# 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 | 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 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.

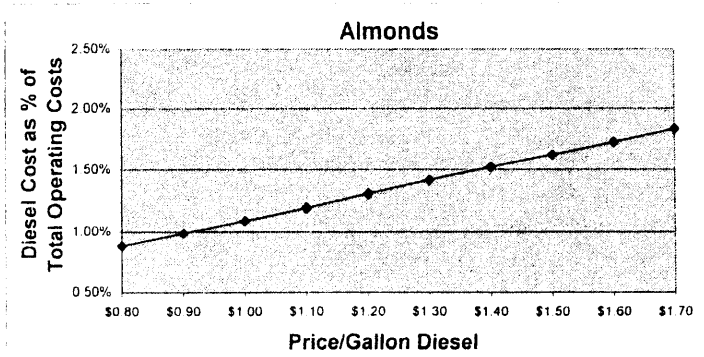
**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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.

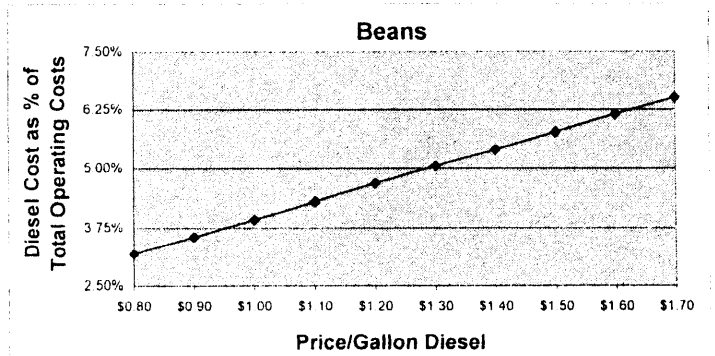
**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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.

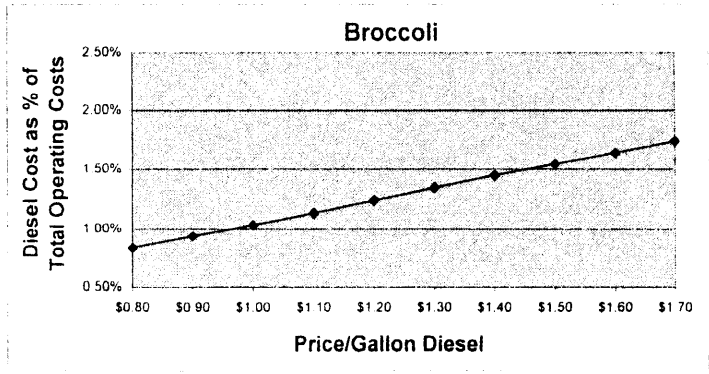
**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

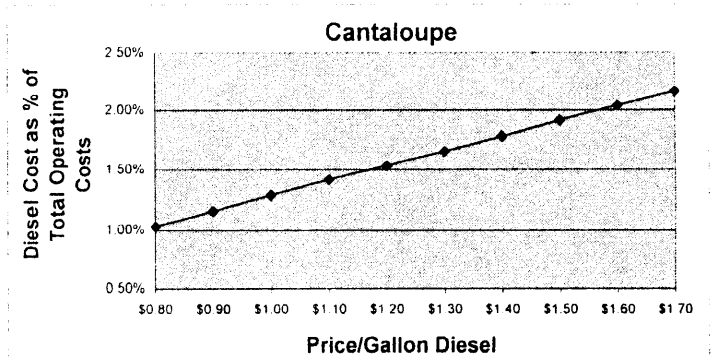
* Based on data from the UC Cooperative Extension on the costs to produce cantaloupe in selected counties.

**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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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.

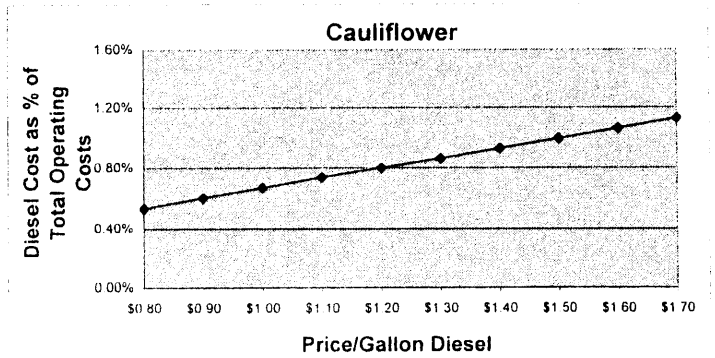
**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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.

