

# Citrus Reference Book



**Florida Department of Citrus**  
Economic and Market Research Department  
**2018**

Initial Release February 2018



# ***CITRUS REFERENCE BOOK***

**Florida Department of Citrus**  
Economic and Market Research Department

**2018**

Initial Release February 2018

---

[www.fdocgrower.com](http://www.fdocgrower.com)

# Florida Department of Citrus

## Economic and Market Research Department

---

### **GAINESVILLE OFFICE:**

2125 McCarty Hall, P.O. Box 110249  
University of Florida  
Gainesville, FL 32611-0249 USA  
PHONE: 352-392-1874 ▪ FAX: 352-392-8634

MARISA ZANSLER  
Economic & Market Research Director  
[MZansler@ufl.edu](mailto:MZansler@ufl.edu)

BOB CAUDILL  
Data Base Analyst  
[GCaudill@ufl.edu](mailto:GCaudill@ufl.edu)

### **BARTOW OFFICE:**

605 East Main Street, P.O. Box 9010  
Bartow, FL 33831-9010 USA  
PHONE: 863-537-3999 ▪ FAX: 877-352-2487

ALEX CUTTS  
Data Base Analyst  
[ACutts@citrus.myflorida.com](mailto:ACutts@citrus.myflorida.com)

Media inquiries should be directed to Shelley Rossetter, Public Relations Manager, at 863-537-3971 or [srossetter@citrus.myflorida.com](mailto:srossetter@citrus.myflorida.com).

# Table of Contents

---

Page

## **ACREAGE, PRODUCTION AND UTILIZATION**

|   |    |
|---|----|
| Bearing Acreage: Oranges .....                                | 1  |
| Bearing Acreage: Grapefruit .....                             | 2  |
| Florida Commercial Citrus Acreage .....                       | 3  |
| Florida Commercial Citrus Bearing Acreage .....               | 4  |
| Florida Commercial Citrus Trees .....                         | 5  |
| Florida Commercial Citrus Bearing Trees .....                 | 6  |
| Production: Oranges .....                                     | 7  |
| Production: Grapefruit .....                                  | 8  |
| Production: Specialty Fruit .....                             | 9  |
| USDA Orange Crop Estimates Versus Actual Production .....     | 10 |
| USDA Grapefruit Crop Estimates Versus Actual Production ..... | 11 |
| USDA Crop Estimates (Current) .....                           | 12 |
| USDA Florida FCOJ Gallons-per-Box Yield Estimates .....       | 13 |
| USDA Specialty Crop Estimates Versus Actual Production .....  | 14 |
| Utilization of Florida Oranges .....                          | 15 |
| Utilization of Florida Grapefruit .....                       | 16 |
| Total Shipments of Florida Fresh Citrus .....                 | 17 |
| Florida Fresh Grapefruit Shipments .....                      | 18 |
| Florida Fresh Orange and Temple Shipments .....               | 19 |
| World Orange Production .....                                 | 20 |
| World Grapefruit Production .....                             | 21 |
| World Tangerine Production .....                              | 22 |

## **BRAZIL**

|   |    |
|---|----|
| Brazil: Bearing Trees, Production and Utilization of Oranges in the<br>State of São Paulo ..... | 23 |
| Brazil FCOJ Exports and Prices .....  | 24 |

## **SUPPLY AND AVAILABILITY**

|   |    |
|---|----|
| Estimated U.S. Orange Juice Availability .....          | 25 |
| Estimated U.S. Orange Juice Supply and Demand .....     | 26 |
| Estimated U.S. Grapefruit Juice Availability .....      | 27 |
| Estimated U.S. Grapefruit Juice Supply and Demand ..... | 28 |

**ECONOMIC INDICATORS**

|   |    |
|---|----|
| General Economic Indicators .....   | 29 |
| Estimated FOB Value of the Florida Citrus Industry .....  | 30 |
| Estimated Economic Impact of Orange Production for<br>Juice Processing in Florida .....                           | 30 |
| Florida Delivered-In Break-Even Prices .....  | 31 |
| Florida Land Value Survey, Estimated Value Per Acre<br>by Geographic Area and Land Use (Weighted Estimates) ..... | 32 |

**IMPORTS AND EXPORTS**

|   |    |
|---|----|
| U.S. Orange Juice Imports .....               | 33 |
| U.S. Citrus Juice Exports .....               | 34 |
| U.S. Imports of Fresh Citrus .....            | 35 |
| U.S. Exports of Fresh Citrus .....            | 36 |
| Florida and Imported FCOJ Prices .....        | 37 |
| History of the U.S. Orange Juice Tariff ..... | 38 |

**CONVERSIONS AND EQUIVALENTS**

|  |    |
|--|----|
| Single Strength & Chilled Juice .....  | 41 |
| Canned & Chilled Sections .....  | 41 |
| Concentrate Factors (3+1) .....  | 42 |
| FCOJ -- 42.0° Brix Equivalent Conversion Factors --<br>Bulk for Manufacturing .....    | 42 |
| Canned Citrus Fruit & Single-Strength Juice .....                                      | 43 |
| Citrus Box Weights: Approximate Net Weight in Pounds by<br>Fruit Type and States ..... | 44 |
| Florida Citrus Product Seasons .....   | 44 |
| Significant Florida Citrus Belt Freeze and Hurricane Dates .....                       | 44 |
| Case Equivalents: Concentrate, Chilled, Canned .....                                   | 44 |
| Basic Metric Conversions .....   | 45 |
| Commonly Used Brix Equivalents .....   | 45 |
| Pounds Solids & Weight per Gallon at Various Degrees Brix .....                        | 46 |
| International Marketing Conversion Tables .....  | 48 |

**FCOJ FUTURES**

|   |    |
|---|----|
| New York FCOJ Monthly Average Nearby Futures<br>Settlement Price..... | 50 |
|---|----|

## **MOVEMENT, PACK AND INVENTORY**

|   |    |
|---|----|
| Florida FCOJ Movement by Product Type .....       | 51 |
| Florida FCOJ Inventories, Pack and Movement ..... | 52 |
| Florida COJ Inventories, Pack and Movement .....  | 53 |
| Florida FCGJ Inventories, Pack and Movement ..... | 54 |
| Florida CGJ Inventories, Pack and Movement .....  | 55 |

## **PRICES, SALES, VALUES AND CONSUMPTION**

|   |    |
|---|----|
| Florida Orange On-Tree Earnings Per Box .....   | 56 |
| Florida Grapefruit On-Tree Earnings Per Box .....   | 57 |
| Total On-Tree Earnings of the Florida Citrus Industry .....   | 58 |
| Delivered-In Prices Reported by Florida Citrus Processors<br>Association for Oranges Purchased .....    | 59 |
| Delivered-In Prices Reported by Florida Citrus Processors<br>Association for Grapefruit Purchased ..... | 60 |
| Nielsen Retail OJ Sales, U.S.....   | 63 |
| Nielsen Retail OJ Sales in Grocery Stores > \$2 Million Annual<br>Sales .....                           | 64 |
| Nielsen Retail OJ Sales in All Outlet Stores.....   | 66 |
| Nielsen Retail Sales, Expanded All Outlets Combined (xAOC) .....  | 67 |
| Nielsen Retail GJ Sales, U.S. ....  | 69 |
| Nielsen Retail GJ Sales in Grocery Stores > \$2 Million Annual<br>Sales .....                           | 70 |
| Nielsen Retail GJ Sales in All-Outlet Stores .....  | 72 |
| Nielsen Retail GJ and GJ Cocktail Sales in Grocery Stores >\$2<br>Million Annual Sales .....            | 73 |
| Nielsen Total OJ Market Ranking .....   | 74 |
| Nielsen Total GJ Market Ranking.....  | 75 |
| OJ Buyer Demographics, Gallons Per Buying Household.....  | 76 |
| OJ Buyer Demographics, Household Penetration (% Buying).....  | 77 |
| GJ Buyer Demographics, Gallons Per Buying Household.....  | 78 |
| GJ Buyer Demographics, Household Penetration (% Buying).....  | 79 |
| U.S. Per Capita Beverage Consumption.....   | 80 |

**INDUSTRY STANDARDS / NUTRITION**

|  |           |
|--|-----------|
| Nutrition Values of Citrus.....                                  | 81        |
| U.S. Grade A Frozen Concentrated Juice Standards.....            | 82        |
| U.S. Grade A Concentrated Juice for Manufacturing Standards..... | 83        |
| U.S. Grade A Juice from Concentrate Standards.....               | 84        |
| U.S. Grade A Juice Standards.....                                | 85        |
| Florida Orange Standards.....                                    | 86        |
| Florida Grapefruit Standards.....                                | 87        |
| Florida Grapefruit-Juice Requirements .....                      | 88        |
| Florida Temple Orange Standards .....                            | 89        |
| Florida Tangerine Standards (November 15-July 31) .....          | 90        |
| Florida Tangerine Standards (August 1-November 14).....          | 91        |
| Florida Tangelo Standards .....                                  | 92        |
| <b>GLOSSARY OF ACRONYMS .....</b>                                | <b>93</b> |



## Bearing Acreage: Oranges

| Season                  | Florida | Texas | Calif. | Arizona | U.S. <sup>a</sup> | Florida<br>Temples |
|-------------------------|---------|-------|--------|---------|-------------------|--------------------|
| ----- 1,000 acres ----- |         |       |        |         |                   |                    |
| 1986-87                 | 375.4   | 10.3  | 172.9  | 10.9    | 569.5             | 9.4                |
| 1987-88                 | 380.2   | 11.1  | 172.6  | 10.6    | 574.5             | 9.3                |
| 1988-89                 | 388.7   | 12.0  | 177.6  | 10.4    | 588.7             | 9.3                |
| 1989-90                 | 399.5   | 13.0  | 175.1  | 10.2    | 597.8             | 8.0                |
| 1990-91                 | 420.9   | 3.5   | 178.4  | 9.9     | 612.7             | 7.7                |
| 1991-92                 | 444.4   | 3.5   | 181.8  | 10.4    | 640.1             | 7.1                |
| 1992-93                 | 489.2   | 4.4   | 184.0  | 10.6    | 688.2             | 7.3                |
| 1993-94                 | 510.8   | 5.5   | 185.0  | 10.6    | 711.9             | 6.7                |
| 1994-95                 | 562.8   | 7.0   | 191.0  | 10.4    | 771.2             | 6.8                |
| 1995-96                 | 594.8   | 7.9   | 196.0  | 9.4     | 808.1             | 6.6                |
| 1996-97                 | 624.9   | 8.7   | 200.0  | 10.0    | 843.6             | 6.7                |
| 1997-98                 | 609.2   | 9.5   | 200.2  | 9.1     | 828.0             | 6.2                |
| 1998-99                 | 612.6   | 9.1   | 201.5  | 6.9     | 830.1             | 6.0                |
| 1999-00                 | 602.1   | 9.1   | 195.5  | 6.2     | 812.9             | 5.8                |
| 2000-01                 | 605.0   | 9.1   | 194.5  | 6.4     | 815.0             | 5.5                |
| 2001-02                 | 586.9   | 9.3   | 195.0  | 6.4     | 797.6             | 4.7                |
| 2002-03                 | 587.6   | 8.8   | 198.0  | 5.6     | 800.0             | 4.2                |
| 2003-04                 | 564.8   | 8.8   | 193.0  | 4.9     | 771.5             | 3.4                |
| 2004-05                 | 541.8   | 8.8   | 191.0  | 4.2     | 745.8             | 2.9                |
| 2005-06                 | 491.0   | 8.8   | 190.0  | 3.3     | 693.1             | 2.5                |
| 2006-07                 | 475.9   | 8.8   | 190.0  | 2.6     | 677.3             | <sup>c</sup>       |
| 2007-08                 | 463.9   | 8.8   | 188.0  | 2.4     | 663.1             | <sup>c</sup>       |
| 2008-09                 | 459.1   | 8.8   | 186.0  | 2.4     | 656.3             | <sup>c</sup>       |
| 2009-10                 | 451.0   | 8.8   | 183.0  | NA      | 642.8             | <sup>c</sup>       |
| 2010-11                 | 440.0   | 8.8   | 180.0  | NA      | 628.8             | <sup>c</sup>       |
| 2011-12                 | 433.4   | 8.8   | 177.0  | NA      | 618.4             | <sup>c</sup>       |
| 2012-13                 | 429.2   | 7.0   | 171.0  | NA      | 607.2             | <sup>c</sup>       |
| 2013-14                 | 418.7   | 7.1   | 166.0  | NA      | 591.8             | <sup>c</sup>       |
| 2014-15                 | 405.5   | 7.4   | 163.0  | NA      | 575.9             | <sup>c</sup>       |
| 2015-16                 | 387.0   | 7.4   | 157.0  | NA      | 551.4             | <sup>c</sup>       |
| 2016-17                 | 367.6   |       |        |         |                   | 0.9                |
| 2017-18                 |         |       |        |         |                   |                    |

<sup>a</sup>May not add up due to rounding.

<sup>b</sup>Preliminary.

<sup>c</sup>Temples included with Florida oranges.

SOURCE: NASS

## Bearing Acreage: Grapefruit

| Season                  | Florida | Texas | Calif. | Arizona | U.S.  |
|-------------------------|---------|-------|--------|---------|-------|
| ----- 1,000 acres ----- |         |       |        |         |       |
| 1986-87                 | 106.0   | 15.2  | 20.8   | 5.9     | 147.9 |
| 1987-88                 | 106.0   | 16.0  | 20.7   | 6.0     | 148.7 |
| 1988-89                 | 106.9   | 16.9  | 19.9   | 6.5     | 150.2 |
| 1989-90                 | 103.0   | 18.7  | 19.2   | 6.4     | 147.3 |
| 1990-91                 | 104.2   | 4.5   | 18.3   | 6.2     | 133.2 |
| 1991-92                 | 104.7   | 7.5   | 18.5   | 5.9     | 136.6 |
| 1992-93                 | 111.9   | 10.1  | 17.8   | 5.9     | 145.7 |
| 1993-94                 | 118.3   | 12.8  | 18.0   | 5.9     | 155.0 |
| 1994-95                 | 127.3   | 15.0  | 18.4   | 5.7     | 166.4 |
| 1995-96                 | 132.8   | 17.7  | 18.8   | 5.1     | 174.4 |
| 1996-97                 | 139.2   | 20.4  | 18.0   | 4.4     | 182.0 |
| 1997-98                 | 127.8   | 23.1  | 16.8   | 4.0     | 171.7 |
| 1998-99                 | 116.6   | 20.0  | 16.6   | 3.3     | 156.5 |
| 1999-00                 | 114.1   | 20.0  | 16.6   | 2.8     | 153.5 |
| 2000-01                 | 107.8   | 20.0  | 15.4   | 2.0     | 145.2 |
| 2001-02                 | 101.3   | 19.0  | 14.0   | 2.0     | 136.3 |
| 2002-03                 | 95.5    | 18.5  | 13.0   | 1.4     | 128.4 |
| 2003-04                 | 82.3    | 18.5  | 11.0   | 1.2     | 113.0 |
| 2004-05                 | 71.0    | 18.5  | 12.0   | 1.0     | 102.5 |
| 2005-06                 | 59.8    | 18.5  | 10.0   | .8      | 89.1  |
| 2006-07                 | 57.4    | 18.5  | 9.6    | .6      | 86.1  |
| 2007-08                 | 54.8    | 18.5  | 9.6    | .5      | 83.4  |
| 2008-09                 | 51.9    | 18.5  | 9.6    | .4      | 80.4  |
| 2009-10                 | 48.1    | 18.5  | 9.6    | NA      | 76.2  |
| 2010-11                 | 46.5    | 18.5  | 9.4    | NA      | 74.4  |
| 2011-12                 | 45.5    | 17.0  | 9.7    | NA      | 72.2  |
| 2012-13                 | 44.9    | 16.5  | 10.0   | NA      | 71.4  |
| 2013-14                 | 43.1    | 16.6  | 9.8    | NA      | 69.5  |
| 2014-15                 | 40.4    | 17.1  | 9.8    | NA      | 67.3  |
| 2015-16                 | 37.5    | 17.1  | 9.5    | NA      | 64.1  |
| 2016-17                 | 33.8    |       |        |         |       |
| 2017-18                 |         |       |        |         |       |

<sup>a</sup>Preliminary.

