## **DEPARTMENT OF AGRICULTURE**

## **Agricultural Marketing Service**

7 CFR Parts 1000, 1001, 1005, 1006, 1007, 1030, 1032, 1033, 1051, 1124, 1126, 1131, and 1170

[Doc. No. AMS-DA-23-0031]

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

**AGENCY:** Agricultural Marketing Service, USDA

**ACTION:** Proposed rule; final decision.

SUMMARY: This proposed rule is the Secretary's final decision in this proceeding and recommends amendments to the pricing provisions in the 11 Federal Milk Marketing Orders (FMMOs). AMS will determine if producers approve of the proposed amended orders, as required by regulation.

**DATES:** The representative period for ascertaining producer approval is January 2024.

ADDRESSES: To review the hearing record, please see https://www.ams.usda.gov/rules-regulations/moa/dairy/hearings/national-fmmo-pricing-hearing. Webinars with information on the proposed amendments and the referendum process are also available on the hearing website.

FOR FURTHER INFORMATION CONTACT: Erin Taylor, USDA/AMS/Dairy Program, Order Formulation and Enforcement Branch, STOP 0231–Room 2530, 1400 Independence Avenue SW, Washington, DC 20250–0231; telephone: (202) 720–4392; email address: Erin.Taylor@usda.gov.

SUPPLEMENTARY INFORMATION: This proposed rule, in accordance with 7 CFR 900.13a, is the Secretary's final decision in this proceeding and proposes the issuance of marketing orders as defined in 7 CFR 900.2(j). AMS continues to find that amendments to five milk pricing categories would provide more orderly marketing in the 11 FMMOs. The final decision reflects changes to the make allowances and, to a very limited extent, the Class I differentials included in the recommended decision. This final decision recommends amendments to:

- 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: \$0.2519; Butter: \$0.2272; Nonfat Dry Milk (NFDM): \$0.2393; and Dry Whey: \$0.2668. 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.

The Agricultural Marketing Service (AMS) will determine if producers approve of each proposed amended order, as required by regulation. If at least two-thirds of the producers or two-thirds of the milk represented in the vote approve of an amended order, AMS will issue a final rule implementing the changes. If an order is not approved as amended, AMS will initiate steps to terminate the order.

In conjunction with this final decision, the 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 final 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-fmmopricing-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).

Recommended Decision: Published July 15, 2024 (89 FR 57580).

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 regulations 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 (AMAA), as amended (7 U.S.C. 601-674), 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) (NAICS Code 112120) 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
311512 311513	Fluid Milk Manufacturing	1,250

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 a 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 proposed amendments 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: \$0.2519 for cheese; \$0.2272 for butter; \$0.2393 for NFDM; and \$0.2668 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. 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 continues to find 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 proposed 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 agreements and 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.

À witness from ŇMPF, a trade association representing dairy farmerowned 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 average protein, other solids, and nonfat solids (NFS) in milk pooled on FMMOs in 2022 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 FMMOs 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 2022based 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. The witness opined that financially sustainable margins are necessary to avoid further consolidation in the industry.

An NMPF ďairy 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 riskmanagement 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 posthearing 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 genderselected 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 supported 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

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 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 hightemperature, 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 12month 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

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, claiming 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 byproduct.

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 that 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 500pound 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 supplydemand 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 capturing the supply and demand balance. They opined that removing 500-pound barrels would both shrink the survey volume and likely result in greater cheddar block production 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 less attractive to 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 formula would force barrels to be priced off blocks, adding dysfunction to the barrel market. The witnesses argued barrels are the market-clearing cheese, and instead 40pound 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, reducing revenue for dairy farmers as the barrel price is a disproportionately large share of the cheese price compared to its volume sold. NMPF estimated 90 percent of the natural cheese produced in the U.S. is priced using the CME 40pound block price, while the remaining is priced off the CME barrel cheese price. As a result, NMPF wrote, the Class III milk price has been undervalued and lowered producer

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 500pound 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 overweight the barrel price relative to the market's actual barrel use.

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 are used to set prices for only 10 percent of U.S. cheese. 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.

In their post-hearing brief, IDFA opposed Proposal 3, arguing its adoption would make 500-pound barrel production uneconomical. This, they explained, would result in barrelmakers 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 40pound 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 40pound 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 640pound blocks typically trade off the 40pound block price, its addition would provide little additional price discovery information. The witness opined that only a small percentage of the 640pound 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 data set 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 640pound 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 640pound 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

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

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.

ĬDFA'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 that 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 marketclearing 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 40pound 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 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 500pound 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 posthearing brief, as an alternative to eliminating barrel cheese or adding 640pound 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 following 3 years.

## IDFA/WCMA PROPOSED MAKE ALLOWANCES

Product	Year 1	Year 2	Year 3	Year 4
Cheese Dry Whey NFDM Butter	\$0.2422	\$0.2561	\$0.2701	\$0.2840
	0.2582	0.2778	0.2976	0.3172
	0.2198	0.2370	0.2544	0.2716
	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 dairybased 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. According to the witness, costs, such as labor and utility, through the productpackaging 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 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 plants compared to 10 in the 2021 survey. Further, 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 opined 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. According to the CDI witness, 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.

A witness from Agri-Mark, a dairy farmer-owned cooperative with over 550 members, 3 cheese manufacturing plants and 1 butter-powder plant in the Northeast, 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 to recoup manufacturing costs, resulting in producer pay prices often less than FMMO blend prices.

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

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. According to the witness, 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, 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 increasing production costs, leading to near negative operating incomes. While make allowance increases would hasten this trend, the witnesses said, 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 farmermembers 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 from 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 indicate 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, emphasizing 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 argued the competitive advantage gained by manufacturing plants not regulated by an FMMO leads to more investments into operations unaffiliated with the FMMO system. Only make allowance increases that reasonably cover 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. In its post-hearing brief, AMPI reiterated 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 Californiaspecific 2017-2022 manufacturing costs, according to the witness. According to the witness, 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, 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. While end-product-prices change monthly to reflect the current market, the witness said, 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

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. According to both IDFA and WCMA witnesses, 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; further, 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. According to the witness, 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. According to these witnesses, 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 Saputo witness, its 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 highercost 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. According to a dairy farmer witness representing Edge, 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 USDAadministered 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, \$0.2260; 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.

In its post-hearing brief, the AFBF wrote in support of 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. According to the witness, whey cream is discounted 20 percent or more compared to fresh cream. In addition, the witness claimed, 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. While large modern plants are installing newer, more efficient vats, the witness claimed, 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. According to the witness, 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 opined that 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, threequarters 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-otherday pickup schedules. Consequently, the witness said, the occurrence of shrinkage is decreasing. As an example, the witness explained, 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-toplant 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

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 that 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 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 farmto-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 farmto-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 vield 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 that 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 they said 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 for 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. Further, according to the witness, 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 vield 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 posthearing 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 24month 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), an 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 averageof 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 higherof 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 higherof mover calculation would have been.

The NMPF witness said the averageof 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 longterm 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 higherof 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 allmilk 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 averageof 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' riskmanagement 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 posthearing 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 12month 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 Nestle USA (Nestlé) testified in support of Proposal 14. Nestlé is a fluid milk processor operating one plant regulated by the FMMO system. The witness testified that Nestlé procures milk from cooperatives using contract agreements 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 18month 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 averageof 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 valueadded 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

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 riskmanagement 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 12month lag. The witness claimed the movers contained in Proposals 14 and 15 provide similar base Člass 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 riskmanagement 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 endproduct 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 24month 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 12month 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 posthearing 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 averageof 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 plantbased 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 posthearing 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 lowerpriced 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 overorder 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 on January 1, 2000.

The USDSS model owners testified on the 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 model 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 model 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 model results to arrive at the proposed differentials, NMPF witnesses stated they followed the same iterative process applied during Order Reform, starting with the model results and adjusting for milk movements, plant locations and historic price relationships.

One witness explained that 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

One NMPF witness testified regarding the cost to dairy farmers to maintain 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 model's 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 model's averages, and designed a Class I differential structure that accounted for factors NMPF members thought were not adequately addressed in the model's 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 model's averages were adopted for Maine, it would incentivize producers in Maine to supply Massachusetts, instead of remaining available to meet local demand. Therefore, the witness said NMPF proposed to flatten the differentials in Maine to maintain current competitive relationships. NMPF also proposed lower differentials in northern Vermont and New York in order to incentivize milk movements south and east. The witness said these changes from the USDSS model's 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 costs 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 model 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 model's 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 model's average values 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's 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 from Georgia, for example. 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 influxes 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 model 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 model's 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 model 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 recommended 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 contained higher proposed differentials than the USDSS model average, with greater increases moving northwest to southeast to incentivize milk to move where needed. The witness added there is a single differential level proposed for New Mexico, reflecting what the witness described as 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 select 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 overorder 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

# Upper Midwest

A Prairie Farms witness representing NMPF discussed the proposed Minnesota and Wisconsin differentials. The witness said the USDSS model 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 FMMO 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 supply 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 was 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 and explained that 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 150mile 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 accounted for 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 FMMO 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 offmodel 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 urban areas.

A DFA witness also testified on the proposed Class I differentials for California and northern Nevada. 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 \$0.10 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 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 supply Class I markets, and geographic and population-influenced cost factors were the primary reasons the proposed differentials deviate from the USDSS model's averages. The witness was of the opinion proposed differentials in the Pacific Northwest 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 recommended 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 Pacific Northwest Class I plants has increased \$1.10 per cwt in the last 15 years.

Regarding 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 were 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 that costs have increased since it was first adopted in 2000. NMPF reviewed its own testimony at the

hearing on what it believed were the appropriate regional considerations used to propose deviations from the USDSS model 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 model's October 2021 results, rather than the average of May and October. 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 were not relevant and/or were 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, proposed at \$1.60 in some areas and \$2.20 in other areas, because they

opined, there was 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 are 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 model's 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 model's May 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 model 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 were 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 supplying 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 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 processor levels). They were of the opinion Proposal 19 failed 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 described 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 grassfed 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 believed 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 believed was the lack of uniformity used by NMPF in developing differentials that deviated from USDSS model results. The witness said there were 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 had 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 created

competitive disadvantages for their plants relative to nearby cooperative plants and would 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 were 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 was 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 Virgina, Ohio, and Pennsylvania, which are primarily supplied by independent dairy farms. The witness testified their plants received 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 contained no evidence of Class I demand not being fulfilled, thus, any increase in Class I prices was 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 believed were 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 lactosefree 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 were 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 model 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 appropriate.

A post-hearing brief submitted on behalf of MIG opposed adoption of Proposal 19, arguing hearing evidence supported 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 was 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 challenging 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 were directly paying for their individual milk balancing needs. The witnesses all opined that through the base differential they were 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 argued 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 overorder 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 that 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 face a market power imbalance when negotiating prices above FMMO minimums, reiterating previous testimony on the difficulty cooperatives 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 overorder 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 resulted 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 were 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 produced 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 in 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 posthearing brief, NMPF added that adoption of Proposal 21 may incentivize 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 proposed changes, which are discussed in detail below, include:

- 1. Milk Composition Factors: Update the factors to 3.3 percent true protein, 6.0 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: \$0.2519;
  - ii. Butter: \$0.2272;
  - iii. NFDM: \$0.2393; and
  - iv. Dry Whey: \$0.2668.
- 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

<sup>&</sup>lt;sup>1</sup> Official Notice is taken of the Notice of Equivalent Price Series: 77 FR 22282 (April 18, 2012). The National Dairy Product Sales Report was deemed as equivalent to the price series previously released by the National Agricultural Statistics Sorvice.

higher-of and the average-of, for 24 months, with a 12-month lag.

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 they receive (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, where the butterfat payment is calculated according to actual pounds of butterfat received but the skim milk is specified at a standardized composition. 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 on skim/ fat basis as described above. Because of these pricing differences, 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 skim/fat basis whose formulas contain component levels that are fixed and do not change either over time or across producer milk receipts. 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, thereby creating marketing challenges, one of which is a preference of suppliers to sell higher component milk to manufacturing handlers. They argue this is especially problematic in the milk deficit skim/fat markets in the southeastern region that must compete with manufacturing milk demands in multiple component orders to procure a supplemental Class I milk supply. Proponents also alleged 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. National FMMO average component data before 2000 is not part of this hearing record. The Order Reform decision did not address specifically why the current assumptions were adopted, other than stating they were based on prevailing protein tests as reported by AMS/USDA, as correctly cited by NAJ in its brief and public comment. While a preliminary Basic Formula Price report does purport to provide average protein levels, none of the Reform related reports in evidence

in this proceeding provide an adequate level of detail as to what exactly the data used represented. However, given the data in evidence in this rulemaking shows 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 from this proceeding reveals that from 2000, component levels were relatively flat with only a slight increase through the mid-2010s. Beginning in 2016, observed data shows a marked increase in component levels. The data also clearly shows 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 customers purchase on a volume basis (e.g., gallons) not on the skim component levels in their fluid milk products. Therefore, they argued, they could not recover an increased cost for their raw material from a higher finished product price. 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. They argued 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

First, regarding the composition of producer milk received by Class I handlers, testimony from fluid milk handlers during the hearing was incomplete and mixed. Some fluid milk handlers would not reveal component levels for the Department to consider, citing confidentiality concerns. Other

fluid handlers offered data that showed a range of average component levels in skim milk received: true protein ranged from 3.09 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 contend a general increase in their component levels. The testimony supported an increase in skim milk component levels since 2000, but precise increases that apply to all milk or all Class I milk was not presented.

Second, regarding market compensation for higher skim components in finished Class I products, the record clearly shows fluid milk handlers sell fluid milk products based on volume. Proponents of changing the composition levels provided anecdotal evidence, such as marketing claims and product description, to assert that some fluid milk products can garner additional market revenue for higher component levels. However, no data was provided to prove there is a general industryaccepted norm or practice that allows handlers to recover a value for nonfat milk solids in excess of the nutrition label claim.

Finally, concerning the claim that the level of components assigned to skim milk can create disorder in the procurement of milk for manufacturing versus Class I uses, the record contains actual component tests of producer milk in the multiple component pricing orders. 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 skim/fat 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 (DHIA) component data was offered at the hearing. This data is from farms who elected to use DHIA services and are

neither a proper statistical sampling of the US nor a census of the US; however, it is a large data set that covers many farms of different sizes and locations. The DHIA data 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 is considering how the price formulas should be updated to reflect current market conditions. Milk composition levels are 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, just as it has not been assumed that each plant has the same cost of manufacturing or yields. Because FMMOs utilize a national pricing system, price formulas have always relied on benchmarks to set levels representative of market conditions. The nature of any representative number is that 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 used in the formulas such as make allowances, survey commodity prices, and butterfat recovery percentages.

While the record does not contain a comprehensive data set of milk component levels received at all fluid milk plants, it does contain data on milk component levels of all milk pooled on the FMMOs, as well as evidence submitted by some producers on the component levels in their milk, and information from some fluid milk handlers on the component levels they receive. Importantly, fluid plant operators testified the milk components received at their respective plants are higher than currently assumed in the formulas, but less than what was proposed by NMPF and NAJ.

The record clearly supports that producer milk now contains higher levels of skim milk components compared to when the current composition factors were established in 2000. As FMMO provisions should reflect current market conditions to ensure orderly marketing, the question becomes what specific composition standards best reflect the current market and are consistent with the practice of specifying levels that ensure minimum prices are most consistent with supply and demand conditions. The review of record evidence described earlier reveals many factors should be considered: the 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, milk composition benchmarks are relevant for consideration in this proceeding.

The record indicates milk composition levels should be increased, but the levels in Proposal 1 are not justified. Given the variability and seasonality of component level information contained in the record. this decision continues to find the average component levels in the FMMOs from 2016–2022 to be the most appropriate benchmark to represent producer skim milk components, and result in a valuation of skim milk reflecting current market conditions. Accordingly, this decision continues to recommend 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 shows 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.

In its comment on the recommended decision, NMPF suggested the 2018-2022 time period would be more appropriate. However, this decision continues to find the 2016–2022 time period the most appropriate as it maintains a proper balance between sellers' and buyers' concerns expressed in this rulemaking and would provide for more orderly marketing.

In public comments submitted on the recommended decision, IDFA and MIG reiterated previous arguments offered that fluid milk handlers do not receive milk with higher nonfat solids levels and, even if they did, cannot recover a higher value for them in traditional fluid milk products (e.g., gallons and half gallons) which encompass a vast majority of Class I sales. They presented a number of arguments: (1) the Department failed to justify a policy

change as it had previously stated Class I prices should not be priced on components because there is no additional value in Class I products; (2) the Department failed to address why updated milk composition levels support orderly marketing and therefore meet the objective of the AMAA; and (3) the Department ignored fluid milk handler testimony regarding the components levels they receive.

On the other hand, NAJ's public comment argued that by not increasing composition standards to the levels proposed by NMPF and NAJ, the Department is artificially constraining the manufacturing and Class I milk price relationship and failing to address the resulting instances of disorderly price inversions and depooling.

This final decision is not recommending a Class I policy change, as some commenters suggest. This decision continues the Class I pricing policy adopted as part of Order Reform. Prior to Order Reform, FMMO prices were based on prices determined by the competition for Grade B milk supplies updated by a product price formula (referred to as the Basic Formula Price (BFP)). During Order Reform, the Department sought to find a replacement that would: (1) meet the supply and demand criteria set forth in the AMAA; (2) not deviate greatly from the general level of the current BFP; and (3) demonstrate the ability to change in response to changes in supply and demand. 64 FR 16026, 16091 (Apr. 2, 1999).

The BFP, and its predecessor Minnesota-Wisconsin price (M–W price), represented a competitive cost of Grade B milk in the Minnesota and Wisconsin area as it was the value for milk at the farm sold into manufacturing uses in those areas. A butterfat differential, reflecting the value of milkfat, was subtracted to determine the value of milk having no fat—i.e., skim milk. Class I skim prices at the time were determined by adding a location differential to the BFP skim price. As it was a survey of prices paid for raw milk in manufacturing, updated by the value of commodity products, the BFP met the objective of the AMAA to reflect market supply and demand conditions. The BFP had the ability to change in response to changes in milk component levels and their value to the manufacturer. By the same token, changes in a manufacturer's costs of manufacturing or yields could also be demand factors that could move the BFP. A change in the BFP due to any of these underlying factors, including milk composition, could be passed through to the Class I price which was based off the BFP

With the adoption of product price formulas to replace the BFP in 2000, Class prices became determined, in part, from the value of commodity dairy products in wholesale markets whose values were translated to an implied value for farm milk used in each Class. The Class I skim price became determined through the higher of the Class III or Class IV skim price. The new pricing system also required a new method for determining these Class III and Class IV skim milk values. Under the new system, a value of skim milk had to be built up from its underlying milk components as there was no farm milk price to start with, only product prices. Hence, specifying underlying composition levels of skim milk based on either a skim solids standard or protein plus other solids standards was necessary. At the time of the transition from BFP to product price formulas, the Class I price reflected the supply and demand conditions for all milk products, as the BFP replacement was designed to not deviate greatly from the BFP price levels at the time of Reform. As highlighted in the decision, "The supply and demand for Grade A milk is not limited to one category of products. The same milk may be used for fluid or soft manufactured products as well as the Class III and Class IV products used to determine the BFP. As a result, the minimum prices established for Class III and Class IV reflect supply and demand for the milk used in all products" (64 FR 16026, 16095).

The record of this current proceeding has highlighted that under the current product price formulas, the standard component assumptions in the Class III and Class IV formulas are not able to automatically adjust to reflect the value of milk used in all products. Data reveals the current formulas reflect the value of very few products in the market as current average FMMO milk composition levels are consistently exceeding the assumed standard levels. Further, as highlighted earlier, fluid milk handlers testified to routinely receiving milk at composition levels greater than the current assumptions. USDA data on MCP orders show market average components consistently above the current standard components since Order Reform, with a noticeable increase in the rate of change since 2016. When combining MCP order data with USDA estimated data for the fat/ skim markets, market averages have exceeded the assumed standard component levels since 2021.

Some commenters claimed data entered by fluid milk plants was ignored and that, instead, USDA relied on less relevant FMMO data. This decision rejects the claim that FMMO data is less relevant to the determination of skim milk composition standards in the formulas than the evidence presented by the plants in question. The current assumptions reflect FMMO data from when the standards were first adopted, and such consideration remains relevant as a change is being considered. As described earlier, the objective of the product price formulas is to represent the value of milk used in all products. Milk composition standards are part of that valuation, and as such, it remains valid to consider FMMO data that reflects the composition of milk used in all products.

As described earlier, aggregated data supplied by MIG through a survey of members of its fluid milk plants regulated by MCP Orders show components levels consistently exceeding current assumed levels but below those proposed by NMPF and NAJ. This information was specifically listed as a factor in determining the proposed skim milk composition levels.

This decision finds updating the skim milk composition standards will provide for more orderly marketing as they will better reflect the supply and demand conditions for milk used in all products, as was one of the stated objectives when the product price formulas were first adopted. As is the nature of fixed factors such as milk composition standards, much like make allowances, are changed through rulemaking. This decision continues to find updating milk composition, as described earlier, will ensure prices paid by handlers and received by producers reflect the supply and demand of milk, a tenet of the AMAA.

NAJ argued the decision ignored testimony presented on the impact of price inversion and depooling and insisted adoption of the proposed levels maintains a narrow spread between Class I and manufacturing prices. Much testimony was given on the impact of price inversions and depooling and attributed at least some cause to inadequate skim milk composition levels. While record evidence demonstrated the occurrence and magnitude of price inversions and depooling, such outcomes are not a reason for changing milk composition levels. This decision finds that milk composition levels should be increased to better reflect current market conditions. While this change may decrease the occurrence and/or magnitude of price inversions and depooling, this was not a determinant in proposing the change as this decision

does not find it an appropriate reason for updating the valuation of skim milk.

A comment filed by Crystal Creamery stated the proposed levels will cause a disproportionate burden for fluid milk handlers in California that must fortify Class I products to meet the State nonfat solids standard. As required by the AMAA, FMMO class prices are applied uniformly across all handlers regulated by a FMMO. Any additional costs a handler might incur due to State requirements are outside the purview of USDA, and outside the scope of this proceeding.

During the hearing and in its posthearing 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. This idea was not proposed by USDA in the

recommended decision.

Edge's public comments on the recommended decision reiterated its request to update the butterfat standard, citing hearing testimony but providing no new arguments. A comment by Sabrosura Foods made the same request. Some commenters indicated not changing the butterfat standard would cause issues related to their risk

management positions.

This decision continues to find changing the butterfat standard is not needed to maintain orderly marketing of milk within the FMMO system. Risk management programs, which often utilize FMMO prices, are maintained in the private sector. These programs can adapt as necessary to facilitate the use of updated FMMO price formulas. Additionally, the butterfat standard does not impact FMMO prices paid by handlers, both fluid and manufacturing, because in all orders handlers pay for the actual pounds of butterfat received. Therefore, the request to amend the butterfat standard continues to be denied.

The NMPF and NAJ proposals contained alternative updating and implementation schedules for the skim 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  $(9.41 \times 1.007)$ . 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  $15\frac{1}{2}$  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.

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, with some not using any tools, some only enrolling in the DMC program which does not involve futures prices, 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. However, producer equity requires that risk management usage be considered against the interest of other producers who do not use risk management tools, because it would delay recognition of the higher components in producer milk.

Risk management issues are not an appropriate consideration in whether milk composition standards should be changed or to what level they should be changed. However, this decision finds

the timing of a regulatory change could impact producer hedging decisions made before a regulatory pricing change. This decision continues to find it appropriate to consider an implementation timeframe in an attempt to mitigate potential financial harm to producers who utilize risk management tools.

The recommended decision proposed a 12-month implementation lag, beginning when other changes from this proceeding become effective. The 12month lag was selected to cover hedge positions for the vast majority of producers utilizing these tools There was considerable public comment from six dairy farmers, five State Farm Bureaus, and four producer-led organizations opposing the 12-month implementation delay on the proposed skim milk composition levels. The producers and producer organizations requested the standards be implemented immediately so producers would be properly compensated for the components in their milk without delay. Some producers questioned why an implementation delay was proposed for skim milk composition standards but not for other factors such as make allowances that also impact Class III and Class IV prices. As noted in the summary of testimony, proponents of the delay explained they assume additional basis risk if a change in a price formula factor results in a price higher than what was locked in when they placed a hedge. As described in testimony, additional basis risk is not assumed if a price formula change results in a lower price.

Record testimony from the CME, as described earlier in the summary of testimony, indicated a decrease in the number of contracts with expiration dates over 12 months due to the regulatory uncertainty created by the unknown implementation timeline of this rulemaking proceeding. A comment submitted by the CME in response to the recommended decision noted a continuing decline in the volume of contracts over 12 months. This indicates the market is already adjusting to

potential FMMO changes.

Accordingly, while this decision continues to find it appropriate to offer an implementation lag for the skim milk composition standards because of the impact to producer hedging positions, the record evidence indicates that shortening the implementation lag to 6 months is appropriate. When combined with the additional rulemaking steps still needed to determine producer approval and issuance of a final rule if approved by producers, this implementation timeframe still offers

adequate notice to the vast majority of producers utilizing risk management tools, while also allowing Class I skim milk prices to more quickly reflect milk supply and demand conditions. The implementation lag would still begin when the other changes from this rulemaking became effective.

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. This is the same rationale for changes to make allowances and yield factors, the other two sets of fixed parameters in the pricing formulas, which data shows tend to change over the long term rather than short term (i.e., monthly), but outside of the normal, predictable seasonal swings in milk components. The nature of all of these fixed parameters, including skim milk components, involve complexities that are difficult to anticipate, as discussed throughout this final decision, and therefore demand robust consideration through a rulemaking proceeding.

# Surveyed Commodity Products

USDA administers the Dairy Product Mandatory Reporting Program to gather weekly wholesale prices of four manufactured dairy products. Average survey prices are released weekly in the National Dairy Product Sales Report, 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. The National Agricultural Statistics Service 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 40pound 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

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.

Most public comments submitted regarding changes to the surveyed commodity products supported the continued exclusion of mozzarella cheese. A public comment submitted by Leprino stated that continued exclusion of mozzarella cheese from the Class III price formula would limit complexity and more accurately reflect a standard market price. Two individual dairy farmers also submitted comments in support of excluding mozzarella cheese.

În its comments, ČDC requested reevaluation of the decision, reiterating arguments expressed at the hearing that more products should be included in the DPMRP survey and inclusion of mozzarella would raise producer revenue. Similar comments were also submitted by the National Family Farm Coalition

Ten dairy farmers from California and Wisconsin submitted public comments supporting the inclusion of mozzarella cheese. The farmers generally expressed that mozzarella should be included because it is a key milk price indicator, and its higher value should be reflected in their milk check. A Wisconsin dairy farmer was of the opinion the cheese value should not be determined from

only one type of cheese.

This decision continues to find exclusion of mozzarella cheese appropriate. Hearing testimony and public comments made in support of including mozzarella primarily centered around generating additional revenue for producers as mozzarella garners a higher price in the market. FMMO prices represent minimum prices paid by handlers for milk used in marketclearing commodity products. The DPMRP survey specifically excludes value added products, and the record contains no evidence that mozzarella is considered a market-clearing commodity product. Consequently, Proposal 6 continues to be 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 640lb 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.

One individual dairy farmer and the AFBF submitted comments on the recommended decision taking exception with the continued exclusion of 640-lb blocks. The AFBF reiterated its

testimony that inclusion of 640-lb blocks would add volume to the survey to ensure more accurate and representative pricing. Similar comments were submitted by the New York, Michigan, Wisconsin, Minnesota, and Arizona Farm Bureaus. AFBF further claimed that without inclusion of 640-lb blocks, manufacturers switch between 40-lb and 640-lb block production to avoid reporting prices to the DPMRP survey. There is no evidence on the record to support that such price manipulation would or does happen given that 640-lb blocks are currently not reported. This decision continues to exclude 640-lb blocks as the record does not demonstrate price discovery is aided by its inclusion. In addition, this decision continues to find it appropriate that more orderly marketing conditions are best maintained through price discovery of a single commodity product, as further discussed below. Accordingly, Proposal 4 continues to be 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 final decision continues to find 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

A comment submitted by Edge in response to the recommended decision maintained reweighting blocks and barrels was a more appropriate alternative to removing 500-lb barrels from the survey. However, the comment did not address a methodology to determine how such a proposal would be implemented. This decision maintains that surveying two cheese products, regardless of how they were weighted in the survey, results in a cheese price that does not represent a

single product.

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 marketclearing 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 (Apr. 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 blockbarrel 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 final decision continues to find the DPMRP cheese survey should only include 40lb 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 continues to recommend adoption of Proposal 3.

Comments submitted by NMPF, Select, and DFA in response to the recommended decision supported the exclusion of 500-lb barrels to provide for an appropriate market clearing cheese price representative of a single product. Comments submitted by two individual dairy farmers and state Farm Bureaus from Arizona, Wisconsin, Minnesota, Michigan, and New York expressed concern that the exclusion of 500-lb barrels could affect market transparency and price accuracy. Prices used in the FMMO system are collected through the DPMRP, which has a robust reporting and auditing component to ensure reporting handlers are complying with program regulations and reporting all qualifiable products. In addition, Annual Validation surveys are conducted with all current and potentially qualifying plants (any entity marketing and selling one million pounds or more of product) to verify current reporters know and understand all reporting requirements and if potentially qualifying plants are still exempt from reporting. Consequently, given the safeguards described, this decision does not find price accuracy and market transparency will be negatively impacted by the exclusion of 500-lb barrels.

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.

Since this decision proposes to remove 500-lb barrels from the DPMRP survey, this decision also proposes a conforming change to the cheese pricing reporting specifications in the Dairy Product Mandatory Reporting Program regulations (7 CFR 1170.8).

# **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.

A comment submitted by CDC in response to the recommended decision advocated for increasing the number of products surveyed, including unsalted butter, but provided no additional arguments for why unsalted butter should be considered a market clearing product. Accordingly, Proposal 5 continues to be 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 nontransformation 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):

	Proposal 7	Proposals 8 and 9				
Product	NMPF	IDFA/WCMA year 1	IDFA/WCMA year 2	IDFA/WCMA year 3	IDFA/WCMA year 4	
Cheese	0.2400 0.2300 0.2100 0.2100	0.2422 0.2582 0.2198 0.2251	0.2561 0.2778 0.2370 0.2428	0.2701 0.2976 0.2544 0.2607	0.2840 0.3172 0.2716 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 at the hearing, as well as in their public comments in response to the recommended decision, that until a mandatory cost survey can be conducted to provide assurances of accuracy in manufacturing cost calculations, 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 at the hearing, as well as in their public comments to the recommended decision, that the impact to producers' profitability 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.

WCMÅ 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 current 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 longheld 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.

 $ar{A}$  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 at the hearing, as well as in public comments to the recommended decision, that 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 final decision continues to find 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 not considered an accurate representation of costs by some stakeholders, particularly the producer community. Forty dairy farmers located throughout the U.S. and 10 dairy farmer organizations who submitted comments to the recommended decision opposed the make allowances levels contained in the hearing notice and proposed by USDA due to the unaudited and voluntary nature of the surveys on which they were based; further, DFA and NMPF mentioned that the surveys

and hearing record do not include cost data from several large manufacturers, potentially leading to an upward bias in the make allowances contained in the recommended decision. The AFBF; the Arizona, Florida, New York, Michigan, and Tennessee Farm Bureaus; and some dairy farmers argued in their comments that make allowances should not be changed without a mandatory audited survey, reiterating testimony on the weaknesses of the 2021 and 2023 surveys. In their joint comment, the Wisconsin and Minnesota Farm Bureaus rejected raising make allowances, as the survey data is unaudited and voluntary. Raising make allowances, they commented, will be detrimental to dairy farmers in the Upper Midwest and other regions with high Class III and IV utilization, speeding up dairy farm consolidation and bankruptcies. NMPF and DFA comments expressed support of an increase in make allowance levels at this time but maintained the NMPFproposed make allowances in Proposal 7 are best supported by the record until a mandatory survey can be conducted.

Questions regarding plant sampling, cost allocation methodology, and capturing a high-cost time period expressed in testimony and public comments 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 continues to support the use of unaudited, voluntary surveys for determining make allowances, as has

been done in the past.

What remains for the Department to consider is determining representative make allowance levels given the evidentiary survey data: 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 proposed levels in this decision. Select's alternative methodology presented in its post-hearing brief, which relied on the transformed 2021 survey numbers, was not considered further.

The recommended decision found usage of the revised non-transformed 2021 and 2023 surveys and the 2016 CA survey appropriate to determine the proposed make allowances. The decision found that relying on a combination of these survey results provided a consensus set of data to determine appropriate make allowance levels and was superior to relying only on one survey.

The Department received 75 comments regarding amendments to make allowances, submitted by dairy farmers (mostly small), cooperatives, processors, trade associations, and advocacy groups from 23 different states.

Dairy farmers and organizations representing dairy farmers, including the AFBF; state Farm Bureaus representing Florida, Michigan, Minnesota, New York, Tennessee, and Wisconsin; Farm Women United; the National Family Farm Coalition; and the Ohio Farmers Union opposed the make allowance levels in the recommended decision. The comments said increasing make allowances would reduce farm income, particularly for small and medium-sized farms, potentially leading to more closures and accelerating industry consolidation.

