Background Material Specific to Milk Movement Incentives

January 11, 2006 Workshop
In Preparation for the January 31, 2006 Hearing

Incentives to Supply Class 1 Markets

Producer price regulation established in the mid-1930's brought stability to the dairy industry, but did not guarantee all producers the same price. The price they received depended on the utilization of the plant they shipped to under a plant pooling and contract system. Thus, producers shipping to a plant with high Class 1 usage received more than producers shipping to a plant with high Class 4 usage. There was competition for Class 1 contracts among producers. Also, there was an imbalance of market power between a large number of small and disorganized producers and a small number of large fluid processors. These factors tended to lead to market instability and price inequity.

Passage of the Gonsalves Milk Pooling Act in 1967, with its implementation in 1969, corrected many of these problems. However, it removed the existing incentive that existed under the old contract system for producers to ship their milk to a Class 1 plant. Instead, producers had an incentive to ship to a local plant, which, for most producers is a manufacturing plant. The incentive to ship to a Class 1 plant still exists for exempt producer-distributors, option exempt producer-distributors, and out-of-state milk.

To address the problem of getting sufficient milk supplies to Class 1 plants, location differentials were established to encourage the movement of only quota milk to Class 1 plants. Over time, overbase milk became a larger and larger share of the milk produced and therefore, location differentials based solely on quota milk were no longer able to ensure that adequate milk was made available to Class 1 plants.

In 1982, location differentials were replaced by transportation allowances and regional quota adjusters (RQA's). The RQA's do not encourage milk movement to Class 1 plants. They were developed to deal with equity issues arising out of the elimination of the location differentials.

In addition to the transportation allowances, two other methods to encourage the movement of milk to Class 1 plants were established: call provisions (1979) and transportation credits (1981). At one time Class 1 area differentials were large enough to cover the cost of moving milk plant-to-plant; Class 1 area differentials are the differences in the hundredweight prices between marketing areas. However, with marketing area consolidation and improvements in relative costs of moving milk ranch-to-plant, Class 1 area differentials were no longer sufficient to cover the cost of plant-to-plant milk movement. These conditions resulted in the establishment of transportation credits. All three methods of encouraging milk movement are detailed below:

1. Call provisions -- Can require that manufacturing plants release milk to Class 1 plants when insufficient milk supplies are available to meet the demand for fluid milk.

2. Transportation credits -- A reduction in the obligation handlers pay for Class 1 milk that partially compensates for the cost of hauling milk assigned to Class 1 usage from plants in designated supply counties to plants in designated deficit counties. If the supply counties and deficit counties are in different marketing areas, the Class 1 area differentials are added to the transportation credit.

Transportation credits have historically been designed to include a "shortfall" so that there is an incentive for bottling plants to purchase milk within the local area.

3. Transportation allowances -- These allowances partially compensate for the cost of hauling milk from a producer's ranch to qualified plants in designated receiving areas. They are funded from the producer pool.

Transportation allowances apply to some market milk moving from the dairy farm to processing plants. This occurs when the receiving plant is located in certain deficit areas and processes more than 50 percent of its production into Class 1, Class 2, and/or Class 3 products. The allowances are set: (1) to reflect distance considerations; (2) to reflect local alternative hauling costs; and (3) to encourage close-in milk to be shipped first.

In addition, cooperative members receive transportation allowances on shipments to their cooperative plant, which is located in a deficit area, if that plant supplies 40 percent of its receipts for Class 1 usage.

Most federal orders have location-based differentials. These differentials apply to producer payments based on the location of the plant of first receipt. The announced farm-blend price for these federal orders is the blend price for producers delivering milk to the main metropolitan areas (high Class I or fluid use areas). The further the plant of delivery is from the main metropolitan area, the more the location differential lowers the producer’s farm-blend prices below the announced blend price for the order.

"One consideration of any adjustments to transportation allowances and credits is the haul rate surveys conducted by the Department. The latest survey covered August 2005. The prior study was for November 2004. Over this nine month period, haul rates increased for 71% of comparable ranch-to-plant hauls."

Table 1 - **HAULING RATES**

RANCH TO PLANT

COMPARISON: JAN 2000 TO AUG 2005

SOURCE / DESTINATION	RAW MILK APRIL 2004 (LBS)	RAW MILK AUGUST 2005 (LBS)	JAN 2000	JULY 2000	JAN 2001	JAN 2002	OCT 2002	MARCH 2003	AUGUST 2003	APRIL 2004	NOV 2004	AUG 2005
DEL NORTE-HUMBOLDT												
LOCAL	16,631,564	12,252,962	0.220	0.227	0.223	0.228	0.221	0.224	0.232	0.235	0.261	0.294
GLENN	582,152	734,635	0.960	0.970	0.980	0.980	0.980	0.980	0.980	1.050	1.070	1.048
NORTH BAY	1,162,817	1,236,720	----	----	----	----	----	----	----	1.135	1.116	1.145
GLENN, BUTTE, SUTTER & YUBA												
LOCAL	29,174,598	32,287,106	0.314	0.321	0.298	0.269	0.261	0.258	0.261	0.260	0.283	0.323
HUMBOLDT	----	741,854	1.290	1.292	----	----	----	----	----	----	----	1.228
SACRAMENTO	----	----	0.554	----	----	----	----	----	----	----	----	----
NORTHERN SAN JOAQUIN VALLEY	15,088,282	8,610,117	0.541	0.523	0.593	0.606	0.656	0.668	0.632	0.728	0.737	0.795
SOLANO COUNTY	5,860,383	4,920,611	0.569	0.579	0.667	0.578	0.632	0.689	0.626	0.657	0.705	0.829
NORTH BAY	----	1,922,078	----	----	----	----	----	----	----	----	----	0.946
ALAMEDA COUNTY	----	1,491,567	----	----	----	----	----	----	----	----	----	0.996
SACRAMENTO & SAN JOAQUIN												
LOCAL	24,386,052	25,149,559	0.282	0.301	0.310	0.289	0.305	0.309	0.320	0.330	0.351	0.389
NORTHERN SAN JOAQUIN VALLEY	67,574,745	76,636,482	0.264	0.296	0.284	0.280	0.306	0.321	0.322	0.328	0.356	0.389
PLACER COUNTY												
NORTHERN SAN JOAQUIN VALLEY	----	1,323,882	----	----	----	----	----	----	----	----	----	0.648
	----	----	----	----	----	----	----	----	----	----	----	----
NORTHERN SAN JOAQUIN VALLEY												
LOCAL	547,720,293	447,271,461	0.226	0.231	0.240	0.238	0.239	0.253	0.258	0.272	0.291	0.294
HUMBOLDT	----	----	----	----	----	----	----	1.970	----	----	----	----
SACRAMENTO	8,542,401	14,992,660	0.364	0.325	0.335	0.310	0.342	0.387	0.354	0.397	0.315	0.329
SOUTHERN SAN JOAQUIN VALLEY	2,850,778	3,032,559	----	----	----	----	----	----	0.747	0.752	0.700	0.361
BAY AREA & SOLANO COUNTY	85,356,737	68,924,867	0.421	0.442	0.471	0.464	0.476	0.481	0.476	0.493	0.525	0.534
SOUTH BAY	----	----	0.483	0.496	0.522	0.535	0.539	----	----	----	----	----
LOS ANGELES	----	----	----	----	----	----	1.601	1.630	1.635	----	----	----
SOUTHERN SAN JOAQUIN VALLEY												
LOCAL	1,244,651,140	1,288,935,252	0.197	0.225	0.231	0.226	0.225	0.230	0.240	0.254	0.263	0.297
SACRAMENTO	----	----	----	----	----	----	----	0.526	0.537	----	----	----
NORTHERN SAN JOAQUIN VALLEY	187,494,864	188,285,151	0.331	0.345	0.352	0.327	0.327	0.325	0.299	0.340	0.361	0.315
LOS ANGELES from KINGS/TULARE	59,973,143	68,465,039	0.845	0.864	0.891	0.828	0.881	0.913	0.938	0.972	0.970	1.034
LOS ANGELES from KERN CO.	129,840,490	214,246,522	0.652	0.681	0.695	0.678	0.699	0.704	0.710	0.737	0.760	0.805
RVER/SAN BERDO from TULARE CO	1,232,084	9,319,534	----	0.946	0.963	0.915	1.002	1.006	0.989	0.980	1.039	0.997
RIVERSIDE/SAN BERDO from KERN	6,849,490	13,819,676	----	0.801	0.821	0.710	0.810	0.843	0.838	0.800	0.808	0.889
SOLANO COUNTY												
LOCAL	3,958,570	7,256,393	----	----	----	----	----	----	0.296	0.460	0.331	0.384
NORTH BAY												
LOCAL	42,808,281	33,463,508	0.328	0.388	0.441	0.396	0.411	0.448	0.450	0.443	0.529	0.447
BAY AREA	18,892,278	26,635,197	0.369	0.398	0.421	0.400	0.392	0.396	0.396	0.493	0.528	0.569
NORTHERN SAN JOAQUIN VALLEY	7,925,367	9,396,713	0.544	0.600	0.616	0.623	0.611	0.682	0.683	0.702	0.731	0.739
HUMBOLDT	673,446	1,641,902	----	----	----	----	----	----	----	1.047	0.913	1.254
SOUTH BAY												
LOCAL	----	----	0.412	0.440	0.462	0.426	0.572	----	----	----	----	----
NORTHERN SAN JOAQUIN VALLEY	975,243	203,772	----	----	----	----	----	0.602	0.542	0.612	0.559	0.556
SANTA BARBARA												
LOS ANGELES	594,304	704,792	1.010	1.160	1.010	0.757	1.243	1.070	1.020	1.310	1.756	1.410
BARSTOW												
LOCAL	886,136	898,838	----	----	0.484	0.472	0.496	0.500	0.498	0.515	0.524	0.529
RIVERSIDE & SAN BERNARDINO	3,719,028	385,615	0.466	0.470	0.484	0.480	0.515	0.528	0.502	0.540	0.553	0.664
LOS ANGELES	23,143,298	43,471,465	----	----	----	----	----	0.488	0.495	0.558	0.467	0.350
CHINO, CORONA & SAN BERDO												
LOCAL	91,769,081	70,287,208	0.256	0.272	0.289	0.282	0.301	0.308	0.309	0.327	0.324	0.349
LOS ANGELES	148,584,997	97,064,261	0.325	0.323	0.313	0.328	0.317	0.321	0.330	0.374	0.380	0.385
SAN JACINTO												
RIVERSIDE & SAN BERNARDINO	41,607,282	29,117,539	0.295	0.324	0.372	0.353	0.375	0.385	0.374	0.384	0.392	0.408
SAN DIEGO	2,209,162	290,568	0.400	0.400	0.367	0.372	0.400	----	----	0.357	0.400	0.420
LOS ANGELES	19,561,142	30,056,408	0.400	0.395	0.401	0.377	0.357	0.373	0.409	0.437	0.419	0.432
SAN DIEGO												
LOCAL	6,276,940	4,430,779	0.303	0.312	0.300	0.320	0.300	0.320	0.320	0.357	0.400	0.371
LOS ANGELES	3,073,560	3,511,516	----	----	----	----	----	0.320	0.320	0.357	0.400	0.371
TOTAL LBS. HAULED	2,851,630,128	2,843,416,768										

