Testimony of Dr. Ronald D. Knutson Presented at FMMO Class I Pricing Hearing Pittsburgh, PA December 14, 2006

1. My name is Dr. Ronald D. Knutson. I reside at 1011 Rose Circle in College Station, Texas. My position at Texas A&M University is that of Professor Emeritus. Prior to my retirement in 2002, I was the Director of the Agricultural and Food Policy Center, a position which I held for 13 years. The Center receives funding directly from for the U.S. Congress for the purpose of conducting analyses of the farm level impacts of changes in farm policy upon the request of its Agriculture Committees. I held the position of Professor at Texas A&M for 27 years. Prior to coming to Texas A&M, I served for 2 years as Chief Economist for the Agriculture Marketing Service of USDA and for 2 years as Administrator of the Farmer Cooperative Service. Previously I had served for 6 years as assistant and associate professor at Purdue University. I received my B.S. from the University of Minnesota, M.S. from Penn State University, and Ph.D. from the University of Minnesota. Throughout my professional career I have received many honors and awards, the most significant of which was being named a Fellow of the American Agricultural Economics Association, the profession's most prestigious award.

- 2. I have spent over 45 years analyzing dairy policy issues, with over 300 dairy related publications. Of special significance to this hearing was my service as Chairman of Assistant Secretary Lyng's Milk Pricing Advisory Committee and Chairman of AMS/USDA's University Scientist Study Committee to analyze pricing options for Federal Milk Marketing Order (hereinafter Federal Order) Reform. This research led to two publications cited in the 1998 and 1999 Proposed Rule for Federal Order Reform titled, *An Economic Evaluation of Basic Formula Price (BFP) Alternatives* and *The Modified Product Value and Fresh Milk Base Price Alternatives*.
- 3. I am testifying in this hearing as an expert witness for the International Dairy Foods Association (IDFA). The purposes of my testimony Include: (1) to evaluate whether economic conditions in the dairy industry warrant a change in Class I milk pricing policy, (2) to evaluate the specific Class I pricing proposal, which is the subject of this hearing, and (3) to explain the economic information required for AMS and the Secretary of Agriculture to make a science-based Class I pricing decision of the type proposed in this hearing.

EXHIBIT 44

Evaluation of Industry Milk Supply and Demand Conditions

- 4. With persistent infusion and adoption of technology, the milk industry is constantly changing and adjusting. The role of government in this environment is to facilitate change and adjustment, not to prevent or discourage it. In other words, Federal Orders have a primary role of providing a soft landing in the face of change. History demonstrates that the milk industry readily and regularly adjusts to price changes. Therefore, one of the primary indicators of undue economic stress and the need for a shift in pricing policy is whether changes in either milk supply or demand are evident and leading to disorderly market conditions. My conclusion is that industry supply and demand conditions provide no indication of disorderly market conditions.
- 5. On the supply side, the key change indicators include: (1) New clusters of milk production outside traditional production areas have developed and are continuing to develop. These new clusters include parts of California, Idaho, New Mexico, and, more recently, Northern Indiana and West Texas. All of these new clusters are outside traditional production areas of the Midwest and Northeast. (2) Within these clusters, there is the continuing development of large scale 1,000 cow plus dairy farms. In 2005, these farms accounted for 36 percent of milk production as indicated by NASS/USDA, in *Farms, Land in Farms, and Livestock Operations: 2005 Summary*, published in January 2006, on page 22. At the current rate of increase, these farms will account for a majority of production within four years. (3) There are the recent developments of higher feed costs and the increased importance in dairy rations of distillers' grain (DG), which is a byproduct of ethanol production.
- 6. The best indicator of smooth adjustment to change is what is happening to milk production and movements of milk to areas of need, particularly for Class I use. Nationally, milk production continues above 2005 levels through November 2006. Some states have experienced decreases in production, particularly in the Southeast. However, milk has been effectively and efficiently moved to fill Class I and II needs from newly developed production clusters such as Northern Indiana and West Texas as well as from traditional production areas, often with the assistance of Federal Order transportation credits. Federal Orders were never designed to assure state or regional self-sufficiency in milk production, but to facilitate least cost milk movements with a minimum of government This is being accomplished under the current Order involvement. My conclusion is that there is no evidence of supply provisions. shortages.

