Montgomery	OH	39113	3.60
Morgan	OH	39115	4.00
Morrow	OH	39117	3.60
Muskingum	OH	39119	3.80
Noble	OH	39121	4.00
Ottawa	OH	39123	3.60
Paulding	OH	39125	3.30
Perry	OH	39127	4.00
Pickaway	OH	39129	3.80
Pike	OH	39131	4.00
Portage	OH	39133	3.80
Preble	OH	39135	3.60
Putnam	OH	39137	3.30
Richland	OH	39139	3.60
Ross	OH	39141	4.00
Sandusky	OH	39143	3.60
Scioto	OH	39145	4.00
Seneca	OH	39147	3.60
Shelby	OH	39149	3.60
Stark	OH	39151	3.80
Summit	OH	39153	3.80
Trumbull	OH	39155	4.00
Tuscarawas	OH	39157	3.80
Union	OH	39159	3.60
Van Wert	OH	39161	3.30
Vinton	OH	39163	4.00
Warren	OH	39165	3.80
Washington	OH	39167	4.00
Wayne	OH	39169	3.80
Williams	OH	39171	3.30
Wood	OH	39173	3.60
Wyandot	OH	39175	3.60
Adair	OK	40001	3.30
Alfalfa	OK	40003	2.60
Atoka	OK	40005	3.60
Beaver	OK	40007	2.50
Beckham	OK	40009	2.60

County/parish/city	State	FIPS code	Class I differential adjusted for location
Blaine	OK	40011	2.90
Bryan	OK	40013	3.60
Caddo	OK	40015	2.90
Canadian	OK	40017	2.90
Carter	OK	40019	3.30
Cherokee	OK	40021	3.30
Choctaw	OK	40023	3.60
Cimarron	OK	40025	2.50
Cleveland	OK	40027	3.30
Coal	OK	40029	3.60
Comanche	OK	40031	2.90
Cotton	OK	40033	3.30
Craig	OK	40035	3.20
Creek	OK	40037	3.30
Custer	OK	40039	2.60
Delaware	OK	40041	3.20
Dewey	OK	40043	2.60
Ellis	OK	40045	2.60
Garfield	OK	40047	2.90
Garvin	OK	40049	3.30
Grady	OK	40051	3.30
Grant	OK	40053	2.90
Greer	OK	40055	2.60
Harmon	OK	40057	2.60
Harper	OK	40059	2.60
Haskell	OK	40061	3.60
Hughes	OK	40063	3.30
Jackson	OK	40065	2.90
Jefferson	OK	40067	3.30
Johnston	OK	40069	3.60
Kay	OK	40071	2.90
Kingfisher	OK	40073	2.90
Kiowa	OK	40075	2.90
Latimer	OK	40077	3.60
Le Flore	OK	40079	3.60
Lincoln	OK	40081	3.30
Logan	OK	40083	3.30
Love	OK	40085	3.30
Major	OK	40093	2.60
Marshall	OK	40095	3.60
Mayes	OK	40097	3.20
McClain	OK	40087	3.30
McCurtain	OK	40089	3.60
McIntosh	OK	40091	3.30
Murray	OK	40099	3.30
Muskogee	OK	40101	3.30
Noble	OK	40103	3.20
Nowata	OK	40105	3.20
Okfuskee	OK	40107	3.30
Oklahoma	OK	40109	3.30
Okmulgee	OK	40111	3.30
Osage	OK	40113	3.20
Ottawa	OK	40115	3.20
Pawnee	OK	40117	3.20
Payne	OK	40119	3.30
Pittsburg	OK	40121	3.60
Pontotoc	OK	40123	3.30
Pottawatomie	OK	40125	3.30
Pushmataha	OK	40127	3.60
Roger Mills	OK	40129	2.60
Rogers	OK	40131	3.20
Seminole	OK	40133	3.30
Sequoyah	OK	40135	3.30
Stephens	OK	40137	3.30
Texas	OK	40139	2.50
Tillman	OK	40141	2.90
Tulsa	OK	40143	3.30
Wagoner	OK	40145	3.30
Washington	OK	40147	3.20
Washita	OK	40149	2.60
Woods	OK	40151	2.60

County/parish/city	State	FIPS code	Class I differential adjusted for location
Woodward	OK	40153	2.60
Baker	OR	41001	2.20
Benton	OR	41003	2.20
Clackamas	OR	41005	2.70
Clatsop	OR	41007	2.20
Columbia	OR	41009	2.20
Coos	OR	41011	2.20
Crook	OR	41013	2.20
Curry	OR	41015	2.20
Deschutes	OR	41017	2.20
Douglas	OR	41019	2.20
Gilliam	OR	41021	2.20
Grant	OR	41023	2.20
Harney	OR	41025	2.20
Hood River	OR	41027	2.20
Jackson	OR	41029	2.20
Jefferson	OR	41031	2.20
Josephine	OR	41033	2.20
Klamath	OR	41035	2.20
Lake	OR	41037	2.20
Lane	OR	41039	2.20
Lincoln	OR	41041	2.20
Linn	OR	41043	2.20
Malheur	OR	41045	1.80
Marion	OR	41047	2.20
Morrow	OR	41049	2.20
Multnomah	OR	41051	2.70
Polk	OR	41053	2.20
Sherman	OR	41055	2.20
Tillamook	OR	41057	2.20
Umatilla	OR	41059	2.20
Union	OR	41061	2.20
Wallowa	OR	41063	2.20
Wasco	OR	41065	2.20
Washington	OR	41067	2.20
Wheeler	OR	41069	2.20
Yamhill	OR	41071	2.20
Adams	PA	42001	4.30
Allegheny	PA	42003	4.00
Armstrong	PA	42005	4.00
Beaver	PA	42007	4.00
Bedford	PA	42009	4.10
Berks	PA	42011	4.30
Blair	PA	42013	4.00
Bradford	PA	42015	4.00
Bucks	PA	42017	4.50
Butler	PA	42019	4.00
Cambria	PA	42021	4.00
Cameron	PA	42023	4.00
Carbon	PA	42025	4.30
Centre	PA	42027	4.00
Chester	PA	42029	4.30
Clarion	PA	42031	4.00
Clearfield	PA	42033	4.00
Clinton	PA	42035	4.00
Columbia	PA	42037	4.10
Crawford	PA	42039	4.00
Cumberland	PA	42041	4.20
Dauphin	PA	42043	4.20
Delaware	PA	42045	4.40
Elk	PA	42047	4.00
Erie	PA	42049	3.90
Fayette	PA	42051	4.00
Forest	PA	42053	4.00
Franklin	PA	42055	4.20
Fulton	PA	42057	4.10
Greene	PA	42059	4.00
Huntingdon	PA	42061	4.10
Indiana	PA	42063	4.00
Jefferson	PA	42065	4.00
Juniata	PA	42067	4.10