In their comments, NMPF and DFA also opposed the make allowance levels specified in the recommended decision and continued to advocate for the NMPF-proposed levels in Proposal 7. They reiterated hearing testimony that dairy farmer cost of production should be considered when determining make allowances to ensure orderly marketing conditions. In its comment, NMPF cited a 2008 amendment to the AMAA stipulating the price for feed and fuel should be considered when determining whether to adjust make allowances. (7 U.S.C. 608c(17)(G)). The provision cited by NMPF applies to hearings commencing prior to September 20, 2012, and the provision was not extended in the 2012 Farm Bill. The Department continues to find it to be inappropriate to consider producer income as a factor in determining make allowance levels.

In its comment to the recommended decision, Edge reiterated arguments

from its post-hearing brief that make allowances should be based on plants at the technological frontier, rather than inefficient plants they claim were represented in the voluntary surveys whose results are part of this hearing record. Since Edge offered no details in their comment on how this methodology would be implemented given this proceeding's evidence, no further consideration was given.

Also opposing the make allowances contained in the recommended decision, IDFA and WCMA advocated in their comments for use of the 2023 survey data only. IDFA and WCMA argued that after eliminating the 2022 CA Forecast from consideration, the only reasonable data remaining is the 2023 survey results. They both objected to the use of the 2021 survey to moderate the influence of prices during an inflationary period. According to IDFA and WCMA, unless price deflation occurred, which they argued did not, there is no reason for adopting anything other than the 2023 survey results for all four commodities.

Inflation describes a general price level increase across the whole economy, whereas deflation describes a general price level decrease. Price decreases can occur in an inflationary environment just as price increases can occur in a deflationary one, and producer price indexes (PPIs) are one way to evaluate such price movements. A series of Federal Reserve Bank of St. Louis input indexes and U.S. Energy Information Administration price data relevant to dairy commodity manufacturing, from June 2022 (marking the end of most pandemic-related programs) to June 2024 (the last full month before the recommended decision was issued) was evaluated to analyze IDFA and WCMA comments. While this decision does not find it appropriate to rely on indexing or forecasting to determine make allowances levels, the consideration of indexes can serve as a check that the proposed levels are reasonable and reflect current costs given the totality of evidence in this rulemaking.

As stated in the recommended decision, there have been price decreases in sectors relevant to the manufacturing process that indicate manufacturing costs were high in 2022 and thus are not reflective of current costs. The PPIs from June 2022 to June 2024 for Corrugated Materials, which declined approximately 14 percent, and Lumber, which declined more than 21 percent, as well as the Henry Hub (U.S. Energy Information Administration) average spot price for natural gas, which declined more than 67 percent, serve as

examples of prices that declined during an inflationary period. The PPI for All Commodities, which decreased nearly 9 percent from June 2022 to 2024, is another more general indicator that input prices for commodities were particularly high in 2022 compared to 2024. Other examples of elevated input prices highlighted in the IDFA and WCMA public comments include labor, legal, insurance, and administrative costs. The presence of cost categories that have not declined do not preclude objective declines in other categories. The record indicates that even after accounting for wage increases of nearly 9 percent, according to the Employment Cost Index from the U.S. Bureau of Labor Statistics, declines in other areas outweigh increased labor costs, leading to an overall decrease in manufacturing costs. These overall input price decreases are relevant to all surveyed products; thus, the Department continues to find sole reliance on the 2023 survey is inappropriate in determining make allowances that reflect current costs.

IDFA and Leprino commented the Department should continue to incorporate a \$0.0015 marketing

allowance in all make allowances, based on the necessary costs to get commodity products to market, historical precedent, and lack of supporting data to merit its removal. IDFA stated the \$0.0015 marketing allowance was first adopted as part of Order Reform to cover the cost of moving commodity products to market, which include maintaining and staffing warehouses, supporting a marketing and sales staff, and transporting product to market. Leprino commented that the marketing allowance is necessary to reflect commodity costs at the same stage in the value chain as commodity prices in the NDPSR. In its comment, Leprino pointed to the make allowance levels since Order Reform as examples of the rationale in maintaining the \$0.0015 marketing allowance without new data to merit its removal. IDFA commented that, while no specific data was offered to estimate the current marketing allowance cost level, a review of the record reveals no evidence to support its removal.

The Department reevaluated the record for testimony related to the marketing allowance. The 2021 and 2023 cost surveys included costs

through product packaging. Postpackaging costs such as warehousing and marketing were specifically excluded. Testimony from a cheese manufacturer estimated the \$0.0015 marketing allowance covers postpackaging costs unaccounted for in the 2021 and 2023 cost surveys. Further, the DPMRP requires manufacturers to report prices that incorporate all costs associated with the product before it is shipped to market. It is important that prices reported to DPMRP and released through the NDPSR relate to the costs accounted for in the make allowance. Since marketing costs are included in prices reported through DPMRP, it is appropriate for such costs to also be accounted for in the make allowance. Therefore, this decision finds it appropriate for make allowances to include a \$0.0015 marketing allowance.

Additional public comments were submitted which pertained to specific make allowance levels proposed in the recommended decision. Those comments are addressed in the respective sections below.

## Cheese

	2021	2023	2016	Current	USDA proposed (recommended decision)	USDA
	Non-transformed	Non-transformed	CA survey			proposed (final decision-inc. marketing allowance)
Low Cost		\$0.2201 \$0.3181				
Average # Plants	\$0.2365 10	\$0.2643 18	\$0.2454 4		\$0.2504	\$0.2519

The recommended decision proposed 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, including lumber and corrugated materials, which testimony indicates and the input index analysis described earlier confirms, have receded since peaking in 2022. Absent any other data on the record, this final decision continues to find it appropriate to utilize an average of the 2023 and 2021 non-transformed survey results to ensure the proposed cheese make allowance is not

disproportionately affected by higher 2022 costs that have since moderated. The decision continues to find 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.

In its public comment, AFBF wrote the current cheese make allowance is clearly adequate as there has been considerable investment in cheese plants; thus, the recommended cheese make allowance is too high. While anecdotal testimony on investments in cheese plants was presented at the hearing, data on the record clearly indicates costs of processing commodity cheese have increased since make allowances were last updated.

The AFBF, as well as dairy farmers from Iowa and Pennsylvania, commented in opposition of all make allowance increases, but specific to cheese they argued that only about half the number of DPMRP reporting manufacturing plants are represented in the data. The Department continues to find it appropriate to use the 2021 and 2023 survey results, as the two samples together provide a reasonable representation of cheddar cheese processing.

This final decision therefore recommends a \$0.2519 per pound cheese make allowance, derived from the average of the 2021 and 2023 non-transformed survey results plus the \$0.0015 marketing allowance.

Butter

	2021	2023	2016	Current	USDA proposed (recommended decision)	USDA proposed (final decision-inc. marketing allowance)
	Non-transformed	Non-transformed	CA survey			
Low Cost		\$0.2616 \$0.4210	\$0.1838 \$0.2149			
Average# Plants	\$0.1338 12	\$0.3176 13	\$0.1938 7			\$0.2272

The recommended decision proposed 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 final decision continues to find it appropriate to average the 2023 and 2021 nontransformed surveys to account for the differences in plant sampling, and to ensure the proposed butter make allowance is not disproportionately affected by higher 2022 input costs that have since moderated. The decision continues to find 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.

The Department received no public comments in response to the recommended decision specifically addressing the butter make allowance. However, since this decision finds it appropriate to continue to incorporate a marketing allowance into all make allowances, the final decision recommends a \$0.2272 per pound butter make allowance, derived from the average of the 2021 and 2023 non-transformed survey results plus a \$0.0015 marketing allowance.

# **NFDM**

	2021	2023	2016	Current	USDA proposed (recommended deci	USDA proposed
	Non-transformed	Non-transformed	CA survey			(final decision-inc. marketing allowance)
Low Cost		\$0.2302 \$0.3247	\$0.1854 \$0.2786			
Average# Plants	\$0.2454 27	\$0.2750 15	\$0.2082 8	\$0.1678	\$0.2268	\$0.2393

The recommended decision proposed 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 supported hearing testimony describing the importance of California manufacturing facilities in the total U.S. production of NFDM powder. Therefore, the recommended decision found it appropriate to place more emphasis on California NFDM plant costs considering the dominant share of NFDM production by California plants. As stated previously, given all the cost surveys contained in the evidentiary record had shortcomings, the recommended decision found it appropriate to use an average of two surveys when recommending make allowances. The recommended decision concluded that it was best to combine

the 2021 survey and the 2016 CDFA cost of processing survey to determine the NFDM make allowance. The 2021 survey was selected over 2023 due to a better plant sample and because the 2023 survey represented costs during a period of high inflation, in particular for energy-intensive (natural gas) dried products like NFDM.

Comments from IDFA, CDI, and Agri-Mark specifically opposed the NFDM make allowance contained in the recommended decision, advocating for different methodologies to be applied. IDFA argued the NFDM make allowance should at least be based on a weighting of the 2021 non-transformed cost of production survey and the 2023 non-transformed cost of production survey for all plants, or at most an adjustment to the 2023 survey to address higher energy costs in 2022 could be made. Agri-Mark and CDI argued that data sources for the NFDM make allowance

should be reconsidered, questioning whether use of 2016 data was too old and not reflective of current costs, especially given its 50 percent weighting in the computation. While the 2023 survey was not used due to higherthan-normal natural gas prices that have since moderated, Agrimark argued in their comment, other cost categories have not similarly moderated. CDI commented that the NFDM make allowance should be determined using a similar methodology to dry whey, taking the simple average of the nontransformed 2021 survey and the 2023 low-cost survey, which would equal \$0.2378.

This decision continues to find it appropriate, given the shortcomings of the cost surveys in the record, to use an average of two surveys to determine appropriate make allowance levels. However, after a review of public comments and a reevaluation of record

evidence, this final decision finds it appropriate to apply a consistent methodology for NFDM and dry whey, as described in CDI's comment.

The 2023 survey represents the most recent cost data but significantly fewer participating plants than the 2021 survey. Additionally, as NFDM production is heavily reliant on natural gas, the 2023 survey captured the historically high energy costs, particularly natural gas. 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 from June 2022 to June 2024, with the spot price falling over 67 percent. Natural gas prices in 2024 were comparable to prices in 2019, with the

June 2024 spot price only 5 percent higher than in 2019. This data suggests current natural gas prices are similar to price levels observed during the 2021 survey. Cost breakdown of the 2023 survey show that utilities (energy) costs constituted 15 percent of the total manufacturing costs of dry whey. This is in contrast to utilities representing 7 percent of total costs for butter and 6 percent for cheese. As the record reveals the major component of this difference in utilities costs share is from drying the product, this cost category is sensitive to movements in natural gas prices.

The record reveals the 2021 survey represents more NFDM plants than the 2023 survey (27 vs. 15), while the 2023 survey represents a larger volume of NDFM production than the 2021 survey

(91.2 percent vs. 64.8 percent). Utilizing a simple average of the 2021 and the low-cost 2023 surveys results in a better representation of NFDM production across the universe of plants making the product, while moderating the influence of the high inflationary period in 2022 as described earlier in the PPI analysis, with particular consideration of declining utilities costs described above. Therefore, in the final decision, the Department recommends a \$0.2393 per pound NFDM make allowance, derived from the average of the 2021 nontransformed survey and the 2023 nontransformed low-cost survey result, plus a \$0.0015 marketing allowance.

Dry Whey

	2021	2023	2016	Current	USDA proposed (recommended decision)	USDA proposed
	Non-transformed	Non-transformed	CA survey			(final decision-inc. marketing allowance)
Low Cost	\$0.2457	\$0.2848 \$0.3952 \$0.3361		\$0.1991	\$0.2653	\$0.2668
Average # Plants # Plants	80.2437	9		φυ.1991	φυ.2033	φυ.2008 

The recommended decision proposed a \$0.2653 per pound dry whey make allowance, derived from the 2021 nontransformed survey and 2023 nontransformed low-cost survey result. Similar to NFDM, dry whey production is heavily energy (natural gas) dependent, and the same concerns regarding the 2023 survey results exist for dry whey, as discussed above. Absent any other data on the record, the recommended decision found it suitable to utilize the 2023 non-transformed lowcost average (\$0,2848) with the 2021 non-transformed survey to ensure the proposed dry whey make allowance is not disproportionately affected by higher 2022 natural gas and utilities costs that have since moderated.

Several comments were received specifically on the dry whey make allowance contained in the recommended decision. IDFA and WCMA opposed the methodology used and opined the dry whey make allowance should be based solely on the 2023 non-transformed cost of production survey for dry whey plants. Due to 2022 being a period of particularly high prices, this decision continues to maintain their proposed methodology is not appropriate. Earlier analysis of relevant price indices contained in the record support this conclusion.

In its public comment, the AFBF wrote that the current dry whey make allowance is clearly sufficient, as there has been considerable investment in dry whey plants; thus, the amended dry whey make allowance contained in the recommended decision is too high. While anecdotal testimony on investments in dry whey plants was presented at the hearing, data on the record clearly indicates costs of processing commodity dry whey have increased since make allowances were last updated.

The AFBF, as well as dairy farmers from Iowa and Pennsylvania, commented in opposition of all make allowances, but especially dry whey, as only about half the number of DPMRP reporting plants provided cost data. This decision continues to find it appropriate to use two surveys in the make allowance calculation, as together they provide sufficient representation of dry whey production.

A public comment filed by the American Dairy Coalition (ADC) opposed all make allowances in the recommended decision and advocated for reevaluation of all proposed changes. ADC specifically addressed the proposed increase in the dry whey make allowance relative to its small market price and advocated implementing a snubber to prevent negative producer values for other solids. Per ADC's

suggestion, if the market price for dry whey is less than the make allowance in a given month, the other solids price would be zero rather than a resulting negative value. For historical context, the Class III price formula briefly contained a similar snubber from Order Reform implementation (January 2000) to October 2001, but it was removed as it was found to mute market signals and arbitrarily adjust prices. There is insufficient evidence on the hearing record of this proceeding to support ADC's comment suggesting a change to the other solids snubber. Similar to NFDM, utilities represent a larger share of manufacturing costs for dry whey at 10 percent of total cost, rather than the 7 percent and 6 percent for butter and cheese, respectively, which are not dried during the manufacturing process. Accordingly, the same consideration of declining utility costs evaluated in the NFDM section apply to dry whey. Utilizing a simple average of the 2021 and low-cost 2023 surveys results in a better representation of dry whey production across the universe of plants making the product, while moderating the influence of the high inflationary period in 2022 as described earlier in the PPI analysis, with particular consideration of declining utilities cost since 2022. Therefore, this decision recommends a \$0.2668 per pound dry whey make allowance, based on the

average of the 2021 non-transformed survey and 2023 low-cost dry whey surveys, plus a \$0.0015 marketing allowance.

The Department finds the proposed make allowances in this final 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 observed costs surveys have weaknesses. The proposed make allowance levels are the best representation of manufacturing costs, given publicly available data and evidence contained in this proceeding's

# b. Butterfat Recovery

Currently, the Class III formula contains 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, vield 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. Testimony also described how cheese fines, or small particles of cheese left in whey during the cheesemaking process, represent a significant source of fat loss to a cheese manufacturer, and are not returned to the finished cheese product due to concerns of bacterial contamination. As butterfat recovery numbers are considered confidential information, the record does not contain a well-developed picture of recovery levels currently attained 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

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.

The Department received comments in support of the amended butterfat recovery factor contained in the recommended decision, including from several state Farm Bureaus (Arizona, Florida, Michigan, Minnesota, New York, Tennessee, and Wisconsin) and five California dairy farmers. These commenters support increasing the butterfat recovery factor from 90 to 91 percent, as it more accurately reflects modern cheesemaking technology and plant efficiencies.

Several comments were also submitted in opposition of the proposed

butterfat recovery factor. Commenting in opposition, Select continued to contend that the factor should be updated to 93 percent. Select pointed to testimony from its expert witness claiming that 93 percent butterfat recovery is attainable by most plants. Even with older cheese making equipment, Select reiterated 93 percent butterfat recovery can be achieved. This decision maintains that the butterfat recovery percentage should represent what is currently attained by the universe of U.S. cheese manufacturing plants, not what can theoretically be attained or may be attained in modern plants. Therefore, this decision maintains a proposed 91 percent butterfat recovery factor.

In its comment, Crystal Creamery argued that cheese moisture levels and other factors in the cheese making process should also be considered in the amended butterfat recovery factor and requested conforming changes to the butterfat-to-protein ratio, from 1.17 to 1.16. Sufficient testimony and evidence was not provided on the record to justify a change to the butterfat-toprotein ratio, therefore, the proposed conforming change is denied.

#### c. Farm-to-Plant Shrinkage

Currently, the FMMO formulas assume a farm-to-plant shrinkage factor of 0.25 percent and 0.015 pounds per cwt of additional butterfat loss. 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 farm-to-plant 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, and to a greater degree butterfat, sticks to the sides of the pipes and tanks. Milk and butterfat 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 and butterfat than was measured at the farm. The record reflects that as the nature of milk and butterfat has not changed, it still sticks to equipment. In recognition of this reality, the yields are slightly reduced to reflect the amount of milk and butterfat 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.

Leprino submitted a public comment in support of maintaining the farm-toplant shrinkage. In contrast, Select commented in opposition of the amended shrinkage in the recommended decision, reiterating arguments in the hearing that it should be eliminated. According to Select, the recommended decision underestimates the number of farms capable of shipping a full tanker. Select contends that more than 75 percent of milk is produced on farms shipping full tanker loads and asserts the recommended decision did not address unsupported additional butterfat shrink.

While the recommended decision inadvertently failed to mention the 0.015 pounds per cwt of additional butterfat loss, the entirety of the farm-to-plant shrinkage within the formulas and the evidentiary record was evaluated. The record contains evidence that additional butterfat losses occur as butterfat naturally clings to equipment. While Select offered evidence its

cooperative has developed operating practices that have greatly reduced observed shrinkage, no other data was offered to validate that it is being attained by other industry stakeholders. Thus, this decision continues to find it appropriate to include the 0.25 percent shrinkage factor and the 0.015 pounds of additional butterfat loss in the formulas as these factors should be based on what is attained, on average, rather than only attainable by some. Accordingly, this decision continues to reject Proposal 11.

# 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 1.03. 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 a 1.02 divisor (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. In other words, the yield factor, when converted to a multiplier, was less than one to reflect that only a portion of the nonfat solids that arrive at a plant are utilized in NFDM.

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, the record evidence in this proceeding does not support reflecting two products (buttermilk powder and NFDM) in the NFDM yield would provide for more

orderly marketing conditions. As such, the recommended decision maintained the current NFDM yield factor to only reflect one product and did not propose the adoption of Proposal 12.

Leprino, as well as the Arizona Farm Bureau, offered comments on the recommended decision in favor of maintaining the 0.99 nonfat solids yield, as they said it properly reflects a widely attainable NFDM yield. In its comment, Select objected to the continuation of the 0.99 NFDM yield, and reiterated arguments presented at the hearing that the value of buttermilk powder should

be included.

This decision maintains that yield factors are not intended to represent the value of milk components utilized in various products, but rather the quantity of a specific product that can be manufactured from a given quantity of milk components. As stated in the recommended decision, the NFDM yield factor represents the quantity of NFDM that can be produced from one pound of nonfat solids in producer milk. This decision continues to find the current NFDM yield factor, and the nonfat solids price formula, appropriately represent the value of NFDM to the nonfat solids utilized in manufacturing NFDM. This decision finds no basis to support the claim that powder manufacturers are not paying for solids in the buttermilk powder they produce. To the contrary, all nonfat solids entering a plant are accounted and paid for at the appropriate use classification. Thus, nonfat solids ending up in buttermilk powder are paid for at the nonfat solids price. This is similar to other products such as whey protein concentrate (WPC), whose other solids are priced at the FMMO other solids price which is based on dry whey yields and prices and does not specifically account for WPC yields and prices.

This decision continues to find it appropriate for component price formulas to utilize a single product price and an associated make allowance and yield factor to determine the value of milk components, which can then be used to value the components utilized in all products under a given class. Accordingly, this decision continues to find it appropriate to maintain the NFDM yield factor of 0.99.

# 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 argued for different adjuster calculations. 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 averageof 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 <sup>3</sup> 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.

<sup>&</sup>lt;sup>2</sup> Advanced refers to prices announced on or before the 23rd of the prior month.

<sup>&</sup>lt;sup>3</sup> Announced refers to prices announced on or before the 5th of the following month.

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 higherof mover. During the 50-month period from May 2019-June 2023, the averageof 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

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. MIĞ 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 averageof 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 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 pricingsomething 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 6month 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 averageof mover has enabled them to meet customer demand for long-term pricefixed 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 continues to recommend adoption of Proposal 13 for HTST fluid milk products.

AMS received 29 comments that specifically supported a return to the higher-of mover. Comments in support of the higher-of mover were submitted by: NMPF; Select; AFBF; ADC; the state Farm Bureaus of Arizona, Michigan, New York, Michigan, Wisconsin, Minnesota, and Tennessee; Georgia Milk Producers, Inc.; Northeast Dairy Producers Association (NDPA); National Family Farm Coalition; Farm Women United; and 15 individual dairy farmers. Seven commenters, including NMPF, ADC, NDPA, and four individual dairy farmers, expressed the higher-of keeps dairy markets more orderly. NDPA noted the return to the higher-of would have an immediate positive impact on farmers. The Wisconsin and Minnesota Farm Bureaus commented the higher-of often provided better financial returns to farmers in the past. One dairy farmer praised a return to the higher-of, arguing its removal in 2019 decreased revenue.

In its comment, AFBF reiterated arguments that the return to the higherof is critical for ensuring dairy farmers receive fair and adequate compensation for their milk, especially in the face of volatile market conditions. AFBF continued to argue that most fluid milk processors have not increased or even begun the use of hedging, which was the intent of adoption of the average-of mover. The Michigan Farm Bureau commented that a return to the higherof would better reflect current market conditions and improve overall pricing for farmers. Georgia Milk Producers, Inc., stated the return to the higher-of is critical to the success of its producers, who were disproportionately impacted by the change to the average-of mover. A dairy farmer commenter advocated for a simple and stable price program that uses the higher-of.

CDC and two dairy farmers specifically requested the higher-of mover alone, without the proposed ESL adjustment, apply to all Class I milk. AFBF; the state Farm Bureaus of Arizona, Florida, New York, and Tennessee; and the two dairy farmers requested a return to the higher-of on an expedited basis.

In their comments on the recommended decision, MIG and Crystal Creamery opposed a return to a higher-of Class I mover. MIG reiterated its hearing testimony that the return to the higher-of on HTST milk prohibits effective hedging.

This decision continues to find that 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 continues to find 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 recommended Class I ESL adjustment would provide more longrun 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.

This decision continues to find adoption of the higher-of mover and Class I ESL adjustment appropriate to provide for more orderly marketing and better ensure price equity for handlers of similar Class I products. As set forth in the recommended decision, 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 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 and could be positive or negative.

The recommended decision described milk subject to the ESL adjustment as all milk used in ESL products with a shelflife no less than 60 days, regardless of the type of Class I plant in which they are made.4 This decision continues to propose an ESL adjustment that 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 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.

<sup>4 1</sup>xxx.7(a) or 1xxx.7(b).

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

Comments to the recommended decision submitted by Select, Edge, Nestle, IDFA, and MIG supported the inclusion of the ESL adjustment as part of the Class I mover. MIG and IDFA further advocated for implementation of a base Class I skim milk price that supports risk management for all Class I milk products, not only ESL products. Both groups expressed that all Class I processors should benefit from the new formula, which they maintained is revenue-neutral with the higher-of formula over time.

In its comment, MIG stated the ESL adjustment would allow processors of ultra-pasteurized or aseptically processed and packaged fluid milk to continue to hedge price risk. MIG credited use of an average-of formula with allowing ESL processors to offer stable pricing, which in turn allows ESL products to more effectively compete with non-dairy alternatives including plant-based beverages.

Select stated the ESL adjustment would accommodate the expressed desire of handlers of ESL products to hedge their raw milk costs while providing dairy farmers the necessary stability of an overall higher-of Class I mover. Nestle opined the average-of formula utilized in the ESL adjuster provides holistic solutions for the industry and provides dairy farmers with assurances on the sale of their

product before the milk is produced. These factors, Nestle wrote, create pricing stability for both retailers and end consumers.

Many comments submitted expressed support for a return to the higher-of mover, but either opposed inclusion of the Class I ESL adjustment or expressed concern the provision could be abused. NMPF, AFBF, Michigan Farm Bureau, ADC, and seven individual dairy farmers stated the milk to which the ESL adjustment would apply was not well defined in the recommended decision, or that ESL itself was not clearly defined. Three commenters noted that the parameters of an ESL product are vague, including the recommended use of shelf-life to define qualifying products. NMPF, AFBF, Michigan Farm Bureau, Upstate Niagara, and an individual dairy farmer expressed concern that handlers could potentially abuse or manipulate the system, for example, by labeling a product with a shelf life of 59 days to benefit from a lower mover price when it is advantageous to do so. Such scenarios, AFBF noted, create a risk of inconsistent application and the potential for market distortions.

AFBF, Michigan Farm Bureau, Upstate Niagara, and five individual dairy farmers expressed concern that the inclusion of the ESL adjustment creates a potential for handlers to take advantage of the ESL adjustment by opting in or out of an adjustment on a monthly basis when favorable. Some commenters expressed concern over handlers attempting to qualify milk for the more favorable mover in a month in order to reduce payments to producers, likening it to depooling. AFBF and other commenters noted the possible range of a 95-cent reduction to a \$1.18 increase per cwt difference in base Class I price creates an incentive for handlers to take

advantage of the system.

Several commenters, including NMPF, requested a clear definition of ESL products based on processing characteristics, not product or marketing characteristics such as shelf life. While the recommended decision highlighted the marketing characteristics of ESL, including the significantly longer shelflife, the record reflects it is the processing technique that enables ESL products to have these marketing characteristics which facilitate wider distribution, shipping to centralized retail warehouses before distribution to individual stores, and most often, longterm sales contracts. In recognition of the possibility the ESL adjustment may be abused by adjusting the shelf life of a product as highlighted in the comments received, this decision finds

it appropriate to rely solely on the definition of the processing technique to define milk eligible to receive the ESL adjustment. While it is an industry term to refer to ESL products, the method of achieving ESL is accomplished through specific temperature and time thresholds which are contained in the ultra-pasteurized definition. As described in the Pasteurized Milk Ordinance, the process of ultrapasteurization involves heating milk "at or above 138 °C (280 °F) for at least 2 seconds . . . so as to produce a milk or milk product, which has an extended shelf-life under refrigerated conditions." This process of obtaining ESL products is to what witnesses testified. Accordingly, this decision finds it appropriate that ultra-pasteurized milk as defined in 21 CFR 131.3(c) would receive the ESL adjustment. The regulatory definition also encompasses aseptically packaged milk products, as the process of aseptic packaging requires milk to first be ultra pasteurized. As a provision defining a shelf-life threshold was not part of the original proposed order language, no changes to the proposed order language are necessary.

AFBF, Michigan Farm Bureau, and Upstate Niagara expressed concern about the potential for the ESL adjustment to set precedent for other types of adjustments for marketing claims for various production practices at the farm level. The proposed ESL adjustment would apply to a specific processing technique at the plant which the record demonstrates results in market characteristics that differentiate ESL products from HTST products.

NMPF requested clear guidance on how handlers report and account for Class I milk to ensure handlers cannot take advantage of the ESL adjustment by only applying it when advantageous. In its comment, ADC requested qualifying Class I fluid products remain with the ESL designation to avoid opportunistic use of the ESL adjustment that could reduce pool payment obligations. Several other commenters requested a review process be incorporated into the ESL adjustment provisions. Upstate Niagara commented many plants have the capacity to process both HTST and ESL products and expressed concern whether the Department would be able to prevent plants switching the type of processing for a pricing advantage.

This decision clarifies that the ESL adjustment would apply to all ESL milk meeting the ultra-pasteurized definition. Current handler reporting provisions in the regulations require handlers that process skim milk classified under 7 CFR 1000.44, both ultra-pasteurized and HTST, to report monthly utilization for Class I utilization as defined in § 1xxx.30(a). Handlers report the type of product, how much product is sold or distributed within, and outside, the marketing area, as well as any other information pertaining to milk receipts and utilization the Market Administrator requires. If the ESL adjustment is adopted, handlers would report HTST and ESL products separately, ensuring accurate handler utilization is accounted for.

The FMMO program has a robust component that audits all handler reports filed with the Market Administrator. As part of an ESL handler's audit plan, FMMO auditors would review and verify handler records currently maintained under 7 CFR 1000.27(a) to ensure the raw milk was processed using ultra-pasteurized equipment, in accordance with the reported utilization. FMMO auditors would use documents such as pasteurization reports and State health department inspection records identifying equipment used for processing as verification.

Handlers producing ESL products would not determine when the Class I ESL adjustment would apply. The Class I ESL adjustment would apply automatically to milk used in ESL products. Handlers found misreporting ESL milk would be subject to an audit adjustment to the FMMO Producer Settlement Fund, as well as any other remedies authorized by current

Upstate Niagara; AFBF; the state Farm Bureaus of Arizona, Georgia, and Michigan; the Kentucky Dairy Development Council; Pennsylvania Association of Milk Dealers (PAMD); CDC; and 10 individual dairy farmers claimed the recommended ESL adjustment was not discussed or evaluated at the hearing, and no justification was presented. The Michigan Farm Bureau commented no testimony specifically supporting this type of adjustment was offered during the hearing process, making it difficult

The commenters expressed concern that the impact of the package of proposed changes to the Class I mover provisions was not fully analyzed. Several expressed concern the proposed adjustment could have unintended consequences similar to those resulting from the Congressionally mandated change to the average-of mover in 2019. Upstate Niagara commented that as the percentage of ESL products in the market grows, the ESL adjustment would apply to an increasing volume of

to recognize the necessity of its

milk. As a result, Upstate Niagara claimed, while the adjuster could mute price volatility over the long term for processors, it could also impact FMMO pools and producer pay in real-time.

Two commenters, PAMD and Upstate Niagara, claimed that because the combination of higher-of and ESL adjuster proposal was not specifically discussed at the hearing, the outcome was not properly noticed. The PAMD, a group representing fluid milk processors that own 14 processing plants located in and around Pennsylvania, opposed the return to the higher-of mover with the ESL adjustment. PAMD stated had the idea been noticed, it would have presented opposing evidence at the hearing. Additionally, PAMD argued the same advantages of less volatility and the opportunity to engage in risk management should apply to HTST processors as well as ESL processors in order to avoid competitive issues that would occur.

As set forth in the hearing notice, the base Class I skim milk price was open for testimony and evidence to be offered on the record for amendments. All FMMO regulated handlers received notice that changes to how milk in Class I products was priced were being considered. The recommended Class I mover is a combination of two proposals noticed and examined through testimony at the hearing. While the mechanics of adding an ESL adjustment to a higher-of mover are slightly different than proposals presented, the record contains extensive testimony and evidence on the processing and marketing of HTST and ESL products. Based on this evidence, this decision continues to find the recommended mover best promotes orderly marketing.

AFBF, Michigan Farm Bureau, ADC, and seven individual dairy farmers claimed the recommendation of a higher-of mover in combination with an ESL adjustment creates a "fifth" or "new" class of milk. Upstate Niagara, AFBF, the state Farm Bureaus of Arizona and Michigan, ADC, and four individual dairy farmers stated that the addition of an ESL adjustment introduces significant complications to an already complex Class I pricing system. AFBF and Michigan Farm Bureau commented the ESL adjuster creates a dual pricing system and adds an additional layer of complexity to an already intricate system. Some commenters asserted the proposed Class I mover provisions would likely create disparities between processors operating at the same location and undermine the FMMO principle of uniform prices.

Edge maintained the adjustment does not create a new classification of milk

but is an innovative approach to allow ESL handlers the ability to continue to use risk management in a changing industry.

Fluid milk products are defined in the current regulations as ". . . any milk products in fluid or frozen form that are intended to be used as beverages containing less than 9 percent butterfat and 6.5 percent or more nonfat solids or 2.25 percent or more true milk protein . . . . . 7 CFR 1000.15(a). Milk used in both HTST and ESL products meets this definition of a fluid milk product and, therefore, a new or separate class of milk is not being proposed. Inclusion of the ESL adjustment to the Class I mover reflects the substantial record evidence demonstrating the unique ultrapasteurization milk product characteristics warranting recognition in the pricing provisions. The ESL adjustment to a handler's pool obligation meets current needs of the industry seeking to update the price formula provisions to reflect current market conditions. While the adjustment adds a new component to the Class I mover, the Department calculates the Class I base price and an ESL handler's adjustment. Handlers already report to the Department the types of products they distribute and would not incur any new reporting as a result of the ESL adjustment.