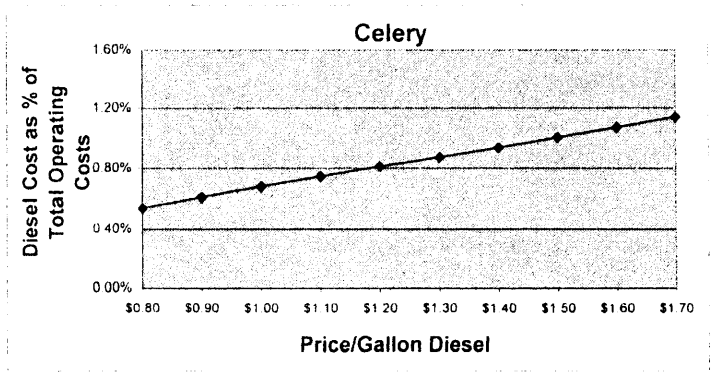
**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

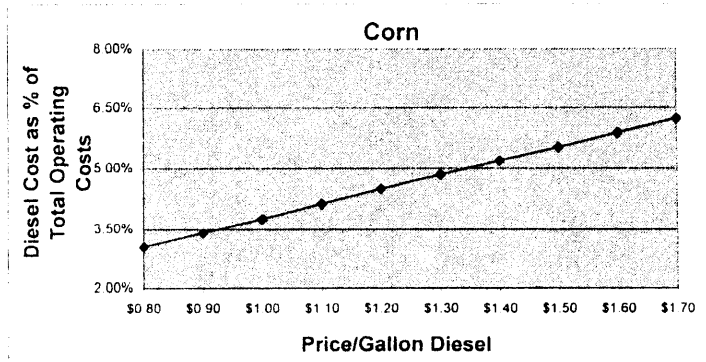
* Based on data from the UC Cooperative Extension on the costs to produce corn in selected counties.

**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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: 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

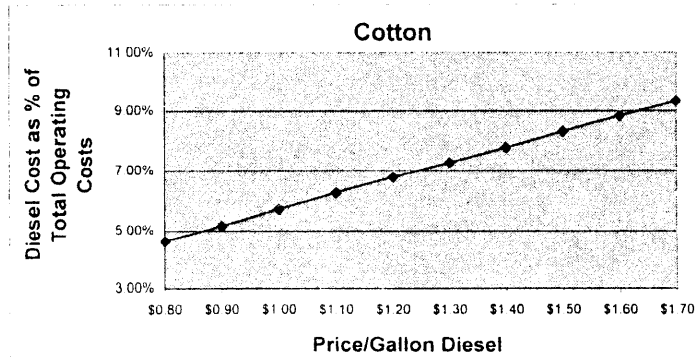
* Based on data from the UC Cooperative Extension on the costs to produce cotton in selected counties

**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | Total Operating Costs/Acre (w/o fuel) | Gasoline: 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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: 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

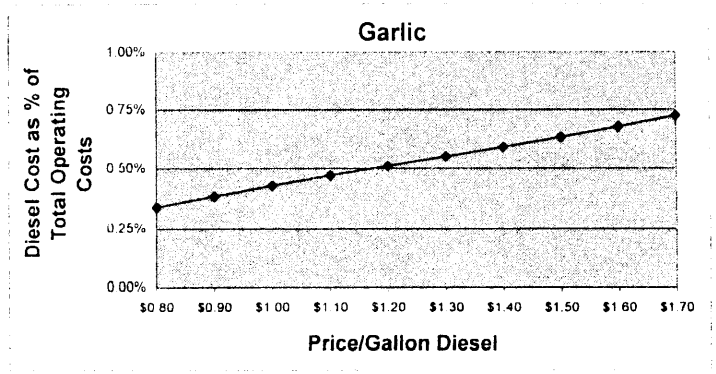
* Based on data from the UC Cooperative Extension on the costs to produce garlic in selected counties.

**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | Total Operating Costs/Acre (w/o fuel) | Gasoline: 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 : 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.