SOURCE: NASS

## Florida Commercial Citrus Acreage

| Census Year       | Oranges | Grapefruit | Specialty Fruit <sup>a</sup> | Total   |
|-------------------|---------|------------|------------------------------|---------|
| ----- acres ----- |         |            |                              |         |
| 1974              | 642,431 | 130,326    | 91,341                       | 864,098 |
| 1976              | 628,567 | 137,909    | 85,893                       | 852,369 |
| 1978              | 616,020 | 136,342    | 78,873                       | 831,235 |
| 1980              | 627,174 | 139,944    | 78,165                       | 845,283 |
| 1982              | 636,864 | 139,939    | 71,053                       | 847,856 |
| 1984              | 573,991 | 134,680    | 52,694                       | 761,365 |
| 1986              | 466,252 | 117,845    | 40,395                       | 624,492 |
| 1988              | 536,737 | 119,606    | 41,586                       | 697,929 |
| 1990              | 564,809 | 125,300    | 42,658                       | 732,767 |
| 1992              | 608,636 | 135,166    | 47,488                       | 791,290 |
| 1994              | 653,370 | 146,915    | 53,457                       | 853,742 |
| 1996              | 656,598 | 144,416    | 56,673                       | 857,687 |
| 1998              | 658,390 | 132,817    | 54,053                       | 845,260 |
| 1999              | --      | 121,258    | --                           | --      |
| 2000              | 665,529 | 118,145    | 48,601                       | 832,275 |
| 2002              | 648,806 | 105,488    | 43,009                       | 797,303 |
| 2004              | 622,821 | 89,048     | 36,686                       | 748,555 |
| 2006              | 529,241 | 63,419     | 28,713                       | 621,373 |
| 2008              | 496,518 | 56,881     | 23,178                       | 576,577 |
| 2009              | 492,529 | 53,863     | 22,422                       | 568,814 |
| 2010              | 483,418 | 50,189     | 20,430                       | 554,037 |
| 2011              | 473,086 | 48,990     | 19,252                       | 541,328 |
| 2012              | 464,918 | 48,191     | 18,384                       | 531,493 |
| 2013              | 459,311 | 47,656     | 17,673                       | 524,640 |
| 2014              | 452,364 | 45,922     | 16,861                       | 515,147 |
| 2015              | 441,628 | 43,692     | 15,806                       | 501,396 |
| 2016              | 425,728 | 40,316     | 14,077                       | 480,121 |
| 2017              | 405,832 | 36,084     | 13,057                       | 454,973 |
| 2018              |         |            |                              |         |

<sup>a</sup>Includes lemons, limes and other citrus.

SOURCE: NASS

## Florida Commercial Citrus Bearing Acreage

| Census Year       | Oranges | Grapefruit | Specialty Fruit <sup>a</sup> | Total   |
|-------------------|---------|------------|------------------------------|---------|
| ----- acres ----- |         |            |                              |         |
| 1974              | 614,608 | 115,767    | 86,961                       | 817,336 |
| 1976              | 596,432 | 117,856    | 81,871                       | 796,159 |
| 1978              | 578,968 | 120,310    | 75,191                       | 774,469 |
| 1980              | 576,615 | 126,395    | 72,757                       | 775,767 |
| 1982              | 560,203 | 127,826    | 66,028                       | 754,057 |
| 1984              | 474,269 | 119,630    | 48,983                       | 642,882 |
| 1986              | 367,581 | 105,134    | 37,996                       | 510,711 |
| 1988              | 380,163 | 105,962    | 35,677                       | 521,802 |
| 1990              | 399,505 | 102,959    | 33,854                       | 536,318 |
| 1992              | 444,421 | 104,719    | 36,511                       | 585,651 |
| 1994              | 510,819 | 118,298    | 38,404                       | 667,521 |
| 1996              | 594,775 | 132,838    | 47,742                       | 775,355 |
| 1998              | 609,194 | 127,839    | 50,599                       | 787,632 |
| 1999              | --      | 116,599    | --                           | --      |
| 2000              | 602,136 | 114,089    | 46,174                       | 762,399 |
| 2002              | 586,859 | 101,338    | 41,334                       | 729,531 |
| 2004              | 564,844 | 82,318     | 34,833                       | 681,995 |
| 2006              | 490,971 | 59,776     | 27,839                       | 578,586 |
| 2008              | 463,994 | 54,837     | 22,545                       | 541,376 |
| 2009              | 459,228 | 51,934     | 21,993                       | 533,155 |
| 2010              | 451,196 | 48,071     | 20,077                       | 519,344 |
| 2011              | 440,130 | 46,502     | 18,863                       | 505,495 |
| 2012              | 433,508 | 45,479     | 17,882                       | 496,869 |
| 2013              | 429,314 | 44,893     | 16,801                       | 491,008 |
| 2014              | 418,900 | 43,154     | 15,895                       | 477,949 |
| 2015              | 405,600 | 40,437     | 14,604                       | 477,949 |
| 2016              | 387,078 | 37,496     | 12,293                       | 436,867 |
| 2017              | 367,558 | 33,846     | 11,228                       | 412,662 |
| 2018              |         |            |                              |         |

<sup>a</sup>Includes lemons, limes and other citrus.

SOURCE: NASS

## Florida Commercial Citrus Trees

| Census Year             | Oranges  | Grapefruit | Specialty Fruit <sup>a</sup> | Total     |
|-------------------------|----------|------------|------------------------------|-----------|
| ----- 1,000 trees ----- |          |            |                              |           |
| 1974                    | 52,521.7 | 9,647.2    | 9,140.2                      | 71,309.1  |
| 1976                    | 51,595.3 | 10,398.1   | 8,553.6                      | 70,547.0  |
| 1978                    | 50,843.2 | 10,412.5   | 7,881.1                      | 69,136.8  |
| 1980                    | 51,977.8 | 10,768.7   | 7,905.9                      | 70,652.4  |
| 1982                    | 53,504.5 | 10,833.1   | 7,232.3                      | 71,569.9  |
| 1984                    | 49,884.7 | 10,582.9   | 5,507.9                      | 65,975.5  |
| 1986                    | 43,461.4 | 9,624.0    | 4,443.4                      | 57,528.8  |
| 1988                    | 54,536.6 | 10,081.2   | 4,690.4                      | 69,308.2  |
| 1990                    | 62,613.4 | 11,193.2   | 5,074.7                      | 78,881.3  |
| 1992                    | 72,826.3 | 13,119.2   | 6,070.2                      | 92,015.7  |
| 1994                    | 81,614.4 | 15,004.0   | 7,114.0                      | 103,732.4 |
| 1996                    | 84,155.4 | 15,116.9   | 7,824.5                      | 107,096.8 |
| 1998                    | 85,430.6 | 14,079.1   | 7,600.5                      | 107,110.2 |
| 1999                    | --       | 12,961.2   | --                           | --        |
| 2000                    | 87,200.1 | 12,668.6   | 6,810.0                      | 106,678.7 |
| 2002                    | 85,751.1 | 11,329.2   | 6,091.7                      | 103,172.0 |
| 2004                    | 82,978.5 | 9,748.3    | 5,218.2                      | 97,945.0  |
| 2006                    | 70,849.4 | 6,971.4    | 4,088.2                      | 81,909.0  |
| 2008                    | 65,775.3 | 6,241.0    | 3,359.8                      | 75,376.1  |
| 2009                    | 64,992.7 | 5,861.0    | 3,236.8                      | 74,090.5  |
| 2010                    | 63,776.7 | 5,445.9    | 2,942.2                      | 72,164.8  |
| 2011                    | 62,528.9 | 5,349.6    | 2,762.2                      | 70,640.7  |
| 2012                    | 61,640.1 | 5,272.3    | 2,653.0                      | 69,565.4  |
| 2013                    | 61,167.0 | 5,251.2    | 2,555.6                      | 68,973.8  |
| 2014                    | 60,545.5 | 5,118.0    | 2,470.8                      | 68,134.3  |
| 2015                    | 59,571.2 | 4,933.1    | 2,362.8                      | 66,867.1  |
| 2016                    | 57,952.1 | 4,582.0    | 2,188.9                      | 64,723.0  |
| 2017                    | 56,022.3 | 4,116.6    | 2,078.4                      | 62,217.3  |
| 2018                    |          |            |                              |           |

<sup>a</sup>Includes lemons, limes and other citrus.

SOURCE: NASS

## Florida Commercial Citrus Bearing Trees

| Census Year             | Oranges  | Grapefruit | Specialty Fruit <sup>a</sup> | Total    |
|-------------------------|----------|------------|------------------------------|----------|
| ----- 1,000 trees ----- |          |            |                              |          |
| 1974                    | 49,466.9 | 8,362.6    | 8,559.6                      | 66,389.1 |
| 1976                    | 48,373.8 | 8,598.9    | 8,075.0                      | 65,047.7 |
| 1978                    | 47,454.5 | 8,969.7    | 7,416.8                      | 63,841.0 |
| 1980                    | 47,366.3 | 9,586.2    | 7,196.5                      | 64,149.0 |
| 1982                    | 46,078.5 | 9,753.9    | 6,555.4                      | 62,387.8 |
| 1984                    | 39,777.7 | 9,192.8    | 5,044.9                      | 54,015.4 |
| 1986                    | 32,708.0 | 8,367.7    | 4,154.6                      | 45,230.3 |
| 1988                    | 35,537.3 | 8,654.7    | 3,928.7                      | 48,120.7 |
| 1990                    | 40,666.0 | 8,748.5    | 3,882.1                      | 53,296.6 |
| 1992                    | 49,577.1 | 9,556.9    | 4,427.3                      | 63,561.3 |
| 1994                    | 61,707.7 | 11,514.1   | 4,825.8                      | 78,047.6 |
| 1996                    | 75,286.6 | 13,632.8   | 6,340.1                      | 95,259.5 |
| 1998                    | 78,586.5 | 13,469.6   | 7,034.1                      | 99,090.2 |
| 1999                    | --       | 12,431.4   | --                           | --       |
| 2000                    | 78,721.0 | 12,204.1   | 6,461.4                      | 97,386.5 |
| 2002                    | 77,595.9 | 10,869.7   | 5,854.3                      | 94,319.9 |
| 2004                    | 75,391.7 | 8,967.9    | 4,972.2                      | 89,331.8 |
| 2006                    | 65,954.4 | 6,543.2    | 3,973.7                      | 76,471.3 |
| 2008                    | 61,740.6 | 5,989.7    | 3,270.3                      | 71,000.6 |
| 2009                    | 60,752.9 | 5,633.8    | 3,179.0                      | 69,565.7 |
| 2010                    | 59,560.8 | 5,201.0    | 2,894.0                      | 67,655.8 |
| 2011                    | 58,160.4 | 5,036.4    | 2,711.9                      | 65,908.7 |
| 2012                    | 57,460.4 | 4,934.6    | 2,587.0                      | 64,982.0 |
| 2013                    | 57,146.1 | 4,896.1    | 2,432.3                      | 64,474.5 |
| 2014                    | 55,891.7 | 4,744.0    | 2,313.5                      | 62,949.2 |
| 2015                    | 54,383.3 | 4,462.3    | 2,155.4                      | 61,001.0 |
| 2016                    | 52,202.8 | 4,198.5    | 1,854.9                      | 58,256.2 |
| 2017                    | 50,082.6 | 3,797.8    | 1,701.9                      | 55,582.3 |
| 2018                    |          |            |                              |          |

<sup>a</sup>Includes lemons, limes and other citrus.