In its comment, NMPF noted that until 36 months after implementation, some or all of the look-back calculation for the ESL adjuster would be based on the announced Class III and Class IV skim milk pricing factors prior to the regulatory changes stemming from this proceeding. NMPF requested in its comment the prices used to compute the rolling adjuster prior to the implementation of the Final Rule be recalculated based on the regulatory changes proposed in this rulemaking. The record does not contain evidence explaining why historical prices should be recalculated. Therefore, this decision does not find is appropriate to recalculate the look-back portion of the ESL adjuster with updates for other amendments to the FMMOs.

In its comment opposing a return to the higher-of, Crystal Creamery maintained the higher-of mover would provide no financial value to mandatorily pooled handlers and would not incentivize service to the Class I market. Further, Crystal Creamery argued, the higher-of would distort market signals and cause greater imbalances in manufacturing markets, leading to disorderly marketing and increased prices to consumers. Crystal Creamery reiterated a return to the higher-of would incentivize the lower-

value manufacturing class milk to remain pooled because of the payment it receives from the producer settlement fund as a result of marketwide pooling.

Marketwide pooling is a cornerstone of the FMMO program. As the record reveals, dairy farmers sell milk to a wide variety of handlers whose products have distinctly different supply, demand, and market conditions. Marketwide pooling provides for more orderly marketing by ensuring a minimum uniform price is paid to producers whose milk is used in distinctively different products, thus preventing destructive competition among producers. While some commenters allege the higher-of will cause disorderly marketing, the evidentiary record shows the adoption of the higher-of would result in greater value differences between Class I and manufacturing prices for shorter time periods, leading to fewer and smaller price inversions, less depooling, and more orderly marketing conditions.

An individual dairy farmer commented the ESL adjustment would incentivize a large spread between Class III and Class IV in the short term, resulting in increased price volatility between ESL and HTST milk, against the intended purpose of FMMOs. The farmer claimed pricing Class I milk using two formulas could result in periods where the price for one product is increasing month-to-month while the other is decreasing, depending on the direction the adjuster moved.

This decision does not find use of an ESL adjustment would incentivize large Class III and Class IV price spreads. The record of this proceeding reveals that farm milk used to produce products in each of the four classifications have distinct supply and demand conditions. The record does not contain evidence to support the implication that manufacturers of dairy products, the majority of which do not manufacture ESL products, would make business decisions to gain an advantage in the fluid market where they do compete.

In its comment, MIG requested two changes to the proposed order language. MIG first requested a reference be added to the proposed Class I ESL adjustment in section 1000.50(r) to refer to section 1000.43(e) General classification rules, in order to link the pricing provision and eligible Class I milk. This decision does not find this change necessary because section 1000.43(e) is referenced in the section 10xx.60(i) Handler's value of milk. The reference in section 10xx.60(i) provides the requested link between the eligible Class I milk and the pricing provision.

MIG also requested clarifying language be added to section 1xxx.60(i)

that the ESL adjustment may be a positive or negative value. This decision finds such technical change warranted but finds the clarifying clause more appropriate in section 1000.50(r). The language is contained in the proposed regulations below.

This decision also continues to propose 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. In their comments, AFBF, and the state Farm Bureaus of Arizona, Michigan, and New York expressed disappointment this decision did not eliminate advanced pricing. Commenters reiterated arguments in testimony that advanced pricing has contributed to discrepancies in milk prices, has increased price volatility, and has caused price inversions and depooling, resulting in lower payments to pooled producers. Eliminating advanced pricing would mitigate these issues, commenters argued, by improving class

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.

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. As stated in the recommended decision, 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). 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 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 model, maintained at the time by Cornell University. The USDSS model 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

<sup>&</sup>lt;sup>5</sup> Order Reform Final Decision.

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 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 model results reflecting the current dairy market structure and transportation costs. NMPF witnesses explained model 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 the lowest differential increase from \$1.60 per cwt to \$2.20 per cwt. NMPF maintained 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 model 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 that 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 member testimonies 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, and Lamers Dairy, 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 marketwide 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 buvers.

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.

Finally, opponents testified 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 model results.

The Department received 33 comments from stakeholders concerning amendments to the Class I differentials in the recommended decision. This included general comments as well as specific requests to reevaluate the proposed Class I differentials in certain counties, as discussed in greater detail by region below. In sum, the Department received 20 comments in support of and 13 comments in opposition to the Class I differentials as proposed in the recommended decision.

Seven individual dairy farmers; AFBF; NMPF; Georgia Milk Producers, Inc.; Maine Dairy Industry Association (MDIA); the Arizona, Michigan, Tennessee, Wisconsin, and Minnesota State Farm Bureau Federations; Upstate Niagara; Select; and Plains Dairy commented in support of the

recommended decision with some location-specific changes requested. These groups largely expressed support for the decision's use of the USDSS model's May results as the baseline for Class I differential changes, as well as the decision to maintain the current base differential of \$1.60. They also pointed to record evidence from producer organizations supporting the need to update the Class I differentials from the levels set nearly 25 years ago. Supporters stated that the increases in the proposed differentials accurately reflect current costs and would ensure an adequate supply of fluid milk nationwide and orderly marketing conditions.

Crystal Creamery; United Dairy; Nestle USA; New Dairy; Lamers Dairy; IDFA; MIG; Pennsylvania Association of Milk Dealers (PAMD); West Virginia Department of Agriculture; and Family Farm Defenders submitted comments objecting to the proposed amendments to the location-specific Class I differentials in the recommended decision and some specifically objected to the continuation of the \$1.60 base differential. DFA, the DFA Mountain Area Council (separately), and an individual DFA producer submitted comments specifically objecting to the Department's reliance on the USDSS model's May results as the basis for determining Class I differentials. They argued the USDSS model does not take into account the unique relationships between dairy farmers and Class I manufacturers in Colorado and the proposed Class I differential levels in Colorado should be raised.

MIG made numerous assertions regarding what it believed were arbitrary and capricious changes proposed in the recommended decision, particularly concerning any deviations from the USDSS model. MIG also continued to express strong opposition to the costs accounted for in the \$1.60 base differential, stating that the record lacks sufficient evidence to continue to account for the Grade A and Class I incentive costs, in particular. IDFA also commented that, in its view, there is no record evidence to support that Class I demand is not met and, thus, the decision to increase Class I differentials to incentivize supply to the Class I market is unsubstantiated.

Comments by Crystal Creamery and Lamers Dairy also expressed additional concerns with the proposed Class I differentials. Crystal Creamery reiterated its support for MIG's proposal to eliminate the base differential, which they believed would allow over-order premiums to incentivize supply to fluid plants. However, Crystal Creamery stated that if the Department continued to propose Class I differential increases, it believed the use of the USDSS model results, with no additional adjustments, was the best tool available for determining location differentials. Lamers Dairy expressed its continued opposition to any increase in the Class I differentials and criticized the Department's determination not to account for over-order premiums in its recommended decision because they are, in its view, the real incentive to supplying fluid milk plants.

Considering comments received on the recommended decision and all record evidence, this decision continues to find that the cost of servicing the Class I market is no longer sufficiently reflected by existing Class I differentials. This was evident in the USDSS model 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 by volume 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 increased costs to ensure fluid demand is met. The witnesses also described in detail how the increased 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). This decision continues to find that 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 continues to recommend that the \$1.60

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

per cwt base differential remain.

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 overorder 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 overorder 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 per cwt 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 supply the fluid market would exist to ensure the FMMO policy objective is met. Accordingly, this decision finds a \$1.60 per cwt 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 model's 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 model's 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 continues to find there is record evidence to support raising the Class I differentials from current levels. The record of this proceeding demonstrates 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 to be 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, ". . . [n]ine 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 continues to recommend that Class I differentials be amended, as appropriate, to better reflect the current cost of serving the Class I market. When determining appropriate levels, the Department began with the USDSS model's 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 model results 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 and any changes from the recommended decision for specific locations—made in this final decision 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 Class I differentials in the Northeast region continue to largely follow the May results with minimal changes. The differential for Portland, Maine, continues to be raised to \$4.50 to match the results in Concord, New Hampshire, and 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.

Comments on the recommended decision from NMPF and Upstate Niagara expressed concern with inconsistent Class I differentials across the area of western New York, NMPF and Upstate Niagara commented that the proposed differentials in the recommended decision would require milk supplying Class I destinations in that region to move from higher to lower differential zones, largely due to the geography of the Great Lakes. They requested the Department consider a flatter differential area by raising some counties from \$3.80 to \$3.90 and decreasing others from \$4.00 to \$3.90 to facilitate the movement of milk in different directions. Without an adjustment, they argue, producers will not have the necessary incentive to supply Class I handlers in the region.

After closer review of the record, this decision recommends increasing the Class I differentials in the following counties from \$3.80 to \$3.90: Niagara, Erie, Orleans, Genesee, Wyoming, Livingston, Yates, Ontario, Monroe, and Wayne. This decision also recommends decreasing the currently proposed Class I differentials from \$4.00 to \$3.90 in the counties of Lewis, Jefferson, and St. Lawrence. These changes will create a consistent \$3.90 zone that addresses milk movements in the region. This decision is consistent with record testimony concerning the market in western New York and expected increases in capacity and demand in the region which may potentially require milk to be sourced from outside of the immediate local area.

MDIA, NMPF, and MIG commented on the recommended decision's proposed Class I differentials in Maine and New Hampshire. MDIA requested that the proposed Class I differential for Cumberland County, Maine, be increased from \$4.50 to \$4.85 to restore the previous \$0.25 variance between the

Portland and Boston areas and ensure handler equity in the region. The current spread, MDIA argued, will incentivize Maine producers to ship to handlers in Boston, rather than those located in Cumberland County, Maine (Portland). Similarly, NMPF requested an increase from \$4.50 to \$4.70 for 6 counties in Maine and New Hampshire to maintain producer and handler equity. Lastly, MIG commented in opposition to the Department's proposal to align certain counties in Maine and New Hampshire, at levels \$0.20 above the model results.

The Department considered MDIA, NMPF, and MIG's comments in the context of the overall marketing dynamic in the northeast marketing areas and concluded that the Class I differential for Cumberland County, Maine should remain at \$4.50, as indicated in the recommended decision. This will align the Portland area with nearby Merrimack County, New Hampshire (Concord) to ensure handler equity in the region. The larger increase in Suffolk County, Massachusetts (Boston) reflects the increase in costs to service that market and fluid milk demand. Accordingly, no changes were made to the Class I differentials assigned in this region from the recommended decision to the final decision.

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. NMPF requested the differentials be aligned across southern New Jersey to ensure handlers competing in the same market face the same raw milk costs. The recommended decision proposed changes to the current Class differentials at varied levels for certain counties in southern New Jersey. More specifically, the proposal for Cumberland County, New Jersey was \$4.70, while the proposal for neighboring Burlington, Atlantic and Cape May counties was \$4.80. However, a review of the record reveals these fluid milk plants compete for sales in the same market and should face similar raw milk costs. Therefore, this decision decreases the Class I differentials for Burlington, Atlantic, and Cape May counties from \$4.80 to \$4.70. This change will also align the differentials with the May results and maintain uniform Class I differentials across the region, as has been the case historically.

The differential for Washington, DC, continues to be \$0.10 above the May result to reflect testimony on servicing an urban area.

In eastern Pennsylvania and northern Maryland, NMPF's comments to the recommended decision requested a \$0.10 increase for 7 counties to maintain a historical \$0.10 price difference with Berks County, Pennsylvania, and to promote handler equity. Similarly, in the Philadelphia and Baltimore corridor, which includes areas in Maryland, Delaware, and southern Pennsylvania, NMPF requested \$0.10 to \$0.20 increases in 15 counties due to milk movements in the region and handler equity concerns. The Department considered NMPF's requests to increase the differentials in Pennsylvania, Maryland, and Delaware. However, the proposed differentials are aligned with the USDSS model results and record evidence does not support the requested increases. Accordingly, no additional changes were made to the Class I differentials proposed in Pennsylvania, Maryland, and Delaware from the recommended decision to the final decision.

# 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 the difference between 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 Class I 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 North and South Carolina coasts. 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.

The Department received comments on the Class I differentials proposed in the recommended decision in the Appalachian region from NMPF, IDFA, MIG, and New Dairy. NMPF requested a \$0.20 increase in 9 Virginia counties to align with the differential proposed for nearby Kanawha County, West Virginia. NMPF explained that the handlers in these areas all compete for the same market and receive milk from the same milkshed. NMPF also requested a \$0.20 increase to 40 additional Virginia counties to reduce the spread in the proposed differentials in Virginia and northern North Carolina, as well as a series of changes to the proposed differentials in other Virginia, West Virginia, and North Carolina counties considering logistical and geographical challenges. Conversely, IDFA, MIG, and New Dairy commented in strong opposition to the proposed increases and requested general downward adjustments.

The Department considered all comments on the Class I differentials proposed for the Appalachian region. First, rather than increasing the differentials for certain Virginia counties by \$0.20 to align with Kanawha County, West Virginia, this final decision decreases the proposed differentials for Kanawha County, West Virginia by \$0.20 to \$4.30. As discussed later in this decision with regard to the Mideast region, this change effectively aligns the region and addresses handler equity concerns described on the record in both West Virginia and neighboring Ohio counties that compete in the same market. Second, with regard to all other requested adjustments in this region, this decision finds that the Class I differentials proposed in the recommended decision are aligned with the model results and record evidence does not support additional changes. As such, no additional changes were made to the Class I differentials assigned in this region from the recommended decision to the final decision.

## Southeast

The proposed Class I 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 continue to 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.

NMPF provided specific comments on the Class I differentials proposed in the recommended decision for the southeast region and requested a series of increases in 12 counties located in Tennessee and Kentucky. NMPF's rationale for these requests was based on historical and expected milk movements and known producer equity concerns among those delivering milk from the same milkshed to the same plant locations. The Department considered NMPF's request to increase the Class I differentials in this region. However, the differentials proposed in the recommended decision are aligned with the model results and record evidence does not support the requested increases. Accordingly, no changes were made to the Class I differentials assigned in this region from the recommended decision to the final decision.

# Florida

The proposed Class I 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.

In its comments on the recommended decision, NMPF requested a series of increases of \$0.20 to \$0.40 to the Class I differentials proposed for 14 Florida counties. NMPF cited producer equity concerns and their ability to ensure a sufficient supply of fluid milk to meet consumer demand in high-population areas such as Miami. The Department considered NMPF's requests to increase the differentials in Florida. However, the proposed differentials are generally aligned with the model results and record evidence does not support additional increases. Accordingly, no changes were made to the Class I differentials proposed in this region from the recommended decision to the final decision.

# Upper Midwest

In the Upper Midwest region, this decision continues to propose deviations from the May results 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. Record evidence indicates 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 Class I 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.

The Department received a comment from NMPF concerning the Class I differentials assigned to eastern North Dakota and western Minnesota. NMPF stated the Department's recommended decision changed the historical relationship in the Class I differentials assigned to Cass County, North Dakota, and four, adjacent western Minnesota counties compared to the rest of western Minnesota. More specifically, these counties were proposed at \$2.70, while the surrounding counties were proposed at \$2.80. Without a change, NMPF commented, dairy farmers would be disincentivized to supply Class I handlers in the recommended \$2.70 zone. Considering these comments, this decision increases the Class I differentials for Cass County, North Dakota, and Clay, Becker, Hubbard, and Wilkin counties in Minnesota from \$2.70 to \$2.80. These changes will help to align these counties with the neighboring counties in Minnesota where the record reveals the reserve supply is located. The increase will also incentivize the supply of milk to Class I plants in the area to ensure fluid milk availability to populations throughout North Dakota and northwestern Minnesota.

# Central

The proposed Class I differentials in the Central FMMO start at \$2.30 in western Colorado and increase moving east to \$4.00 in southern Illinois. This decision continues to align 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 to remain aligned with 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 remain aligned with the May result of \$2.70.

Douglas County, Nebraska, and Minnehaha County, South Dakota, proposed Class I differentials are \$2.70 and \$2.60, an increase of \$0.20 and \$0.10, respectively, from the May results. These increases continue to 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 aligned at \$2.90; as they are neighboring counties, 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 continue to be proposed at the same differential of \$3.30. Lincoln and Cleveland counties continue to be proposed in alignment with the May results, which 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.

The Department received specific comments on the Class I differentials proposed in the recommended decision for the Central FMMO region from NMPF, DFA, and DFA's Mountain Area Council in collaboration with Colorado dairy farmers. NMPF's comments focused on producer and handler equity concerns in the region and included a request for a \$0.20 increase in the proposed Class I differentials for 23 Colorado counties. DFA and its Mountain Area Council provided similar comments and argued further that the USDSS model is inappropriate for the Colorado market because of the unique circumstances in that market where a single Class III handler absorbs nearly all the milk produced in Colorado. The DFA Mountain Area Council also reiterated hearing testimony on Colorado milk production costs.

The Department considered all comments received on the Class I

differentials in the State of Colorado. Record evidence, however, does not justify a change in the proposed differentials. While the record reflects the USDSS model did not account for a variety of milk cost of production factors and plant supply relationships, this decision has consistently articulated consideration of producer costs is not appropriate when determining Class I differential levels. As such, no changes were made to the Class I differentials proposed in Colorado from the recommended decision to the final decision.

NMPF also commented on the Class I differentials proposed for 35 counties across Oklahoma, Missouri, and Arkansas, covered by both the Central and Southeast FMMOs. NMPF requested that the Department align these counties at \$3.40 because handlers in the tri-state area all compete for the same markets and are supplied by the same milkshed. This decision finds, however, that record evidence does not justify an additional increase or a reason to align the tri-state area at \$3.40, as the proposed differentials generally follow the model results. As such, no changes were made to the Class I differentials proposed in this region from the recommended decision to the final decision.

# 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. This decision continues to propose Class I differentials for Lake and Huntington counties \$0.40 and \$0.10 lower. respectively, from the May results to provide handler equity in the northern Indiana zone. This decision continues to propose an increase to the Class I differentials in Madison and Wayne counties by \$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.

Considering additional handler equity concerns in southern Ohio, as expressed in comments received from United Dairy, and competition among plants in the region as revealed in hearing testimony, this decision decreases the Class I differentials from \$4.00 to \$3.80 in the counties of Noble, Belmont, Morgan, Jefferson, and Perry, Ohio. United Dairy noted in its comments that current Class I differentials in the region are aligned, vet the recommended decision amended the differentials at higher levels for some counties. United Dairy added that the proposed Class I differentials in the recommended decision set the minimum raw milk price for some Class I handlers located in southern Ohio \$0.20 higher than those in neighboring central Ohio counties. United Dairy asserted that with such a large price difference, it would be at a competitive disadvantage relative to its current price relationships with competitors. Upon further review, this decision finds the Class I differentials proposed in the recommended decision would create competitive disadvantages for plants located in southern Ohio and, thus, a decrease in these counties was appropriate.

West Virgina differentials range from \$4.00 to \$4.80, moving northwest to southeast, and are largely consistent with the May results. However, considering handler equity concerns in West Virginia, as expressed in comments received from NMPF, United Dairy, and the West Virginia Department of Agriculture, this decision decreases the Class I differentials in Cabell, Putnam, Clay, and Kanawha Counties in West Virginia from \$4.50 to \$4.30. NMPF, United Dairy, and the West Virginia Department of Agriculture all highlighted handler equity concerns in their comments because of significantly higher differentials in Kanawha County, West Virginia compared to neighboring West Virginia, Virginia, and southern Ohio counties. To address these concerns, this decision will align the Class I differentials in Cabell, Putnam, Clay, and Kanawha Counties in West Virginia with nearby counties that compete in the same market.

MIG provided specific comments regarding Pennsylvania, urging the Department to lower additional Class I differentials to ensure handler equity with unregulated areas of the State. The Department reviewed relevant record evidence and found no justification to modify the proposed Class I differentials from the recommended decision to the final decision. While the proposed differentials in western Pennsylvania are higher than the May results, they generally follow the model results that showed multiple differential zones through the state moving west to east. As such, this decision continues to propose a Class I differential for Butler, Fayette, Lawrence, and Mercer counties of \$4.00, \$0.10 lower than the May results, to encourage service to the demand areas of Western Pennsylvania.

#### Southwest

The proposed Class I differentials in the Southwest FMMO start at \$2.30 in northwest New Mexico and increase moving southeast to \$4.80 in southeast Texas. 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 aligns with 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, continues to be proposed in alignment with 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.

Upon review of comments received from NMPF and Plains Dairy regarding Class I differentials in New Mexico, this decision proposes to increase the Class I differentials for Bernalillo, Los Alamos, Sandoval, Santa Fe, Socorro, Torrance, and Valencia counties from \$2.40 to \$2.50. NMPF commented specifically that, as proposed in the recommended decision, there would be a \$0.10 disincentive to supply the Class I market in Bernalillo County, New Mexico (Albuquerque). NMPF argued an increase is needed in these counties to ensure there remains an incentive to supply the Class I market in Albuquerque from the reserve supply available in New Mexico, as reflected in

hearing testimony. This change aligns the differentials for the fluid market of Albuquerque with nearby manufacturing markets that compete for the same milk supply and would not disincentivize service to the Class I market in Albuquerque.

Plains Dairy was the only Class I handler to comment in support of the recommended Class I differentials and for use of the USDSS model results. Plains Dairy requested a series of decreases in the southwest region to align with the May results. While this decision increases some of the Class I differentials included in Plains Dairy's comments, it creates a consistent \$2.50 zone in New Mexico so as to not disincentivize milk movements to the milk demand location in Bernalillo County, New Mexico. This change is supported by record testimony concerning the location of the milk supply and demand locations in New Mexico.

This decision also recognizes the competitive relationship between plants located in the Texas panhandle that draw from a common local milk supply, as also discussed by Plains Dairy in its comments. While Plains Dairy requests decreases in some locations, NMPF requests increases in other locations in Texas and neighboring Oklahoma counties. Because processors and manufacturing plants located in the panhandle compete for a shared milk supply, as revealed in the hearing record, this decision finds lowering the differentials in the region to the May results would both disrupt this competitive relationship and disincentivize service to the Class I market. Considering resulting producer and handler equity concerns, deviations from the model results are appropriate for the Southwest region.

MIG also provided specific comments questioning the Department's proposed Class I differentials in certain Texas and New Mexico counties where the model suggested a Class I differential lower than current levels, but the Department proposed an increase. The record of this proceeding reflects the model estimates for some supply locations in Texas and New Mexico were higher than the demand areas where the bottling plants are located. The record does not indicate why such a price relationship is suggested given that economic theory would assume the opposite—the demand areas should have higher differential levels to incentivize milk to supply bottling plants in those locations. During the national hearing, the model authors testified that while the model results entered into evidence give estimates for the 3,108 counties in

the contiguous United States, the model only produces estimates for 663 demand locations. The model then uses a Kriging process which interpolates estimates for the counties between the demand locations. As such, when determining the proposed differentials, adjustments from the model were made to some demand locations in the Texas and New Mexico areas to not disincentivize milk movements from supply to demand locations.

## Arizona

In Arizona, the metropolitan area of Phoenix encompasses both Maricopa and Pinal counties. This decision continues to propose an increase to the Class I differentials for these counties by \$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.

In its comments on the recommended decision, MIG indicated its opposition to the proposed increase in Kern County, California to align with Yuma County, Arizona. The record reflects there are additional costs to service the Los Angeles market that are not accounted for in the USDSS model and, thus, the differentials as proposed in the recommended decision would incentivize milk to service the Los Angeles market, MIG argued the proposed differentials will incentivize dairy farmers in Arizona to supply the California market rather than the Phoenix area, where demand is high. However, the record does not indicate the proposed differentials would cause a milk shortage for the Phoenix market as hearing evidence demonstrates the supply for Phoenix comes from its surrounding area.

Considering the same urban area, NMPF requested an increase from \$2.60 to \$2.80 in Maricopa County, Arizona due to a number of logistical, geographical and climate-related challenges when servicing Phoenix. The Department considered NMPF's comments, however, this decision finds that record evidence does not justify a change in the proposed differentials. Additional costs of servicing the urban area were already considered in determining the proposed differentials, and as already articulated in the decision, producer costs are not an appropriate consideration when determining Class I differential levels. As such, no changes were made to the

Class I differentials assigned in this region from the recommended decision to the final decision.

#### 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, this decision continues to propose an increase to the Class I differential in San Diego by \$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 Class I differentials for Alameda, Contra Costa, Solano, Napa, Marin, and Sonoma counties continue to be proposed 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.

The Department received specific comments from MIG, NMPF, and Crystal Creamery regarding the Class I differentials proposed in California. MIG and Crystal Creamery commented in opposition to the Department's deviations from the USDSS model results in the region and emphasized specific concerns with the Class I differentials proposed for the Fresno area. NMPF requested an increase from \$2.60 to \$2.80 to the Class I differentials for San Bernardino County to align with neighboring counties where handlers compete for the same milk supply.

The Department reviewed and considered these comments and reexamined relevant record evidence. The proposed differentials reflect consideration of the cost to supply the multiple California metropolitan demand centers given its unique geography and significant logistical supply challenges. Witnesses testified and the model authors indicated the USDSS model was not capable of taking these factors into consideration. Therefore, the record supported differential levels higher than the model results. The differentials in the metropolitan areas were raised with consideration for record evidence pertaining to handler equity, geography and traffic congestion. These increases then necessitated changes to the supply regions. A review of the record evidence regarding milk movements in southern California similarly finds no justification for change. Given the large size of San Bernadino County, the largest county in the state, this decision does not find justification to increase the differential applicable to the entire county, given only a small portion is located next to Los Angeles County. Considering this analysis, no changes were made to the Class I differentials assigned in this region from the recommended decision to the final decision.

### 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 Class I 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 Class I 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 that is 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.

The Department received specific requests from NMPF, DFA, and an individual dairy farmer for changes to the Class I differentials proposed for certain counties in northwestern Nevada to address alleged producer equity concerns. NMPF and DFA suggested a flat pricing surface of \$2.20 for 6 Nevada counties, while the dairy farmer requested a \$0.30 increase for Churchill County, Nevada, specifically. The Department reviewed record evidence relevant to the requested changes in Nevada and found no justification for change. The proposed differentials generally follow the May results with a slight increase in Washoe county to encourage milk movements to service the demand in Reno, NV. As such, no changes were made to the Class I differentials assigned in this region from the recommended decision to the final decision.

### Pacific Northwest

In the Pacific Northwest, the proposed Class I differential in Seattle 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.

MIG commented that the Department deviated from the model results in the Pacific Northwest without justification. It also stated that the \$0.20 banding of the Class I differentials is inconsistent

with the Department's proposals for other regions and highlighted several specific differentials of concern. The Department reviewed the record regarding the differentials in the Pacific Northwest FMMO. While MIG contends Portland and Seattle are not comparable demand areas, the record shows similar population areas facing similar geographic and traffic congestion issues that cause milk supply logistical issues necessitating an increase over the model results. The differential for Spokane, Washington was proposed at the model result as it does not face some of the same logistical challenges. The modelrecommended \$2.40 differential for Spokane, which is higher than the surrounding areas, will encourage milk to move to the demand location. As for the banding of differentials in the middle of the Pacific Northwestmarketing area, as referenced in MIGs comment, the model suggested a more gradual differential gradient between the milk supply and demand centers. However, the record does not demonstrate that there are plants located in many of those areas to justify the numerous differential areas. The decision does not find such additional differential values necessary to move milk from supply and demand areas. As such, no changes were made to the Class I differentials assigned in this region from the recommended decision to the final decision.

# Summary

In total, the Class I differentials proposed in this decision reflect a simple average of \$0.01 higher than the 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 May results:

Number of counties	Range of difference	Number of plants
5	-\$0.40 to -\$0.60 -\$0.20 to -\$0.30 -\$0.10 to +\$0.10 +\$0.20 to +\$0.30 +\$0.40 to \$0.60	171

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

This final decision details all requested changes to the proposed Class

I differentials from the recommended decision to the final decision. The Department reviewed and considered all 33 comments received on the Class I differentials but found, as detailed by region above, that any additional changes not made in this final decision were either already considered or were not supported by record evidence.

# 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.

As discussed above, with regard to the Appalachian region, another argument made in post-hearing briefs and in comments 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. MIG, New Dairy, NMPF, and IDFA reiterated these concerns in their comments on the recommended decision and requested the Class I differentials in these orders be reduced by the amount of the TCBF and DPDC payments.

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. As was stated in the recommended decision, 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.

# Demand Elasticity

IDFA, and Nestle USA, commented that Class I differentials should not be increased until a thorough econometric study is conducted to inform decisionmaking. This study, they argued, should center around the relationship between fluid milk prices and retail consumer demand, otherwise referred to by these and other commentors as changes in demand elasticity. Several Class I processors such as United Dairy, Crystal Creamery, New Dairy, and Lamers Dairy, as well as the trade association Pennsylvania Association of Milk Dealers, provided similar comments that described, in their view, changes in

consumer demand because of higher prices and competition from alternative beverages in the marketplace. MIG, IDFA, and PAMD go further in their comments, repeating arguments made at the hearing and in post-hearing briefs centered around the notion that USDA is not authorized to raise differentials because it would decrease demand, which they believe is a violation of the AMAA. More specifically, IDFA and MIG commented that the AMAA requires that FMMOs: (1) consider economic conditions which affect market supply and consumer demand, and (2) be in the public interest. IDFA acknowledged the Department's explanation in the recommended decision that the AMAA does not explicitly state that FMMO provisions should encourage Class I sales. However, IDFA opined that the AMAA does so implicitly. In its view, per the AMAA, FMMOs should never reduce quantity demanded by consumers.

During the hearing and in posthearing briefs, Class I processors and manufacturers similarly argued that 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 argued that consumer 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.

As to whether fluid milk has an inelastic or elastic demand, four studies were entered onto the record, some drawing opposite conclusions. One study found the consumer demand for regular milk to be inelastic, while specialty milk (i.e., lactose free) to be price elastic. A second study concluded consumer demand was elastic, but less so than was determined in the fourth study on the record. Another witness reviewed time series data published within the last 20 years, concluding that consumer demand for fluid milk remains inelastic with respect to milk prices.

The recommended decision highlighted the fourth study which looked at cross-sectional data over relatively short periods of time as an example. This econometric study, entered on behalf of IDFA and emphasized by IDFA and MIG in their comments on the recommended decision, found the retail level demand for fluid milk to be elastic. An analysis of the IDFA study indicates that other than product prices and quantities, no other variables were considered that could explain changes in demand. Some

variables that 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 IDFA 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 studies may be warranted given the evolution of the dairy industry in the last 25 years. However, a conclusion of the long-term consumer demand elasticity of fluid milk cannot be drawn from the varying results of the four studies contained in the record.

MIG and IDFA arguments around elasticity rely on the premise that fluid milk product demand at the retail level is elastic and thus, any increase in Class I prices would lower consumer demand, which they assert would not be in the public interest and violate the AMAA policy objective. The AMAA authorizes marketing orders to provide for more orderly marketing conditions. In the context of milk prices, the AMAA states FMMOs shall ". . . insure a sufficient quantity of pure and wholesome milk, and be in the public interest . . . " 7 U.S.C. 608c(18). This decision emphasizes that one objective of FMMOs is to ensure minimum milk prices reflect supply and demand conditions. In so doing, FMMOs satisfy the AMAA's public interest requirement by ensuring buyers are purchasing raw milk at minimum prices that reflect current market conditions.

Upon review of comments received and all record evidence, the Department maintains the changes proposed in this decision would ensure the FMMO pricing provisions reflect current supply and demand conditions. This decision does not find that the AMAA explicitly states or implies FMMO provisions should encourage Class I sales and thus, a determination of fluid milk consumer demand elasticity is not required. As described in detail throughout this decision, the record of this proceeding reveals the cost of supplying the Class I market has increased. This was demonstrated through the USDSS model, which was an academic exercise to quantify the location-specific cost of servicing Class I plants, and corroborated through witness testimony concerning increasing transportation costs and distances traveled for milk to supply Class I plants.

## 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 drving 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.

As indicated in the recommended decision, 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.

AMS received four comments specific to the Class II differential. NMPF and the Arizona Farm Bureau Federation commented in support of the decision to maintain the current Class II differential. Comments filed in opposition to the recommended decision, from AFBF and the Tennessee Farm Bureau, requested that USDA reconsider increasing the Class II differential for the final decision for reasons previously communicated on the record, which were specifically addressed and rejected in the recommended decision. Therefore, this final decision continues to find it appropriate to maintain the current Class II differential. 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. The differentials are also listed in order of FIPS code, not state abbreviation, in order to be listed alphabetically by state;

- 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:
- 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;
- 8. Amending 7 CFR 1170.8 to remove the collection of 500-pound barrel price information. The order language would no longer be necessary with the proposed amendments to cheese survey.

# Rulings on Proposed Findings and Conclusions

AMS has also considered proposed findings submitted in post-hearing briefs, officially noticed documents, and comments and exceptions filed in response to the recommended decision to formulate this proposed FMMO. These briefs, proposed findings and conclusions, comments and exceptions, 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 the 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.

January 2024 is hereby determined to be the representative period for the purpose of ascertaining whether the issuance of the orders, as amended and as hereby proposed to be amended the uniform pricing provisions in the Northeast, Appalachian, Florida, Southeast, Upper Midwest, Central, Mideast, California, Pacific Northwest, Southwest, and Arizona FMMOs, are approved or favored by producers, as defined under the terms of the orders (as amended and as hereby proposed to be amended), who during such representative period were engaged in the production of milk for sale within the aforesaid marketing areas.

