APPENDIX M

Economic Impacts of Proposed Regulations on the Agricultural Sector

Economic Impacts of Proposed Regulations on the Agricultural Sector

In estimating the potential economic impacts of low sulfur diesel fuel on the agricultural sector, staff first identified the principal harvested commodities of the State, based on both the numbers of harvested acres as well as total commodity values. For the purposes of this analysis, harvested commodities are considered crops that are grown and either picked or harvested by hand or machine. Staff also identified principal livestock commodities, based on their commodity values, to estimate the potential economic impacts of low sulfur diesel to this category within the agricultural sector.

The tables below summarize staffs findings in the analysis of the economic impacts of the proposed regulations on the harvested commodities, including field crops, fruits and nuts, and vegetables and melons, cattle for dairy milk, and cattle for beef production categories.

HARVESTED CROPS:

FIELD, FRUITS & NUTS, VEGETABLES & MELONS

Summary of Harvested Commodities Fuel Operating Costs 2001

SECTOR / Commodities	Harvested Acres	Crop values ($1,000)	% of State Agricultural Total Value	Gasoline				Diesel				Total Fuel cost/acre	Average Total Operating Costs / Acre (w/o fuel)**	Average Total Operating Costs / Acre**	Fuel Costs as % of Total Operating Costs	Diesel Fuel Costs as % of Total Operating Costs	Total Operating costs / Acre with 3 ¢ increase in diesel fuel	% change due to 3 ¢ diesel increase
				Average gal/acre	Average price/gal*	Avg Total Gasoline cost/acre	Estimated Total Gasoline Use (kgal/year)	Average gal/acre	Average price/gal*	Avg Total Diesel cost/acre	Estimated Total Diesel Use (kgal/year)							
FIELD CROPS																		
Beans, Dry	89,000	$52,589	0.19%	2.1	$1.06	$2.2	187	20.1	$0.83	$16.7	1,789	$18.9	$489	$508	3.72%	3.28%	$509	0.12%
Corn, All	475,000	$56,668	0.21%	0.8	$1.06	$0.8	380	21.3	$0.83	$17.7	10,118	$18.5	$545	$564	3.29%	3.14%	$564	0.11%
Cotton, All	864,000	$706,137	2.56%	0.8	$1.06	$0.8	691	40.2	$0.83	$33.4	34,733	$34.2	$664	$698	4.90%	4.78%	$699	0.17%
Hay, All	1,540,000	$588,931	2.14%	2.4	$1.06	$2.5	3696	22.0	$0.83	$18.3	33880	$20.8	$600	$621	3.35%	2.94%	$621	0.11%
Rice, All	471,000	$209,227	0.76%	1.1	$1.06	$1.2	518	22.3	$0.83	$18.5	10,503	$19.7	$496	$516	3.82%	3.59%	$516	0.13%
Wheat, All	461,000	$96,189	0.35%	0.6	$1.06	$0.6	277	13.2	$0.83	$11.0	6,085	$11.6	$149	$161	7.22%	6.82%	$161	0.25%
Sub-Total																		
	3,900,000	$1,709,741	6.20%	1.3	$1.06	$1.38	5,749	23.2	$0.83	$19.2	97,108	$20.6	$491	$511	4.03%	3.76%	$512	0.15%
FRUITS & NUTS																		
Almonds	525,000	$731,880	2.65%	8.3	$1.06	$8.8	4,358	17.8	$0.83	$14.8	9,345	$23.6	$1,604	$1,628	1.45%	0.91%	$1,628	0.03%
Grapes																		
Raisin	235,000	$401,690	1.46%	3.8	$1.06	$4.0	893	26.1	$0.83	$21.7	6,134	$25.7	$1,164	$1,190	2.16%	1.82%	$1,190	0.07%
Table	88,000	$434,793	1.58%	4.6	$1.06	$4.9	405	26.8	$0.83	$22.2	2,358	$27.1	$6,011	$6,038	0.45%	0.37%	$6,039	0.01%
Wine	480,000	$1,817,140	6.59%	10.8	$1.06	$11.4	5,184	22.4	$0.83	$18.6	10,752	$30.0	$2,172	$2,202	1.36%	0.84%	$2,203	0.03%
Lemons	49,500	$247,042	0.90%	24.3	$1.06	$25.8	1,203	14.4	$0.83	$12.0	713	$37.7	$6,275	$6,313	0.60%	0.19%	$6,313	0.01%
Nectarines	36,500	$127,642	0.46%	11.4	$1.06	$12.1	416	77.4	$0.83	$64.2	2,825	$76.3	$9,661	$9,737	0.78%	0.66%	$9,740	0.02%
Oranges, All	194,500	$571,446	2.07%	24.2	$1.06	$25.7	4,707	11.6	$0.83	$9.6	2,256	$35.3	$3,748	$3,783	0.93%	0.25%	$3,784	0.01%
Peaches, All	67,800	$227,554	0.83%	8.0	$1.06	$8.5	542	42.9	$0.83	$35.6	2,909	$44.1	$5,514	$5,558	0.79%	0.64%	$5,559	0.02%
Pistachios	78,000	$159,390	0.58%	10.5	$1.06	$11.1	819	12.2	$0.83	$10.1	952	$21.3	$1,248	$1,269	1.67%	0.80%	$1,270	0.03%
Prunes	86,000	$146,843	0.53%	14.2	$1.06	$15.1	1,221	10.7	$0.83	$8.9	920	$23.9	$2,646	$2,670	0.90%	0.33%	$2,670	0.01%
Strawberries	26,400	$841,031	3.05%	25.0	$1.06	$26.5	660	81.1	$0.83	$67.3	2,141	$93.8	$24,729	$24,823	0.38%	0.27%	$24,825	0.01%
Walnuts	196,000	$341,600	1.24%	13.7	$1.06	$14.5	2,685	18.9	$0.83	$15.7	3,704	$30.2	$1,700	$1,730	1.75%	0.91%	$1,731	0.03%
Misc. Fruits/Nuts***	47,000	$140,311	0.51%	13.2	$1.06	$14.0	620	30.2	$0.83	$25.1	1,419	$39.1	$5,539	$5,578	0.70%	0.45%	$5,579	0.02%
Sub-Total																		
	2,109,700	$6,188,362	22.4%	13.2	$1.06	$14.02	23,713	30.2	$0.83	$25.06	46,428	$39.1	$5,539	$5,578	0.70%	0.45%	$5,579	0.02%
VEGS & MELONS																		
Broccoli	129,000	$438,118	1.59%	2.3	$1.06	$2.4	297	35.9	$0.83	$29.8	4,631	$32.2	$3,426	$3,458	0.93%	0.86%	$3,459	0.03%
Cantaloupe	56,800	$252,277	0.92%	24.9	$1.06	$26.4	1,414	36.1	$0.83	$30.0	2,050	$56.4	$2,749	$2,805	2.01%	1.07%	$2,806	0.04%
Cauliflower	42,500	$185,197	0.67%	6.5	$1.06	$6.9	276	36.6	$0.83	$30.4	1,556	$37.3	$5,439	$5,476	0.68%	0.55%	$5,477	0.02%
Celery	25,500	$259,865	0.94%	4.0	$1.06	$4.2	102	43.9	$0.83	$36.4	1,119	$40.7	$6,448	$6,489	0.63%	0.56%	$6,490	0.02%
Garlic	26,000	$140,166	0.51%	24.9	$1.06	$26.4	647	36.1	$0.83	$30.0	939	$56.4	$8,398	$8,454	0.67%	0.35%	$8,455	0.01%
Lettuce, All	228,000	$1,370,004	4.97%	9.1	$1.06	$9.6	2,075	27.0	$0.83	$22.4	6,156	$32.1	$3,118	$3,150	1.02%	0.71%	$3,151	0.03%
Onions	40,400	$184,224	0.67%	18.3	$1.06	$19.4	739	48.4	$0.83	$40.2	1,955	$59.6	$3,422	$3,482	1.71%	1.15%	$3,483	0.04%
Peppers, Bell	22,000	$147,305	0.53%	7.1	$1.06	$7.5	156	37.1	$0.83	$30.8	816	$38.3	$5,566	$5,604	0.68%	0.55%	$5,605	0.02%
Tomatoes																		
Fresh Market	41,000	$269,452	0.98%	2.1	$1.06	$2.2	86	46.4	$0.83	$38.5	1,902	$40.7	$4,935	$4,976	0.82%	0.77%	$4,977	0.03%
Processing	254,000	$496,808	1.80%	1.2	$1.06	$1.3	305	71.3	$0.83	$59.2	18,110	$60.5	$1,227	$1,287	4.70%	4.60%	$1,290	0.17%
Misc. Veg/Melons***	185,000	$995,727	3.61%	10.0	$1.06	$10.6	1,850	41.9	$0.83	$34.8	7,752	$45.4	$4,473	$4,518	1.00%	0.77%	$4,519	0.03%
Sub-Total																		
	1,050,200	$4,739,143	17.2%	10.0	$1.06	$10.64	7,948	41.9	$0.83	$34.76	46,987	$45.4	$4,473	$4,518	1.00%	0.77%	$4,519	0.04%
Total	**7,059,900**	**$12,637,246**	**46%**	**10**	**$1.06**	**$10.3**	**$37,410**	**33**	**$0.83**	**$27.5**	**$190,523**	**$37.7**	**$4,139**	**$4,176**	**0.90%**	**0.66%**	**$4,177**	**0.05%**
% of state total	**25%**					or	**2.4** kb/day			or	**12.4** kb/day							

* Average price per gallon in 2001

** Includes inflation adjustment for data from previous years

*** Assumes values will be similar to averages from other commodities within same category

**** State-wide total harvested acres of 27,800,000 acres, with a total value of $27.6 billion dollars

Calculation of Average for Miscellaneous Commodity

Fruits & Nuts	13.2	$1.06	$14.0	1,924	30.2	$0.83	$25.1	3,751	$39.1	$5,539	$5,578	1.10%	0.67%
Veggies & Melons	10.0	$1.06	$10.6	610	41.9	$0.83	$34.8	3,924	$45.4	$4,473	$4,518	1.38%	1.12%
Field Crops	1.3	$1.06	$1.4	958	23.2	$0.83	$19.2	16,185	$20.6	$491	$511	4.38%	4.09%

Costs for Producing Almonds* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1992 : SJV North	Organic, Sprinkler Irrigation	$1,760	4.2	$0.98	$4	0.23%	21.2	$0.71	$15	0.85%	$1,779
1992 : SJV North	Organic, Flood Irrigation	$1,625	4.2	$0.98	$4	0.25%	25.1	$0.71	$18	1.08%	$1,647
1995 : Sacramento	Sprinkler irrigated	$1,257	9.0	$1 17	$11	0.82%	15.0	$0.85	$13	1.00%	$1,280
1997 : SJV South	Surface Irrigation	$1,527	7.3	$1.30	$9	0.61%	22.4	$0.97	$22	1.40%	$1,558
1998 : SJV North	Sprinkler Irrigation	$1,465	9.0	$1.22	$11	0.74%	19.8	$0.78	$15	1.03%	$1,491
1998 : SJV North	Flood Irrigation	$1,463	9.0	$1.22	$11	0.74%	21.1	$0.78	$16	1.10%	$1,490
2001 : Sacramento Valley	Low-Volume Sprinkler	$1,262	9.4	$1.51	$14	1.10%	11.7	$1.26	$15	1.14%	$1,291
2002 : SJV North	Flood Irrigation	$1,384	10.4	$1.51	$16	1.11%	15.1	$1.26	$19	1.34%	$1,419
2002 : SJV North	Micro-Sprinkler Irrigation	$1,429	10.6	$1 51	$16	1.10%	12.6	$1.26	$16	1.09%	$1,461
2002 : SJV North	Organic, Sprinkler Irrigation	$1,428	10.2	$1 51	$15	1.06%	13.7	$1.26	$17	1.18%	$1,461
	Average	$1,460	8.3	$1 29	$10 8	0.72%	17.8	$0.98	$17.5	1.18%	$1,488

* Based on data from the UC Cooperative Extension on the costs to produce almonds in selected counties.