SOURCE: NASS

## Production: Oranges

| Season                             | Florida | Texas        | Calif. | Arizona | U.S. <sup>a</sup> | Florida<br>Temples |
|------------------------------------|---------|--------------|--------|---------|-------------------|--------------------|
| ----- million 90-pound boxes ----- |         |              |        |         |                   |                    |
| 1988-89                            | 146.6   | 1.7          | 49.1   | 1.4     | 198.8             | 3.8                |
| 1989-90                            | 110.2   | 1.1          | 59.5   | 1.3     | 172.2             | 1.4                |
| 1990-91                            | 151.6   | --           | 21.3   | 1.5     | 174.4             | 2.5                |
| 1991-92                            | 139.8   | <sup>b</sup> | 56.2   | 2.0     | 198.0             | 2.4                |
| 1992-93                            | 186.6   | .5           | 55.7   | 1.5     | 244.3             | 2.5                |
| 1993-94                            | 174.4   | .5           | 53.0   | 1.6     | 229.5             | 2.3                |
| 1994-95                            | 205.5   | 1.0          | 46.7   | .9      | 254.0             | 2.6                |
| 1995-96                            | 203.3   | .9           | 48.3   | 1.4     | 253.9             | 2.2                |
| 1996-97                            | 226.2   | 1.3          | 53.3   | 1.2     | 282.0             | 2.4                |
| 1997-98                            | 244.0   | 1.4          | 57.5   | .8      | 303.8             | 2.3                |
| 1998-99                            | 186.0   | 1.4          | 30.0   | 1.0     | 218.3             | 1.8                |
| 1999-00                            | 233.0   | 1.6          | 53.3   | .9      | 288.8             | 2.0                |
| 2000-01                            | 223.3   | 2.1          | 45.4   | .8      | 271.6             | 1.3                |
| 2001-02                            | 230.0   | 1.6          | 42.9   | .4      | 275.0             | 1.6                |
| 2002-03                            | 203.0   | 1.5          | 51.7   | .4      | 256.5             | 1.3                |
| 2003-04                            | 242.0   | 1.6          | 42.1   | .4      | 286.0             | 1.4                |
| 2004-05                            | 149.8   | 1.7          | 53.8   | .4      | 205.6             | .7                 |
| 2005-06                            | 147.7   | 1.5          | 50.8   | .4      | 200.4             | .7                 |
| 2006-07                            | 129.0   | 1.9          | 38.3   | .3      | 169.5             | <sup>d</sup>       |
| 2007-08                            | 170.2   | 1.7          | 51.7   | .3      | 223.9             | <sup>d</sup>       |
| 2008-09                            | 162.5   | 1.4          | 38.8   | .2      | 202.8             | <sup>d</sup>       |
| 2009-10                            | 133.7   | 1.5          | 47.9   | .0      | 183.2             | <sup>d</sup>       |
| 2010-11                            | 140.5   | 1.8          | 55.6   | --      | 197.9             | <sup>d</sup>       |
| 2011-12                            | 146.7   | 1.3          | 52.0   | --      | 200.0             | <sup>d</sup>       |
| 2012-13                            | 133.6   | 1.7          | 48.4   | --      | 183.7             | <sup>d</sup>       |
| 2013-14                            | 104.6   | 1.7          | 44.0   | --      | 150.3             | <sup>d</sup>       |
| 2014-15                            | 96.8    | 1.4          | 42.8   | --      | 141.0             | <sup>d</sup>       |
| 2015-16                            | 81.6    | 1.6          | 48.2   | --      | 131.4             | <sup>d</sup>       |
| 2016-17                            | 68.8    |              |        |         |                   | 0.2                |
| 2017-18                            |         |              |        |         |                   |                    |

<sup>a</sup>May not add up due to rounding.

<sup>b</sup>Less than 50,000 boxes.

<sup>c</sup>Projection as of March 2017 crop forecast.

<sup>d</sup>Temples included in Oranges beginning 2006-07.

SOURCE: NASS

## Production: Grapefruit

| Season                             | Florida           | Texas | Calif. | Arizona | U.S. |
|------------------------------------|-------------------|-------|--------|---------|------|
| ----- million 85-pound boxes ----- |                   |       |        |         |      |
| 1988-89                            | 54.8              | 4.5   | 6.1    | 1.5     | 66.9 |
| 1989-90                            | 35.7              | 1.9   | 7.2    | 1.7     | 46.4 |
| 1990-91                            | 45.1              | --    | 6.1    | 1.8     | 53.0 |
| 1991-92                            | 42.4              | .1    | 7.6    | 2.1     | 52.2 |
| 1992-93                            | 55.2              | 1.8   | 7.0    | 1.6     | 65.6 |
| 1993-94                            | 51.1              | 2.8   | 7.3    | 1.4     | 62.6 |
| 1994-95                            | 55.7              | 4.4   | 7.3    | 1.1     | 68.5 |
| 1995-96                            | 52.4 <sup>a</sup> | 4.3   | 6.4    | .9      | 64.0 |
| 1996-97                            | 55.8 <sup>b</sup> | 5.0   | 6.5    | .6      | 67.9 |
| 1997-98                            | 49.6 <sup>b</sup> | 4.5   | 6.3    | .6      | 61.0 |
| 1998-99                            | 47.1              | 5.7   | 5.8    | .6      | 59.1 |
| 1999-00                            | 53.4              | 5.6   | 5.7    | .4      | 65.0 |
| 2000-01                            | 46.0 <sup>c</sup> | 6.8   | 5.0    | .2      | 57.9 |
| 2001-02                            | 46.7              | 5.6   | 4.7    | .1      | 57.0 |
| 2002-03                            | 38.7              | 5.3   | 4.4    | .1      | 48.5 |
| 2003-04                            | 40.9              | 5.4   | 4.6    | .1      | 50.9 |
| 2004-05                            | 12.8              | 6.2   | 4.8    | .1      | 23.9 |
| 2005-06                            | 19.3              | 4.9   | 4.7    | .1      | 29.0 |
| 2006-07                            | 27.2              | 6.7   | 4.3    | .1      | 38.3 |
| 2007-08                            | 26.6              | 5.6   | 4.1    | .1      | 36.4 |
| 2008-09                            | 21.7              | 5.2   | 3.8    | --      | 30.7 |
| 2009-10                            | 20.3              | 5.3   | 3.5    | --      | 29.1 |
| 2010-11                            | 19.8              | 5.9   | 4.1    | --      | 29.7 |
| 2011-12                            | 18.9              | 4.5   | 3.8    | --      | 27.1 |
| 2012-13                            | 18.4              | 5.7   | 4.2    | --      | 28.3 |
| 2013-14                            | 15.7              | 5.4   | 3.6    | --      | 24.6 |
| 2014-15                            | 12.9              | 4.0   | 4.5    | --      | 21.4 |
| 2015-16                            | 10.8              | 4.5   | 3.6    | --      | 18.9 |
| 2016-17                            | 7.8               |       |        |         |      |
| 2017-18                            |                   |       |        |         |      |

<sup>a</sup>Excludes 3 million boxes of economic abandonment. <sup>b</sup>Excludes 6 million boxes of economic abandonment.

<sup>c</sup>Excludes 2 million boxes of economic abandonment. <sup>d</sup>Projection as of March 2017 crop for. SOURCE: NASS



## Production: Specialty Fruit

| Season                  | Tangerines |        |         | Florida  |         |       | Lemons |         |
|-------------------------|------------|--------|---------|----------|---------|-------|--------|---------|
|                         | Florida    | Calif. | Arizona | Tangelos | K-Early | Limes | Calif. | Arizona |
| ----- 1,000 boxes ----- |            |        |         |          |         |       |        |         |
| 1988-89                 | 2,900      | 2,040  | 650     | 3,800    | 320     | 1,250 | 16,200 | 3,800   |
| 1989-90                 | 1,700      | 1,650  | 600     | 2,950    | 210     | 1,650 | 15,800 | 2,800   |
| 1990-91                 | 1,950      | 1,350  | 600     | 2,650    | 160     | 1,450 | 14,800 | 4,100   |
| 1991-92                 | 2,600      | 2,440  | 1,200   | 2,600    | 165     | 1,600 | 15,100 | 5,100   |
| 1992-93                 | 2,800      | 2,100  | 950     | 3,050    | 185     | 1,000 | 20,400 | 4,400   |
| 1993-94                 | 4,100      | 2,300  | 1,000   | 3,350    | 210     | 200   | 20,700 | 5,200   |
| 1994-95                 | 3,550      | 2,500  | 650     | 3,150    | 120     | 230   | 20,000 | 3,600   |
| 1995-96                 | 4,500      | 2,600  | 1,000   | 2,450    | 160     | 300   | 21,000 | 5,100   |
| 1996-97                 | 6,300      | 2,600  | 750     | 3,950    | 150     | 320   | 22,600 | 2,700   |
| 1997-98                 | 5,200      | 2,400  | 600     | 2,850    | 40      | 440   | 21,000 | 2,600   |
| 1998-99                 | 4,950      | 1,500  | 950     | 2,550    | 80      | 500   | 16,200 | 3,450   |
| 1999-00                 | 7,000      | 2,500  | 850     | 2,200    | 110     | 600   | 19,000 | 3,100   |
| 2000-01                 | 5,600      | 2,200  | 650     | 2,100    | 40      | 250   | 22,600 | 3,600   |
| 2001-02                 | 6,600      | 2,200  | 620     | 2,150    | 30      | 150   | 18,300 | 2,800   |
| 2002-03                 | 5,500      | 2,800  | 430     | 2,350    | a       | a     | 24,000 | 3,000   |
| 2003-04                 | 6,500      | 2,200  | 690     | 1,000    | a       | a     | 18,000 | 3,000   |
| 2004-05                 | 4,450      | 2,900  | 400     | 1,550    | a       | a     | 20,500 | 2,400   |
| 2005-06                 | 5,500      | 3,600  | 550     | 1,400    | a       | a     | 22,000 | 3,800   |
| 2006-07                 | 4,600      | 3,500  | 300     | 1,250    | a       | a     | 18,500 | 2,500   |
| 2007-08                 | 5,500      | 6,700  | 400     | 1,500    | a       | a     | 14,800 | 1,500   |
| 2008-09                 | 3,850      | 6,700  | 250     | 1,150    | a       | a     | 21,000 | 3,000   |
| 2009-10                 | 4,450      | 9,900  | 350     | 900      | a       | a     | 21,000 | 2,200   |
| 2010-11                 | 4,650      | 10,600 | 300     | 1,150    | a       | a     | 20,500 | 2,500   |
| 2011-12                 | 4,290      | 10,800 | 200     | 1,150    | a       | a     | 20,500 | 750     |
| 2012-13                 | 3,280      | 13,000 | 160     | 1,000    | a       | a     | 21,000 | 1,800   |
| 2013-14                 | 2,900      | 14,700 | 150     | 880      | a       | a     | 18,800 | 1,800   |
| 2014-15                 | 2,265      | 18,700 | 170     | 665      | a       | a     | 20,600 | 2,000   |
| 2015-16                 | 1,415      | 21,700 | N/A     | 390      | a       | a     | 20,500 | 1,750   |
| 2016-17                 | 1,340      |        |         | 280      | a       | a     |        |         |
| 2017-18                 |            |        |         |          |         |       |        |         |

<sup>a</sup>No longer reported.

<sup>b</sup>Projection as of March 2017 crop forecast.

SOURCE: NASS

## USDA Orange Crop Estimates Versus Actual Production

| Season                                 | Florida            |        |       | California |        |       | Texas |        |      | Arizona |        |      | Total <sup>a</sup> |
|--|--------------------|--------|-------|------------|--------|-------|-------|--------|------|---------|--------|------|--------------------|
|  | Oct.               | Actual | +/-   | Oct.       | Actual | +/-   | Oct.  | Actual | +/-  | Oct.    | Actual | +/-  | Oct.               |
| ----- million boxes <sup>b</sup> ----- |                    |        |       |            |        |       |       |        |      |         |        |      |                    |
| 1995-96                                | 202.0              | 203.3  | +1.3  | 66.0       | 58.0   | -8.0  | 1.2   | .9     | -0.3 | 1.1     | 1.7    | +0.6 | 270.3              |
| 1996-97                                | 220.0              | 226.2  | +6.2  | 63.0       | 64.0   | +1.0  | 1.5   | 1.4    | -0.1 | 1.5     | 1.4    | -0.1 | 286.0              |
| 1997-98                                | 254.0              | 244.0  | -10.0 | 74.0       | 69.0   | -5.0  | 1.6   | 1.5    | -0.1 | 1.0     | 1.0    | 0.0  | 330.6              |
| 1998-99                                | 190.0              | 186.0  | -4.0  | 62.0       | 36.0   | -26.0 | 1.4   | 1.4    | +0.0 | 1.0     | 1.2    | +0.2 | 254.4              |
| 1999-00                                | 211.0              | 233.0  | +22.0 | 67.0       | 64.0   | -3.0  | 1.6   | 1.7    | +0.1 | .9      | 1.1    | +0.2 | 280.5              |
| 2000-01                                | 240.0              | 223.3  | -16.7 | 59.0       | 54.5   | -4.5  | 2.0   | 2.2    | +0.2 | 1.1     | .9     | -0.2 | 302.1              |
| 2001-02                                | 231.0              | 230.0  | -1.0  | 54.0       | 51.5   | -2.5  | 2.2   | 1.7    | -0.5 | .8      | .5     | -0.3 | 288.0              |
| 2002-03                                | 197.0              | 203.0  | +6.0  | 63.0       | 62.0   | -1.0  | 1.6   | 1.6    | 0.0  | .5      | .5     | 0.0  | 262.0              |
| 2003-04                                | 252.0              | 242.0  | -10.0 | 59.0       | 50.5   | -8.5  | 1.6   | 1.7    | +0.0 | .5      | .5     | 0.0  | 313.0              |
| 2004-05                                | 176.0              | 149.8  | -26.2 | 62.0       | 64.5   | +2.5  | 1.9   | 1.8    | -0.1 | .4      | .4     | +0.0 | 240.3              |
| 2005-06                                | 190.0              | 147.7  | -42.3 | 55.0       | 61.0   | +6.0  | 1.5   | 1.6    | +0.1 | .5      | .5     | -0.1 | 247.0              |
| 2006-07                                | 135.0 <sup>c</sup> | 129.0  | -6.0  | 46.0       | 46.0   | 0.0   | 1.8   | 2.0    | +0.2 | .4      | .3     | -0.1 | 183.1              |
| 2007-08                                | 168.0 <sup>c</sup> | 170.2  | +2.2  | 58.0       | 62.0   | +4.0  | 1.8   | 1.8    | 0.0  | .3      | .4     | +0.1 | 228.1              |
| 2008-09                                | 166.0 <sup>c</sup> | 162.5  | -3.5  | 44.0       | 46.5   | +2.5  | 1.5   | 1.5    | 0.0  | .3      | .3     | -0.1 | 211.5              |
| 2009-10                                | 136.0 <sup>c</sup> | 133.7  | -2.3  | 55.0       | 57.5   | +2.5  | 1.5   | 1.6    | +0.1 | NF      | --     | --   | 192.5              |
| 2010-11                                | 146.0 <sup>c</sup> | 140.5  | -5.5  | 60.5       | 62.5   | +2.0  | 1.7   | 1.9    | +0.2 | NF      | --     | --   | 208.2              |
| 2011-12                                | 147.0 <sup>c</sup> | 146.7  | -0.3  | 57.5       | 58.5   | +1.0  | 1.7   | 1.4    | -0.3 | NF      | --     | --   | 206.2              |
| 2012-13                                | 154.0 <sup>c</sup> | 133.6  | -20.4 | 59.5       | 54.5   | -5.0  | 1.4   | 1.8    | +0.4 | NF      | --     | --   | 214.9              |
| 2013-14                                | 125.0 <sup>c</sup> | 104.6  | -20.4 | 56.5       | 49.5   | -7.0  | 1.8   | 1.8    | +0.0 | NF      | --     | --   | 183.3              |
| 2014-15                                | 108.0 <sup>c</sup> | 96.8   | -11.2 | 50.5       | 48.2   | -2.3  | 2.0   | 1.5    | -0.5 | NF      | --     | --   | 160.5              |
| 2015-16                                | 80.0 <sup>c</sup>  | 81.6   | +1.6  | 52.5       | 54.2   | +1.7  | 1.7   | 1.7    | +0.0 | NF      | --     | --   | 134.2              |
| 2016-17                                | 70.0               | 68.8   | -1.3  | 50.5       | 48.0   | -2.5  | 1.4   | 1.4    | +0.0 | NF      | --     | --   | 121.9              |
| 2017-18 <sup>d</sup>                   | 54.0               |        |       | 46.0       |        |       | 1.65  |        |      | NF      | --     | --   | 101.7              |

<sup>a</sup>May not add up due to rounding.