---- Data not available

"One consideration of any adjustments to transportation credits is the haul rate surveys conducted by the Depart
The latest survey covered August 2005. The prior study was for November 2004. Over this nine month period, l
rates increased for 87% of comparable plant-to-plant hauls."

Table 2 - **HAULING RATES**

PLANT TO PLANT

COMPARISON: JULY 2000 TO AUGUST 2005

FROM	TO	JULY 2000	JAN 2001	JAN 2002	OCT 2002	MARCH 2003	AUGUST 2003	APRIL 2004	NOV 2004	AUG 2005
SAN JOAQUIN VALLEY AREA										
A-1	A-2	---	---	---	---	---	---	** 0.324	---	---
B-1	B-2	** 0.255	** 0.265	** 0.342	** 0.298	** 0.243	** 0.249	---	** 0.262	0.339
C-1	C-2	---	---	---	---	** 0.306	** 0.320	** 0.390	** 0.391	0.362
D-1	D-2	---	---	---	---	---	** 0.512	** 0.632	---	0.963
E-1	E-2	n/a	** 0.396	** 0.359	** 0.360	** 0.357	** 0.359	** 0.372	** 0.370	** 0.406
F-1	F-2	---	---	** 0.220	** 0.214	** 0.213	** 0.212	** 0.208	** 0.240	---
G-1	G-2	---	---	** 0.367	** 0.388	---	** 0.423	** 0.443	** 0.448	** 0.518
H-1	H-2	---	---	---	---	---	---	** 0.490	---	---
I-1	I-2	---	---	---	---	---	---	---	** 0..745	---
J-1	J-2	---	---	---	---	---	---	---	** 1.092	---
K-1	K-2	---	---	---	---	---	---	---	** 1.007	---
L-1	L-2	---	---	---	---	---	---	---	** 0.448	** 0.485
M-1	M-2	---	---	---	---	---	---	---	** 0.225	** 0.265
N-1	N-2	---	---	---	---	---	---	---	** 0.720	---
O-1	O-2	---	---	---	---	---	---	---	** 0.255	** 0.265
P-1	P-2	---	---	---	---	---	---	---	---	** 0.319
Q-1	Q-2	---	---	---	---	---	---	---	---	** 1.988
R-1	R-2	---	---	---	---	---	---	---	---	** 1.079
S-1	S-2	---	---	---	---	---	---	---	---	** 1.881
T-1	T-2	---	---	---	---	---	---	---	---	** 0.815
U-1	U-2	---	---	---	---	---	---	---	---	** 0.212
V-1	V-2	---	---	---	---	---	---	---	---	** 0.623
W-1	W-2	---	---	---	---	---	---	---	---	** 1.334
X-1	X-2	---	---	---	---	---	---	---	---	** 0.970
Y-1	Y-2	---	---	---	---	---	---	---	---	** 0.766
Z-1	Z-2	---	---	---	---	---	---	---	---	** 1.050
NORTHERN SAN JOAQUIN VALLEY TO BAY AREA										
A-5	A-6	0.488	0.483	0.480	0.486	0.492	0.487	0.507	---	** 0.530
B-5	B-6	** 0.642	---	---	---	---	---	** 0.508	** 0.549	---
C-5	C-6	** 0.446	** 0.557	** 0.546	** 0.443	** 0.453	** 0.445	---	---	---
D-5	D-6	** 0.595	** 0.574	** 0.589	** 0.453	** 0.561	** 0.504	---	---	---
E-5	E-6	---	---	---	---	---	---	---	---	** 4.530
F-5	F-6	---	---	---	---	---	---	---	---	** 0.685
G-5	G-6	---	---	---	---	---	---	---	---	** 3.354
		---	---	---	---	---	---	---	---	---
BAY AREA										
A-7	A-8	** 0.475	** 0.451	** 0.453	** 0.494	** 0.588	** 0.663	---	---	---
BAY AREA TO SOUTHERN CALIF.										
A-9	A-10	---	---	---	---	---	---	** 2.169	** 2.329	---
B-9	B-10	---	---	---	---	---	---	---	---	** 1.764
SOUTHERN CALIF. TO SOUTHERN SAN JOAQUIN VALLEY										
A-11	A-12	---	---	---	** 0.845	** 0.871	** 1.076	---	---	---
B-11	B-12	---	---	---	---	** 0.887	** 0.859	** 0.913	** 0.945	** 1.092
SOUTHERN CALIF. TO BAY AREA										
B-13	B-14	---	---	** 1.945	** 1.716	** 1.880	** 1.960	---	---	---
SOUTHERN SAN JOAQUIN VALLEY TO SOUTHERN CALIF. AREA										
A-15	A-16	0.842	0.862	0.885	0.920	0.950	0.953	1.023	1.043	1.078
B-15	B-16	---	---	---	---	---	---	0.973	---	---
C-15	C-16	0.861	0.881	0.900	0.935	0.970	0.973	1.043	1.058	1.098
D-15	D-16	0.922	0.937	0.960	0.995	1.030	1.033	1.105	---	---
E-15	E-16	---	---	0.885	0.920	0.950	0.953	1.023	---	---
F-15	F-16	---	---	0.885	0.920	---	0.953	---	---	---
SOUTHERN CALIFORNIA AREA										
A-17	A-18	** 0.406	** 0.366	** 0.457	** 0.529	** 0.432	** 0.411	** 0.366	** 0.360	** 0.447
B-17	B-18	---	---	---	---	---	---	---	---	** 0.503
C-17	C-18	** 0.249	** 0.333	** 0.306	** 0.294	** 0.314	** 0.341	** 0.336	** 0.346	** 0.362
D-17	D-18	** 0.264	** 0.302	** 0.349	** 0.343	** 0.349	** 0.415	** 0.461	** 0.329	** 0.347
E-17	E-18	---	---	---	---	---	---	** 0.368	** 0.447	** 0.519
F-17	F-18	** 0.314	** 0.336	** 0.327	** 0.555	** 0.598	** 0.432	---	---	** 0.401
G-17	G-18	** 0.514	** 0.481	---	** 0.702	** 0.585	** 0.513	** 0.843	** 0.818	** 0.896
H-17	H-18	** 0.410	---	---	---	** 0.254	** 0.257	** 0.282	** 0.874	** 0.427
I-17	I-18	---	---	---	---	---	---	---	** 0.481	** 0.583
J-17	J-18	---	---	---	---	---	---	---	** 0.335	** 0.356
K-17	K-18	---	---	---	---	---	---	---	---	** 0.396
L-17	L-18	---	---	---	---	---	---	---	---	** 0.437
M-17	M-18	---	---	---	---	---	---	---	---	** 2.018
N-17	N-18	---	---	---	---	---	---	---	---	** 2.373
O-17	O-18	---	---	---	---	---	---	---	---	** 1.102

**Hauling rates based on cost per load times number of loads per month divided by total lbs.

---- Data not available

"One consideration of any adjustments to transportation credits is the haul rate surveys conducted by the Department. The latest survey covered August 2005. The prior study was for November 2004. Over this nine month period excluding shipments of cream, haul rates increased for 94% of comparable plant-to-plant hauls."