7. It would be a mistake to focus only on the supply and cost side of the milk industry because it ignores the sensitivity of consumers to changes in milk prices. On the demand side, milk is experiencing increased competition from other beverages including sodas, energy drinks, juices, and soy substitutes. This leads to more elastic demand for Class I milk, resulting in the need for greater caution in pricing decisions. In addition to continuing milk promotion programs, the best strategy is to maintain the price competitiveness of milk with these substitute products. At the retail level, demand elasticity estimates cover quite a large range. In his 2003 product classification testimony, Cornell dairy economist Dr. Mark Stevenson concluded, after reviewing the literature, that standard fluid milk products have a demand elasticity of -0.25 but noted that new substitute products have a higher elasticity. As the number of new substitute products increases, the elasticity of demand for fluid milk also increases. Based on supply and demand conditions, it is my conclusion that there is no economic evidence of a need for a change in Class I milk pricing policy

Role of Federal Orders in Adjusting to Changing Economic Conditions

8. One of the key purposes of Federal Orders is to facilitate adjustment to change. The most widely recognized guide to the objectives of Federal Orders is the Nourse Report, which is undoubtedly the most extensively cited economic guide to Federal Order decision making. On the subject of adjustment to change, the Nourse Report states:

It is well to remember that the original statute from which the Federal milk order system stems was conceived as an adjustment undertaking. It was set up as an apparatus for improving the lot of the farmer by helping in every reasonable way to bring an industry (and its subindustries) in which productivity was rising rapidly—even faster than the industrial sector of the economy—into better equilibrium over time... (p. 10)

This is a profoundly important statement to this hearing. It calls attention to the importance of Federal Orders in facilitating adjustment to change. It says that Orders should not only facilitate change, but also encourage it. According to this historically important guide to Federal Order policy, any action that discourages adjustment to change would be contrary to the Agricultural Marketing Agreement Act of 1937, as amended, hereinafter referred to as the AMAA.

- 9. Certainly, today's dairy industry is not the same as when the AAMA was enacted, as the hearing proponents appear to assume. Nor is the industry the same today as when the Order Reform decisions were made in the late 1990s. The dairy industry continues to evolve to more regional production, fewer but larger dairy farms, higher feed costs, more complex dairy nutrition issues, and more competition from competitive products that are often nondairy in composition. Markets are automatically adjusting to these changing conditions and should be allowed to do so in order to avoid market distortions.
- 10. In order not to interfere with these market adjustments, Federal Orders must also adjust to these changes in conditions. Optimally this adjustment must reflect changes in economic conditions and, therefore, simulate those adjustments that would occur in the market while maintaining orderly market conditions as prescribed by the AAMA. Old arguments ((so-called "established principles" by the proponents petition (p. 1)) require careful, science-based economic analysis to determine their relevance to today's conditions and to determine how they should be modified to fit today's industry conditions. To achieve this objective, the Federal Order Reform process was preceded by the extensive economic analyses required to adjust Class I pricing policy to change. To the credit of AMS and the Secretary, they tried to make the essential adjustments in Class I pricing policy based on the analyses that had been done by Cornell University and others as reflected in the hearing record and in the 1998 and 1999 proposed rules. Unfortunately, these rules were derailed by the Agriculture Committees and Appropriation Subcommittees controlled by southern interests. This is not the case today.

Avoiding Unintended Consequences

11 The challenge facing AMS and the Secretary in this decision is to accurately identify those economic conditions relevant to the hearing issues that have changed and to determine their regulatory implications. AMS and the Secretary have made these adjustments in previous hearings. For example, the boundaries of the Appalachian and Southeast orders were modified in consideration of a consolidation petition. Ninety days prior notice was provided before a hearing considered the modification of make allowances. Changing the structure of Class I prices is a much more fundamental issue than either of these hearings. As noted previously, in the Federal Order Reform process a separate study was initiated to address the economic forces affecting the Class I pricing issue. This study served as a benchmark or baseline in evaluating the seven policy options considered. Changed economic conditions suggest the need for another study of the same type so that the decision makers understand the current economic forces affecting their decision. This is not a task that can be adequately undertaken in an emergency hearing

environment without incurring unanticipated and unintended consequences. At the risk of repetition, increasingly hearings have been preceded by studies of the proposed changes in policy. In addition to the Class I pricing study and a basic formula price study promulgated and completed prior to the Order Reform hearings, the recent make allowance hearing was suspended pending the completion of the Cornell manufacturing product cost study. In preparation for the current Class III and IV pricing hearing, pre-hearing information sessions provide opportunities for input and study prior to the hearing announcement.