<sup>b</sup>Box sizes: FL 90#; CA 80# (CA & AZ 75# prior to 2010-11); TX 85#.

SOURCE: NASS

<sup>c</sup>Includes Temples.

## USDA Grapefruit Crop Estimates Versus Actual Production

| Season                                | Florida |                   |      | California |        |      | Texas |        |      | Arizona |        |      | Total<br>Oct. |
|---------------------------------------|---------|-------------------|------|------------|--------|------|-------|--------|------|---------|--------|------|---------------|
|                                       | Oct.    | Actual            | +/-  | Oct.       | Actual | +/-  | Oct.  | Actual | +/-  | Oct.    | Actual | +/-  |               |
| -----million boxes <sup>a</sup> ----- |         |                   |      |            |        |      |       |        |      |         |        |      |               |
| 1995-96                               | 54.0    | 52.4 <sup>c</sup> | -1.7 | 8.5        | 8.1    | -0.4 | 5.0   | 4.6    | -0.5 | 1.2     | 1.2    | 0.0  | 68.7          |
| 1996-97                               | 59.0    | 55.8 <sup>d</sup> | -3.2 | 8.0        | 8.2    | +0.2 | 5.7   | 5.3    | -0.4 | 1.1     | .8     | -0.3 | 73.8          |
| 1997-98                               | 54.0    | 49.6 <sup>d</sup> | -4.5 | 9.0        | 8.0    | -1.0 | 5.0   | 4.8    | -0.2 | .8      | .8     | 0.0  | 68.8          |
| 1998-99                               | 50.0    | 47.1              | -3.0 | 8.4        | 7.3    | -1.1 | 5.0   | 6.1    | +1.1 | .7      | .75    | +0.1 | 64.1          |
| 1999-00                               | 50.0    | 53.4              | +3.4 | 8.0        | 7.2    | -0.8 | 5.5   | 5.9    | +0.4 | .7      | .45    | -0.3 | 64.2          |
| 2000-01                               | 50.0    | 46.0 <sup>e</sup> | -4.0 | 7.2        | 6.3    | -0.9 | 6.5   | 7.2    | +0.7 | .6      | .25    | -0.4 | 64.3          |
| 2001-02                               | 48.0    | 46.7              | -1.3 | 6.0        | 5.9    | -0.1 | 7.8   | 5.9    | -1.9 | .2      | .16    | 0.0  | 62.0          |
| 2002-03                               | 42.0    | 38.7              | -3.3 | 6.2        | 5.6    | -0.6 | 5.6   | 5.7    | +0.1 | .1      | .13    | +0.0 | 53.9          |
| 2003-04                               | 42.0    | 40.9              | -1.1 | 5.5        | 5.8    | +0.3 | 5.3   | 5.7    | +0.4 | .1      | .14    | +0.0 | 52.9          |
| 2004-05                               | 15.0    | 12.8              | -2.2 | 5.2        | 6.1    | +0.9 | 5.9   | 6.6    | +0.7 | .2      | .14    | -0.1 | 26.3          |
| 2005-06                               | 24.0    | 19.3              | -4.7 | 5.8        | 6.0    | +0.2 | 5.4   | 5.2    | -0.2 | .1      | .1     | 0.0  | 35.3          |
| 2006-07                               | 26.0    | 27.2              | +1.2 | 5.7        | 5.5    | -0.2 | 6.7   | 7.1    | +0.4 | .1      | .1     | 0.0  | 38.5          |
| 2007-08                               | 25.0    | 26.6              | +1.6 | 4.5        | 5.2    | +0.7 | 6.8   | 6.0    | -0.8 | .2      | .1     | -0.1 | 36.5          |
| 2008-09                               | 23.0    | 21.7              | -1.3 | 5.5        | 4.8    | -0.7 | 5.3   | 5.5    | +0.2 | .2      | .03    | -0.2 | 34.0          |
| 2009-10                               | 19.8    | 20.3              | +0.5 | 4.7        | 4.5    | -0.2 | 5.3   | 5.6    | +0.3 | NF      | --     | --   | 29.8          |
| 2010-11                               | 20.0    | 19.8              | -0.3 | 3.8        | 4.3    | +0.5 | 5.5   | 6.3    | +0.8 | NF      | --     | --   | 29.3          |
| 2011-12                               | 21.0    | 18.9              | -2.2 | 3.4        | 4.0    | +0.6 | 5.1   | 4.8    | -0.3 | NF      | --     | --   | 29.5          |
| 2012-13                               | 20.3    | 18.4              | -2.0 | 4.0        | 4.5    | +0.5 | 5.3   | 6.1    | +0.8 | NF      | --     | --   | 29.6          |
| 2013-14                               | 17.8    | 15.7              | -2.2 | 4.0        | 3.9    | -0.2 | 5.2   | 5.7    | +0.5 | NF      | --     | --   | 27.0          |
| 2014-15                               | 15.0    | 12.9              | -2.1 | 4.0        | 4.8    | +0.8 | 5.8   | 4.3    | -1.5 | NF      | --     | --   | 24.8          |
| 2015-16                               | 12.3    | 10.8              | -1.5 | 3.5        | 3.8    | +0.3 | 4.0   | 4.8    | +0.8 | NF      | --     | --   | 19.8          |
| 2016-17                               | 9.6     | 7.8               | -1.8 | 4.0        | 4.0    | 0.0  | 4.7   | 4.8    | +0.1 | NF      | --     | --   | 18.3          |
| 2017-18                               | 4.9     |                   |      | 4.2        |        |      | 5.3   |        |      | NF      | --     | --   | 14.4          |

<sup>a</sup>Box sizes: FL 85#; CA 80# (CA & AZ 67# prior to 2010-11); TX 80#.

<sup>d</sup>Excludes 6 million boxes of economic abandonment.

<sup>b</sup>Includes April forecast for California.

<sup>e</sup>Excludes 2 million boxes of economic abandonment.

<sup>c</sup>Excludes 3 million boxes of economic abandonment.

SOURCE: NASS

## USDA Crop Estimates (Current)

| Time Period <sup>a</sup> | Oranges         |    |    | Grapefruit |    |    |
|--------------------------|-----------------|----|----|------------|----|----|
|                          | FL <sup>b</sup> | TX | CA | FL         | TX | CA |

----- million boxes<sup>c</sup> -----

### 2017-18

|     |      |     |      |     |     |     |
|-----|------|-----|------|-----|-----|-----|
| OCT | 54.0 | 1.7 | 46.0 | 4.9 | 5.3 | 4.3 |
| NOV | 50.0 | 1.7 | 46.0 | 4.7 | 5.3 | 4.2 |
| DEC | 46.0 | 1.7 | 46.0 | 4.7 | 5.3 | 4.2 |
| JAN | 46.0 | 1.8 | 46.0 | 4.7 | 4.1 | 4.2 |
| FEB | 45.0 | 1.8 | 46.0 | 4.7 | 4.1 | 4.2 |
| MAR |      |     |      |     |     |     |
| APR |      |     |      |     |     |     |
| MAY |      |     |      |     |     |     |
| JUN |      |     |      |     |     |     |
| JUL |      |     |      |     |     |     |

<sup>b</sup>Includes Temples.

SOURCE: NASS

<sup>c</sup>FL oranges and Temples 90# box, grapefruit 85# box. CA oranges 80# box, grapefruit 80# box. TX oranges 85# box, grapefruit 80# box.

## USDA Florida FCOJ Gallons-per-Box Yield Estimates

| Season                       | OCT                        | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  |
|------------------------------|----------------------------|------|------|------|------|------|------|------|------|------|
| ----- 42° Brix gallons ----- |                            |      |      |      |      |      |      |      |      |      |
| 1995-96                      | 1.54                       | 1.54 | 1.50 | 1.47 | 1.47 | 1.48 | 1.48 | 1.52 | 1.52 | 1.52 |
| 1996-97                      | 1.53                       | 1.53 | 1.53 | 1.53 | 1.54 | 1.54 | 1.57 | 1.58 | 1.58 | 1.58 |
| 1997-98                      | 1.55                       | 1.55 | 1.55 | 1.55 | 1.56 | 1.56 | 1.56 | 1.58 | 1.58 | 1.58 |
| 1998-99                      | 1.57                       | 1.57 | 1.57 | 1.57 | 1.60 | 1.62 | 1.63 | 1.64 | 1.63 | 1.63 |
| 1999-00                      | 1.60                       | 1.60 | 1.60 | 1.57 | 1.54 | 1.54 | 1.54 | 1.54 | 1.55 | 1.55 |
| 2000-01                      | 1.55                       | 1.55 | 1.55 | 1.55 | 1.54 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 |
| 2001-02                      | 1.55                       | 1.55 | 1.55 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 | 1.58 |
| 2002-03                      | 1.57                       | 1.57 | 1.57 | 1.57 | 1.57 | 1.55 | 1.55 | 1.53 | 1.52 | 1.54 |
| 2003-04                      | 1.55                       | 1.55 | 1.55 | 1.53 | 1.53 | 1.53 | 1.54 | 1.55 | 1.56 | 1.56 |
| 2004-05                      | 1.56                       | 1.56 | 1.56 | 1.56 | 1.58 | 1.58 | 1.58 | 1.60 | 1.60 | 1.58 |
| 2005-06                      | 1.58                       | 1.58 | 1.55 | 1.55 | 1.58 | 1.58 | 1.61 | 1.62 | 1.63 | 1.63 |
| 2006-07                      | 1.58                       | 1.58 | 1.58 | 1.58 | 1.61 | 1.62 | 1.65 | 1.65 | 1.65 | 1.65 |
| 2007-08                      | 1.60                       | 1.60 | 1.60 | 1.60 | 1.62 | 1.63 | 1.63 | 1.65 | 1.67 | 1.67 |
| 2008-09                      | 1.59                       | 1.59 | 1.58 | 1.62 | 1.62 | 1.64 | 1.64 | 1.65 | 1.66 | 1.67 |
| 2009-10                      | 1.63                       | 1.63 | 1.63 | 1.60 | 1.56 | 1.53 | 1.56 | 1.55 | 1.55 | 1.56 |
| 2010-11                      | 1.61                       | 1.61 | 1.61 | 1.61 | 1.57 | 1.57 | 1.58 | 1.58 | 1.59 | 1.59 |
| 2011-12                      | 1.60                       | 1.60 | 1.60 | 1.62 | 1.63 | 1.64 | 1.62 | 1.61 | 1.63 | 1.63 |
| 2012-13                      | 1.61                       | 1.61 | 1.61 | 1.61 | 1.62 | 1.61 | 1.61 | 1.60 | 1.59 | 1.59 |
| 2013-14                      | a                          | 1.60 | 1.61 | 1.61 | 1.61 | 1.61 | 1.60 | 1.58 | 1.57 | 1.57 |
| 2014-15                      | 1.60                       | 1.60 | 1.60 | 1.59 | 1.57 | 1.60 | 1.54 | 1.49 | 1.50 | 1.50 |
| 2015-16                      | 1.61                       | 1.58 | 1.56 | 1.50 | 1.45 | 1.45 | 1.42 | 1.41 | 1.41 | 1.41 |
| 2016-17                      | 1.40                       | 1.47 | 1.44 | 1.44 | 1.43 | 1.43 | 1.42 | 1.41 | 1.42 | 1.42 |
| 2017-18                      | No longer reported by USDA |      |      |      |      |      |      |      |      |      |

SOURCE: NASS

<sup>a</sup> No report due to government furlough.

# USDA Specialty Crop Estimates Versus Actual Production

| Season               | Florida Tangelos    |        | Tangerines          |        |  |        |         |        | California/ Arizona Lemons       |        |
|----------------------|---------------------|--------|---------------------|--------|--|--------|---------|--------|----------------------------------|--------|
|                      |                     |        | Florida             |        | California                                   |        | Arizona |        |                                  |        |
|                      | Oct.                | Actual | Oct.                | Actual | Oct.   | Actual | Oct.    | Actual | Oct.                             | Actual |
|                      | mil. 90-pound boxes |        | mil. 95-pound boxes |        | ----- mil. 80-pound boxes <sup>b</sup> ----- |        |         |        | mil. 80-pound boxes <sup>c</sup> |        |
| 1996-97              | 3.8                 | 4.0    | 6.0                 | 6.3    | 2.6  | 2.6    | .9      | .8     | 26.7                             | 25.3   |
| 1997-98              | 3.3                 | 2.9    | 5.5                 | 5.2    | 2.4  | 2.4    | .5      | .6     | 24.6                             | 23.6   |
| 1998-99              | 2.5                 | 2.6    | 4.2                 | 5.0    | 2.5  | 1.5    | .7      | 1.0    | 23.7                             | 19.65  |
| 1999-00              | 2.6                 | 2.2    | 6.4                 | 7.0    | 2.3  | 2.5    | .7      | .9     | 24.4                             | 22.1   |
| 2000-01              | 2.1                 | 2.1    | 6.3                 | 5.6    | 2.0  | 2.2    | .9      | .7     | 24.6                             | 26.2   |
| 2001-02              | 2.3                 | 2.2    | 7.0                 | 6.6    | 2.5  | 2.2    | .6      | .6     | 26.1                             | 21.1   |
| 2002-03              | 2.4                 | 2.4    | 5.2                 | 5.5    | 2.3  | 2.8    | .5      | .4     | 23.8                             | 27.0   |
| 2003-04              | 1.3                 | 1.0    | 6.6                 | 6.5    | 2.5  | 2.2    | .6      | .7     | 26.0                             | 21.0   |
| 2004-05              | 1.4                 | 1.6    | 4.7                 | 4.5    | 2.9  | 2.9    | .5      | .4     | 21.9                             | 22.9   |
| 2005-06              | 1.4                 | 1.4    | 6.0                 | 5.5    | 3.2  | 3.6    | .5      | .6     | 22.8                             | 25.8   |
| 2006-07              | 1.1                 | 1.3    | 4.6                 | 4.6    | 3.8  | 3.5    | .4      | .3     | 22.5                             | 21.0   |
| 2007-08              | 1.3                 | 1.5    | 5.1                 | 5.5    | 4.7  | 6.7    | .4      | .4     | 18.0                             | 16.3   |
| 2008-09              | 1.5                 | 1.2    | 4.9                 | 3.9    | 6.3  | 6.7    | .3      | .3     | 21.5                             | 24.0   |
| 2009-10              | 1.0                 | .9     | 4.9                 | 4.5    | 7.0  | 9.9    | .4      | .4     | 22.5                             | 23.2   |
| 2010-11              | 1.1                 | 1.2    | 4.5                 | 4.7    | 10.0   | 10.6   | .3      | .3     | 23.7                             | 23.0   |
| 2011-12              | 1.1                 | 1.2    | 4.7                 | 4.3    | 10.3   | 10.8   | .2      | .2     | 20.8                             | 21.3   |
| 2012-13              | 1.2                 | 1.0    | 4.4                 | 3.3    | 11.8   | 13.0   | .2      | .2     | 22.2                             | 22.8   |
| 2013-14 <sup>d</sup> | 1.0                 | .9     | 3.8                 | 2.9    | 13.5   | 14.7   | .2      | .2     | 23.3                             | 20.6   |
| 2014-15              | .9                  | .7     | 2.8                 | 2.3    | 16.0   | 18.7   | .2      | .2     | 21.0                             | 22.6   |
| 2015-16              | .5                  | .4     | 1.8                 | 1.4    | 19.0   | 21.7   | -       | -      | 21.1                             | 22.3   |
| 2016-17              | .3                  | .3     | 1.7                 | 1.3    | 23.0   | 24.0   | -       | -      | 22.8                             | 20.7   |
| 2017-18              | f                   |        | 1.0                 |        | 23.0   |        | -       | -      | 22.6                             |        |

<sup>a</sup>No longer forecast or reported.

