Toward Reform of Fluid Milk Pricing
in Southern New England:
Milk Market Channel Policies
for Connecticut and Other States

by

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Toward Reform of Fluid Milk Pricing in Southern New England: Milk Market Channel Policies for Connecticut and Other States

I.   Introduction

This paper is an extension of earlier work on the Fair Share policy (Cotterill, 2006a) and analysis of other policy alternatives including the Maine Handler Fee policy (Cotterill, 2006b). This paper presents two alternatives to the Maine Handler Fee policy, each ensures that Connecticut farmers receive at least $15.00 per cwt (at Hartford). First we will show that a Fair Share policy can achieve this target while having no impact on processors, preserving the profitable sale of milk by retailers, and in most cases having little impact on consumers. We will examine how sensitive the results are to alternative market channel assumptions and different policy options. Then we examine a second policy. It is a modified Maine Handler Fee program and a retail price ceiling law that is nearly identical to New York's. This policy duo impacts processors as well as retailers, and in most cases has little impact on consumers. Finally, we will compare the Fair Share policy to the Refined Handler Fee and Price Ceiling combination, and to the Maine Handler Fee policy. All three policy approaches are sufficiently flexible so that the Connecticut Milk Regulation Board can redistribute income among farmers, retailers and consumers. We also raise a fundamental question. Are these alternative policy approaches legal? We believe that all three policies may be; however, we defer to professional legal analysis.

At this juncture it is imperative that legal analysis be done on these policy options, especially for milk importing states such as Connecticut, Massachusetts, and Rhode Island. It is very important to understand that fair share or refined handler fee premiums are placed in an independent fund that a state milk board oversees. It does not

go into a state's general fund. Therefore, we believe that it <u>must </u>be paid back to all

farmers who supply milk to plants that supply Connecticut retailers. One cannot collect

money from plants under the Fair Share program <u>or</u> the refined Handler Fee program and

pay benefits <u>only</u> to Connecticut farmers. A U.S. Supreme Court decision struck down a

Massachusetts program in the 1990s wherein a handler fee was collected on all milk

supplied to processing plants in Massachusetts from MA, CT, VT, NH, RI and NY but

paid back only to Massachusetts farmers. This Massachusetts program directly linked the

handler fee with the pay out to farmers.

There may be an "out" for the pure Maine Handler Fee policy. That policy has

two parts. The fee is a tax that is paid into the state's general fund. A separate law

provides a state subsidy to dairy farmers from the state's general fund. These two

separate laws make no mention of the other. Also, they do not link or earmark specific

tax revenues for a specific state program. This may be enough to avoid violation of the

U.S. Constitution's interstate commerce clause. Again, we stress the need for legal

analysis. Our thoughts on legality are in no way determinative.

II.   The Structure of the Southern New England Milk Market Channel

To analyze these policy approaches in Connecticut one needs to specify the

Southern New England milk market channel. We do this in Tables 1-5. At the outset we

stress that our structural estimates are very crude; however, they are a reasonable starting

point. We will examine how changes in some of them affect some results. More precise

data is available from other sources including the Federal Milk Market Administrators

Office. Exact measures can be generated if either program is implemented.

Table 1 gives the estimated annual fluid milk consumption for Connecticut, Massachusetts, and Rhode Island. Table 2a decomposes the estimated 599 million pounds consumed annually into the amount sold through the retail channel (assumed to be 75%) and then allocates those sales across the processors that supply Connecticut retailers. We estimate that the Garelick/Dean Franklin, Massachusetts plant supplies 55% of Connecticut retail milk, Guida (and we lump in Stew Leonard here) supplies 30%. Hood supplies 7%, Stearns Mountain Dairy 4% and all others (Shop Rite own label, organic, etc.) supplies 4%. These market share estimates are in all likelihood not correct. We test the sensitivity of our results to two other sets that give Hood a larger share at the expense of Garelick and/or Guida.

Tables 2b and 2c decompose retail fluid consumption for Massachusetts and Rhode Island in a similar fashion.

Table 3 gives the annual milk production for the three Southern New England states. We assume that 85% of this milk is used for fluid bottling. The other 15% goes to Class III or IV because at certain times of the week and year balancing of the fluid supply to processor demand requires diversion. The Agri-Mark butter and nonfat dry milk powder (Class IV) plant at Agawam helps to balance the regional fluid market.

Table 4 details the annual procurement of raw milk from each of the three states by the processing plants that supply Connecticut retailers. Note that we assume 70.9% of Guida's purchases are Connecticut production. Only 1.2% of the Garelick/Dean Franklin, Massachusetts plant's milk and only 6% of the Hood Agawam plant comes from Connecticut farms.

Tables 5a and 5b identify how the processing plants distribute output to retail and non retail accounts in the three states. In Table 5a Connecticut retailers account for 20.6% of the Franklin, Massachusetts Garelick/Dean plant, 35.9% of the Guida plants' output, and 7.9% of the Hood Agawam output. For Stearns, virtually all milk is produced and sold in state. In Table 5b the milk sold outside of the retail channel in Connecticut comes from Guida. This undoubtedly overstates Guida's non retail position; however, we have no better information at this time.

With these structural specifications one can now trace how payments by the Fair Share and the Refined Handler Fee policies flow back to farmers. Again, as these structural specifications change, the impact of either program will change.

III.   **Basic Facts on Fluid Milk Market Channel Pricing in New York and New England**

Research on the fluid milk marketing channel has documented several basic facts. Retailers in Southern New England have very wide margins at all stages of the raw milk price cycle (Chidmi, et al. 2005) At all times there are margins in excess of the 50-55 cents per gallon that is needed to cover in store costs and return a competitive return on investment (Criner, 2003). The New York Price Gouging Law limits retailer margins when raw fluid prices are low so that retail prices are lower than in nearby Southern New England (Cotterill, 2006a). The Northeast Dairy Compact was a program that elevated raw fluid milk prices in the New England milk shed. That milk shed includes farms from New York and also as well as New England. When it started, retailers in Southern New England "piled on" by raising the retail prices much more than the Compact's raw milk price increase (Chidmi, et al., 2005; Lass, 2005). In their moves to defeat the Dairy

Compact retailers supported research that claimed that their prices would drop by even more than any resulting raw fluid price drop (Bailey, 2001). In fact, after the demise of the Compact, raw prices plummeted 50 cents per gallon, and retail prices dropped only 11 cents (Cotterill, 2005).

Given these facts, economic theory counsels that pricing efficiency will be improved if a milk channel policy redistributes excessive retail margins to farmers and consumers. The New York Price Gouging Law is a start; however, it only benefits consumers during milk price cycle lows and does nothing for farmers. Income redistribution to farmers is in order if one wishes to improve the economic prospects for dairying in the New England milk shed.

IV.   Analysis of the Fair Share Program

Table 6 shows how the Fair Share Program could guarantee farmers at least $15.00/cwt on all their milk (not just Class I milk), and ensure that retailers receive 60 cents per gallon for costs and profits (5 cents above the 2003 estimate of 55 cents). Given that the Connecticut Milk Regulation Board sets these two policy targets the Fair Share policy generates an impact on consumers. We will examine it to see if the two targets, $15.00 per cwt for farmers and 60 cents for retailer margins, can be attained without large negative impacts on consumers. Table 6 illustrates the program's operation for the consecutive low raw milk price months between February and June 2006, and for an even lower raw milk price month, April 2003.

Before we start to explain the guts of the program, note that line 27 gives the actual blend price received by Connecticut farmers.   It ranged from $14.15 in February 2006 to $11.35 in April 2003. Then note on line 28 that the Fair Share Program pays the

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difference between $15.00 and these prices so that on line 29 the price plus program

payment equals $15.00. The bottom line is that this program, <u>even if passed only in</u>

<u>Connecticut</u>, can increase farmers' prices to the targeted $15.00.

Let's return to the top of Table 6 to see how the program does this. Row 1 is the

average wholesale price over all brands and all butterfat content milk.[1] There are two

policy parameters that in tandem determine the amount retailers must pay into the fair

share fund. They are a New York style retail price markup ceiling (line 2) and a share

ratio (line 5). If one relaxes the ceiling so retailers can charge a higher markup then a

lower share ratio will generate a given dollar contribution to the fair share fund. Note

that this benefits retailers at the expense of consumers for a given benefit to farmers.

Thus when the Connecticut Milk Regulation Board sets all policy parameters it can

reallocate income among the three groups.

In February 2006 the retail markup ceiling is set at 41% (line 2), and the share

ratio is set at 30% (line 5). We assume that the ceiling is binding and retailers add 86

cents (line 3) to the wholesale price so milk retails at $2.97 per gallon (line 4). Note that

the actual market price in February 2006 was $3.45 (line 8) so consumers save 48 cents

per gallon if the policy is implemented.

How do farmers get the needed 85 cents per hundred weight to raise their price to

$15.00 per cwt? Look at line 6. Given the 41% price markup ceiling and the fact that

retailers must share 30% of their markup with farmers, the fair share fund receives 26

cents per gallon from Connecticut retailers (line 6). This is $3.03 per cwt (line 7).

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[1] We have assumed all processors need 76 cents per gallon to process and deliver fluid milk. This estimate
is based upon information provided by Dairy Technomics to the Connecticut Department of Agriculture
during 2006. Adding this to the raw price for different types of milk gives the wholesale price. If the
policy were in operation the wholesale price would easily be available on invoices to retailers.

Lines 11-13 document that the program always returns 60 cents to retailers, honoring the target margin set by the Board.[2].