Referendum Order To Determine Producer Approval; Determination of Representative Period; and Designation of Referendum Agent

It is hereby directed that a referendum be conducted and completed on December 31, 2024, in accordance with the procedures for the conduct of referenda (7 CFR 900.300-311), to determine whether the issuance of the order regulating the handling of milk in the Northeast, Appalachian, Florida, Southeast, Upper Midwest, Central, Mideast, California, Pacific Northwest, Southwest, and Arizona marketing areas is approved or favored by producers, as defined under the terms of the order, who during such representative period were engaged in the production of milk for sale within the aforesaid marketing area. The representative period for the conduct of such referenda is hereby determined to be January 2024. The agent of the Secretary of Agriculture to conduct such referenda is hereby designated to be the Director of Operations and Accountability, Dairy Program, AMS, USDA.

List of Subjects in 7 CFR Parts 1000, 1001, 1005, 1006, 1007, 1030, 1032, 1033, 1051, 1124, 1126, 1131, and 1170

Milk marketing orders.

Order Amending the Orders Regulating the Handling of Milk in the Northeast, Appalachian, Florida, Southeast, Upper Midwest, Central, Mideast, California, Pacific Northwest, Southwest, and Arizona Marketing Areas

(This order shall not become effective unless and until the requirements of § 900.14 of the rules of practice and procedure governing proceedings to formulate marketing agreements and marketing orders have been met.)

# **Findings and Determinations**

The findings and determinations hereinafter set forth supplement those that were made when the orders 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.

(a) Findings. A public hearing was held upon certain proposed amendments to the marketing agreement and to the orders regulating the handling of milk in the Northeast, Southeast, Appalachian, Florida, Upper Midwest, Central, Mideast, California, Southwest, Pacific Northwest, and Arizona 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).

Upon the basis of the evidence introduced at such hearing and the record thereof, it is determined that:

- (1) The said orders as hereby amended, and all of the terms and conditions thereof, will tend to effectuate the declared policy of the AMAA;
- (2) The parity prices of milk, as determined pursuant to section 2 of the AMAA, are not reasonable in view of the price of feeds, available supplies of feeds, and other economic conditions which affect market supply and demand for milk in the aforesaid marketing area. The minimum prices specified in the orders as hereby amended 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
- (3) The said orders, as hereby amended, regulate the handling of milk in the same manner as and are applicable only to persons in the respective classes of industrial or

commercial activity specified in, marketing agreements upon which a hearing has been held.

### Order Relative to Handling

It is therefore ordered, that on and after the effective date hereof, the handling of milk in the Northeast, Southeast, Appalachian, Florida, Upper Midwest, Central, Mideast, California, Southwest, Pacific Northwest, and Arizona marketing areas shall be in conformity to and in compliance with the terms and conditions of the orders, as amended, and as hereby amended, as follows:

For the reasons set forth in the preamble, AMS proposes to amend 7 CFR chapter X 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:
- a. In paragraph (a) and paragraph (b) introductory text, removing the words "and § 1135.11 of this chapter";
- b. In paragraph (b)(2) removing the words "or § 1135.11 of this chapter";
- c. Adding paragraph (e). The addition reads as follows:

# § 1000.43 General classification rules.

- (e) Any skim milk used in ultrapasteurized 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 Agricultural 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

(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 onehundredth cent, shall be the U.S. average AMS AA Butter survey price reported by the Department for the month, less 22.72 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 23.93 cents and multiplying the result by 0.99.

(n) Protein price. The protein price per pound, rounded to the nearest onehundredth 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 25.19 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 25.19 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 26.68 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

(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

(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 22.72 cents from this average, and multiplying the result by 1.211.
- (r) Class I Extended Shelf Life (ESL) adjustment. The Class I ESL adjustment, whether positive or negative, 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
DE KALB	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	01067	5.80
JACKSON	AL	01009	5.20
JEFFERSON	AL	01071	5.60
LAMAR	AL	01075	5.40
LAWAIT	\ \C	010/5	5.40

County/parish/city	State	FIPS code	Class I differential adjusted for location
LAUDERDALE	AL	01077	4.90
LAWRENCE	AL	01079	5.20
LEE		01081	5.80
LIMESTONE		01083	5.20
LOWNDESMACON	1	01085 01087	5.80 5.80
MACONMADISON		01087	5.20
MARENGO		01091	5.80
MARION	AL	01093	5.20
MARSHALL	AL	01095	5.40
MOBILE		01097	5.80
MONROE	1	01099	5.80
MONTGOMERY MORGAN		01101 01103	5.80 5.40
PERRY		01105	5.60
PICKENS	1	01107	5.40
PIKE	AL	01109	5.80
RANDOLPH	AL	01111	5.60
RUSSELL		01113	5.80
ST. CLAIR		01115	5.60
SHELBY	1	01117 01119	5.60 5.60
SUMTER TALLADEGA	1	01119	5.60 5.60
TALLAPOOSA		01123	5.60
TUSCALOOSA		01125	5.60
WALKER	1	01127	5.40
WASHINGTON	AL	01129	5.80
WILCOX	AL	01131	5.80
WINSTON		01133	5.40
APACHE		04001	2.30
COCONINO		04003	2.40
GILA	AZ AZ	04005 04007	2.40 2.40
GRAHAM		04009	2.40
GREENLEE		04011	2.40
LA PAZ	AZ	04012	2.50
MARICOPA		04013	2.60
MOHAVE	1	04015	2.50
NAVAJO	1	04017	2.30
PINAL	1	04019 04021	2.40 2.60
SANTA CRUZ		04021	2.40
YAVAPAI	AZ	04025	2.40
YUMA	AZ	04027	2.50
ARKANSAS	AR	05001	4.60
ASHLEY	AR	05003	4.90
BAXTER	1	05005	3.60
BENTON		05007 05009	3.20
BRADLEY	I	05009	3.30 4.60
CALHOUN		05011	4.60
CARROLL		05015	3.30
CHICOT	AR	05017	4.90
CLARK		05019	4.00
CLAY		05021	4.30
CLEBURNE		05023	4.00
CLEVELANDCOLUMBIA		05025 05027	4.60 4.30
CONWAY	I	05027	4.00
CRAIGHEAD		05031	4.30
CRAWFORD		05033	3.30
CRITTENDEN		05035	4.60
CROSS		05037	4.30
DALLAS		05039	4.30
DESHA		05041	4.90
DREWFAULKNER	I	05043 05045	4.60 4.00
FRANKLIN	I	05047	3.60
FULTON		05049	4.00
GARLAND	AR	05051	4.00
GRANT	1 A D	05053	4.30

County/parish/city	State	FIPS code	Class I differential adjusted for location
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 AR	05067 05069	4.30 4.60
JOHNSON	AR	05009	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 AR	05087	3.30
MARION	AR	05089 05091	3.60 4.00
MISSISSIPPI	AR	05091	4.30
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
POPEPRAIRIE	AR AR	05115 05117	3.60 4.30
PULASKI	AR	05117	4.30
RANDOLPH	AR	05113	4.00
ST. FRANCIS	AR	05123	4.60
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
STONE	AR AR	05137 05139	4.00
VAN BUREN	AR	05139	4.60 4.00
WASHINGTON	AR	05141	3.30
WHITE	AR	05145	4.30
WOODRUFF	AR	05147	4.30
YELL	AR	05149	3.60
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
CONTRA COSTA	CA	06011	2.20
DEL NORTE	CA CA	06013 06015	2.40 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
LACCEN	CA	06033	2.20
LASSEN	CA	06035	2.00
MADERA	CA CA	06037 06039	2.80 2.20
MARIN	CA	06039	2.20
	CA	06041	1.80
MARIPOSA			

MERCED	CA CA CA CA CA CA CA CA CA CA CA	06047 06049 06051 06053 06055 06057 06059 06061 06063 06065 06067 06069	2.20 2.00 2.00 2.50 2.40 2.00 2.80 2.00 2.80 2.20
MODOC	CA CA CA CA CA CA CA CA CA CA CA	06049 06051 06053 06055 06057 06059 06061 06063 06065 06067	2.00 2.00 2.50 2.40 2.00 2.80 2.00 2.80 2.20
MONTEREY	CA CA CA CA CA CA CA CA CA	06053 06055 06057 06059 06061 06063 06065 06067	2.50 2.40 2.00 2.80 2.00 2.00 2.80 2.20
IAPA       CA         IEVADA       CA         DRANGE       CA         PLACER       CA         IVENSIDE       CA         SACRAMENTO       CA         SAN BENITO       CA         SAN BERNARDINO       CA         SAN DIEGO       CA         SAN FRANCISCO       CA         SAN JOAQUIN       CA	CA CA CA CA CA CA CA CA	06055 06057 06059 06061 06063 06065 06067 06069	2.40 2.00 2.80 2.00 2.00 2.80 2.20
EVADA	CA CA CA CA CA CA CA CA	06057 06059 06061 06063 06065 06067 06069	2.00 2.80 2.00 2.00 2.80 2.20
DRANGE         CA           DRANGE         CA           DLACER         CA           DLUMAS         CA           RIVERSIDE         CA           SACRAMENTO         CA           SAN BENITO         CA           SAN BERNARDINO         CA           SAN DIEGO         CA           SAN FRANCISCO         CA           SAN JOAQUIN         CA	CA CA CA CA CA CA CA CA	06059 06061 06063 06065 06067 06069	2.80 2.00 2.00 2.80 2.20
PLACER         CA           PLUMAS         CA           RIVERSIDE         CA           BACRAMENTO         CA           SAN BENITO         CA           SAN BERNARDINO         CA           SAN DIEGO         CA           SAN FRANCISCO         CA           SAN JOAQUIN         CA	CA CA CA CA CA CA CA	06061 06063 06065 06067 06069	2.00 2.00 2.80 2.20
PLUMAS         CA           RIVERSIDE         CA           GACRAMENTO         CA           GAN BENITO         CA           GAN BERNARDINO         CA           GAN DIEGO         CA           GAN FRANCISCO         CA           GAN JOAQUIN         CA	CA CA CA CA CA	06063 06065 06067 06069	2.00 2.80 2.20
RIVERSIDE CA SACRAMENTO CA SAN BENITO CA SAN BERNARDINO CA SAN DIEGO CA SAN FRANCISCO CA SAN JOAQUIN CA	CA CA CA CA	06065 06067 06069	2.80 2.20
ACRAMENTO CA SAN BENITO CA SAN BERNARDINO CA SAN DIEGO CA SAN FRANCISCO CA SAN JOAQUIN CA	CA CA CA CA	06067 06069	2.20
SAN BENITO CA SAN BERNARDINO CA SAN DIEGO CA SAN FRANCISCO CA SAN JOAQUIN CA	CA CA CA	06069	
SAN BERNARDINO CASAN DIEGO CASAN FRANCISCO CASAN JOAQUIN CASAN JOAQUIN	CA CA		2.50
SAN DIEGO	CA	00071	2.60
SAN FRANCISCO		06073	2.80
SAN JOAQUIN		06075	2.50
	CA	06077	2.20
SAN LUIS OBISPO   CA	A	06079	2.50
SAN MATEO CA	CA	06081	2.50
SANTA BARBARA CA	CA	06083	2.50
SANTA CLARA   CA	CA	06085	2.50
SANTA CRUZ   CA	A	06087	2.50
SHASTA   CA	A	06089	2.00
SIERRA CA		06091	2.00
SISKIYOU CA		06093	2.00
OLANO		06095	2.40
ONOMA CA		06097	2.40
TANISLAUS		06099	2.20
SUTTER		06101	2.20
EHAMA		06103	2.20
RINITY		06105	2.00
ULARE		06107 06109	2.20 1.80
ZENTURA CA		06111	2.60
OLO CA		06113	2.20
UBA CA		06115	2.00
DAMS		08001	2.70
LAMOSA		08003	2.50
RAPAHOE	O	08005	2.70
RCHULETA CC	O	08007	2.30
3ACA	O	08009	2.50
BENT		08011	2.50
OULDER		08013	2.50
ROOMFIELD		08014	2.50
CHAFFEE	_	08015	2.50
HEYENNE CONTRACTOR OF THE CONT		08017	2.50
CLEAR CREEK	_	08019	2.50
CONEJOS	_	08021	2.50
COSTILLA COS	_	08023 08025	2.50
CUSTER CO	_	08025	2.70 2.70
DELTA CO	_	08027	2.30
DENVER CO	_	08031	2.70
OOLORES	_	08033	2.30
OUGLAS	_	08035	2.70
AGLE		08037	2.50
ELBERT	_	08039	2.70
EL PASO	O	08041	2.70
REMONT	O	08043	2.70
GARFIELD	O	08045	2.30
GILPIN	O	08047	2.50
GRAND	_	08049	2.50
GUNNISON		08051	2.50
IINSDALE	_	08053	2.30
IUERFANO	_	08055	2.70
ACKSON	_	08057	2.50
EFFERSON		08059	2.70
IOWA	_	08061	2.50
IT CARSON	_	08063	2.50
ARIATA		08065	2.50
A PLATA		08067 08069	2.30 2.50

County/parish/city	State	FIPS code	Class I differential adjusted for location
LAS ANIMAS	СО	08071	2.50
LINCOLN		08073	2.70
LOGAN		08075	2.50
MESAMINERAL	1	08077 08079	2.30 2.50
MOFFAT		08079	2.30
MONTEZUMA		08083	2.30
MONTROSE	co	08085	2.30
MORGAN		08087	2.50
OTERO		08089	2.70
OURAY	1	08091	2.30
PARKPHILLIPS		08093 08095	2.70 2.50
PITKIN		08097	2.50
PROWERS		08099	2.50
PUEBLO	co	08101	2.70
RIO BLANCO		08103	2.30
RIO GRANDE	1	08105	2.50
ROUTT		08107	2.50
SAGUACHESAN JUAN	l	08109 08111	2.50 2.30
SAN MIGUEL	1	08113	2.30
SEDGWICK		08115	2.50
SUMMIT		08117	2.50
TELLER		08119	2.70
WASHINGTON		08121	2.50
WELD		08123	2.50
YUMA		08125	2.50
FAIRFIELD		09001	5.00
HARTFORD		09003	4.80
MIDDLESEX	l	09005 09007	4.80 4.80
NEW HAVEN	l	09009	4.80
NEW LONDON	l	09011	4.80
TOLLAND	CT	09013	4.80
WINDHAM		09015	4.80
KENT		10001	4.60
NEW CASTLE		10003	4.40
SUSSEXDISTRICT OF COLUMBIA		10005 11001	4.80 4.70
ALACHUA		12001	6.40
BAKER		12003	6.40
BAY	1	12005	6.00
BRADFORD	FL	12007	6.40
BREVARD	FL	12009	6.80
BROWARD	l	12011	7.40
CALHOUNCHARLOTTE		12013 12015	6.00 7.00
CITRUS		12017	6.80
CLAY	1	12019	6.40
COLLIER		12021	7.40
COLUMBIA	FL	12023	6.40
DE SOTO		12027	7.00
DIXIE		12029	6.40
DUVAL		12031	6.40
ESCAMBIAFLAGLER	l	12033 12035	5.80 6.80
FRANKLIN		12037	6.00
GADSDEN	1	12039	6.00
GILCHRIST		12041	6.40
GLADES		12043	7.00
GULF		12045	6.00
HAMILTON		12047	6.40
HARDEE		12049	7.00
HENDRYHERNANDO		12051 12053	7.40 6.80
HIGHLANDS		12055	7.00
HILLSBOROUGH		12057	6.80
HOLMES		12059	6.00
INDIAN RIVER	FL	12061	7.00
JACKSON			6.00

County/parish/city	State	FIPS code	Class I differential adjusted for location
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
LEVY	FL	12075	6.40
LIBERTY	FL	12077	6.00
MADISONMANATEE	FL   FL	12079	6.00 7.00
MARION	FL	12081 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   FL	12097	6.80
PALM BEACH	FL	12099 12101	7.40 6.80
PINELLAS	FL	12103	6.80
POLK	FL	12105	6.80
PUTNAM	FL	12107	6.40
ST. JOHNS	FL	12109	6.40
ST. LUCIE	FL	12111	7.00
SANTA ROSA	FL	12113	5.80
SARASOTA	FL	12115	7.00
SEMINOLE	FL	12117	6.80
SUMTER	FL	12119	6.80
SUWANNEE	FL   FL	12121	6.40
TAYLORUNION	FL	12123 12125	6.40 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
BALDWINBANKS	GA GA	13009 13011	5.80 5.60
BARROW	GA	13011	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 BURKE	GA GA	13031 13033	6.00 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
CHATTOCCA	GA GA	13053	5.80 5.40
CHATTOOGACHEROKEE	GA GA	13055 13057	5.40 5.60
CLARKE	GA	13057	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

County/parish/city	State	FIPS code	Class I differential adjusted for location
COLUMBIA	GA	13073	5.80
COOK	GA	13075	6.00
COWETA	_	13077	5.80
CRAWFORD	1	13079	5.80
DADE	_	13081 13083	5.80 5.40
DAWSON		13085	5.60
DECATUR	_	13087	6.00
DE KALB	GA	13089	5.80
DODGE	_	13091	5.80
DOOLY	_	13093	5.80
DOUGHERTY		13095	5.80
DOUGLASEARLY	_	13097 13099	5.60 5.80
ECHOLS	_	13101	6.00
EFFINGHAM	GA	13103	6.00
ELBERT	l	13105	5.80
EMANUEL	GA	13107	6.00
EVANS	GA	13109	6.00
FANNIN	GA	13111	5.60
FAYETTE		13113	5.80
FLOYD	-	13115	5.60
FORSYTH	GA GA	13117 13119	5.60
FRANKLINFULTON	GA	13121	5.60 5.80
GILMER	GA	13123	5.60
GLASCOCK		13125	5.80
GLYNN	GA	13127	6.00
GORDON	GA	13129	5.60
GRADY	GA	13131	6.00
GREENE		13133	5.80
GWINNETT	GA	13135	5.80
HABERSHAM	_	13137	5.60
HANCOCK	GA GA	13139 13141	5.60 5.80
HARALSON	GA	13143	5.60
HARRIS		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 GA	13159 13161	5.80 6.00
JEFFERSON	GA	13163	5.80
JENKINS	-	13165	6.00
JOHNSON	GA	13167	5.80
JONES	GA	13169	5.80
LAMAR	_	13171	5.80
LANIER		13173	6.00
LAURENS		13175	5.80
LIBERTY	1	13177 13179	5.80 6.00
LINCOLN	1	13181	5.80
LONG		13183	6.00
LOWNDES		13185	6.00
LUMPKIN		13187	5.60
MCDUFFIE	GA	13189	5.80
MCINTOSH		13191	6.00
MACON		13193	5.80
MADISON		13195	5.80
MARION		13197	5.80 5.80
MERIWETHER		13199 13201	5.80 5.80
MITCHELL	l	13205	5.80
MONROE	l	13207	5.80
MONTGOMERY		13209	6.00
MORGAN	l	13211	5.80
MURRAY	GA	13213	5.40
MUSCOGEE		13215	5.80

County/parish/city	State	FIPS code	Class I differential adjusted for location
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
PICKENS	GA	13227	5.60
PIERCE	GA	13229	6.00
PIKE	GA	13231	5.80
POLKPULASKI	GA GA	13233 13235	5.60 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
STEWARTSUMTER	GA GA	13259 13261	5.80 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 GA	13285 13287	5.60 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
WHITEWHITFIELD	GA GA	13311 13313	5.60 5.40
WILCOX	GA	13315	5.80
WILKES	GA	13317	5.80
WILKINSON	GA	13319	5.80
WORTH	GA	13321	5.80
ADA	ID	16001	1.70
ADAMS	ID	16003	2.00
BANNOCK	ID	16005	2.00
BEAR LAKE	ID	16007	2.20
BENEWAH		16009	2.40
BINGHAM	ID	16011	2.00
BLAINE	ID	16013	1.80
BOISE BONNER	ID   ID	16015 16017	1.70 2.40
BONNEVILLE	ID	16017	2.40
BOUNDARY		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

County/parish/city	State	FIPS code	Class I differential adjusted for location
CUSTER	ID	16037	1.80
ELMORE	ID	16039	1.70
FRANKLIN	ID	16041	2.00
FREMONT	ID	16043	2.00
GEM	ID ID	16045	1.70
GOODINGIDAHO	1	16047 16049	1.70 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
LINCOLN	ID ID	16061 16063	2.00 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
POWERSHOSHONE	ID ID	16077 16079	2.00 2.20
TETON	ID	16079	2.00
TWIN FALLS	İD	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
BROWNBUREAU	IL IL	17009 17011	3.40 3.40
CALHOUN	IL	17011	3.60
CARROLL	iĒ	17015	3.20
CASS	l iL	17017	3.40
CHAMPAIGN	IL	17019	3.60
CHRISTIAN	IL	17021	3.60
CLARK	IL.	17023	3.60
CLAYCLINTON	IL IL	17025 17027	3.60 3.60
COLES	IL	17027	3.60
COOK	iĒ	17023	3.20
CRAWFORD	∣ iĽ	17033	3.60
CUMBERLAND	IL	17035	3.60
DE KALB	IL	17037	3.20
DE WITT	IL	17039	3.40
DUGLAS		17041	3.60
DU PAGEEDGAR	IL   IL	17043 17045	3.20 3.60
EDWARDS		17043	3.60
EFFINGHAM	1	17049	3.60
FAYETTE	IL	17051	3.60
FORD	IL	17053	3.60
FRANKLIN	IL	17055	3.60
FULTON	IL	17057	3.40
GREENE	IL   IL	17059	4.00
GRUNDY	IL	17061 17063	3.60 3.40
HAMILTON	iĒ	17065	3.60
HANCOCK	l iL	17067	3.20
HARDIN	IL	17069	4.00
HENDERSON	IL	17071	3.20
HENRY	1	17073	3.20
IROQUOIS	IL II	17075	3.60
JACKSON	1	17077	3.60
JASPER	IL   IL	17079 17081	3.60 3.60
JERSEY	IL	17081	3.60
	1		3.10
JO DAVIESS	IL	17085	3.10
JO DAVIESS	IL IL	17087	4.00

County/parish/city	State	FIPS code	Class I differential adjusted for location
KANKAKEE	IL	17091	3.40
KENDALL	İL	17093	3.20
KNOX	l iL	17095	3.40
LAKE	l IL	17097	3.10
LA SALLE	l IL	17099	3.40
LAWRENCE	IL	17101	3.60
LEE	IL	17103	3.20
LIVINGSTON	IL	17105	3.40
LOGAN	IL	17107	3.40
MCDONOUGH	IL	17109	3.40
MCHENRY	IL	17111	3.10
MCLEAN	IL	17113	3.40
MACON	IL	17115	3.40
MACOUPIN	IL	17117	3.60
MADISON	l IL	17119	3.60
MARION	l IL	17121	3.60
MARSHALL	l IL	17123	3.40
MASON	l IL	17125	3.40
MASSAC	l IL	17127	4.00
MENARD	l 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
ST. CLAIR	IL	17163	3.60
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
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
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	l IN	18023	3.60
CLINTONCRAWFORD	IN IN	18023	4.00

County/parish/city	State	FIPS code	Class I differential adjusted for location
DEARBORN	IN	18029	3.70
DECATUR	IN	18031	3.70
DEKALB	IN	18033	3.30
DUBOIS	IN IN	18035	3.60
DUBOISELKHART	IN	18037 18039	3.70 3.30
FAYETTE	IN	18041	3.60
FLOYD	IN	18043	4.00
FOUNTAIN	IN	18045	3.60
FRANKLIN	IN	18047	3.70
FULTONGIBSON	IN IN	18049 18051	3.30 3.70
GRANT	IN	18053	3.30
GREENE	İN	18055	3.70
HAMILTON	IN	18057	3.60
HANCOCK	IN	18059	3.60
HARRISON	IN	18061	4.00
HENRY	IN IN	18063 18065	3.60 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 IN	18079 18081	3.70
KNOX	IN	18083	3.60 3.70
KOSCIUSKO	IN	18085	3.30
LAGRANGE	IN	18087	3.30
LAKE	IN	18089	3.30
LA PORTE	IN	18091	3.30
LAWRENCEMADISON	IN IN	18093 18095	3.70 3.60
MARION	IN	18095	3.60
MARSHALL	IN	18099	3.30
MARTIN	IN	18101	3.70
MIAMI	IN	18103	3.30
MONROE	IN	18105	3.70
MONTGOMERY	IN IN	18107 18109	3.60 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
PARKEPERRY	IN IN	18121 18123	3.60 4.00
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 IN	18135 18137	3.60 3.70
RUSH	IN	18139	3.60
ST. JOSEPH	IN	18141	3.30
SCOTT	IN	18143	4.00
SHELBY	IN	18145	3.60
SPENCER	IN	18147	4.00
STARKE	IN	18149	3.30
STEUBENSULLIVAN	IN IN	18151 18153	3.30 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 IN	18165 18167	3.60 3.60
		1010/	0.00

County/parish/city	State	FIPS code	Class I differential adjusted for location
WARREN	IN	18171	3.60
WARRICK	İN	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
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
CHCKASAW	IA	19037	2.90
CLARKE	IA	19039	2.90
CLAYTON	IA	19041	2.60
CLAYTON	IA IA	19043 19045	2.90 3.10
CRAWFORD	IA IA		
DALLAS	IA IA	19047 19049	2.60 2.70
DAVIS	IA IA	19049	2.90
DECATUR	IA 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		19101	2.90
JOHNSON	IA	19103	2.90
JONES		19105	3.10
KEOKUK	IA	19107	2.90
KOSSUTH		19109	2.70
LEE	IA	19111	3.10
LINN		19113	2.90
LOUISA	IA	19115	3.10
LUCAS		19117	2.90
LYON	IA	19119	2.60
MADISON		19121	2.70
MAHASKA		19123	2.90
MARION	IA	19125	2.90
MARSHALL	ı IA	19127	2.90

County/parish/city	State	FIPS code	Class I differential adjusted for location
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
POLKPOTTAWATTAMIE	IA	19153	2.70
POWESHIEK	IA IA	19155 19157	2.70 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
WINNESHIEK	IA IA	19189	2.70
WOODBURY	IA IA	19191 19193	2.80 2.60
WORTH	IA	19195	2.80
WRIGHT	IA	19197	2.70
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
CHAUTAUQUACHEROKEE	KS KS	20019 20021	2.90 3.20
CHEYENNE	KS	20021	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 KS	20047 20049	2.60
ELLIS	KS	20049	2.90 2.50
ELLSWORTH	KS	20051	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

County/parish/city	State	FIPS code	Class I differential adjusted for location
GREENWOOD	. ks	20073	2.90
HAMILTON	KS	20075	2.50
HARPER	_	20077	2.90
HARVEY		20079	2.90
HASKELL		20081	2.50
HODGEMAN	_	20083	2.50
JACKSON	_	20085	2.90
JEWELL JEWELL	1	20087 20089	2.90 2.60
JOHNSON	_	20089	3.20
KEARNY	1	20091	2.50
KINGMAN	1	20095	2.90
KIOWA	1	20097	2.60
LABETTE		20099	3.20
LANE	. KS	20101	2.50
LEAVENWORTH	KS	20103	2.90
LINCOLN	KS	20105	2.60
LINN	KS	20107	3.20
LOGAN	_	20109	2.50
LYON	I	20111	2.90
MCPHERSON	_	20113	2.70
MARION	I	20115	2.70
MARSHALL	I	20117	2.70
MEADE	_	20119	2.50
MIAMI	_	20121	3.20
MITCHELL	1	20123	2.60
MONTGOMERY	_	20125	3.20
MORRIS	_	20127	2.70
MORTONNEMAHA	1	20129 20131	2.50 2.70
NEOSHO	1	20131	2.70
NESS		20135	2.50
NORTON	1	20137	2.50
OSAGE		20139	2.90
OSBORNE	1	20141	2.50
OTTAWA	1	20143	2.70
PAWNEE	. KS	20145	2.50
PHILLIPS	KS	20147	2.50
POTTAWATOMIE	KS	20149	2.70
PRATT	KS	20151	2.60
RAWLINS	I	20153	2.50
RENO	I	20155	2.90
REPUBLIC	I	20157	2.60
RICE	1	20159	2.60
RILEY		20161	2.70
ROOKS	I	20163	2.50
RUSH	I	20165 20167	2.50
RUSSELL SALINE SALINE		20167	2.50 2.70
SCOTT	I	20171	2.50
SEDGWICK		20173	2.90
SEWARD	_	20175	2.50
SHAWNEE		20177	2.90
SHERIDAN	I	20179	2.50
SHERMAN	I	20181	2.50
SMITH	KS	20183	2.50
STAFFORD	KS	20185	2.60
STANTON		20187	2.50
STEVENS		20189	2.50
SUMNER		20191	2.90
THOMAS	I	20193	2.50
TREGO	I	20195	2.50
WABAUNSEE	I	20197	2.90
WALLACE	I	20199	2.50
WASHINGTON		20201	2.70
WICHITA		20203	2.50
WILSON		20205 20207	2.90
MOODEON		20207	2.90
WOODSON			
WOODSON	KS	20209 21001	3.20 4.20

County/parish/city	State	FIPS code	Class I differential adjusted for location
ANDERSON	KY	21005	4.20
BALLARD	KY	21007	4.00
BARREN	KY	21009	4.20
BATH	KY KY	21011 21013	4.20 4.80
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 KY	21025 21027	4.50 4.00
BULLITT	KY	21027	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
CASEY	KY KY	21043 21045	4.20 4.20
CHRISTIAN	KY	21043	4.20
CLARK	KY	21047	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 KY	21063	4.20
FAYETTE FAYETTE	KY	21065 21067	4.20 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
GRAVES	KY KY	21081 21083	4.00 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
HARTHENDERSON	KY KY	21099 21101	4.20 4.00
HENRY	KY	21101	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
JOHNSONKENTON	KY KY	21115	4.50
KNOTT	KY	21117 21119	4.00 4.50
KNOX	KY	21113	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
LINCOLN	KY KY	21135 21137	4.20 4.20
LIVINGSTON	KY	21137	4.20
LOGAN	KY	21141	4.20
LYON	KY	21143	4.00
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County/parish/city	State	FIPS code	Class I differential adjusted for location
MCCREARY	KY	21147	4.50
MCLEAN		21149	4.00
MADISON	KY	21151	4.20
MAGOFFIN	KY	21153	4.50
MARION	KY	21155	4.20
MARSHALL	1	21157	4.00
MARTIN		21159	4.50
MASON		21161	4.20
MEADE	1	21163	4.00
MENIFEE MERCER		21165 21167	4.20 4.20
METCALFE		21167	4.20
MONROE		21171	4.50
MONTGOMERY		21173	4.20
MORGAN	1	21175	4.20
MUHLENBERG		21177	4.00
NELSON	1	21179	4.20
NICHOLAS	KY	21181	4.20
OHIO	KY	21183	4.00
OLDHAM	KY	21185	4.00
OWEN		21187	4.00
OWSLEY		21189	4.50
PENDLETON		21191	4.00
PERRY		21193	4.50
PIKE	1	21195	4.50
POWELL		21197	4.20
PULASKI	1	21199	4.50
ROBERTSONROCKCASTLE	1	21201 21203	4.20 4.20
ROWAN		21205	4.20
RUSSELL		21207	4.50
SCOTT		21209	4.00
SHELBY		21211	4.00
SIMPSON	1	21213	4.20
SPENCER		21215	4.00
TAYLOR	KY	21217	4.20
TODD	KY	21219	4.20
TRIGG	1	21221	4.20
TRIMBLE	1	21223	4.00
UNION		21225	4.00
WARREN	1	21227	4.20
WASHINGTON	1	21229	4.20
WEBSTER	1	21231 21233	4.50 4.00
WHITLEY		21235	4.50
WOLFE	1	21237	4.20
WOODFORD	1	21239	4.20
ACADIA	1	22001	5.20
ALLEN	LA	22003	4.90
ASCENSION	LA	22005	5.20
ASSUMPTION	LA	22007	5.20
AVOYELLES	LA	22009	5.20
BEAUREGARD		22011	4.90
BIENVILLE		22013	4.60
BOSSIER		22015	4.30
CADDO		22017	4.30
CALCASIEU	1	22019	4.90
CAMERON	1	22021	4.90
CATALIOUI A		22023	4.90
CATAHOULA	1	22025	5.20 4.30
CLAIBORNECONCORDIA		22027 22029	4.30 5.20
DE SOTO		22029	4.30
EAST BATON ROUGE		22033	5.20
EAST CARROLL		22035	5.20
EAST FELICIANA		22037	5.20
EVANGELINE	1	22039	4.90
FRANKLIN		22041	4.90
GRANT		22043	4.90
IBERIA		22045	5.20
IBERVILLE		22047	5.20