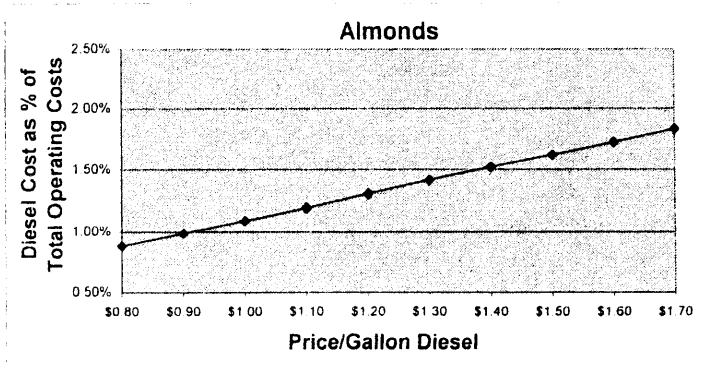
Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1992 : SJV North	Organic, Sprinkler Irrigation	2,221	4.2	$1.06	$4	0.20%	21.2	$0.83	$18	0.79%	$2,243
1992 : SJV North	Organic, Flood Irrigation	2,051	4.2	$1.06	$4	0.21%	25.1	$0.83	$21	1.00%	$2,077
1995 : Sacramento	Sprinkler irrigated	1,460	9.0	$1 06	$10	0.64%	15.0	$0.83	$12	0.84%	$1,482
1997 : SJV South	Surface Irrigation	1,685	7.3	$1.06	$8	0.45%	22.4	$0.83	$19	1.09%	$1,711
1998 : SJV North	Sprinkler Irrigation	1,591	9.0	$1 06	$10	0.59%	19.8	$0.83	$16	1.01%	$1,617
1998 : SJV North	Flood Irrigation	1,589	9.0	$1 06	$10	0.59%	21.1	$0 83	$17	1.08%	$1,616
2001 : Sacramento Valley	Low-Volume Sprinkler	1,262	9.4	$1 06	$10	0.78%	11.7	$0.83	$10	0.76%	$1,282
2002 : SJV North	Flood Irrigation	1,363	10.4	$1 06	$11	0.80%	15.1	$0.83	$12	0.90%	$1,386
2002 : SJV North	Micro-Sprinkler Irrigation	1,407	10.6	$1 06	$11	0.79%	12.6	$0.83	$10	0.73%	$1,429
2002 : SJV North	Organic, Sprinkler Irrigation	1,406	10.2	$1 06	$11	0.76%	13.7	$0.83	$11	0.80%	$1,428
	Average	$1,604	8.3	$1 06	$8.8	0.54%	17.8	$0.83	$14.8	0.91%	$1,627

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	525,000	$853,984,933	$0.80	$7,464,240	0.87%
	525,000	$854,917,963	$0.90	$8,397,270	0.98%
	525,000	$855,850,993	$1 00	$9,330,300	1.09%
	525,000	$856,784,023	$1 10	$10,263,330	1.20%
	525,000	$857,717,053	$1 20	$11,196,360	1.31%
	525,000	$858,650,083	$1 30	$12,129,390	1.41%
	525,000	$859,583,113	$1 40	$13,062,420	1.52%
	525,000	$860,516,143	$1 50	$13,995,450	1.63%
	525,000	$861,449,173	$1 60	$14,928,480	1.73%
	525,000	$862,382,203	$1.70	$15,861,510	1 84%

* Total acres harvested of commodity in California 2001. From CDFA Resource Directory
** Assumes that increases in diesel fuel price does not increase other direct costs for producing almonds.



Costs for Producing Beans* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1995 : San Luis Obispo	Garbanzo	$213	0.4	$1.20	$1	0.21%	25.7	$1.15	$30	12.16%	$243
1998 : SJV	Large Lima Beans	$588	1.1	$1.22	$1	0.21%	26.7	$0.78	$21	3.42%	$610
1998 : SJV	Baby Lima Beans	$562	1.1	$1.22	$1	0.22%	25.8	$0.78	$20	3.46%	$583
1999 : Sacramento	Common Dry Varieties	$446	2.5	$1.02	$3	0.55%	19.4	$0.62	$12	2.61%	$461
2001 : SJV South	Blackeye, Single Cropped	$519	3.7	$1.51	$6	1.03%	12.0	$1.26	$15	2.81%	$540
2001 : SJV South	Blackeye, Double Cropped	$446	3.7	$1.51	$6	1.20%	11.0	$1.26	$14	2.98%	$465
	Average	$462	2.1	$1.28	$2.6	0.55%	20.1	$0.98	$19.6	4.05%	$484

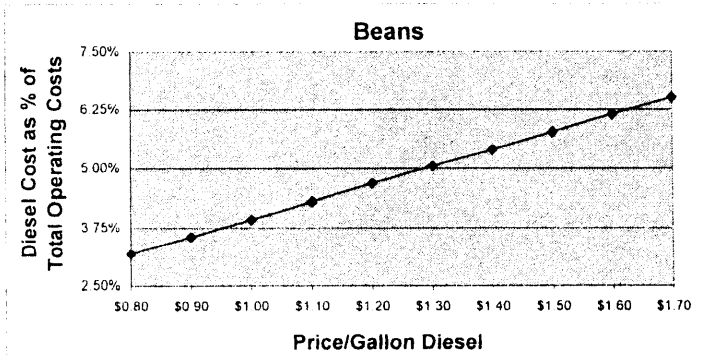
* Based on data from the UC Cooperative Extension on the costs to produce beans in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1995 : San Luis Obispo	Garbanzo	$247	0.4	$1.06	$0	0.17%	25.7	$0.83	$21	7.92%	$269
1998 : SJV	Large Lima Beans	$639	1.1	$1.06	$1	0.17%	26.7	$0.83	$22	3.35%	$662
1998 : SJV	Baby Lima Beans	$610	1.1	$1.06	$1	0.18%	25.8	$0.83	$21	3.39%	$633
1999 : Sacramento	Common Dry Varieties	$475	2.5	$1.06	$3	0.53%	19.4	$0.83	$16	3.26%	$493
2001 : SJV South	Blackeye, Single Cropped	$519	3.7	$1.06	$4	0.73%	12.0	$0.83	$10	1.87%	$533
2001 : SJV South	Blackeye, Double Cropped	$446	3.7	$1.06	$4	0.85%	11.0	$0.83	$9	1.99%	$459
	Average	$489	2.1	$1.06	$2.2	0.43%	20.1	$0.83	$16.7	3.28%	$508

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	89,000	$45,173,640	$0.80	$1,431,951	3.17%
	89,000	$45,352,633	$0.90	$1,610,945	3.55%
	89,000	$45,531,627	$1.00	$1,789,938	3.93%
	89,000	$45,710,621	$1.10	$1,968,932	4.31%
	89,000	$45,889,615	$1.20	$2,147,926	4.68%
	89,000	$46,068,609	$1.30	$2,326,920	5.05%
	89,000	$46,247,603	$1.40	$2,505,914	5.42%
	89,000	$46,426,596	$1.50	$2,684,908	5.78%
	89,000	$46,605,590	$1.60	$2,863,901	6.14%
	89,000	$46,784,584	$1.70	$3,042,895	6.50%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing beans.

Costs for Producing Broccoli* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1999 : Ventura County	Broccoli	$2,480	4.0	$1.20	$5	0.19%	39.6	$0.72	$29	1.14%	$2,513
2001 : Monterey County	Fresh Market	$4,216	0.7	$1.51	$1	0.02%	32.1	$1.26	$40	0.95%	$4,257
	Average	$3,348	2.3	$1.36	$3.2	0.09%	35.9	$0.99	$35.5	1.05%	$3,385

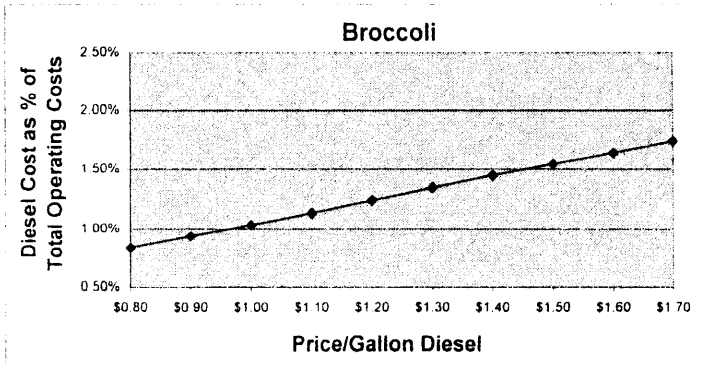
* Based on data from the UC Cooperative Extension on the costs to produce broccoli in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1999 : Ventura County	Broccoli	$2,636	4.0	$1.06	$4	0.16%	39.6	$0.83	$33	1.23%	$2,673
2001 : Monterey County	Fresh Market	$4,216	0.7	$1.06	$1	0.02%	32.1	$0.83	$27	0.63%	$4,243
	Average	$3,426	2.3	$1.06	$2.5	0.07%	35.9	$0.83	$29.8	0.86%	$3,458

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	129,000	$445,941,941	$0.80	$3,700,752	0.83%
	129,000	$446,404,535	$0.90	$4,163,346	0.93%
	129,000	$446,867,129	$1.00	$4,625,940	1.04%
	129,000	$447,329,723	$1.10	$5,088,534	1.14%
	129,000	$447,792,317	$1.20	$5,551,128	1.24%
	129,000	$448,254,911	$1.30	$6,013,722	1.34%
	129,000	$448,717,505	$1.40	$6,476,316	1.44%
	129,000	$449,180,099	$1.50	$6,938,910	1.54%
	129,000	$449,642,693	$1.60	$7,401,504	1.65%
	129,000	$450,105,287	$1.70	$7,864,098	1.75%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory
** Assumes that increases in diesel fuel price does not increase other direct costs for producing broccoli

Costs for Producing Cantaloupe* in California

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline: Gallons used per Acre	Gasoline: Cost per Gallon	Gasoline: Total Gasoline Cost	Gasoline: % of Total Operatiing Costs	Diesel: Gallons used per Acre	Diesel: Cost per Gallon	Diesel: Total Diesel Cost	Diesel: % of Total Operatiing Costs	Total Operating Costs per Acre
1992 : SJV	Cantaloupe	$2,243	0.7	$0.98	$1	0.03%	29.2	$0.71	$21	0.92%	$2,264
	Average	$2,243	0.7	$0.98	$0 6	0.03%	29.2	$0.71	$20.7	0.92%	$2,264

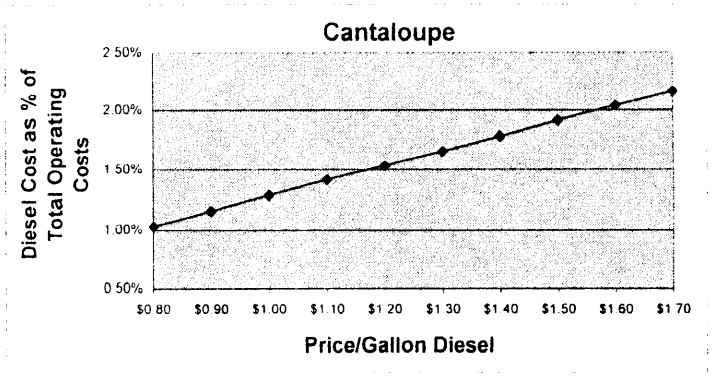
* Based on data from the UC Cooperative Extension on the costs to produce cantaloupe in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline: Gallons used per Acre	Gasoline: Cost per Gallon	Gasoline: Total Gasoline Cost	Gasoline: % of Total Operating Costs	Diesel: Gallons used per Acre	Diesel: Cost per Gallon	Diesel: Total Diesel Cost	Diesel: % of Total Operatiing Costs	Total Operating Costs per Acre
1992 : SJV	Cantaloupe	$2,749	24.9	$1.06	$26	0.94%	36.1	$0.83	$30	1.07%	$2,805
	Average	$2,749	24.9	$1.06	$26.4	0.94%	36.1	$0.83	$30.0	1.07%	$2,805

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	56,800	$159,255,872	$0.80	$1,640,384	1.03%
	56,800	$159,460,920	$0.90	$1,845,432	1.16%
	56,800	$159,665,968	$1.00	$2,050,480	1.28%
	56,800	$159,871,016	$1.10	$2,255,528	1.41%
	56,800	$160,076,064	$1.20	$2,460,576	1.54%
	56,800	$160,281,112	$1.30	$2,665,624	1.66%
	56,800	$160,486,160	$1.40	$2,870,672	1.79%
	56,800	$160,691,208	$1.50	$3,075,720	1.91%
	56,800	$160,896,256	$1.60	$3,280,768	2.04%
	56,800	$161,101,304	$1.70	$3,485,816	2.16%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing cantaloupe.

Costs for Producing Cauliflower* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
1993 : Central Coast	Organic Cauliflower	$5,110	11.7	$0.98	$11	0.22%	32.8	$0.71	$23	0.45%	$5,145
2001 : Central Coast	Fresh Market	$4,616	1.4	$1.51	$2	0.04%	40.3	$1.26	$51	1.09%	$4,669
	Average	$4,863	6.5	$1.25	$8.1	0.17%	36.6	$0.99	$36.0	0.73%	$4,907

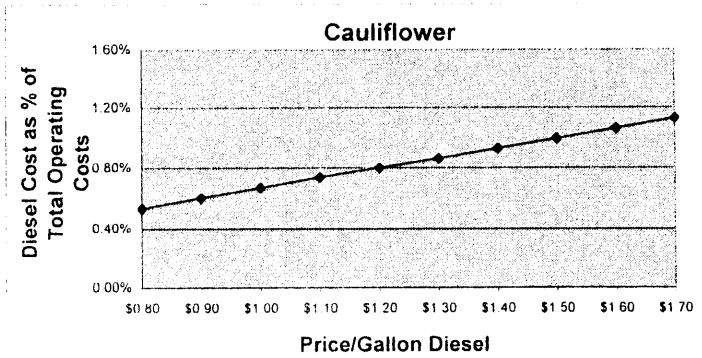
* Based on data from the UC Cooperative Extension on the costs to produce cauliflower in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
1993 : Central Coast	Organic Cauliflower	$6,263	11.7	$1.06	$12	0.20%	32.8	$0.83	$27	0.43%	$6,302
2001 : Central Coast	Fresh Market	$4,616	1.4	$1.06	$1	0.03%	40.3	$0.83	$33	0.72%	$4,651
	Average	$5,439	6.5	$1.06	$6.9	0.13%	36.6	$0.83	$30.3	0.55%	$5,477

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	42,500	$232,715,512	$0.80	$1,243,040	0.53%
	42,500	$232,870,892	$0.90	$1,398,420	0.60%
	42,500	$233,026,272	$1.00	$1,553,800	0.67%
	42,500	$233,181,652	$1.10	$1,709,180	0.73%
	42,500	$233,337,032	$1.20	$1,864,560	0.80%
	42,500	$233,492,412	$1.30	$2,019,940	0.87%
	42,500	$233,647,792	$1.40	$2,175,320	0.93%
	42,500	$233,803,172	$1.50	$2,330,700	1.00%
	42,500	$233,958,552	$1.60	$2,486,080	1.06%
	42,500	$234,113,932	$1.70	$2,641,460	1.13%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory
** Assumes that increases in diesel fuel price does not increase other direct costs for producing cauliflower.