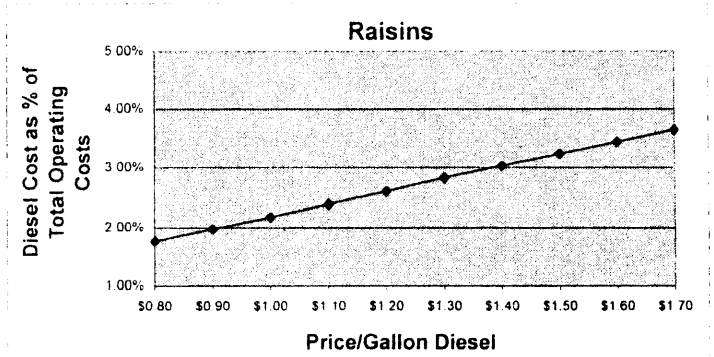
**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 : 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

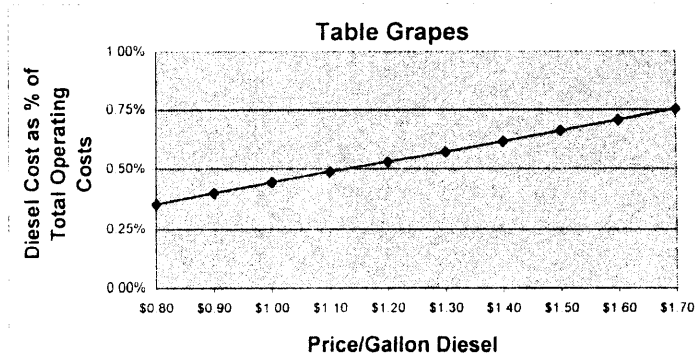
* Based on data from the UC Cooperative Extension on the costs to produce table grapes in selected counties.

**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 : 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 |

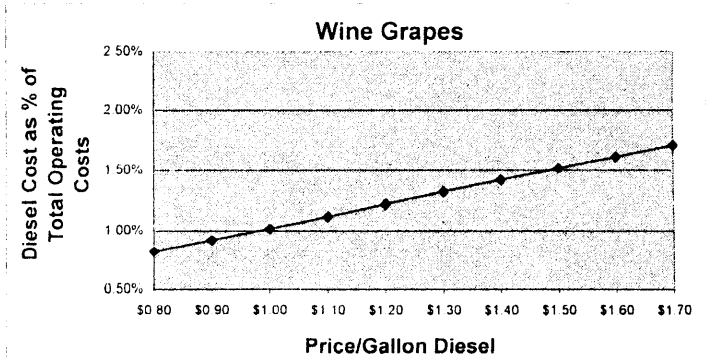
* Based on data from the UC Cooperative Extension on the costs to produce wine grapes in selected counties.

**Adjusted to 2001 to Reflect Inflation***

| 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 : 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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.

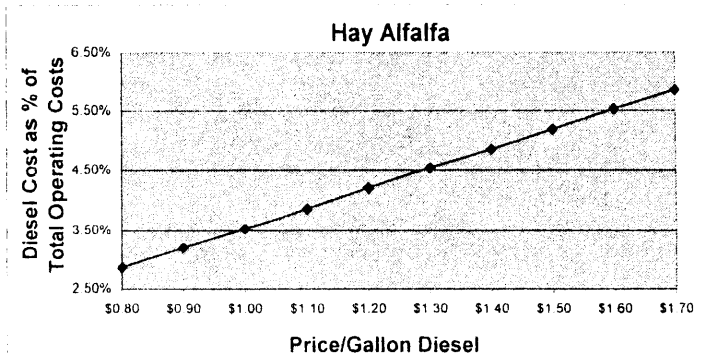
**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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.

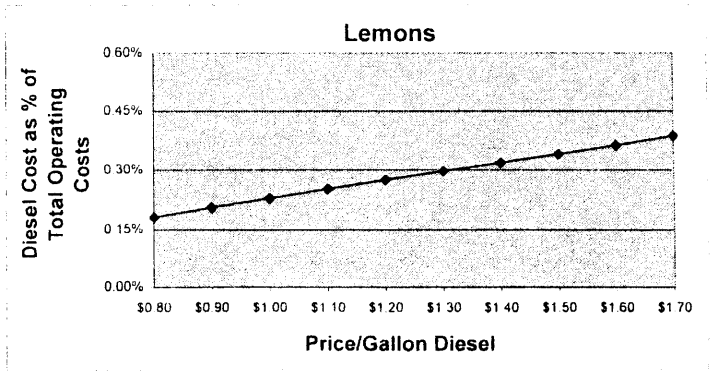
**Adjusted to 2001 to Reflect Inflation***

| 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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.