County/parish/city	State	FIPS code	Class I differential adjusted for location
Lackawanna	PA	42069	4.30
Lancaster	PA	42071	4.30
Lawrence	PA	42073	4.00
Lebanon	PA	42075	4.20
Lehigh	PA	42077	4.30
Luzerne	PA	42079	4.20
Lycoming	PA	42081	4.10
McKean	PA	42083	3.90
Mercer	PA	42085	4.00
Mifflin	PA	42087	4.10
Monroe	PA	42089	4.40
Montgomery	PA	42091	4.40
Montour	PA	42093	4.10
Northampton	PA	42095	4.40
Northumberland	PA	42097	4.10
Perry	PA	42099	4.20
Philadelphia	PA	42101	4.60
Pike	PA	42103	4.40
Potter	PA	42105	3.90
Schuylkill	PA	42107	4.20
Snyder	PA	42109	4.10
Somerset	PA	42111	4.10
Sullivan	PA	42113	4.10
Susquehanna	PA	42115	4.20
Tioga	PA	42117	4.00
Union	PA	42119	4.10
Venango	PA	42121	4.00
Warren	PA	42123	3.90
Washington	PA	42125	4.00
Wayne	PA	42127	4.30
Westmoreland	PA	42129	4.00
Wyoming	PA	42131	4.20
York	PA	42133	4.30
Bristol	RI	44001	5.10
Kent	RI	44003	5.10
Newport	RI	44005	5.10
Providence	RI	44007	5.10
Washington	RI	44009	5.10
Abbeville	SC	45001	5.80
Aiken	SC	45003	6.00
Allendale	SC	45005	6.00
Anderson	SC	45007	5.60
Bamberg	SC	45009	6.00
Barnwell	SC	45011	6.00
Beaufort	SC	45013	6.00
Berkeley	SC	45015	6.00
Calhoun	SC	45017	6.00
Charleston	SC	45019	6.00
Cherokee	SC	45021	5.60
Chester	SC	45023	5.80
Chesterfield	SC	45025	5.80
Clarendon	SC	45027	6.00
Colleton	SC	45029	6.00
Darlington	SC	45031	6.00
Dillon	SC	45033	6.00
Dorchester	SC	45035	6.00
Edgefield	SC	45037	5.80
Fairfield	SC	45039	5.80
Florence	SC	45041	6.00
Georgetown	SC	45043	6.00
Greenville	SC	45045	5.60
Greenwood	SC	45047	5.80
Hampton	SC	45049	6.00
Horry	SC	45051	6.00
Jasper	SC	45053	6.00
Kershaw	SC	45055	6.00
Lancaster	SC	45057	5.80
Laurens	SC	45059	5.80
Lee	SC	45061	6.00
Lexington	SC	45063	6.00
Marion	SC	45067	6.00

County/parish/city	State	FIPS code	Class I differential adjusted for location
Marlboro	SC	45069	5.80
McCormick	SC	45065	5.80
Newberry	SC	45071	5.80
Oconee	SC	45073	5.60
Orangeburg	SC	45075	6.00
Pickens	SC	45077	5.60
Richland	SC	45079	6.00
Saluda	SC	45081	5.80
Spartanburg	SC	45083	5.60
Sumter	SC	45085	6.00
Union	SC	45087	5.80
Williamsburg	SC	45089	6.00
York	SC	45091	5.60
Aurora	SD	46003	2.60
Beadle	SD	46005	2.60
Bennett	SD	46007	2.40
Bon Homme	SD	46009	2.60
Brookings	SD	46011	2.60
Brown	SD	46013	2.60
Brule	SD	46015	2.50
Buffalo	SD	46017	2.50
Butte	SD	46019	2.40
Campbell	SD	46021	2.50
Charles Mix	SD	46023	2.50
Clark	SD	46025	2.60
Clay	SD	46027	2.60
Codington	SD	46029	2.60
Corson	SD	46031	2.40
Custer	SD	46033	2.40
Davison	SD	46035	2.60
Day	SD	46037	2.60
Deuel	SD	46039	2.60
Dewey	SD	46041	2.40
Douglas	SD	46043	2.60
Edmunds	SD	46045	2.50
Fall River	SD	46047	2.40
Faulk	SD	46049	2.50
Grant	SD	46051	2.60
Gregory	SD	46053	2.50
Haakon	SD	46055	2.40
Hamlin	SD	46057	2.60
Hand	SD	46059	2.50
Hanson	SD	46061	2.60
Harding	SD	46063	2.40
Hughes	SD	46065	2.50
Hutchinson	SD	46067	2.60
Hyde	SD	46069	2.50
Jackson	SD	46071	2.40
Jerauld	SD	46073	2.60
Jones	SD	46075	2.40
Kingsbury	SD	46077	2.60
Lake	SD	46079	2.60
Lawrence	SD	46081	2.40
Lincoln	SD	46083	2.60
Lyman	SD	46085	2.50
Marshall	SD	46091	2.60
McCook	SD	46087	2.60
McPherson	SD	46089	2.50
Meade	SD	46093	2.40
Mellette	SD	46095	2.40
Miner	SD	46097	2.60
Minnehaha	SD	46099	2.60
Moody	SD	46101	2.60
Oglala Lakota	SD	46102	2.40
Pennington	SD	46103	2.40
Perkins	SD	46105	2.40
Potter	SD	46107	2.50
Roberts	SD	46109	2.60
Sanborn	SD	46111	2.60
Spink	SD	46115	2.60
Stanley	SD	46117	2.40

County/parish/city	State	FIPS code	Class I differential adjusted for location
Sully	SD	46119	2.50
Todd	SD	46121	2.40
Tripp	SD	46123	2.50
Turner	SD	46125	2.60
Union	SD	46127	2.60
Walworth	SD	46129	2.50
Yankton	SD	46135	2.60
Ziebach	SD	46137	2.40
Anderson	TN	47001	4.90
Bedford	TN	47003	4.90
Benton	TN	47005	4.60
Bledsoe	TN	47007	4.90
Blount	TN	47009	5.20
Bradley	TN	47011	5.20
Campbell	TN	47013	4.90
Cannon	TN	47015	4.90
Carroll	TN	47017	4.60
Carter	TN	47019	5.20
Cheatham	TN	47021	4.60
Chester	TN	47023	4.60
Claiborne	TN	47025	4.90
Clay	TN	47027	4.60
Cocke	TN	47029	5.20
Coffee	TN	47031	4.90
Crockett	TN	47033	4.30
Cumberland	TN	47035	4.90
Davidson	TN	47037	4.60
Decatur	TN	47039	4.60
DeKalb	TN	47041	4.90
Dickson	TN	47043	4.60
Dyer	TN	47045	4.30
Fayette	TN	47047	4.60
Fentress	TN	47049	4.60
Franklin	TN	47051	5.20
Gibson	TN	47053	4.30
Giles	TN	47055	4.90
Grainger	TN	47057	4.90
Greene	TN	47059	5.20
Grundy	TN	47061	4.90
Hamblen	TN	47063	5.20
Hamilton	TN	47065	5.20
Hancock	TN	47067	4.90
Hardeman	TN	47069	4.60
Hardin	TN	47071	4.90
Hawkins	TN	47073	5.20
Haywood	TN	47075	4.60
Henderson	TN	47077	4.60
Henry	TN	47079	4.30
Hickman	TN	47081	4.60
Houston	TN	47083	4.60
Humphreys	TN	47085	4.60
Jackson	TN	47087	4.60
Jefferson	TN	47089	5.20
Johnson	TN	47091	5.20
Knox	TN	47093	4.90
Lake	TN	47095	4.30
Lauderdale	TN	47097	4.30
Lawrence	TN	47099	4.90
Lewis	TN	47101	4.90
Lincoln	TN	47103	5.20
Loudon	TN	47105	5.20
Macon	TN	47111	4.60
Madison	TN	47113	4.60
Marion	TN	47115	5.20
Marshall	TN	47117	4.90
Maury	TN	47119	4.90
McMinn	TN	47107	5.20
McNairy	TN	47109	4.90
Meigs	TN	47121	5.20
Monroe	TN	47123	5.20
Montgomery	TN	47125	4.30