County/parish/city	State	FIPS code	Class I differential adjusted for location
JACKSON	LA	22049	4.60
JEFFERSON	1	22051	5.60
JEFFERSON DAVIS	LA	22053	4.90
LAFAYETTE	LA	22055	5.20
LAFOURCHE		22057	5.60
LA SALLE		22059	4.90
LINCOLN		22061	4.60
LIVINGSTONMADISON	LA LA	22063	5.40 5.20
MADISONMOREHOUSE		22065 22067	4.90
NATCHITOCHES	LA	22069	4.60
ORLEANS	1	22071	5.60
OUACHITA	LA	22073	4.90
PLAQUEMINES	LA	22075	5.60
POINTE COUPEE	LA	22077	5.20
RAPIDES		22079	4.90
RED RIVER		22081	4.60
RICHLAND		22083	4.90
SABINE	1	22085	4.60
ST. BERNARD		22087	5.60
ST. CHARLESST. HELENA		22089 22091	5.60 5.40
ST. JAMES	1	22093	5.20
ST. JOHN THE BAPTIST		22095	5.60
ST. LANDRY	1	22097	5.20
ST. MARTIN		22099	5.20
ST. MARY	1	22101	5.20
ST. TAMMANY	1	22103	5.60
TANGIPAHOA	LA	22105	5.40
TENSAS	LA	22107	5.20
TERREBONNE		22109	5.60
UNION	1	22111	4.60
VERMILION		22113	5.20
VERNON		22115	4.60
WASHINGTONWEBSTER		22117 22119	5.60 4.30
WEST BATON ROUGE		22119	5.20
WEST CARROLL		22123	4.90
WEST FELICIANA		22125	5.20
WINN		22127	4.60
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	1	23011	4.20
KNOXLINCOLN		23013 23015	4.20 4.20
OXFORD		23017	4.20
PENOBSCOT		23019	3.90
PISCATAQUIS		23021	3.90
SAGADAHOC		23023	4.20
SOMERSET	ME	23025	3.90
WALDO	ME	23027	3.90
WASHINGTON	ME	23029	3.90
YORK	ME	23031	4.50
ALLEGANY		24001	4.10
ANNE ARUNDEL		24003	4.60
BALTIMORE	1	24005	4.40
CAROLINE	1	24009	4.80
CAROLINE		24011	4.60
CECIL		24013 24015	4.40 4.40
CHARLES		24015	4.40
DORCHESTER		24017	4.80
FREDERICK	1	24021	4.40
GARRETT	1	24023	4.10
HARFORD		24025	4.40
HOWARD		24027	4.60
KENT	1	24029	4.60
MONTGOMERY	MD	24031	4.60

QUEEN ANNE'S   MD	County/parish/city	State	FIPS code	Class I differential adjusted for location
OUEEN ANNE'S         MD         24035           ST. MARYS         MD         24037           SOMERISET         MD         24039           TALBOT         MD         24041           WASHINGOL         MD         24041           WASHINGOL         MD         24042           WASHINGOL         MD         24043           WASHINGOL         MD         24041           WASHINGOL         MD         24047           BALTIMORE CITY         MD         24510           BALTIMORE CITY         MA         25001           BERNSTALL         MA         25001           BERNSTALL         MA         25001           BERNSTALL         MA         25006           DISKES         MA         25006           FRANKLIN         MA         25001           HAMPDEN         MA         25013           HAMPDEN         MA         25015           MAPPINER         MA         25015           MIDDLESEX         MA         25017           MATTUCKET         MA         25017           MATTUCKET         MA         25021           MATTUCKET         MA         25021 </td <td>PRINCE GEORGE'S</td> <td>MD</td> <td>24033</td> <td>4.60</td>	PRINCE GEORGE'S	MD	24033	4.60
ST. MAPYS				4.60
TALBOT MD 24041 WASHINGTON MD 24043 WICOMICO MD 24043 WICOMICO MD 24045 WICOMICO MD 24045 WICOMICO MD 24047 BALTIMORE CITY MA 24017 BALTIMORE CITY MA 25001 BALTIMORE CITY MA 25001 BALTIMORE CITY MA 25001 BRISTOL MA 25003 BRISTOL MA 25007 ESSEX MA 25007 ESSEX MA 25007 ESSEX MA 25001 BRISTOL MA 25007 BRISTOL MA 25007 ESSEX MA 25001 BRISTOL MA 250	ST. MARY'S	MD		4.80
WASHINGTON         MD         24043           WICOMICO         MD         24045           WORCESTER         MD         24047           BALTIMORE CITY         MD         24510           BARNSTABLE         MA         25001           BARNSTABLE         MA         25003           BARNSTABLE         MA         25007           BARNSTABLE         MA         25007           BARNSTABLE         MA         25007           BARNSTABLE         MA         25011           HAMPOEN         MA         25011           HAMPOEN         MA         25013           HAMPOEN         MA         25013 <td>SOMERSET</td> <td>MD</td> <td>24039</td> <td>4.80</td>	SOMERSET	MD	24039	4.80
WICOMICO	TALBOT	MD	24041	4.60
WÖRCESTER         MD         24467           BALTIMORE CITY         MD         24510           BALTIMORE CITY         MA         25001           BARNSTABLE         MA         25003           BRISTOL         MA         25003           DIKES         MA         25007           DIKES         MA         25007           DIKES         MA         25011           HAMPORN         MA         25011           HAMPORN         MA         25013           HAMPORN         MA         25013           HAMPORN         MA         25013           HAMPORNICE         MA         25017           NATIOCKET         MA         25017           NATIOCKET         MA         25021           NOFOLK         MA         25021           VORCESTER         MA         25022           ALCONA         MI         26001           ALGER         MI         26003           ALLEGAN         MI         26003           ALPENA         MI         26003           ALPENA         MI         26003           ALPENA         MI         26019           BAPRY </td <td></td> <td></td> <td></td> <td>4.20</td>				4.20
BALTMORE CITY		1		4.80
BARNSTABLE			-	4.80
BERKSHIRE				4.60
BRISTOL		1		5.10
DUKES		1		4.50
ESSEX				5.10 5.10
FRANKIN				5.10
HAMPDEN				4.70
HAMPSHIRE		1		4.70
MODLESEX				4.70
NANTUCKET				5.10
NORFOLK				5.10
PLYMOUTH	1			5.10
SUFFOLK				5.10
WORCESTER				5.10
ALGER  ALLEGAN  ALLEGAN  ALPENA  ALLEGAN  MI  26005  ALPENA  MI  26007  ANTRIM  MI  26007  ARENAC  MI  26011  BARAGA  BARRY  MI  26013  BARRY  MI  26013  BARRY  MI  26015  BAY  MI  26016  BAY  MI  26017  BAY  MI  26017  BAY  MI  26019  BERNIEN  MI  26021  BRANCH  MI  26022  CALHOUN  MI  26025  CASS  MI  26026  CHARLEVOIX  MI  26031  CHIPPEWA  MI  26030  CLINTON  MI  26035  CLINTON  MI  26035  CLINTON  MI  26039  DELTA  MI  26041  DICKINSON  MI  26043  EATON  EATON  MI  26043  EATON  EATON  MI  26047  EATON  EATON  MI  26047  EATON  EATON  MI  26055  GRANTOT  MI  26056  GRANTOT  MI  26056  GRANTOT  MI  26057  MI  26065  GRANTOT  MI  26065  GRANTOT  MI  26065  GRANTOT  MI  26065  GRANTOT  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26068  NGHAMA  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26067  HILLSDALE  MI  26068  HONIA  MI  26068  HONIA  MI  26067  HILLSDALE  MI  26068  HONIA  MI  26068  HONIA  MI  26068  HONIA  MI  26068  HONIA  MI  26069  HONIA  MI  26069  HONIA  MI  26069  HONIA  MI  26069  HONIA  MI  26069  HONIA  MI  26069  HONIA  MI  26069  HONIA  MI  26077  HALLAGANA  MI  26080  HONIA  MI  26080  HONIA  MI  26080  HONIA  MI  26080  HONIA  MI  26080  LAPEER  MI  26080  LAPEER  MI  26080  LAPEER  MI  26080  LAPEER  MI  26080  LAPEER  MI  26080  LAPEER  MI  26080  LAPEER  MI  26080				4.90
ALLEGAN ALPENA ALPENA ALPENA ALPENA ALPENA ALPENA ALPENA ALPENA ALPENA ALPENA ALPENA ALPENA ALPENA ALPENA ALPENA ALPENA ALPENA ALPENA ML ALPENA ALPEN		МІ		3.30
ALPENA ANTRIM ANTRIM ANTRIM BARAGA MI 26009 ARENAC MI 26011 BARAGA MI 26013 BARAY MI 26015 BAY MI 26015 BAY MI 26017 BERRIEN MI 26019 BERRIEN MI 26021 BERRIEN MI 26021 BERRIEN MI 26023 CALHOUN MI 26025 CALHOUN MI 26027 CHARLEVOIX MI 26031 CHEBOYGAN MI 26027 CHARLEVOIX MI 26031 CHIPPEWA MI 26031 CHIPPEWA MI 26031 CHIPPEWA MI 26035 CLARE MI 26035 CLARE MI 26036 CLARE MI 26036 CLARE MI 26036 CLARE MI 26037 CRAWFORD MI 26037 CRAWFORD MI 26037 CRAWFORD MI 26036 CRAWFORD MI 26041 EATON MI 26041 EATON MI 26041 EATON MI 26043 EATON MI 26043 EATON MI 26045 EMMET MI 26046 EMMET MI 26047 GENESSE MI 26051 GOGEBIC MI 26053 GRAND TRAVERSE MI 26053 GRAND TRAVERSE MI 26056 GRATIOT MI 26057 HILLSDALE MI 26067 INCHAMA MI 26067 INCHAMA MI 26067 INCHAMA MI 26067 INCHAMA MI 26067 INCHAMA MI 26067 INCHAMA MI 26075 KALAMAZOO MI 26077 KALAMAZOO MI 26089 INCHAM MI 26089 INCHAMA MI 26077 KALAKSKA MI 26087 INCHAMACOO MI 26087 INCHAMACOO MI 26087 INCHAMACOO MI 26087 INCHAMA MI 26087 INCHAMACOO MI 26087 INCHAMACOO MI 26087 INCHAMACOO MI 26077 KALKASKA MI 26089 INCHAMAU	ALGER	MI	26003	3.00
ANTRIM ARENAC ARENAC  ARENAC  BARAGA  BARRY  MI  BOSO15  BARRY  MI  BOSO17  BENZIE  MI  BERRIEN  MI  BERRIEN  MI  BERRIEN  MI  BOSO25  CALHOUN  MI  26027  CALHOUN  MI  26029  CHEBOYGAN  MI  26031  CHAPEEWA  MI  26031  CLARE  MI  26031  CLARE  MI  26031  CLARE  MI  26037  CRAWFORD  MI  26037  CRAWFORD  MI  26039  DELTA  MI  26039  DELTA  MI  26041  DICKINSON  BARTY  MI  26041  DICKINSON  MI  26041  DICKINSON  MI  26041  DICKINSON  MI  26041  DICKINSON  MI  26041  DICKINSON  MI  26041  DICKINSON  MI  26043  EATON  MI  26045  EMMET  MI  26049  GLADWIN  MI  26049  GLADWIN  MI  26049  GLADWIN  MI  26055  GRANIOTRAVERSE  MI  26069  MI  26069  MI  26069  MI  26069  MI  26069  MI  26069  MI  26069  MI  26069  MI  26069  MI  26069  MI  26067  NI  26067  NI  26067  NI  26067  NI  26067  NI  26067  NI  26067  NI  26067  NI  26067  NI  2607  NI  26067  NI  26067  NI  2607  NI  26067  NI  26067  NI  2607  NI  2607  NI  26067  NI  26067  NI  2607  NI  2607  NI  26067  NI  2607  NI  2607  NI  26067  NI  2607  NI  2607  NI  2607  NI  2607  NI  2607  NI  2607  NI  2607  NI  2607  NI  2607  NI  2608  NI  2607  NI  2608  NI  2607  NI  2608  NI  2607  NI  2607  NI  2608	ALLEGAN	MI	26005	3.30
ARENAC         MI         26011           BARAGA         MI         26013           BARRY         MI         26015           BAY         MI         26017           BERZIE         MI         26019           BERRIEN         MI         26021           BRANCH         MI         26023           CALHOUN         MI         26025           CASS         MI         26025           CHARLEVOIX         MI         26029           CHEBOYGAN         MI         26031           CHIPPEWA         MI         26033           CLARE         MI         26035           CLINTON         MI         26035           CLINTON         MI         26037           CRAWFORD         MI         26039           DELTA         MI         26039           DELTA         MI         26041           DICKINSON         MI         26043           EATON         MI         26044           EATON         MI         26045           EMMET         MI         26047           GENESEE         MI         26049           GLADWIN         MI	ALPENA	MI	26007	3.30
BARACA	ANTRIM	MI	26009	3.30
BARRY	ARENAC	MI	26011	3.30
BAY   BENZIE	BARAGA	MI	26013	3.00
BENZIE	BARRY	MI	26015	3.30
BERRIEN	BAY		26017	3.30
BRANCH				3.30
CALHOUN         MI         26025           CASS         MI         26027           CHARLEVOIX         MI         26029           CHEBOYGAN         MI         26031           CHIPPEWA         MI         26033           CLARE         MI         26035           CLINTON         MI         26037           CRAWFORD         MI         26039           DELTA         MI         26041           DICKINSON         MI         26043           EATON         MI         26045           EMMET         MI         26047           GENESEE         MI         26049           GLADWIN         MI         26051           GOGEBIC         MI         26053           GRATIOT         MI         26055           GRATIOT         MI         26055           HULBOALE         MI         26055           GRATIOT         MI         26055           HUURON         MI         26056           HOUGHTON         MI         26065           HOUGHTON         MI         26065           IONIA         MI         26065           IONIA         M				3.30
CASS       MI       26027         CHARLEVOIX       MI       26029         CHEBOYGAN       MI       26031         CHIPPEWA       MI       26033         CLARE       MI       26035         CLINTON       MI       26037         CRAWFORD       MI       26039         DELTA       MI       26041         DICKINSON       MI       26043         EATON       MI       26045         EMMET       MI       26047         GENESEE       MI       26049         GLADWIN       MI       26051         GOGEBIC       MI       26053         GRAND TRAVERSE       MI       26055         GRATIOT       MI       26057         HILLSDALE       MI       26059         HOUGHTON       MI       26061         HURON       MI       26065         IONIA       MI       26067         IOSCO       MI       26067         IOSCO       MI       26067         IOSCO       MI       26073         KALAMAZOO       MI       26075         KALAMAZOO       MI       26077 <tr< td=""><td></td><td></td><td></td><td>3.30</td></tr<>				3.30
CHARLEVOIX         MI         26029           CHEBOYGAN         MI         26031           CHIPPEWA         MI         26033           CLARE         MI         26035           CLINTON         MI         26037           CRAWFORD         MI         26039           DELTA         MI         26041           DICKINSON         MI         26043           EATON         MI         26045           EMMET         MI         26047           GENESEE         MI         26049           GLADWIN         MI         26051           GOGEBIC         MI         26053           GRAND TRAVERSE         MI         26055           GRATIOT         MI         26057           HILLSDALE         MI         26057           HOUGHTON         MI         26059           HOUGHTON         MI         26063           INGHAM         MI         26065           IONIA         MI         26065           IONIA         MI         26065           IONIA         MI         26065           IONIA         MI         26069           IRON         <				3.30
CHEBOYGAN				3.30
CHIPPEWA       MI       26033         CLARE       MI       26035         CLINTON       MI       26037         CRAWFORD       MI       26039         DELTA       MI       26041         DICKINSON       MI       26043         EATON       MI       26045         EMMET       MI       26047         GENESEE       MI       26049         GLADWIN       MI       26051         GOGEBIC       MI       26053         GRAND TRAVERSE       MI       26055         GRATIOT       MI       26057         HILLSDALE       MI       26069         HOUGHTON       MI       26061         HURON       MI       26063         INGHAM       MI       26065         IONIA       MI       26065         IONIA       MI       26071         ISABELIA       MI       26071         ISABELIA       MI       26071         KALMAZOO       MI       26077         KALMAZOO       MI       26077         KALMAZOO       MI       26081         KEWEENAW       MI       26085				3.30
CLARE       MI       26035         CLINTON       MI       26037         CRAWFORD       MI       26039         DELTA       MI       26041         DICKINSON       MI       26043         EATON       MI       26045         EMMET       MI       26047         GENESEE       MI       26049         GLADWIN       MI       26051         GOGEBIC       MI       26053         GRAND TRAVERSE       MI       26057         GRATIOT       MI       26057         HILLSDALE       MI       26059         HOUGHTON       MI       26061         HURON       MI       26063         INGHAM       MI       26063         IONIA       MI       26065         IONIA       MI       26069         IRON       MI       26071         ISABELLA       MI       26073         JACKSON       MI       26075         KALAMAZOO       MI       26075         KALASKA       MI       26075         KENT       MI       26081         LAKE       MI       26081 <t< td=""><td></td><td></td><td></td><td>3.30</td></t<>				3.30
CLINTON       MI       26037         CRAWFORD       MI       26039         DELTA       MI       26041         DICKINSON       MI       26043         EATON       MI       26045         EMMET       MI       26047         GENESEE       MI       26049         GLADWIN       MI       26051         GOGEBIC       MI       26053         GRAND TRAVERSE       MI       26055         GRATIOT       MI       26057         HILLSDALE       MI       26059         HOUGHTON       MI       26061         HURON       MI       26063         INGHAM       MI       26065         IONIA       MI       26067         IOSCO       MI       26067         IRON       MI       26071         ISABELLA       MI       26075         KALAMAZOO       MI       26075         KALAMAZOO       MI       26077         KALAMAZOO       MI       26077         KENT       MI       26081         LAKE       MI       26081         LAPEER       MI       26087				3.00 3.30
CRAWFORD       MI       26039         DELTA       MI       26041         DICKINSON       MI       26043         EATON       MI       26045         EMMET       MI       26047         GENESEE       MI       26049         GLADWIN       MI       26051         GOGEBIC       MI       26053         GRAND TRAVERSE       MI       26055         GRATIOT       MI       26057         HILLSDALE       MI       26059         HOUGHTON       MI       26061         HURON       MI       26063         INGHAM       MI       26065         IONIA       MI       26067         IOSCO       MI       26069         IRON       MI       26071         ISABELLA       MI       26073         JACKSON       MI       26075         KALAMAZOO       MI       26077         KALASKA       MI       26081         KEWEENAW       MI       26081         LAPEER       MI       26085         LAPEER       MI       26089				3.30
DELTA         MI         26041           DICKINSON         MI         26043           EATON         MI         26045           EMMET         MI         26047           GENESEE         MI         26049           GLADWIN         MI         26051           GOGEBIC         MI         26053           GRAND TRAVERSE         MI         26055           GRATIOT         MI         26057           HILLSDALE         MI         26069           HOUGHTON         MI         26061           HURON         MI         26063           INGHAM         MI         26065           IONIA         MI         26067           IOSCO         MI         26069           IRON         MI         26071           ISABELIA         MI         26073           JACKSON         MI         26075           KALKASKA         MI         26079           KENT         MI         26081           KEWEENAW         MI         26081           LAPEER         MI         26087           LAPEER         MI         26089				3.30
DICKINSON				2.80
EATON		l		2.80
EMMET       MI       26047         GENESEE       MI       26049         GLADWIN       MI       26051         GOGEBIC       MI       26053         GRAND TRAVERSE       MI       26055         GRATIOT       MI       26057         HILLSDALE       MI       26059         HOUGHTON       MI       26061         HURON       MI       26063         INGHAM       MI       26065         IONIA       MI       26067         IOSCO       MI       26069         IRON       MI       26071         ISABELLA       MI       26073         JACKSON       MI       26075         KALAMAZOO       MI       26079         KALKASKA       MI       26079         KENT       MI       26081         KEWEENAW       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089				3.30
GENESEE       MI       26049         GLADWIN       MI       26051         GOGEBIC       MI       26053         GRAND TRAVERSE       MI       26055         GRATIOT       MI       26057         HILLSDALE       MI       26059         HOUGHTON       MI       26061         HURON       MI       26063         INGHAM       MI       26065         IONIA       MI       26067         IOSCO       MI       26069         IRON       MI       26071         ISABELLA       MI       26073         JACKSON       MI       26075         KALAMAZOO       MI       26077         KALKASKA       MI       26079         KENT       MI       26081         KEWEENAW       MI       26083         LAPEER       MI       26087         LEELANAU       MI       26089				3.30
GLADWIN       MI       26051         GOGEBIC       MI       26053         GRAND TRAVERSE       MI       26055         GRATIOT       MI       26057         HILLSDALE       MI       26059         HOUGHTON       MI       26061         HURON       MI       26063         INGHAM       MI       26065         IONIA       MI       26067         IOSCO       MI       26069         IRON       MI       26071         ISABELLA       MI       26073         JACKSON       MI       26075         KALAMAZOO       MI       26077         KALKASKA       MI       26079         KENT       MI       26081         KEWENAW       MI       26085         LAPEER       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089		МІ		3.30
GRAND TRAVERSE       MI       26055         GRATIOT       MI       26057         HILLSDALE       MI       26059         HOUGHTON       MI       26061         HURON       MI       26063         INGHAM       MI       26065         IONIA       MI       26067         IOSCO       MI       26071         ISABELLA       MI       26073         JACKSON       MI       26075         KALAMAZOO       MI       26077         KALKASKA       MI       26079         KENT       MI       26081         KEWEENAW       MI       26083         LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089		MI	26051	3.30
GRATIOT       MI       26057         HILLSDALE       MI       26059         HOUGHTON       MI       26061         HURON       MI       26063         INGHAM       MI       26065         IONIA       MI       26069         IRON       MI       26071         ISABELLA       MI       26073         JACKSON       MI       26075         KALAMAZOO       MI       26077         KALKASKA       MI       26079         KENT       MI       26081         KEWEENAW       MI       26083         LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089	GOGEBIC	MI	26053	2.80
HILLSDALE       MI       26059         HOUGHTON       MI       26061         HURON       MI       26063         INGHAM       MI       26065         IONIA       MI       26067         IOSCO       MI       26069         IRON       MI       26071         ISABELLA       MI       26073         JACKSON       MI       26075         KALAMAZOO       MI       26077         KALKASKA       MI       26079         KENT       MI       26081         KEWEENAW       MI       26083         LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089	GRAND TRAVERSE	MI	26055	3.30
HOUGHTON       MI       26061         HURON       MI       26063         INGHAM       MI       26065         IONIA       MI       26067         IOSCO       MI       26069         IRON       MI       26071         ISABELLA       MI       26073         JACKSON       MI       26075         KALAMAZOO       MI       26077         KALKASKA       MI       26079         KENT       MI       26081         KEWEENAW       MI       26083         LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089	GRATIOT	MI	26057	3.30
HURON       MI       26063         INGHAM       MI       26065         IONIA       MI       26067         IOSCO       MI       26069         IRON       MI       26071         ISABELLA       MI       26073         JACKSON       MI       26075         KALAMAZOO       MI       26077         KALKASKA       MI       26079         KENT       MI       26081         KEWEENAW       MI       26083         LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089	HILLSDALE	MI	26059	3.30
INGHAM		MI	26061	3.00
IONIA       MI       26067         IOSCO       MI       26069         IRON       MI       26071         ISABELLA       MI       26073         JACKSON       MI       26075         KALAMAZOO       MI       26077         KALKASKA       MI       26079         KENT       MI       26081         KEWEENAW       MI       26083         LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089		l		3.30
IOSCO       MI       26069         IRON       MI       26071         ISABELLA       MI       26073         JACKSON       MI       26075         KALAMAZOO       MI       26077         KALKASKA       MI       26079         KENT       MI       26081         KEWEENAW       MI       26083         LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089				3.30
IRON		l		3.30
ISABELLA       MI       26073         JACKSON       MI       26075         KALAMAZOO       MI       26077         KALKASKA       MI       26079         KENT       MI       26081         KEWEENAW       MI       26083         LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089				3.30
JACKSON       MI       26075         KALAMAZOO       MI       26077         KALKASKA       MI       26079         KENT       MI       26081         KEWEENAW       MI       26083         LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089		l		2.80
KALAMAZOO       MI       26077         KALKASKA       MI       26079         KENT       MI       26081         KEWEENAW       MI       26083         LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089				3.30
KALKASKA       MI       26079         KENT       MI       26081         KEWEENAW       MI       26083         LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089		l		3.30
KENT       MI       26081         KEWEENAW       MI       26083         LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089				3.30
KEWEENAW       MI       26083         LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089		l		3.30
LAKE       MI       26085         LAPEER       MI       26087         LEELANAU       MI       26089				3.30 3.00
LAPEER		l		3.30
LEELANAU MI 26089				3.30
		l		3.30
				3.30
		l		3.30
				3.00

County/parish/city	State	FIPS code	Class I differential adjusted for location
MACKINAC	. MI	26097	3.00
MACOMB		26099	3.30
MANISTEE		26101	3.30
MARQUETTE		26103	3.00
MASON		26105	3.30
MECOSTA		26107	3.30
MENOMINEE		26109	2.80
MIDLAND		26111	3.30
MISSAUKEE		26113	3.30
MONROE	.	26115	3.30
MONTCALM	1 1 1111	26117	3.30
MONTMORENCY		26119	3.30
MUSKEGON		26121	3.30
NEWAYGO		26123	3.30
OAKLAND		26125	3.30
OCEANA		26127	3.30
OGEMAW		26129	3.30
ONTONAGON		26131	2.80
OSCEOLA		26133	3.30
OSCODA		26135	3.30
OTTAWA		26137	3.30
OTTAWA		26139	3.30
PRESQUE ISLE		26141	3.30
ROSCOMMON		26143	3.30
SAGINAW		26145	3.30
ST. CLAIR	.   MI	26147	3.30
ST. JOSEPH	.   MI	26149	3.30
SANILAC	.   MI	26151	3.30
SCHOOLCRAFT	. MI	26153	3.00
SHIAWASSEE	. MI	26155	3.30
TUSCOLA	. MI	26157	3.30
VAN BUREN	. MI	26159	3.30
WASHTENAW		26161	3.30
WAYNE		26163	3.30
WEXFORD		26165	3.30
AITKIN		27001	2.80
ANOKA		27003	2.80
BECKER		27005	2.80
BELTRAMI		27007	2.30
BENTON		27009	2.80
BIG STONE		27011	2.70
BLUE EARTH		27013	2.80
BROWN	1	27015	2.80
CARLTON		27017	2.80
CARVER	1	27017	2.80
CASS		27013	2.80
CHIPPEWA		27023	2.80
CHISAGO		27025	2.80
CLAY		27027	2.80
CLEARWATER		27029	2.30
COOK		27031	2.30
COTTONWOOD		27033	2.80
CROW WING		27035	2.80
DAKOTA		27037	2.90
DODGE		27039	2.80
DOUGLAS		27041	2.80
FARIBAULT	.   MN	27043	2.80
FILLMORE	.   MN	27045	2.80
FREEBORN	. MN	27047	2.80
GOODHUE	. MN	27049	2.80
GRANT		27051	2.80
HENNEPIN		27053	2.90
HOUSTON		27055	2.80
HUBBARD		27057	2.80
ISANTI		27059	2.80
ITASCA		27061	2.30
JACKSON		27063	2.80
		27065	2.80
KANAREC.		2/000	2.00
KANDIYOHI		27067	2 00
KANABEC	. MN	27067 27069	2.80 2.30

County/parish/city	State	FIPS code	Class I differential adjusted for location
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
LYON	MN	27083	2.70
MCLEOD	MN	27085	2.80
MAHNOMEN	MN	27087	2.60
MARSHALL	MN	27089	2.30
MARTIN MEEKER	MN MN	27091	2.80 2.80
MILLE LACS	MN	27093 27095	2.80
MORRISON	MN	27093	2.80
MOVER	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
ST. LOUIS	MN	27137	2.30
SCOTTSHERBURNE	MN MN	27139	2.90 2.80
SIBLEY	MN	27141 27143	2.80
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	2.80
WINONA	MN	27169	2.80
WRIGHT	MN	27171	2.80
YELLOW MEDICINE	MN	27173	2.70
ALCORN	MS MS	28001 28003	5.20 4.90
AMITE	MS	28005	5.40
ATTALA	MS	28003	5.20
BENTON	MS	28007	4.90
BOLIVAR	MS	28011	4.90
CALHOUN	MS	28013	5.20
CABROLL	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
DE SOTO	MS	28033	4.60
FORREST	MS	28035	5.80
FRANKLIN	MS	28037	5.20
GEORGE	∣ MS	28039	5.80

County/parish/city	State	FIPS code	Class I differential adjusted for location
GREENE	MS	28041	5.80
GRENADA	1	28043	5.20
HANCOCK	MS	28045	5.80
HARRISON		28047	5.80
HINDS		28049	5.40
HOLMES		28051	5.20
HUMPHREYS	1	28053	5.20
ISSAQUENA	1	28055 28057	5.20
JACKSON	1	28059	5.20 5.80
JASPER	1	28061	5.60
JEFFERSON	1	28063	5.20
JEFFERSON DAVIS	1	28065	5.60
JONES	1	28067	5.60
KEMPER	MS	28069	5.40
LAFAYETTE	MS	28071	4.90
LAMAR	MS	28073	5.80
LAUDERDALE	MS	28075	5.60
LAWRENCE		28077	5.60
LEAKE	_	28079	5.40
LEE	_	28081	5.20
LEFLORE	_	28083	5.20
LINCOLN		28085	5.40
LOWNDES		28087	5.20
MARION		28089 28091	5.40 5.60
MARSHALL		28093	4.90
MONROE		28095	5.20
MONTGOMERY		28097	5.20
NESHOBA	1	28099	5.40
NEWTON		28101	5.60
NOXUBEE		28103	5.40
OKTIBBEHA	MS	28105	5.20
PANOLA	MS	28107	4.90
PEARL RIVER	_	28109	5.80
PERY	_	28111	5.80
PIKE		28113	5.40
PONTOTOC	1	28115	4.90
PRENTISS	1	28117 28119	4.90
RANKIN	l	28121	4.90 5.40
SCOTT	1	28123	5.40
SHARKEY		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		28137	4.90
TIPPAH		28139	4.90
TISHOMINGO		28141	4.90
TUNICA		28143	4.60
UNION		28145	4.90
WALTHALL	_	28147	5.60
WARRENWASHINGTON		28149 28151	5.20 4.90
WAYNE		28153	5.80
WEBSTER		28155	5.20
WILKINSON		28157	5.20
WINSTON		28159	5.40
YALOBUSHA		28161	4.90
YAZOO		28163	5.20
ADAIR		29001	3.20
ANDREW		29003	2.90
ATCHISON		29005	2.70
AUDRAIN	MO	29007	3.40
BARRY		29009	3.20
BARTON	1	29011	3.20
BATES	1	29013	3.20
BENTON	MO	29015	3.20
BOLLINGER	140	29017	3.60

County/parish/city	State	FIPS code	Class I differential adjusted for location
BOONE	МО	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
CLAY	MO MO	29045 29047	3.20 3.20
CLINTON	MO	29047	3.20
COLE	MO	29043	3.40
COOPER	MO	29053	3.40
CRAWFORD	MO	29055	3.60
DADE	MO	29057	3.20
DALLAS	MO	29059	3.30
DAVIESS	МО	29061	3.20
DE KALB	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
GRUNDYHARRISON	MO MO	29079 29081	3.20 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	МО	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
LAWRENCE	MO MO	29107 29109	3.20 3.20
LEWIS	MO	29111	3.20
LINCOLN	_	29113	3.60
LINN	MO	29115	3.20
LIVINGSTON	MO	29117	3.20
MCDONALD	MO	29119	3.20
MACON	MO	29121	3.20
MADISON	MO	29123	3.60
MARIES	MO	29125	3.60
MARION	MO	29127	3.20
MERCER	MO	29129	2.90
MILLER	MO	29131	3.40
MISSISSIPPI	MO	29133	4.00
MONITEAU	MO	29135	3.40
MONROE	MO MO	29137 29139	3.40 3.40
MORGAN	MO	29141	3.40
NEW MADRID	MO	29143	4.00
NEWTON	l	29145	3.20
NODAWAY	MO	29147	2.90
OREGON	MO	29149	4.00
OSAGE	МО	29151	3.60
OZARK	MO	29153	3.60
PEMISCOT	MO	29155	4.30
PERRY	MO	29157	3.60
PETTIS	I MO	29159	3.40

County/parish/city	State	FIPS code	Class I differential adjusted for location
PHELPS	МО	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
ST. CHARLES	MO	29183	3.60
ST. CLAIR	MO	29185	3.20
STE. GENEVIEVE	MO	29186	3.60
ST. FRANCOIS	MO	29187	3.60
ST. LOUIS	MO	29189	3.60
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
SHELBY	MO	29205	3.20
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 MO	29229 29510	3.30
ST. LOUIS CITY BEAVERHEAD	MT	30001	3.60 1.80
BIG HORN	MT	30001	2.40
BLAINE	MT	30005	2.00
BROADWATER	MT	30003	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
MCCONE	MT	30055	2.40
MADISON	MT	30057	1.80
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