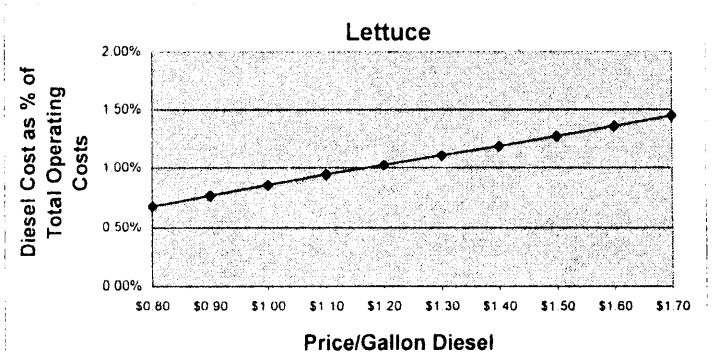
**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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: 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

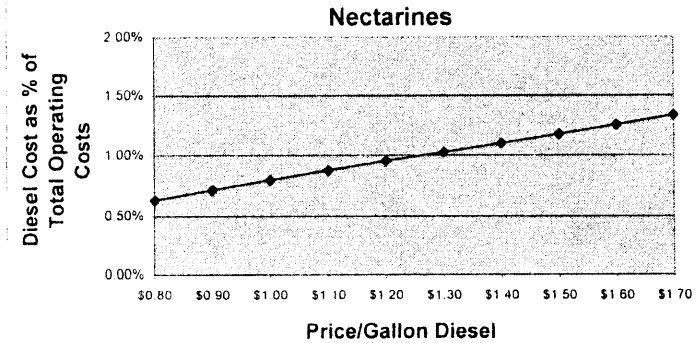
* Based on data from the UC Cooperative Extension on the costs to produce nectarines in selected counties.

**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | Total Operating Costs/Acre (w/o fuel) | Gasoline: 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 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 |

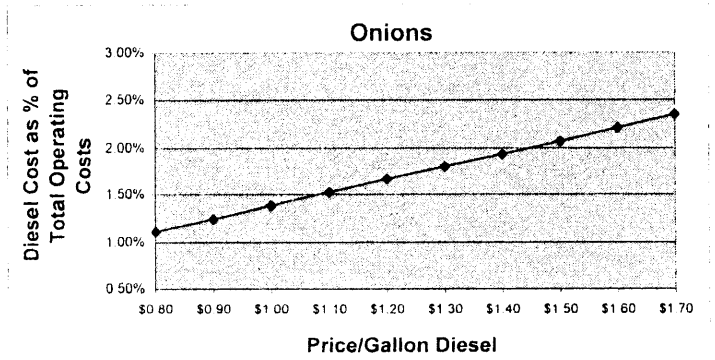
* Based on data from the UC Cooperative Extension on the costs to produce onions in selected counties.

**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 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 | 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 : 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 |

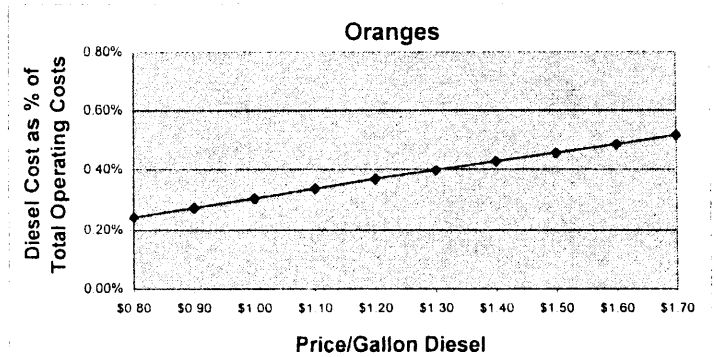
* Based on data from the UC Cooperative Extension on the costs to produce oranges in selected counties

**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 : 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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.