County/parish/city	State	FIPS code	Class I differential adjusted for location
Moore	TN	47127	4.90
Morgan	TN	47129	4.90
Obion	TN	47131	4.30
Overton	TN	47133	4.60
Perry	TN	47135	4.60
Pickett	TN	47137	4.60
Polk	TN	47139	5.40
Putnam	TN	47141	4.60
Rhea	TN	47143	4.90
Roane	TN	47145	4.90
Robertson	TN	47147	4.60
Rutherford	TN	47149	4.60
Scott	TN	47151	4.90
Sequatchie	TN	47153	5.20
Sevier	TN	47155	5.20
Shelby	TN	47157	4.60
Smith	TN	47159	4.60
Stewart	TN	47161	4.30
Sullivan	TN	47163	5.20
Sumner	TN	47165	4.60
Tipton	TN	47167	4.60
Trousdale	TN	47169	4.60
Unicoi	TN	47171	5.40
Union	TN	47173	4.90
Van Buren	TN	47175	4.90
Warren	TN	47177	4.90
Washington	TN	47179	5.20
Wayne	TN	47181	4.90
Weakley	TN	47183	4.30
White	TN	47185	4.90
Williamson	TN	47187	4.60
Wilson	TN	47189	4.60
Anderson	TX	48001	4.00
Andrews	TX	48003	2.90
Angelina	TX	48005	4.60
Aransas	TX	48007	4.60
Archer	TX	48009	3.30
Armstrong	TX	48011	2.50
Atascosa	TX	48013	4.30
Austin	TX	48015	4.30
Bailey	TX	48017	2.50
Bandera	TX	48019	4.00
Bastrop	TX	48021	4.30
Baylor	TX	48023	2.90
Bee	TX	48025	4.60
Bell	TX	48027	4.00
Bexar	TX	48029	4.30
Blanco	TX	48031	4.00
Borden	TX	48033	2.90
Bosque	TX	48035	3.60
Bowie	TX	48037	4.00
Brazoria	TX	48039	4.80
Brazos	TX	48041	4.30
Brewster	TX	48043	3.30
Briscoe	TX	48045	2.50
Brooks	TX	48047	4.60
Brown	TX	48049	3.60
Burleson	TX	48051	4.30
Burnet	TX	48053	4.00
Caldwell	TX	48055	4.30
Calhoun	TX	48057	4.60
Callahan	TX	48059	3.30
Cameron	TX	48061	4.60
Camp	TX	48063	3.70
Carson	TX	48065	2.50
Cass	TX	48067	4.00
Castro	TX	48069	2.50
Chambers	TX	48071	4.80
Cherokee	TX	48073	4.00
Childress	TX	48075	2.60
Clay	TX	48077	3.30

County/parish/city	State	FIPS code	Class I differential adjusted for location
Cochran	TX	48079	2.50
Coke	TX	48081	3.30
Coleman	TX	48083	3.60
Collin	TX	48085	3.70
Collingsworth	TX	48087	2.60
Colorado	TX	48089	4.30
Comal	TX	48091	4.00
Comanche	TX	48093	3.60
Concho	TX	48095	3.60
Cooke	TX	48097	3.30
Coryell	TX	48099	4.00
Cottle	TX	48101	2.60
Crane	TX	48103	2.90
Crockett	TX	48105	3.30
Crosby	TX	48107	2.60
Culberson	TX	48109	2.90
Dallam	TX	48111	2.50
Dallas	TX	48113	3.70
Dawson	TX	48115	2.90
Deaf Smith	TX	48117	2.50
Delta	TX	48119	3.70
Denton	TX	48121	3.70
DeWitt	TX	48123	4.30
Dickens	TX	48125	2.60
Dimmit	TX	48127	4.00
Donley	TX	48129	2.50
Duval	TX	48131	4.60
Eastland	TX	48133	3.60
Ector	TX	48135	2.90
Edwards	TX	48137	3.60
El Paso	TX	48141	2.70
Ellis	TX	48139	3.70
Erath	TX	48143	3.60
Falls	TX	48145	4.00
Fannin	TX	48147	3.70
Fayette	TX	48149	4.30
Fisher	TX	48151	2.90
Floyd	TX	48153	2.60
Foard	TX	48155	2.90
Fort Bend	TX	48157	4.60
Franklin	TX	48159	3.70
Freestone	TX	48161	4.00
Frio	TX	48163	4.30
Gaines	TX	48165	2.60
Galveston	TX	48167	4.80
Garza	TX	48169	2.90
Gillespie	TX	48171	4.00
Glasscock	TX	48173	3.30
Goliad	TX	48175	4.60
Gonzales	TX	48177	4.30
Gray	TX	48179	2.50
Grayson	TX	48181	3.70
Gregg	TX	48183	4.00
Grimes	TX	48185	4.60
Guadalupe	TX	48187	4.30
Hale	TX	48189	2.50
Hall	TX	48191	2.50
Hamilton	TX	48193	3.60
Hansford	TX	48195	2.50
Hardeman	TX	48197	2.90
Hardin	TX	48199	4.80
Harris	TX	48201	4.80
Harrison	TX	48203	4.00
Hartley	TX	48205	2.50
Haskell	TX	48207	2.90
Hays	TX	48209	4.00
Hemphill	TX	48211	2.60
Henderson	TX	48213	3.70
Hidalgo	TX	48215	4.60
Hill	TX	48217	3.70
Hockley	TX	48219	2.60

County/parish/city	State	FIPS code	Class I differential adjusted for location
Hood	TX	48221	3.70
Hopkins	TX	48223	3.70
Houston	TX	48225	4.00
Howard	TX	48227	2.90
Hudspeth	TX	48229	2.70
Hunt	TX	48231	3.70
Hutchinson	TX	48233	2.50
Irion	TX	48235	3.30
Jack	TX	48237	3.30
Jackson	TX	48239	4.60
Jasper	TX	48241	4.80
Jeff Davis	TX	48243	2.90
Jefferson	TX	48245	4.80
Jim Hogg	TX	48247	4.60
Jim Wells	TX	48249	4.60
Johnson	TX	48251	3.70
Jones	TX	48253	3.30
Karnes	TX	48255	4.30
Kaufman	TX	48257	3.70
Kendall	TX	48259	4.00
Kenedy	TX	48261	4.60
Kent	TX	48263	2.90
Kerr	TX	48265	4.00
Kimble	TX	48267	3.60
King	TX	48269	2.90
Kinney	TX	48271	4.00
Kleberg	TX	48273	4.60
Knox	TX	48275	2.90
La Salle	TX	48283	4.30
Lamar	TX	48277	3.70
Lamb	TX	48279	2.50
Lampasas	TX	48281	4.00
Lavaca	TX	48285	4.30
Lee	TX	48287	4.30
Leon	TX	48289	4.00
Liberty	TX	48291	4.80
Limestone	TX	48293	4.00
Lipscomb	TX	48295	2.60
Live Oak	TX	48297	4.30
Llano	TX	48299	4.00
Loving	TX	48301	2.90
Lubbock	TX	48303	2.60
Lynn	TX	48305	2.90
Madison	TX	48313	4.00
Marion	TX	48315	4.00
Martin	TX	48317	2.90
Mason	TX	48319	3.60
Matagorda	TX	48321	4.80
Maverick	TX	48323	4.00
McCulloch	TX	48307	3.60
McLennan	TX	48309	4.00
McMullen	TX	48311	4.30
Medina	TX	48325	4.00
Menard	TX	48327	3.60
Midland	TX	48329	2.90
Milam	TX	48331	4.00
Mills	TX	48333	3.60
Mitchell	TX	48335	3.30
Montague	TX	48337	3.30
Montgomery	TX	48339	4.80
Moore	TX	48341	2.50
Morris	TX	48343	3.70
Motley	TX	48345	2.60
Nacogdoches	TX	48347	4.00
Navarro	TX	48349	3.70
Newton	TX	48351	4.80
Nolan	TX	48353	3.30
Nueces	TX	48355	4.60
Ochiltree	TX	48357	2.50
Oldham	TX	48359	2.50
Orange	TX	48361	4.80