Costs for Producing Celery* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1999 : Ventura County	Fresh Market	$6,066	4.0	$1.20	$5	0.08%	43.9	$0.72	$32	0.52%	$6,102
	Average	$6,066	4.0	$1.20	$4.8	0.08%	43.9	$0.72	$31.6	0.52%	$6,102

* Based on data from the UC Cooperative Extension on the costs to produce celery in selected counties.

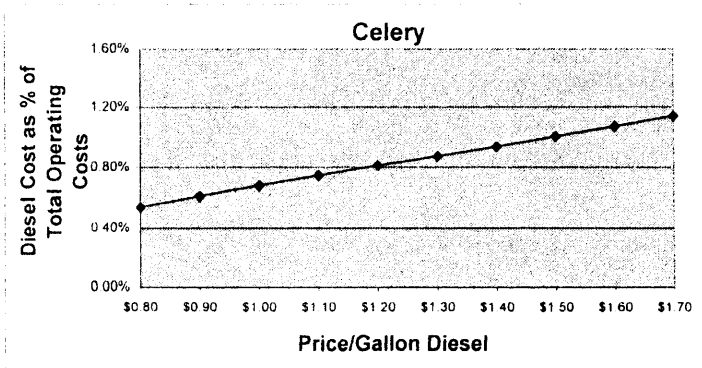
Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1999 : Ventura County	Fresh Market	$6,448	4.0	$1.06	$4	0.07%	43.9	$0.83	$36	0.56%	$6,489
	Average	$6,448	4.0	$1.06	$4.2	0.07%	43.9	$0.83	$36.4	0.56%	$6,489

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	25,500	$165,424,522	$0.80	$894,948	0.54%
	25,500	$165,536,391	$0.90	$1,006,817	0.61%
	25,500	$165,648,259	$1.00	$1,118,685	0.68%
	25,500	$165,760,128	$1.10	$1,230,554	0.74%
	25,500	$165,871,996	$1.20	$1,342,422	0.81%
	25,500	$165,983,865	$1.30	$1,454,291	0.88%
	25,500	$166,095,733	$1.40	$1,566,159	0.94%
	25,500	$166,207,602	$1.50	$1,678,028	1.01%
	25,500	$166,319,470	$1.60	$1,789,896	1.08%
	25,500	$166,431,339	$1.70	$1,901,765	1.14%

* Total acres harvested of commodity in California 2001. From CDFA Resource Directory
** Assumes that increases in diesel fuel price does not increase other direct costs for producing celery



Costs for Producing Corn* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1999 : SJV	Field Corn	$571	0.6	$1.02	$1	0.10%	21.7	$0.62	$13	2.30%	$585
2000 : Sacramento / Yolo	Field Corn	$346	0.8	$1.49	$1	0.30%	26.2	$1.26	$33	8.69%	$380
2001 : SJV	Corn Silage	$673	1.0	$1.51	$1	0.21%	16.1	$1.26	$20	2.92%	$695
	Average	$530	0.8	$1.34	$1.0	0.19%	21.3	$1.05	$22.3	4.04%	$553

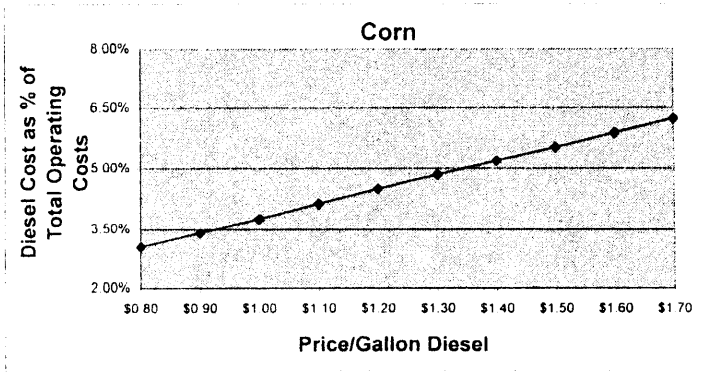
* Based on data from the UC Cooperative Extension on the costs to produce corn in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1999 : SJV	Field Corn	$607	0.6	$1.06	$1	0.10%	21.7	$0.83	$18	2.88%	$626
2000 : Sacramento / Yolo	Field Corn	$356	0.8	$1.06	$1	0.22%	26.2	$0.83	$22	5.75%	$378
2001 : SJV	Corn Silage	$673	1.0	$1.06	$1	0.15%	16.1	$0.83	$13	1.95%	$688
	Average	$545	0.8	$1.06	$0.8	0.15%	21.3	$0.83	$17.7	3.14%	$564

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	475,000	$267,508,163	$0.80	$8,111,733	3.03%
	475,000	$268,522,130	$0.90	$9,125,700	3.40%
	475,000	$269,536,096	$1.00	$10,139,667	3.76%
	475,000	$270,550,063	$1.10	$11,153,633	4.12%
	475,000	$271,564,030	$1.20	$12,167,600	4.48%
	475,000	$272,577,996	$1.30	$13,181,567	4.84%
	475,000	$273,591,963	$1.40	$14,195,533	5.19%
	475,000	$274,605,930	$1.50	$15,209,500	5.54%
	475,000	$275,619,896	$1.60	$16,223,467	5.89%
	475,000	$276,633,863	$1.70	$17,237,433	6.23%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing corn.

Costs for Producing Cotton* in California

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline				Diesel				Total Operating Costs per Acre
			Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	
1995 : SJV North	Organic Cotton	$624	1.6	$1.15	$2	0.28%	26.4	$0.75	$20	3.07%	$646
1997 : Palo Verde Valley	Cotton	$435	1.6	$1.40	$2	0.45%	52.9	$0.95	$50	10.32%	$487
1999 : SJV	Pima Varieties	$663	0.5	$1.02	$0	0.07%	44.4	$0.62	$28	3.98%	$691
1999 : SJV	30" Row Acala Variety	$607	0.5	$1.02	$0	0.08%	42.4	$0.62	$26	4.14%	$634
1999 : SJV	40" Row Acala Variety	$643	0.5	$1.02	$0	0.07%	41.1	$0.62	$25	3.81%	$669
1999 : SJV	Transgenic, Herbicide-Resistant	$637	0.5	$1.02	$0	0.07%	39.3	$0.62	$24	3.68%	$662
2002 : Sacramento	California Upland	$743	0.5	$1.51	$1	0.09%	35.2	$1.26	$44	5.63%	$788
	Average	$622	0.8	$1.16	$0.9	0.14%	40.2	$0.78	$31.3	4.78%	$654

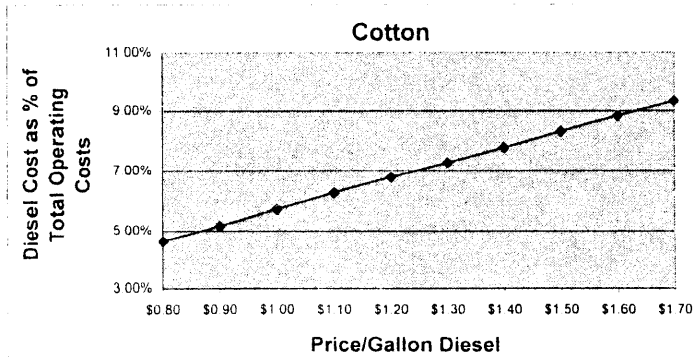
* Based on data from the UC Cooperative Extension on the costs to produce cotton in selected counties

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline				Diesel				Total Operating Costs per Acre
			Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	
1995 : SJV North	Organic Cotton	$726	1.6	$1.06	$2	0.23%	26.4	$0.83	$22	2.93%	$749
1997 : Palo Verde Valley	Cotton	$479	1.6	$1.06	$2	0.31%	52.9	$0.83	$44	8.36%	$525
1999 : SJV	Pima Varieties	$705	0.5	$1.06	$1	0.07%	44.4	$0.83	$37	4.96%	$742
1999 : SJV	30" Row Acala Variety	$646	0.5	$1.06	$1	0.07%	42.4	$0.83	$35	5.16%	$681
1999 : SJV	40" Row Acala Variety	$684	0.5	$1.06	$1	0.07%	41.1	$0.83	$34	4.75%	$718
1999 : SJV	Transgenic, Herbicide-Resistant	$677	0.5	$1.06	$1	0.07%	39.3	$0.83	$33	4.59%	$710
2002 : Sacramento	California Upland	$731	0.5	$1.06	$1	0.07%	35.2	$0.83	$29	3.84%	$761
	Average	$664	0.8	$1.06	$0.8	0.12%	40.2	$0.83	$33.4	4.78%	$698

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	864,000	$602,177,560	$0.80	$27,804,014	4.62%
	864,000	$605,653,061	$0.90	$31,279,515	5.16%
	864,000	$609,128,563	$1.00	$34,755,017	5.71%
	864,000	$612,604,065	$1.10	$38,230,519	6.24%
	864,000	$616,079,567	$1.20	$41,706,021	6.77%
	864,000	$619,555,068	$1.30	$45,181,522	7.29%
	864,000	$623,030,570	$1.40	$48,657,024	7.81%
	864,000	$626,506,072	$1.50	$52,132,526	8.32%
	864,000	$629,981,573	$1.60	$55,608,027	8.83%
	864,000	$633,457,075	$1.70	$59,083,529	9.33%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory

** Assumes that increases in diesel fuel price does not increase other direct costs for producing cotton.

Costs for Producing Garlic* in California

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline				Diesel				Total Operating Costs per Acre
			Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	
1993 : Central Coast	Organic Garlic	$6,852	24.9	$0.98	$24	0.35%	36.1	$0.71	$26	0.37%	$6,902
	Average	$6,852	24.9	$0.98	$24 4	0.35%	36.1	$0.71	$25.6	0.37%	$6,902

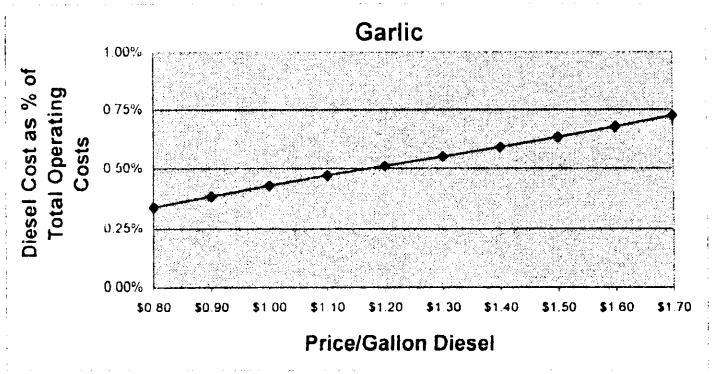
* Based on data from the UC Cooperative Extension on the costs to produce garlic in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline				Diesel				Total Operating Costs per Acre
			Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	
1993 : Central Coast	Organic Garlic	$8,398	24.9	$1.06	$26	0.31%	36.1	$0.83	$30	0.35%	$8,454
	Average	$8,398	24 9	$1.06	$26.4	0.31%	36.1	$0.83	$30.0	0.35%	$8,454

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	26,000	$219,784,758	$0 80	$750,880	0.34%
	26,000	$219,878,618	$0.90	$844,740	0.38%
	26,000	$219,972,478	$1 00	$938,600	0.43%
	26,000	$220,066,338	$1 10	$1,032,460	0.47%
	26,000	$220,160,198	$1 20	$1,126,320	0.51%
	26,000	$220,254,058	$1 30	$1,220,180	0.55%
	26,000	$220,347,918	$1 40	$1,314,040	0.60%
	26,000	$220,441,778	$1.50	$1,407,900	0.64%
	26,000	$220,535,638	$1.60	$1,501,760	0.68%
	26,000	$220,629,498	$1.70	$1,595,620	0.72%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing garlic.