- 12. These studies and related opportunities for input provide assurance that all relevant economic facts and considerations are studied. The results are available to the USDA decision makers to use in critically important science-based decisions. They also hold the potential for avoiding the greatest danger in rushing to judgment, specifically, that regulatory decisions are made without adequate science-based analysis of the facts underlying the decisions and of their consequences. More often than not, the result of such a rush to judgment is unintended, markets-distorting consequences.
- 13. One of the most serious unintended market-distorting consequence of an economically unjustified Class I price increase is the inevitability of increasing benefits to dairy farmers in higher utilization markets, and to those having access to those markets, at the expense of those in lower utilization markets. In this hearing the dairy farmers that AMS and the Secretary need to be most concerned about are the large number of smaller farmers located in the Upper Midwest. The inevitable result of the proponent's proposal is to lower Class III and Class IV prices to the detriment of dairy farmers in the States of Minnesota, Iowa, Wisconsin, North Dakota, South Dakota, and others. This was the effect of the politically inspired Class 1A Order Reform decision.
- 14. I have analyzed the effect of the NMPF proposal on the farmers pooled on the Upper Midwest order. To do so, I have utilized 2005 Federal Order Market Statistics data to establish the quantity of Class III and IV milk utilized in the Upper Midwest Federal Order market as a percent of all Federal Order Class III and IV utilization for the same time period. I multiplied this market share times the AMS estimate of the effect of the NMPF proposal on the nine-year average pounds utilized in Class III and IV and Federal Order minimum price changes at test for Class III and IV and Federal Order minimum price changes at test for Class III and Class IV as published in the Hearing Notice dated November 22, 2006. The results of this analysis indicated that Upper Midwest dairy farmers would lose a total of \$249 million in Class III and IV receipts from adoption of the NMPF Class I option, \$37 million from the NMPF Class I option, and \$286 million from the combination of the NMPF Class I and Class II options. Even when these revenue reductions are combined with the indicated price and quantity changes resulting from higher Class I and II

prices, Upper Midwest producers are net losers of \$27 million under the Class I option, \$27 million under the Class II option, and \$54 million if both options were adopted.

- 15 AMS economists did not analyze the most recent NMPF proposal increasing the Class I differential by an additional 5.479% from \$0.73 per cwt to \$0.77 per cwt. However, the losses to the Upper Midwest producers would clearly be further inflated. A rough estimate can be derived by multiplying the nine-year loss under the previous NMPF proposal by 1.05479. The result would be a \$302 million reduction is Class III and IV receipts and \$57 million in total receipts from the adoption of the new Class I and II proposal.
- 16. These estimates of the adverse impacts on the Upper Midwest are conservative for three reasons: (1) They do not account for all of the milk used for manufacturing in the region, while all of the Class I and II milk is accounted for. (2) The amount of the reduction is influenced by the relatively low elasticity of demand assumed by AMS. AMS uses a -0.048 demand elasticity at the farm level, which is lower than estimated by other prominent dairy economists. FAPRI uses a -0.144 demand elasticity at retail for fluid milk and, as noted previously, Dr. Stevenson used -0.25. These imply farm level elasticities of about -0.072 and -0.125. Likewise. supply elasticity estimated by most dairy economists is higher than the 0.269 assumed by AMS. For example, Cox and Chavas, both highly respected agricultural economists, estimated a supply elasticity of 0.37 that was published as a peer reviewed article in the American Journal of Agricultural Economics in 2001. These what might be viewed as small differences would be expected to have large impacts on Upper Midwest farmers. It would not be unreasonable to anticipate that they might double the size of the adverse impacts, but the precise effect would require modeling changes.
- 17. In retrospect, a serious error occurred in this hearing when the AMS economist who developed the model used to estimate the impacts of the NMPF proposal did not appear as a witness. These estimated impacts and sensitivities need to be clarified and made transparent for all farmers to see, regardless of their location. Those dairy farmers located in the Southwest, Mideast, or Central Orders that have access to the higher Southeast and Florida markets stand to reap substantial benefits from the proposal. Upper Midwest farmers bear substantial losses. Moreover, due to the predominance of smaller farmers located in the Upper Midwest region, these changes in policy have particularly adverse impacts on small farmers and other small businesses located in the Upper Midwest and in other regions that do not have access to the Class I and II option benefits proposed by the proponents.