Lines 14-19 documents how much money in the fair share fund must be allocated to farmers that supply each processing plant. Turning now to the column for February 2006, note on line 14 that the farmers that supply the Garelick/Dean Franklin, Massachusetts plant get the most money from the program, $624,627. This is because that plant makes the largest share of the sales to retailers in Connecticut (Table 2a). Next is Guida (line 15). Farmers that supply Guida are entitled to $340,706 from the Fair Share Fund. The total to all farmers that supply all plants is on line 19 and is $1,135,685 for February 2006.

Line 20 is the amount that we estimate will be needed to administer this program or a Handler Fee program. The $100,000 per month is allocated from the Fair Share Fund for the following uses. First, the Regulation Board will need to create a Milk Pricing Agency. It will need at least one Ph.D. level marketing economist who is trained in price analysis to advise the Board on how to set policy parameters to achieve targets. This is especially the case if policy parameters change from month to month as is done in the illustrations in this paper. It will also need a chief auditor. These two executions will need technical and clerical support for auditing, data assembly, and analysis. Staff of the Pricing Agency should not be state employees. We think that they should be a private organization fully funded by this program and located at or near the University of Connecticut. This would enable the Agency to work with University staff. Graduate

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[2] This assumes that the retailers would not want to set a lower price and receive a lower margin. There is evidence that major supermarket chains have practiced loss leader pricing of milk in New England. If they decided to price below the ceiling price the Board could increase payments into the fund by increasing the fair share ratio or moving to a lump sum charge. A lump sum charge, in fact, is a handler fee program which is analyzed next.

research students or recent graduates might work at the Commission on policy matters.

This separate pricing agency could also work for other states if they pass similar laws.

This would economize on administrative costs across several states and would sustain

economic expertise for the region's dairy industry.

Lines 21-26 employ the pro rata shares of milk shipped by Connecticut farmers to

the plants (Table 4) to determine the dollars Connecticut farmers receive from each plant.

All other monies are paid to farmers from other states that ship milk to these plants, again

based on each farmer's share of the plant volume. This means that the Milk Pricing

Agency will need to know (determine in some fashion) who ships how much fluid milk

to each plant. The cooperatives can help here since AgriMark and DMS deliver all the

milk to these plants (except Stearns and all others).

One could also pay Connecticut farmers based on the plant that they ship to. This

would be a handler pool. The Pennsylvania Milk Marketing Board has handler pools;

however, we suggest that all monies due to Connecticut farmers be re-blended so that all

farmers in the state receive the same premium per cwt. This repooling approach to

farmers in state does not benefit them *vis a vis* out of state farmers. Thus it should be

legal. In fact, when we repool and pay out the monies in Table 6, all Connecticut farmers

receive the needed 85 cents per cwt to bring their price up to $15.00 per cwt. The

program parameters were set so that, given the channel structure, the reblend produces

$15.00 per cwt.[3]

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[3] One would also structure payment premiums to Connecticut farmers based on production; for example, paying a higher premium for the first two million pounds and progressively lower premiums for two to four million pounds and over four million pounds. The Maine pay out program has three tiers with smallest farmers receiving the highest subsidy per cwt.

Now let's look at May 2006, a very low raw milk price month. Line 27 shows that farmers received at Hartford only $12.51 per cwt. Note that the Fair Share program pays Connecticut farmers an additional $2.49 per cwt to bring them up to $15.00. To do this the markup ceiling is now set at 68% (line 2) and the share ratio is now set at 55% (line 5). Retailers still receive 60 cents per gallon (line 13). Now consumers pay $3.25 per gallon, up from $2.97. Thus the program "hurts" consumers during this very low farm price month in order to keep farmers at $15.00.

Table 7 gives another policy scenario. Each month retailers receive 60 cents and consumers are not hurt in any month. This caps payment to farmers, and in some months they receive premiums but not enough to get to $15.00.

Three points deserve elaboration on these trade offs between farmers, consumers, and retailers. First, the short run damage to consumers may not be regarded as substantial given the long run benefits of preserving the local milk shed. Second, one could run the Fair Share fund in a fashion that accumulates funds during some months to pay out in really bad months so that farmers recover the $15.00 minimum at all times without policy generated "price spikes" at the consumer level. These results suggest that this type of policy could operate with no impact on consumers. Third, in this after the fact application of policy we know what the market price was without the policy. If any policy is implemented, one will not observe such benchmark prices. Thus it will be harder to measure exactly what the program impact on consumers is.

Note on line 30 of Table 6 that only 25% of the Fair Share fund is paid out to Connecticut farmers. The rest follows the milk to the milk shed of the plants that supply Connecticut. But, if Massachusetts and Rhode Island passed similar laws then virtually

all of the milk in the identified processing plants would be covered, and Connecticut

farmers would receive four times as much in premiums, effectively 100% of paid

premiums net of administrative costs. For example, the premium could be 4 x .85 =

$3.40/cwt in February 2006 giving a farm price for all milk shipped at $17.55/cwt.

Alternatively, one could cut the price ceiling and or share ratio by an aggregate 75%

dollar amount and still receive $15.00/cwt.

Table A15 in the Appendix shows how the Fair Share program would work if

adopted only in Massachusetts. It guaranties Massachusetts farmers $15.00 per cwt and

also pays very substantial premiums to Connecticut farmers. If only one New England

state was to adopt the fair share, or refined handler fee program explained in the next

section, it should be Massachusetts. That is because more fluid milk is consumed there

than in Connecticut. Of course the ideal outcome would be adoption in Connecticut,

Massachusetts, and Rhode Island. Then effectively 100% of the milk processed in the

three Southern New England plants (Garelick, Hood and Guida) would be covered.

The appendices contain alternatives to Tables 6 and 7 that test the results

sensitivity to different structural specifications.. Table 8 summarizes what we found for

April 2003. Alternative 1 is to increase Hood's share from 7 to 12% in Connecticut and

reduce Garelick's share from 55 to 50%. These share changes have a very minimal effect

on the program. Farmer's impact is nearly identical. Alternative 2, we increase Hood's

share of retail sales in Connecticut another 5% to 17%, and cut Guida back to 25%.

These changes tend to hurt consumers (scenario 1) or farmers (scenario 2) a little more

than our base scenario. In scenario 1 consumers' loss increases 13 cents per gallon to 62

cents, and in scenario 2 farmers' price rises only to $13.06 instead of $13.28 in the base

scenario. The premium paid farmers in alternative 2 is in scenario 2 is $1.71 per cwt whereas in the base run in scenario 2 it was $1.93.

V. A Refined Handler Fee Policy in Tandem with a Price Ceiling (Anti Price Gouging) Policy

When evaluating a Handler Fee program one must recognize that Connecticut cannot assess a fee on all milk sold in Connecticut, put it in a dedicated fund for dairy farmers, and then pay it out only to Connecticut farmers. If one does not go the Maine route (put funds in the general fund) collected dollars that go into a dedicated fund must be paid back to all farmers that supplied milk to Connecticut. That way the policy does not favor Connecticut farmers over farmers from other states. Therefore, a handler fee policy with payment into a dedicated "milk" fund if the handler fee program is assessed on only milk sold at retail would have the same economics as the Fair Share Program. Handler fee programs, however, have an advantage. A handler fee can be charged on non retail as well as retail milk. Nonetheless, we will not include 10% of fluid milk that we estimate goes to schools and the WIC program. This means the Refined Handler Fee policy with its dedicated milk fund covers 90% of fluid milk whereas the Fair Share covers only 75%.

Table 9 evaluates the economics of a Refined Handler Fee policy in each of the same six months that we used for the Fair Share policy analysis. On line 1 in Table 9 the handler fee is set at the level, given the milk market channel structure described in Tables 1-5, that guarantees Connecticut farmers $15.00 per cwt at Hartford. In February 2006 the fee needs to be 17 cents per gallon. In a month like April 2003 it needs to be 68 cents per gallon. Line 2 gives the actual wholesale price for each month. Line 3 adds the

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handler fee to this price to give the wholesale price that could exist under the program. This assumes, as earlier in the Fair Share section, that all processors need 76 cents per gallon to bottle and deliver milk. Note that as wholesale (and the underlying farm prices) drop the needed Handler Fee goes up a little more than the drop so that wholesale prices under the Fee policy do increase. This is due to variation in Class I utilization. Lower utilization in the lower price months requires a higher premium to attain $15.00.

Lines 4 through 9 are the Refined Handler Fee difference from a pure Maine Handler Fee policy. Here payments "follow the milk" back to the farmers that supply each plant. Farmers that supply the Garelick/Dean plant in Franklin, MA receive the most money from the program. Guida's farmers are next.

Line 10 is the administrative draw for the Milk Pricing Agency. Lines 11 through 16 determine the total dollars from each plant that are available for reblending to pay Connecticut farmers a premium per cwt.

Lines 17 through 19 indicate that we have set the Handler Fee at the level needed to pay Connecticut farmers the necessary premium to sustain a $15.00 cwt price in these lower priced months.

Line 20 indicates that Connecticut farmers receive 30% to 32.8% of the program's collected funds. This is better than the 25% under the Fair Share policy because this program covers non retail milk, and we assume all of that is processed by Guida and it is all from Connecticut farms.[4]

The rest of Table 9 focuses on how a price ceiling law could complement the Handler Fee to ensure that consumers would not be gouged and that retailers' margins

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[4] If one changes these assumptions and reduces the share values to less than 100%, the percentage on line 20 in Table 9 will fall.

would fall towards competitive levels. Following the New York law we establish a base raw milk price which is the Class I price for 3.5% milk plus any cooperative premiums, plus the handler's fee (line 21). Next, as in New York, one sees a retail threshold price. In this example it is set at 165% of the base price because this limits retail margins to approximately 60 cents per gallon in these months (line 23). As under the New York law retailers could charge more than the threshold price if they can justify that they need a higher price to cover their costs. Retailers have an "out" so that no one will ever be forced to sell at a loss.