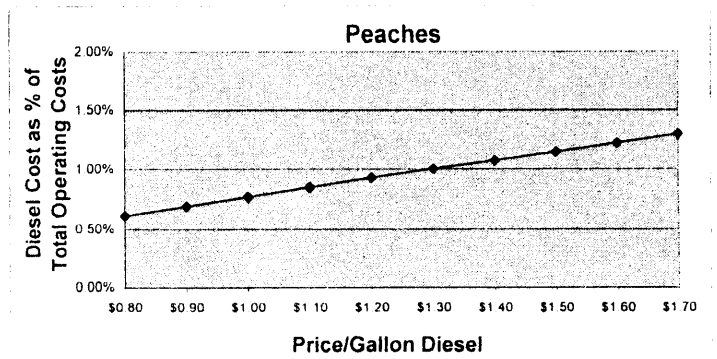
**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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: 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

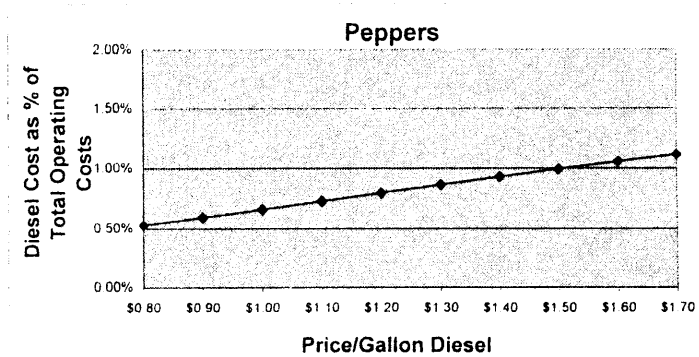
* Based on data from the UC Cooperative Extension on the costs to produce peppers in selected counties.

**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | Total Operating Costs/Acre (w/o fuel) | Gasoline: 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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.

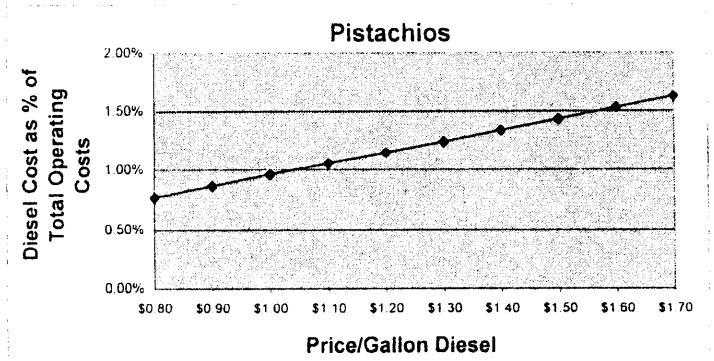
**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 : 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.

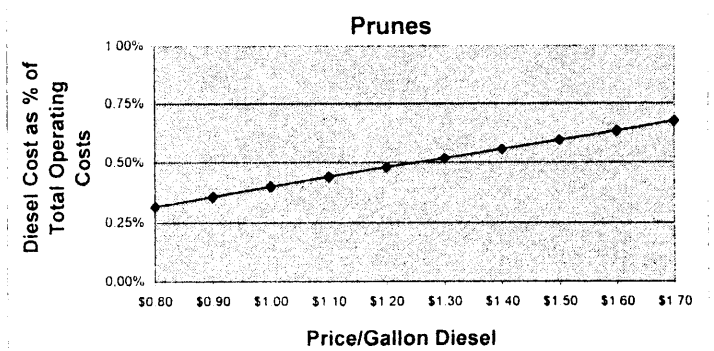
**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 : 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: 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 : 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 |

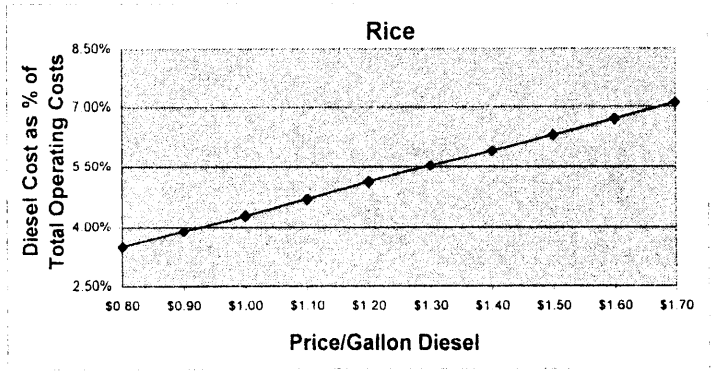
* Based on data from the UC Cooperative Extension on the costs to produce rice in selected counties.