Table 3 - **HAULING RATES**

PLANT TO PLANT

COMPARISON: JULY 2000 TO AUGUST 2005 - ***NO CREAM***

FROM	TO	JULY 2000	JAN 2001	JAN 2002	OCT 2002	MARCH 2003	AUGUST 2003	APRIL 2004	NOV 2004	AUG 2005	08/05 Lbs LOAD 50,000 LB
SAN JOAQUIN VALLEY AREA											
A-1	A-2	---	---	---	---	---	---	** 0.324	---	---	---
B-1	B-2	** 0.255	** 0.265	** 0.342	** 0.298	** 0.243	** 0.249	---	** 0.262	0.339	---
C-1	C-2	---	---	---	---	** 0.306	** 0.320	** 0.390	** 0.391	0.362	---
D-1	D-2	---	---	---	---	---	** 0.512	** 0.632	---	0.963	---
E-1	E-2	n/a	** 0.396	** 0.359	** 0.360	** 0.357	** 0.359	** 0.372	** 0.370	** 0.406	---
F-1	F-2	---	---	** 0.220	** 0.214	** 0.213	** 0.212	** 0.208	** 0.240	---	---
G-1	G-2	---	---	** 0.367	** 0.388	---	** 0.423	** 0.443	** 0.448	---	---
H-1	H-2	---	---	---	---	---	---	** 0.490	---	---	---
I-1	I-2	---	---	---	---	---	---	---	** 0..745	---	---
J-1	J-2	---	---	---	---	---	---	---	** 1.092	---	---
K-1	K-2	---	---	---	---	---	---	---	** 1.007	---	---
L-1	L-2	---	---	---	---	---	---	---	** 0.448	** 0.485	---
M-1	M-2	---	---	---	---	---	---	---	** 0.225	** 0.265	---
N-1	N-2	---	---	---	---	---	---	---	** 0.720	---	---
O-1	O-2	---	---	---	---	---	---	---	** 0.255	** 0.265	---
P-1	P-2	---	---	---	---	---	---	---	---	** 0.815	---
Q-1	Q-2	---	---	---	---	---	---	---	---	** 0.212	---
R-1	R-2	---	---	---	---	---	---	---	---	** 1.334	---
S-1	S-2	---	---	---	---	---	---	---	---	** 0.970	---
NORTHERN SAN JOAQUIN VALLEY TO BAY AREA											
A-5	A-6	0.488	0.483	0.480	0.486	0.492	0.487	0.507	---	** 0.530	---
B-5	B-6	** 0.642	---	---	---	---	---	** 0.508	** 0.549	---	---
C-5	C-6	** 0.446	** 0.557	** 0.546	** 0.443	** 0.453	** 0.445	---	---	---	---
D-5	D-6	** 0.595	** 0.574	** 0.589	** 0.453	** 0.561	** 0.504	---	---	---	---
E-5	E-6	---	---	---	---	---	---	---	---	** 4.530	1.080
F-5	F-6	---	---	---	---	---	---	---	---	** 0.685	---
BAY AREA											
A-7	A-8	** 0.475	** 0.451	** 0.453	** 0.494	** 0.588	** 0.663	---	---	---	---
BAY AREA TO SOUTHERN CALIF.											
A-9	A-10	---	---	---	---	---	---	** 2.169	** 2.329	---	---
SOUTHERN CALIF. TO SOUTHERN SAN JOAQUIN VALLEY											
A-11	A-12	---	---	---	** 0.845	** 0.871	** 1.076	---	---	---	---
B-11	B-12	---	---	---	---	** 0.887	** 0.859	** 0.913	** 0.945	** 1.092	---
SOUTHERN CALIF. TO BAY AREA											
B-13	B-14	---	---	** 1.945	** 1.716	** 1.880	** 1.960	---	---	---	---
SOUTHERN SAN JOAQUIN VALLEY TO SOUTHERN CALIF. AREA											
A-15	A-16	0.842	0.862	0.885	0.920	0.950	0.953	1.023	1.043	1.078	---
B-15	B-16	---	---	---	---	---	---	0.973	---	---	---
C-15	C-16	0.861	0.881	0.900	0.935	0.970	0.973	1.043	1.058	1.098	---
D-15	D-16	0.922	0.937	0.960	0.995	1.030	1.033	1.105	---	---	---
E-15	E-16	---	---	0.885	0.920	0.950	0.953	1.023	---	---	---
F-15	F-16	---	---	0.885	0.920	---	0.953	---	---	---	---
SOUTHERN CALIFORNIA AREA											
A-17	A-18	** 0.406	** 0.366	** 0.457	** 0.529	** 0.432	** 0.411	** 0.366	** 0.360	** 0.447	---
B-17	B-18	---	---	---	---	---	---	---	---	** 0.503	---
C-17	C-18	** 0.249	** 0.333	** 0.306	** 0.294	** 0.314	** 0.341	** 0.336	** 0.346	** 0.362	---
D-17	D-18	** 0.264	** 0.302	** 0.349	** 0.343	** 0.349	** 0.415	** 0.461	** 0.329	** 0.347	---
E-17	E-18	---	---	---	---	---	---	** 0.368	** 0.447	** 0.519	---
F-17	F-18	** 0.314	** 0.336	** 0.327	** 0.555	** 0.598	** 0.432	---	---	** 0.401	---
G-17	G-18	** 0.514	** 0.481	---	** 0.702	** 0.585	** 0.513	** 0.843	** 0.818	** 0.896	---
H-17	H-18	** 0.410	---	---	---	** 0.254	** 0.257	** 0.282	** 0.874		---
I-17	I-18	---	---	---	---	---	---	---	** 0.481	** 0.583	---
J-17	J-18	---	---	---	---	---	---	---	** 0.335	** 0.356	---
K-17	K-18	---	---	---	---	---	---	---	---	** 0.396	---
L-17	L-18	---	---	---	---	---	---	---	---	** 0.437	---
M-17	M-18	---	---	---	---	---	---	---	---	** 2.018	---
N-17	N-18	---	---	---	---	---	---	---	---	** 2.373	---
O-17	O-18	---	---	---	---	---	---	---	---	** 1.102	---

**Hauling rates based on cost per load times number of loads per month divided by total lbs.

---- Data not available

August 2005 rates - Cream removed.

Table 4 - **SUMMARY OF CHANGES IN AREA DIFFERENTIALS AND TRANSPORTATION CREDITS:** *Plant-to-Plant*

The incentives to move milk for Class 1 usage on a plant-to-plant basis are the sum of any transportation credits and area differentials (i.e., any difference in the Class 1 pool obligation between the two plant). For various supply counties and deficit counties, this table shows both the area differentials from c1950 to the latest change in December 1996, and the transportation credits from their inception in 1981 to the latest change in August 2003. Transportation credits have always covered bulk milk, and since November 2003 it has also covered condensed skim.

MAXIMUM DEDUCTION PER HUNDREDWEIGHT

SUPPLY COUNTIES	DEFICIT COUNTIES		c1950	c1960	c1970	c1980	AUG. 1981 OCT. 1981 19	MAR. 1982 APR. 1982 21	JUNE 1982 AUG. 1982 23 3/	APR. 1983 JUNE 1983 26	OCT. 1984 DEC. 1984 31	MAY 1988 JULY 1988 38	OCT. 1989 DEC. 1989 44	APR. 1991 JUNE 1991 47	JULY 1994 SEP. 1994 56	OCT. 1996 DEC. 1996 4/	J-J 2001 SEP. 2001	Jun 2003 Aug 2003
Los Angeles	Orange, Riverside, San Diego and Ventura 1/	Differential	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Credit															0.24	0.34
		Total	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.00**	**$0.24**	**$0.34**
Tulare	Los Angeles, Orange, and Ventura 1/	Differential	0.60	0.28	0.38	0.55	0.55	0.55	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.27	0.27	0.27
		Credit					0.06	0.06	0.22	0.20	0.22	0.24	0.26	0.27	0.33	0.50	0.50	0.60
		Total	**$0.60**	**$0.28**	**$0.38**	**$0.55**	**$0.61**	**$0.61**	**$0.62**	**$0.60**	**$0.62**	**$0.64**	**$0.66**	**$0.67**	**$0.73**	**$0.77**	**$0.77**	**$0.87**
	Riverside, and San Diego	Differential	0.60	0.28	0.38	0.55	0.55	0.55	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.27	0.27	0.27
		Credit					0.06	0.06	0.22	0.20	0.22	0.24	0.26	0.27	0.33	0.50	0.50	0.68
		Total	**$0.60**	**$0.28**	**$0.38**	**$0.55**	**$0.61**	**$0.61**	**$0.62**	**$0.60**	**$0.62**	**$0.64**	**$0.66**	**$0.67**	**$0.73**	**$0.77**	**$0.77**	**$0.95**
Kings and Fresno	Los Angeles, Orange, and Ventura 1/	Differential	0.52	0.28	0.38	0.55	0.55	0.55	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.27	0.27	0.27
		Credit					0.09	0.09	0.25	0.23	0.25	0.27	0.29	0.30	0.36	0.53	0.53	0.63
		Total	**$0.52**	**$0.28**	**$0.38**	**$0.55**	**$0.64**	**$0.64**	**$0.65**	**$0.63**	**$0.65**	**$0.67**	**$0.69**	**$0.70**	**$0.76**	**$0.80**	**$0.80**	**$0.90**
	Riverside, and San Diego	Differential	0.52	0.28	0.38	0.55	0.55	0.55	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.27	0.27	0.27
		Credit					0.09	0.09	0.25	0.23	0.25	0.27	0.29	0.30	0.36	0.53	0.53	0.71
		Total	**$0.52**	**$0.28**	**$0.38**	**$0.55**	**$0.64**	**$0.64**	**$0.65**	**$0.63**	**$0.65**	**$0.67**	**$0.69**	**$0.70**	**$0.76**	**$0.80**	**$0.80**	**$0.98**
Sonoma	Alameda, San Francisco and Santa Clara	Differential	0.16	0.09	0.18	0.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Credit					0.16	0.26	0.26	0.26	0.26	0.26	0.26	0.27	0.27	0.27	0.27	0.27
		Total	**$0.16**	**$0.09**	**$0.18**	**$0.14**	**$0.16**	**$0.26**	**$0.26**	**$0.26**	**$0.26**	**$0.26**	**$0.26**	**$0.27**	**$0.27**	**$0.27**	**$0.27**	**$0.27**
Merced and Stanislaus (part) 2/	Alameda, San Francisco and Santa Clara	Differential	0.33	0.35	0.28					0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
		Credit					0.16	0.16	0.16	0.32	0.32	0.37	0.37	0.38	0.38	0.38	0.38	0.38
		Total	**$0.33**	**$0.35**	**$0.28**	**$0.00**	**$0.16**	**$0.16**	**$0.16**	**$0.32**	**$0.32**	**$0.37**	**$0.37**	**$0.38**	**$0.38**	**$0.38**	**$0.38**	**$0.38**

1/ Ventura County added effective December 1989.