Lines 24 and 25 give the impact of both policies (handler fee with 165% price ceiling) on consumers. As with the Fair Share policy, consumers benefit in the first three months and suffer a little in the last three months of Table 9. Again, a dynamic approach could collect more in months when consumers are not hurt and less when they are to smooth out the consumer impact, possibly having no negative impact while paying farmers $15.00 per cwt.

VI.   **Comparing the Fair Share, the Refined Handler Fee with Price Ceiling, and the Pure Maine Handler Fee with Price Ceiling Policies**

First and foremost is the question, are these policies legal? We recommend a careful legal review of these policies by qualified legal experts. The retail ceiling component is legal, or at least the New York law has never been challenged. For the rest of this section we will assume that all three policies are legal so that we can compare the economic merits of each.

First, let's compare the Fair Share and Refined Handler Fee /Price Ceiling policies. Perhaps the biggest difference is that under the Refined Handler Policy with Price Ceiling, 90% of fluid milk is covered while under the Fair Share policy only 75% is covered. This means one can collect funds to attain a farmer price target with less impact on retail prices. It also means that the retail sector can bear less burden; however, research documents that retail margins are sufficiently excessive to sustain either program without sub-competitive returns to retailers.

Would the Refined Handler Fee with Price Ceiling program be easier to implement and manage than the Fair Share program? Both require a careful assessment of the structure of the milk channel. Both need to take the same dollar amount out of the channel. Both must follow the flow of milk back to all farmers in the milk shed. Both need to repool the proceeds to pay Connecticut farmers the same per cwt premium. Both need to set program parameters that have desired impacts on farmers, retailers and consumers. Under both one may want to manage the program over the entire raw milk price cycle to attain a raw milk price target with the least amount of negative consumer impact.

Where the programs differ is in the collection of funds. Under the Refined Handler Fee policy the funds are paid by the main processors (Garelick, Guida, Hood) and other smaller processors that sell in Connecticut. One would need proof that they collect the fee on milk sold to all non retail and retail buyers in the state with a credit for school and WIC sales.

Under the Fair Share policy, funds are collected from all retailers in the state. Since there are fewer processors, and since the top four processors that sell in the state

account for more fluid milk than the top four retailers, the audit burden is less under the

Handler Fee policy.

Finally, we would note that there are second order effects to both policies that

need to be controlled. Either law would have to prohibit retailers from switching to

higher cost, FOB the retail store, bottled milk from more distant processors. An

economically rational retailer should buy the lowest cost milk. If a retailer switches to

higher cost more distant milk, the Connecticut program benefits are paid under either

program to those distant farmers, not Connecticut farmers. This move by the retailer

could only be rational if it seeks to destroy the Connecticut program. Such conduct must

be prohibited by the law.

Based on this analysis the refined handler fee policy with price ceiling is the most

desirable policy. Its biggest advantage is that it covers non-retail, as well as retail, fluid

milk sales. It also is simpler to administer and the revenue input is more certain. The

milk board sets the monthly fee per gallon and the price ceiling. Setting the fair share

rate and ceiling under the fair share policy generates the desired amount only if the

retailer prices at the ceiling price. Lowball prices would not generate the desired

payment.[5]

Now let's compare the Refined Handler Fee with Price Ceiling to a pure Maine

Handler fee with price ceiling. The biggest difference is in the payout scheme. The

Refined Handler fee policy pays out only 30-33% of collected fees to Connecticut

farmers. The rest goes to out of state farmers. But, if Massachusetts adopted the same

program the coverage ratio at the Hood and Garelick plants in Massachusetts and Guida

in Connecticut would increase towards 100%. Since the fee would be collected on milk

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[5] However, raising the fair share rate would deter lowball pricing.

sold in Massachusetts as well as Connecticut, nearly all of those plant's outputs would be covered. Add Rhode Island and coverage would be even higher. Then not just Connecticut farmers, but all farmers that supply those plants would receive effectively 100 cents (but for administration costs) of every dollar collected.

Under the pure Maine Handler fee program every dollar collected goes into the Connecticut General Revenue fund, so the monies stay in-state. The question is how much will the legislature appropriate each year to a dairy farmer subsidy program? Dairy farmers will need to lobby each year for full funding of any Connecticut Milk Board policy that seeks to sustain milk prices at, for example, $15.00 per cwt.

Finally, we would note that the pure Maine policy offers no benefits to other states in the Southern New England milk shed which include Vermont, New Hampshire, and New York. Moreover a major exporting state such as Vermont cannot use a handler fee on milk sold in-state to elevate farm prices. If Connecticut and Massachusetts "go it alone" with a pure Maine program Vermont, New Hampshire, and Eastern New York will have to fend for themselves. A regional approach that uses the refined handler fee policy strategy would benefit all farmers in the milk shed without damaging Massachusetts and Connecticut farmers. Ultimately the decision to pursue a particular policy or no policy at all is political and depends upon the ability of farmers in a particular state to enact legislation. Would a regional coalition of all dairy farmers have more influence in a particular state house than the farmers from that state?

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Tables 1-5. Milk Channel Structural Assumptions

Table 1. Estimated Annual Fluid Milk Consumption by State in million of pounds*

Connecticut	599.1
Massachusetts	1139.6
Rhode Island	182.8

* Based on 21 gallons per capita. Population estimate obtained from US Census Bureau for July 1, 2005.

Table 2. Decomposition of Annual Fluid Milk Sales in Connecticut to Obtain Processor Sales and Market Shares through Retail Outlets

a) Connecticut

	Fluid Sales (mil lbs)	Market Share
Estimated Total Fluid Consumption	599.1	
25% are Sales Outside of Retail Channel (school, restaurant, institutional)	149.8	
Total Fluid Sold Through The Retail Channel	449.3	
Garelick/Dean	247.1	55.0%
Guida (Stew Leonards)	134.8	30.0%
Hood	31.5	7.0%
Stearns	18.0	4.0%
All Other	18.0	4.0%

b) Massachusetts

	Fluid Sales (mil lbs)	Market Share
Estimated Total Fluid Consumption	1139.6	
25% are Sales Outside of Retail Channel (school, restaurant, institutional)	284.9	
Total Fluid Sold Through The Retail Channel	854.7	
Garelick/Dean	598.3	70.0%
Guida (Stew Leonards)	42.7	5.0%
Hood	170.9	20.0%
Stearns	0.0	0.0%
All Other	42.7	5.0%

c) Rhode Island

	Fluid Sales (mil lbs)	Market Share
Estimated Total Fluid Consumption	182.8	
25% are Sales Outside of Retail Channel (school, restaurant, institutional)	45.7	
Total Fluid Sold Through The Retail Channel	137.1	
Garelick/Dean	96.0	70.0%
Guida (Stew Leonards)	6.9	5.0%
Hood	27.4	20.0%
Stearns	0.0	0.0%
All Other	6.9	5.0%

Table 3. Annual Milk Production (in million of pounds) and Estimated Fluid Utilization*

	Production	Estimated Fluid Utilization
Connecticut	384.0	85.0%
Massachusetts	290.0	85.0%
Rhode Island	18.7	85.0%

* USDA National Agricultural Statistics Service, Connecticut State Agricultural Overview - 2005.

Table 4. Annual Procurement of Raw Milk by State for Processing Plants

| | Raw Milk Procurred From | | | | | | | |
| | CT | | MA | | RI | | Total | |
Plant	mil lbs	%	mil lbs	%	mil lbs	%	mil lbs	%
Garelick/Dean, Franklin MA	14.4	1.2%	49.2	4.1%	0.0	0.0%	63.6	5.3%
Guida, New Britain CT (plus Stew Leonards)	265.9	70.9%	0.0	0.0%	15.8	4.2%	281.6	75.1%
Hood Agawam	24.0	6.0%	197.2	49.3%	0.0	0.0%	221.2	55.3%
Stearns, Storrs CT	18.0	100.0%	0.0	0.0%	0.0	0.0%	18.0	100.0%
All Other Plants*	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

* Dean Plant Rensaleer, NY; Byrne Dairy Syracuse, NY; Shop Rite (Reddington Farms) NJ; UHT/Organic

Table 5a. Distribution of Processing Plant Output to Retail Accounts in Different States

| | Annual Production (mil lbs) | Plant Output Sold at Retail in | | | |
Plant		CT	MA	RI	Total
Garelick/Dean, Franklin MA	1200.0	20.6%	50%	8.0%	78.4%
Guida, New Britain CT (plus Stew Leonards)	375.0	35.9%	11%	1.8%	49.2%
Hood Agawam	400.0	7.9%	43%	6.9%	57.5%
Stearns, Storrs CT	18.0	99.8%	0%	0.0%	99.8%
All Other Plants*	-	-	-	-	-

* Dean Plant Rensaleer, NY; Byrne Dairy Syracuse, NY; Shop Rite (Reddington Farms) NJ; UHT/Organic

Table 5b. Distribution of Processing Plant Output to Non-Retail Accounts in Different States

| | Annual Production (mil lbs) | Plant Output Sold at Non-Retail in | | | |
Plant		CT	MA	RI	Total
Garelick/Dean, Franklin MA	1200.0	0.0%	17%	2.1%	18.8%
Guida, New Britain CT (plus Stew Leonards)	375.0	39.9%	6%	5.3%	50.9%
Hood Agawam	400.0	0.0%	21%	0.0%	21.2%
Stearns, Storrs CT	18.0	0.0%	0%	0.0%	0.0%
All Other Plants*	-	-	-	-	-

* Dean Plant Rensaleer, NY; Byrne Dairy Syracuse, NY; Shop Rite (Reddington Farms) NJ; UHT/Organic

Table 6. Connecticut Scenario 1: CT farmers guaranteed $15.00/cwt, retailers keep $0.60/gal for instore costs and profits.