Costs for Producing Raisin Grapes* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1997 : SJV	Thompson Seedless Raisins	$1,251	4.5	$1.30	$6	0.45%	29.7	$0.97	$29	2.24%	$1,286
1997 : SJV South	Organic Raisin Grapes	$987	4.5	$1.30	$6	0.57%	25.1	$0.97	$24	2.39%	$1,017
1998 : Fresno	40 Acre Raisin Vineyard	$977	2.8	$1.22	$3	0.34%	25.7	$0.78	$20	2.00%	$1,001
1998 : Fresno	120 Acre Raisin Vineyard	$1,034	3.6	$1.22	$4	0.41%	23.9	$0.78	$19	1.76%	$1,057
	Average	$1,062	3.8	$1.26	$4.8	0.44%	26.1	$0.88	$22.8	2.09%	$1,090

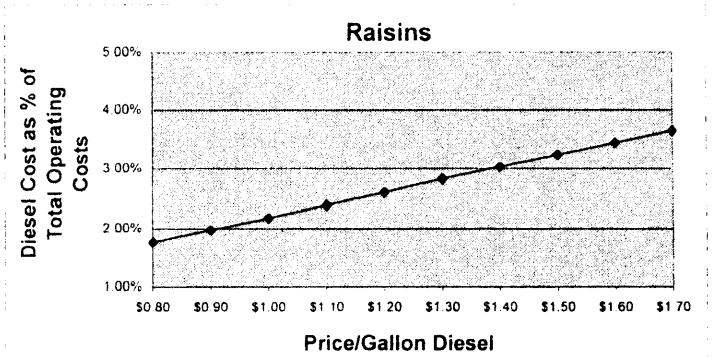
* Based on data from the UC Cooperative Extension on the costs to produce raisin grapes in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1997 : SJV	Thompson Seedless Raisins	$1,381	4.5	$1.06	$5	0.34%	29.7	$0.83	$25	1.75%	$1,410
1997 : SJV South	Organic Raisin Grapes	$1,089	4.5	$1.06	$5	0.42%	25.1	$0.83	$21	1.87%	$1,115
1998 : Fresno	40 Acre Raisin Vineyard	$1,062	2.8	$1.06	$3	0.28%	25.7	$0.83	$21	1.97%	$1,086
1998 : Fresno	120 Acre Raisin Vineyard	$1,123	3.6	$1.06	$4	0.33%	23.9	$0.83	$20	1.73%	$1,147
	Average	$1,164	3.8	$1.06	$4.1	0.34%	26.1	$0.83	$21.7	1.82%	$1,190

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	235,000	$279,365,145	$0.80	$4,904,450	1.76%
	235,000	$279,978,201	$0.90	$5,517,506	1.97%
	235,000	$280,591,257	$1.00	$6,130,563	2.18%
	235,000	$281,204,314	$1.10	$6,743,619	2.40%
	235,000	$281,817,370	$1.20	$7,356,675	2.61%
	235,000	$282,430,426	$1.30	$7,969,731	2.82%
	235,000	$283,043,482	$1.40	$8,582,788	3.03%
	235,000	$283,656,539	$1.50	$9,195,844	3.24%
	235,000	$284,269,595	$1.60	$9,808,900	3.45%
	235,000	$284,882,651	$1.70	$10,421,956	3.66%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory

** Assumes that increases in diesel fuel price does not increase other direct costs for producing raisin grapes.

Costs for Producing Table Grapes* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1998 : SJV	Thompson Seedless Raisins	$5,533	4.6	$1.22	$6	0.10%	26.8	$0.78	$21	0.38%	$5,559
	Average	$5,533	4.6	$1.22	$5.6	0.10%	26.8	$0.78	$20.9	0.38%	$5,559

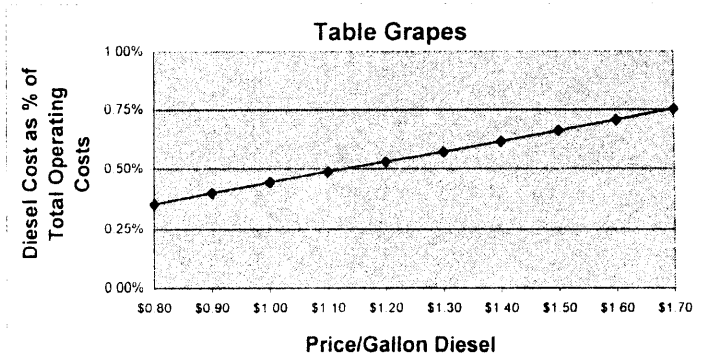
* Based on data from the UC Cooperative Extension on the costs to produce table grapes in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1998 : SJV	Thompson Seedless Raisins	$6,011	4.6	$1.06	$5	0.08%	26.8	$0.83	$22	0.37%	$6,038
	Average	$6,011	4.6	$1.06	$4.8	0.08%	26.8	$0.83	$22.2	0.37%	$6,038

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	88,000	$531,289,863	$0.80	$1,886,720	0.36%
	88,000	$531,525,703	$0.90	$2,122,560	0.40%
	88,000	$531,761,543	$1.00	$2,358,400	0.44%
	88,000	$531,997,383	$1.10	$2,594,240	0.49%
	88,000	$532,233,223	$1.20	$2,830,080	0.53%
	88,000	$532,469,063	$1.30	$3,065,920	0.58%
	88,000	$532,704,903	$1.40	$3,301,760	0.62%
	88,000	$532,940,743	$1.50	$3,537,600	0.66%
	88,000	$533,176,583	$1.60	$3,773,440	0.71%
	88,000	$533,412,423	$1.70	$4,009,280	0.75%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing table grapes.

Costs for Producing Wine Grapes* in California

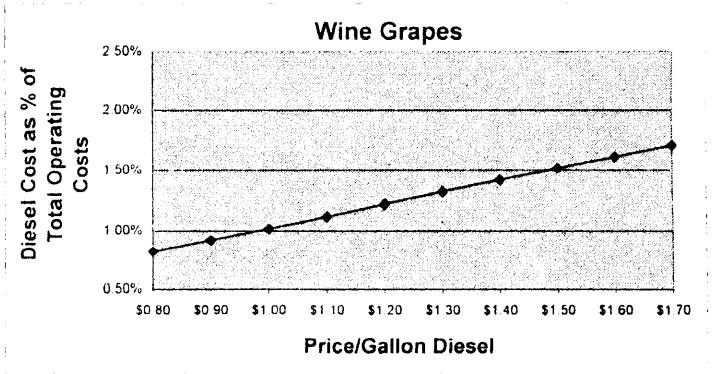
Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
1992 : North Coast	Organic, annual sown cover crop	$2,134		$0.98	$0	0.00%	40.0	$0.71	$28	1.31%	$2,162
1992 : North Coast	Organic, resident vegetation	$2,075		$0.98	$0	0.00%	34.5	$0.71	$25	1.17%	$2,100
1996 : Sierra Nevada	Zinfandel Variety 28 Acre	$1,507	17.8	$1.47	$26	1.70%	9.2	$1.09	$10	0.65%	$1,543
1996 : Santa Maria Valley	Drip Irrigated Chardonnay	$2,152	3.2	$1.20	$4	0.18%	24.3	$1.15	$28	1.28%	$2,184
1996 : San Luis Obispo	Drip Irrigated Cabernet Sauvigno	$2,525	3.2	$1.40	$4	0.18%	14.6	$1.15	$17	0.66%	$2,546
1997 : SJV	Wine Grapes	$1,142	4.5	$1.30	$6	0.50%	18.6	$0.97	$18	1.55%	$1,166
1998 : Lake County	Sauvignon Blanc	$1,919	5.1	$1.22	$6	0.32%	16.3	$0.78	$13	0.66%	$1,938
1999 : Sonoma County	Chardonnay	$2,861	17.8	$1.02	$18	0.63%	31.6	$0.62	$20	0.68%	$2,899
2000 : Sierra Nevada	Zinfandel Variety 5 Acre	$1,632	37.5	$1.49	$56	3.26%	20.1	$1.09	$22	1.28%	$1,710
2001 : SJV North	Cabernet Sauvignon	$1,651	2.7	$1.51	$4	0.25%	14.6	$1.26	$18	1.10%	$1,673
2002 : Sacramento	Chardonnay	$1,910	5.7	$1.51	$9	0.44%	22.7	$1.26	$29	1.47%	$1,947
	Average	$1,955	10.8	$1.28	$13.9	0.70%	22.4	$0.98	$22.0	1.11%	$1,988

* Based on data from the UC Cooperative Extension on the costs to produce wine grapes in selected counties.

Adjusted to 2001 to Reflect Inflation*			Gasoline				Diesel				
Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
1992 : North Coast	Organic, annual sown cover crop	$2,693		$1.06	$0	0.00%	40.0	$0.83	$33	1.22%	$2,726
1992 : North Coast	Organic, resident vegetation	$2,619		$1.06	$0	0.00%	34.5	$0.83	$29	1.08%	$2,648
1996 : Sierra Nevada	Zinfandel Variety 28 Acre	$1,701	17.8	$1.06	$19	1.09%	9.2	$0.83	$8	0.44%	$1,727
1996 : Santa Maria Valley	Drip Irrigated Chardonnay	$2,429	3.2	$1.06	$3	0.14%	24.3	$0.83	$20	0.82%	$2,453
1996 : San Luis Obispo	Drip Irrigated Cabernet Sauvigno	$2,850	3.2	$1.06	$3	0.12%	14.6	$0.83	$12	0.42%	$2,865
1997 : SJV	Wine Grapes	$1,260	4.5	$1.06	$5	0.37%	18.6	$0.83	$15	1.21%	$1,280
1998 : Lake County	Sauvignon Blanc	$2,085	5.1	$1.06	$5	0.26%	16.3	$0.83	$14	0.64%	$2,104
1999 : Sonoma County	Chardonnay	$3,042	17.8	$1.06	$19	0.61%	31.6	$0.83	$26	0.85%	$3,087
2000 : Sierra Nevada	Zinfandel Variety 5 Acre	$1,679	37.5	$1.06	$40	2.29%	20.1	$0.83	$17	0.96%	$1,735
2001 : SJV North	Cabernet Sauvignon	$1,651	2.7	$1.06	$3	0.17%	14.6	$0.83	$12	0.73%	$1,666
2002 : Sacramento	Chardonnay	$1,880	5.7	$1.06	$6	0.32%	22.7	$0.83	$19	0.99%	$1,905
	Average	$2,172	10.8	$1.06	$11.5	0.52%	22.4	$0.83	$18.6	0.85%	$2,200

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	480,000	$1,055,532,597	$0.80	$8,604,393	0.82%
	480,000	$1,056,608,146	$0.90	$9,679,942	0.92%
	480,000	$1,057,683,695	$1.00	$10,755,491	1.02%
	480,000	$1,058,759,244	$1.10	$11,831,040	1.12%
	480,000	$1,059,834,793	$1.20	$12,906,589	1.22%
	480,000	$1,060,910,342	$1.30	$13,982,138	1.32%
	480,000	$1,061,985,891	$1.40	$15,057,687	1.42%
	480,000	$1,063,061,440	$1.50	$16,133,236	1.52%
	480,000	$1,064,136,989	$1.60	$17,208,785	1.62%
	480,000	$1,065,212,538	$1.70	$18,284,335	1.72%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing wine grapes.

Costs for Producing Hay Alfalfa* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1998 : San Luis Obispo	Alfalfa	$401	3.6	$0.99	$4	0.84%	27.1	$0.75	$20	4.77%	$425
1998 : SJV	Alfalfa Hay, 300 Acre Planting	$771	1.9	$1.22	$2	0.29%	35.1	$0.78	$27	3.42%	$801
1998 : Sacramento Valley	Alfalfa Hay, Flood Irrigated	$900	2.6	$1.22	$3	0.35%	29.5	$0.78	$23	2.48%	$926
2001 : Siskiyou County	Ifalfa Hay, Center Pivot Irrigation	$356	1.9	$1.51	$3	0.76%	9.3	$1.26	$12	3.15%	$370
2001 : Siskiyou County	Alfalfa Hay, Wheel Line Irrigation	$395	1.9	$1.51	$3	0.68%	9.3	$1.26	$12	2.85%	$409
	Average	$564	2.4	$1.29	$3.1	0.52%	22.0	$0.97	$21.3	3.63%	$586

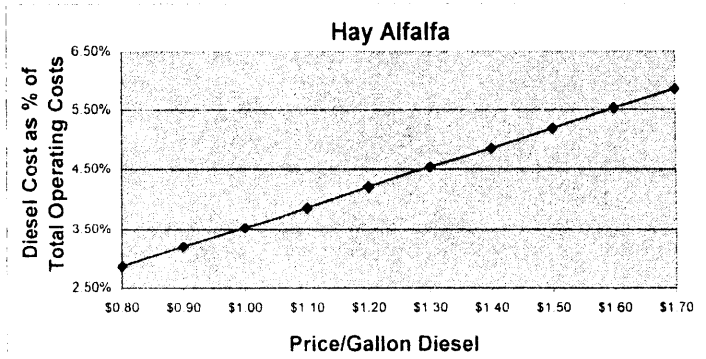
* Based on data from the UC Cooperative Extension on the costs to produce alfalfa hay in selected counties.
Note: Operating costs include costs to establish an alfalfa stand and costs to produce alfalfa hay. Assumes costs to produce alfalfa and hay are similar.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1998 : San Luis Obispo	Alfalfa	436	3.6	$1.06	$4	0.83%	27.1	$0.83	$22	4.86%	$462
1998 : SJV	Alfalfa Hay, 300 Acre Planting	838	1.9	$1.06	$2	0.23%	35.1	$0.83	$29	3.35%	$869
1998 : Sacramento Valley	Alfalfa Hay, Flood Irrigated	978	2.6	$1.06	$3	0.28%	29.5	$0.83	$24	2.44%	$1,005
2001 : Siskiyou County	Ifalfa Hay, Center Pivot Irrigation	356	1.9	$1.06	$2	0.54%	9.3	$0.83	$8	2.10%	$365
2001 : Siskiyou County	Alfalfa Hay, Wheel Line Irrigation	395	1.9	$1.06	$2	0.49%	9.3	$0.83	$8	1.90%	$404
	Average	$600	2.4	$1.06	$2.5	0.40%	22.0	$0.83	$18.3	2.95%	$621

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	1,540,000	$955,552,989	$0.80	$27,153,280	2.84%
	1,540,000	$958,947,149	$0.90	$30,547,440	3.19%
	1,540,000	$962,341,309	$1.00	$33,941,600	3.53%
	1,540,000	$965,735,469	$1.10	$37,335,760	3.87%
	1,540,000	$969,129,629	$1.20	$40,729,920	4.20%
	1,540,000	$972,523,789	$1.30	$44,124,080	4.54%
	1,540,000	$975,917,949	$1.40	$47,518,240	4.87%
	1,540,000	$979,312,109	$1.50	$50,912,400	5.20%
	1,540,000	$982,706,269	$1.60	$54,306,560	5.53%
	1,540,000	$986,100,429	$1.70	$57,700,720	5.85%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory
** Assumes that increases in diesel fuel price does not increase other direct costs for producing alfalfa hay.