County/parish/city	State	FIPS code	Class I differential adjusted for location
Palo Pinto	TX	48363	3.30
Panola	TX	48365	4.00
Parker	TX	48367	3.70
Parmer	TX	48369	2.50
Pecos	TX	48371	3.30
Polk	TX	48373	4.60
Potter	TX	48375	2.50
Presidio	TX	48377	2.90
Rains	TX	48379	3.70
Randall	TX	48381	2.50
Reagan	TX	48383	3.30
Real	TX	48385	4.00
Red River	TX	48387	3.70
Reeves	TX	48389	2.90
Refugio	TX	48391	4.60
Roberts	TX	48393	2.50
Robertson	TX	48395	4.00
Rockwall	TX	48397	3.70
Runnels	TX	48399	3.30
Rusk	TX	48401	4.00
Sabine	TX	48403	4.60
San Augustine	TX	48405	4.60
San Jacinto	TX	48407	4.60
San Patricio	TX	48409	4.60
San Saba	TX	48411	3.60
Schleicher	TX	48413	3.60
Scurry	TX	48415	2.90
Shackelford	TX	48417	3.30
Shelby	TX	48419	4.60
Sherman	TX	48421	2.50
Smith	TX	48423	3.70
Somervell	TX	48425	3.70
Starr	TX	48427	4.60
Stephens	TX	48429	3.30
Sterling	TX	48431	3.30
Stonewall	TX	48433	2.90
Sutton	TX	48435	3.60
Swisher	TX	48437	2.50
Tarrant	TX	48439	3.70
Taylor	TX	48441	3.30
Terrell	TX	48443	3.30
Terry	TX	48445	2.60
Throckmorton	TX	48447	3.30
Titus	TX	48449	3.70
Tom Green	TX	48451	3.30
Travis	TX	48453	4.00
Trinity	TX	48455	4.60
Tyler	TX	48457	4.80
Upshur	TX	48459	3.70
Upton	TX	48461	3.30
Uvalde	TX	48463	4.00
Val Verde	TX	48465	3.60
Van Zandt	TX	48467	3.70
Victoria	TX	48469	4.60
Walker	TX	48471	4.60
Waller	TX	48473	4.60
Ward	TX	48475	2.90
Washington	TX	48477	4.30
Webb	TX	48479	4.30
Wharton	TX	48481	4.60
Wheeler	TX	48483	2.60
Wichita	TX	48485	2.90
Wilbarger	TX	48487	2.90
Willacy	TX	48489	4.60
Williamson	TX	48491	4.00
Wilson	TX	48493	4.30
Winkler	TX	48495	2.90
Wise	TX	48497	3.30
Wood	TX	48499	3.70
Yoakum	TX	48501	2.60
Young	TX	48503	3.30

County/parish/city	State	FIPS code	Class I differential adjusted for location
Zapata	TX	48505	4.30
Zavala	TX	48507	4.00
Beaver	UT	49001	2.40
Box Elder	UT	49003	2.00
Cache	UT	49005	2.20
Carbon	UT	49007	2.20
Daggett	UT	49009	2.30
Davis	UT	49011	2.20
Duchesne	UT	49013	2.20
Emery	UT	49015	2.30
Garfield	UT	49017	2.30
Grand	UT	49019	2.30
Iron	UT	49021	2.40
Juab	UT	49023	2.20
Kane	UT	49025	2.40
Millard	UT	49027	2.30
Morgan	UT	49029	2.20
Piute	UT	49031	2.30
Rich	UT	49033	2.20
Salt Lake	UT	49035	2.20
San Juan	UT	49037	2.30
Sanpete	UT	49039	2.20
Sevier	UT	49041	2.30
Summit	UT	49043	2.20
Tooele	UT	49045	2.20
Uintah	UT	49047	2.30
Utah	UT	49049	2.20
Wasatch	UT	49051	2.20
Washington	UT	49053	2.50
Wayne	UT	49055	2.30
Weber	UT	49057	2.20
Accomack	VA	51001	4.80
Albemarle	VA	51003	4.50
Alexandria City	VA	51510	4.50
Alleghany	VA	51005	4.50
Amelia	VA	51007	4.80
Amherst	VA	51009	4.50
Appomattox	VA	51011	4.80
Arlington	VA	51013	4.60
Augusta	VA	51015	4.30
Bath	VA	51017	4.50
Bedford	VA	51019	4.80
Bland	VA	51021	4.80
Botetourt	VA	51023	4.80
Bristol City	VA	51520	5.20
Brunswick	VA	51025	5.20
Buchanan	VA	51027	4.80
Buckingham	VA	51029	4.80
Buena Vista City	VA	51530	4.50
Campbell	VA	51031	4.80
Caroline	VA	51033	4.80
Carroll	VA	51035	5.20
Charles City	VA	51036	5.20
Charlotte	VA	51037	4.80
Charlottesville	VA	51540	4.50
Chesapeake City	VA	51550	5.20
Chesterfield	VA	51041	4.80
Clarke	VA	51043	4.30
Colonial Heights	VA	51570	4.80
Covington	VA	51580	4.50
Craig	VA	51045	4.80
Culpeper	VA	51047	4.50
Cumberland	VA	51049	4.80
Danville City	VA	51590	5.20
Dickenson	VA	51051	4.80
Dinwiddie	VA	51053	5.20
Emporia	VA	51595	5.20
Essex	VA	51057	4.80
Fairfax	VA	51059	4.60
Fairfax City	VA	51600	4.50
Falls Church City	VA	51610	4.50

County/parish/city	State	FIPS code	Class I differential adjusted for location
Fauquier	VA	51061	4.50
Floyd	VA	51063	5.20
Fluvanna	VA	51065	4.50
Franklin City	VA	51620	5.20
Franklin County	VA	51067	4.80
Frederick	VA	51069	4.30
Fredericksburg City	VA	51630	4.50
Galax City	VA	51640	5.20
Giles	VA	51071	4.80
Gloucester	VA	51073	5.20
Goochland	VA	51075	4.80
Grayson	VA	51077	5.20
Greene	VA	51079	4.50
Greensville	VA	51081	5.20
Halifax	VA	51083	5.20
Hampton City	VA	51650	5.20
Hanover	VA	51085	4.80
Harrisonburg	VA	51660	4.30
Henrico	VA	51087	4.80
Henry	VA	51089	5.20
Highland	VA	51091	4.30
Hopewell	VA	51670	5.20
Isle of Wight	VA	51093	5.20
James City	VA	51095	5.20
King and Queen	VA	51097	4.80
King George	VA	51099	4.80
King William	VA	51101	4.80
Lancaster	VA	51103	5.20
Lee	VA	51105	4.80
Lexington	VA	51678	4.50
Loudoun	VA	51107	4.40
Louisa	VA	51109	4.50
Lunenburg	VA	51111	5.20
Lynchburg City	VA	51680	4.80
Madison	VA	51113	4.50
Manassas	VA	51683	4.50
Manassas Park	VA	51685	4.50
Martinsville City	VA	51690	5.20
Mathews	VA	51115	5.20
Mecklenburg	VA	51117	5.20
Middlesex	VA	51119	5.20
Montgomery	VA	51121	4.80
Nelson	VA	51125	4.50
New Kent	VA	51127	5.20
Newport News City	VA	51700	5.20
Norfolk City	VA	51710	5.20
Northampton	VA	51131	4.80
Northumberland	VA	51133	4.80
Norton City	VA	51720	4.80
Nottoway	VA	51135	4.80
Orange	VA	51137	4.50
Page	VA	51139	4.30
Patrick	VA	51141	5.20
Petersburg City	VA	51730	5.20
Pittsylvania	VA	51143	5.20
Poquoson City	VA	51735	5.20
Portsmouth City	VA	51740	5.20
Powhatan	VA	51145	4.80
Prince Edward	VA	51147	4.80
Prince George	VA	51149	5.20
Prince William	VA	51153	4.50
Pulaski	VA	51155	4.80
Radford City	VA	51750	4.80
Rappahannock	VA	51157	4.50
Richmond City	VA	51760	4.80
Richmond County	VA	51159	4.80
Roanoke	VA	51161	4.80
Roanoke City	VA	51770	4.80
Rockbridge	VA	51163	4.50
Rockingham	VA	51165	4.30
Russell	VA	51167	4.80