2/ Part of Stanislaus County added effective April 1982; the part of Stanislaus County included modified effective July 1988.

3/ South Valley - Southern California Class 1 price differential reduced $0.16 per hundredweight.

4/ South Valley merged with Northern California, differential with Southern California Class 1 price reduced $0.17 per hundredweight.

Data source: CDFA-DMB current and historic Stabilization Plans.

Table 5 - **SUMMARY OF CHANGES IN TRANSPORTATION ALLOWANCES:** *Ranch-to-Plant*

With a statewide pool, the incentives to move milk to Class 1 plants on a ranch-to-plant basis are the transportation allowances. For various receiving areas (deficit counties), this table shows the transportation allowances from their inception in 1982 to the latest changes made in 2004. The allowances vary based on the mileage from the ranch to the plant.

	CONSTRUCTIVE MILES	DOLLARS PER HUNDREDWEIGHT					CONSTRUCTIVE MILES	DOLLARS PER HUNDREDWEIGHT		CONSTRUCTIVE MILES	DOLLARS PER HUNDREDWEIGHT		CONSTRUCTIVE MILES	DOLLARS PER HUNDREDWEIGHT
HEARING DATE		SEP. 82	OCT. 83	OCT. 1984	MAY 1988	OCT. 1989		APR. 1991	JULY 1994		J-J 2001	June 2003		Aug 2004
ORDER DATE		DEC. 82	NOV. 83	DEC. 1984	JULY 1988	DEC. 1989		JUNE 1991	SEP. 1994		SEPT 2001	AUG 2003		Oct 2004
HEARING NUMBER		24	27	31	38	44		47	56					
Bay Area Receiving Area 1/	0 to 44	$0.00	$0.00	$0.00	$0.00	$0.00	0 to 99	$0.20	$0.20		$0.24	$0.24		$0.25
	44 to 74	0.17	0.17	0.17	0.17	0.17	99 to 199	0.24	0.24		0.28	0.28		0.29
	74 to 100	0.20	0.20	0.20	0.20	0.20	199 +	0.30	0.30		0.30	0.30		0.30
	100 +	0.21	0.21	0.21	0.21	0.21								
North Bay Receiving Area 2/ 9/ 10/	0 to 9	0.00	0.00	0.00	0.00	0.00	0 to 44	0.11	0.11		0.15	0.15		0.18
	9 to 75	0.06	0.06	0.06	0.06	0.06	44 to 99	0.16	0.16		0.20	0.20		0.25
	75 +	0.09	0.09	0.09	0.09	0.09	99 +	0.21	0.21		0.25	0.25		0.29
Sacramento Receiving Area 2/	See above Solano Receiving Area 2/						0 to 59	0.09	0.09		0.09	0.09		0.13
							59 +	0.12	0.12		0.12	0.12		0.16
Shasta Receiving Area 3/	0 to 19	0.00	0.00	0.00	0.00	0.00	0 to 29	0.13	0.13		0.13	0.13		0.13
	19 to 30	0.13	0.13	0.13	0.13	0.13	29 to 49	0.16	0.16		0.16	0.16		0.16
	30 to 50	0.16	0.16	0.16	0.16	0.16	49 +	0.19	0.19		0.19	0.19		0.19
	50 +	0.19	0.19	0.19	0.19	0.19								
San Diego Receiving Area										0 to 89	0.00	0.09		0.10
										89 to 139	0.43	0.43		0.43
										139 +	0.58	0.58		0.58
Southern California Receiving Area 4/	See below Southern California Receiving Area									0 to 89	0.00	0.09	0 to 89	0.09
										89 to 139	0.43	0.43	89 to 120	0.29
										89 +	0.58	0.58	120 to 139	0.48
													139 +	0.62
Southern California Receiving Area 5/														
From Southern California 6/	0 +	0.00	0.00	0.00	0.00	0.00	0 +	0.00	0.00					
From South Valley 7/	0 to 75	See below "All Other" 7/	0.00	0.00	0.00	0.00	0 to 74	0.00	0.00	See above Southern California Receiving Area				
	75 +		0.34	0.36	0.38	0.49	74 to 149	0.31	0.32					
							149 +	0.56	0.58					
From All Other 8/	0 to 75	0.00	0.00	0.00	0.00	0.00	0 to 74	0.00	0.00					
	75 +	0.21	0.21	0.21	0.23	0.23	74 +	0.30	0.30					

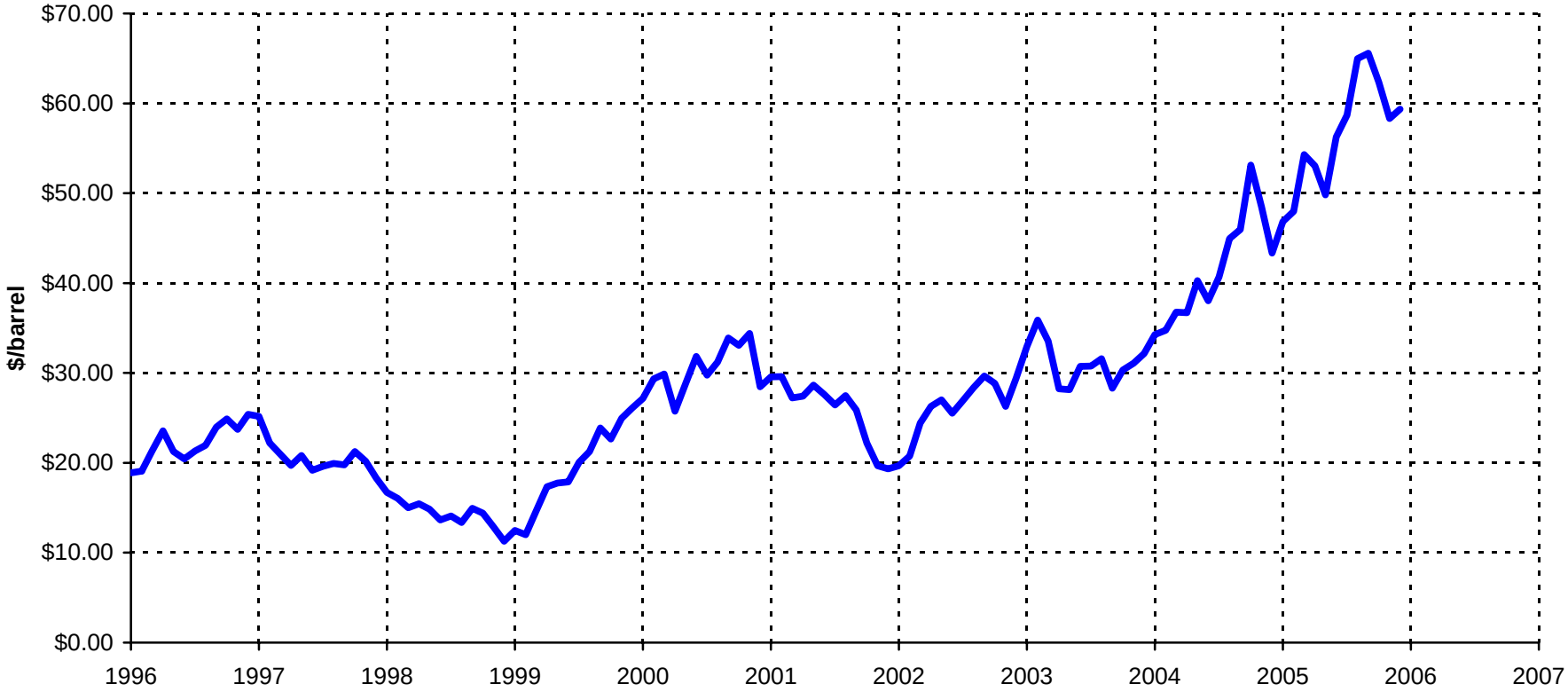
1/ Alameda, Contra Costa, San Francisco, San Mateo, Santa Clara, and Santa Cruz Counties.
2/ Prior To June 1991, Sacramento and Solano Counties had been a single combined Receiving Area.
3/ Transportation Allowances for the Shasta Receiving Area have not been used since mid 1996.
4/ Los Angeles, Orange and Ventura Counties. Effective August 2003 Riverside County added.
5/ Los Angeles and Orange Counties. Effective December 1989 Ventura County added.
6/ Imperial, Inyo, Los Angeles, Mono, Orange, Riverside, San Bernardino, and San Diego Counties.
7/ Part of "All Other" from December 1982 to November 1983. Created November 1983 to include Fresno, Kings and Tulare Counties. Effective June 1991 Kern County added.
8/ Effective June 1991, Kern County was moved from "All Other" to "South Valley".
9/ Prior To October 2004, included only Solano county.
10/ Marin, Solano and Sonoma counties since October 2004.

Data source: CDFA-MPB current and historic Pooling Plans.

"For the last four years, there has been a steady, significant increase in prices for petroleum and its products. Earlier significant price increases were attributed to supply shortages. The current price increases seem to be the result of increases in demand. While the supply shortage price increases were followed by price decreases, there is no history of what follows a demand driven price increase. For the last four years, there has been a steady, significant increase in prices for petroleum and its products. Earlier significant price increases were attributed to supply shortages. The current price increases seem to be the result of increases in demand. While the supply shortage price increases were followed by price decreases, there is no history of what follows a demand driven price increase."