County/parish/city	State	FIPS code	Class I differential adjusted for location
PONDERA	МТ	30073	1.70
POWDER RIVER		30075	2.40
POWELL	MT	30077	1.80
PRAIRIE	MT	30079	2.40
RAVALLI	MT	30081	1.80
RICHLAND		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
STILLWATERSWEET GRASS	MT MT	30095 30097	2.40 2.00
TETON		30097	1.70
TOOLE	MT	30101	1.80
TREASURE		30103	2.40
VALLEY	MT	30105	2.30
WHEATLAND		30107	2.00
WIBAUX	MT	30109	2.40
YELLOWSTONE	1	30111	2.40
ADAMS	NE	31001	2.60
ANTELOPE		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	1	31019	2.50
BURT	NE	31021	2.60
BUTLER	1	31023	2.60
CASS	NE	31025	2.70
CEDAR	1	31027	2.60
CHASE	NE	31029	2.50
CHERRY		31031	2.40
CHEYENNE	NE	31033	2.40
CLAY	1	31035	2.60
CUMING	NE	31037	2.60
CUMINGCUSTER	NE NE	31039	2.60
DAKOTA		31041 31043	2.50 2.60
DAWES	NE	31045	2.40
DAWSON	NE	31043	2.50
DEUEL	NE	31049	2.40
DIXON		31051	2.60
DODGE		31053	2.60
DOUGLAS	NE	31055	2.70
DUNDY		31057	2.50
FILLMORE	NE	31059	2.60
FRANKLIN	NE	31061	2.60
FRONTIER		31063	2.50
FURNAS		31065	2.50
GAGE		31067	2.70
GARDEN		31069	2.40
GARFIELD		31071	2.50
GOSPER		31073	2.50
GRANT		31075	2.40
GREELEY		31077	2.60
HALL		31079	2.60
HARLAN		31081 31083	2.60 2.50
HAYES	1	31085	2.50
HITCHCOCK		31087	2.50
HOLT		31087	2.50
HOOKER		31009	2.40
HOWARD		31091	2.60
JEFFERSON		31095	2.60
		31097	2.70
JOHNSON	INL		
JOHNSONKEARNEY		31099	2.60

County/parish/city	State	FIPS code	Class I differential adjusted for location
KEYA PAHA	NE	31103	2.50
KIMBALL		31105	2.40
KNOX	1	31107	2.60
LANCASTER	1	31109	2.60
LINCOLN		31111	2.50
LOGAN		31113	2.40
LOUP		31115	2.50
MCPHERSON		31117	2.40
MADISON	NE	31119	2.60
MERRICK	1	31121	2.60
MORRILL		31123	2.40
NANCE		31125	2.60
NEMAHA		31127	2.70
NUCKOLLS	1	31129	2.60
OTOE		31131	2.70
PAWNEE	l	31133	2.70
PERKINS		31135	2.50
PHELPS	l	31137	2.50
PIERCE	l	31139	2.60
PLATTE			
		31141	2.60
POLK RED WILLOW	1	31143	2.60
		31145	2.50
RICHARDSON		31147	2.70
ROCK	1	31149	2.50
SALINE		31151	2.60
SARPY		31153	2.70
SAUNDERS		31155	2.60
SCOTTS BLUFF		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		31183	2.50
YORK	1	31185	2.60
CHURCHILL	NV	32001	1.90
CLARK	NV	32003	2.60
DOUGLAS	NV	32005	1.80
ELKO		32007	2.00
ESMERALDA		32009	2.20
EUREKA		32011	2.20
HUMBOLDT		32013	1.90
LANDER		32015	2.00
LINCOLN	1	32017	2.50
LYON		32019	1.90
MINERAL		32021	2.00
NYE	1	32023	2.20
PERSHING		32023	
		32027	1.90
STOREY			1.90
WASHOE	1	32031	2.00
WHITE PINE		32033	2.20
CARSON CITY		32510	1.90
BELKNAP	1	33001	4.50
CARROLL		33003	4.50
CHESHIRE		33005	4.50
COOS		33007	4.20
GRAFTON		33009	4.40
HILLSBOROUGH		33011	4.50
MERRIMACK	1	33013	4.50
ROCKINGHAM	NH	33015	4.50
STRAFFORD	NH	33017	4.50
SULLIVAN	NH	33019	4.50
	1	1	
ATLANTIC	NJ	34001	4.70

County/parish/city	State	FIPS code	Class I differential adjusted for location
BURLINGTON	NJ	34005	4.70
CAMDEN	NJ	34007	4.70
CAPE MAY	NJ	34009	4.70
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
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
WARRENBERNALILLO	NJ NM	34041	4.70
CATRON	NM	35001 35003	2.50 2.30
CHAVES	NM	35005	2.50
CIBOLA	NM	35005	2.30
COLFAX	NM	35007	2.50
CURRY	NM	35009	2.50
DE BACA	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	2.50
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
SANDOVAL	NM	35043	2.50
SAN JUAN	NM	35045	2.30
SAN MIGUELSANTA FE	NM NM	35047 35049	2.50 2.50
SIERRA	NM	35051	2.50
SOCORRO	NM	35053	2.50
TAOS	NM	35055	2.50
TORRANCE	NM	35057	2.50
UNION	NM	35059	2.50
VALENCIA	NM	35061	2.50
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
DUTCHESS	NY	36027	4.70
ERIE	NY NY	36029	3.90
FRANKLIN	NY	36031 36033	4.20 4.10
FULTON	NY	36035	4.10
GENESEE	1	36037	3.90
GENEULE	1 1 1 1	30037	3.90

County/parish/city	State	FIPS code	Class I differential adjusted for location
GREENE	NY	36039	4.40
HAMILTON	1 1 1.1.	36041	4.10
HERKIMER		36043	4.00
JEFFERSON		36045	3.90
KINGS	NY	36047	5.10
LEWIS	1	36049	3.90
LIVINGSTON	NY	36051	3.90
MADISON	NY	36053	3.90
MONROE	NY	36055	3.90
MONTGOMERY	NY	36057	4.10
NASSAU	NY	36059	5.10
NEW YORK	NY	36061	5.10
NIAGARA	NY	36063	3.90
ONEIDA	1	36065	3.90
ONONDAGA	1	36067	3.90
ONTARIO		36069	3.90
ORANGE_	1	36071	4.70
ORLEANS	1	36073	3.90
OSWEGO		36075	3.90
OTSEGO	1	36077	4.10
PUTNAM	1 1 1.1.	36079	4.70
QUEENS	1	36081	5.10
RENSSELAER		36083	4.40
RICHMOND	1	36085	5.10
ROCKLAND	1	36087	5.00
ST. LAWRENCE	1	36089	3.90
SARATOGA		36091	4.20
SCHENECTADY	1	36093	4.20
SCHOHARIE	1	36095	4.20
SCHUYLER	1	36097	3.90
SENECA		36099	3.90
STEUBEN		36101	3.90
SUFFOLK	1	36103	5.10
SULLIVAN	1	36105	4.40
TIOGA	1	36107	4.00
TOMPKINS		36109	3.90
ULSTER	1	36111	4.40
WARREN		36113	4.20
WASHINGTON		36115	4.20
WESTCHESTED		36117	3.90
WESTCHESTER		36119 36121	5.00 3.90
YATES		36123	3.90
ALAMANCE		37001	5.40
ALEXANDER	1	37003	5.60
ALLEGHANY	1	37005	5.40
ANSON	1	37007	5.80
ASHE	_	37009	5.40
AVERY		37011	5.40
BEAUFORT	_	37013	5.80
BERTIE	1	37015	5.60
BLADEN	_	37017	5.80
BRUNSWICK		37019	6.00
BUNCOMBE	_	37021	5.40
BURKE	1	37023	5.60
CABARRUS	_	37025	5.60
CALDWELL	1	37027	5.60
CAMDEN		37029	5.60
CARTERET		37031	6.00
CASWELL	NC	37033	5.40
CATAWBA		37035	5.60
CHATHAM	_	37037	5.60
CHEROKEE		37039	5.40
CHOWAN	1	37041	5.60
CLAY	1	37043	5.60
CLEVELAND	1	37045	5.60
COLUMBUS		37047	6.00
CRAVEN	1	37049	6.00
CUMBERLAND		37051	5.80
	1	37053	5.60
CURRITUCK	INC	07000	5.00

County/parish/city	State	FIPS code	Class I differential adjusted for location
DAVIDSON	NC	37057	5.60
DAVIE	_	37057	5.60
DUPLIN	1	37059	5.80
	1		
DURHAM	_	37063	5.40
EDGECOMBE		37065	5.60
FORSYTH	_	37067	5.40
FRANKLIN		37069	5.60
GASTON		37071	5.60
GATES		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		37085	5.80
HAYWOOD		37087	5.40
HENDERSON		37089	5.60
HERTFORD		37091	5.60
	1		
HOKE		37093	5.80
HYDE		37095	5.80
IREDELL	.	37097	5.60
JACKSON		37099	5.60
JOHNSTON	NC	37101	5.80
JONES	NC	37103	6.00
LEE	NC	37105	5.60
LENOIR	NC	37107	5.80
LINCOLN		37109	5.60
MCDOWELL		37111	5.60
	1		5.60
		37113	
MADISON		37115	5.40
MARTIN		37117	5.80
MECKLENBURG		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		37129	6.00
NORTHAMPTON		37131	5.60
ONSLOW		37133	6.00
ORANGE		37135	5.40
		37137	
PAMLICO			6.00
PASQUOTANK		37139	5.60
PENDER		37141	6.00
PERQUIMANS	1	37143	5.60
PERSON	NC	37145	5.40
PITT	NC	37147	5.80
POLK	NC	37149	5.60
RANDOLPH	NC	37151	5.60
RICHMOND		37153	5.80
ROBESON	NC	37155	5.80
ROCKINGHAM		37157	5.40
ROWAN	_	37159	5.60
RUTHERFORD		37161	5.60
SAMPSON		37163	5.80
SCOTLAND		37165	5.80
STANLY		37167	5.60
STOKES	NC	37169	5.40
SURRY	NC	37171	5.40
SWAIN		37173	5.40
TRANSYLVANIA		37175	5.60
TYRRELL		37177	5.80
UNION	_	37179	5.80
VANCE		37181	5.40
WAKE		37183	5.60
WARREN		37185	5.40
WASHINGTON		37187	5.80
WATAUGA		37189	5.40
	NC	37191	5.80
WAYNE	INC		
		37193	5.40
WAYNEWILKESWILSON	NC		5.40 5.80

County/parish/city	State	FIPS code	Class I differential adjusted for location
YANCEY	NC	37199	5.40
ADAMS		38001	2.40
BARNES	1	38003	2.60
BENSON		38005	2.30
BILLINGS		38007	2.40
BOTTINEAUBOWMAN		38009 38011	2.30 2.40
BURKE	1	38013	2.30
BURLEIGH	ND	38015	2.40
CASS		38017	2.80
CAVALIER		38019	2.30
DICKEY	1	38021	2.60
DIVIDE DUNN	1	38023 38025	2.30 2.40
EDDY		38027	2.40
EMMONS		38029	2.40
FOSTER	ND	38031	2.40
GOLDEN VALLEY		38033	2.40
GRAND FORKS		38035	2.30
GRANT		38037	2.40
GRIGGSHETTINGER		38039 38041	2.60 2.40
KIDDER		38043	2.40
LA MOURE		38045	2.60
LOGAN		38047	2.40
MCHENRY		38049	2.30
MCINTOSH	ND	38051	2.40
MCKENZIE		38053	2.40
MCLEAN		38055	2.40
MERCER	1	38057	2.40
MORTONMOUNTRAIL	I	38059 38061	2.40 2.30
NELSON		38063	2.30
OLIVER		38065	2.40
PEMBINA		38067	2.30
PIERCE	ND	38069	2.30
RAMSEY		38071	2.30
RANSOM	1	38073	2.60
RENVILLERICHLAND		38075 38077	2.30 2.60
ROLETTE	1	38077	2.30
SARGENT		38081	2.60
SHERIDAN		38083	2.40
SIOUX	ND	38085	2.40
SLOPE	ND	38087	2.40
STARK		38089	2.40
STEELE		38091	2.60
STUTSMANTOWNER		38093 38095	2.40 2.30
TRAILL		38097	2.60
WALSH		38099	2.30
WARD		38101	2.30
WELLS	ND	38103	2.40
WILLIAMS		38105	2.30
ADAMS		39001	4.00
ASHLAND		39003	3.30
ASHTABULA		39005 39007	3.80 3.80
ATHENS		39009	4.00
AUGLAIZE		39011	3.60
BELMONT		39013	3.80
BROWN		39015	4.00
BUTLER		39017	3.80
CHAMDAICN		39019	3.80
CLARK	l	39021 39023	3.60 3.60
CLERMONT		39025	4.00
CLINTON		39027	3.80
COLUMBIANA	l	39029	4.00
		20021	2.00
COSHOCTONCRAWFORD		39031 39033	3.80 3.60

County/parish/city	State	FIPS code	Class I differential adjusted for location
CUYAHOGA	ОН	39035	3.80
DARKE	_	39037	3.60
DEFIANCE	_	39039	3.30
DELAWARE		39041	3.60
ERIE	OH	39043	3.60
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	1	39057	3.60
GUERNSEY		39059	3.80
HAMILTON		39061	3.80
HANCOCK		39063	3.60
HARDIN	_	39065	3.60
HARRISON		39067	3.80
HENRY		39069	3.30
HIGHLAND		39071	4.00
HOCKING		39073	4.00
HOLMES		39075	3.80
HURON	.	39077	3.60
JACKSON		39079	4.00
JEFFERSON	_	39081	3.80
KNOX	_	39083	3.80
LAWDENCE	_	39085	3.80
LAWRENCELICKING		39087	4.30
LOGAN		39089 39091	3.80 3.60
LORAIN	1	39093	3.80
LUCAS		39095	3.30
MADISON		39093	3.60
MAHONING		39099	4.00
MARION		39101	3.60
MEDINA		39103	3.80
MEIGS		39105	4.30
MERCER		39107	3.30
MIAMI		39109	3.60
MONROE		39111	4.00
MONTGOMERY		39113	3.60
MORGAN	1	39115	3.90
MORROW	OH	39117	3.60
MUSKINGUM	OH	39119	3.80
NOBLE	OH	39121	3.80
OTTAWA	OH	39123	3.60
PAULDING	OH	39125	3.30
PERRY	OH	39127	3.80
PICKAWAY	OH	39129	3.80
PIKE	OH	39131	4.00
PORTAGE		39133	3.80
PREBLE		39135	3.60
PUTNAM		39137	3.30
RICHLAND		39139	3.60
ROSS		39141	4.00
SANDUSKY		39143	3.60
SCIOTO		39145	4.00
SENECA		39147	3.60
SHELBY		39149	3.60
STARK		39151	3.80
SUMMIT		39153	3.80
TRUMBULL		39155	4.00
TUSCARAWAS		39157	3.80
UNION		39159	3.60
VAN WERT		39161	3.30
VINTON		39163	4.00
WARREN		39165	3.80
	OH	39167	4.00
WASHINGTON		20160	7) (7)
WAYNE		39169	3.80
	OH	39169 39171 39173	3.80 3.30 3.60

County/parish/city	State	FIPS code	Class I differential adjusted for location
ADAIR	ОК	40001	3.30
ALFALFA		40003	2.60
ATOKA	_	40005	3.60
BEAVER		40007 40009	2.50
BECKHAMBLAINE		40009	2.60 2.90
BRYAN	1 2	40013	3.60
CADDO		40015	2.90
CANADIAN	_	40017	2.90
CARTER		40019	3.30
CHEROKEECHOCTAW		40021 40023	3.30 3.60
CIMARRON		40025	2.50
CLEVELAND		40027	3.30
COAL	OK	40029	3.60
COMANCHE	I	40031	2.90
COTTON	_	40033	3.30
CRAIG	_	40035	3.20
CREEKCUSTER		40037 40039	3.30 2.60
DELAWARE	I	40041	3.20
DEWEY	_	40043	2.60
ELLIS	OK	40045	2.60
GARFIELD	_	40047	2.90
GARVIN	_	40049	3.30
GRADY	_	40051	3.30
GRANTGREER	1	40053 40055	2.90 2.60
HARMON		40057	2.60
HARPER	I	40059	2.60
HASKELL	OK	40061	3.60
HUGHES	I	40063	3.30
JACKSON	I	40065	2.90
JEFFERSON	I	40067	3.30
KAY	_	40069 40071	3.60 2.90
KINGFISHER	I	40073	2.90
KIOWA		40075	2.90
LATIMER		40077	3.60
LE FLORE		40079	3.60
LINCOLN		40081	3.30
LOVE	_	40083 40085	3.30 3.30
MCCLAIN	I	40083	3.30
MCCURTAIN		40089	3.60
MCINTOSH	OK	40091	3.30
MAJOR	I	40093	2.60
MARSHALL	I	40095	3.60
MAYES		40097 40099	3.20 3.30
MUSKOGEE		40101	3.30
NOBLE		40103	3.20
NOWATA		40105	3.20
OKFUSKEE	OK	40107	3.30
OKLAHOMA		40109	3.30
OKMULGEE		40111	3.30
OSAGEOTTAWA		40113 40115	3.20 3.20
PAWNEE		40117	3.20
PAYNE		40119	3.30
PITTSBURG		40121	3.60
PONTOTOC	OK	40123	3.30
POTTAWATOMIE	I	40125	3.30
PUSHMATAHA	I	40127	3.60
ROGERS MILLS		40129 40131	2.60
ROGERSSEMINOLE		40133	3.20 3.30
SEQUOYAH		40135	3.30
STEPHENS	I	40137	3.30
TEXAS		40139	2.50
		40141	2.90

County/parish/city	State	FIPS code	Class I differential adjusted for location
TULSA	ок	40143	3.30
WAGONER	OK OK	40145	3.30
WASHINGTON	OK OK	40147	3.20
WASHITA	OK	40149	2.60
WOODS	OK	40151	2.60
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 DESCHUTES	OR OR	41015 41017	2.20 2.20
DOUGLAS	OR	41017	2.20
GILLIAM	OR	41013	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
MORROWMULTNOMAH	OR OR	41049 41051	2.20 2.70
POLK	OR	41051	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
ARMSTRONG	PA PA	42003	4.00 4.00
BEAVER	PA	42005 42007	4.00
BEDFORD	PA	42009	4.10
BERKS		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		42023	4.00
CARBON	PA	42025	4.30
CENTRE	1	42027	4.00
CHESTER	PA	42029	4.30
CLARION	PA   PA	42031 42033	4.00
CLINTON		42035	4.00 4.00
COLUMBIA	PA	42037	4.10
CRAWFORD		42039	4.00
CUMBERLAND	PA	42041	4.20
DAUPHIN		42043	4.20
DELAWARE	PA	42045	4.40
ELK	PA	42047	4.00
ERIE	PA	42049	3.90
FAYETTE		42051	4.00
FOREST	PA	42053	4.00
FRANKLIN	PA	42055	4.20
FULTON	∣ PA	42057	4.10

County/parish/city	State	FIPS code	Class I differential adjusted for location
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
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
WASHINGTONWAYNE	PA   PA	42125 42127	4.00 4.30
WESTMORELAND	PA	42127	4.00
WYOMING	PA	42131	4.20
YORK	PA	42133	4.30
BRISTOL	RI	44001	5.10
KENT	RI	44001	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	1	45049	6.00
HORRY	SC	45051	6.00
JASPER	SC	45053	6.00
KERSHAW	SC	45055	6.00

County/parish/city	State	FIPS code	Class I differential adjusted for location
LANCASTER	sc	45057	5.80
LAURENS	SC	45059	5.80
LEE	SC	45061	6.00
LEXINGTON	SC	45063	6.00
MCCORMICK	SC	45065	5.80
MARION	SC	45067	6.00
MARLBORO	SC	45069	5.80
NEWBERRYOCONEE	SC SC	45071 45073	5.80
OCONEEORANGEBURG	SC	45075	5.60 6.00
PICKENS	SC	45073	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
WILIAMSBURG	SC	45089	6.00
YORK	SC	45091	5.60
AURORA	SD	46003	2.60
BEADLE BENNETT	SD SD	46005 46007	2.60 2.40
BON HOMME	SD	46007	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
DAVISON	SD SD	46033 46035	2.40 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
HANSON	SD SD	46059 46061	2.50 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 SD	46083	2.60
LYMANMCCOOK	SD	46085 46087	2.50 2.60
MCPHERSON	SD	46089	2.50
MARSHALL	SD	46091	2.60
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

County/parish/city	State	FIPS code	Class I differential adjusted for location
POTTER	SD	46107	2.50
ROBERTS		46109	2.60
SANBORN		46111	2.60
SHANNON		46113	0.00
SPINK		46115	2.60
STANLEY	_	46117	2.40
SULLY		46119	2.50
TODD	.   22	46121	2.40
TRIPP	l	46123	2.50
TURNER	_	46125	2.60
UNION	1 -	46127	2.60
WALWORTH	1 -	46129	2.50
YANKTON	1 -	46135	2.60
ZIEBACH	_	46137	2.40
ANDERSON		47001	4.90
BEDFORD	I	47001	4.90
		47005	
BENTON			4.60
BLEDSOE		47007	4.90
BLOUNT		47009	5.20
BRADLEY		47011	5.20
CAMPBELL		47013	4.90
CANNON		47015	4.90
CARROLL		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		47031	4.90
CROCKETT		47033	4.30
CUMBERLAND		47035	4.90
DAVIDSON	TN	47037	4.60
DECATUR		47039	4.60
DE KALB	l <b>_</b>	47041	4.90
DICKSON		47043	4.60
DYER		47045	4.30
FAYETTE		47047	4.60
FENTRESS		47049	4.60
FRANKLIN		47051	5.20
GIBSON		47053	4.30
GILES		47055	4.90
GRAINGER		47057	4.90
GREENE		47059	5.20
GRUNDY	l	47061	4.90
HAMBLEN		47063	5.20
HAMILTON	.	47065	5.20
HANCOCK		47067	4.90
HARDEMAN		47069	4.60
HARDIN		47003	4.90
HAWKINS		47071	
			5.20
HAYWOOD		47075	4.60
HENDERSON		47077	4.60
HENRY		47079	4.30
HICKMAN		47081	4.60
HOUSTON		47083	4.60
HUMPHREYS		47085	4.60
JACKSON		47087	4.60
JEFFERSON		47089	5.20
JOHNSON		47091	5.20
KNOX		47093	4.90
LAKE	TN	47095	4.30
LAUDERDALE	TN	47097	4.30
LAWRENCE	TN	47099	4.90
LEWIS		47101	4.90
LINCOLN		47103	5.20
LOUDON		47105	5.20
		47107	5.20
MCMINN	TN		
MCMINN			4.90
	TN	47109 47111	

County/parish/city	State	FIPS code	Class I differential adjusted for location
MARION	TN	47115	5.20
MARSHALL	TN	47117	4.90
MAURY	TN	47119	4.90
MEIGS	TN	47121	5.20
MONROE	TN	47123	5.20
MONTGOMERY	TN	47125	4.30
MOORE	TN	47127	4.90
MORGAN	TN	47129	4.90
OBION	TN	47131	4.30
OVERTON	TN	47133	4.60
PERRY	TN TN	47135	4.60
PICKETT	TN	47137 47139	4.60 5.40
PUTNAM	TN	47139	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
ARANGAS	TX	48005	4.60
ARANSASARCHER	TX TX	48007 48009	4.60 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
CALUQUAL	TX	48055	4.30
CALLALIAN	TX	48057	4.60
CANCRON	TX	48059	3.30
CAMP	TX	48061	4.60
CARSON	TX TX	48063	3.70
CARSON	· 1^	48065	2.50

County/parish/city	State	FIPS code	Class I differential adjusted for location
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
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
CONCHO	TX TX	48093 48095	3.60 3.60
COOKE	TX	48093	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
DE WITT	TX	48123	4.30
DICKENS	TX TX	48125	2.60
DIMMIT DONLEY	TX	48127 48129	4.00 2.50
DUVAL	TX	48131	4.60
EASTLAND	TX	48133	3.60
ECTOR	TX	48135	2.90
EDWARDS	TX	48137	3.60
ELLIS	TX	48139	3.70
EL PASO	TX	48141	2.70
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 48155	2.60
FORT BEND	TX	48157	2.90 4.60
FRANKLIN		48159	3.70
FREESTONE		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	1	48173	3.30
GOLIAD	TX	48175	4.60
GONZALES	1	48177	4.30
GRAY	TX	48179	2.50
GRAYSON		48181	3.70
GREGG	TX	48183	4.00
GRIMESGUADALUPE	TX TX	48185 48187	4.60 4.30
HALE		48189	2.50
HALL	TX	48191	2.50
HAMILTON		48193	3.60
HANSFORD	TX	48195	2.50
HARDEMAN		48197	2.90
HARDIN	TX	48199	4.80
HARRIS	TX	48201	4.80
HARRISON	1	48203	4.00
	T	10005	0.50
HARTLEYHASKELL	TX TX	48205 48207	2.50 2.90

County/parish/city	State	FIPS code	Class I differential adjusted for location
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
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
JACK	TX TX	48235 48237	3.30 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 TX	48269 48271	2.90 4.00
KINNEYKLEBERG	TX	48273	4.60
KNOX	TX	48275	2.90
LAMAR	TX	48277	3.70
LAMB	TX	48279	2.50
LAMPASAS	TX	48281	4.00
LA SALLE	TX	48283	4.30
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
LIPSCOMBLIVE OAK	TX	48295	2.60
LLANO	TX TX	48297 48299	4.30 4.00
LOVING	TX	48301	2.90
LUBBOCK	TX	48303	2.60
LYNN	TX	48305	2.90
MCCULLOCH	TX	48307	3.60
MCLENNAN	TX	48309	4.00
MCMULLEN	TX	48311	4.30
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
MEDINA	TX TX	48325	4.00
MENARD	TX	48327 48329	3.60 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	I IX	48349	3.70

County/parish/city	State	FIPS code	Class I differential adjusted for location
NEWTON	TX	48351	4.80
NOLAN		48353	3.30
NUECES		48355	4.60
OCHILTREE	I	48357	2.50
OLDHAM	TX	48359	2.50
ORANGE	TX	48361	4.80
PALO PINTO	I	48363	3.30
PANOLA	1	48365	4.00
PARKER	I	48367	3.70
PARMER		48369	2.50
PECOS	l	48371	3.30 4.60
POTTER		48373 48375	2.50
PRESIDIO		48377	2.90
RAINS		48379	3.70
RANDALL		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	I	48391	4.60
ROBERTS	I	48393	2.50
ROBERTSON		48395	4.00
ROCKWALL		48397	3.70
RUNNELS	I	48399	3.30
RUSK		48401	4.00
SABINE		48403 48405	4.60
SAN AUGUSTINESAN JACINTO		48407	4.60 4.60
SAN PATRICIO	I	48409	4.60
SAN SABA		48411	3.60
SCHLEICHER		48413	3.60
SCURRY		48415	2.90
SHACKELFORD		48417	3.30
SHELBY		48419	4.60
SHERMAN	TX	48421	2.50
SMITH	TX	48423	3.70
SOMERVELL		48425	3.70
STARR		48427	4.60
STEPHENS		48429	3.30
STERLING		48431	3.30
STONEWALLSUTTON	1	48433	2.90
SUTTONSWISHER	1 111	48435 48437	3.60 2.50
TARRANT	l	48439	3.70
TAYLOR		48441	3.30
TERRELL	I	48443	3.30
TERRY		48445	2.60
THROCKMORTON		48447	3.30
TITUS	TX	48449	3.70
TOM GREEN	TX	48451	3.30
TRAVIS	TX	48453	4.00
TRINITY		48455	4.60
TYLER		48457	4.80
UPSHUR		48459	3.70
UPTON		48461	3.30
UVALDE		48463	4.00
VAL VERDE		48465	3.60
VAN ZANDTVICTORIA	I	48467 48469	3.70
WALKER		48471	4.60 4.60
WALLER		48473	4.60
WARD		48475	2.90
WASHINGTON	I	48477	4.30
WEBB		48479	4.30
WHARTON	I	48481	4.60
WHEELER		48483	2.60
WICHITA		48485	2.90
WILBARGER		48487	2.90
WIEDATIGET		1	
WILLIAMSON	TX	48489 48491	4.60 4.00

County/parish/city	State	FIPS code	Class I differential adjusted for location
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
ZAPATA	TX	48505	4.30
ZAVALA	TX	48507	4.00
BEAVER	UT	49001	2.40
BOX ELDERCACHE	UT UT	49003 49005	2.00 2.20
CARBON	UT	49003	2.20
DAGGETT	UT	49007	2.30
DAVIS	ÜŤ	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 JUANSANPETE	UT UT	49037	2.30
SEVIER	UT	49039 49041	2.20 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
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
FRANKLINGRAND ISLE	VT VT	50011 50013	4.20 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
ACCOMACK	VA	51001	4.80
ALBEMARLE	VA	51003	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
BEDFORDBLAND	VA VA	51019 51021	4.80 4.80
BOTETOURT	VA	51021	4.80
BRUNSWICK	VA	51025	5.20
BUCHANAN	VA	51023	4.80
BUCKINGHAM	VA	51027	4.80
CAMPBELL	VA	51031	4.80
CAROLINE		51033	4.80
CARROLL	VA	51035	5.20
CHARLES CITY	VA	51036	5.20
CHARLOTTE	VA	51037	4.80