County/parish/city	State	FIPS code	Class I differential adjusted for location
Salem City	VA	51775	4.80
Scott	VA	51169	4.80
Shenandoah	VA	51171	4.30
Smyth	VA	51173	5.20
Southampton	VA	51175	5.20
Spotsylvania	VA	51177	4.50
Stafford	VA	51179	4.50
Staunton	VA	51790	4.30
Suffolk City	VA	51800	5.20
Surry	VA	51181	5.20
Sussex	VA	51183	5.20
Tazewell	VA	51185	4.80
Virginia Beach City	VA	51810	5.20
Warren	VA	51187	4.30
Washington	VA	51191	5.20
Waynesboro	VA	51820	4.30
Westmoreland	VA	51193	4.80
Williamsburg	VA	51830	5.20
Winchester City	VA	51840	4.30
Wise	VA	51195	4.80
Wythe	VA	51197	5.20
York	VA	51199	5.20
Addison	VT	50001	4.30
Bennington	VT	50003	4.50
Caledonia	VT	50005	4.30
Chittenden	VT	50007	4.30
Essex	VT	50009	4.20
Franklin	VT	50011	4.20
Grand Isle	VT	50013	4.20
Lamoille	VT	50015	4.30
Orange	VT	50017	4.30
Orleans	VT	50019	4.20
Rutland	VT	50021	4.30
Washington	VT	50023	4.30
Windham	VT	50025	4.50
Windsor	VT	50027	4.50
Adams	WA	53001	2.20
Asotin	WA	53003	2.20
Benton	WA	53005	2.20
Chelan	WA	53007	2.40
Clallam	WA	53009	2.40
Clark	WA	53011	2.70
Columbia	WA	53013	2.20
Cowlitz	WA	53015	2.40
Douglas	WA	53017	2.40
Ferry	WA	53019	2.40
Franklin	WA	53021	2.20
Garfield	WA	53023	2.20
Grant	WA	53025	2.20
Grays Harbor	WA	53027	2.40
Island	WA	53029	2.40
Jefferson	WA	53031	2.40
King	WA	53033	2.70
Kitsap	WA	53035	2.40
Kittitas	WA	53037	2.40
Klickitat	WA	53039	2.20
Lewis	WA	53041	2.40
Lincoln	WA	53043	2.40
Mason	WA	53045	2.40
Okanogan	WA	53047	2.40
Pacific	WA	53049	2.40
Pend Oreille	WA	53051	2.40
Pierce	WA	53053	2.40
San Juan	WA	53055	2.40
Skagit	WA	53057	2.40
Skamania	WA	53059	2.40
Snohomish	WA	53061	2.40
Spokane	WA	53063	2.40
Stevens	WA	53065	2.40
Thurston	WA	53067	2.40
Wahkiakum	WA	53069	2.40

County/parish/city	State	FIPS code	Class I differential adjusted for location
Walla Walla	WA	53071	2.20
Whatcom	WA	53073	2.40
Whitman	WA	53075	2.20
Yakima	WA	53077	2.20
Adams	WI	55001	2.90
Ashland	WI	55003	2.80
Barron	WI	55005	2.80
Bayfield	WI	55007	2.80
Brown	WI	55009	2.90
Buffalo	WI	55011	2.80
Burnett	WI	55013	2.80
Calumet	WI	55015	2.90
Chippewa	WI	55017	2.80
Clark	WI	55019	2.80
Columbia	WI	55021	2.90
Crawford	WI	55023	2.90
Dane	WI	55025	2.90
Dodge	WI	55027	2.90
Door	WI	55029	2.90
Douglas	WI	55031	2.80
Dunn	WI	55033	2.80
Eau Claire	WI	55035	2.80
Florence	WI	55037	2.80
Fond du Lac	WI	55039	2.90
Forest	WI	55041	2.80
Grant	WI	55043	2.90
Green	WI	55045	2.90
Green Lake	WI	55047	2.90
Iowa	WI	55049	2.90
Iron	WI	55051	2.80
Jackson	WI	55053	2.80
Jefferson	WI	55055	2.90
Juneau	WI	55057	2.90
Kenosha	WI	55059	3.10
Kewaunee	WI	55061	2.90
La Crosse	WI	55063	2.90
Lafayette	WI	55065	2.90
Langlade	WI	55067	2.90
Lincoln	WI	55069	2.80
Manitowoc	WI	55071	2.90
Marathon	WI	55073	2.90
Marinette	WI	55075	2.90
Marquette	WI	55077	2.90
Menominee	WI	55078	2.90
Milwaukee	WI	55079	3.10
Monroe	WI	55081	2.90
Oconto	WI	55083	2.90
Oneida	WI	55085	2.80
Outagamie	WI	55087	2.90
Ozaukee	WI	55089	3.10
Pepin	WI	55091	2.80
Pierce	WI	55093	2.80
Polk	WI	55095	2.80
Portage	WI	55097	2.90
Price	WI	55099	2.80
Racine	WI	55101	3.10
Richland	WI	55103	2.90
Rock	WI	55105	2.90
Rusk	WI	55107	2.80
Sauk	WI	55111	2.90
Sawyer	WI	55113	2.80
Shawano	WI	55115	2.90
Sheboygan	WI	55117	2.90
St. Croix	WI	55109	2.80
Taylor	WI	55119	2.80
Trempealeau	WI	55121	2.80
Vernon	WI	55123	2.90
Vilas	WI	55125	2.80
Walworth	WI	55127	3.10
Washburn	WI	55129	2.80
Washington	WI	55131	2.90