		Feb 06	Mar 06	Apr 06	May 06	Jun 06	Apr 03
1.	Wholesale Price (over all brands and types: 3.25, 2, 1, 0%)	2.11	2.04	1.95	1.94	1.91	1.84
	Policy Set Retailing Markup Ceilings to Obtain Scenario Objectives						
2.	Retail Price Markup Ceiling	41%	53%	67%	68%	69%	90%
3.	Dollar Markup Ceiling (rows 1 * 2)	0.86	1.08	1.31	1.32	1.31	1.64
4.	Ceiling Price	2.97	3.13	3.26	3.25	3.22	3.48
	Policy Set Share Rates to Obtain Scenario Objectives						
5.	Share Ratio Needed to Attain Target Raw Fluid Price	30%	45%	54%	55%	54%	63%
6.	Program Payment per Gallon Sold at Retail (rows [4 - 1] * 5)	0.26	0.49	0.71	0.72	0.70	1.04
7.	Payment per cwt into Fair Share by CT Retailers	3.03	5.67	8.24	8.34	8.20	12.12
	Impact on Consumers						
8.	Actual Price per Gallon (FMO No. 1 retail price: Whole Milk - Hartford)	3.45	3.44	3.30	2.97	2.83	2.99
9.	Retail Price per Gallon under Fair Share Program	2.97	3.13	3.26	3.25	3.22	3.48
10.	Consumer Savings per Gallon if Fair Share Program Implemented[1]	0.48	0.31	0.04	-0.28	-0.39	-0.49
	Impact on Retailers						
11.	Price kept by the Retailer after Payment of Fair Share Premium	2.71	2.64	2.55	2.53	2.52	2.44
12.	Realized Percent Gross Margin under the Fair Share Program	22%	23%	23%	24%	24%	25%
13.	Realized Dollar Gross Margin under the Fair Share Program	0.60	0.60	0.60	0.60	0.60	0.60
	Retailer Payments to Fund for Farmers that Supply each Processing Plant						
14.	Garelick/Dean, Franklin, MA	624,627	1,167,595	1,697,327	1,717,779	1,687,843	2,494,847
15.	Guida, New Britan, CT[2]	340,706	636,870	925,815	936,970	920,641	1,360,825
16.	Hood, Agawam, CT	79,498	148,603	216,023	218,626	214,816	317,526
17.	Stearns, Storrs, CT	45,427	84,916	123,442	124,929	122,752	181,443
18.	All Other, Out-of-State	45,427	84,916	123,442	124,929	122,752	181,443
19.	Total Fair Share Program Funds Collected	1,135,685	2,122,900	3,086,050	3,123,235	3,068,805	4,536,085
20.	Less Administrative Expenses	100,000	100,000	100,000	100,000	100,000	100,000
	Program Payment to CT Farmers by Plant[3]						
21.	Garelick/Dean, Franklin, MA	7,496	14,011	20,368	20,613	20,254	29,938
22.	Guida, New Britan, CT	241,560	451,541	656,403	664,312	652,735	964,825
23.	Hood, Agawam, CT	4,770	8,916	12,961	13,118	12,889	19,052
24.	Stearns, Storrs, CT	45,427	84,916	123,442	124,929	122,752	181,443
25.	All Other, Out-of-State	0	0	0	0	0	0
26.	Total Program Payment to Fund for CT Farmers[4]	272,903	533,034	786,824	796,622	782,280	1,168,908
	Bottom Line Impact to CT Farmers						
27.	Actual Blend Price Paid to Farmers when there was No Program	14.15	13.33	12.54	12.51	12.56	11.35
28.	Program Payment to CT Farmers per Hundredweight Milk Production[5]	0.85	1.67	2.46	2.49	2.44	3.65
29.	Blend Price Paid to Farmers with Program	15.00	15.00	15.00	15.00	15.00	15.00
30.	Percent of Fair Share Fund Going to CT Farmers (rows 26 / 19)	24.0%	25.1%	25.5%	25.5%	25.5%	25.8%

[1] This analysis assumes that the prices for 0%, 1%, and 2% are equal to reported whole FMO whole milk prices. There is evidence of such flat pricing of milk, however, if lower fat milk is cheaper these savings are overstated.

[2] Includes Stew Leonards.

[3] This uses the following program rule: Payments to a plant must be pro rated, by % volume delivered, over all farmers who ship milk to the plant that month. The pro rata per cwt used are from Table 4.

[4] The funds paid to CT farmers are pooled across all plants and the same payment per cwt is paid to each CT farmer. Out-of-state farmers that ship to a plant that supplies CT receive a premium based upon their pro rata share of milk processed in that plant, i.e. one has a handler specific pool for out-of-state farmers.

[5] From Table 3 only 85% of CT production goes to fluid. However, here program funds are paid equally per cwt for all CT milk production. Essentially we assume that all CT farmers share equally in the fluid milk market.

Table 7. Connecticut Scenario 2: Retailer keeps $0.60/gal and the program does not hurt consumers (no negative impact to consumer). Farmers capped at $15.00, in some months they get less.

	Feb 06	Mar 06	Apr 06	May 06	Jun 06	Apr 03
1. Wholesale Price (over all brands and types: 3.25, 2, 1, 0%)	2.11	2.04	1.95	1.94	1.91	1.84
Policy Set Retailing Markup Ceilings to Obtain Scenario Objectives						
2. Retail Price Markup Ceiling	41%	53%	67%	54%	48%	63%
3. Dollar Markup Ceiling (rows 1 * 2)	0.86	1.08	1.31	1.04	0.92	1.16
4. Ceiling Price	2.97	3.13	3.26	2.97	2.83	2.99
Policy Set Share Rates to Obtain Scenario Objectives						
5. Share Ratio Needed to Attain Target Raw Fluid Price	30%	45%	54%	42%	35%	48%
6. Program Payment per Gallon Sold at Retail (rows [4 - 1] * 5)	0.26	0.49	0.71	0.43	0.32	0.56
7. Payment per cwt into Fair Share by CT Retailers	3.03	5.67	8.24	5.05	3.69	6.53
Impact on Consumers						
8. Actual Price per Gallon (FMO No. 1 retail price: Whole Milk - Hartford)	3.45	3.44	3.30	2.97	2.83	2.99
9. Retail Price per Gallon under Fair Share Program	2.97	3.13	3.26	2.97	2.83	2.99
10. Consumer Savings per Gallon if Fair Share Program Implemented[1]	0.48	0.31	0.04	0.00	0.00	0.00
Impact on Retailers						
11. Price kept by the Retailer after Payment of Fair Share Premium	2.71	2.64	2.55	2.54	2.51	2.43
12. Realized Percent Gross Margin under the Fair Share Program	22%	23%	23%	24%	24%	24%
13. Realized Dollar Gross Margin under the Fair Share Program	0.60	0.60	0.60	0.60	0.60	0.60
Retailer Payments to Fund for Farmers that Supply each Processing Plant						
14. Garelick/Dean, Franklin, MA	624,627	1,167,595	1,697,327	1,039,443	759,975	1,344,097
15. Guida, New Britan, CT[2]	340,706	636,870	925,815	566,969	414,532	733,144
16. Hood, Agawam, CT	79,498	148,603	216,023	132,293	96,724	171,067
17. Stearns, Storrs, CT	45,427	84,916	123,442	75,596	55,271	97,752
18. All Other, Out-of-State	45,427	84,916	123,442	75,596	55,271	97,752
19. Total Fair Share Program Funds Collected	1,135,685	2,122,900	3,086,050	1,889,895	1,381,773	2,443,812
20. Less Administrative Expenses	100,000	100,000	100,000	100,000	100,000	100,000
Program Payment to CT Farmers by Plant[3]						
21. Garelick/Dean, Franklin, MA	7,496	14,011	20,368	12,473	9,120	16,129
22. Guida, New Britan, CT	241,560	451,541	656,403	401,981	293,903	519,799
23. Hood, Agawam, CT	4,770	8,916	12,961	7,938	5,803	10,264
24. Stearns, Storrs, CT	45,427	84,916	123,442	75,596	55,271	97,752
25. All Other, Out-of-State	0	0	0	0	0	0
26. Total Program Payment to Fund for CT Farmers[4]	272,903	533,034	786,824	471,637	337,747	617,595
Bottom Line Impact to CT Farmers						
27. Actual Blend Price Paid to Farmers when there was No Program	14.15	13.33	12.54	12.51	12.56	11.35
28. Program Payment to CT Farmers per Hundredweight Milk Production[5]	0.85	1.67	2.46	1.47	1.06	1.93
29. Blend Price Paid to Farmers with Program	15.00	15.00	15.00	13.98	13.62	13.28
30. Percent of Fair Share Fund Going to CT Farmers (rows 26 / 19)	24.0%	25.1%	25.5%	25.0%	24.4%	25.3%

[1] This analysis assumes that the prices for 0%, 1%, and 2% are equal to reported whole FMO whole milk prices. There is evidence of such flat pricing of milk, however, if lower fat milk is cheaper these savings are overstated.

[2] Includes Stew Leonards.

[3] This uses the following program rule: Payments to a plant must be pro rated, by % volume delivered, over all farmers who ship milk to the plant that month. The pro rata per cwt used are from Table 4.

[4] The funds paid to CT farmers are pooled across all plants and the same payment per cwt is paid to each CT farmer. Out-of-state farmers that ship to a plant that supplies CT receive a premium based upon their pro rata share of milk processed in that plant, i.e. one has a handler specific pool for out-of-state farmers.

[5] From Table 3 only 85% of CT production goes to fluid. However, here program funds are paid equally per cwt for all CT milk production. Essentially we assume that all CT farmers share equally in the fluid milk market.