- 18. My conclusion is that it is impossible to raise Class I prices without adversely affecting Class III and IV prices. As has been noted by other witnesses, this conclusion is well documented in the economic literature. The benefits of increases in Class I prices get diluted by lower Class III and IV prices with the greatest economic burden falling on those producers who primarily produce milk for manufacturing and do not have access to the higher Class I prices.
- 19.A second unintended consequence for the Upper Midwest would materialize if the Milk Income Loss Contract (MILC) program were extended in the 2007 Farm Bill. To the extent that the options being considered raise the market price, MILC payments decline. This would be another kick in the financial gut of Midwest farmers.
- 20. The third unintended consequence is that increases in Class I prices create economic incentives for more milk to be pooled on the higher Class I utilization markets. This was one of the unintended consequences of the Order Reform decision to adopt the 1A pricing option as opposed to 1B. It was also one of the factors that led to increased pooling of milk on higher utilization Federal Orders and to eventually require tighter standards for pooling milk on these orders. The complexity of this unintended consequence is indicated by the fact that it took two rounds of hearings to deal with the issue. Make no mistake about it, the proponents' proposal is a sister of the adopted option 1A. It is safe to bet that if this proposal is adopted, another round of even tighter pooling standards will be required. Therefore, regulatory decisions not based on sound economics often require offsetting higher level of regulation.
- 21. Both the AMAA and the Nourse Report explicitly identify the pursuit of more orderly marketing as a primary objective of Federal Orders. However, these unintended consequences create disorder in markets for milk. Specifically, it benefits one group of producers at the expense of another, and it leads to unnecessary pooling of milk on higher utilization markets. Therefore, while the proponents assert but do not explain how their proposal leads to more orderly marketing, the fact is that it leads to greater market disorder as did the 1A Reform decision.
- 22. The fourth obvious unintended consequence of higher Class I prices is that higher consumer prices lead to lower milk consumption and increased consumption of milk substitutes. The result is lower Class I utilization at a time when there is plenty of milk available to serve all market needs.

Lack of Science-Based Support for Proposal

- 23. The proponent's position supporting emergency regulatory action is not based on sound economic science and, therefore, does not justify a Class I price increase. This is the case for each of the enumerated costs because insufficient time and input was provided for study of these issues.
- 24. First, the costs of converting to Grade A are no longer a relevant consideration because 98% of all U.S. milk production is now Grade A. In addition to the incentives for conversion provided by Federal Order classified pricing, increases in sanitation and facility requirements for Grade B have fostered conversion to Grade A. In fact, the industry made the conversion to Grade A decades ago and all Federal Order milk is produced to meet Grade A standards. As a consequence, the costs of maintaining Grade A are born by all milk Classes, not just by Class I.
- 25. The fact that virtually all milk is Grade A was the underlying reason for converting from the M-W price series to product formula pricing as indicated by the Proposed Rule dated January 30, 1998 at pp. 4876-7. As a result of the virtual absence of Grade B production, the price needed to maintain Grade A production is the same as that required to assure an adequate supply of milk. The available supply and demand data discussed previously clearly demonstrates an adequate supply of milk has existed and currently exists under the current Federal Order provisions.
- 26. It is obvious that AMS and the Secretary preferred Option 1B in the 1998 reform decision. It is also a fact that the only option for which the issue of the cost of conversion was specifically analyzed was for Option 1A. For all other options the Class I differential was explicitly determined to "Recognize quality (Grade A) value of milk" as indicated, for example, on p. 4894. That is, for all options other than 1A, the Class I differential was explicitly determined to be sufficient in the 1998 Proposed Rule. In addition, it is a fact that the final decision did not mention the cost of conversion or any of the proponents' cost items.
- 27. The 1998 Reform decision did not adopt Option 1A; neither did the April 1999 Proposed Rule. Therefore, based on the 1998 Proposed Rule, the current Class I differential is also sufficient to induce and maintain conversion.