County/parish/city	State	FIPS code	Class I differential adjusted for location
Waukesha	WI	55133	2.90
Waupaca	WI	55135	2.90
Waushara	WI	55137	2.90
Winnebago	WI	55139	2.90
Wood	WI	55141	2.90
Barbour	WV	54001	4.30
Berkeley	WV	54003	4.30
Boone	WV	54005	4.50
Braxton	WV	54007	4.30
Brooke	WV	54009	4.00
Cabell	WV	54011	4.50
Calhoun	WV	54013	4.30
Clay	WV	54015	4.50
Doddridge	WV	54017	4.30
Fayette	WV	54019	4.50
Gilmer	WV	54021	4.30
Grant	WV	54023	4.30
Greenbrier	WV	54025	4.50
Hampshire	WV	54027	4.30
Hancock	WV	54029	4.00
Hardy	WV	54031	4.30
Harrison	WV	54033	4.30
Jackson	WV	54035	4.30
Jefferson	WV	54037	4.30
Kanawha	WV	54039	4.50
Lewis	WV	54041	4.30
Lincoln	WV	54043	4.50
Logan	WV	54045	4.50
Marion	WV	54049	4.00
Marshall	WV	54051	4.00
Mason	WV	54053	4.30
McDowell	WV	54047	4.80
Mercer	WV	54055	4.80
Mineral	WV	54057	4.10
Mingo	WV	54059	4.50
Monongalia	WV	54061	4.10
Monroe	WV	54063	4.80
Morgan	WV	54065	4.30
Nicholas	WV	54067	4.50
Ohio	WV	54069	4.00
Pendleton	WV	54071	4.30
Pleasants	WV	54073	4.00
Pocahontas	WV	54075	4.50
Preston	WV	54077	4.10
Putnam	WV	54079	4.50
Raleigh	WV	54081	4.50
Randolph	WV	54083	4.30
Ritchie	WV	54085	4.30
Roane	WV	54087	4.30
Summers	WV	54089	4.80
Taylor	WV	54091	4.30
Tucker	WV	54093	4.30
Tyler	WV	54095	4.00
Upshur	WV	54097	4.30
Wayne	WV	54099	4.50
Webster	WV	54101	4.50
Wetzel	WV	54103	4.00
Wirt	WV	54105	4.30
Wood	WV	54107	4.00
Wyoming	WV	54109	4.80
Albany	WY	56001	2.40
Big Horn	WY	56003	2.40
Campbell	WY	56005	2.40
Carbon	WY	56007	2.40
Converse	WY	56009	2.40
Crook	WY	56011	2.40
Fremont	WY	56013	2.40
Goshen	WY	56015	2.40
Hot Springs	WY	56017	2.40
Johnson	WY	56019	2.40
Laramie	WY	56021	2.50

County/parish/city	State	FIPS code	Class I differential adjusted for location
Lincoln	WY	56023	2.20
Natrona	WY	56025	2.40
Niobrara	WY	56027	2.40
Park	WY	56029	2.20
Platte	WY	56031	2.40
Sheridan	WY	56033	2.40
Sublette	WY	56035	2.20
Sweetwater	WY	56037	2.40
Teton	WY	56039	2.20
Uinta	WY	56041	2.20
Washakie	WY	56043	2.40
Weston	WY	56045	2.40

■ 5. Amend § 1000.76 by removing the words ''and § 1135.11 of this chapter'' wherever they appear and by revising and republishing paragraphs (a)(2) through (4) and paragraph (c) to read as follows:

§ 1000.76 Payments by a handler operating a partially regulated distributing plant.

* * * * *

(a) * * *

(2) For orders with multiple component pricing, compute a Class I differential price by subtracting Class III price from the current month's applicable Class I price. Multiply the pounds remaining after the computation in paragraph (a)(1)(iii) of this section by the amount by which the Class I differential price exceeds the producer price differential, both prices to be applicable at the location of the partially regulated distributing plant except that neither the adjusted Class I differential price nor the adjusted producer price differential shall be less than zero;

(3) For orders with skim milk and butterfat pricing, multiply the remaining pounds by the amount by which the applicable Class I price exceeds the uniform price, both prices to be applicable at the location of the partially regulated distributing plant except that neither the adjusted Class I price nor the adjusted uniform price differential shall be less than the lowest announced class price; and

(4) Unless the payment option described in paragraph (d) of this section is selected, add the amount obtained from multiplying the pounds of labeled reconstituted milk included in paragraph (a)(1)(iii) of this section by any positive difference between the applicable Class I price at the location of the partially regulated distributing plant (less $1.00 if the reconstituted milk is labeled as such) and the Class IV price.

* * * * *

(c) The operator of a partially regulated distributing plant that is subject to marketwide pooling of returns under a milk classification and pricing program that is imposed under the authority of a State government shall pay on or before the 25th day after the end of the month (except as provided in § 1000.90) to the market administrator for the producer-settlement fund an amount computed as follows: after completing the computations described in paragraphs (a)(1)(i) and (ii) of this section, determine the value of the remaining pounds of fluid milk products disposed of as route disposition in the marketing area by multiplying the hundredweight of such pounds by the amount, if greater than zero, that remains after subtracting the State program's class prices applicable to such products at the plant's location from the applicable Federal order Class I price at the location of the plant.

* * * * *

PART 1001—MILK IN THE NORTHEAST MARKETING AREA

■ 6. The authority citation for part 1001 continues to read as follows:

Authority: 7 U.S.C. 601–674, and 7253.

■ 7. Amend § 1001.60 by:
■ a. Revising the introductory paragraph;
■ b. Redesignating paragraph (i) as paragraph (j); and
■ c. Adding new paragraph (i).
The revision and addition read as follows:

§ 1001.60 Handler's value of milk.

For the purpose of computing a handler's obligation for producer milk, the market administrator shall determine for each month the value of milk of each handler with respect to each of the handler's pool plants and of each handler described in § 1000.9(c) of this chapter with respect to milk that was not received at a pool plant by

adding the amounts computed in paragraphs (a) through (i) of this section and subtracting from that total amount the value computed in paragraph (j) of this section. Unless otherwise specified, the skim milk, butterfat, and the combined pounds of skim milk and butterfat referred to in this section shall result from the steps set forth in § 1000.44(a), (b), and (c) of this chapter, respectively, and the nonfat components of producer milk in each class shall be based upon the proportion of such components in producer skim milk. Receipts of nonfluid milk products that are distributed as labeled reconstituted milk for which payments are made to the producer-settlement fund of another Federal order under § 1000.76(a)(4) or (d) of this chapter shall be excluded from pricing under this section.

* * * * *

(i) Compute an adjustment for eligible Class I producer milk pursuant to § 1000.43(e) of this chapter by multiplying the Class I skim milk price adjuster computed in § 1000.50(r) of this chapter by the pounds of skim milk eligible in Class I.

* * * * *

PART 1005—MILK IN THE APPLACHIAN MARKETING AREA

■ 8. The authority citation for part 1005 continues to read as follows:

Authority: 7 U.S.C. 601–674, and 7253.

■ 9. Amend § 1005.51 by revising paragraph (a) and removing and reserving paragraph (b) to read as follows:

§ 1005.51 Class I differential, adjustments to Class I prices, and Class I price.

(a) The Class I differential shall be the differential established for Mecklenburg County, North Carolina, which is reported in § 1000.52 of this chapter. The Class I price shall be the price computed pursuant to § 1000.50(a) of

this chapter for Mecklenburg County, North Carolina.

(b) [Reserved]

■ 10. Amend § 1005.60 by:

■ a. Revising the introductory paragraph and paragraph (a);

■ b. Removing paragraph (g);

■ c. Redesignating paragraph (f) as paragraph (g); and

■ d. Adding new paragraph (f).

The revisions and addition read as follows:

§ 1005.60 Handler's value of milk.

For the purpose of computing a handler's obligation for producer milk, the market administrator shall determine for each month the value of milk of each handler with respect to each of the handler's pool plants and of each handler described in § 1000.9(c) of this chapter with respect to milk that was not received at a pool plant by adding the amounts computed in paragraphs (a) through (f) of this section and subtracting from that total amount the value computed in paragraph (g) of this section. Receipts of nonfluid milk products that are distributed as labeled reconstituted milk for which payments are made to the producer-settlement fund of another Federal order under § 1000.76(a)(4) or (d) of this chapter shall be excluded from pricing under this section.

(a) Multiply the pounds of skim milk and butterfat in producer milk that were classified in each class pursuant to § 1000.44(c) of this chapter by the applicable skim milk and butterfat prices, and add the resulting amounts;

*   *   *   *   *

(f) Compute an adjustment for eligible Class I producer milk pursuant to § 1000.43(e) of this chapter by multiplying the Class I skim milk price adjuster computed in § 1000.50(r) of this chapter by the pounds of skim milk eligible in Class I.