Costs for Producing Lemons* in California

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline: Gallons used per Acre	Gasoline: Cost per Gallon	Gasoline: Total Gasoline Cost	Gasoline: % of Total Operatiing Costs	Diesel: Gallons used per Acre	Diesel: Cost per Gallon	Diesel: Total Diesel Cost	Diesel: % of Total Operatiing Costs	Total Operating Costs per Acre
1997 : Ventura County	Lemons	$4,436	18.5	$1.20	$22	0.50%	12.6	$1.15	$14	0.32%	$4,473
1997 : South Coast	Organic, Fresh Market	$3,131	4.7	$1.30	$6	0.19%	8.1	$0.97	$8	0.25%	$3,145
1998 : San Diego County	Lemons	$9,756	50.1	$1.20	$60	0.61%	25.3	$0.85	$21	0.22%	$9,838
1998 : Coachella Valley	Lemons	$5,661	23.7	$1.16	$28	0.48%	11.8	$0.76	$9	0.16%	$5,697
	Average	$5,746	24.3	$1.22	$29.5	0.51%	14.4	$0.93	$13.4	0.23%	$5,788

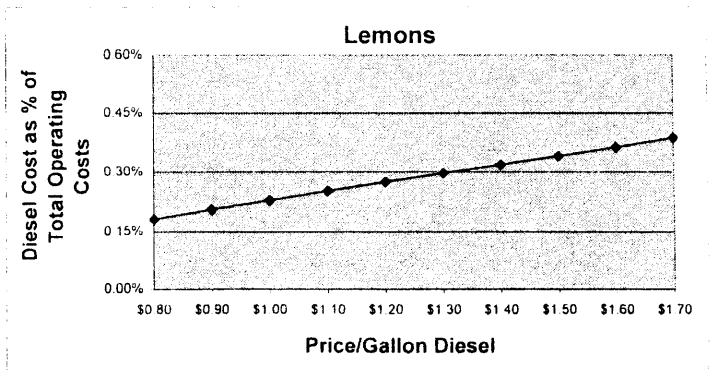
* Based on data from the UC Cooperative Extension on the costs to produce lemons in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline: Gallons used per Acre	Gasoline: Cost per Gallon	Gasoline: Total Gasoline Cost	Gasoline: % of Total Operating Costs	Diesel: Gallons used per Acre	Diesel: Cost per Gallon	Diesel: Total Diesel Cost	Diesel: % of Total Operatiing Costs	Total Operating Costs per Acre
1997 : Ventura County	Lemons	$4,895	18.5	$1.06	$20	0.40%	12.6	$0.83	$10	0.21%	$4,925
1997 : South Coast	Organic, Fresh Market	$3,455	4.7	$1.06	$5	0.14%	8.1	$0.83	$7	0.19%	$3,467
1998 : San Diego County	Lemons	$10,600	50.1	$1.06	$53	0.50%	25.3	$0.83	$21	0.20%	$10,674
1998 : Coachella Valley	Lemons	$6,150	23.7	$1.06	$25	0.41%	11.8	$0.83	$10	0.16%	$6,185
	Average	$6,275	24.3	$1.06	$25.7	0.41%	14.4	$0.83	$12.0	0.19%	$6,313

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	49,500	$312,463,921	$0.80	$570,933	0.18%
	49,500	$312,535,288	$0.90	$642,300	0.21%
	49,500	$312,606,654	$1.00	$713,666	0.23%
	49,500	$312,678,021	$1.10	$785,033	0.25%
	49,500	$312,749,388	$1.20	$856,400	0.27%
	49,500	$312,820,754	$1.30	$927,766	0.30%
	49,500	$312,892,121	$1.40	$999,133	0.32%
	49,500	$312,963,488	$1.50	$1,070,499	0.34%
	49,500	$313,034,854	$1.60	$1,141,866	0.36%
	49,500	$313,106,221	$1.70	$1,213,233	0.39%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing lemons.

Costs for Producing Lettuce* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1993 : Central Coast	Organic, Leaf Lettuce	$2,335	11.7	$0.98	$11	0.48%	22.1	$0.71	$16	0.66%	$2,362
1993 : Central Coast	Organic, Romaine Lettuce	$2,400	11.7	$0.98	$11	0.47%	22.1	$0.71	$16	0.65%	$2,427
1999 : Ventura County	Loose-leaf Lettuce	$3,339	4.0	$1.20	$5	0.14%	36.9	$0.72	$27	0.79%	$3,370
	Average	$2,691	9.1	$1.05	$9.6	0.35%	27.0	$0.71	$19.3	0.71%	$2,720

* Based on data from the UC Cooperative Extension on the costs to produce lettuce in selected counties.

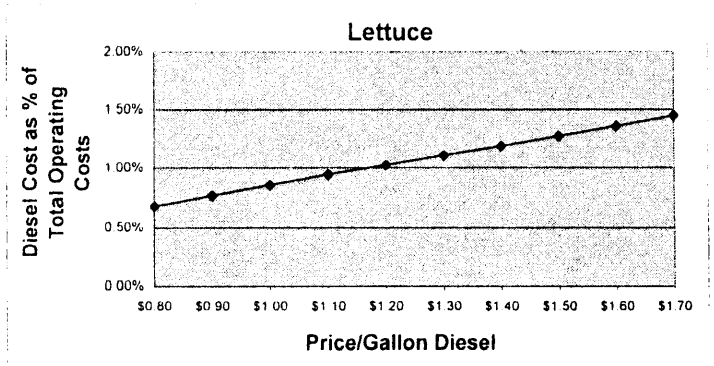
Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1993 : Central Coast	Organic, Leaf Lettuce	$2,862	11.7	$1.06	$12	0.43%	22.1	$0.83	$18	0.63%	$2,893
1993 : Central Coast	Organic, Romaine Lettuce	$2,942	11.7	$1.06	$12	0.42%	22.1	$0.83	$18	0.62%	$2,972
1999 : Ventura County	Loose-leaf Lettuce	$3,549	4.0	$1.06	$4	0.12%	36.9	$0.83	$31	0.85%	$3,584
	Average	$3,118	9.1	$1.06	$9.6	0.31%	27.0	$0.83	$22.4	0.71%	$3,150

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	228,000	$717,956,354	$0.80	$4,926,016	0.69%
	228,000	$718,572,106	$0.90	$5,541,768	0.77%
	228,000	$719,187,858	$1.00	$6,157,520	0.86%
	228,000	$719,803,610	$1.10	$6,773,272	0.94%
	228,000	$720,419,362	$1.20	$7,389,024	1.03%
	228,000	$721,035,114	$1.30	$8,004,776	1.11%
	228,000	$721,650,866	$1.40	$8,620,528	1.19%
	228,000	$722,266,618	$1.50	$9,236,280	1.28%
	228,000	$722,882,370	$1.60	$9,852,032	1.36%
	228,000	$723,498,122	$1.70	$10,467,784	1.45%

* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing lettuce.



Costs for Producing Nectarines* in California

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline				Diesel				Total Operating Costs per Acre
			Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	
2000 : SJV South	July/August Harvest Varieties	$9,394	11.4	$1.49	$17	0.18%	77.4	$1.09	$84	0.89%	$9,495
	Average	$9,394	11.4	$1.49	$17.0	0.18%	77.4	$1.09	$84.3	0.89%	$9,495

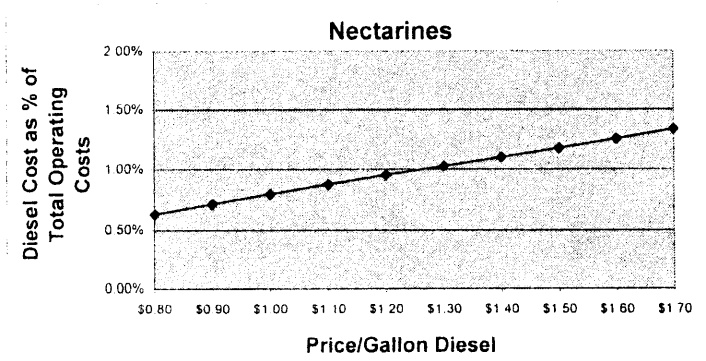
* Based on data from the UC Cooperative Extension on the costs to produce nectarines in selected counties

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline				Diesel				Total Operating Costs per Acre
			Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	
2000 : SJV South	July/August Harvest Varieties	$9,661	11.4	$1.06	$12	0.12%	77.4	$0.83	$64	0.66%	$9,737
	Average	$9,661	11.4	$1.06	$12.1	0.12%	77.4	$0.83	$64.2	0.66%	$9,737

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	36,500	$355,326,295	$0.80	$2,258,620	0.64%
	36,500	$355,608,622	$0.90	$2,540,948	0.71%
	36,500	$355,890,950	$1.00	$2,823,275	0.79%
	36,500	$356,173,277	$1.10	$3,105,603	0.87%
	36,500	$356,455,605	$1.20	$3,387,930	0.95%
	36,500	$356,737,932	$1.30	$3,670,258	1.03%
	36,500	$357,020,260	$1.40	$3,952,585	1.11%
	36,500	$357,302,587	$1.50	$4,234,913	1.19%
	36,500	$357,584,915	$1.60	$4,517,240	1.26%
	36,500	$357,867,242	$1.70	$4,799,568	1.34%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory

** Assumes that increases in diesel fuel price does not increase other direct costs for producing nectarines.

Costs for Producing Onions* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
1993 : Central Coast	Organic, Red Onions	$3,707	18.3	$0.98	$18	0.48%	46.4	$0.71	$33	0.88%	$3,758
1993 : Central Coast	Organic, Yellow Onions	$3,536	18.3	$0.98	$18	0.50%	46.4	$0.71	$33	0.92%	$3,587
2002 : Shasta & Lassen	Onion Seed	$1,412		$1.51	$0	0.00%	52.4	$1.26	$66	4.46%	$1,478
	Average	$2,885	18.3	$1.16	$21.1	0.72%	48.4	$0.89	$43.2	1.47%	$2,941

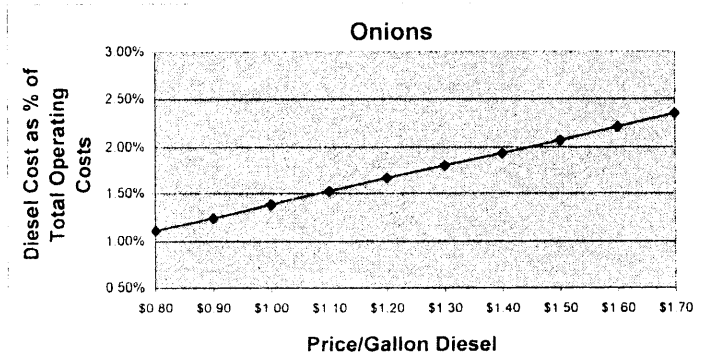
* Based on data from the UC Cooperative Extension on the costs to produce onions in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
1993 : Central Coast	Organic, Red Onions	$4,543	18.3	$1.06	$19	0.42%	46.4	$0.83	$39	0.84%	$4,601
1993 : Central Coast	Organic, Yellow Onions	$4,334	18.3	$1.06	$19	0.44%	46.4	$0.83	$39	0.88%	$4,391
2002 : Shasta & Lassen	Onion Seed	$1,390		$1.06	$0	0.00%	52.4	$0.83	$43	3.03%	$1,434
	Average	$3,422	18.3	$1.06	$19.4	0.56%	48.4	$0.83	$40.2	1.16%	$3,475

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	40,400	$140,344,297	$0.80	$1,563,749	1.11%
	40,400	$140,539,766	$0.90	$1,759,218	1.25%
	40,400	$140,735,234	$1.00	$1,954,687	1.39%
	40,400	$140,930,703	$1.10	$2,150,155	1.53%
	40,400	$141,126,172	$1.20	$2,345,624	1.66%
	40,400	$141,321,640	$1.30	$2,541,093	1.80%
	40,400	$141,517,109	$1.40	$2,736,561	1.93%
	40,400	$141,712,578	$1.50	$2,932,030	2.07%
	40,400	$141,908,046	$1.60	$3,127,499	2.20%
	40,400	$142,103,515	$1.70	$3,322,967	2.34%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing onions.