**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | Total Operating Costs/Acre (w/o fuel) | Gasoline: 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 : 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

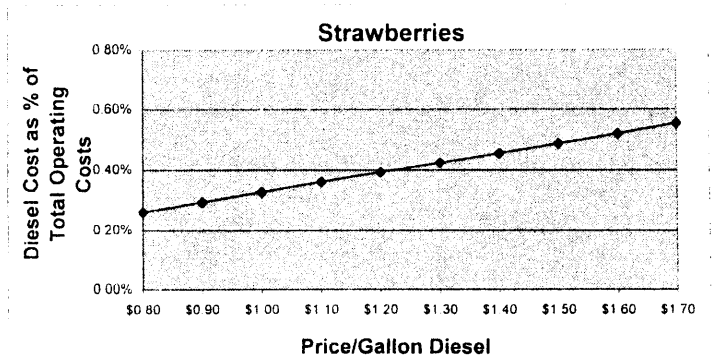
* Based on data from the UC Cooperative Extension on the costs to produce strawberries in selected counties.

**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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

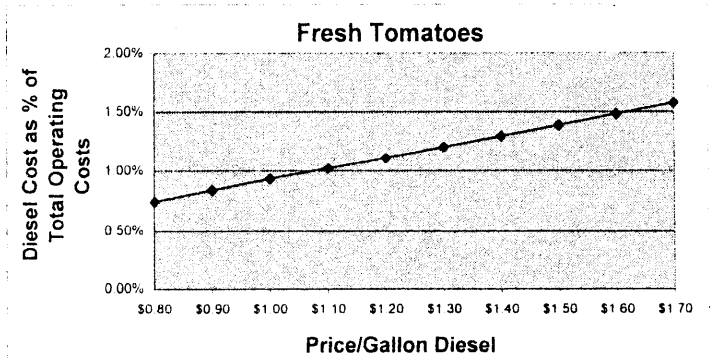
**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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

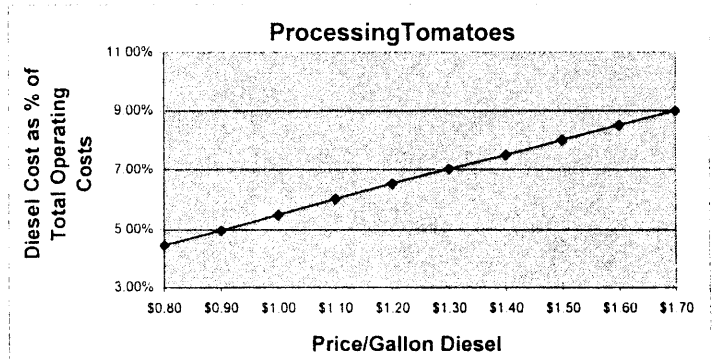
**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

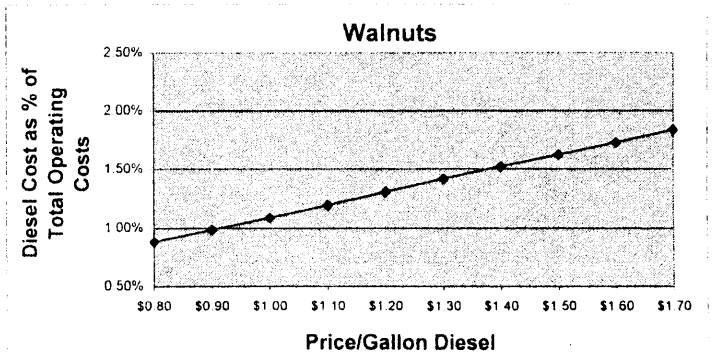
* Based on data from the UC Cooperative Extension on the costs to produce walnuts in selected counties.

**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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 |

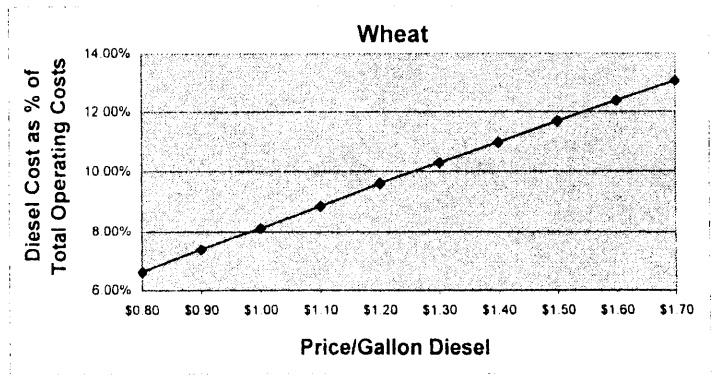
* Based on data from the UC Cooperative Extension on the costs to produce wheat in selected counties.

**Adjusted to 2001 to Reflect Inflation***

| Year / Location | Variety | 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 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.