Table 8. Summary Table for April 2003

| | Scenario 1 | Scenario 2 | Alternative 1 | | Alternative 2 | |
			Scenario 1	Scenario 2	Scenario 1	Scenario 2
Connecticut Market Share of Retail Fluid Sales						
Garelick/Dean	55.0%		50.0%		50.0%	
Guida (Stew Leonard)	30.0%		30.0%		25.0%	
Hood	7.0%		12.0%		17.0%	
Stearns	4.0%		4.0%		4.0%	
All Other	4.0%		4.0%		4.0%	
Impact on Consumers						
Consumer Savings per Gallon	-0.49	0.00	-0.48	0.00	-0.62	0.00
Impact on Retailer						
Realized Dollar Gross Margin	0.60	0.60	0.60	0.60	0.60	0.60
Impact on Farmers						
Actual Blend Price	11.35	11.35	11.35	11.35	11.35	11.35
Program Payment per cwt	3.65	1.93	3.65	1.95	3.65	1.71
Blend Price with Program	15.00	13.28	15.00	13.30	15.00	13.06

Table 9. Handler Fee Policy:
Policy Target Scenario 1: $15.00/cwt for Farmers and a Retail Threshold Price at 165% of the Base Price.

	Feb 06	Mar 06	Apr 06	May 06	Jun 06	Apr 03
Handler Fee						
1. Handler Fee Per Gallon Needed to Increase Farm Milk Price to $15/cwt at Hart	0.17	0.32	0.47	0.47	0.46	0.68
2. Actual Wholesale Price (over all brands and types: 3.25, 2, 1, 0%)	2.11	2.04	1.95	1.94	1.91	1.84
3. Wholesale Price Under the Handler Fee Program (rows 1 + 2)	2.28	2.37	2.42	2.41	2.37	2.52
Processor Payments to Fund for Farmers that Supply each Processing Plant						
4. Garelick/Dean, Franklin, MA	413,858	770,283	1,115,896	1,126,657	1,103,989	1,629,967
5. Guida, New Britan, CT[1]	376,235	700,258	1,014,451	1,024,234	1,003,626	1,481,788
6. Hood, Agawam, CT	52,673	98,036	142,023	143,393	140,508	207,450
7. Stearns, Storrs, CT	30,099	56,021	81,156	81,939	80,290	118,543
8. All Other, Out-of-State	30,099	56,021	81,156	81,939	80,290	118,543
9. Total Fair Share Program Funds Collected	902,963	1,680,618	2,434,682	2,458,161	2,408,703	3,556,292
10. Less Administrative Expenses	100,000	100,000	100,000	100,000	100,000	100,000
Program Payment to CT Farmers by Plant[2]						
11. Garelick/Dean, Franklin, MA	4,966	9,243	13,391	13,520	13,248	19,560
12. Guida, New Britan, CT	266,750	496,483	719,246	726,182	711,571	1,050,588
13. Hood, Agawam, CT	3,160	5,882	8,521	8,604	8,430	12,447
14. Stearns, Storrs, CT	30,099	56,021	81,156	81,939	80,290	118,543
15. All Other, Out-of-State	0	0	0	0	0	0
16. Total Program Payment to Fund for CT Farmers[3]	271,201	533,854	788,539	796,469	779,764	1,167,363
Bottom Line Impact on CT Farmers						
17. Actual Blend Price Paid to Farmers when there was No Program	14.15	13.33	12.54	12.51	12.56	11.35
18. Program Payment to CT Farmers per Hundredweight Milk Production[4]	0.85	1.67	2.46	2.49	2.44	3.65
19. Blend Price Paid to Farmers with Program	15.00	15.00	15.00	15.00	15.00	15.00
20. Percent of Fair Share Fund Going to CT Farmers	30.0%	31.8%	32.4%	32.4%	32.4%	32.8%
Controlling the Impact on Consumers by Limiting Retail Margins						
Retailer Threshold Price Policy Impact						
21. Per Gallon Raw Fluid Milk Base Price Under the Program[5]	1.72	1.80	1.83	1.81	1.79	1.90
22. Retail Threshold Price @ 165% of Base Price	2.84	2.96	3.02	2.99	2.95	3.14
23. Retail Dollar Margin	0.57	0.60	0.60	0.59	0.57	0.62
Impact on Consumers						
24. Actual Price per Gallon (FMO No. 1 retail price: Whole Milk - Hartford)	3.45	3.44	3.30	2.97	2.83	2.99
25. Consumer Savings per Gallon if Handler Fee Program Implemented[6]	0.61	0.48	0.28	-0.02	-0.12	-0.15

[1] Includes Stew Leonards.

[2] This uses the following program rule: Payments to a plant must be pro rated, by % volume delivered, over all farmers who ship milk to the plant that month. The pro rata per cwt used are from Table 4.

[3] The funds paid to CT farmers are pooled across all plants and the same payment per cwt is paid to each CT farmer. Out-of-state farmers that ship to a plant that supplies CT receive a premium based upon their pro rata share of milk processed in that plant, i.e. one has a handler specific pool for out-of-state farmers.

[4] From Table 3 only 85% of CT production goes to fluid. However, here program funds are paid equally per cwt for all CT milk production. Essentially we assume that all CT farmers share equally in the fluid milk market.

[5] Class 1 3.5% Price (Hartford) + Coop Premium + Handler Fee

[6] This analysis assumes that the prices for 0%, 1%, and 2% are equal to reported whole FMO whole milk prices. There is evidence of such flat pricing of milk, however, if lower fat milk is cheaper these savings are overstated.

Appendix Tables A1-A5. Alternative Milk Channel Structural Assumptions:
Changed Market Shares are in bold.

Table A1. Estimated Annual Fluid Milk Consumption by State in million of pounds*

Connecticut	599.1
Massachusetts	1139.6
Rhode Island	182.8

* Based on 21 gallons per capita. Population estimate obtained from US Census Bureau for July 1, 2005.

Table A2. Decomposition of Annual Fluid Milk Sales in Connecticut to Obtain Processor Sales and Market Shares through Retail Outlets

a) Connecticut

	Fluid Sales (mil lbs)	Market Share
Estimated Total Fluid Consumption	599.1	
25% are Sales Outside of Retail Channel (school, restaurant, institutional)	149.8	
Total Fluid Sold Through The Retail Channel	449.3	
Garelick/Dean	224.6	**50.0%**
Guida (Stew Leonards)	134.8	30.0%
Hood	53.9	**12.0%**
Stearns	18.0	4.0%
All Other	18.0	4.0%

b) Massachusetts

	Fluid Sales (mil lbs)	Market Share
Estimated Total Fluid Consumption	1139.6	
25% are Sales Outside of Retail Channel (school, restaurant, institutional)	284.9	
Total Fluid Sold Through The Retail Channel	854.7	
Garelick/Dean	598.3	70.0%
Guida (Stew Leonards)	42.7	5.0%
Hood	170.9	20.0%
Stearns	0.0	0.0%
All Other	42.7	5.0%

c) Rhode Island

	Fluid Sales (mil lbs)	Market Share
Estimated Total Fluid Consumption	182.8	
25% are Sales Outside of Retail Channel (school, restaurant, institutional)	45.7	
Total Fluid Sold Through The Retail Channel	137.1	
Garelick/Dean	96.0	70.0%
Guida (Stew Leonards)	6.9	5.0%
Hood	27.4	20.0%
Stearns	0.0	0.0%
All Other	6.9	5.0%

Table A3. Annual Milk Production (in million of pounds) and Estimated Fluid Utilization*

	Production	Estimated Fluid Utilization
Connecticut	384.0	85.0%
Massachusetts	290.0	85.0%
Rhode Island	18.7	85.0%

* USDA National Agricultural Statistics Service, Connecticut State Agricultural Overview - 2005.

Table A4. Annual Procurement of Raw Milk by State for Processing Plants

| | Raw Milk Procurred From | | | | | | | |
| | CT | | MA | | RI | | Total | |
Plant	mil lbs	%	mil lbs	%	mil lbs	%	mil lbs	%
Garelick/Dean, Franklin MA	14.4	1.2%	49.2	4.1%	0.0	0.0%	63.6	5.3%
Guida, New Britain CT (plus Stew Leonards)	265.9	70.9%	0.0	0.0%	15.8	4.2%	281.6	75.1%
Hood Agawam	24.0	6.0%	197.2	49.3%	0.0	0.0%	221.2	55.3%
Stearns, Storrs CT	18.0	100.0%	0.0	0.0%	0.0	0.0%	18.0	100.0%
All Other Plants*	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

* Dean Plant Rensaleer, NY; Byrne Dairy Syracuse, NY; Shop Rite (Reddington Farms) NJ; UHT/Organic

Table A5. Distribution of Processing Plant Output to Retail Accounts in Different States

| | Annual Production (mil lbs) | Plant Output Sold at Retail in | | | |
Plant		CT	MA	RI	Total
Garelick/Dean, Franklin MA	1200.0	18.7%	50%	8.0%	76.6%
Guida, New Britain CT (plus Stew Leonards)	375.0	35.9%	11%	1.8%	49.2%
Hood Agawam	400.0	13.5%	43%	6.9%	63.1%
Stearns, Storrs CT	18.0	99.8%	0%	0.0%	99.8%
All Other Plants*	-	-	-	-	-

* Dean Plant Rensaleer, NY; Byrne Dairy Syracuse, NY; Shop Rite (Reddington Farms) NJ; UHT/Organic

Table A6. Alternative Connecticut Scenario 1: CT farmers guaranteed $15.00/cwt, retailers keep $0.60/gal for instore costs and profits.