*   *   *   *   *

PART 1006—MILK IN THE FLORIDA MARKETING AREA

■ 11. The authority citation for part 1006 continues to read as follows:

Authority: 7 U.S.C. 601–674, and 7253.

■ 12. Amend § 1006.51 by revising paragraph (a), removing and reserving paragraph (b), and removing paragraph (c) to read as follows:

§ 1006.51 Class I differential, adjustments to Class I prices, and Class I price.

(a) The Class I differential shall be the differential established for Hillsborough County, Florida, which is reported in § 1000.52 of this chapter. The Class I price shall be the price computed

pursuant to § 1000.50(a) of this chapter for Hillsborough County, Florida.

(b) [Reserved]

■ 13. Amend § 1006.60 by:

■ a. Revising the introductory paragraph and paragraph (a);

■ b. Removing paragraphs (g) through (i);

■ c. Redesignating paragraph (f) as paragraph (g); and

■ d. Adding new paragraph (f).

The revisions and addition read as follows:

§ 1006.60 Handler's value of milk.

For the purpose of computing a handler's obligation for producer milk, the market administrator shall determine for each month the value of milk of each handler with respect to each of the handler's pool plants and of each handler described in § 1000.9(c) of this chapter with respect to milk that was not received at a pool plant by adding the amounts computed in paragraphs (a) through (f) of this section and subtracting from that total amount the value computed in paragraph (g) of this section. Receipts of nonfluid milk products that are distributed as labeled reconstituted milk for which payments are made to the producer-settlement fund of another Federal order under § 1000.76(a)(4) or (d) of this chapter shall be excluded from pricing under this section.

(a) Multiply the pounds of skim milk and butterfat in producer milk that were classified in each class pursuant to § 1000.44(c) of this chapter by the applicable skim milk and butterfat prices, and add the resulting amounts;

*   *   *   *   *

(f) Compute an adjustment for eligible Class I producer milk pursuant to § 1000.43(e) of this chapter by multiplying the Class I skim milk price adjuster computed in § 1000.50(r) of this chapter by the pounds of skim milk eligible in Class I.

*   *   *   *   *

PART 1007—MILK IN THE SOUTHEAST MARKETING AREA

■ 14. The authority citation for part 1007 continues to read as follows:

Authority: 7 U.S.C. 601–674, and 7253.

■ 15. Amend § 1007.51 by revising paragraph (a) and removing and reserving paragraph (b) to read as follows:

§ 1007.51 Class I differential, adjustments to Class I prices, and Class I price.

(a) The Class I differential shall be the differential established for Fulton County, Georgia, which is reported in § 1000.52 of this chapter. The Class I

price shall be the price computed pursuant to § 1000.50(a) of this chapter for Fulton County, Georgia.

(b) [Reserved]

■ 16. Amend § 1007.60 by:

■ a. Revising the introductory paragraph and paragraph (a);

■ b. Removing paragraph (g);

■ c. Redesignating paragraph (f) as paragraph (g); and

■ d. Adding new paragraph (f).

The revisions and addition read as follows:

§ 1007.60 Handler's value of milk.

For the purpose of computing a handler's obligation for producer milk, the market administrator shall determine for each month the value of milk of each handler with respect to each of the handler's pool plants and of each handler described in § 1000.9(c) of this chapter with respect to milk that was not received at a pool plant by adding the amounts computed in paragraphs (a) through (f) of this section and subtracting from that total amount the value computed in paragraph (g) of this section. Receipts of nonfluid milk products that are distributed as labeled reconstituted milk for which payments are made to the producer-settlement fund of another Federal order under § 1000.76(a)(4) or (d) of this chapter shall be excluded from pricing under this section.

(a) Multiply the pounds of skim milk and butterfat in producer milk that were classified in each class pursuant to § 1000.44(c) of this chapter by the applicable skim milk and butterfat prices, and add the resulting amounts;

*   *   *   *   *

(f) Compute an adjustment for eligible Class I producer milk pursuant to § 1000.43(e) of this chapter by multiplying the Class I skim milk price adjuster computed in § 1000.50(r) of this chapter by the pounds of skim milk eligible in Class I.

*   *   *   *   *

PART 1030—MILK IN THE UPPER MIDWEST MARKETING AREA

■ 17. The authority citation for part 1030 continues to read as follows:

Authority: 7 U.S.C. 601–674, and 7253.

■ 18. Amend § 1030.60 by:

■ a. Revising the introductory paragraph;

■ b. Redesignating paragraphs (j) and (k) as paragraphs (k) and (l); and

■ c. Adding new paragraph (j).

The revision and addition read as follows:

§ 1030.60 Handler's value of milk.

For the purpose of computing a handler's obligation for producer milk,

the market administrator shall determine for each month the value of milk of each handler with respect to each of the handler's pool plants and of each handler described in § 1000.9(c) of this chapter with respect to milk that was not received at a pool plant by adding the amounts computed in paragraphs (a) through (j) of this section and subtracting from that total amount the values computed in paragraphs (k) and (l) of this section. Unless otherwise specified, the skim milk, butterfat, and the combined pounds of skim milk and butterfat referred to in this section shall result from the steps set forth in § 1000.44(a), (b), and (c) of this chapter, respectively, and the nonfat components of producer milk in each class shall be based upon the proportion of such components in producer skim milk. Receipts of nonfluid milk products that are distributed as labeled reconstituted milk for which payments are made to the producer-settlement fund of another Federal order under § 1000.76(a)(4) or (d) of this chapter shall be excluded from pricing under this section.

*　*　*　*　*

(j) Compute an adjustment for eligible Class I producer milk pursuant to § 1000.43(e) of this chapter by multiplying the Class I skim milk price adjuster computed in § 1000.50(r) of this chapter by the pounds of skim milk eligible in Class I.

*　*　*　*　*

PART 1032—MILK IN THE CENTRAL MARKETING AREA

■ 19. The authority citation for part 1032 continues to read as follows:

Authority: 7 U.S.C. 601–674, and 7253.

■ 20. Amend § 1032.60 by:
■ a. Revising the introductory paragraph;
■ b. Redesignating paragraph (j) as paragraph (k); and
■ c. Adding new paragraph (j).
The revision and addition read as follows:

§ 1032.60 Handler's value of milk.

For the purpose of computing a handler's obligation for producer milk, the market administrator shall determine for each month the value of milk of each handler with respect to each of the handler's pool plants and of each handler described in § 1000.9(c) of this chapter with respect to milk that was not received at a pool plant by adding the amounts computed in paragraphs (a) through (j) of this section and subtracting from that total amount the value computed in paragraph (k) of this section. Unless otherwise specified,

the skim milk, butterfat, and the combined pounds of skim milk and butterfat referred to in this section shall result from the steps set forth in § 1000.44(a), (b), and (c) of this chapter, respectively, and the nonfat components of producer milk in each class shall be based upon the proportion of such components in producer skim milk. Receipts of nonfluid milk products that are distributed as labeled reconstituted milk for which payments are made to the producer-settlement fund of another Federal order under § 1000.76(a)(4) or (d) of this chapter shall be excluded from pricing under this section.

*　*　*　*　*

(j) Compute an adjustment for eligible Class I producer milk pursuant to § 1000.43(e) of this chapter by multiplying the Class I skim milk price adjuster computed in § 1000.50(r) of this chapter by the pounds of skim milk eligible in Class I.

*　*　*　*　*

PART 1033—MILK IN THE MIDEAST MARKETING AREA

■ 21. The authority citation for part 1033 continues to read as follows:

Authority: 7 U.S.C. 601–674, and 7253.