Figure 1 - **CRUDE OIL PRICES**

Monthly averages,1996 through 2005

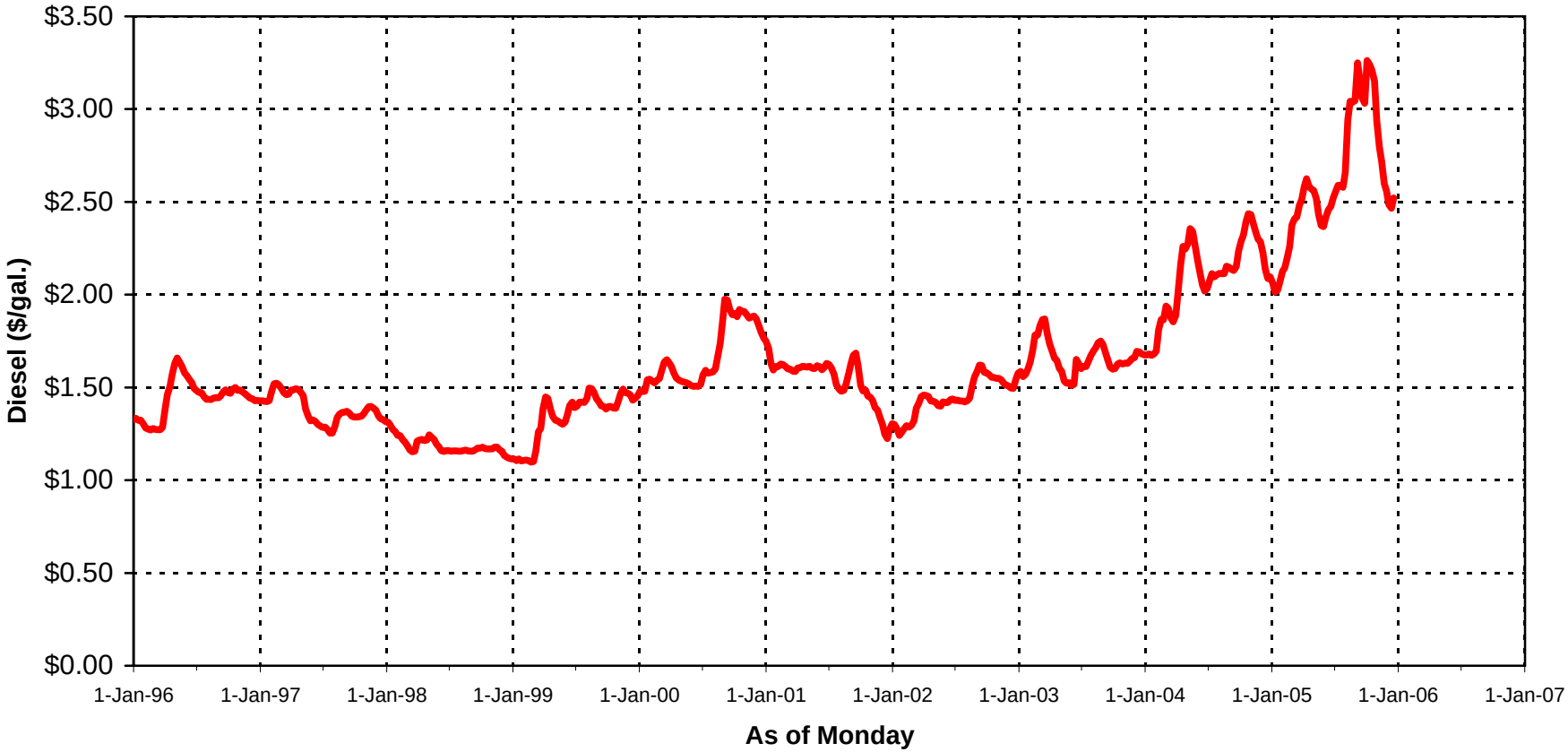


Crude oil prices are for West Texas Intermediate Crude. The data is supplied by Economagic.com, the Economic Time Series Page: http://www.economagic.com/em-cgi/data.exe/var/west-texas-crude-long

"Diesel flues prices have tracked the price changes for crude oil for the last four years (Figure 1), and will probably continue to do so. The storm damage to the Gulf Coast seemed to have a relatively larger impact on diesel prices compared to oil prices."

Figure 2 - **DIESEL PRICES**

Average prices for Monday of each week, 1996 through 2006.



Diesel fuel prices are for California retail on-highway. The data is supplied by the US Department of Energy: http://tonto.eia.doe.gov/oog/info/wohdp/diesel.asp

Figure 3 – **FEDERAL CLASS 1 PRICE STRUCTURE AND PRODUCER DIFFERENTIALS**

January 2000

FEDERAL CLASS 1 PRICE STRUCTURE AND PRODUCER DIFFERENTIALS

In federal Milk Marketing Orders, every county in the contiguous 48 states is assigned a Class I price differential. These differentials range from a minimum of $1.60 to a maximum of $4.30 per hundredweight.

These differentials are used for two different functions. First, for any Class I processor in a federal order, their pool obligation is the base Class I price plus the Class I differential applicable to the county where their plant is located. Thus for example only, if California were part of a federal order, their pool obligation for a Class I plant located in Los Angeles county would be $0.50 per hundredweight more than for a Class I plant located in Tulare county ($0.50 equals $2.10 less $1.60).

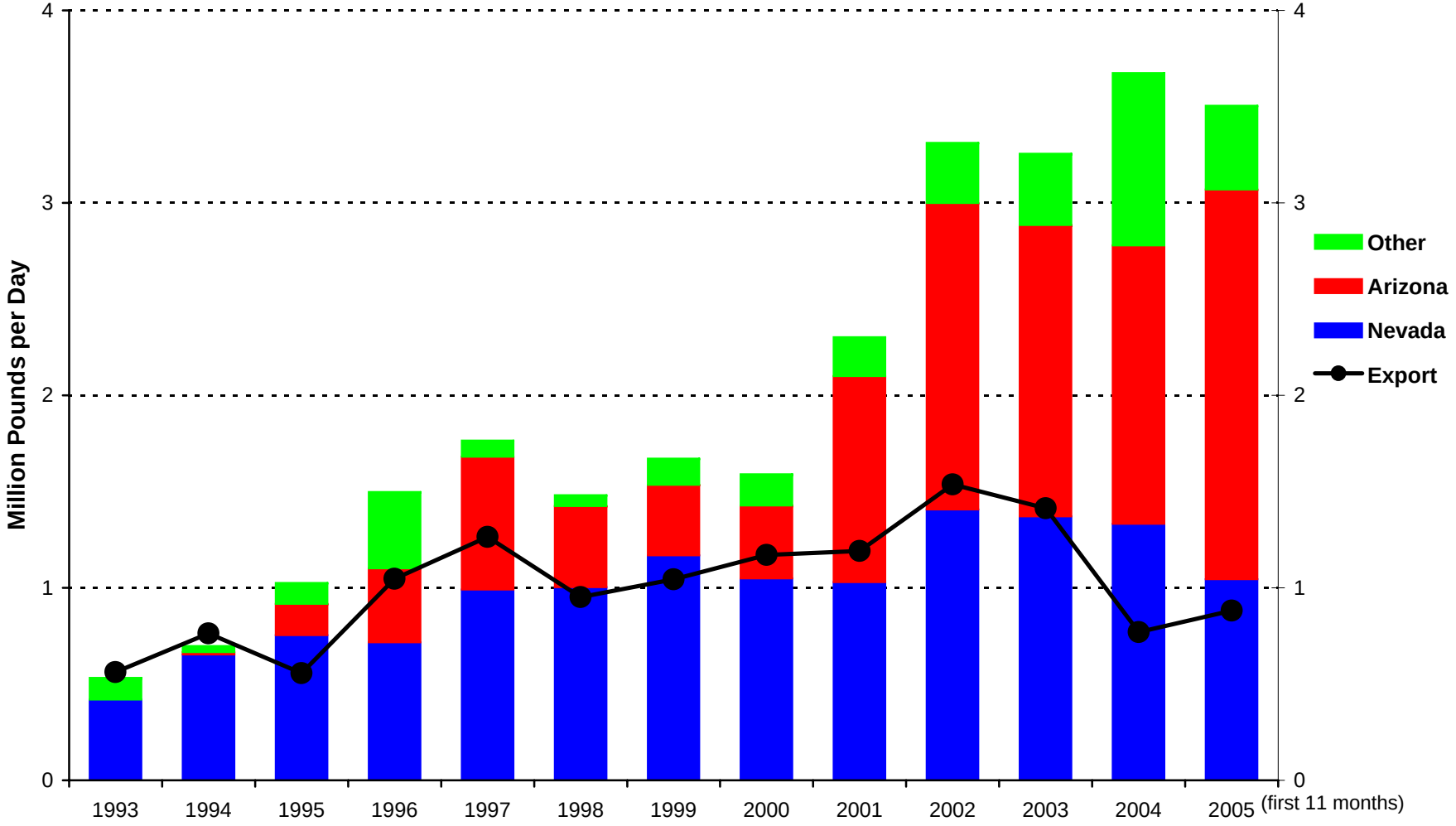
For the purposes of a California hearing on milk movement incentives, the second function of the Class I differentials is more relevant, in terms of both ranch-to-plant milk movement and plant-to-plant milk movement.

The relative Class I differentials affect the pool price a producer receives. Again for example only, if California were part of a federal order, a producer shipping to a pool plant in Los Angeles county would receive $0.50 more than a producer shipping to a pool plant in Tulare county. (The plants do not have to be Class I plants; they only have to be associated with the pool). This $0.50 incentive to help cover hauling costs is comparable to the $0.48 to $0.62 transportation allowances California sets for milk moving from the Southern San Joaquin Valley into Los Angeles.