- 28. If it is determined that the costs of converting from Grade B to Grade A are still relevant in determining the Class I price, it should be based on sound economic science as has become the standard principle for USDA domestic and international policy decisions; the proponents have failed to utilize sound economic science in estimating its cost. No study has been made of the differential cost between Grade A and B production since 1977, which is nearly 3 decades ago. That was a study by Gary G. Frank, G. A. Peterson and Harlan Hughes titled Class I Differential: Cost of Production Justification. It was published in Economic Issues, No. 8. University of Wisconsin-Madison. Department of Agricultural Economics. April 1977. The January 30, 1998, Proposed Rule at p. 4908 indicates an estimated cost of conversion of "approximately \$0.40 per hundredweight" but provides no source for this estimate. The proponents provide no information on the cost of conversion, but rather build on the Proposed Rule's approximation using flawed methods as opposed to sound economic science.
- 29. My conclusion is that the cost of converting to Grade A is no longer a relevant consideration in Class I pricing. In addition, I conclude that the proponents have failed to provide a sound economic estimate of the cost of converting to from Grade B to Grade A
- 30. The second enumerated cost utilized by the proponents to justify a Class I price increase is higher marketing costs. Here the proponents give primary attention to balancing and transportation costs. Both of these cost elements are already provided for in other Federal Order provisions.
- 31. Consideration of the costs of balancing in Federal Orders has occurred in at least four hearings since 1980 and has been explicitly rejected for lack of sound science based economic data. This includes: (1) the 1987 Atlanta decision dated May 1, 1987, (2) the Proposed Federal Order Reform Rule, dated January 30, 1998 at pages. 4951-2. recognizing (3) a previous Northeast decision, and (4) the Northeast decision dated January 31, 2005. The conclusion in each of these decisions is that balancing costs are part of the Class III and IV prices at page 4952.
- 32. Also, the costs of balancing are recognized as a component of full supply contract services provided by cooperatives assessing over-order premiums and handling charges. As a result, they should not be a relevant consideration in setting the Class I price differential. To imply otherwise would be double counting: (1) supply-demand determined market premiums and handling charges and (2) Federal Order regulatory considerations.

- 33. No sound economic data have been presented by the proponents to support the third enumerated cost alleging "sacrifice in plant profitability" at a time when manufacturing plants are running at or near capacity due to the higher levels of production noted previously. The alleged 22% increases in costs of converting milk to butter and powder utilized to establish make allowances in no way represents sound economic science in reflecting the "sacrifice in plant profitability." In fact, USDA rejected this very data in its recent decision on make allowances, approving only a 5% increase in the butter and powder make allowance, not a 22% increase.
- 34. My conclusion is that the proponents have failed to provide a sound economic basis for the inclusion of balancing costs in Federal Order Class I pricing and have failed to present a sound economic estimate of the changes in the balancing cost.
- 35. Transportation credits are already provided for in Federal Orders where they have been determined to be relevant and, therefore, are not a sound economic reason for increasing the Class I differential. To include increases in transportation costs as a justification for increasing the Class I differential would imply a lack of transportation credits in Federal Orders, which, as noted previously, are already being addressed for the Southeast and Appalachian and Chicago Federal Order markets as indicated in the 1998 Proposed Rule at p. 4951 and pp. 4958-9.
- 36. From the information presented by the NMPF, it appears that the transportation cost increase of \$0.10/cwt is based on milk assembly and hauling charges for all milk in the Upper Midwest and the Northwest, not on the cost of serving Class I markets. At the risk of repetition once again, the studies referred to the cost of assembly and hauling for all milk, not for just Class I milk. It would neither be logical nor credible to apply a hauling cost for all milk to only Class I milk. My conclusion is that, it would not be sound economic science to use this as one of the economic basis for increasing the Class I differential in all Orders.
- 37. There is no economic justification for using increases in premiums as a basis for increasing the Class I differential when there is already an adequate supply of milk. Premiums reflect the value of milk in manufacturing and in maintaining the utilization of manufacturing capacity, and the amount of money required to induce a manufacturing plant to give up milk for Class I purposes, which is related to the obligations of a cooperative under full supply contracts. Given that Class I premiums are pooled and shared among producers, regardless of whether they are supplying Class I facilities, raising the Class I price neither necessarily compensates for the functions performed by premiums, nor does it necessarily reduce the amount of the premium, unless a reduction in the premium was mandated.