<sup>b</sup>Box sizes: CA & AZ 80# (75# prior to 2010-11).

SOURCE: NASS

<sup>c</sup>Box sizes: CA & AZ 80# (76# prior to 2010-11).

<sup>d</sup>Oct: November crop forecast

<sup>f</sup>Tangelos combined with Tangerines

## Utilization of Florida Oranges

| Season                             | Fresh | Frozen<br>Concen-<br>trate | Chilled<br>Juice | Non-<br>Certified | Other | Total <sup>a</sup> |
|------------------------------------|-------|----------------------------|------------------|-------------------|-------|--------------------|
| ----- million 90-pound boxes ----- |       |                            |                  |                   |       |                    |
| 1996-97                            | 9.3   | 147.9                      | 65.7             | 1.4               | 1.9   | 226.2              |
| 1997-98                            | 8.7   | 156.4                      | 74.8             | 2.5               | 1.6   | 244.0              |
| 1998-99                            | 8.6   | 93.6                       | 80.1             | 2.2               | 1.2   | 186.0              |
| 1999-00                            | 6.9   | 129.5                      | 90.1             | 2.5               | 4.0   | 233.0              |
| 2000-01                            | 6.7   | 120.5                      | 89.6             | 3.0               | 3.5   | 223.3              |
| 2001-02                            | 6.9   | 132.2                      | 85.9             | 2.5               | 2.5   | 230.0              |
| 2002-03                            | 6.3   | 98.7                       | 92.5             | 3.4               | 2.1   | 203.0              |
| 2003-04                            | 6.2   | 137.0                      | 93.4             | 3.7               | 1.7   | 242.0              |
| 2004-05                            | 4.9   | 52.2                       | 88.5             | 2.5               | 1.7   | 149.8              |
| 2005-06                            | 4.5   | 49.1                       | 90.2             | 2.8               | 1.1   | 147.7              |
| 2006-07                            | 5.0   | 46.0                       | 75.2             | 1.4               | 1.4   | 129.0              |
| 2007-08                            | 4.4   | 78.0                       | 85.1             | 1.4               | 1.3   | 170.2              |
| 2008-09                            | 5.5   | 71.2                       | 82.8             | 1.4               | 1.6   | 162.5              |
| 2009-10                            | 4.5   | 51.3                       | 75.1             | 1.4               | 1.4   | 133.7              |
| 2010-11                            | 4.5   | 50.3                       | 82.7             | 1.5               | 1.6   | 140.5              |
| 2011-12                            | 4.6   | 63.9                       | 75.5             | 1.5               | 1.2   | 146.7              |
| 2012-13                            | 4.6   | 47.0                       | 79.2             | 1.4               | 1.3   | 133.6              |
| 2013-14                            | 4.2   | 22.7                       | 76.0             | 1.7               | 0.8   | 104.6              |
| 2014-15                            | 3.6   | 19.2                       | 71.9             | 1.1               | 1.0   | 96.8               |
| 2015-16                            | 3.0   | 15.8                       | 61.8             | 0.9               | 0.0   | 81.7               |
| 2016-17                            | 2.2   | 12.6                       | 53.2             | 0.7               | 0.0   | 68.8               |

<sup>a</sup>May not add up due to rounding.

SOURCE: FDOC-EMRD

## Utilization of Florida Grapefruit

| Season                             | Fresh | Frozen<br>Concen-<br>trate | Chilled<br>Juice | Non-<br>Certified | Other | Total             |
|------------------------------------|-------|----------------------------|------------------|-------------------|-------|-------------------|
| ----- million 85-pound boxes ----- |       |                            |                  |                   |       |                   |
| 1996-97                            | 22.1  | 25.0                       | 7.1              | 1.1               | .5    | 55.8 <sup>a</sup> |
| 1997-98                            | 20.0  | 20.6                       | 7.2              | 1.2               | .6    | 49.6 <sup>a</sup> |
| 1998-99                            | 18.7  | 19.0                       | 7.5              | 1.2               | .7    | 47.1              |
| 1999-00                            | 17.0  | 24.1                       | 10.4             | 1.3               | .6    | 53.4              |
| 2000-01                            | 15.9  | 21.2                       | 6.4              | 1.6               | .9    | 46.0 <sup>b</sup> |
| 2001-02                            | 15.9  | 21.7                       | 6.4              | 1.5               | 1.2   | 46.7              |
| 2002-03                            | 14.1  | 16.0                       | 6.2              | 1.5               | .9    | 38.7              |
| 2003-04                            | 15.2  | 17.2                       | 6.6              | 1.5               | .4    | 40.9              |
| 2004-05                            | 6.7   | 2.5                        | 2.8              | .7                | .2    | 12.8              |
| 2005-06                            | 6.2   | 8.0                        | 4.1              | .7                | .3    | 19.3              |
| 2006-07                            | 10.3  | 11.6                       | 4.4              | .6                | .3    | 27.2              |
| 2007-08                            | 9.9   | 10.4                       | 5.2              | .7                | .3    | 26.6              |
| 2008-09                            | 8.7   | 8.4                        | 3.7              | .7                | .2    | 21.7              |
| 2009-10                            | 8.7   | 6.0                        | 4.6              | .6                | .3    | 20.3              |
| 2010-11                            | 7.7   | 7.0                        | 4.2              | .7                | .2    | 19.8              |
| 2011-12                            | 7.2   | 6.9                        | 3.8              | .7                | .2    | 18.9              |
| 2012-13                            | 7.1   | 6.1                        | 4.2              | .6                | .3    | 18.4              |
| 2013-14                            | 6.1   | 4.7                        | 4.0              | .5                | .2    | 15.7              |
| 2014-15                            | 5.3   | 3.8                        | 3.2              | .5                | .2    | 13.0              |
| 2015-16                            | 4.5   | 2.8                        | 3.0              | .4                | .0    | 10.8              |
| 2016-17                            | 3.2   | 1.8                        | 2.4              | .3                | .0    | 7.8               |

<sup>a</sup>Excludes 6 million boxes of economic abandonment.

<sup>b</sup>Excludes 2 million boxes of economic abandonment.

SOURCE: FDOC-EMRD

<sup>c</sup>Projection, as of July 2016 Forecast



## Total Shipments of Florida Fresh Citrus<sup>a</sup>

| Aug-July<br>Season                      | Grapefruit | Oranges | Temples | Tangelos | Honey<br>Tangerines | Tangerines | Total  |
|---|------------|---------|---------|----------|---------------------|------------|--------|
| ----- thousand 4/5-bushel cartons ----- |            |         |         |          |                     |            |        |
| 1998-99                                 | 37,399     | 17,303  | 956     | 1,199    | 2,651               | 4,102      | 63,610 |
| 1999-00                                 | 33,925     | 13,906  | 694     | 1,076    | 3,427               | 4,972      | 58,002 |
| 2000-01                                 | 31,850     | 13,397  | 585     | 1,096    | 2,368               | 4,517      | 53,813 |
| 2001-02                                 | 31,783     | 13,860  | 592     | 967      | 2,627               | 5,162      | 54,992 |
| 2002-03                                 | 28,270     | 12,552  | 471     | 837      | 3,380               | 3,883      | 49,392 |
| 2003-04                                 | 30,350     | 12,310  | 552     | 646      | 3,968               | 4,284      | 52,111 |
| 2004-05                                 | 13,409     | 9,810   | 313     | 628      | 2,771               | 3,336      | 30,267 |
| 2005-06                                 | 12,473     | 9,065   | 284     | 658      | 3,252               | 3,435      | 29,167 |
| 2006-07                                 | 20,623     | 9,591   | 348     | 691      | 2,639               | 2,928      | 36,821 |
| 2007-08                                 | 19,829     | 8,581   | 266     | 717      | 2,874               | 3,210      | 35,477 |
| 2008-09                                 | 17,353     | 10,827  | 263     | 827      | 1,686               | 3,470      | 34,426 |
| 2009-10                                 | 17,421     | 8,726   | 251     | 638      | 2,750               | 2,710      | 32,496 |
| 2010-11                                 | 15,455     | 8,693   | 263     | 684      | 2,310               | 3,107      | 30,513 |
| 2011-12                                 | 14,491     | 9,077   | 182     | 673      | 2,146               | 2,951      | 29,520 |
| 2012-13                                 | 14,271     | 9,023   | 166     | 788      | 1,664               | 2,308      | 28,219 |
| 2013-14                                 | 12,108     | 8,129   | 177     | 581      | 1,373               | 2,071      | 24,439 |
| 2014-15                                 | 10,549     | 7,831   | 141     | 597      | 1,061               | 1,810      | 21,989 |
| 2015-16                                 | 9,071      | 6,017   | 122     | 414      | 765                 | 1,071      | 17,460 |
| 2016-17                                 | 6,491      | 4,375   | 66      | 253      | 492                 | 911        | 12,590 |
| 2017-18                                 |            |         |         |          |                     |            |        |

<sup>a</sup>Columns may not add up due to rounding. <sup>b</sup>Projection as of 7/5/2016

SOURCE: FDOC-EMRD

## Florida Fresh Grapefruit Shipments

| Aug-July<br>Season                      | Domestic | Canada | Europe | Japan  | Other<br>Pacific Rim | Other | Total  |
|---|----------|--------|--------|--------|----------------------|-------|--------|
| ----- thousand 4/5 bushel cartons ----- |          |        |        |        |                      |       |        |
| 2000-01                                 | 11,602   | 2,236  | 6,637  | 10,719 | 635                  | 21    | 31,850 |
| 2001-02                                 | 11,103   | 2,183  | 6,549  | 11,227 | 696                  | 25    | 31,783 |
| 2002-03                                 | 9,938    | 1,619  | 6,228  | 10,150 | 325                  | 9     | 28,270 |
| 2003-04                                 | 8,999    | 1,780  | 6,912  | 12,123 | 529                  | 7     | 30,350 |
| 2004-05                                 | 4,891    | 768    | 2,786  | 4,833  | 119                  | 13    | 13,409 |
| 2005-06                                 | 4,790    | 773    | 2,115  | 4,559  | 232                  | 4     | 12,473 |
| 2006-07                                 | 6,751    | 1,282  | 4,395  | 7,860  | 332                  | 3     | 20,623 |
| 2007-08                                 | 6,183    | 1,163  | 5,015  | 7,018  | 443                  | 9     | 19,829 |
| 2008-09                                 | 6,045    | 1,088  | 3,924  | 6,036  | 258                  | 3     | 17,353 |
| 2009-10                                 | 6,110    | 1,151  | 3,455  | 6,277  | 426                  | 3     | 17,421 |
| 2010-11                                 | 5,397    | 1,098  | 3,121  | 5,409  | 426                  | 5     | 15,455 |
| 2011-12                                 | 5,533    | 992    | 2,799  | 4,807  | 360                  | 1     | 14,491 |
| 2012-13                                 | 5,990    | 1,087  | 2,917  | 3,894  | 384                  | -     | 14,271 |
| 2013-14                                 | 5,131    | 987    | 2,609  | 2,898  | 482                  | 0     | 12,108 |
| 2014-15                                 | 4,423    | 805    | 2,328  | 2,430  | 562                  | 1     | 10,549 |
| 2015-16                                 | 3,791    | 655    | 1,926  | 2,125  | 574                  | -     | 9,071  |
| 2016-17                                 | 2,662    | 423    | 1,420  | 1,583  | 403                  | -     | 6,491  |
| 2017-18                                 |          |        |        |        |                      |       |        |

SOURCE: FDOC-EMRD

## Florida Fresh Orange and Temple<sup>a</sup> Shipments

| Aug-July<br>Season                      | Domestic | Canada | Europe | Japan | Other<br>Pacific Rim | Other | Total  |
|---|----------|--------|--------|-------|----------------------|-------|--------|
| ----- thousand 4/5 bushel cartons ----- |          |        |        |       |                      |       |        |
| 1999-00                                 | 13,341   | 873    | 7      | 20    | 355                  | 5     | 14,601 |
| 2000-01                                 | 12,465   | 870    | 24     | 11    | 594                  | 18    | 13,982 |
| 2001-02                                 | 13,264   | 1,033  | 43     | 4     | 95                   | 13    | 14,452 |
| 2002-03                                 | 11,977   | 797    | 24     | 3     | 215                  | 7     | 13,022 |
| 2003-04                                 | 11,416   | 868    | 178    | 2     | 330                  | 68    | 12,862 |
| 2004-05                                 | 9,119    | 580    | 194    | 1     | 204                  | 25    | 10,123 |
| 2005-06                                 | 8,660    | 540    | 6      | -     | 119                  | 23    | 9,349  |
| 2006-07                                 | 9,259    | 564    | 0      | -     | 113                  | 4     | 9,939  |
| 2007-08                                 | 8,068    | 498    | 97     | 2     | 180                  | 2     | 8,847  |
| 2008-09                                 | 10,249   | 594    | 87     | 1     | 158                  | 1     | 11,089 |
| 2009-10                                 | 8,241    | 550    | 53     | -     | 130                  | 2     | 8,977  |
| 2010-11                                 | 8,259    | 554    | 43     | 1     | 96                   | 3     | 8,956  |
| 2011-12                                 | 8,654    | 511    | 25     | 0     | 66                   | 2     | 9,258  |
| 2012-13                                 | 8,502    | 571    | 8      | 4     | 92                   | 11    | 9,189  |
| 2013-14                                 | 7,653    | 534    | 0      | 3     | 109                  | 5     | 8,305  |
| 2014-15                                 | 7,266    | 648    | 0      | 0     | 55                   | 2     | 7,972  |
| 2015-16                                 | 5,386    | 504    | 0      | -     | 127                  | -     | 6,017  |
| 2016-17                                 | 3,959    | 388    | 0      | 0     | 28                   | -     | 4,375  |
| 2017-18                                 |          |        |        |       |                      |       |        |

<sup>a</sup>Temples no longer included with oranges starting with 2015-16 season

0 = fewer than 499 cartons shipped, - = no shipments.