The relative Class I differentials also affects a plant's ability to ship milk to another plant. Again for example only, if California were part of a federal order, a pool plant in Tulare county shipping to a pool plant in Los Angeles county would have a $0.50 raw product advantage to help cover hauling costs. This $0.50 incentive is compared to the $0.87 to $0.90 transportation credits plus price differential California sets for milk moving from the South Valley into Los Angeles. Recall however, that if the receiving plant does not have 100% fluid utilization, the effective incentive is prorated down from these figures.

"Bulk milk movement in California is many faceted. California has a small but important interstate milk movement segment. While imported milk makes up only 4% of California total supply, it has 15% of the fluid milk market."

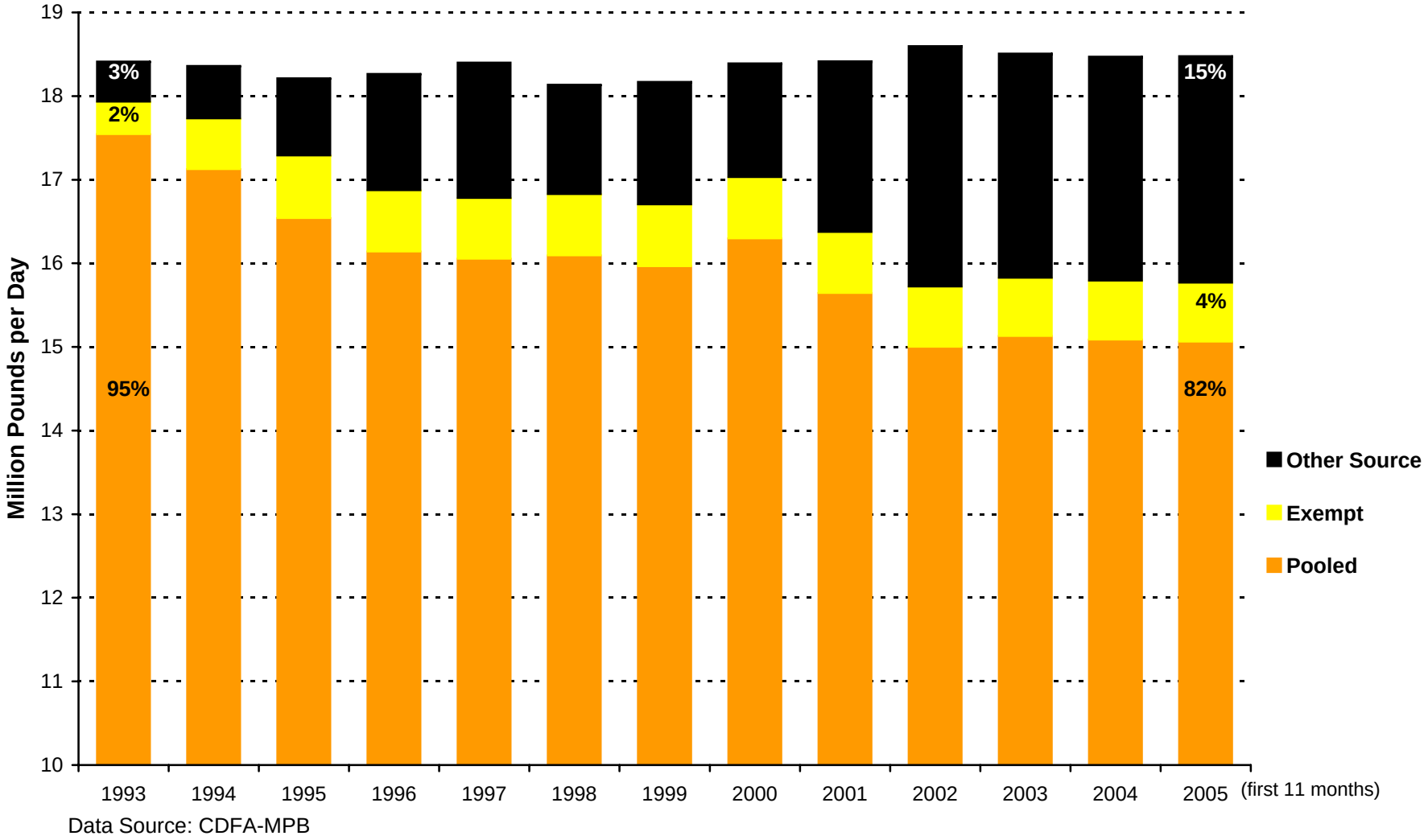
Figure 4 - **CALIFORNIA ANNUAL BULK MILK IMPORTS AND EXPORTS FOR ALL USES**
Annual, 1993-2005



Imports by state of origin: note "Other" may include mislabeled Arizona and Nevada milk. Data Source: CDFA-MPB

"Bulk milk movement in California is many faceted. While imported milk makes up only 4% of California total supply, it has 15% of the fluid milk market."

Figure 5 - **ANNUAL SOURCES OF FLUID MILK PROCESSED IN CALIFORNIA**
Annual, 1993-2005



Data Source: CDFA-MPB

"Bulk milk movement in California is many faceted. While once milk movement was very local, now milk in California moves half way across the state on a regular basis."

Table 6 - **RANCH TO PLANT MILK MOVEMENT - ALL USES**

Sources and Destination of Milk by Groups of Counties
Loads per day
December 2004 to November 2005

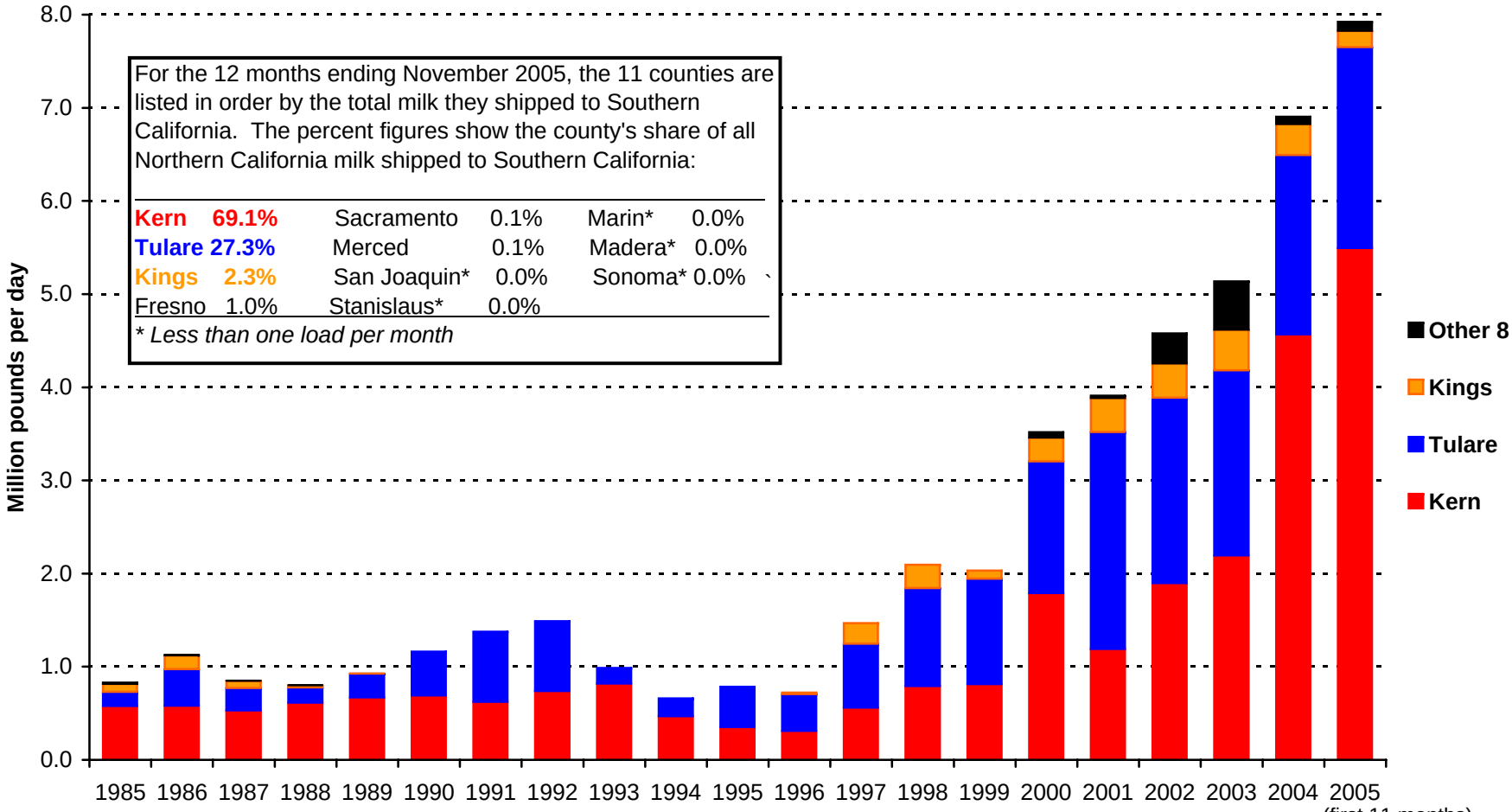
FROM	TO A	B	C	D	E	F	G	H	I	J	K
A	11	1									
B	0	40	0	10		0				0	
C	1	5	14	8							
D	0	45	0	564		54	4		0	0	
E		1		0	0	0			2	0	
F				6		189	89		2	3	
G	0	0		11		47	399	1	10	35	
H				1		6	33	1	24	90	
I		0		0		3	0		95	85	1
J									0	2	
K							0		0		4
	Del Norte	Alameda	Butte	Madera	Monterey	Fresno	Tulare	Kern	Orange	Los Angeles	Imperial
	Humboldt	Marin	Glenn	Merced	San Benito	Kings			Riverside		
		Mendocino	Placer	Sacramento	San Luis Obispo				San Bernardino		
		San Mateo	Shasta	San Joaquin	Santa Barbara				San Diego		
		Santa Clara	Sutter	Stanislaus					Ventura		
		Santa Cruz	Tehama								
		Solano	Yolo								
		Sonoma	Yuba								

Assumes 52,000 pounds per load. Blank cells represent no shipments. A value of zero "0" represents an average of less than half a load per day; underlined counties have processing plants but no dairy farms.