■ 22. Amend § 1033.60 by:
■ a. Revising the introductory paragraph;
■ b. Redesignating paragraph (j) as paragraph (k); and
■ c. Adding new paragraph (j).
The revision and addition read as follows:

§ 1033.60 Handler's value of milk.

For the purpose of computing a handler's obligation for producer milk, the market administrator shall determine for each month the value of milk of each handler with respect to each of the handler's pool plants and of each handler described in § 1000.9(c) of this chapter with respect to milk that was not received at a pool plant by adding the amounts computed in paragraphs (a) through (j) of this section and subtracting from that total amount the value computed in paragraph (k) of this section. Unless otherwise specified, the skim milk, butterfat, and the combined pounds of skim milk and butterfat referred to in this section shall result from the steps set forth in § 1000.44(a), (b), and (c) of this chapter, respectively, and the nonfat components of producer milk in each class shall be based upon the proportion of such components in producer skim milk. Receipts of nonfluid milk products that are distributed as labeled reconstituted milk for which payments are made to

the producer-settlement fund of another Federal order under § 1000.76(a)(4) or (d) of this chapter shall be excluded from pricing under this section.

*　*　*　*　*

(j) Compute an adjustment for eligible Class I producer milk pursuant to § 1000.43(e) of this chapter by multiplying the Class I skim milk price adjuster computed in § 1000.50(r) of this chapter by the pounds of skim milk eligible in Class I.

*　*　*　*　*

PART 1051—MILK IN THE CALIFORNIA MARKETING AREA

■ 23. The authority citation for part 1051 continues to read as follows:

Authority: 7 U.S.C. 601–674, and 7253.

■ 24. Amend § 1051.60 by:
■ a. Revising the introductory paragraph;
■ b. Redesignating paragraph (i) as paragraph (j); and
■ c. Adding new paragraph (i).
The revision and addition read as follows:

§ 1051.60 Handler's value of milk.

For the purpose of computing a handler's obligation for producer milk, the market administrator shall determine for each month the value of milk of each handler with respect to each of the handler's pool plants and of each handler described in § 1000.9(c) of this chapter with respect to milk that was not received at a pool plant by adding the amounts computed in paragraphs (a) through (i) of this section and subtracting from that total amount the value computed in paragraph (j) of this section. Unless otherwise specified, the skim milk, butterfat, and the combined pounds of skim milk and butterfat referred to in this section shall result from the steps set forth in § 1000.44(a), (b), and (c) of this chapter, respectively, and the nonfat components of producer milk in each class shall be based upon the proportion of such components in producer skim milk. Receipts of nonfluid milk products that are distributed as labeled reconstituted milk for which payments are made to the producer-settlement fund of another Federal order under § 1000.76(a)(4) or (d) of this chapter shall be excluded from pricing under this section.

*　*　*　*　*

(i) Compute an adjustment for eligible Class I producer milk pursuant to § 1000.43(e) of this chapter by multiplying the Class I skim milk price adjuster computed in § 1000.50(r) of this

chapter by the pounds of skim milk eligible in Class I.

* * * * *

PART 1124—MILK IN THE PACIFIC NORTHWEST MARKETING AREA

■ 25. The authority citation for part 1124 continues to read as follows:

Authority: 7 U.S.C. 601–674, and 7253.

■ 26. Amend § 1124.60 by:
■ a. Revising the introductory paragraph;
■ b. Redesignating paragraph (i) as paragraph (j); and
■ c. Adding new paragraph (i).
The revision and addition read as follows:

§ 1124.60 Handler's value of milk.

For the purpose of computing a handler's obligation for producer milk, the market administrator shall determine for each month the value of milk of each handler with respect to each of the handler's pool plants and of each handler described in § 1000.9(c) of this chapter with respect to milk that was not received at a pool plant by adding the amounts computed in paragraphs (a) through (i) of this section and subtracting from that total amount the value computed in paragraph (j) of this section. Unless otherwise specified, the skim milk, butterfat, and the combined pounds of skim milk and butterfat referred to in this section shall result from the steps set forth in § 1000.44(a), (b), and (c) of this chapter, respectively, and the nonfat components of producer milk in each class shall be based upon the proportion of such components in producer skim milk. Receipts of nonfluid milk products that are distributed as labeled reconstituted milk for which payments are made to the producer-settlement fund of another Federal order under § 1000.76(a)(4) or (d) of this chapter shall be excluded from pricing under this section.

* * * * *

(i) Compute an adjustment for eligible Class I producer milk pursuant to § 1000.43(e) of this chapter by multiplying the Class I skim milk price adjuster computed in § 1000.50(r) of this

chapter by the pounds of skim milk eligible in Class I.

* * * * *

PART 1126—MILK IN THE SOUTHWEST MARKETING AREA

■ 27. The authority citation for part 1126 continues to read as follows:

Authority: 7 U.S.C. 601–674, and 7253.

■ 28. Amend § 1126.60 by:
■ a. Revising the introductory paragraph;
■ b. Redesignating paragraph (j) as paragraph (k); and
■ c. Adding new paragraph (j).
The revision and addition read as follows:

§ 1126.60 Handler's value of milk.

For the purpose of computing a handler's obligation for producer milk, the market administrator shall determine for each month the value of milk of each handler with respect to each of the handler's pool plants and of each handler described in § 1000.9(c) of this chapter with respect to milk that was not received at a pool plant by adding the amounts computed in paragraphs (a) through (j) of this section and subtracting from that total amount the value computed in paragraph (k) of this section. Unless otherwise specified, the skim milk, butterfat, and the combined pounds of skim milk and butterfat referred to in this section shall result from the steps set forth in § 1000.44(a), (b), and (c) of this chapter, respectively, and the nonfat components of producer milk in each class shall be based upon the proportion of such components in producer skim milk. Receipts of nonfluid milk products that are distributed as labeled reconstituted milk for which payments are made to the producer-settlement fund of another Federal order under § 1000.76(a)(4) or (d) of this chapter shall be excluded from pricing under this section.

* * * * *

(j) Compute an adjustment for eligible Class I producer milk pursuant to § 1000.43(e) of this chapter by multiplying the Class I skim milk price adjuster computed in § 1000.50(r) of this

chapter by the pounds of skim milk eligible in Class I.

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PART 1131—MILK IN THE ARIZONA MARKETING AREA

■ 29. The authority citation for part 1131 continues to read as follows:

Authority: 7 U.S.C. 601–674, and 7253.

■ 30. Amend § 1131.60 by:
■ a. Revising the introductory paragraph;
■ b. Redesignating paragraph (f) as paragraph (g); and
■ c. Adding new paragraph (f).
The revision and addition read as follows:

§ 1131.60 Handler's value of milk.

For the purpose of computing a handler's obligation for producer milk, the market administrator shall determine for each month the value of milk of each handler with respect to each of the handler's pool plants and of each handler described in § 1000.9(c) of this chapter with respect to milk that was not received at a pool plant by adding the amounts computed in paragraphs (a) through (f) of this section and subtracting from that total amount the value computed in paragraph (g) of this section. Receipts of nonfluid milk products that are distributed as labeled reconstituted milk for which payments are made to the producer-settlement fund of another Federal order under § 1000.76(a)(4) or (d) of this chapter shall be excluded from pricing under this section.

* * * * *

(f) Compute an adjustment for eligible Class I producer milk pursuant to § 1000.43(e) of this chapter by multiplying the Class I skim milk price adjuster computed in § 1000.50(r) of this chapter by the pounds of skim milk eligible in Class I.

* * * * *

Erin Morris,

Associate Administrator, Agricultural Marketing Service.

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