	Feb 06	Mar 06	Apr 06	May 06	Jun 06	Apr 03
1. Wholesale Price (over all brands and types: 3.25, 2, 1, 0%)	2.11	2.04	1.95	1.94	1.91	1.84
Policy Set Retailing Markup Ceilings to Obtain Scenario Objectives						
2. Retail Price Markup Ceiling	41%	53%	67%	68%	68%	89%
3. Dollar Markup Ceiling (rows 1 * 2)	0.86	1.08	1.31	1.32	1.30	1.64
4. Ceiling Price	2.96	3.13	3.26	3.25	3.21	3.47
Policy Set Share Rates to Obtain Scenario Objectives						
5. Share Ratio Needed to Attain Target Raw Fluid Price	30%	45%	54%	54%	54%	63%
6. Program Payment per Gallon Sold at Retail (rows [4 - 1] * 5)	0.26	0.48	0.70	0.71	0.70	1.03
7. Payment per cwt into Fair Share by CT Retailers	3.00	5.62	8.18	8.28	8.10	12.00
Impact on Consumers						
8. Actual Price per Gallon (FMO No. 1 retail price: Whole Milk - Hartford)	3.45	3.44	3.30	2.97	2.83	2.99
9. Retail Price per Gallon under Fair Share Program	2.96	3.13	3.26	3.25	3.21	3.47
10. Consumer Savings per Gallon if Fair Share Program Implemented[1]	0.49	0.31	0.04	-0.28	-0.38	-0.48
Impact on Retailers						
11. Price kept by the Retailer after Payment of Fair Share Premium	2.71	2.64	2.55	2.54	2.51	2.44
12. Realized Percent Gross Margin under the Fair Share Program	22%	23%	24%	24%	24%	25%
13. Realized Dollar Gross Margin under the Fair Share Program	0.60	0.60	0.60	0.60	0.60	0.60
Retailer Payments to Fund for Farmers that Supply each Processing Plant						
14. Garelick/Dean, Franklin, MA	561,235	1,052,640	1,532,013	1,550,605	1,516,783	2,246,018
15. Guida, New Britan, CT[2]	336,741	631,584	919,208	930,363	910,070	1,347,611
16. Hood, Agawam, CT	134,697	252,634	367,683	372,145	364,028	539,044
17. Stearns, Storrs, CT	44,899	84,211	122,561	124,048	121,343	179,681
18. All Other, Out-of-State	44,899	84,211	122,561	124,048	121,343	179,681
19. Total Fair Share Program Funds Collected	1,122,471	2,105,281	3,064,026	3,101,211	3,033,567	4,492,037
20. Less Administrative Expenses	100,000	100,000	100,000	100,000	100,000	100,000
Program Payment to CT Farmers by Plant[3]						
21. Garelick/Dean, Franklin, MA	6,735	12,632	18,384	18,607	18,201	26,952
22. Guida, New Britan, CT	238,750	447,793	651,718	659,628	645,240	955,456
23. Hood, Agawam, CT	8,082	15,158	22,061	22,329	21,842	32,343
24. Stearns, Storrs, CT	44,899	84,211	122,561	124,048	121,343	179,681
25. All Other, Out-of-State	0	0	0	0	0	0
26. Total Program Payment to Fund for CT Farmers[4]	271,875	533,204	788,134	798,022	780,035	1,167,843
Bottom Line Impact to CT Farmers						
27. Actual Blend Price Paid to Farmers when there was No Program	14.15	13.33	12.54	12.51	12.56	11.35
28. Program Payment to CT Farmers per Hundredweight Milk Production[5]	0.85	1.67	2.46	2.49	2.44	3.65
29. Blend Price Paid to Farmers with Program	15.00	15.00	15.00	15.00	15.00	15.00
30. Percent of Fair Share Fund Going to CT Farmers (rows 26 / 19)	24.2%	25.3%	25.7%	25.7%	25.7%	26.0%

[1] This analysis assumes that the prices for 0%, 1%, and 2% are equal to reported whole FMO whole milk prices. There is evidence of such flat pricing of milk, however, if lower fat milk is cheaper these savings are overstated.

[2] Includes Stew Leonards.

[3] This uses the following program rule: Payments to a plant must be pro rated, by % volume delivered, over all farmers who ship milk to the plant that month. The pro rata per cwt used are from Table 4.

[4] The funds paid to CT farmers are pooled across all plants and the same payment per cwt is paid to each CT farmer. Out-of-state farmers that ship to a plant that supplies CT receive a premium based upon their pro rata share of milk processed in that plant, i.e. one has a handler specific pool for out-of-state farmers.

[5] From Table 3 only 85% of CT production goes to fluid. However, here program funds are paid equally per cwt for all CT milk production. Essentially we assume that all CT farmers share equally in the fluid milk market.

Table A7. Alternative Connecticut Scenario 2: Retailer keeps $0.60/gal and the program does not hurt consumers (no negative impact to consumer). Farmers capped at $15.00, in some months they get less.

	Feb 06	Mar 06	Apr 06	May 06	Jun 06	Apr 03
1. Wholesale Price (over all brands and types: 3.25, 2, 1, 0%)	2.11	2.04	1.95	1.94	1.91	1.84
Policy Set Retailing Markup Ceilings to Obtain Scenario Objectives						
2. Retail Price Markup Ceiling	41%	53%	67%	54%	48%	63%
3. Dollar Markup Ceiling (rows 1 * 2)	0.86	1.08	1.31	1.04	0.92	1.16
4. Ceiling Price	2.96	3.13	3.26	2.97	2.83	2.99
Policy Set Share Rates to Obtain Scenario Objectives						
5. Share Ratio Needed to Attain Target Raw Fluid Price	30%	45%	54%	42%	35%	48%
6. Program Payment per Gallon Sold at Retail (rows [4 - 1] * 5)	0.26	0.48	0.70	0.43	0.32	0.56
7. Payment per cwt into Fair Share by CT Retailers	3.00	5.62	8.18	5.05	3.69	6.53
Impact on Consumers						
8. Actual Price per Gallon (FMO No. 1 retail price: Whole Milk - Hartford)	3.45	3.44	3.30	2.97	2.83	2.99
9. Retail Price per Gallon under Fair Share Program	2.96	3.13	3.26	2.97	2.83	2.99
10. Consumer Savings per Gallon if Fair Share Program Implemented[1]	0.49	0.31	0.04	0.00	0.00	0.00
Impact on Retailers						
11. Price kept by the Retailer after Payment of Fair Share Premium	2.71	2.64	2.55	2.54	2.51	2.43
12. Realized Percent Gross Margin under the Fair Share Program	22%	23%	24%	24%	24%	24%
13. Realized Dollar Gross Margin under the Fair Share Program	0.60	0.60	0.60	0.60	0.60	0.60
Retailer Payments to Fund for Farmers that Supply each Processing Plant						
14. Garelick/Dean, Franklin, MA	561,235	1,052,640	1,532,013	944,948	690,886	1,221,906
15. Guida, New Britan, CT[2]	336,741	631,584	919,208	566,969	414,532	733,144
16. Hood, Agawam, CT	134,697	252,634	367,683	226,787	165,813	293,257
17. Stearns, Storrs, CT	44,899	84,211	122,561	75,596	55,271	97,752
18. All Other, Out-of-State	44,899	84,211	122,561	75,596	55,271	97,752
19. Total Fair Share Program Funds Collected	1,122,471	2,105,281	3,064,026	1,889,895	1,381,773	2,443,812
20. Less Administrative Expenses	100,000	100,000	100,000	100,000	100,000	100,000
Program Payment to CT Farmers by Plant[3]						
21. Garelick/Dean, Franklin, MA	6,735	12,632	18,384	11,339	8,291	14,663
22. Guida, New Britan, CT	238,750	447,793	651,718	401,981	293,903	519,799
23. Hood, Agawam, CT	8,082	15,158	22,061	13,607	9,949	17,595
24. Stearns, Storrs, CT	44,899	84,211	122,561	75,596	55,271	97,752
25. All Other, Out-of-State	0	0	0	0	0	0
26. Total Program Payment to Fund for CT Farmers[4]	271,875	533,204	788,134	475,933	340,823	623,220
Bottom Line Impact to CT Farmers						
27. Actual Blend Price Paid to Farmers when there was No Program	14.15	13.33	12.54	12.51	12.56	11.35
28. Program Payment to CT Farmers per Hundredweight Milk Production[5]	0.85	1.67	2.46	1.49	1.07	1.95
29. Blend Price Paid to Farmers with Program	15.00	15.00	15.00	14.00	13.63	13.30
30. Percent of Fair Share Fund Going to CT Farmers (rows 26 / 19)	24.2%	25.3%	25.7%	25.2%	24.7%	25.5%

[1] This analysis assumes that the prices for 0%, 1%, and 2% are equal to reported whole FMO whole milk prices. There is evidence of such flat pricing of milk, however, if lower fat milk is cheaper these savings are overstated.

[2] Includes Stew Leonards.

[3] This uses the following program rule: Payments to a plant must be pro rated, by % volume delivered, over all farmers who ship milk to the plant that month. The pro rata per cwt used are from Table 4.

[4] The funds paid to CT farmers are pooled across all plants and the same payment per cwt is paid to each CT farmer. Out-of-state farmers that ship to a plant that supplies CT receive a premium based upon their pro rata share of milk processed in that plant, i.e. one has a handler specific pool for out-of-state farmers.

[5] From Table 3 only 85% of CT production goes to fluid. However, here program funds are paid equally per cwt for all CT milk production. Essentially we assume that all CT farmers share equally in the fluid milk market.

Appendix Tables A8-A12. Alternative Milk Channel Structural Assumptions:
Changed Market Shares are in bold.

Table A8. Estimated Annual Fluid Milk Consumption by State in million of pounds*

Connecticut	599.1
Massachusetts	1139.6
Rhode Island	182.8

* Based on 21 gallons per capita. Population estimate obtained from US Census Bureau for July 1, 2005.