Obligation to Generate and Make Transparent Relevant Studies

- **38.** For some individuals, this decision and that of Federal Order Reform in 1999 may be characterized as a difference over whether Federal Order regulation ought to be market oriented or regulatory oriented. I understand this perspective but believe there is a much more fundamental point, regardless of the regulatory philosophy. This point is that AMS and the Secretary have a public interest obligation to gather and make transparent, all relevant facts and consequences prior to making a decision on the proposed rule.
- **39.** A sound economic basis for establishing Class I differentials lies in a comprehensive analysis of the rationale for Class I pricing, considering current industry practices and economic conditions. Significant changes have occurred and are occurring in industry structure and costs as demonstrated, for example, by the make allowance hearing and decision. In both the Reform decisions, comprehensive and unbiased economic analyses were completed as a basis for these decisions.
- 40. While the results of these analyses were not always followed, as in the imposition of the Class I pricing option 1A by Congressional mandate, the nature and economic reasoning that went into the 1998 and 1999 Proposed Rules were clear for all to see and pass judgment on option 1A's economic validity. Due to the emergency nature of this hearing, that transparent, analytical, science-based approach is not being provided in this instance.
- 41. With no question as to the adequacy of milk supplies, this is not the time to make fundamental Class I pricing decisions based on approximate costs and shoddy economic analysis obviously not based in science. As in the make allowance decision, it is time to take a deep breath and do the type of analysis that will stand up to economic, legal, and political scrutiny. The starting point for such an analysis should be a replication of the spatial pricing study utilized in the 1998 Proposed Rule considering plant capacities, production locations, transportation costs, and demand points, the updated model for which exists at Cornell University. This approach was used by USDA as part of Order Reform. While such a study may not provide the final answer and may need to be complemented by other studies and factual industry information, the result would be economically defensible in consideration of the changes that have occurred and are occurring in the dairy industry.
- 42 The overall conclusion of my study of this proposed change in Class I pricing policy is that no change in the Class I differential is justified. This conclusion is based on: (1) the milk supply and demand are adequate, (2) the proposal does not facilitate adjustment to the changes occurring in the

milk industry, (3) unintended consequences result in disorderly market conditions, (4) the enumerated costs that sum to Class I price increase are not grounded in sound science-based methods, (5) the time required for a science-based economic analysis of the proposal and of its alternatives and consequences has been insufficient to provide decision makers an adequate basis for science-based decisions and transparency to the industry, the general public, and the Congress. The conclusions I have drawn, while valid to the best of my knowledge, barely scratch the surface in terms of the type and depth of analysis needed for a science-based and transparent Class I pricing decision.

-\$271,426,260 -\$30,257,337 -\$301,683,597 Estimated impact of proposed changes in Class I and II FMMO options on Upper Midwest dairy farmer receipts based on 2005 Upper Midwest Federal Order receipts and AMS Hearing Notice analysis. Baseline Class I policon Class I option Class I option 9 Baseline % Upper Midwest option price option price annual revenue annual revenue year revenue 9 year revenue 9 year revenue Class I & I option Year and Class utilization cwt Midwest option price change -\$257,327,297 -\$28,685,650 -\$286,012,947 -\$34,310,306 -\$2,494,404 -\$36,804,711 -\$23,016,991 -\$26,191,246 -\$249,208,237 -\$28,691,922 `-\$3,187,294 -\$31,779,216 \$29,031,168 -\$3,253,461 \$25,777,707 -\$3,812,256 -\$277,156 -\$4,089,412 -\$453,812 \$1,541,113 \$1,087,501 -\$24,779,666 -\$2,910,138 -\$27,689,804 \$29,484,780 -\$4,794,574 \$24,690,206 -\$0.15 -\$0.23 \$0.64 -\$0.19 \$0.01 \$0.09 -\$0.02 -\$0.02 -\$0.13 -\$0.21 \$0.65 190,612,813 13,857,802 45,361,200 17,123,480 37.264% 8.830% 9.791% 511,520,000 156,940,000 458,750,000 174,890,000 Class III Class IV Class I Class II Total revenue change . 2005

\$275,596,071 -\$30,885,465 \$244,710,606 -\$56,972,990

\$261,280,512 -\$29,281,151 \$231,999,361 -\$54,013,586

-\$4,082,508 \$13,870,019 \$9,787,511 -\$27,017,200

\$285,363,020 -\$43,151,169 \$222,211,851 -\$26,996,386

Total revenue change