SOURCE: FDOC-EMRD

## World Orange Production

| Country                       | Average   |           |           |           |           | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|--------|--------|--------|--------|--------|--------|
|                               | 1961-1970 | 1971-1980 | 1981-1990 | 1991-2000 | 2001-2010 |        |        |        |        |        |        |
| ----- 1,000 metric tons ----- |           |           |           |           |           |        |        |        |        |        |        |
| United States                 | 5,439     | 8,836     | 7,437     | 9,990     | 9,284     | 8,078  | 8,268  | 7,501  | 6,140  | 5,786  | 5,160  |
| % of U.S. to World            | 27.1%     | 27.2%     | 17.2%     | 17.0%     | 14.3%     | 11.2%  | 11.8%  | 10.3%  | 10.6%  | 8.7%   | 7.1%   |
| Florida <sup>a</sup>          | 4,271     | 7,126     | 5,408     | 8,055     | 7,340     | 5,736  | 5,989  | 5,454  | 4,270  | 3,952  | 3,335  |
| % of Florida to World         | 21.2%     | 21.9%     | 12.5%     | 13.7%     | 11.3%     | 7.9%   | 8.5%   | 7.5%   | 5.9%   | 5.4%   | 4.6%   |
| Brazil                        | 2,363     | 6,564     | 13,998    | 20,390    | 17,998    | 19,811 | 18,013 | 17,550 | 16,928 | 16,940 | 17,251 |
| China, mainland               | 58        | 93        | 578       | 1,558     | 2,986     | 6,688  | 7,096  | 7,306  | 7,802  | 8,052  | 8,420  |
| India                         | 898       | 1,211     | 1,470     | 2,067     | 3,768     | 4,571  | 4,360  | 6,426  | 7,318  | 7,693  | 7,503  |
| Mexico                        | 1,261     | 1,720     | 2,002     | 3,318     | 4,094     | 4,080  | 3,667  | 4,410  | 4,533  | 4,516  | 4,603  |
| Spain                         | 1,736     | 1,887     | 2,065     | 2,624     | 2,939     | 2,819  | 2,942  | 3,394  | 3,494  | 2,935  | 3,138  |
| Egypt                         | 415       | 810       | 1,248     | 1,561     | 2,015     | 2,578  | 2,786  | 2,855  | 3,136  | 3,351  | 3,438  |
| Italy                         | 1,103     | 1,573     | 1,882     | 1,797     | 2,140     | 2,470  | 1,771  | 1,701  | 1,669  | 1,905  | 1,495  |
| Turkey                        | 320       | 565       | 699       | 902       | 1,429     | 1,730  | 1,661  | 1,781  | 1,780  | 1,817  | 1,850  |
| South Africa                  | 456       | 547       | 604       | 906       | 1,329     | 1,496  | 1,644  | 1,811  | 1,797  | 1,763  | 1,366  |
| Indonesia                     | 97        | 186       | 448       | 542       | 1,929     | 1,819  | 1,612  | 1,655  | 1,927  | 1,856  | 2,138  |
| Pakistan                      | 307       | 474       | 990       | 1,314     | 1,414     | 1,388  | 1,503  | 1,401  | 1,517  | 1,677  | 1,593  |
| Iran (Islamic Republic of)    | 100       | 285       | 827       | 1,652     | 2,037     | 2,293  | 2,456  | 2,547  | 1,530  | 1,650  | 1,944  |
| Morocco                       | 572       | 679       | 763       | 916       | 760       | 859    | 962    | 759    | 1,001  | 869    | 909    |
| Argentina                     | 611       | 765       | 640       | 763       | 849       | 1,130  | 934    | 860    | 1,022  | 1,001  | 1,032  |
| Algeria                       | 298       | 330       | 186       | 257       | 461       | 815    | 803    | 891    | 955    | 1,005  | 893    |
| Greece                        | 367       | 518       | 751       | 948       | 935       | 847    | 850    | 876    | 754    | 956    | 919    |
| Ghana                         | 48        | 91        | 86        | 199       | 459       | 600    | 625    | 663    | 690    | 690    | 690    |
| Syrian Arab Republic          | 4         | 20        | 88        | 304       | 541       | 734    | 542    | 792    | 693    | 763    | 799    |
| All Others                    | 3,652     | 5,351     | 6,426     | 6,842     | 7,555     | 7,584  | 7,858  | 7,935  | 7,670  | 7,569  | 8,045  |
| WORLD TOTAL                   | 20,104    | 32,505    | 43,190    | 58,850    | 64,921    | 72,389 | 70,353 | 73,113 | 72,357 | 72,794 | 73,188 |

<sup>a</sup>Temples included.

SOURCE: FAO-FAOSTAT-Agricultural Data

## World Grapefruit Production

| Country                       | Average   |           |           |           |           | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  |
|-------------------------------|-----------|-----------|-----------|-----------|-----------|-------|-------|-------|-------|-------|-------|
|                               | 1961-1970 | 1971-1980 | 1981-1990 | 1991-2000 | 2001-2010 |       |       |       |       |       |       |
| ----- 1,000 metric tons ----- |           |           |           |           |           |       |       |       |       |       |       |
| United States                 | 1,666     | 2,506     | 2,278     | 2,387     | 1,549     | 1,147 | 1,204 | 1,092 | 950   | 789   | 728   |
| % of U.S. to World            | 67.7%     | 63.2%     | 53.4%     | 46.8%     | 25.5%     | 14.5% | 14.6% | 12.9% | 10.9% | 8.9%  | 8.0%  |
| Florida                       | 1,324     | 1,869     | 1,787     | 1,957     | 1,157     | 727   | 707   | 603   | 497   | 416   | 299   |
| % of Florida to World         | 53.7%     | 47.2%     | 41.9%     | 38.4%     | 19.0%     | 9.2%  | 8.6%  | 7.1%  | 5.7%  | 4.7%  | 3.3%  |
| China, mainland               | 8         | 7         | 41        | 145       | 1,212     | 3,207 | 3,370 | 3,717 | 4,064 | 4,368 | 4,587 |
| Viet Nam                      | 15        | 25        | 54        | 110       | 270       | 424   | 437   | 440   | 467   | 471   | 497   |
| Mexico                        | 14        | 73        | 95        | 173       | 367       | 397   | 415   | 425   | 425   | 424   | 438   |
| South Africa                  | 69        | 103       | 89        | 160       | 343       | 416   | 309   | 443   | 418   | 392   | 361   |
| India                         | 23        | 25        | 46        | 99        | 172       | 196   | 323   | 285   | 249   | 261   | 391   |
| Turkey                        | 4         | 14        | 26        | 75        | 160       | 219   | 227   | 229   | 230   | 250   | 253   |
| Thailand                      | 10        | 14        | 15        | 96        | 276       | 272   | 246   | 247   | 242   | 233   | 231   |
| Sudan                         | 41        | 49        | 56        | 64        | 145       | 18    | 196   | 198   | 198   | 219   | 220   |
| Israel                        | 177       | 432       | 412       | 368       | 256       | 184   | 247   | 211   | 227   | 185   | 176   |
| Argentina                     | 76        | 162       | 161       | 206       | 217       | 172   | 132   | 114   | 131   | 130   | 102   |
| Tunisia                       | 2         | 11        | 33        | 53        | 78        | 91    | 96    | 96    | 99    | 101   | 103   |
| Iran (Islamic Republic of)    | 3         | 8         | 23        | 53        | 46        | 78    | 82    | 87    | 94    | 88    | 75    |
| Brazil                        | 26        | 33        | 47        | 62        | 70        | 76    | 78    | 78    | 79    | 80    | 80    |
| China, Taiwan Province of     | 11        | 14        | 23        | 85        | 95        | 83    | 84    | 76    | 80    | 72    | 76    |
| Spain                         | 5         | 6         | 16        | 25        | 36        | 48    | 57    | 59    | 69    | 69    | 71    |
| Bangladesh                    | 3         | 4         | 6         | 12        | 41        | 59    | 61    | 60    | 63    | 63    | 66    |
| Cuba                          | 12        | 38        | 235       | 307       | 176       | 112   | 85    | 64    | 41    | 56    | 56    |
| Swaziland                     | 16        | 35        | 40        | 40        | 40        | 54    | 54    | 47    | 52    | 47    | 47    |
| Syrian Arab Republic          | -         | -         | -         | -         | 23        | 40    | 36    | 45    | 45    | 47    | 50    |
| Paraguay                      | 16        | 42        | 75        | 63        | 42        | 42    | 53    | 44    | 41    | 50    | 50    |
| All Others                    | 267       | 364       | 495       | 514       | 470       | 591   | 450   | 435   | 425   | 439   | 415   |
| WORLD TOTAL                   | 2,463     | 3,964     | 4,267     | 5,096     | 6,083     | 7,926 | 8,241 | 8,491 | 8,686 | 8,835 | 9,074 |

SOURCE: FAO-FAOSTAT-Agricultural Data

<sup>b</sup>data not previously collected for these countries.

## World Tangerine Production

| Country                          | Average   |           |           |           |           | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   |
|----------------------------------|-----------|-----------|-----------|-----------|-----------|--------|--------|--------|--------|--------|--------|
|                                  | 1961-1970 | 1971-1980 | 1981-1990 | 1991-2000 | 2001-2010 |        |        |        |        |        |        |
| ----- 1,000 metric tons -----    |           |           |           |           |           |        |        |        |        |        |        |
| United States                    | 320       | 599       | 496       | 500       | 416       | 596    | 682    | 619    | 664    | 765    | 780    |
| % of U.S. to World               | 7.8%      | 7.6%      | 4.7%      | 3.0%      | 1.8%      | 2.2%   | 2.5%   | 2.1%   | 2.2%   | 2.3%   | 2.4%   |
| Florida                          | 173       | 214       | 120       | 185       | 226       | 185    | 141    | 125    | 98     | 61     | 58     |
| % of Florida to World            | 4.2%      | 2.7%      | 1.1%      | 1.1%      | 1.0%      | 0.7%   | 0.5%   | 0.4%   | 0.3%   | 0.2%   | 0.2%   |
| China, mainland                  | 161       | 257       | 1,614     | 5,593     | 9,967     | 13,891 | 14,469 | 15,442 | 15,900 | 16,861 | 17,155 |
| Spain                            | 198       | 679       | 1,150     | 1,706     | 2,122     | 2,117  | 1,871  | 2,199  | 2,390  | 3,592  | 2,942  |
| Turkey                           | 47        | 120       | 264       | 442       | 710       | 872    | 875    | 942    | 1,047  | 1,156  | 1,337  |
| Brazil                           | 291       | 433       | 637       | 756       | 1,186     | 1,005  | 960    | 938    | 965    | 1,001  | 998    |
| Morocco                          | 83        | 186       | 289       | 365       | 399       | 753    | 877    | 664    | 1,185  | 993    | 1,078  |
| Egypt                            | 66        | 87        | 133       | 377       | 701       | 848    | 885    | 937    | 957    | 983    | 1,020  |
| Japan                            | 1,560     | 3,266     | 2,339     | 1,387     | 1,035     | 928    | 846    | 896    | 875    | 778    | 805    |
| Italy                            | 193       | 318       | 417       | 482       | 675       | 864    | 760    | 643    | 617    | 822    | 649    |
| Republic of Korea                | 2         | 70        | 388       | 587       | 654       | 681    | 692    | 683    | 722    | 672    | 699    |
| Iran (Islamic Republic of)       | 24        | 66        | 217       | 628       | 626       | 582    | 615    | 650    | 694    | 666    | 652    |
| Pakistan                         | 108       | 168       | 368       | 488       | 525       | 515    | 558    | 520    | 564    | 623    | 592    |
| Mexico                           | 88        | 103       | 125       | 246       | 400       | 406    | 450    | 494    | 492    | 486    | 467    |
| Argentina                        | 171       | 254       | 430       | 577       | 478       | 555    | 374    | 365    | 487    | 491    | 468    |
| Peru                             | 9         | 19        | 29        | 87        | 172       | 236    | 281    | 314    | 340    | 358    | 404    |
| Algeria                          | 111       | 147       | 88        | 95        | 141       | 218    | 208    | 231    | 228    | 262    | 234    |
| Bolivia (Plurinational State of) | 15        | 19        | 36        | 50        | 59        | 125    | 128    | 123    | 199    | 213    | 226    |
| China, Taiwan Province of        | 96        | 237       | 237       | 215       | 155       | 197    | 189    | 178    | 197    | 160    | 160    |
| South Africa                     | 13        | 20        | 29        | 70        | 132       | 163    | 163    | 167    | 172    | 176    | 180    |
| Israel                           | 43        | 75        | 128       | 119       | 118       | 131    | 179    | 154    | 144    | 204    | 164    |
| Nepal                            | -         | -         | 7         | 68        | 115       | 179    | 167    | 147    | 149    | 149    | 147    |
| All Others                       | 503       | 706       | 1,093     | 1,616     | 1,783     | 1,445  | 1,540  | 1,537  | 1,566  | 1,556  | 1,636  |
| WORLD TOTAL                      | 4,100     | 7,829     | 10,511    | 16,455    | 22,571    | 27,307 | 27,769 | 28,843 | 30,552 | 32,969 | 32,793 |

SOURCE: FAO-FAOSTAT-Agricultural Data

## Brazil: Bearing Trees, Production and Utilization of Oranges in the State of São Paulo

| Production<br>Season <sup>a</sup> | Bearing<br>Trees | Oranges<br>Produced       | Oranges Utilized for            |    | Frozen Concentrate Production <sup>b</sup> |                 |
|-----------------------------------|------------------|---------------------------|---------------------------------|----|--|-----------------|
|                                   |                  |                           | Frozen Concentrate <sup>b</sup> |    | 65° Brix                                   | SSE             |
|                                   | million          | ----- million boxes ----- | % of total                      |    | thousand MT                                | million gallons |
| 1990-91                           | 109              | 242                       | 202                             | 83 | 838  | 1,167           |
| 1995-96                           | 163              | 357                       | 263                             | 74 | 1,062                                      | 1,479           |
| 2000-01                           | 162              | 355                       | 270                             | 76 | 1,140                                      | 1,588           |
| 2001-02                           | 161              | 280                       | 220                             | 79 | 953  | 1,327           |
| 2002-03                           | 160              | 365                       | 305                             | 84 | 1,309                                      | 1,823           |
| 2003-04                           | 159              | 290                       | 230                             | 79 | 1,040                                      | 1,448           |
| 2004-05                           | 160              | 380                       | 336                             | 88 | 1,407                                      | 1,959           |
| 2005-06                           | 162              | 320                       | 284                             | 89 | 1,240                                      | 1,727           |
| 2006-07                           | 164              | 350                       | 316                             | 90 | 1,380                                      | 1,922           |
| 2007-08                           | 165              | 360                       | 325                             | 90 | 1,420                                      | 1,978           |
| 2008-09                           | 166              | 315                       | 276                             | 88 | 1,195                                      | 1,664           |
| 2009-10                           | 164              | 320                       | 274                             | 86 | 1,220                                      | 1,699           |
| 2010-11                           | 167              | 285                       | 257                             | 90 | 1,055                                      | 1,469           |
| 2011-12                           | 171              | 444                       | 395                             | 89 | 1,105                                      | 1,539           |
| 2012-13                           | 173              | 390                       | 310                             | 79 | 1,188                                      | 1,654           |
| 2013-14                           | 157              | 290                       | 245                             | 84 | 890  | 1,239           |
| 2014-15                           | 166              | 325                       | 270                             | 83 | 1,205                                      | 1,678           |
| 2015-16                           | 174              | 301                       | 262                             | 87 | 699  | 973             |
| 2016-17 <sup>c</sup>              | 176              | 245                       | 222                             | 91 | 490  | 682             |
| 2017-18 <sup>d</sup>              | 175              | 365                       | 340                             | 93 | 920  | 1,281           |

<sup>a</sup>July-June. <sup>b</sup>Beginning 2004-05, includes NFC for export. <sup>c</sup>Estimate. <sup>d</sup>Projected.