Costs for Producing Oranges* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1997 : South Coast	Organic, Fresh Market Oranges	$1,828	4.7	$1.30	$6	0.33%	8.7	$0.97	$8	0.46%	$1,843
1997 : Ventura County	Valencia Oranges	$2,279	18.5	$1.20	$22	0.96%	7.2	$1.15	$8	0.36%	$2,310
1998 : San Diego County	Valencia Oranges	$5,883	50.1	$1.20	$60	1.01%	20.8	$0.85	$18	0.30%	$5,961
1998 : Coachella Valley	Valencia Oranges	$3,494	23.7	$1.16	$28	0.78%	10.3	$0.76	$8	0.22%	$3,529
1998 : Western Riverside	Navel Oranges	$3,700	23.7	$1.16	$28	0.74%	11.0	$0.76	$8	0.22%	$3,736
	Average	$3,437	24.2	$1.20	$29.1	0.84%	11.6	$0.90	$10.4	0.30%	$3,476

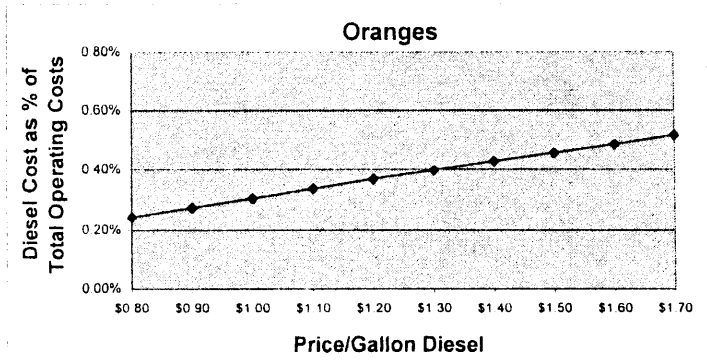
* Based on data from the UC Cooperative Extension on the costs to produce oranges in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1997 : South Coast	Organic, Fresh Market Oranges	$2,018	4.7	$1.06	$5	0.24%	8.7	$0.83	$7	0.36%	$2,030
1997 : Ventura County	Valencia Oranges	$2,515	18.5	$1.06	$20	0.77%	7.2	$0.83	$6	0.23%	$2,541
1998 : San Diego County	Valencia Oranges	$6,392	50.1	$1.06	$53	0.82%	20.8	$0.83	$17	0.27%	$6,462
1998 : Coachella Valley	Valencia Oranges	$3,796	23.7	$1.06	$25	0.66%	10.3	$0.83	$9	0.22%	$3,830
1998 : Western Riverside	Navel Oranges	$4,020	23.7	$1.06	$25	0.62%	11.0	$0.83	$9	0.23%	$4,054
	Average	$3,748	24.2	$1.06	$25.6	0.68%	11.6	$0.83	$9.6	0.25%	$3,783

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	194,500	$735,808,885	$0.80	$1,805,894	0.25%
	194,500	$736,034,622	$0.90	$2,031,630	0.28%
	194,500	$736,260,359	$1.00	$2,257,367	0.31%
	194,500	$736,486,096	$1.10	$2,483,104	0.34%
	194,500	$736,711,832	$1.20	$2,708,840	0.37%
	194,500	$736,937,569	$1.30	$2,934,577	0.40%
	194,500	$737,163,306	$1.40	$3,160,314	0.43%
	194,500	$737,389,042	$1.50	$3,386,051	0.46%
	194,500	$737,614,779	$1.60	$3,611,787	0.49%
	194,500	$737,840,516	$1.70	$3,837,524	0.52%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing oranges.

Costs for Producing Peaches* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1998 : Sacramento & SJV	Cling Peaches, Flood Irrigation	$2,550	6.8	$1.22	$8	0.32%	24.3	$0.78	$19	0.74%	$2,577
2000 : Sierra Nevada	Fresh Market	$3,996	5.7	$1.49	$8	0.21%	27.1	$1.09	$30	0.73%	$4,034
2000 : SJV South	July/August Harvest Varieties	$9,394	11.4	$1.49	$17	0.18%	77.4	$1.09	$84	0.89%	$9,495
	Average	$5,313	8.0	$1.40	$11.1	0.21%	42.9	$0.99	$42.4	0.79%	$5,369

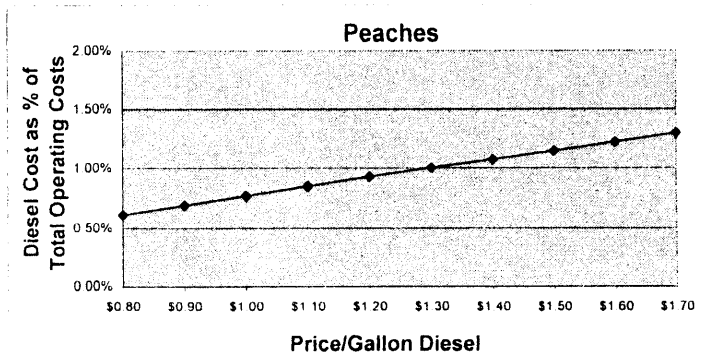
* Based on data from the UC Cooperative Extension on the costs to produce peaches in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1998 : Sacramento & SJV	Cling Peaches, Flood Irrigation	$2,770	6.8	$1.06	$7	0.26%	24.3	$0.83	$20	0.72%	$2,798
2000 : Sierra Nevada	Fresh Market	$4,110	5.7	$1.06	$6	0.15%	27.1	$0.83	$22	0.54%	$4,138
2000 : SJV South	July/August Harvest Varieties	$9,661	11.4	$1.06	$12	0.12%	77.4	$0.83	$64	0.66%	$9,737
	Average	$5,514	8.0	$1.06	$8.4	0.15%	42.9	$0.83	$35.6	0.64%	$5,558

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	67,800	$376,726,887	$0.80	$2,328,523	0.62%
	67,800	$377,017,953	$0.90	$2,619,589	0.69%
	67,800	$377,309,018	$1.00	$2,910,654	0.77%
	67,800	$377,600,084	$1.10	$3,201,719	0.85%
	67,800	$377,891,149	$1.20	$3,492,785	0.92%
	67,800	$378,182,214	$1.30	$3,783,850	1.00%
	67,800	$378,473,280	$1.40	$4,074,916	1.08%
	67,800	$378,764,345	$1.50	$4,365,981	1.15%
	67,800	$379,055,411	$1.60	$4,657,046	1.23%
	67,800	$379,346,476	$1.70	$4,948,112	1.30%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing peaches.

Costs for Producing Peppers* in California

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline				Diesel				Total Operating Costs per Acre
			Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	
1993 : Central Coast	Organic, Green Bell Peppers	$5,301	11.7	$0.98	$11	0.21%	32.8	$0.71	$23	0.44%	$5,336
1993 : Central Coast	Organic, Red Bell Peppers	$4,170	11.7	$0.98	$11	0.27%	32.8	$0.71	$23	0.55%	$4,205
1997 : Santa Clara	Bell Peppers	$5,151	1.0	$1.30	$1	0.02%	40.0	$0.97	$39	0.75%	$5,191
1999 : Ventura County	Bell Peppers	$4,678	4.0	$1.20	$5	0.10%	42.9	$0.72	$31	0.66%	$4,714
	Average	$4,825	7.1	$1.12	$7.9	0.16%	37.1	$0.78	$28.9	0.59%	$4,861

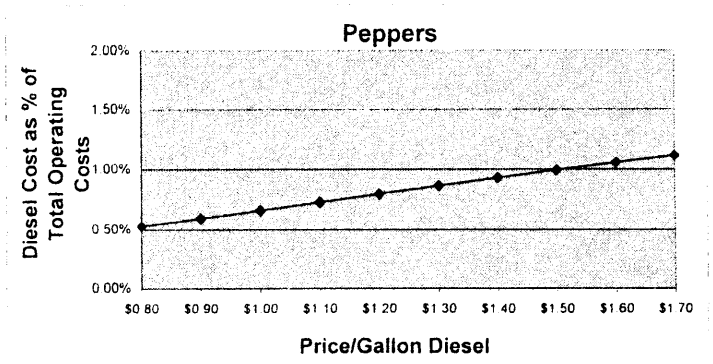
* Based on data from the UC Cooperative Extension on the costs to produce peppers in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline				Diesel				Total Operating Costs per Acre
			Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	
1993 : Central Coast	Organic, Green Bell Peppers	$6,497	11.7	$1.06	$12	0.19%	32.8	$0.83	$27	0.42%	$6,537
1993 : Central Coast	Organic, Red Bell Peppers	$5,111	11.7	$1.06	$12	0.24%	32.8	$0.83	$27	0.53%	$5,150
1997 : Santa Clara	Bell Peppers	$5,684	1.0	$1.06	$1	0.02%	40.0	$0.83	$33	0.58%	$5,718
1999 : Ventura County	Bell Peppers	$4,973	4.0	$1.06	$4	0.08%	42.9	$0.83	$36	0.71%	$5,013
	Average	$5,566	7.1	$1.06	$7.5	0.13%	37.1	$0.83	$30.8	0.55%	$5,604

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	22,000	$123,272,243	$0.80	$653,620	0.53%
	22,000	$123,353,946	$0.90	$735,323	0.60%
	22,000	$123,435,648	$1.00	$817,025	0.66%
	22,000	$123,517,351	$1.10	$898,728	0.73%
	22,000	$123,599,053	$1.20	$980,430	0.79%
	22,000	$123,680,756	$1.30	$1,062,133	0.86%
	22,000	$123,762,458	$1.40	$1,143,835	0.92%
	22,000	$123,844,161	$1.50	$1,225,538	0.99%
	22,000	$123,925,863	$1.60	$1,307,240	1.05%
	22,000	$124,007,566	$1.70	$1,388,943	1.12%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing peppers.

Costs for Producing Pistachios* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
2000 : SJV	Low-Volume Irrigation	$1,213	10.5	$1.49	$16	1.26%	12.2	$1.09	$13	1.07%	$1,242
	Average	$1,213	10.5	$1.49	$15.6	1.26%	12.2	$1.09	$13.3	1.07%	$1,242

* Based on data from the UC Cooperative Extension on the costs to produce pistachios in selected counties.

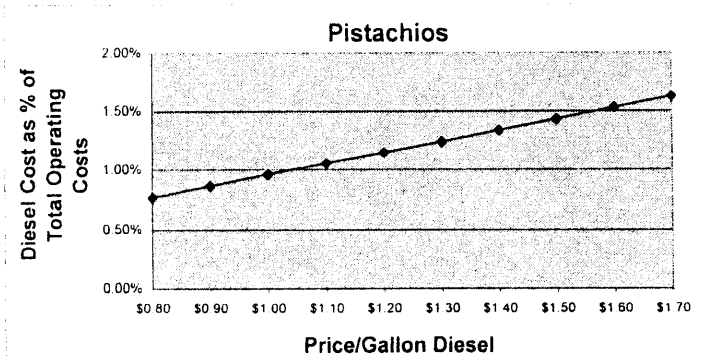
Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
2000 : SJV	Low-Volume Irrigation	$1,248	10.5	$1.06	$11	0.88%	12.2	$0.83	$10	0.80%	$1,269
	Average	$1,248	10.5	$1.06	$11.1	0.88%	12.2	$0.83	$10.1	0.80%	$1,269

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	78,000	$98,940,379	$0.80	$761,904	0.77%
	78,000	$99,035,617	$0.90	$857,142	0.87%
	78,000	$99,130,855	$1.00	$952,380	0.96%
	78,000	$99,226,093	$1.10	$1,047,618	1.06%
	78,000	$99,321,331	$1.20	$1,142,856	1.15%
	78,000	$99,416,569	$1.30	$1,238,094	1.25%
	78,000	$99,511,807	$1.40	$1,333,332	1.34%
	78,000	$99,607,045	$1.50	$1,428,570	1.43%
	78,000	$99,702,283	$1.60	$1,523,808	1.53%
	78,000	$99,797,521	$1.70	$1,619,046	1.62%

* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing pistachios.



Costs for Producing Prunes* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1997 : SJV South	French Variety Prunes	$2,452	20.4	$1.30	$26	1.06%	10.3	$0.97	$10	0.40%	$2,488
2001 : Sacramento	French Var, Low-Vol. Irrigation	$2,587	8.1	$1.51	$12	0.47%	11.0	$1.26	$14	0.53%	$2,613
	Average	$2,519	14.2	$1.41	$20.0	0.78%	10.7	$1.12	$11.9	0.47%	$2,551

* Based on data from the UC Cooperative Extension on the costs to produce prunes in selected counties.

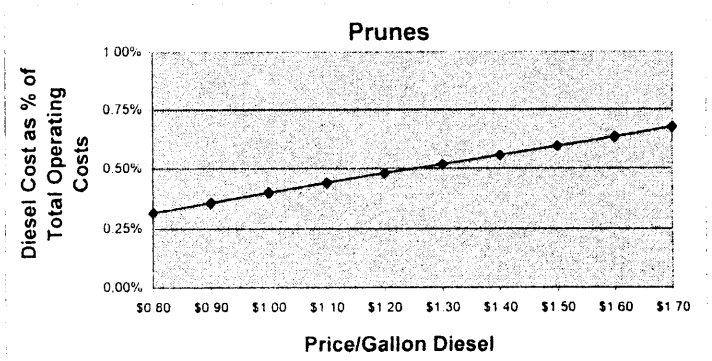
Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1997 : SJV South	French Variety Prunes	$2,705	20.4	$1.06	$22	0.79%	10.3	$0.83	$9	0.31%	$2,735
2001 : Sacramento	French Var, Low-Vol. Irrigation	$2,587	8.1	$1.06	$9	0.33%	11.0	$0.83	$9	0.35%	$2,605
	Average	$2,646	14.2	$1.06	$15.1	0.56%	10.7	$0.83	$8.9	0.33%	$2,670

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	86,000	$229,586,067	$0.80	$733,752	0.32%
	86,000	$229,677,786	$0.90	$825,471	0.36%
	86,000	$229,769,505	$1.00	$917,190	0.40%
	86,000	$229,861,224	$1.10	$1,008,909	0.44%
	86,000	$229,952,943	$1.20	$1,100,628	0.48%
	86,000	$230,044,662	$1.30	$1,192,347	0.52%
	86,000	$230,136,381	$1.40	$1,284,066	0.56%
	86,000	$230,228,100	$1.50	$1,375,785	0.60%
	86,000	$230,319,819	$1.60	$1,467,504	0.64%
	86,000	$230,411,538	$1.70	$1,559,223	0.68%

* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing prunes.