Data source: CDFA-MPB

"While Southern California historically has had enough milk to meet its fluid milk needs, it has for over twenty years imported milk from other areas to meets the needs of all its processors."

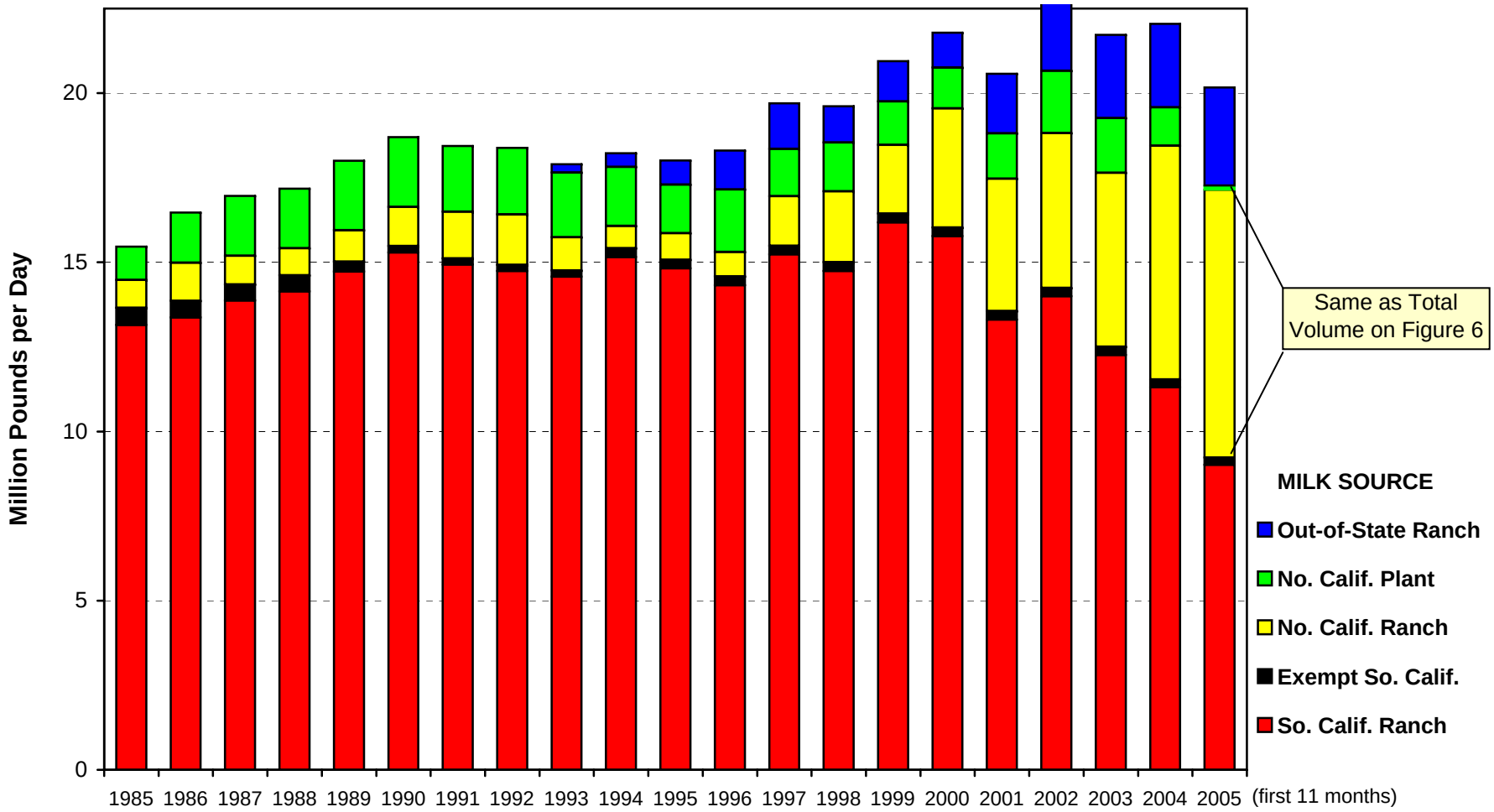
Figure 6 - **ANNUAL MILK MOVEMENT FROM NORTHERN CALIFORNIA RANCHES TO SOUTHERN CALIFORNIA PLANTS FOR ALL USES**
Annual, 1985 to 2005



Selected counties through 1999, for all Northern California counties from 2000. Data source: CDFA-MPB.

"While Southern California historically has had enough milk to meet its fluid milk needs, it has for over twenty years imported milk from other areas to meets the needs of all its processors. Recent decreases in local milk production, however, has resulted in large increases in imports."

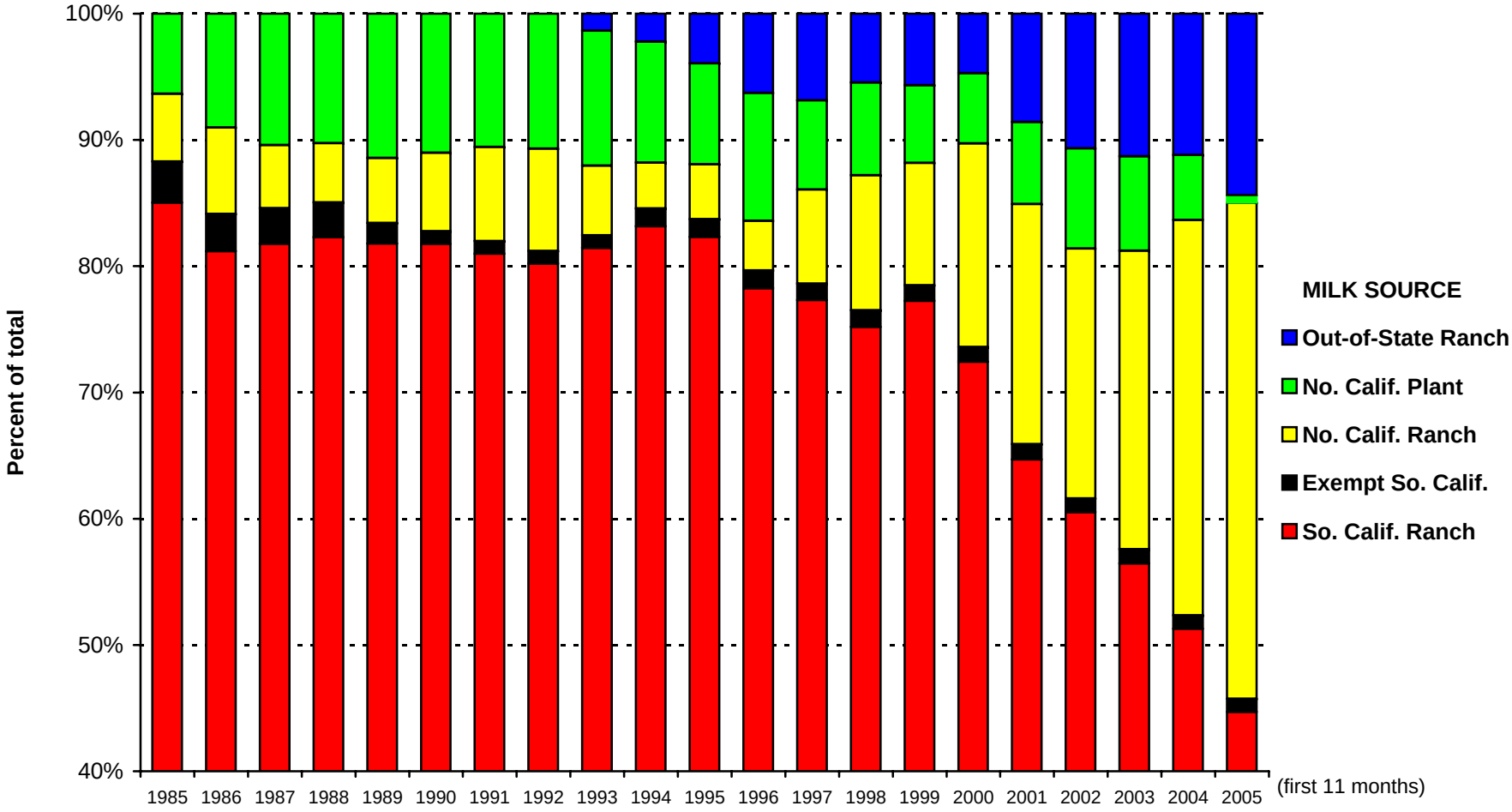
Figure 7 - **SOUTHERN CALIFORNIA SOURCES AND PROCESSING OF MILK FOR ALL USES (Pounds)**
Annual 1985 -2005



Out-of-state data only available starting 1993, source: CDFA-MPB.

"Recent urbanization of the major Southern California milk producing region has, however, decreased local milk production. In 2005, Southern California only produced 45% of all local utilization, not even producing enough milk to meet its fluid milk needs. This has increased the total cost of the transportation allowance and credit system as more milk is brought in from the rest of the state."

Figure 8 - **SOUTHERN CALIFORNIA MILK SOURCES AND PROCESSING FOR ALL USES (Percent)**
Annual 1985-2005



Out-of-state data only available starting January 1993. July 1985 to November 2005, source: CDFA-MPB .