Table A9. Decomposition of Annual Fluid Milk Sales in Connecticut to Obtain Processor Sales and Market Shares through Retail Outlets

a) Connecticut

	Fluid Sales (mil lbs)	Market Share
Estimated Total Fluid Consumption	599.1	
25% are Sales Outside of Retail Channel (school, restaurant, institutional)	149.8	
Total Fluid Sold Through The Retail Channel	449.3	
Garelick/Dean	224.6	50.0%
Guida (Stew Leonards)	112.3	**25.0%**
Hood	76.4	**17.0%**
Stearns	18.0	4.0%
All Other	18.0	4.0%

b) Massachusetts

	Fluid Sales (mil lbs)	Market Share
Estimated Total Fluid Consumption	1139.6	
25% are Sales Outside of Retail Channel (school, restaurant, institutional)	284.9	
Total Fluid Sold Through The Retail Channel	854.7	
Garelick/Dean	598.3	70.0%
Guida (Stew Leonards)	42.7	5.0%
Hood	170.9	20.0%
Stearns	0.0	0.0%
All Other	42.7	5.0%

c) Rhode Island

	Fluid Sales (mil lbs)	Market Share
Estimated Total Fluid Consumption	182.8	
25% are Sales Outside of Retail Channel (school, restaurant, institutional)	45.7	
Total Fluid Sold Through The Retail Channel	137.1	
Garelick/Dean	96.0	70.0%
Guida (Stew Leonards)	6.9	5.0%
Hood	27.4	20.0%
Stearns	0.0	0.0%
All Other	6.9	5.0%

Table A10. Annual Milk Production (in million of pounds) and Estimated Fluid Utilization*

	Production	Estimated Fluid Utilization
Connecticut	384.0	85.0%
Massachusetts	290.0	85.0%
Rhode Island	18.7	85.0%

* USDA National Agricultural Statistics Service, Connecticut State Agricultural Overview - 2005.

Table A11. Annual Procurement of Raw Milk by State for Processing Plants

	Raw Milk Procured From							
	CT		MA		RI		Total	
Plant	mil lbs	%	mil lbs	%	mil lbs	%	mil lbs	%
Garelick/Dean, Franklin MA	14.4	1.2%	49.2	4.1%	0.0	0.0%	63.6	5.3%
Guida, New Britain CT (plus Stew Leonards)	265.9	70.9%	0.0	0.0%	15.8	4.2%	281.6	75.1%
Hood Agawam	24.0	6.0%	197.2	49.3%	0.0	0.0%	221.2	55.3%
Stearns, Storrs CT	18.0	100.0%	0.0	0.0%	0.0	0.0%	18.0	100.0%
All Other Plants*	0.0	0.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%

* Dean Plant Rensaleer, NY; Byrne Dairy Syracuse, NY; Shop Rite (Reddington Farms) NJ; UHT/Organic

Table A12. Distribution of Processing Plant Output to Retail Accounts in Different States

	Annual Production	Plant Output Sold at Retail in			
Plant	(mil lbs)	CT	MA	RI	Total
Garelick/Dean, Franklin MA	1200.0	18.7%	50%	8.0%	76.6%
Guida, New Britain CT (plus Stew Leonards)	375.0	**30.0%**	11%	1.8%	**43.2%**
Hood Agawam	400.0	**19.1%**	43%	6.9%	**68.7%**
Stearns, Storrs CT	18.0	99.8%	0%	0.0%	99.8%
All Other Plants*	-	-	-	-	-

* Dean Plant Rensaleer, NY; Byrne Dairy Syracuse, NY; Shop Rite (Reddington Farms) NJ; UHT/Organic

Table A13. Alternative Connecticut Scenario 1: CT farmers guaranteed $15.00/cwt, retailers keep $0.60/gal for instore costs and profits.

		Feb 06	Mar 06	Apr 06	May 06	Jun 06	Apr 03
1.	Wholesale Price (over all brands and types: 3.25, 2, 1, 0%)	2.11	2.04	1.95	1.94	1.91	1.84
	Policy Set Retailing Markup Ceilings to Obtain Scenario Objectives						
2.	Retail Price Markup Ceiling	43%	56%	72%	73%	73%	97%
3.	Dollar Markup Ceiling (rows 1 * 2)	0.89	1.14	1.39	1.41	1.39	1.77
4.	Ceiling Price	3.00	3.19	3.35	3.35	3.30	3.61
	Policy Set Share Rates to Obtain Scenario Objectives						
5.	Share Ratio Needed to Attain Target Raw Fluid Price	32%	48%	57%	57%	57%	66%
6.	Program Payment per Gallon Sold at Retail (rows [4 - 1] * 5)	0.29	0.55	0.80	0.81	0.79	1.17
7.	Payment per cwt into Fair Share by CT Retailers	3.37	6.38	9.29	9.40	9.18	13.64
	Impact on Consumers						
8.	Actual Price per Gallon (FMO No. 1 retail price: Whole Milk - Hartford)	3.45	3.44	3.30	2.97	2.83	2.99
9.	Retail Price per Gallon under Fair Share Program	3.00	3.19	3.35	3.35	3.30	3.61
10.	Consumer Savings per Gallon if Fair Share Program Implemented[1]	0.45	0.25	-0.05	-0.38	-0.47	-0.62
	Impact on Retailers						
11.	Price kept by the Retailer after Payment of Fair Share Premium	2.71	2.64	2.55	2.54	2.51	2.44
12.	Realized Percent Gross Margin under the Fair Share Program	22%	23%	23%	24%	24%	25%
13.	Realized Dollar Gross Margin under the Fair Share Program	0.60	0.60	0.60	0.60	0.60	0.60
	Retailer Payments to Fund for Farmers that Supply each Processing Plant						
14.	Garelick/Dean, Franklin, MA	631,712	1,193,593	1,739,038	1,759,833	1,719,403	2,554,353
15.	Guida, New Britan, CT[2]	315,856	596,797	869,519	879,916	859,702	1,277,177
16.	Hood, Agawam, CT	214,782	405,822	591,273	598,343	584,597	868,480
17.	Stearns, Storrs, CT	50,537	95,487	139,123	140,787	137,552	204,348
18.	All Other, Out-of-State	50,537	95,487	139,123	140,787	137,552	204,348
19.	Total Fair Share Program Funds Collected	1,263,424	2,387,187	3,478,075	3,519,665	3,438,807	5,108,706
20.	Less Administrative Expenses	100,000	100,000	100,000	100,000	100,000	100,000
	Program Payment to CT Farmers by Plant[3]						
21.	Garelick/Dean, Franklin, MA	7,581	14,323	20,868	21,118	20,633	30,652
22.	Guida, New Britan, CT	223,942	423,129	616,489	623,861	609,529	905,518
23.	Hood, Agawam, CT	12,887	24,349	35,476	35,901	35,076	52,109
24.	Stearns, Storrs, CT	50,537	95,487	139,123	140,787	137,552	204,348
25.	All Other, Out-of-State	0	0	0	0	0	0
26.	Total Program Payment to Fund for CT Farmers[4]	271,601	533,944	788,612	798,321	779,444	1,169,283
	Bottom Line Impact to CT Farmers						
27.	Actual Blend Price Paid to Farmers when there was No Program	14.15	13.33	12.54	12.51	12.56	11.35
28.	Program Payment to CT Farmers per Hundredweight Milk Production[5]	0.85	1.67	2.46	2.49	2.44	3.65
29.	Blend Price Paid to Farmers with Program	15.00	15.00	15.00	15.00	15.00	15.00
30.	Percent of Fair Share Fund Going to CT Farmers (rows 26 / 19)	21.5%	22.4%	22.7%	22.7%	22.7%	22.9%

[1] This analysis assumes that the prices for 0%, 1%, and 2% are equal to reported whole FMO whole milk prices. There is evidence of such flat pricing of milk, however, if lower fat milk is cheaper these savings are overstated.

[2] Includes Stew Leonards.

[3] This uses the following program rule: Payments to a plant must be pro rated, by % volume delivered, over all farmers who ship milk to the plant that month. The pro rata per cwt used are from Table 4.

[4] The funds paid to CT farmers are pooled across all plants and the same payment per cwt is paid to each CT farmer. Out-of-state farmers that ship to a plant that supplies CT receive a premium based upon their pro rata share of milk processed in that plant, i.e. one has a handler specific pool for out-of-state farmers.

[5] From Table 3 only 85% of CT production goes to fluid. However, here program funds are paid equally per cwt for all CT milk production. Essentially we assume that all CT farmers share equally in the fluid milk market.

Table A14. Alternative Connecticut Scenario 2: Retailer keeps $0.60/gal and the program does not hurt consumers (no negative impact to consumer). Farmers capped at $15.00, in some months they get less.