Costs for Producing Rice* in California

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline				Diesel				Total Operating Costs per Acre
			Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	
1992 : Sacramento	Organic, Water Seeded	$243		$0.98	$0	0.00%	27.6	$0.71	$20	7.47%	$262
1992 : Sacramento	No-Till Drill Seeded	$231		$0.98	$0	0.00%	19.2	$0.71	$14	5.59%	$244
1998 : Sacramento	Rice Only Rotation	$493	1.6	$1.22	$2	0.39%	22.2	$0.78	$17	3.38%	$512
1998 : Sacramento	Multiple Crop Rotation	$533	0.6	$1.22	$1	0.13%	20.6	$0.78	$16	2.92%	$550
2000 : Shasta & Lassen	Wild Rice	$683	0.4	$1.49	$1	0.08%	11.1	$1.09	$12	1.73%	$696
2001 : Sacramento	Rice Only Rotation	$561	1.6	$1.51	$2	0.41%	33.3	$1.26	$42	6.93%	$605
	Average	$457	1.1	$1.23	$1.3	0.27%	22.3	$0.89	$19.8	4.14%	$478

* Based on data from the UC Cooperative Extension on the costs to produce rice in selected counties.

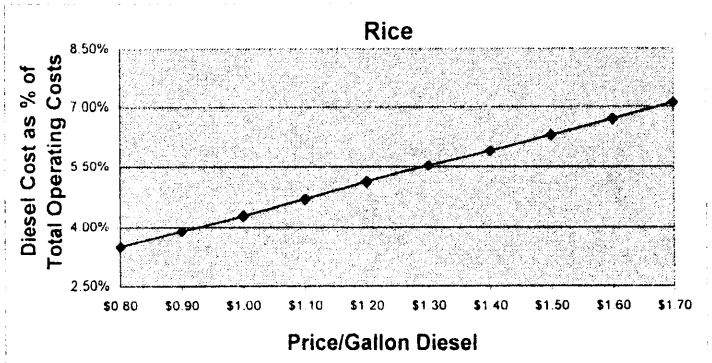
Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety	Total Operating Costs/Acre (w/o fuel)	Gasoline				Diesel				Total Operating Costs per Acre
			Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	
1992 : Sacramento	Organic, Water Seeded	$306		$1.06	$0	0.00%	27.6	$0.83	$23	6.95%	$329
1992 : Sacramento	No-Till Drill Seeded	$291		$1.06	$0	0.00%	19.2	$0.83	$16	5.19%	$307
1998 : Sacramento	Rice Only Rotation	$535	1.6	$1.06	$2	0.31%	22.2	$0.83	$18	3.31%	$555
1998 : Sacramento	Multiple Crop Rotation	$579	0.6	$1.06	$1	0.10%	20.6	$0.83	$17	2.86%	$597
2000 : Shasta & Lassen	Wild Rice	$703	0.4	$1.06	$0	0.06%	11.1	$0.83	$9	1.29%	$712
2001 : Sacramento	Rice Only Rotation	$561	1.6	$1.06	$2	0.29%	33.3	$0.83	$28	4.68%	$590
	Average	$496	1.1	$1.06	$1.1	0.22%	22.3	$0.83	$18.5	3.59%	$515

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	471,000	$242,321,251	$0.80	$8,406,408	3.47%
	471,000	$243,372,052	$0.90	$9,457,209	3.89%
	471,000	$244,422,853	$1.00	$10,508,010	4.30%
	471,000	$245,473,654	$1.10	$11,558,811	4.71%
	471,000	$246,524,455	$1.20	$12,609,612	5.11%
	471,000	$247,575,256	$1.30	$13,660,413	5.52%
	471,000	$248,626,057	$1.40	$14,711,214	5.92%
	471,000	$249,676,858	$1.50	$15,762,015	6.31%
	471,000	$250,727,659	$1.60	$16,812,816	6.71%
	471,000	$251,778,460	$1.70	$17,863,617	7.09%

* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing rice



Costs for Producing Strawberries* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
2001 : Ventura County	Strawberries	$26,090	26.9	$1.51	$41	0.15%	55.6	$1.26	$70	0.27%	$26,201
2001 : Santa Maria Valley	Strawberries	$21,225	25.2	$1.51	$38	0.18%	100.9	$1.26	$127	0.59%	$21,390
2001 : Central Coast	Strawberries	$26,873	23.0	$1.51	$35	0.13%	86.7	$1.26	$109	0.40%	$27,017
	Average	$24,729	25.0	$1.51	$37.8	0.15%	81.1	$1.26	$102.1	0.41%	$24,869

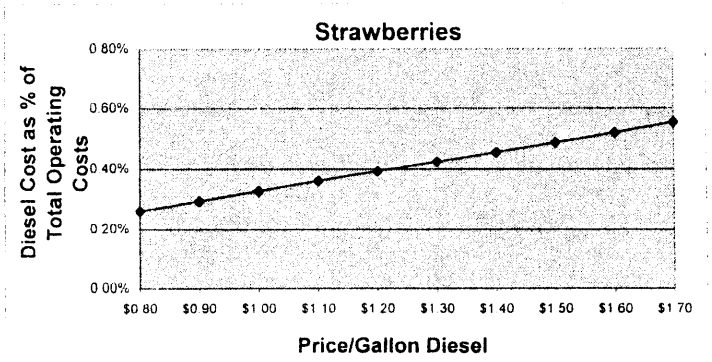
* Based on data from the UC Cooperative Extension on the costs to produce strawberries in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
2001 : Ventura County	Strawberries	$26,090	26.9	$1.06	$29	0.11%	55.6	$0.83	$46	0.18%	$26,165
2001 : Santa Maria Valley	Strawberries	$21,225	25.2	$1.06	$27	0.13%	100.9	$0.83	$84	0.39%	$21,335
2001 : Central Coast	Strawberries	$26,873	23.0	$1.06	$24	0.09%	86.7	$0.83	$72	0.27%	$26,969
	Average	$24,729	25.0	$1.06	$26.5	0.11%	81.1	$0.83	$67.3	0.27%	$24,823

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	26,400	$655,268,851	$0.80	$1,711,846	0.26%
	26,400	$655,482,832	$0.90	$1,925,827	0.29%
	26,400	$655,696,812	$1.00	$2,139,808	0.33%
	26,400	$655,910,793	$1.10	$2,353,789	0.36%
	26,400	$656,124,774	$1.20	$2,567,770	0.39%
	26,400	$656,338,755	$1.30	$2,781,750	0.42%
	26,400	$656,552,736	$1.40	$2,995,731	0.46%
	26,400	$656,766,716	$1.50	$3,209,712	0.49%
	26,400	$656,980,697	$1.60	$3,423,693	0.52%
	26,400	$657,194,678	$1.70	$3,637,674	0.55%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing strawberries.

Costs for Producing Fresh Tomatoes* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
2000 : SJV	Fresh Maket, Furrow Irrigated	$4,798	2.1	$1.48	$3	0.06%	46.4	$1.09	$51	1.04%	$4,852
	Average	$4,798	2.1	$1.48	$3.1	0.06%	46.4	$1.09	$50.5	1.04%	$4,852

* Based on data from the UC Cooperative Extension on the costs to produce fresh market tomatoes in selected counties

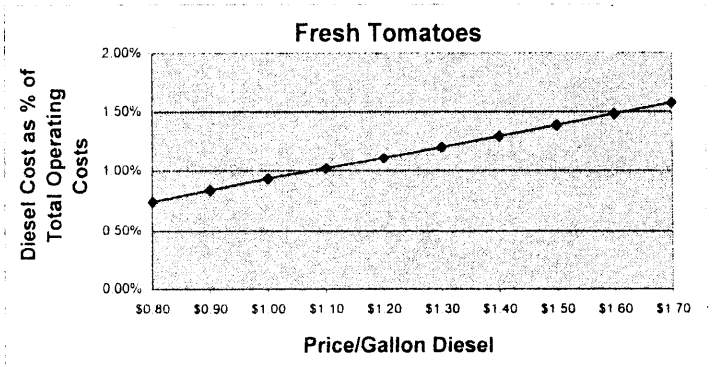
Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
2000 : SJV	Fresh Maket, Furrow Irrigated	$4,935	2.1	$1.06	$2	0.04%	46.4	$0.83	$38	0.77%	$4,976
	Average	$4,935	2.1	$1.06	$2.2	0.04%	46.4	$0.83	$38.5	0.77%	$4,976

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	41,000	$203,943,083	$0.80	$1,520,608	0.75%
	41,000	$204,133,159	$0.90	$1,710,684	0.84%
	41,000	$204,323,235	$1.00	$1,900,760	0.93%
	41,000	$204,513,311	$1.10	$2,090,836	1.02%
	41,000	$204,703,387	$1.20	$2,280,912	1.11%
	41,000	$204,893,463	$1.30	$2,470,988	1.21%
	41,000	$205,083,539	$1.40	$2,661,064	1.30%
	41,000	$205,273,615	$1.50	$2,851,140	1.39%
	41,000	$205,463,691	$1.60	$3,041,216	1.48%
	41,000	$205,653,767	$1.70	$3,231,292	1.57%

* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing fresh market tomatoes.



Costs for Producing Processing Tomatoes* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
1994 : Sacramento	Organic, Processing Tomatoes	$987	0.7	$1.17	$1	0.08%	71.0	$0.85	$60	5.76%	$1,048
1997 : Yolo County	Processing Tomatoes	$1,114	1.9	$1.30	$2	0.21%	99.4	$0.97	$96	7.95%	$1,213
2000 : SJV	Processing Tomatoes	$1,028	1.3	$1.48	$2	0.17%	86.9	$1.09	$95	8.42%	$1,125
2001 : SJV	Processing, Double Row Seeded	$1,073	1.3	$1.51	$2	0.17%	66.5	$1.26	$84	7.23%	$1,159
2001 : Sacramento	Processing Tomatoes	$1,109	1.3	$1.51	$2	0.17%	84.3	$1.26	$106	8.73%	$1,217
2002 : SJV South	Processing, Transplaned	$1,582	0.3	$1.51	$0	0.03%	43.0	$1.26	$54	3.31%	$1,637
2002 : SJV South	Processing Tomatoes	$1,407	1.3	$1.51	$2	0.13%	48.3	$1.26	$61	4.14%	$1,470
	Average	$1,186	1.2	$1.43	$1.7	0.13%	71.3	$1.14	$81.0	6.39%	$1,267

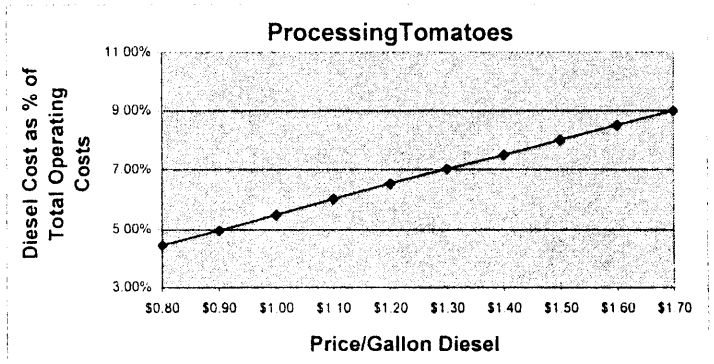
* Based on data from the UC Cooperative Extension on the costs to produce processing tomatoes in selected counties

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
1994 : Sacramento	Organic, Processing Tomatoes	$1,179	0.7	$1.06	$1	0.06%	71.0	$0.83	$59	4.76%	$1,239
1997 : Yolo County	Processing Tomatoes	$1,229	1.9	$1.06	$2	0.15%	99.4	$0.83	$82	6.28%	$1,314
2000 : SJV	Processing Tomatoes	$1,057	1.3	$1.06	$1	0.12%	86.9	$0.83	$72	6.38%	$1,131
2001 : SJV	Processing, Double Row Seeded	$1,073	1.3	$1.06	$1	0.12%	66.5	$0.83	$55	4.89%	$1,130
2001 : Sacramento	Processing Tomatoes	$1,109	1.3	$1.06	$1	0.12%	84.3	$0.83	$70	5.93%	$1,180
2002 : SJV South	Processing, Transplaned	$1,558	0.3	$1.06	$0	0.02%	43.0	$0.83	$36	2.24%	$1,594
2002 : SJV South	Processing Tomatoes	$1,385	1.3	$1.06	$1	0.10%	48.3	$0.83	$40	2.81%	$1,427
	Average	$1,227	1.2	$1.06	$1.2	0.10%	71.3	$0.83	$59.2	4.60%	$1,288

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	254,000	$326,522,395	$0.80	$14,495,417	4.44%
	254,000	$328,334,322	$0.90	$16,307,344	4.97%
	254,000	$330,146,249	$1.00	$18,119,271	5.49%
	254,000	$331,958,177	$1.10	$19,931,199	6.00%
	254,000	$333,770,104	$1.20	$21,743,126	6.51%
	254,000	$335,582,031	$1.30	$23,555,053	7.02%
	254,000	$337,393,958	$1.40	$25,366,980	7.52%
	254,000	$339,205,885	$1.50	$27,178,907	8.01%
	254,000	$341,017,812	$1.60	$28,990,834	8.50%
	254,000	$342,829,739	$1.70	$30,802,761	8.98%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory

** Assumes that increases in diesel fuel price does not increase other direct costs for producing processing tomatoes.

Costs for Producing Processing Walnuts* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operatiing Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1994 : Sacramento	Organic, Sprinkler Irrigated	$2,367	17.8	$1.17	$21	0.87%	26.2	$0.85	$22	0.92%	$2,410
1998 : SJV South	Walnuts	$1,322	13.0	$1.22	$16	1.17%	13.7	$0.78	$11	0.79%	$1,348
2001 : SJV North	prinkler Irrigation, lateral bearing	$1,365	10.5	$1.51	$16	1.13%	20.6	$1.26	$26	1.85%	$1,407
2002 : Sacramento	Sprinkler Irrigation	$1,191	13.5	$1.51	$20	1.65%	15.2	$1.26	$19	1.55%	$1,230
	Average	$1,561	13.7	$1.35	$18.5	1.16%	18.9	$1.04	$19.6	1.23%	$1,599