SOURCE: FAS

## Brazil FCOJ Exports and Prices

| Year | Exports        | U.S. \$<br>per MT <sup>a</sup> | Season    | Exports        | U.S. \$<br>per MT <sup>a</sup> |
|------|----------------|--------------------------------|-----------|----------------|--------------------------------|
|      | MT<br>65° Brix | dollars                        | July-June | MT<br>65° Brix | dollars                        |
| 1974 | 108,460        | 546                            | 1996-97   | 1,153,799      | 1,024                          |
| 1975 | 180,897        | 454                            | 1997-98   | 1,280,921      | 877                            |
| 1976 | 209,841        | 481                            | 1998-99   | 1,140,606      | 1,112                          |
| 1977 | 213,524        | 829                            | 1999-00   | 1,295,725      | 969                            |
| 1978 | 335,629        | 991                            | 2000-01   | 1,235,679      | 691                            |
| 1979 | 308,328        | 965                            | 2001-02   | 1,033,628      | 767                            |
| 1980 | 401,144        | 845                            | 2002-03   | 998,851        | 875                            |
| 1981 | 639,143        | 1,032                          | 2003-04   | 1,071,045      | 831                            |
| 1982 | 502,034        | 1,101                          | 2004-05   | 1,076,942      | 755                            |
| 1983 | 552,373        | 1,104                          | 2005-06   | 1,001,714      | 839                            |
| 1984 | 905,231        | 1,563                          | 2006-07   | 1,018,699      | 1,408                          |
| 1985 | 484,782        | 1,544                          | 2007-08   | 893,353        | 1,523                          |
| 1986 | 808,262        | 844                            | 2008-09   | 611,437        | 1,386                          |
| 1987 | 754,968        | 1,100                          | 2009-10   | 524,981        | 1,258                          |
| 1988 | 663,600        | 1,716                          | 2010-11   | 422,883        | 1,722                          |
| 1989 | 710,114        | 1,381                          | 2011-12   | 463,297        | 2,108                          |
| 1990 | 899,801        | 1,527                          | 2012-13   | 582,118        | 1,900                          |
| 1991 | 913,747        | 985                            | 2013-14   | 526,193        | 1,801                          |
| 1992 | 968,627        | 1,087                          | 2014-15   | 599,011        | 1,309                          |
| 1993 | 1,165,241      | 709                            | 2015-16   | 508,016        | 1,543                          |
| 1994 | 1,146,758      | 859                            | 2016-17   | 420,017        | 1,785                          |
| 1995 | 960,905        | 1,150                          |           |                |                                |
| 1996 | 1,202,427      | 1,156                          |           |                |                                |
| 1997 | 1,179,572      | 850                            |           |                |                                |

<sup>a</sup>FOB value of product, Brazil.

SOURCES: CACEX, DECEX, FAS.



## Estimated U.S. Orange Juice Availability

| Oct-Sept<br>Season              | Florida            |       |        | Texas <sup>a</sup> | Calif/ <sup>a</sup><br>Arizona | U.S. Imports |       | U.S.<br>Exports | Total<br>Domestic<br>Availability |
|---------------------------------|--------------------|-------|--------|--------------------|--------------------------------|--------------|-------|-----------------|-----------------------------------|
|                                 | FCOJ<br>11.8° Brix | COJ   | Total  |                    |                                | Florida      | Total |                 |                                   |
| ----- million SSE gallons ----- |                    |       |        |                    |                                |              |       |                 |                                   |
| 1998-99                         | 641.7              | 512.9 | 1154.6 | 1.8                | 69.6                           | 188.5        | 350.2 | 146.6           | 1429.7                            |
| 1999-00                         | 838.9              | 583.5 | 1422.4 | 2.2                | 86.6                           | 139.4        | 339.4 | 145.2           | 1705.4                            |
| 2000-01                         | 791.8              | 565.2 | 1357.1 | 5.6                | 36.0                           | 125.2        | 257.7 | 122.9           | 1533.5                            |
| 2001-02                         | 868.6              | 546.5 | 1415.0 | 2.0                | 30.4                           | 96.6         | 188.8 | 181.2           | 1455.1                            |
| 2002-03                         | 633.5              | 574.6 | 1208.1 | 2.6                | 50.6                           | 155.2        | 290.9 | 104.8           | 1447.4                            |
| 2003-04                         | 881.7              | 566.3 | 1448.0 | 2.8                | 24.7                           | 84.8         | 222.3 | 123.0           | 1574.9                            |
| 2004-05                         | 347.3              | 564.0 | 911.3  | 3.2                | 63.4                           | 129.9        | 357.5 | 119.1           | 1216.3                            |
| 2005-06                         | 341.7              | 592.6 | 934.3  | 1.9                | 69.8                           | 125.2        | 298.8 | 137.7           | 1167.2                            |
| 2006-07                         | 319.3              | 501.6 | 820.9  | 3.0                | 77.4                           | 96.6         | 399.2 | 122.6           | 1177.9                            |
| 2007-08                         | 546.0              | 560.6 | 1106.6 | 2.4                | 61.6                           | 155.2        | 405.5 | 138.7           | 1437.4                            |
| 2008-09                         | 487.9              | 547.0 | 1034.8 | 1.3                | 30.8                           | 84.8         | 317.4 | 124.7           | 1259.6                            |
| 2009-10                         | 332.2              | 473.6 | 805.9  | 1.1                | 39.6                           | 129.9        | 327.6 | 146.7           | 1027.5                            |
| 2010-11                         | 331.6              | 532.4 | 864.0  | 1.7                | 54.7                           | 97.8         | 265.2 | 214.2           | 971.5                             |
| 2011-12                         | 429.9              | 497.7 | 927.6  | 0.9                | 37.6                           | 169.0        | 223.3 | 151.7           | 1037.7                            |
| 2012-13                         | 307.5              | 513.2 | 820.7  | 1.6                | 28.2                           | 180.3        | 420.5 | 169.4           | 1101.6                            |
| 2013-14                         | 144.0              | 478.6 | 622.6  | 1.8                | 40.2                           | 126.9        | 417.6 | 160.0           | 922.2                             |
| 2014-15                         | 116.6              | 430.0 | 546.6  | 1.3                | 42.9                           | 108.3        | 458.4 | 113.1           | 936.0                             |
| 2015-16                         | 89.9               | 353.5 | 443.4  | 1.9                | 48.9                           | 96.6         | 390.1 | 94.3            | 790.1                             |
| 2016-17                         | 72.4               | 314.0 | 386.4  | 1.4                | 36.9                           | 95.4         | 404.1 | 74.1            | 754.6                             |

<sup>a</sup>Based on assumed yields.

SOURCE: Processor Reports, NASS Citrus Summary, FAS, NASS, U.S. Department of Commerce, FDOC-EMRD

## Estimated U.S. Orange Juice Supply and Demand

| Oct-Sept<br>Season              | Total<br>Domestic<br>Availability | Net Carry<br>Over <sup>a</sup> | Total<br>Presumed<br>Consumption | Sales               |                    | Population | Per Capita<br>Consumption |
|---------------------------------|-----------------------------------|--------------------------------|----------------------------------|---------------------|--------------------|------------|---------------------------|
|                                 |                                   |                                |                                  | Retail <sup>b</sup> | Other <sup>c</sup> |            |                           |
| ----- million SSE gallons ----- |                                   |                                |                                  |                     |                    | millions   | SSE gal.                  |
| 1998-99                         | 1,430                             | -117                           | 1,547                            | 853                 | 694                | 278        | 5.6                       |
| 1999-00                         | 1,705                             | +106                           | 1,599                            | 872                 | 726                | 281        | 5.7                       |
| 2000-01                         | 1,534                             | +52                            | 1,482                            | 889                 | 593                | 284        | 5.2                       |
| 2001-02                         | 1,455                             | -5                             | 1,460                            | 862                 | 598                | 287        | 5.1                       |
| 2002-03                         | 1,447                             | +14                            | 1,433                            | 836                 | 596                | 290        | 4.9                       |
| 2003-04                         | 1,575                             | +135                           | 1,440                            | 807                 | 633                | 292        | 4.9                       |
| 2004-05                         | 1,216                             | -178                           | 1,394                            | 795                 | 599                | 295        | 4.7                       |
| 2005-06                         | 1,167                             | -183                           | 1,350                            | 745                 | 605                | 298        | 4.5                       |
| 2006-07                         | 1,178                             | -86                            | 1,264                            | 650                 | 614                | 301        | 4.2                       |
| 2007-08                         | 1,437                             | +274                           | 1,163                            | 624                 | 539                | 303        | 3.8                       |
| 2008-09                         | 1,260                             | +42                            | 1,217                            | 629                 | 588                | 306        | 4.0                       |
| 2009-10                         | 1,028                             | -125                           | 1,153                            | 608                 | 544                | 309        | 3.7                       |
| 2010-11                         | 971                               | -165                           | 1,136                            | 618                 | 519                | 311        | 3.7                       |
| 2011-12                         | 1,038                             | +88                            | 949                              | 569                 | 381                | 313        | 3.0                       |
| 2012-13                         | 1,102                             | +17                            | 1,084                            | 562                 | 522                | 315        | 3.4                       |
| 2013-14                         | 922                               | -30                            | 953                              | 526                 | 427                | 318        | 3.0                       |
| 2014-15                         | 936                               | +32                            | 904                              | 491                 | 413                | 321        | 2.8                       |
| 2015-16                         | 790                               | -87                            | 877                              | 464                 | 413                | 324        | 2.7                       |
| 2016-17                         | 755                               | -83                            | 837                              | 400                 | 438                | 325        | 2.6                       |

<sup>a</sup>2004-05 forward based on FCOJ inventories for the United States (NASS, Cold Storage Reports) plus Florida COJ inventories (Processor Reports); in 2003-04 and prior years, based on Florida FCOJ and COJ inventories.

<sup>b</sup>All outlets.

<sup>c</sup>Includes unidentified inventory.

SOURCE: Processor Reports, NASS Citrus Summary, U.S. Census Bureau, Nielsen

## Estimated U.S. Grapefruit Juice Availability

| Oct-Sept<br>Season              | Florida |      |       | Texas <sup>a</sup> | Calif/ <sup>a</sup><br>Arizona | U.S.<br>Imports | Total<br>Supply | U.S.<br>Exports | Total<br>Domestic<br>Availability |
|---------------------------------|---------|------|-------|--------------------|--------------------------------|-----------------|-----------------|-----------------|-----------------------------------|
|                                 | FCGJ    | CGJ  | Total |                    |                                |                 |                 |                 |                                   |
| ----- million SSE gallons ----- |         |      |       |                    |                                |                 |                 |                 |                                   |
| 1998-99                         | 98.0    | 42.3 | 140.4 | 9.7                | 2.5                            | .3              | 152.8           | 24.3            | 128.5                             |
| 1999-00                         | 114.6   | 55.3 | 169.9 | 9.9                | 3.6                            | 5.0             | 188.4           | 32.9            | 155.5                             |
| 2000-01                         | 108.8   | 37.8 | 146.6 | 15.1               | 2.7                            | .9              | 165.3           | 39.0            | 126.3                             |
| 2001-02                         | 109.2   | 39.9 | 149.1 | 9.6                | 2.3                            | .3              | 161.3           | 36.3            | 125.1                             |
| 2002-03                         | 77.5    | 37.3 | 114.8 | 11.2               | 2.0                            | .4              | 128.4           | 39.5            | 89.0                              |
| 2003-04                         | 83.6    | 36.7 | 120.3 | 11.0               | 2.0                            | .5              | 133.8           | 55.5            | 78.3                              |
| 2004-05                         | 12.2    | 16.9 | 29.1  | 16.7               | 2.0                            | 11.4            | 59.2            | 23.9            | 35.3                              |
| 2005-06                         | 38.9    | 23.4 | 62.2  | 9.6                | 2.0                            | 5.6             | 79.4            | 18.7            | 60.8                              |
| 2006-07                         | 63.1    | 28.1 | 91.3  | 17.5               | 2.0                            | .9              | 111.6           | 37.2            | 74.5                              |
| 2007-08                         | 54.7    | 32.9 | 87.7  | 13.0               | -                              | .3              | 101.0           | 36.4            | 64.6                              |
| 2008-09                         | 43.0    | 23.3 | 66.2  | 11.1               | -                              | .5              | 77.8            | 33.9            | 43.9                              |
| 2009-10                         | 35.9    | 29.4 | 65.2  | 11.0               | -                              | .6              | 76.9            | 24.7            | 52.2                              |
| 2010-11                         | 42.2    | 25.1 | 67.3  | 14.0               | -                              | .4              | 81.6            | 32.8            | 48.8                              |
| 2011-12                         | 41.1    | 24.2 | 65.3  | 10.6               | -                              | .5              | 76.4            | 23.8            | 52.6                              |
| 2012-13                         | 33.7    | 25.2 | 58.9  | 14.9               | -                              | .8              | 74.6            | 22.8            | 51.8                              |
| 2013-14                         | 26.1    | 23.3 | 49.3  | 13.1               | 1.42                           | .3              | 64.2            | 18.2            | 45.9                              |
| 2014-15                         | 20.4    | 18.0 | 38.4  | 6.2                | 3.18                           | .4              | 48.1            | 21.5            | 26.6                              |
| 2015-16                         | 14.9    | 16.3 | 31.1  | 10.4               | 2.07                           | .8              | 44.4            | 11.1            | 33.4                              |
| 2016-17                         | 11.7    | 13.2 | 24.9  | 8.8                | 2.45                           | 2.8             | 38.9            | 8.6             | 30.3                              |

<sup>a</sup>Based on assumed yields.