CRAIG	County/parish/city	State	FIPS code	Class I differential adjusted for location
CLARKE	CHESTERFIELD	VA	51041	4.80
CULPEPER         VA         51049         4.50           CUMBERIAND         VA         51049         4.80           DICKENSON         VA         51051         4.80           DICKENSON         VA         51053         5.20           CHARTAN         VA         51063         4.50           FAIFRAX         VA         51063         4.50           FAIFRAX         VA         510661         4.50           FLOYD         VA         51066         4.50           GLUCESTER         VA         51066         4.50           GILS         VA         51073         4.80           GLUCESTER         VA         51073         4.80           GREANSVILLE         VA         51073	CLARKE	VA		4.30
CUMBERLAND         VA         51049         480           DIOKKENSON         VA         51051         480           DIOKKENSON         VA         51053         520           ESSEX         VA         51057         480           ESSEX         VA         51057         480           FAUQUIER         VA         51063         420           FAUQUIER         VA         51063         425           FLOYD         VA         51063         425           FLUVANNA         VA         51066         4.50           FLUVANNA         VA         510667         4.80           FREDERICK         VA         510667         4.80           FREDERICK         VA         51067         4.80           GOCCHAND         VA         51073         520           GOCCHAND         VA         51077         520           GREENSVILE         VA         51063         520           HANDOR         VA         51077         520           GREENSVILE         VA         51063         520           HARDOR         VA         51063         520           HENRY         VA         51063	CRAIG	VA	51045	4.80
DICKENSON         VA         51051         4.80           DINWIDDIE         VA         51053         5.22           ESSEX         VA         51057         4.80           FAIRFAX         VA         51053         4.80           FLOYDI         VA         51053         5.20           FLOYDI         VA         51063         5.20           FLOYDI         VA         51068         5.20           FLOYDI         VA         51068         5.20           FLUVANNA         VA         51068         5.20           FRANKLIN COUNTY         VA         51069         4.80           GILES         VA         51073         5.20           GILES         VA         51073         5.20           GILES         VA         51073         5.20           GREENE         VA         51073         5.20           GREENE         VA         51079         5.20           GREENSVILLE         VA         51083         5.22           HAUFAX         VA         51083         5.22           HANOVER         VA         51084         5.80           HANOVER         VA         51086	CULPEPER	VA	51047	4.50
DINWIDDE	CUMBERLAND		51049	4.80
ESSEX				4.80
FAIRFAX				
FAUQUIER				
FLOYD				
FLUVANNA				
FRANKLIN COUNTY				
GILES GILCSTER VA 51071 4.80 GOOCHLAND VA 51075 4.80 GOOCHLAND VA 51075 4.80 GOOCHLAND VA 51075 4.80 GOOCHLAND VA 51077 5.20 GREENS VA 51079 4.50 GREENS VA 51079 4.50 GREENSUILE VA 51083 5.20 HALIFAX VA 51083 5.20 HALIFAX VA 51083 5.20 HALIFAX VA 51083 5.20 HALIFAX VA 51083 5.20 HERRIO VA 51086 4.80 HERRIO VA 51086 4.80 HERRIO VA 51086 4.80 HERRIO VA 51086 4.80 HERRIO VA 51098 4.80 HERRIO VA 51098 4.80 HERRIO VA 51098 5.20 KING AND QUEEN VA 51097 4.80 KING WILLIAM VA 51097 4.80 KING WILLIAM VA 51097 4.80 KING WILLIAM VA 51099 4.80 KING WILLIAM VA 51101 4.80 LEE VA 51105 4.80 LEE VA 51105 4.80 LEE VA 51105 4.80 LUDDOUN VA 51107 4.40 LUJISA VA 51109 4.50 A.80 HARRIO VA 51111 5.20 MADISCON VA 51111 5.20 MADISCON VA 51111 5.20 MADISCON VA 51111 5.20 MADISCON VA 51111 5.20 MADISCON VA 51111 5.20 MADISCON VA 51111 5.20 MADISCON VA 51111 6.20 MADISCON VA 51111 6.20 MADISCON VA 51111 6.20 MADISCON VA 51111 6.20 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51113 4.80 MADISCON VA 51115 4.50 MADISCON VA 51115 4.50 MADISCON VA 51115 4.80 MA				4.80
GLOUCESTER		VA		4.30
GOOCHLAND GAYSON SA 51075 GAYSON SA 51077 S 20 GREENS VA 51079 S 25 GREENSUILE VA 51079 S 25 GREENSUILE VA 51081 S 20 HALIFAX VA 51083 S 20 HALIFAX VA 51083 S 20 HANICVER VA 51086 S 20 HENRICO VA 51087 S 20 HENRICO VA 51087 S 20 HENRICO VA 51089 S 20 HENRICO VA 51089 S 20 HENRICO VA 51089 S 20 HENRICO VA 51089 S 20 HENRICO VA 51089 S 20 HENRICO VA 51089 S 20 HENRICO VA 51089 S 20 HENRICO VA 51089 S 20 HENRICO VA 51099 S 20 HENRICO VA 51099 S 20 HENRICO VA 51097 S 20 HENRICO VA 51097 S 20 HENRICO VA 51097 S 20 HENRICO VA 51097 S 20 HENRICO VA 51097 S 20 HENRICO VA 51097 S 20 HENRICO VA 51097 S 20 HENRICO VA 51097 S 20 HENRICO VA 51097 S 20 HENRICO VA 51097 S 20 HENRICO VA 51101 S 20 HENRICO VA 51101 S 20 HENRICO VA 51101 S 20 HENRICO VA 51103 S 20 HENRICO VA 51103 S 20 HENRICO VA 51105 S 20 HENRICO VA 51105 S 20 HENRICO VA 51105 S 20 HENRICO VA 51107 S 20 HENRICO VA 51107 S 20 HENRICO VA 51111 S 20 HENRICO VA 51113 S 20 HENRICO VA 51113 S 20 HENRICO VA 51113 S 20 HENRICO VA 51113 S 20 HENRICO VA 51113 S 20 HENRICO VA 51113 S 20 HENRICO VA 51113 S 20 HENRICO VA 51113 S 20 HENRICO VA 51131 S 20 HENRICO VA 51131 S 20 HENRICO VA 51131 S 20 HENRICO VA 51133 S 20 HENRICO VA 51133 S 20 HENRICO VA 51134 S 20 HENRICO VA 51135 S 20 HENRICO VA 51135 S 20 HENRICO VA 51135 S 20 HENRICO VA 51136 S 20 HENRICO VA 51136 S 20 HENRICO VA 51136 S 20 HENRICO VA 51136 S 20 HENRICO VA 51136 S 20 HENRICO VA 51136 S 20 HENRICO VA 51136 S 20 HENRICO VA 51136 S 20 HENRICO VA 51136 S 20 HENRICO VA 51136 S 20 HENRICO VA 51136 S 20 HENRICO VA 51136 S 20 HENRICO VA 51136 S 20 HENRICO VA 51136 S 20 HENRICO VA 51137 S 20 HENRICO VA 51136 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51137 S 20 HENRICO VA 51	GILES	VA	51071	4.80
GRAYSON  GREENE  (REENEVILLE  (VA 51087)  GREENES  (VA 51081)  GREENES  (VA 51081)  FALIFAX  (VA 51083)  FALIFAX  (VA 51083)  FALIFAX  (VA 51085)  FALIFAX  (VA 51085)  FALIFAX  (VA 51085)  FALIFAX  (VA 51085)  FALIFAX  (VA 51085)  FALIFAX  (VA 51086)  FALIFAX  (VA 51089)  FALIFAX  (VA 51089)  FALIFAX  (VA 51089)  FALIFAX  (VA 51089)  FALIFAX  (VA 51083)  FALIFAX  (VA 51083)  FALIFAX  (VA 51084)  FALIFAX  (VA 51086)  FALIFAX  (VA 51086)  FALIFAX  (VA 51096)  FALIFAX  (VA 51103)  FALIFAX  (VA 51103)  FALIFAX  (VA 51103)  FALIFAX  (VA 51103)  FALIFAX  (VA 51103)  FALIFAX  (VA 51103)  FALIFAX  (VA 51103)  FALIFAX  (VA 51101)  FALIFAX  FALIFAX  FALIFAX  FALIFAX  FALIFAX  FALIFAX  FALIFAX  FALIFAX	GLOUCESTER	VA	51073	5.20
GREENSUILE         VA         51079         4.50           GREENSUILE         VA         51083         5.20           HALIFAX         VA         51083         5.20           HANOVER         VA         51085         4.80           HENRICO         VA         51087         4.80           HENRY         VA         51091         4.80           HIGHLAND         VA         51093         5.20           JAMES CITY         VA         51093         5.20           KING AND QUEEN         VA         51095         5.20           KING GEORGE         VA         51099         4.80           KING GEORGE         VA         51103         5.20           KING WILLIAM         VA         51103         5.20           KING WILLIAM         VA         51103         5.20           LEE         VA         51103         5.20           LEE         VA         51103         5.20           LEE         VA         51103         5.20           LOUDON         VA         51113         4.50           MADISON         VA         51113         4.50           MADISON         VA				4.80
GREENSVILLE         VA         51081         5.20           HANDVER         VA         51085         4.80           HENRICO         VA         51085         4.80           HENRIY         VA         51089         5.20           HENRY         VA         51089         5.20           HIGHLAND         VA         51093         5.20           ISLE OF WIGHT         VA         51093         5.20           JAMES CITY         VA         51097         4.80           KING AND QUEEN         VA         51097         4.80           KING GEORGE         VA         51109         4.80           KING WILLIAM         VA         51101         4.80           LEE         VA         51105         5.20           LEE         VA         51105         4.80           LOUDOUN         VA         51109         4.50           LOUISA         VA         51109         4.50           LUNENBURG         VA         51111         5.20           MADISCON         VA         51113         5.20           MADISCON         VA         51113         5.50           MATHEWS         VA				
HALIFAX				
HANOVER				
HENRICO				
HENRY				
HIGHLAND				
ISLE OF WIGHT				
JAMES CITY				
KING AND QUEEN		1		
KING GEORGE				
LANCASTER				4.80
LEE	KING WILLIAM	VA	51101	4.80
LOUDOUN	LANCASTER	VA	51103	5.20
LOUISA	LEE	VA	51105	4.80
LUNENBURG         VA         51111         5.20           MADISON         VA         51113         4.50           MATHEWS         VA         51115         5.20           MECKLENBURG         VA         51117         5.20           MIDCLESEX         VA         51119         5.20           MONTGOMERY         VA         51121         4.80           NELSON         VA         51125         4.50           NEW KENT         VA         51127         5.20           NORTHAMPTON         VA         51131         4.80           NOTTOWAY         VA         51133         4.80           NOTTOWAY         VA         51137         4.50           PAGE         VA         51139         4.30           PAGE         VA         51139         4.30           PAGE         VA         51141         5.20           PATRICK         VA         51143         5.20           PITTSYLVANIA         VA         51143         5.20           POWHATAN         VA         51145         4.80           PRINCE GEORGE         VA         51146         4.80           PRINCE WILLIAM         VA			51107	4.40
MADISON		1		4.50
MATHEWS         VA         51115         5.20           MECKLENBURG         VA         51117         5.20           MIDDLESEX         VA         51119         5.20           MONTGOMERY         VA         51121         4.80           NELSON         VA         51127         5.20           NEW KENT         VA         51127         5.20           NORTHAMPTON         VA         51131         4.80           NORTHUMBERLAND         VA         51133         4.80           NOTTOWAY         VA         51135         4.80           ORANGE         VA         51137         4.50           PAGE         VA         51137         4.50           PAGE         VA         51139         4.30           PATRICK         VA         51141         5.20           POWHATAN         VA         51143         5.20           POWHATAN         VA         51145         4.80           PRINCE EDWARD         VA         51145         4.80           PRINCE WILLIAM         VA         51155         4.80           PULASKI         VA         51155         4.80           ROPAHANDOCK         VA<				
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         NORTHAMPTON       VA       51131       4.80         NORTHUMBERLAND       VA       51133       4.80         NORTHUMBERLAND       VA       51133       4.80         NORTOWAY       VA       51135       4.80         ORANGE       VA       51137       4.50         PAGE       VA       51139       4.30         PATRICK       VA       51141       5.20         PITSYLVANIA       VA       51141       5.20         POWHATAN       VA       51143       5.20         PRINCE EDWARD       VA       51145       4.80         PRINCE EDWARD       VA       51143       5.20         PRINCE GEORGE       VA       51153       4.50         PRINCE WILLIAM       VA       51153       4.50         PULASKI       VA       51155       4.50         ROCKBRIDGE       VA <t< td=""><td></td><td></td><td></td><td></td></t<>				
MIDDLESEX				
MONTGOMERY				
NELSON       VA       51125       4.55         NEW KENT       VA       51127       5.20         NORTHAMPTON       VA       51131       4.80         NORTHUMBERLAND       VA       51135       4.80         NORTOWAY       VA       51135       4.80         ORANGE       VA       51137       4.50         PAGE       VA       51139       4.30         PAGE       VA       51141       5.20         PATRICK       VA       51143       5.20         PITTSYLVANIA       VA       51143       5.20         POWHATAN       VA       51145       4.80         PRINCE EDWARD       VA       51147       4.80         PRINCE GEORGE       VA       51147       4.80         PRINCE WILLIAM       VA       51153       4.50         PULASKI       VA       51153       4.50         RAPPAHANNOCK       VA       51157       4.50         RICHMOND       VA       51157       4.50         ROANOKE       VA       51161       4.80         ROCKINGHAM       VA       51163       4.50         RUSSELL       VA       51167				
NEW KENT         VA         51127         5.20           NORTHAMPTON         VA         51131         4.80           NORTHUMBERLAND         VA         51133         4.80           NOTTOWAY         VA         51135         4.80           ORANGE         VA         51137         4.50           PAGE         VA         51139         4.50           PAGE         VA         51141         5.20           PATRICK         VA         51141         5.20           POWHATAN         VA         51143         5.20           POWHATAN         VA         51147         4.80           PRINCE EDWARD         VA         51147         4.80           PRINCE GEORGE         VA         51153         4.50           PRINCE WILLIAM         VA         51153         4.50           PULSKI         VA         51155         4.80           RAPPAHANOCK         VA         51155         4.80           RICHMOND         VA         51161         4.80           ROCKBRIDGE         VA         51163         4.50           ROCKINGHAM         VA         51165         4.30           RUSSELL <td< td=""><td></td><td></td><td></td><td></td></td<>				
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NORTHUMBERLAND         VA         51133         4.80           NOTTOWAY         VA         51135         4.80           ORANGE         VA         51137         4.50           PAGE         VA         51139         4.30           PATRICK         VA         51141         5.20           PHTSYLVANIA         VA         51143         5.20           POWHATAN         VA         51145         4.80           PRINCE GEORGE         VA         51147         4.80           PRINCE WILLIAM         VA         51153         4.50           PULASKI         VA         51153         4.50           PULASKI         VA         51155         4.80           RAPPAHANNOCK         VA         51157         4.50           RICHMOND         VA         51159         4.80           ROKKBRIDGE         VA         51163         4.80           ROCKBRIDGE         VA         51163         4.50           ROCKINGHAM         VA         51163         4.80           ROCKINGHAM         VA         51165         4.30           RUSSEL         VA         51166         4.30           SHENANDOAH				4.80
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PATRICK         VA         51141         5.20           PITTSYLVANIA         VA         51143         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           PRINCE WILLIAM         VA         51155         4.80           PULASKI         VA         51157         4.50           RAPPAHANNOCK         VA         51157         4.50           ROKIMOND         VA         51159         4.80           ROANOKE         VA         51161         4.80           ROCKBRIDGE         VA         51163         4.50           ROCKINGHAM         VA         51165         4.30           RUSSELL         VA         51167         4.80           SCOTT         VA         51169         4.80           SHENANDOAH         VA         51173         5.20           SMYTH         VA         51173         5.20           SOUTHAMPTON         VA         51175         5.20           SPOTSYLVANIA </td <td>ORANGE</td> <td>VA</td> <td>51137</td> <td>4.50</td>	ORANGE	VA	51137	4.50
PITTSYLVANIA	PAGE	VA	51139	4.30
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           RAPPAHANNOCK         VA         51157         4.50           RICHMOND         VA         51159         4.80           ROCKBRIDGE         VA         51161         4.80           ROCKINGHAM         VA         51163         4.50           RUSSELL         VA         51167         4.80           SCOTT         VA         51167         4.80           SHENANDOAH         VA         51171         4.30           SHENANDOAH         VA         51173         5.20           SOUTHAMPTON         VA         51173         5.20           SPOTSYLVANIA         VA         51177         4.50           SUSRY         VA         51181         5.20           SUSSEX         VA         51183         5.20           TAZEWELL         VA         51185         4.80           WARREN	PATRICK		51141	5.20
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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         SURRY       VA       51181       5.20         SUSSEX       VA       51183       5.20         TAZEWELL       VA       51183       5.20         WARREN       VA       51185       4.80		VA		4.30
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         SURRY       VA       51181       5.20         SUSSEX       VA       51181       5.20         TAZEWELL       VA       51183       5.20         WARREN       VA       51185       4.80         WARREN       VA       51187       4.30	RUSSELL	VA	51167	4.80
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SOUTHAMPTON       VA       51175       5.20         SPOTSYLVANIA       VA       51177       4.50         STAFFORD       VA       51179       4.50         SURRY       VA       51181       5.20         SUSSEX       VA       51183       5.20         TAZEWELL       VA       51185       4.80         WARREN       VA       51187       4.30	SHENANDOAH		51171	4.30
SPOTSYLVANIA       VA       51177       4.50         STAFFORD       VA       51179       4.50         SURRY       VA       51181       5.20         SUSSEX       VA       51183       5.20         TAZEWELL       VA       51185       4.80         WARREN       VA       51187       4.30				5.20
STAFFORD       VA       51179       4.50         SURRY       VA       51181       5.20         SUSSEX       VA       51183       5.20         TAZEWELL       VA       51185       4.80         WARREN       VA       51187       4.30				5.20
SURRY       VA       51181       5.20         SUSSEX       VA       51183       5.20         TAZEWELL       VA       51185       4.80         WARREN       VA       51187       4.30				4.50
SUSSEX       VA       51183       5.20         TAZEWELL       VA       51185       4.80         WARREN       VA       51187       4.30				4.50
TAZEWELL       VA       51185       4.80         WARREN       VA       51187       4.30				5.20
WARREN				
WASHINGTON				5.20

WISE  WYTHE  WYTHE  WA 51197  524  YORK  WA 51197  525  YORK  WA 51199  426  ALEXANDRIA TOY  WA 51199  BUENA VISTA CITY  WA 51520  BUENA VISTA CITY  WA 51530  CHARLOTTESULE CITY  WA 51550  COUNDAIL PERIOR CITY  WA 51550  COUNDAIL PERIOR CITY  WA 51550  COUNDAIL PERIOR CITY  WA 51550  COUNDAIL PERIOR CITY  WA 51550  COUNDAIL PERIOR CITY  WA 51550  COUNDAIL PERIOR CITY  WA 51550  ALEXANDRIA CITY  WA 51550  ALEXANDRIA CITY  WA 51550  ALEXANDRIA CITY  WA 51550  ALEXANDRIA CITY  WA 51550  ALEXANDRIA CITY  WA 51550  ALEXANDRIA CITY  WA 51600  ALEXANDRIA CITY  W	County/parish/city	State	FIPS code	Class I differential adjusted for location
WISE  WYTHE  WYTHE  WA 51197  524  YORK  WA 51197  525  YORK  WA 51199  426  ALEXANDRIA TOY  WA 51199  BUENA VISTA CITY  WA 51520  BUENA VISTA CITY  WA 51530  CHARLOTTESULE CITY  WA 51550  COUNDAIL PERIOR CITY  WA 51550  COUNDAIL PERIOR CITY  WA 51550  COUNDAIL PERIOR CITY  WA 51550  COUNDAIL PERIOR CITY  WA 51550  COUNDAIL PERIOR CITY  WA 51550  COUNDAIL PERIOR CITY  WA 51550  ALEXANDRIA CITY  WA 51550  ALEXANDRIA CITY  WA 51550  ALEXANDRIA CITY  WA 51550  ALEXANDRIA CITY  WA 51550  ALEXANDRIA CITY  WA 51550  ALEXANDRIA CITY  WA 51600  ALEXANDRIA CITY  W	WESTMORELAND	VA	51193	4.80
YORK				4.80
ALEXANDRÍA CITY  ALEXAN	WYTHE	VA	51197	5.20
BRISTOL CITY	YORK	VA	51199	5.20
BUENA VISTA CITY				4.50
CHARLOTTESVILLE CITY		1		5.20
CHESAPEAKE CITY  COLONIAL HEIGHTS CITY  VA 51550  4.5  COVINGTON CITY  VA 51580  4.5  COVINGTON CITY  VA 51580  4.5  COVINGTON CITY  VA 51580  4.5  COVINGTON CITY  VA 51580  4.5  COVINGTON CITY  VA 51580  4.5  COVINGTON CITY  VA 51580  4.6  COVINGTON CITY  VA 51680  4.7  COVINGTON CITY  VA 51680  4.7  COVINGTON CITY  VA 51680  4.7  COVINGTON CITY  VA 51680  4.7  COVINGTON CITY  VA 51680  4.7  COVINGTON CITY  VA 51680  4.7  COVINGTON CITY  VA 51680  5.7  COVINGTON CITY  VA 51680  4.7  COVINGTON CITY  VA 51683  4.7  COVINGTON CITY  VA 51683  4.7  COVINGTON CITY  VA 51683  4.7  COVINGTON CITY  VA 51683  4.7  COVINGTON CITY  VA 51683  4.7  COVINGTON CITY  VA 51683  4.7  COVINGTON CITY  VA 51683  4.7  COVINGTON CITY  VA 51683  4.7  COVINGTON CITY  VA 51683  4.7  COVINGTON CITY  VA 51683  4.7  COVINGTON CITY  VA 51683  4.7  COVINGTON CITY  VA 51683  4.7  COVINGTON CITY  VA 51683  4.7  COVINGTON CITY  VA 51760  5.7  COVINGTON CITY  VA 51760  5.7  COVINGTON CITY  VA 51770  5.7  COVINGTON CITY  VA 51770  5.7  COVINGTON CITY  VA 51770  5.7  COVINGTON CITY  VA 51770  5.7  COVINGTON CITY  VA 51770  5.7  COVINGTON CITY  VA 51780  5.7  COVINGT				
COLONIAL HEIGHTS CITY         VA         \$1550         4.4           COVINGTON COVINGTON CITY         VA         \$1580         4.4           DANVILLE CITY         VA         \$1590         5.2           FAIRFAX CITY         VA         \$1600         4.6           FAIRFAX CITY         VA         \$1600         4.6           FALS CHUNCH CITY         VA         \$1630         5.6           FREDERICKSBURG CITY         VA         \$1630         5.6           FREDERICKSBURG CITY         VA         \$1630         5.6           HAMPTON CITY         VA         \$1660         5.6           HAMPTON CITY         VA         \$1660         5.6           HAPPEWELL CITY         VA         \$1670         5.2           LEXINGTON CITY         VA         \$1670         5.2           LYNCHEURG CITY         VA         \$1670         5.2           LYNCHEURG CITY         VA         \$1670         5.2           LYNCHEURG CITY         VA         \$1670         5.2           LYNCHEURG CITY         VA         \$1670         5.2           LYNCHEURG CITY         VA         \$1680         4.2           WANDASSAS CITY         VA				5.20
COUNTGTON CITY		1		4.80
EMPORIA CITY		1		4.50
FAIRFAX CITY	DANVILLE CITY	VA	51590	5.20
FALLS CHURCH CITY	EMPORIA CITY	VA	51595	5.20
FRANKLIN CITY  FREDERICKSBURG CITY  VA 51640  GALAX CITY  VA 51640  5.2  HARPITON CITY  VA 51660  5.2  HARRISONBURG CITY  VA 51660  5.2  HARRISONBURG CITY  VA 51660  5.2  HARRISONBURG CITY  VA 51670  5.2  LEXINGTON CITY  VA 51670  VA 51670  5.2  LEXINGTON CITY  VA 51670  VA 51670  VA 51670  4.2  LEXINGTON CITY  VA 51678  4.4  LEXINGTON CITY  VA 51680  4.5  HARRISONBURG CITY  VA 51680  4.6  HARRISONBURG CITY  VA 51680  4.6  HARRISONBURG CITY  VA 51680  4.6  HARRISONBURG CITY  VA 51680  4.6  HARRISONBURG CITY  VA 51680  4.6  HARRISONBURG CITY  VA 51680  5.2  HARRISONBURG CITY  VA 51680  5.2  HARRISONBURG CITY  VA 51680  5.2  HARRISONBURG CITY  VA 51680  5.2  HARRISONBURG CITY  VA 51700  5.2  HARRISONBURG CITY  VA 51700  5.2  HARRISONBURG CITY  VA 51700  5.2  HARRISONBURG CITY  VA 51700  5.2  HARRISONBURG CITY  VA 51770  4.6  HARRISONBURG CITY  VA 51770  4.7  HARRISONBURG CITY  VA 51770  4.7  HARRISONBURG CITY  VA 51770  4.7  HARRISONBURG CITY  VA 51770  4.7  HARRISONBURG CITY  VA 51770  4.7  HARRISONBURG CITY  VA 51770  4.7  HARRISONBURG CITY  VA 51770  4.7  HARRISONBURG CITY  VA 51770  4.7  HARRISONBURG CITY  VA 51770  4.7  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  5.2  HARRISONBURG CITY  VA 51800  6.2  HARRISONBURG CITY  VA 51700  6.2  HARRISONBURG CITY  VA		1		4.50
FREDERICKSBURG CITY  VA 51830 4.4 AMPTON CITY  VA 51860 5.5 AAMPTON CITY  VA 51860 4.3 HARRISONBURG CITY  VA 51860 4.4 HARRISONBURG CITY  VA 51860 4.5 HARRISONBURG CITY  VA 51870 5.4 LYNCHBURG CITY  VA 51870 4.4 LYNCHBURG CITY  VA 51883 4.6  MANASSAS PARK CITY  VA 51883 4.6  MANASSAS PARK CITY  VA 51880 4.6  MANASSAS PARK CITY  VA 51880 4.6  MANASSAS PARK CITY  VA 51880 4.6  MANASSAS PARK CITY  VA 51880 4.6  MANASSAS PARK CITY  VA 51890 4.6  MARTINSVILLE CITY  VA 51890 4.6  MARTINSVILLE CITY  VA 51890 4.6  MARTINSVILLE CITY  VA 51700 5.6  MARTINSVILLE CITY  VA 51770 5.6  MARTINSVILLE CIT		1		4.50
GALAX CITY		1		5.20
HAMPTON CITY		1		
HARRISONBURG CITY		1		5.20
HOPEWELL CITY				4.30
LYNCHBURG CITY  VA 51880 4.8  MANASSAS PARIK CITY  VA 51885 4.5  MANASSAS PARIK CITY  VA 51886 4.5  MANASSAS PARIK CITY  VA 51880 4.5  MARTINSVILLE CITY  VA 51700 5.2  NORPOLK CITY  VA 51700 5.2  NORPOLK CITY  VA 51710 5.2  NORPOLK CITY  VA 51720 4.8  PETERSBURG CITY  VA 51730 5.2  POOLOUSON CITY  VA 51735 5.2  POOLOUSON CITY  VA 51735 5.2  POOLOUSON CITY  VA 51736 4.8  POOLOUSON CITY  VA 51736 4.8  POOLOUSON CITY  VA 51736 4.8  POOLOUSON CITY  VA 51736 4.8  POOLOUSON CITY  VA 51736 4.8  POOLOUSON CITY  VA 51750 4.8  RICHMOND CITY  VA 51750 4.8  RICHMOND CITY  VA 51760 4.8  SALEM CITY  VA 51770 4.8  SALEM CITY  VA 51770 4.8  STAUNTON CITY  VA 51770 4.8  STAUNTON CITY  VA 51800 5.2  VIRIGINIA BEACH CITY  VA 51810 5.2  VIRIGINIA BEACH CITY  VA 51820 4.3  VILLIANISBURG CITY  VA 51820 4.3  VILLIANISBURG CITY  VA 51820 4.3  VINCHESTER CITY  VA 51820 4.3  VINCHESTER CITY  VA 51830 5.2  VINCHESTER CITY  VA 51820 4.3  VINCHE		1		5.20
MANASSAS CITY		1		4.50
MANASSAS PARK CITY	LYNCHBURG CITY	VA	51680	4.80
MARTINSVILLE CITY	MANASSAS CITY	VA	51683	4.50
NEWPORT NEWS CITY NORFOLK CITY NORFOLK CITY NORFOLK CITY VA 51710 52 NORFOLK CITY VA 51720 48 PETERSBURG CITY VA 51730 52 POQUOSON CITY VA 51735 52 POQUOSON CITY VA 51735 52 RADFORD CITY VA 51730 48 RICHMOND CITY VA 51760 48 RICHMOND CITY VA 51760 48 RICHMOND CITY VA 51770 48 SALEM CITY VA 51775 48 SALEM CITY VA 51775 48 SALEM CITY VA 51776 48 SALEM CITY VA 51776 48 SALEM CITY VA 51776 48 SALEM CITY VA 51776 48 SALEM CITY VA 51776 48 SALEM CITY VA 51776 48 SALEM CITY VA 51776 48 SALEM CITY VA 51780 52 SALEM CITY VA 51800 53 SALEM CITY VA 51800 53 SALEM CITY SALEM CITY VA 51800 53 SALEM CITY SALEM CITY SALEM CITY SALEM CITY SALEM CITY SALEM CITY SALEM CITY SALEM CITY SALEM CITY SALEM CITY SALEM CITY SALEM CITY SALEM CITY SALEM CITY SALEM CITY SALEM		1		4.50
NORTON CITY  VA 51720 4.8 PETERSBURG CITY  VA 51730 5.2 PORTSMOUTH CITY  VA 51730 5.2 PORTSMOUTH CITY  VA 51730 5.2 RAPFORD CITY  VA 51730 5.2 PORTSMOUTH CITY  VA 51750 4.8 RICHMOND CITY  VA 51750 4.8 RICHMOND CITY  VA 51750 4.8 ROANOKE CITY  VA 51776 4.8 SALEM CITY  VA 51776 4.8 STAUNTON CITY  VA 51776 4.8 STAUNTON CITY  VA 51770 4.8 STAUNTON CITY  VA 51800 5.2 VIRGINIA BEACH CITY  VA 51800 5.2 VIRGINIA BEACH CITY  VA 51800 5.2 VIRGINIA BEACH CITY  VA 51800 5.2 VIRGINIA BEACH CITY  VA 51800 5.2 VIRGINIA STAUNTON CITY  VA 51800 5.2 VIRGINIA WA 53001 2.2 SASOTIN  VA 53003 2.2 BENTON  VA 53003 2.2 CHELAN  VA 53006 2.2 CHELAN  VA 53007 2.4 CLALLAM  VA 53011 2.7 COLUMBIA  VA 53012 2.2 COWLITZ  VA 53019 2.4 FERRY  FRANKLIN  VA 53017 2.4 FRANKLIN  VA 53021 2.2 GARFIELD  VA 53033 2.2 SARRIN  VA 53017 2.4 SARRIN  VA 53017 2.4 SARRIN  VA 53018 2.2 SARRIN  VA 53019 2.4 SARRIN  VA 53019 2.4 SARRIN  VA 53017 2.4 SARRIN  VA 53017 2.4 SARRIN  VA 53018 2.2 SARRIN  VA 53019 2.4 SARRIN  VA 53019 2.4 SARRIN  VA 53017 2.4 SARRIN  VA 53017 2.4 SARRIN  VA 53018 2.2 SARRIN  VA 53019 2.4 SARRIN  VA 53019 2.4 SARRIN  VA 53017 2.4 SARRIN  VA 53017 2.4 SARRIN  VA 53017 2.4 SARRIN  VA 53017 2.4 SARRIN  VA 53017 2.4 SARRIN  VA 53017 2.4 SARRIN  VA 53017 2.4 SARRIN  VA 53017 2.4 SARRIN  VA 53031 2.		1		5.20
NORTON CITY				5.20
PETERSBURG CITY		1		
POQUOSON CITY		1		5.20
PORTSMOUTH CITY         VA         \$1740         \$2           AADFORD CITY         VA         \$1750         4.8           RICHMOND CITY         VA         \$1770         4.6           ROANOKE CITY         VA         \$1770         4.6           SALEM CITY         VA         \$1775         4.6           STAUNTON CITY         VA         \$1780         4.3           SUFFOLK CITY         VA         \$1810         5.2           VIRGINIA BEACH CITY         VA         \$1820         4.3           WILLIAMSBURG CITY         VA         \$1830         5.2           WINCHESTER CITY         VA         \$1840         4.2           ADAMS         WA         \$3001         2.2           ASOTIN         WA         \$3001         2.2           BENTON         WA         \$3003         2.2           CHELAN         WA         \$3007         2.4           CHAILAM         WA         \$3011         2.7           COLUMBIA         WA         \$3011         2.7           COLUMBIA         WA         \$3015         2.4           COWLITZ         WA         \$3015         2.4           FERRY		1		5.20
RADFORD CITY				5.20
ROANOKE CITY		1		4.80
SALEM CITY       VA       51775       4.8         STAUNTON CITY       VA       51790       4.3         SUFFOLK CITY       VA       51800       5.2         VIRGINIA BEACH CITY       VA       51810       5.2         WAYNESBORO CITY       VA       51830       5.2         WILLIAMSBURG CITY       VA       51830       5.2         WINCHESTER CITY       VA       51840       4.3         ADAMS       WA       53001       2.2         ASOTIN       WA       53003       2.2         BENTON       WA       53003       2.2         CHELAN       WA       53007       2.4         CLALLAM       WA       53007       2.4         CLARK       WA       53011       2.7         COLUMBIA       WA       53011       2.7         COULIMBIA       WA       53015       2.4         COWLITZ       WA       53017       2.4         FERRY       WA       53017       2.4         FRANKLIN       WA       53021       2.2         GARFIELD       WA       53022       2.2         GRAFIELD       WA       53025       2.2<	RICHMOND CITY	VA	51760	4.80
STAUNTON CITY       VA       51790       4.3         SUFFOLK CITY       VA       51800       5.2         VAYNESBORO CITY       VA       51820       4.3         WAYNESBORO CITY       VA       51830       5.2         WILLIAMSBURG CITY       VA       51840       4.3         WINCHESTER CITY       VA       51840       4.3         ADAMS       WA       53001       2.2         ASOTIN       WA       53005       2.2         CHELAN       WA       53005       2.2         CHELAN       WA       53007       2.4         CLARK       WA       53011       2.7         COLUMBIA       WA       53015       2.4         COULITZ       WA       53015       2.4         DOUGLAS       WA       53017       2.4         FERRY       WA       53019       2.4         FERRY       WA       53021       2.2         GRANT       WA       53025       2.2         GRAYS HARBOR       WA       53031       2.2         ISLAND       WA       53035       2.4         JEFFERSON       WA       53035       2.4     <	ROANOKE CITY	VA	51770	4.80
SUFFOLK CITY         VA         51800         5.2           VIRGINIA BEACH CITY         VA         51810         5.2           WAYNESBORO CITY         VA         51820         4.3           WILLIAMSBURG CITY         VA         51840         4.3           WINCHESTER CITY         VA         51840         4.3           ADAMS         WA         53001         2.2           ASOTIN         WA         53003         2.2           BENTON         WA         53007         2.4           CHELAN         WA         53007         2.4           CLALLAM         WA         53011         2.7           COLUMBIA         WA         53013         2.2           COWLITZ         WA         53013         2.2           COWLITZ         WA         53017         2.4           FERRY         WA         53019         2.4           FERRY         WA         53021         2.2           GRAFIELD         WA         53023         2.2           GRAYS HARBOR         WA         53021         2.2           GRAYS HARBOR         WA         53031         2.4           KITGAP         WA		1		4.80
VIRIGNIA BEACH CITY         VA         51810         52           WAYNESBORO CITY         VA         51820         4.3           WILLIAMSBURG CITY         VA         51830         52           WINCHESTER CITY         VA         51840         4.3           ADAMS         WA         53001         4.2           ASOTIN         WA         53003         2.2           ASOTIN         WA         53005         2.2           ASOTIN         WA         53007         2.4           CHELAN         WA         53007         2.4           CLAILAM         WA         53009         2.4           CLAIRK         WA         53011         2.7           COLUMBIA         WA         53013         2.2           COULITZ         WA         53015         2.4           COUGLAS         WA         53015         2.4           FERRY         WA         53019         2.2           FERRY         WA         53021         2.2           GRANT         WA         53023         2.2           GRAYS HARBOR         WA         53023         2.4           KING         WA         53031 <td></td> <td>1</td> <td></td> <td>4.30</td>		1		4.30
WANNESBORO CITY       VA       51820       4.3         WILLIAMSBURG CITY       VA       51830       5.2         WINCHESTER CITY       VA       51840       4.3         ADAMS       WA       53001       2.2         ASOTIN       WA       53003       2.2         BENTON       WA       53005       2.2         CHELAN       WA       53007       2.4         CLAILAM       WA       53011       2.7         COLUMBIA       WA       53013       2.2         COWLITZ       WA       53015       2.4         DOUGLAS       WA       53017       2.4         FERRY       WA       53017       2.4         FRANKIN       WA       53019       2.2         GARFIELD       WA       53021       2.2         GRAYS HARBOR       WA       53022       2.2         GRAYS HARBOR       WA       53031       2.4         ISLAND       WA       53031       2.4         JEFFERSON       WA       53031       2.4         KITGAP       WA       53031       2.4         KITTITAS       WA       53033       2.7		1		5.20
WILLIAMSBURG CITY         VA         51830         5.2           WINCHESTER CITY         VA         51840         4.3           ADAMS         WA         53001         2.2           ASOTIN         WA         53003         2.2           BENTON         WA         53005         2.2           CHELAN         WA         53007         2.4           CLAILAM         WA         53009         2.4           CLARK         WA         53011         2.7           COLUMBIA         WA         53015         2.4           COWLITZ         WA         53015         2.4           DOUGLAS         WA         53017         2.4           FERRY         WA         53021         2.2           GARFIELD         WA         53021         2.2           GRAPTELD         WA         53023         2.2           GRAYS HARBOR         WA         53027         2.4           ISLAND         WA         53031         2.4           ISLAND         WA         53033         2.7           KITASP         WA         53033         2.7           KITTAS         WA         53033 <t< td=""><td></td><td>1</td><td></td><td></td></t<>		1		
WINCHESTER CITY       VA       51840       4.3         ADAMS       WA       53001       2.2         ASOTIN       WA       53003       2.2         BENTON       WA       53005       2.2         CHELAN       WA       53007       2.4         CLALLAM       WA       53009       2.4         CLARK       WA       53011       2.7         COLUMBIA       WA       53013       2.2         COWLITZ       WA       53015       2.4         DOUGLAS       WA       53017       2.4         FERRY       WA       53019       2.4         FERRY       WA       53021       2.2         GRANILIN       WA       53023       2.2         GRANT       WA       53023       2.2         GRAYS HABOR       WA       53027       2.4         ISLAND       WA       53031       2.4         JEFFERSON       WA       53031       2.4         KITGAP       WA       53033       2.7         KITTIAS       WA       53033       2.4         KITTITAS       WA       53037       2.4         KULCKITAT <td></td> <td>1</td> <td></td> <td>5.20</td>		1		5.20
ASOTIN		1		4.30
BENTON       WA       53005       2.2         CHELAN       WA       53007       2.4         CLALLAM       WA       53009       2.4         CLARK       WA       53011       2.7         COLUMBIA       WA       53013       2.2         COWLITZ       WA       53015       2.4         DOUGLAS       WA       53017       2.4         FERRY       WA       53019       2.4         FRANKLIN       WA       53021       2.2         GARFIELD       WA       53023       2.2         GRANT       WA       53025       2.2         GRAYS HARBOR       WA       53027       2.4         ISLAND       WA       53031       2.4         JEFFERSON       WA       53031       2.4         KING       WA       53031       2.4         KING       WA       53033       2.7         KITITIAS       WA       53037       2.4         KICKITAT       WA       53037       2.4         LINCOLN       WA       53041       2.4         WASON       WA       53043       2.4         OKANOGAN	ADAMS			2.20
CHELAN       WA       53007       2.4         CLALIAM       WA       53009       2.4         CLARK       WA       53011       2.7         COLUMBIA       WA       53013       2.2         COWLITZ       WA       53015       2.4         DOUGLAS       WA       53017       2.4         FERRY       WA       53019       2.4         FRANKLIN       WA       53021       2.2         GARFIELD       WA       53023       2.2         GRANT       WA       53025       2.2         GRAYS HARBOR       WA       53027       2.4         ISLAND       WA       53031       2.4         KING       WA       53031       2.7         KIRSAP       WA       53033       2.7         KITTITAS       WA       53037       2.4         KLICKITAT       WA       53039       2.2         LEWIS       WA       53041       2.4         UINCOLN       WA       53043       2.4         WASON       WA       53043       2.4         OKANOGAN       WA       53049       2.4         PEND OREILE	ASOTIN	WA	53003	2.20
CLALLAM       WA       53009       2.4         CLARK       WA       53011       2.7         COLUMBIA       WA       53013       2.2         COWLITZ       WA       53015       2.4         DOUGLAS       WA       53017       2.4         FERRY       WA       53019       2.4         FRANKLIN       WA       53021       2.2         GRANT       WA       53023       2.2         GRANT       WA       53025       2.2         GRAYS HARBOR       WA       53029       2.4         ISLAND       WA       53029       2.4         JEFFERSON       WA       53031       2.4         KITSAP       WA       53033       2.7         KITSAP       WA       53037       2.4         KICKITAT       WA       53037       2.4         KLICKITAT       WA       53041       2.4         LEWIS       WA       53043       2.4         KINCOLN       WA       53043       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53051       2.4         PEND OREILLE <td></td> <td></td> <td></td> <td>2.20</td>				2.20
CLARK       WA       53011       2.7         COLUMBIA       WA       53013       2.2         COWLITZ       WA       53015       2.4         DOUGLAS       WA       53017       2.4         FERRY       WA       53019       2.4         FRANKLIN       WA       53021       2.2         GARFIELD       WA       53023       2.2         GRANT       WA       53025       2.2         GRAYS HARBOR       WA       53027       2.4         ISLAND       WA       53031       2.4         JEFFERSON       WA       53031       2.4         KING       WA       53033       2.7         KITSAP       WA       53035       2.4         KITTITAS       WA       53037       2.4         KLICKITAT       WA       53039       2.2         LEWIS       WA       53043       2.4         MASON       WA       53043       2.4         OKANOGAN       WA       53047       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4				2.40
COLUMBIA       WA       53013       2.2         COWLITZ       WA       53015       2.4         DOUGLAS       WA       53017       2.4         FERRY       WA       53019       2.4         FRANKLIN       WA       53021       2.2         GARFIELD       WA       53023       2.2         GRAY       WA       53025       2.2         GRAYS HARBOR       WA       53027       2.4         ISLAND       WA       53029       2.4         JEFFERSON       WA       53031       2.4         KING       WA       53033       2.7         KITSAP       WA       53035       2.4         KITTITAS       WA       53037       2.4         KILCKITAT       WA       53041       2.4         LINCOLN       WA       53041       2.4         MASON       WA       53043       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53051       2.4         PEND OREILLE       WA       53053       2.4         PIERCE       WA       53053       2.4				2.40
COWLITZ       WA       53015       2.4         DOUGLAS       WA       53017       2.4         FERRY       WA       53019       2.4         FRANKLIN       WA       53021       2.2         GARFIELD       WA       53023       2.2         GRANT       WA       53025       2.2         GRAYS HARBOR       WA       53027       2.4         ISLAND       WA       53031       2.4         KING       WA       53031       2.4         KING       WA       53031       2.4         KITSAP       WA       53035       2.4         KILICKITAT       WA       53037       2.4         LEWIS       WA       53041       2.4         LINCOLN       WA       53043       2.4         MASON       WA       53045       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53051       2.4         PIERCE       WA       53053       2.4				
DOUGLAS       WA       53017       2.4         FERRY       WA       53019       2.4         FRANKLIN       WA       53021       2.2         GARFIELD       WA       53023       2.2         GRANT       WA       53025       2.2         GRAYS HARBOR       WA       53027       2.4         ISLAND       WA       53029       2.4         JEFFERSON       WA       53031       2.4         KING       WA       53031       2.4         KITSAP       WA       53035       2.4         KITITITAS       WA       53037       2.4         KLICKITAT       WA       53039       2.2         LEWIS       WA       53041       2.4         LINCOLN       WA       53043       2.4         MASON       WA       53045       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53051       2.4         PIERCE       WA       53053       2.4				2.40
FERRY       WA       53019       2.4         FRANKLIN       WA       53021       2.2         GARFIELD       WA       53023       2.2         GRANT       WA       53025       2.2         GRAYS HARBOR       WA       53027       2.4         ISLAND       WA       53029       2.4         JEFFERSON       WA       53031       2.4         KING       WA       53033       2.7         KITSAP       WA       53035       2.4         KITTITAS       WA       53037       2.4         KLICKITAT       WA       53039       2.2         LEWIS       WA       53041       2.4         LINCOLN       WA       53043       2.4         MASON       WA       53043       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4				2.40
FRANKLIN       WA       53021       2.2         GARFIELD       WA       53023       2.2         GRANT       WA       53025       2.2         GRAYS HARBOR       WA       53027       2.4         ISLAND       WA       53029       2.4         KING       WA       53031       2.4         KING       WA       53033       2.7         KITSAP       WA       53035       2.4         KITTITAS       WA       53037       2.4         KLICKITAT       WA       53039       2.2         LEWIS       WA       53041       2.4         LINCOLN       WA       53043       2.4         MASON       WA       53043       2.4         PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4				2.40
GRANT       WA       53025       2.2         GRAYS HARBOR       WA       53027       2.4         ISLAND       WA       53029       2.4         JEFFERSON       WA       53031       2.4         KING       WA       53033       2.7         KITSAP       WA       53035       2.4         KITTITAS       WA       53037       2.4         KLICKITAT       WA       53039       2.2         LEWIS       WA       53041       2.4         LINCOLN       WA       53043       2.4         MASON       WA       53045       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4		1		2.20
GRAYS HARBOR       WA       53027       2.4         ISLAND       WA       53029       2.4         JEFFERSON       WA       53031       2.4         KING       WA       53033       2.7         KITSAP       WA       53035       2.4         KITITIAS       WA       53037       2.4         KLICKITAT       WA       53039       2.2         LEWIS       WA       53041       2.4         LINCOLN       WA       53043       2.4         MASON       WA       53045       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4	GARFIELD	WA	53023	2.20
ISLAND       WA       53029       2.4         JEFFERSON       WA       53031       2.4         KING       WA       53033       2.7         KITSAP       WA       53035       2.4         KITITAS       WA       53037       2.4         KLICKITAT       WA       53039       2.2         LEWIS       WA       53041       2.4         LINCOLN       WA       53043       2.4         MASON       WA       53045       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4				2.20
JEFFERSON       WA       53031       2.4         KING       WA       53033       2.7         KITSAP       WA       53035       2.4         KITTITAS       WA       53037       2.4         KLICKITAT       WA       53039       2.2         LEWIS       WA       53041       2.4         LINCOLN       WA       53043       2.4         MASON       WA       53045       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4		1		2.40
KING       WA       53033       2.7         KITSAP       WA       53035       2.4         KITTITAS       WA       53037       2.4         KLICKITAT       WA       53039       2.2         LEWIS       WA       53041       2.4         LINCOLN       WA       53043       2.4         MASON       WA       53045       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4				2.40
KITSAP       WA       53035       2.4         KITTITAS       WA       53037       2.4         KLICKITAT       WA       53039       2.2         LEWIS       WA       53041       2.4         LINCOLN       WA       53043       2.4         MASON       WA       53045       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4				2.40
KITTITAS       WA       53037       2.4         KLICKITAT       WA       53039       2.2         LEWIS       WA       53041       2.4         LINCOLN       WA       53043       2.4         MASON       WA       53045       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4				2.40
KLICKITAT       WA       53039       2.2         LEWIS       WA       53041       2.4         LINCOLN       WA       53043       2.4         MASON       WA       53045       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4				2.40
LEWIS       WA       53041       2.4         LINCOLN       WA       53043       2.4         MASON       WA       53045       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4				2.20
LINCOLN       WA       53043       2.4         MASON       WA       53045       2.4         OKANOGAN       WA       53047       2.4         PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4				2.40
OKANOGAN       WA       53047       2.4         PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4		WA		2.40
PACIFIC       WA       53049       2.4         PEND OREILLE       WA       53051       2.4         PIERCE       WA       53053       2.4				2.40
PEND OREILLE         WA         53051         2.4           PIERCE         WA         53053         2.4		1		2.40
PIERCE				2.40
				2.40
	SAN JUAN	WA WA	53053	2.40 2.40
		1		2.40