	Feb 06	Mar 06	Apr 06	May 06	Jun 06	Apr 03
1. Wholesale Price (over all brands and types: 3.25, 2, 1, 0%)	2.11	2.04	1.95	1.94	1.91	1.84
Policy Set Retailing Markup Ceilings to Obtain Scenario Objectives						
2. Retail Price Markup Ceiling	43%	56%	69%	54%	48%	63%
3. Dollar Markup Ceiling (rows 1 * 2)	0.89	1.14	1.35	1.04	0.92	1.16
4. Ceiling Price	3.00	3.19	3.30	2.97	2.83	2.99
Policy Set Share Rates to Obtain Scenario Objectives						
5. Share Ratio Needed to Attain Target Raw Fluid Price	32%	48%	55%	42%	35%	48%
6. Program Payment per Gallon Sold at Retail (rows [4 - 1] * 5)	0.29	0.55	0.74	0.43	0.32	0.56
7. Payment per cwt into Fair Share by CT Retailers	3.37	6.38	8.65	5.05	3.69	6.53
Impact on Consumers						
8. Actual Price per Gallon (FMO No. 1 retail price: Whole Milk - Hartford)	3.45	3.44	3.30	2.97	2.83	2.99
9. Retail Price per Gallon under Fair Share Program	3.00	3.19	3.30	2.97	2.83	2.99
10. Consumer Savings per Gallon if Fair Share Program Implemented[1]	0.45	0.25	0.00	0.00	0.00	0.00
Impact on Retailers						
11. Price kept by the Retailer after Payment of Fair Share Premium	2.71	2.64	2.55	2.54	2.51	2.43
12. Realized Percent Gross Margin under the Fair Share Program	22%	23%	24%	24%	24%	24%
13. Realized Dollar Gross Margin under the Fair Share Program	0.60	0.60	0.60	0.60	0.60	0.60
Retailer Payments to Fund for Farmers that Supply each Processing Plant						
14. Garelick/Dean, Franklin, MA	631,712	1,193,593	1,620,109	944,948	690,886	1,221,906
15. Guida, New Britan, CT[2]	315,856	596,797	810,054	472,474	345,443	610,953
16. Hood, Agawam, CT	214,782	405,822	550,837	321,282	234,901	415,448
17. Stearns, Storrs, CT	50,537	95,487	129,609	75,596	55,271	97,752
18. All Other, Out-of-State	50,537	95,487	129,609	75,596	55,271	97,752
19. Total Fair Share Program Funds Collected	1,263,424	2,387,187	3,240,217	1,889,895	1,381,773	2,443,812
20. Less Administrative Expenses	100,000	100,000	100,000	100,000	100,000	100,000
Program Payment to CT Farmers by Plant[3]						
21. Garelick/Dean, Franklin, MA	7,581	14,323	19,441	11,339	8,291	14,663
22. Guida, New Britan, CT	223,942	423,129	574,328	334,984	244,919	433,166
23. Hood, Agawam, CT	12,887	24,349	33,050	19,277	14,094	24,927
24. Stearns, Storrs, CT	50,537	95,487	129,609	75,596	55,271	97,752
25. All Other, Out-of-State	0	0	0	0	0	0
26. Total Program Payment to Fund for CT Farmers[4]	271,601	533,944	733,084	417,851	299,230	547,163
Bottom Line Impact to CT Farmers						
27. Actual Blend Price Paid to Farmers when there was No Program	14.15	13.33	12.54	12.51	12.56	11.35
28. Program Payment to CT Farmers per Hundredweight Milk Production[5]	0.85	1.67	2.29	1.31	0.94	1.71
29. Blend Price Paid to Farmers with Program	15.00	15.00	14.83	13.82	13.50	13.06
30. Percent of Fair Share Fund Going to CT Farmers (rows 26 / 19)	21.5%	22.4%	22.6%	22.1%	21.7%	22.4%

[1] This analysis assumes that the prices for 0%, 1%, and 2% are equal to reported whole FMO whole milk prices. There is evidence of such flat pricing of milk, however, if lower fat milk is cheaper these savings are overstated.

[2] Includes Stew Leonards.

[3] This uses the following program rule: Payments to a plant must be pro rated, by % volume delivered, over all farmers who ship milk to the plant that month. The pro rata per cwt used are from Table 4.

[4] The funds paid to CT farmers are pooled across all plants and the same payment per cwt is paid to each CT farmer. Out-of-state farmers that ship to a plant that supplies CT receive a premium based upon their pro rata share of milk processed in that plant, i.e. one has a handler specific pool for out-of-state farmers.

[5] From Table 3 only 85% of CT production goes to fluid. However, here program funds are paid equally per cwt for all CT milk production. Essentially we assume that all CT farmers share equally in the fluid milk market.

Table A15. Fair Share Policy only in Massachusetts Scenario 1: MA farmers guaranteed $15.00/cwt, retailers keep $0.60/gal for instore costs and profits, plus Impact on CT Farmers.

	Feb 06	Mar 06	Apr 06	May 06	Jun 06	Apr 03
1. Wholesale Price (over all brands and types: 3.25, 2, 1, 0%)	2.11	2.04	1.95	1.94	1.91	1.84
Policy Set Retailing Markup Ceilings to Obtain Scenario Objectives						
2. Retail Price Markup Ceiling	39%	49%	60%	61%	61%	79%
3. Dollar Markup Ceiling (rows 1 * 2)	0.81	0.99	1.17	1.18	1.17	1.45
4. Ceiling Price	2.92	3.04	3.12	3.12	3.08	3.29
Policy Set Share Rates to Obtain Scenario Objectives						
5. Share Ratio Needed to Attain Target Raw Fluid Price	26%	40%	49%	49%	49%	59%
6. Program Payment per Gallon Sold at Retail (rows [4 - 1] * 5)	0.21	0.39	0.58	0.58	0.57	0.85
7. Payment per cwt into Fair Share by CT Retailers	2.41	4.59	6.69	6.79	6.63	9.88
Impact on Consumers						
8. Actual Price per Gallon (FMO No. 1 retail price: Whole Milk - Hartford)	3.45	3.44	3.30	2.97	2.83	2.99
9. Retail Price per Gallon under Fair Share Program	2.92	3.04	3.12	3.12	3.08	3.29
10. Consumer Savings per Gallon if Fair Share Program Implemented[1]	0.53	0.40	0.18	-0.15	-0.25	-0.30
Impact on Retailers						
11. Price kept by the Retailer after Payment of Fair Share Premium	2.71	2.64	2.55	2.53	2.51	2.44
12. Realized Percent Gross Margin under the Fair Share Program	22%	23%	23%	24%	24%	25%
13. Realized Dollar Gross Margin under the Fair Share Program	0.60	0.60	0.60	0.60	0.60	0.60
Retailer Payments to Fund for Farmers that Supply each Processing Plant						
14. Garelick/Dean, Franklin, MA	1,201,434	2,287,278	3,335,212	3,384,729	3,306,383	4,925,915
15. Guida, New Britan, CT[2]	85,817	163,377	238,229	241,766	236,170	351,851
16. Hood, Agawam, CT	343,267	653,508	952,918	967,065	944,681	1,407,404
17. Stearns, Storrs, CT	0	0	0	0	0	0
18. All Other, Out-of-State	85,817	163,377	238,229	241,766	236,170	351,851
19. Total Fair Share Program Funds Collected	1,716,335	3,267,541	4,764,589	4,835,327	4,723,405	7,037,021
20. Less Administrative Expenses	100,000	100,000	100,000	100,000	100,000	100,000
Program Payment to MA Farmers by Plant[3]						
21. Garelick/Dean, Franklin, MA	49,259	93,778	136,744	138,774	135,562	201,963
22. Guida, New Britan, CT	0	0	0	0	0	0
23. Hood, Agawam, CT	169,231	322,180	469,788	476,763	465,728	693,850
24. Stearns, Storrs, CT	0	0	0	0	0	0
25. All Other, Out-of-State	0	0	0	0	0	0
26. Total Program Payment to Fund for MA Farmers[4]	205,759	403,228	593,802	602,807	588,559	883,083
Bottom Line Impact to MA Farmers						
27. Actual Blend Price Paid to Farmers when there was No Program	14.15	13.33	12.54	12.51	12.56	11.35
28. Program Payment to MA Farmers per Hundredweight Milk Production[5]	0.85	1.67	2.46	2.49	2.44	3.65
29. Blend Price Paid to Farmers with Program	15.00	15.00	15.00	15.00	15.00	15.00
30. Percent of Fair Share Fund Going to MA Farmers (rows 26 / 19)	12.0%	12.3%	12.5%	12.5%	12.5%	12.5%
Program Payment to CT Farmers by Plant						
31. Garelick/Dean, Franklin, MA	14,417	27,447	40,023	40,617	39,677	59,111
32. Guida, New Britan, CT	60,844	115,834	168,905	171,412	167,445	249,462
33. Hood, Agawam, CT	20,596	39,210	57,175	58,024	56,681	84,444
34. Stearns, Storrs, CT	0	0	0	0	0	0
35. All Other, Out-of-State	0	0	0	0	0	0
36. Total Program Payment to Fund for CT Farmers	90,272	176,907	260,517	264,468	258,217	387,433
Program Payment per CWT to CT Farmers by Plant						
37. Garelick/Dean, Franklin, MA	1.13	2.22	3.27	3.31	3.24	4.86
38. Guida, New Britan, CT	0.26	0.51	0.75	0.76	0.74	1.11
39. Hood, Agawam, CT	0.97	1.90	2.80	2.84	2.77	4.16
40. Stearns, Storrs, CT	0.00	0.00	0.00	0.00	0.00	0.00
41. All Other, Out-of-State	0.00	0.00	0.00	0.00	0.00	0.00

[1] This analysis assumes that the prices for 0%, 1%, and 2% are equal to reported whole FMO whole milk prices. There is evidence of such flat pricing of milk, however, if lower fat milk is cheaper these savings are overstated.

[2] Includes Stew Leonards.

[3] This uses the following program rule: Payments to a plant must be pro rated, by % volume delivered, over all farmers who ship milk to the plant that month. The pro rata per cwt used are from Table 4.

[4] The funds paid to MA farmers are pooled across all plants and the same payment per cwt is paid to each MA farmer. Out-of-state farmers that ship to a plant that supplies MA receive a premium based upon their pro rata share of milk processed in that plant, i.e. one has a handler specific pool for out-of-state farmers.

[5] From Table 3 only 85% of MA production goes to fluid. However, here program funds are paid equally per cwt for all MA milk production. Essentially we assume that all MA farmers share equally in the fluid milk market.