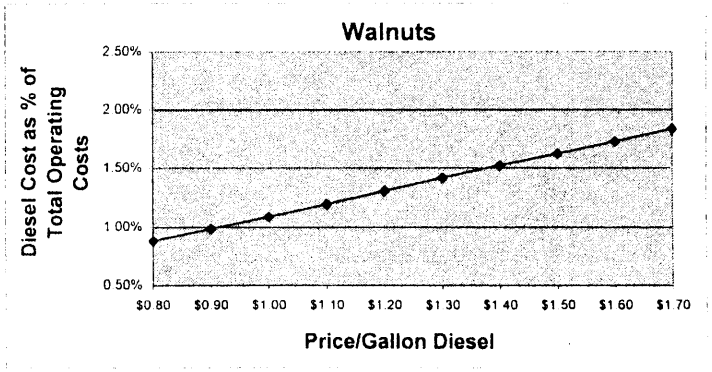
* Based on data from the UC Cooperative Extension on the costs to produce walnuts in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operatiing Costs	Total Operating Costs per Acre
1994 : Sacramento	Organic, Sprinkler Irrigated	$2,829	17.8	$1.06	$19	0.66%	26.2	$0.83	$22	0.76%	$2,869
1998 : SJV South	Walnuts	$1,436	13.0	$1.06	$14	0.94%	13.7	$0.83	$11	0.78%	$1,461
2001 : SJV North	prinkler Irrigation, lateral bearing	$1,365	10.5	$1.06	$11	0.80%	20.6	$0.83	$17	1.23%	$1,393
2002 : Sacramento	Sprinkler Irrigation	$1,172	13.5	$1.06	$14	1.19%	15.2	$0.83	$13	1.05%	$1,199
	Average	$1,700	13.7	$1.06	$14.5	0.84%	18.9	$0.83	$15.7	0.91%	$1,731

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	196,000	$339,086,884	$0.80	$2,966,264	0.87%
	196,000	$339,457,667	$0.90	$3,337,047	0.98%
	196,000	$339,828,450	$1.00	$3,707,830	1.09%
	196,000	$340,199,233	$1.10	$4,078,613	1.20%
	196,000	$340,570,016	$1.20	$4,449,396	1.31%
	196,000	$340,940,799	$1.30	$4,820,179	1.41%
	196,000	$341,311,582	$1.40	$5,190,962	1.52%
	196,000	$341,682,365	$1.50	$5,561,745	1.63%
	196,000	$342,053,148	$1.60	$5,932,528	1.73%
	196,000	$342,423,931	$1.70	$6,303,311	1.84%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory
** Assumes that increases in diesel fuel price does not increase other direct costs for producing walnuts.

Costs for Producing Processing Wheat* in California

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
1994 : Yolo County	Dryland & Conventional Tillage	$121	0.6	$1.17	$1	0.54%	13.3	$0.85	$11	8.46%	$133
1994 : Yolo County	Dryland & Non Tillage Conditions	$108	0.6	$1.17	$1	0.58%	3.2	$0.85	$3	2.47%	$112
1996 : San Luis Obispo	Dryland & Conventional Tillage	$67	0.4	$1.20	$0	0.58%	13.3	$1.15	$15	18.55%	$82
1999 : SJV	Wheat Silage	$153	0.6	$1.02	$1	0.37%	16.2	$0.62	$10	6.14%	$164
1999 : SJV	Double Cropped	$243	0.6	$1.02	$1	0.24%	16.2	$0.62	$10	3.96%	$254
2000 : Sacramento	Irrigated	$119	0.6	$1.49	$1	0.68%	16.9	$1.26	$21	15.13%	$141
	Average	$135	0.6	$1.18	$0.7	0.45%	13.2	$0.89	$11.8	7.97%	$148

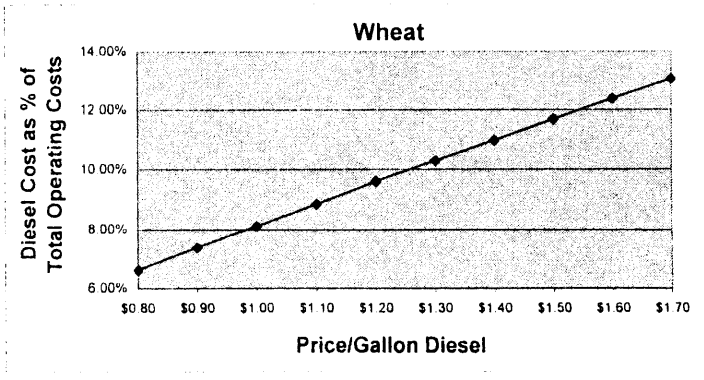
* Based on data from the UC Cooperative Extension on the costs to produce wheat in selected counties.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety		Gasoline				Diesel				
		Total Operating Costs/Acre (w/o fuel)	Gallons used per Acre	Cost per Gallon	Total Gasoline Cost	% of Total Operating Costs	Gallons used per Acre	Cost per Gallon	Total Diesel Cost	% of Total Operating Costs	Total Operating Costs per Acre
1994 : Yolo County	Dryland & Conventional Tillage	$145	0.6	$1.06	$1	0.42%	13.3	$0.83	$11	7.03%	$157
1994 : Yolo County	Dryland & Non Tillage Conditions	$129	0.6	$1.06	$1	0.44%	3.2	$0.83	$3	2.03%	$132
1996 : San Luis Obispo	Dryland & Conventional Tillage	$75	0.4	$1.06	$0	0.49%	13.3	$0.83	$11	12.73%	$87
1999 : SJV	Wheat Silage	$163	0.6	$1.06	$1	0.36%	16.2	$0.83	$13	7.61%	$177
1999 : SJV	Double Cropped	$259	0.6	$1.06	$1	0.23%	16.2	$0.83	$13	4.94%	$273
2000 : Sacramento	Irrigated	$122	0.6	$1.06	$1	0.50%	16.9	$0.83	$14	10.27%	$137
	Average	$149	0.6	$1.06	$0.6	0.38%	13.2	$0.83	$11.0	6.83%	$160

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

Scenarios	Acres Harvested*	Total Operating Costs**	Cost of Diesel per Galon	Total Diesel Fuel Costs	Diesel Fuel Costs as % of Total Operating Costs
Base	461,000	$73,770,639	$0.80	$4,868,160	6.60%
	461,000	$74,379,159	$0.90	$5,476,680	7.36%
	461,000	$74,987,679	$1.00	$6,085,200	8.11%
	461,000	$75,596,199	$1.10	$6,693,720	8.85%
	461,000	$76,204,719	$1.20	$7,302,240	9.58%
	461,000	$76,813,239	$1.30	$7,910,760	10.30%
	461,000	$77,421,759	$1.40	$8,519,280	11.00%
	461,000	$78,030,279	$1.50	$9,127,800	11.70%
	461,000	$78,638,799	$1.60	$9,736,320	12.38%
	461,000	$79,247,319	$1.70	$10,344,840	13.05%



* Total acres harvested of commodity in California 2001. From CDFA Resource Directory.
** Assumes that increases in diesel fuel price does not increase other direct costs for producing wheat.

CATTLE:

MILK & BEEF PRODUCTION

Costs for Producing Cow Dairy - Milk

Year / Location	Variety	Tractors, Trucks, Fuel & Oil Costs	Total Operating Costs (w/o fuel)	Total Operating Costs	Total Annual Operating Costs	Fuel as % of Total Operating Costs
2001 : Humboldt	Dairy Milk*	$3.19	$38.83	$42.02	$504.24	7.59%
2001 : North Bay	Dairy Milk*	$3.07	$49.99	$53.06	$636.72	5.79%
2001 : North Valley	Dairy Milk*	$3.36	$45.79	$49.15	$589.80	6.84%
2001 : South Valley	Dairy Milk*	$3.75	$47.15	$50.90	$610.80	7.37%
2001 : So. California	Dairy Milk*	$1.03	$47.21	$48.24	$578.88	2.14%
	Average	$2.88	$45.79	$48.67	$584.09	5.94%

* All costs are per cow per month. Data from USDA NASS California Cost of Production for Dairy Milk.

Year / Location	Variety	Gallons Diesel Used Per Cow*	Total Fuel Costs with a 3 ¢ / gal increase	Total Operating Costs w/ price increase	Total Annual Operating Costs	% Change due to 3 ¢ increase
2001 : Humboldt	Dairy Milk	3.8	$3.31	$42.14	$505.62	0.27%
2001 : North Bay	Dairy Milk	3.7	$3.18	$53.17	$638.05	0.21%
2001 : North Valley	Dairy Milk	4.0	$3.48	$49.27	$591.26	0.25%
2001 : South Valley	Dairy Milk	4.5	$3.89	$51.04	$612.43	0.27%
2001 : So. California	Dairy Milk	1.2	$1.07	$48.28	$579.33	0.08%
	Average	$3.47	$2.98	$48.78	$585.34	0.21%

* Assuming California average wholesale diesel price in 2001 of 83 ¢ per gallon and conservative assumption that all fuel costs are attributable to diesel fuel.

Costs for Producing Cattle / Calf - Beef

In State of Oregon*

Year / Location	Variety	Fuel & Lube, Machinery / Equip.	Gallons Diesel Used Per Cow**	Total Operating Costs (w/o fuel)	Total Operating Costs	Fuel as % of Total Operating Costs
1997 : High Desert Area	50 cow / calf	$24.18	35.6	$499.30	$523.48	4.62%
1998 : Mountain Region	50 cow / calf	$32.30	64.6	$534.82	$567.12	5.70%
1998 : North Central Plateau	50 cow / calf	$36.98	74.0	$493.16	$530.14	6.98%
1997 : High Desert Area	100 cow / calf	$17.88	26.3	$332.16	$350.04	5.11%
1998 : Mountain Region	100 cow / calf	$24.90	49.8	$387.42	$412.32	6.04%
1996 : Klamath Basin, California Winter Range	210 cow / calf	$5.75	8.0	$321.94	$327.69	1.75%
1996 : Klamath Basin, Irrigated Pasture	210 cow / calf	$3.94	5.5	$360.96	$364.90	1.08%
1998 : North Central Plateau	300 cow / calf	$10.31	20.6	$300.67	$310.98	3.32%
1998 : Mountain Region	300 cow / calf	$9.49	19.0	$316.35	$325.84	2.91%
1997 : High Desert Area	350 cow / calf	$9.61	14.1	$296.08	$305.69	3.14%
1997 : High Desert Area	500 cow / calf	$7.79	11.5	$283.26	$291.05	2.68%
1998 : Mountain Region	500 cow / calf	$9.64	19.3	$295.90	$305.54	3.16%
1998 : North Central Plateau	750 cow / calf	$6.96	13.9	$265.05	$272.01	2.56%

* All costs are per cow. Data from Oregon State University Extension Agricultural and Resource Economics Department

** Assuming average wholesale diesel price in 1996 of 72 ¢ /gal, 1997 of 68 ¢ /gal, 1998 of 50 ¢ /gal and conservative assumption that all fuel costs are attributable to diesel fuel. Price info from EIA values for PADD V.

Adjusted to 2001 to Reflect Inflation*

Year / Location	Variety	Operation Costs (w/o) fuel	Fuel Costs in 2001***	Total Operating Costs	Fuel Costs with a 3¢ / gal increase	Total Operating Costs w/ price increase	% Change due to 3 ¢ increase
1997 : High Desert Area	50 cow / calf	$550.94	$29.51	$580.45	$30.58	$581.52	0.18%
1998 : Mountain Region	50 cow / calf	$581.08	$53.62	$634.70	$55.56	$636.64	0.30%
1998 : North Central Plateau	50 cow / calf	$535.82	$61.39	$597.21	$63.61	$599.43	0.37%
1997 : High Desert Area	100 cow / calf	$366.51	$21.82	$388.34	$22.61	$389.13	0.20%
1998 : Mountain Region	100 cow / calf	$420.93	$41.33	$462.27	$42.83	$463.76	0.32%
1996 : Klamath Basin, California Winter Range	210 cow / calf	$363.39	$6.63	$370.02	$6.87	$370.26	0.06%
1996 : Klamath Basin, Irrigated Pasture	210 cow / calf	$407.43	$4.54	$411.97	$4.71	$412.14	0.04%
1998 : North Central Plateau	300 cow / calf	$326.68	$17.11	$343.79	$17.73	$344.41	0.18%
1998 : Mountain Region	300 cow / calf	$343.72	$15.75	$359.47	$16.32	$360.04	0.16%
1997 : High Desert Area	350 cow / calf	$326.70	$11.73	$338.43	$12.15	$338.86	0.13%
1997 : High Desert Area	500 cow / calf	$312.56	$9.51	$322.07	$9.85	$322.41	0.11%
1998 : Mountain Region	500 cow / calf	$321.50	$16.00	$337.50	$16.58	$338.08	0.17%
1998 : North Central Plateau	750 cow / calf	$287.98	$11.55	$299.53	$11.97	$299.95	0.14%

* According to "Economic Indicators" prepared for the Joint Economic Committee (108th US Congress)

** Average California wholesale diesel cost in 2001 83 ¢ / gallon.