County/parish/city	State	FIPS code	Class I differential adjusted for location
SKAMANIA	WA	53059	2.40
SNOHOMISH	WA	53061	2.40
SPOKANE	WA	53063	2.40
STEVENS	WA	53065	2.40
THURSTON	WA WA	53067	2.40
WAHKIAKUMWALLA WALLA	WA	53069 53071	2.40 2.20
WHATCOM	WA	53073	2.40
WHITMAN	WA	53075	2.20
YAKIMA	WA	53077	2.20
BARBOUR		54001	4.30
BERKELEY	WV	54003	4.30
BRAXTON	WV WV	54005 54007	4.50 4.30
BROOKE		54007	4.00
CABELL	WV	54011	4.30
CALHOUN	WV	54013	4.30
CLAY	WV	54015	4.30
DODDRIDGE	WV	54017	4.30
FAYETTE	WV	54019	4.50
GRANT	WV WV	54021 54023	4.30 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
KANAWHALEWIS	WV WV	54039 54041	4.30 4.30
LINCOLN	WV	54043	4.50
LOGAN	WV	54045	4.50
MCDOWELL	WV	54047	4.80
MARION	WV	54049	4.00
MARSHALL	WV	54051	4.00
MASON	WV WV	54053	4.30
MERCER	WV	54055 54057	4.80 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
PENDLETONPLEASANTS	WV WV	54071 54073	4.30 4.00
POCAHONTAS	WV	54075	4.50
PRESTON		54077	4.10
PUTNAM	WV	54079	4.30
RALEIGH	WV	54081	4.50
RANDOLPH	WV	54083	4.30
RITCHIE	WV	54085	4.30
ROANE	WV WV	54087	4.30
SUMMERS	WV	54089 54091	4.80 4.30
TUCKER		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 WV	54105 54107	4.30 4.00
WYOMING		54107 54109	4.00
ADAMS	Wi	55001	2.90
ASHLAND		55003	2.80
BARRON	WI	55005	2.80
BAYFIELD	1	55007	2.80
BROWN	WI	55009	2.90
BUFFALO	1 1 1 1 1	55011	2.80

BURNETT	2.80 2.90 2.80 2.90 2.90 2.90 2.90 2.80 2.80 2.80 2.90 2.90 2.90 2.90 2.90 2.90 2.90 2.9
CALLMET         W         55015           CHPPEWA         W         55017           CLARK         W         55019           COLUMBIA         W         55023           CRAWFORD         W         55023           DANE         W         55023           DODG         W         55027           DOOR         W         55029           DOOR         W         55031           DUNN         W         55031           DUNN         W         55031           DUNN         W         55033           EAU CLAIRE         W         55035           FLORENCE         W         55037           FOREST         W         55041           GREST         W         55043           GREEN W         W         55045           GREEN LAKE         W         55045           IOWA         W         55049           IRON         W         55051           JACKSON         W         55053           JEFFERSON         W         55055           JUNEAU         W         55055           JUNEAU         W         55055	2.90 2.80 2.90 2.90 2.90 2.90 2.80 2.80 2.80 2.90 2.90 2.90 2.90 2.90 2.90 2.90 2.9
CHIPPEWA	2.80 2.80 2.90 2.90 2.90 2.90 2.80 2.80 2.80 2.90 2.90 2.90 2.90 2.90 2.90 2.90 2.9
COLUMBIA	2.90 2.90 2.90 2.90 2.80 2.80 2.80 2.90 2.90 2.90 2.90 2.90 2.90 2.80 2.90 2.90 2.90 3.10
CRAWFORD         WI         55025           DANE         WI         55025           DODGE         WI         55027           DOOR         WI         55027           DOOR         WI         55021           DOOR         WI         55031           DUNN         WI         55031           DUNN         WI         55035           FLORENCE         WI         55035           FLORENCE         WI         55039           FOREST         WI         55043           GREST         WI         55043           GREEN         WI         55043           GREEN LAKE         WI         55045           GREEN LAKE         WI         55045           GREEN LAKE         WI         55049           IRON         WI         55051           JACKSON         WI         55053           JEFFERSON         WI         55053           JEFFERSON         WI         55053           JEFFERSON         WI         55055           JUNEAU         WI         55055           JUNEAU         WI         55055           JUNEAU         WI	2.90 2.90 2.90 2.80 2.80 2.80 2.80 2.90 2.90 2.90 2.90 2.90 2.80 2.90 2.90 3.10
DANE	2.90 2.90 2.80 2.80 2.80 2.80 2.90 2.90 2.90 2.90 2.90 2.90 2.90 2.9
DODGE	2.90 2.90 2.80 2.80 2.80 2.90 2.90 2.90 2.90 2.90 2.90 2.90 2.9
DOOR	2.90 2.80 2.80 2.80 2.90 2.90 2.90 2.90 2.90 2.90 2.80 2.90 2.90 3.10
DOUGLAS         WI         55031           DUNN         WI         55033           EAU CLAIRE         WI         55035           FLORENCE         WI         55037           FOND DU LAC         WI         55039           FOREST         WI         55041           GRANT         WI         55043           GREEN         WI         55045           GREEN LAKE         WI         55047           IOWA         WI         55049           IRON         WI         55051           JACKSON         WI         55055           JUNEAU         WI         55055           JUNEAU         WI         55055           KEWAUNEE         WI         55065           KEWAUNEE         WI         55065           LA GROSSE         WI         55065           LAAFYETTE         WI         55065           LANGLADE         WI         55065           LINCOLN         WI         55079           MARITHON         WI         55073           MARITHON         WI         55073           MARQUETTE         WI         55075           MARQUETTE	2.80 2.80 2.80 2.90 2.90 2.90 2.90 2.90 2.80 2.90 2.80 2.90 2.80 2.90 3.10
DUNN         WI         55033           EAU CLAIRE         WI         55035           FLORENCE         WI         55037           FOND DU LAC         WI         55037           FOREST         WI         55041           GRANT         WI         55043           GREEN         WI         55045           GREEN LAKE         WI         55047           IOWA         WI         55049           IRON         WI         55051           JACKSON         WI         55053           JEFFERSON         WI         55055           JURAU         WI         55055           JURAU         WI         55067           KEWAUNEE         WI         55061           LA CROSSE         WI         55063           KEWAUNEE         WI         55068           LAPAYETTE         WI         55068           LANGADE         WI         55069           LANGADE         WI         55079           MARITHON         WI         55073           MARATHON         WI         55075           MARQUETTE         WI         55078           MILWAUKEE	2.80 2.80 2.90 2.90 2.90 2.90 2.90 2.90 2.80 2.80 2.90 2.90 3.10
EAU CLAIRE	2.80 2.80 2.90 2.80 2.90 2.90 2.90 2.80 2.80 2.90 2.90 3.10
FLORENCE	2.80 2.90 2.80 2.90 2.90 2.90 2.80 2.80 2.90 2.90 3.10
FOND DU LAC         WI         55039           FOREST         WI         55041           GRANT         WI         55043           GREEN         WI         55045           GREEN LAKE         WI         55047           IOWA         WI         55049           IRON         WI         55051           JACKSON         WI         55053           JEFFERSON         WI         55055           JUNEAU         WI         55055           KENOSHA         WI         55051           KEWAUNEE         WI         55061           LA CROSSE         WI         55063           LAFAYETTE         WI         55065           LANGLADE         WI         55069           MANITOWOC         WI         55071           MARATHETE         WI         55073           MARINETTE         WI         55075           MARQUETTE         WI         55078           MILWAUK	2.90 2.80 2.90 2.90 2.90 2.90 2.80 2.80 2.90 2.90 3.10
FOREST	2.80 2.90 2.90 2.90 2.80 2.80 2.90 2.90 3.10
GRANT         WI         55043           GREEN         WI         55047           GREEN LAKE         WI         55047           IOWA         WI         55049           IRON         WI         55051           JACKSON         WI         55053           JEFFERSON         WI         55055           JUNEAU         WI         55057           KENOSHA         WI         55061           LA CROSSE         WI         55063           LAFAYETTE         WI         55065           LANGLADE         WI         55067           LINCOLN         WI         55069           MANITOWOC         WI         55071           MARATHON         WI         55073           MARINETTE         WI         55075           MARQUETTE         WI         55078           MILWAUKEE         WI         55078           MILWAUKEE         WI         55083           ONEIDA         WI         55081           OCONTO         WI         55083           ONEIDA         WI         55089           PEPIN         WI         55089           PEPIN	2.90 2.90 2.90 2.90 2.80 2.80 2.90 2.90 3.10
GREEN         WI         55045           GREEN LAKE         WI         55047           IOWA         WI         55049           IRON         WI         55051           JACKSON         WI         55053           JEFFERSON         WI         55055           JUNEAU         WI         55057           KENOSHA         WI         55061           LA CROSSE         WI         55063           LAFAYETTE         WI         55065           LANGLADE         WI         55067           LINCOLN         WI         55079           MANITOWOC         WI         55071           MARATHON         WI         55075           MARQUETTE         WI         55075           MARQUETTE         WI         55075           MILWAUKEE         WI         55078           MONROE         WI         55081           OCONTO         WI         55085           OUTAGAMIE         WI         55085           OUTAGAMIE         WI         55099           PEIN         WI         55099           PORTAGE         WI         55099           PORTAGE	2.90 2.90 2.90 2.80 2.80 2.90 2.90 3.10
IOWA	2.90 2.80 2.80 2.90 2.90 3.10
IRON	2.80 2.80 2.90 2.90 3.10
JACKSON	2.80 2.90 2.90 3.10
JEFFERSON	2.90 2.90 3.10
JUNEAU   WI   55057	2.90 3.10
KENOSHA       WI       55059         KEWAUNEE       WI       55061         LA CROSSE       WI       55063         LAFAYETTE       WI       55065         LANGLADE       WI       55067         LINCOLN       WI       55069         MANITOWOC       WI       55071         MARATHON       WI       55073         MARINETTE       WI       55075         MARQUETTE       WI       55078         MILWAUKEE       WI       55078         MILWAUKEE       WI       55079         MONROE       WI       55081         OCONTO       WI       55083         ONEIDA       WI       55085         OUTAGAMIE       WI       55087         OZAUKEE       WI       55091         PEPIN       WI       55093         POLK       WI       55095         PORTAGE       WI       55095         PORTAGE       WI       55099         RACINE       WI       55091	3.10
KEWAUNEE       WI       55061         LA CROSSE       WI       55063         LAFAYETTE       WI       55065         LANGLADE       WI       55067         LINCOLN       WI       55069         MANITOWOC       WI       55071         MARATHON       WI       55073         MARINETTE       WI       55075         MARQUETTE       WI       55078         MILWAUKEE       WI       55079         MONROE       WI       55081         OCONTO       WI       55083         ONEIDA       WI       55085         OUTAGAMIE       WI       55087         OZAUKEE       WI       55091         PEPIN       WI       55091         PIERCE       WI       55095         PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55091	
LA CROSSE	2 an
LAFAYETTE       WI       55065         LANGLADE       WI       55067         LINCOLN       WI       55069         MANITOWOC       WI       55071         MARATHON       WI       55073         MARINETTE       WI       55075         MARQUETTE       WI       55077         MENOMINEE       WI       55078         MILWAUKEE       WI       55079         MONROE       WI       55081         OCONTO       WI       55083         ONEIDA       WI       55085         OUTAGAMIE       WI       55087         OZAUKEE       WI       55089         PEPIN       WI       55091         PIERCE       WI       55093         POLK       WI       55097         PRICE       WI       55099         RACINE       WI       55101	
LANGLADE       WI       55067         LINCOLN       WI       55069         MANITOWOC       WI       55071         MARATHON       WI       55073         MARINETTE       WI       55075         MARQUETTE       WI       55077         MENOMINEE       WI       55078         MILWAUKEE       WI       55079         MONROE       WI       55081         OCONTO       WI       55083         ONEIDA       WI       55085         OUTAGAMIE       WI       55087         OZAUKEE       WI       55089         PEPIN       WI       55091         PIERCE       WI       55095         POLK       WI       55097         PRICE       WI       55097         PRICE       WI       55099         RACINE       WI       55101	2.90
LINCOLN       WI       55069         MANITOWOC       WI       55071         MARATHON       WI       55073         MARINETTE       WI       55075         MARQUETTE       WI       55077         MENOMINEE       WI       55078         MILWAUKEE       WI       55079         MONFOE       WI       55081         OCONTO       WI       55083         ONEIDA       WI       55085         OUTAGAMIE       WI       55087         OZAUKEE       WI       55089         PEPIN       WI       55091         PIERCE       WI       55093         POLK       WI       55095         PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55091	2.90
MANITOWOC       WI       55071         MARATHON       WI       55073         MARINETTE       WI       55075         MARQUETTE       WI       55077         MENOMINEE       WI       55078         MILWAUKEE       WI       55079         MONROE       WI       55081         OCONTO       WI       55083         ONEIDA       WI       55085         OUTAGAMIE       WI       55087         OZAUKEE       WI       55089         PEIN       WI       55091         PIERCE       WI       55093         POLK       WI       55095         PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55091	2.90 2.80
MARATHON       WI       55073         MARINETTE       WI       55075         MARQUETTE       WI       55077         MENOMINEE       WI       55078         MILWAUKEE       WI       55079         MONROE       WI       55081         OCONTO       WI       55083         ONEIDA       WI       55085         OUTAGAMIE       WI       55087         OZAUKEE       WI       55089         PEPIN       WI       55091         PIERCE       WI       55095         POLK       WI       55097         PRICE       WI       55099         RACINE       WI       55101	2.90
MARINETTE       WI       55075         MARQUETTE       WI       55077         MENOMINEE       WI       55078         MILWAUKEE       WI       55079         MONROE       WI       55081         OCONTO       WI       55083         ONEIDA       WI       55085         OUTAGAMIE       WI       55087         OZAUKEE       WI       55089         PEPIN       WI       55091         PIERCE       WI       55093         POLK       WI       55097         PRICE       WI       55099         RACINE       WI       55101	2.90
MARQUETTE       WI       55077         MENOMINEE       WI       55078         MILWAUKEE       WI       55079         MONROE       WI       55081         OCONTO       WI       55083         ONEIDA       WI       55085         OUTAGAMIE       WI       55087         OZAUKEE       WI       55089         PEPIN       WI       55091         PIERCE       WI       55093         POLK       WI       55095         PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55101	2.90
MENOMINEE       WI       55078         MILWAUKEE       WI       55079         MONROE       WI       55081         OCONTO       WI       55083         ONEIDA       WI       55085         OUTAGAMIE       WI       55087         OZAUKEE       WI       55089         PEPIN       WI       55091         PIERCE       WI       55093         POLK       WI       55095         PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55101	2.90
MONROE       WI       55081         OCONTO       WI       55083         ONEIDA       WI       55085         OUTAGAMIE       WI       55087         OZAUKEE       WI       55089         PEPIN       WI       55091         PIERCE       WI       55093         POLK       WI       55095         PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55101	2.90
OCONTO       WI       55083         ONEIDA       WI       55085         OUTAGAMIE       WI       55087         OZAUKEE       WI       55089         PEPIN       WI       55091         PIERCE       WI       55093         POLK       WI       55095         PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55101	3.10
ONEIDA       WI       55085         OUTAGAMIE       WI       55087         OZAUKEE       WI       55089         PEPIN       WI       55091         PIERCE       WI       55093         POLK       WI       55095         PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55101	2.90
OUTAGAMIE       WI       55087         OZAUKEE       WI       55089         PEPIN       WI       55091         PIERCE       WI       55093         POLK       WI       55095         PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55101	2.90
OZAUKEE       WI       55089         PEPIN       WI       55091         PIERCE       WI       55093         POLK       WI       55095         PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55101	2.80
PEPIN       WI       55091         PIERCE       WI       55093         POLK       WI       55095         PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55101	2.90
PIERCE       WI       55093         POLK       WI       55095         PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55101	3.10
POLK       WI       55095         PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55101	2.80
PORTAGE       WI       55097         PRICE       WI       55099         RACINE       WI       55101	2.80
PRICE	2.80
RACINE WI 55101	2.90
	2.80
TIIOTILAND	3.10 2.90
ROCK	2.90
RUSK WI 55107	2.80
ST. CROIX	2.80
SAUK	2.90
SAWYER	2.80
SHAWANO	2.90
SHEBOYGAN	2.90
TAYLOR WI 55119	2.80
TREMPEALEAU	2.80
VERNON	2.90
VILAS WI 55125	2.80
WALWORTH	3.10
WASHBURNWI 55129	2.80
WASHINGTON	2.90
WAUKESHA	2.90
WAUPACA	2.90
WAUSHARA	
WINNEBAGO WI 55139 WOOD WI 55141	2.90
ALBANY	2.90 2.90
BIG HORN WY 56003	2.90 2.90 2.90
CAMPBELL WY 56005	2.90 2.90 2.90 2.40
CARBON WY 56007	2.90 2.90 2.90 2.40 2.40
CONVERSE WY 56009	2.90 2.90 2.90 2.40

County/parish/city	State	FIPS code	Class I differential adjusted for location
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
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
- a. Removing the words "and § 1135.11 of this chapter" wherever they appear; and
- b. Revising and republishing paragraphs (a)(2) through (4) and paragraph (c).

The revisions and republications 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 text;
- 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 text 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

(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 text 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

(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 text 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 text;
- 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 text;
- 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:
- lacksquare a. Revising the introductory text;
- 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 text;
- b. Redesignating paragraph (i) as paragraph (j); and
- a 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 text;
- lacktriangle 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 text;
- 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.

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.

PART 1170—DAIRY PRODUCT MANDATORY REPORTING

■ 31. The authority citation for part 1170 continues to read as follows:

**Authority:** 7 U.S.C. 1637–1637b, as amended by Pub. L. 106–532, 114 Stat. 2541; Pub. L. 107–171, 116 Stat. 207; and Pub. L. 111–239, 124 Stat. 2501.

■ 32. Revise and republish § 1170.8(a) to read as follows:

### §1170.8 Price reporting specifications.

- (a) Specifications for Cheddar Cheese Prices:
  - (1) Variety: Cheddar cheese.
  - (2) Style: 40-pound blocks.
- (3) Age: Not less than 4 days or more than 30 days on date of sale. Exclude cheese that will be aged.
- (4) Grade: Product meets Wisconsin State Brand or USDA Grade A or better standards.
- (5) Color: Colored and within the color range of 6–8 on the National Cheese Institute color chart.
- (6) Packaging: Price should reflect cheese wrapped in a sealed, airtight package in corrugated or solid fiberboard containers with a reinforcing

inner liner or sleeve. Exclude all other packaging costs from the reported price.

(7) Exclude: Intra-company sales, resales of purchased cheese, forward pricing sales (sales in which the selling price was set [not adjusted] 30 or more days before the transaction was completed), cheese produced under faith-based close supervision and marketed at a higher price than the manufacturer's wholesale market price for the basic commodity (for example, kosher cheese produced with a rabbi on site who is actively involved in supervision of the production process), sales under the Dairy Export Incentive Program or other premium-assisted sales (for example, export assistance sales through the Cooperatives Working Together program), and cheese certified as organic by a USDA-accredited certifying agent.

[Note: The following will not appear in the Code of Federal Regulations.]

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\*

# Marketing Agreement Regulating the Handling of Milk in Certain Marketing

The parties hereto, in order to effectuate the declared policy of the Act, and in accordance with the rules of practice and procedure effective thereunder (7 CFR part 900), desire to enter into this marketing agreement and do hereby agree that the provisions referred to in paragraph I hereof as augmented by the provisions specified in paragraph II hereof, shall be and are the provisions of this marketing agreement as if set out in full herein.

I. The findings and determinations, order relative to handling, and the provisions of §§ \_\_to\_\_,6 all inclusive, of the order regulating the handling of milk in the\_\_ <sup>7</sup> marketing area (7 CFR part \_\_)<sup>8</sup> which is annexed hereto; and

II. The following provisions: § \_\_\_9
Record of milk handled and
authorization to correct typographical
errors

- (a) Record of milk handled. The undersigned certifies that he/she handled during the month of \_\_\_\_\_, ^10\_\_hundredweight of milk covered by this marketing agreement.
- (b) Authorization to correct typographical errors. The undersigned

hereby authorizes the Deputy Administrator, or Acting Deputy Administrator, Dairy Programs, Agricultural Marketing Service, to correct any typographical errors which may have been made in this marketing agreement.

Effective date. This marketing agreement shall become effective upon the execution of a counterpart hereof by the Secretary in accordance with § 900.14(a) of the aforesaid rules of practice and procedure.

In Witness Whereof, the contracting handlers, acting under the provisions of the Act, for the purposes and subject to the limitations herein contained and not otherwise, have hereunto set their respective hands and seals.

Signature	
By (Name)	
(Title)	
(Address)	
(Seal)	
Attest	

#### Erin Morris.

Associate Administrator, Agricultural Marketing Service.

[FR Doc. 2024-27228 Filed 11-29-24; 8:45 am]

BILLING CODE P

<sup>&</sup>lt;sup>6</sup> First and last section of order.

<sup>7</sup> Name of order.

<sup>&</sup>lt;sup>8</sup> Appropriate CFR part number.

<sup>&</sup>lt;sup>9</sup> Next consecutive section number.

<sup>&</sup>lt;sup>10</sup> Appropriate representative period for the order.