"The amount of milk brought in to Southern California from Northern California, much of which uses transportation allowances and credits, is comparable to the milk utilized in manufacturing products."

Figure 9 - **SOURCES AND USES OF MILK IN SOUTHERN CALIFORNIA**

For the 12 months ending November 2005. Sources: CDFA-MPB report FAMP140-4.

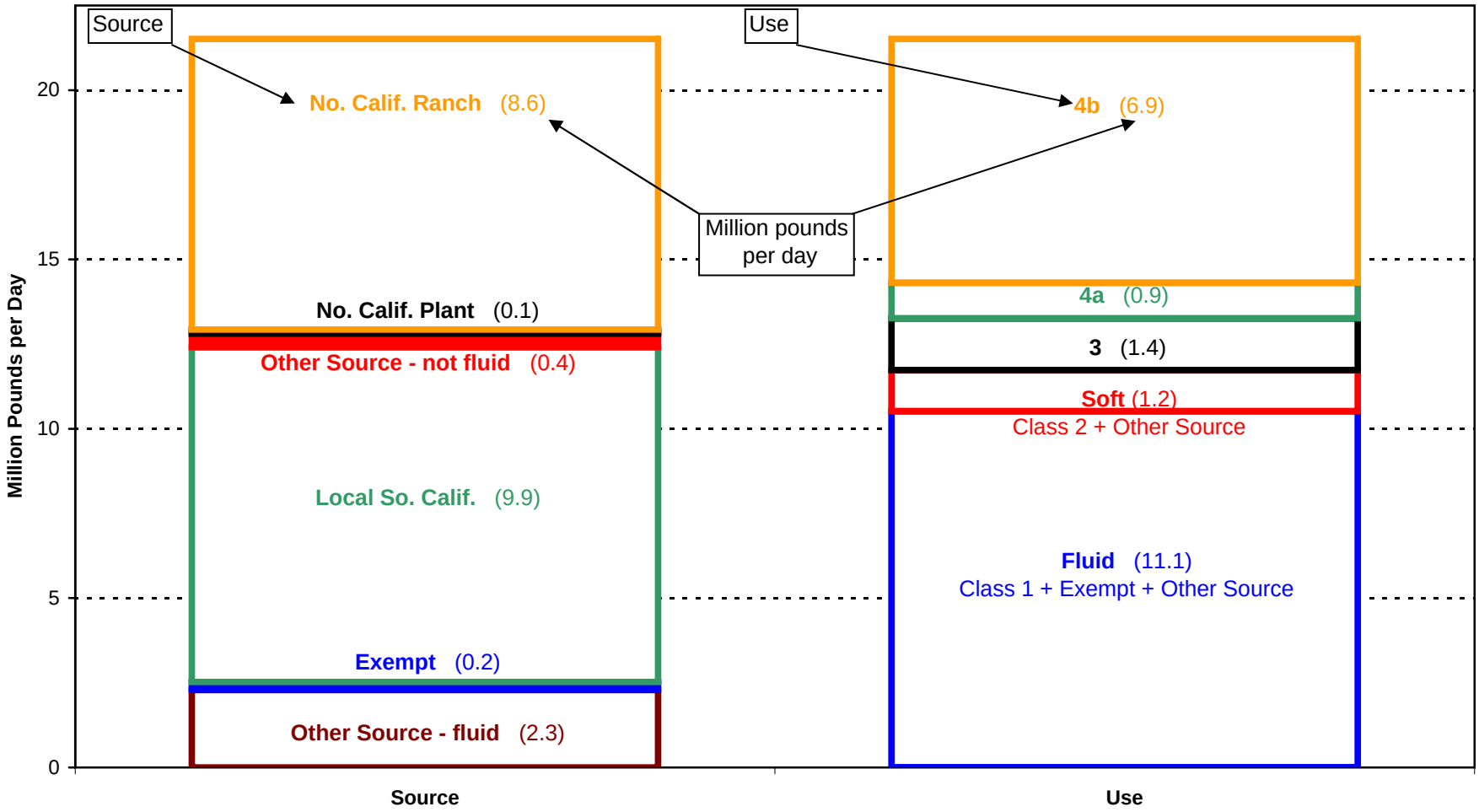
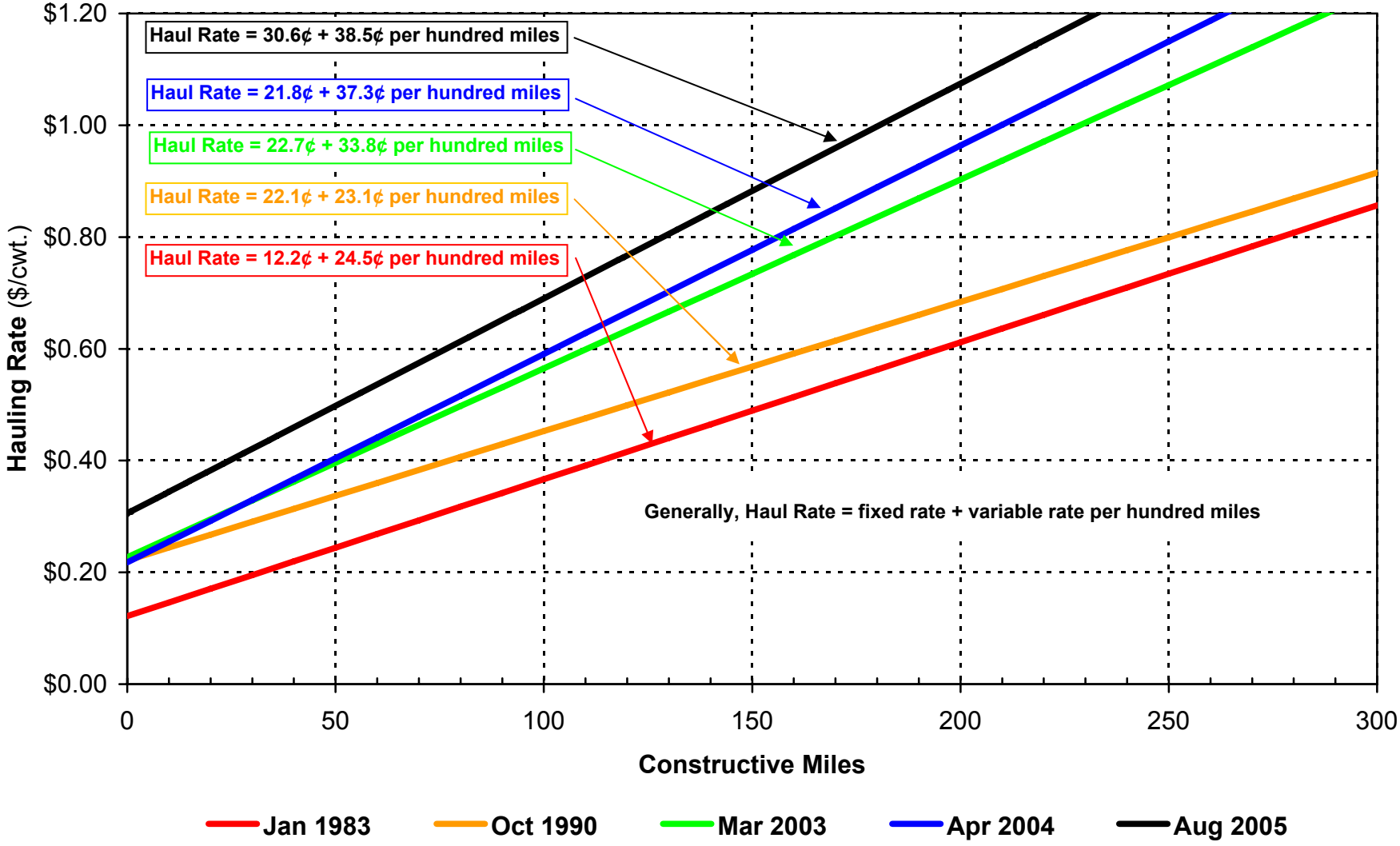


Figure 10 - **RELATIONSHIP BETWEEN HAULING RATES AND DISTANCE BETWEEN PLANTS**

Weighted regression analysis of plant-to-plant hauling distance in constructive miles and hauling rates for selected years. Sources: (a) hauling rates from CDFA-DMB studies, (b) plant location from CDFA-MPB report FAMP2351, (c) constructive miles from PUC Distance Table 8.



Relationship between Hauling Rates and Distance

The distance between processing plants can be easily determined. Thus, it is possible to plot the hauling rates of plant-to-plant product movement (dependent variable on the Y-axis) against the distance of the haul (independent variable on the X-axis). Currently, both the transportation allowance and credits are discrete, discontinues sets of numbers. It **might** be possible to use the information from a weighted regression analysis as the basis for developing transportation allowances and credits that are continuous functions of distance.

For the purposes of this hearing however, a weighted regression analysis is useful as a way to summarize a large quality of data. In April 2004 before the last hearing on milk movement incentives, the fixed rate of hauling product plant-to-plant was about $0.22 per hundredweight of product while the variable rate was about $0.37 per hundred miles per hundredweight of product. It is assumed that the fixed rates would reflect such things as the cost of loading, unloading and washing, as well as insurance, taxes and depreciation. The variable rates would reflect fuel costs and wage rates.

In August 2005, the weighted regression analysis suggested that the fixed rate was now about $0.31 (up $0.09) per hundredweight of product while the variable rate was about $0.39 (up $0.02) per hundred miles per hundredweight of product. (Given the increase in diesel prices, it is surprising that the fixed rate increased more than the variable rate.) In terms of actual costs, these increases implies that between April 2004 and August 2005, the rate for hauling milk from the Northern San Joaquin Valley to the Bay Area went up 9 cents and the rate from the Southern San Joaquin Valley to Los Angles went up about 11 cents.