SOURCE: Processor Reports, NASS Citrus Summary, FAS, NASS, U.S. Department of Commerce, FDOC-EMRD

## Estimated U.S. Grapefruit Juice Supply and Demand

| Oct-Sept<br>Season              | Total<br>Domestic<br>Availability | Net Florida<br>Carry Over | Total<br>Presumed<br>Consumption | Sales               |                    | Population | Per Capita<br>Consumption |
|---------------------------------|-----------------------------------|---------------------------|----------------------------------|---------------------|--------------------|------------|---------------------------|
|                                 |                                   |                           |                                  | Retail <sup>a</sup> | Other <sup>b</sup> |            |                           |
| ----- million SSE gallons ----- |                                   |                           |                                  |                     |                    | millions   | SSE gal.                  |
| 1998-99                         | 129                               | -31                       | 160                              | 60                  | 101                | 278        | .58                       |
| 1999-00                         | 156                               | +24                       | 132                              | 52                  | 80                 | 281        | .47                       |
| 2000-01                         | 126                               | +1                        | 126                              | 46                  | 79                 | 284        | .44                       |
| 2001-02                         | 125                               | +11                       | 114                              | 40                  | 74                 | 287        | .40                       |
| 2002-03                         | 89                                | -14                       | 103                              | 37                  | 66                 | 290        | .35                       |
| 2003-04                         | 78                                | -7                        | 85                               | 34                  | 51                 | 292        | .29                       |
| 2004-05                         | 35                                | -34                       | 69                               | 24                  | 45                 | 295        | .24                       |
| 2005-06                         | 61                                | +8                        | 53                               | 20                  | 33                 | 298        | .18                       |
| 2006-07                         | 75                                | +16                       | 59                               | 20                  | 39                 | 301        | .19                       |
| 2007-08                         | 65                                | +3                        | 62                               | 22                  | 40                 | 303        | .20                       |
| 2008-09                         | 44                                | -13                       | 57                               | 21                  | 36                 | 306        | .19                       |
| 2009-10                         | 52                                | -4                        | 56                               | 20                  | 35                 | 309        | .18                       |
| 2010-11                         | 49                                | -9                        | 58                               | 20                  | 38                 | 312        | .19                       |
| 2011-12                         | 53                                | +3                        | 49                               | 18                  | 31                 | 314        | .16                       |
| 2012-13                         | 52                                | -3                        | 54                               | 17                  | 37                 | 316        | .17                       |
| 2013-14                         | 46                                | -1                        | 47                               | 15                  | 31                 | 319        | .15                       |
| 2014-15                         | 27                                | -5                        | 31                               | 15                  | 16                 | 322        | .10                       |
| 2015-16                         | 33                                | -2                        | 35                               | 14                  | 21                 | 324        | .09                       |
| 2016-17                         | 30                                | -7                        | 38                               | 13                  | 38                 | 325        | .12                       |

<sup>a</sup>All outlets.

<sup>b</sup>Includes unidentified inventory.

SOURCE: Processor Reports, NASS Citrus Summary, U.S. Census Bureau, Nielsen

## General Economic Indicators

| Year | Consumer Price Indices<br>(1982-84 = 100) |           | Population | Disposable<br>Personal<br>Income |
|------|---|-----------|------------|----------------------------------|
|      | All Food                                  | All Items |            |                                  |
|      |   |           | millions   | billion \$                       |
| 1992 | 137.9                                     | 140.3     | 256.5      | 4,800.3                          |
| 1993 | 140.9                                     | 144.5     | 259.9      | 5,000.2                          |
| 1994 | 144.3                                     | 148.2     | 263.1      | 5,244.2                          |
| 1995 | 148.4                                     | 152.4     | 266.3      | 5,532.6                          |
| 1996 | 153.3                                     | 156.9     | 269.4      | 5,829.9                          |
| 1997 | 157.3                                     | 160.5     | 272.6      | 6,148.8                          |
| 1998 | 160.7                                     | 163.0     | 275.9      | 6,561.3                          |
| 1999 | 164.1                                     | 166.6     | 279.0      | 6,876.3                          |
| 2000 | 167.8                                     | 172.2     | 282.2      | 7,400.5                          |
| 2001 | 173.1                                     | 177.1     | 285.1      | 7,752.3                          |
| 2002 | 176.2                                     | 179.9     | 287.8      | 8,099.2                          |
| 2003 | 180.0                                     | 184.0     | 290.3      | 8,486.7                          |
| 2004 | 186.2                                     | 188.9     | 293.0      | 9,003.2                          |
| 2005 | 190.7                                     | 195.3     | 295.8      | 9,401.8                          |
| 2006 | 195.2                                     | 201.6     | 298.6      | 10,037.7                         |
| 2007 | 202.9                                     | 207.3     | 301.6      | 10,507.9                         |
| 2008 | 214.1                                     | 215.3     | 304.4      | 10,995.4                         |
| 2009 | 218.0                                     | 214.5     | 307.0      | 10,937.2                         |
| 2010 | 219.6                                     | 218.1     | 309.3      | 11,243.7                         |
| 2011 | 227.8                                     | 224.9     | 311.7      | 11,787.4                         |
| 2012 | 233.8                                     | 229.6     | 314.1      | 12,245.8                         |
| 2013 | 237.0                                     | 232.9     | 316.5      | 12,476.2                         |
| 2014 | 242.7                                     | 236.7     | 318.9      | 12,985.8                         |
| 2015 | 247.2                                     | 237.0     | 321.4      | 13,395.0                         |
| 2016 | 247.9                                     | 240.0     | 323.1      | 14,045.5                         |
| 2017 |   |           |            |                                  |

<sup>a</sup>Preliminary.

SOURCE: U.S. Census Bureau, Bureau of Labor Statistics, and Bureau of Economic Analysis

# Estimated Delivered-in Value of the Florida Citrus Industry, 2008-09 to 2015-16

## Oranges

| Season                  | Without HLB   | With HLB      | Difference   |
|-------------------------|---------------|---------------|--------------|
| ----- million \$ -----  |               |               |              |
| 2008-09                 | 1,314         | 1,304         | 10           |
| 2009-10                 | 1,320         | 1,184         | 136          |
| 2010-11                 | 1,319         | 1,478         | -159         |
| 2011-12                 | 1,319         | 1,758         | -439         |
| 2012-13                 | 1,328         | 1,260         | 68           |
| 2013-14                 | 1,325         | 1,199         | 126          |
| 2014-15                 | 1,325         | 1,089         | 236          |
| 2015-16                 | 1,330         | 833           | 497          |
| <b>CUMULATIVE TOTAL</b> | <b>10,580</b> | <b>10,105</b> | <b>2,994</b> |

SOURCE: C.D. Court, A.W. Hodges & M. Rahmani & T.H. Spreen, "Economic Contributions of the Florida Citrus Industry in 2015-16," UF-IFAS-FRED, Gainesville, FL, May 2017.

## Summary of economic impacts of citrus greening disease (HLB) for Florida processed orange and grapefruit production, 2006-07 to 2015-16

| Impact Type                               | Value Added  | Labor Income | Output/Sales | Employment    |
|---|--------------|--------------|--------------|---------------|
| ----- million \$ -----                    |              |              |              | Job-Years     |
| <b>Direct Effects</b>                     | <b>981</b>   | <b>634</b>   | <b>1,809</b> | <b>9,732</b>  |
| Indirect and Induced Effects              | 1,787        | 1,126        | 2,835        | 24,393        |
| <b>Total Effect</b>                       | <b>2,768</b> | <b>1,760</b> | <b>4,644</b> | <b>34,125</b> |
| <b>Average annual impact over 8 years</b> | <b>464</b>   | <b>176</b>   | <b>277</b>   | <b>3,412</b>  |

SOURCE: A.W. Hodges & T.H. Spreen, "Economic Impacts of the Florida Citrus Industry in 2012-13," UF-IFAS-FRED, Gainesville, FL, December 2014.

## Florida Delivered-In Break-even Price

| Region/<br>Market/<br>Variety | WITH Canker/Greening<br>NO Resetting-Tree Replacement |       |       |       |       | WITH Canker/Greening<br>WITH Resetting-Tree Replacement |       |       |       |       | WITH<br>Canker/Greening<br>NO Resetting-Tree<br>Replacement<br>WITH Foliar Nutrient |       | WITH<br>Canker/Greening<br>WITH Resetting-Tree<br>Replacement<br>WITH Foliar Nutrient |       |
|-------------------------------|---|-------|-------|-------|-------|---|-------|-------|-------|-------|---|-------|---|-------|
|                               | 07-08   | 08-09 | 09-10 | 10-11 | 11-12 | 07-08   | 08-09 | 09-10 | 10-11 | 11-12 | 10-11   | 11-12 | 10-11   | 11-12 |

### CENTRAL

----- \$/PS -----

*Assumes yield of 300 boxes/acre*

Processed Valencia

|      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1.38 | 1.27 | 1.24 | 1.35 | 1.36 | 1.49 | 1.42 | 1.39 | 1.44 | 1.45 | 1.45 | 1.46 | 1.50 | 1.53 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|

### SOUTHWEST

*Assumes yield of 350 boxes/acre*

Processed Hamlin

|      |      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1.36 | 1.23 | 1.20 | 1.31 | 1.33 | 1.49 | 1.38 | 1.36 | 1.41 | 1.44 | 1.40 | 1.43 | 1.46 | 1.51 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|------|

### INDIAN RIVER

----- \$/carton -----

*Assumes yield of 400 boxes/acre*

Fresh Grapefruit

|      |      |      |      |      |      |      |      |      |      |     |      |     |      |
|------|------|------|------|------|------|------|------|------|------|-----|------|-----|------|
| 4.57 | 4.32 | 4.22 | 4.41 | 4.50 | 6.10 | 4.67 | 4.59 | 6.11 | 4.79 | .00 | 4.76 | .00 | 4.99 |
|------|------|------|------|------|------|------|------|------|------|-----|------|-----|------|

SOURCE: Ron Muraro, Extension Economist, University of Florida, IFAS, CREC, Lake Alfred, FL, et al (F.M. Roka, R.E. Rouse, R.M. Turley, J.W. Hebb, E.W. Stover, T.W. Oswalt and M. Still).  
Website: [www.crec.ifas.ufl.edu/Extension/Economics](http://www.crec.ifas.ufl.edu/Extension/Economics).

# Florida Land Value Survey

Estimated Value Per Acre by Geographic Area  
and Land Use (Weighted Estimates)

| Date                | South Florida |            |                 | Central Florida |            |                 |
|---------------------|---------------|------------|-----------------|-----------------|------------|-----------------|
|                     | Oranges       | Grapefruit | 5-7 Year Citrus | Oranges         | Grapefruit | 5-7 Year Citrus |
| ----- \$/acre ----- |               |            |                 |                 |            |                 |
| 5/1986              | 8,685         | 8,289      | --              | 8,798           | 6,918      | --              |
| 5/1987              | 9,661         | 8,833      | --              | 8,792           | 7,701      | --              |
| 5/1988              | 10,911        | 10,012     | --              | 10,550          | 8,835      | --              |
| 5/1989              | 11,873        | 10,420     | --              | 11,800          | 10,265     | --              |
| 5/1990              | 13,351        | 12,169     | --              | 12,863          | 10,058     | --              |
| 5/1991              | 11,274        | 10,890     | 8,888           | 10,771          | 9,215      | 6,823           |
| 5/1992              | 10,756        | 10,804     | 9,136           | 10,250          | 8,695      | 7,193           |
| 5/1993              | 9,046         | 9,478      | 7,432           | 8,796           | 7,119      | 6,526           |
| 5/1994              | 8,097         | 8,188      | 6,677           | 7,822           | 6,749      | 6,342           |
| 5/1995              | 7,477         | 6,182      | 6,121           | 7,253           | 5,836      | 5,231           |
| 5/1996              | 7,457         | 4,986      | 6,159           | 6,774           | 4,980      | 5,053           |
| 5/1997              | 7,290         | 4,053      | 6,096           | 6,776           | 4,216      | 4,981           |
| 5/1998              | 6,882         | 3,035      | 5,691           | 6,763           | 3,322      | 4,875           |
| 5/1999              | 6,956         | 3,759      | 5,799           | 6,780           | 3,543      | 4,871           |
| 5/2000              | 7,073         | 4,824      | 5,909           | 6,899           | 4,431      | 4,941           |
| 5/2001              | 6,410         | 4,344      | 5,802           | 6,139           | 4,241      | 4,783           |
| 5/2002              | 5,687         | 3,658      | 5,211           | 5,438           | 3,614      | 4,668           |
| 5/2003              | 5,932         | 3,929      | 5,440           | 5,721           | 3,914      | 4,889           |
| 5/2004              | 6,540         | 5,264      | 5,920           | 6,409           | 4,518      | 5,340           |
| 5/2005              | 9,956         | 9,897      | 8,944           | 9,805           | 8,192      | 8,461           |
| 5/2007              | 16,123        | 11,183     | 11,900          | NA              | NA         | NA              |
| 5/2008              | 13,500        | 10,640     | 10,461          | NA              | NA         | NA              |
| 5/2009              | 12,086        | 7,369      | 7,459           | NA              | NA         | NA              |
| 5/2010              | 7,982         | 6,752      | 7,116           | NA              | NA         | NA              |

SOURCE: "Florida Land Value Survey," FRED-IFAS-UF, various surveys.



## U.S. Orange Juice Imports

| Oct-Sept<br>Season | Florida Ports |              |         | Total U.S.    |              |         |
|--------------------|---------------|--------------|---------|---------------|--------------|---------|
|                    | Volume        |              | Value   | Volume        |              | Value   |
|                    | mil. SSE gal. | thou. MT 65° | mil. \$ | mil. SSE gal. | thou. MT 65° | mil. \$ |
| 1974-75            | 17.8          | 12.8         | 6.6     | 30.2          | 21.7         | 11.4    |
| 1975-76            | 24.1          | 17.3         | 7.6     | 34.1          | 24.5         | 10.8    |
| 1976-77            | 21.1          | 15.1         | 9.4     | 32.1          | 23.0         | 14.2    |
| 1977-78            | 70.5          | 50.7         | 54.7    | 92.0          | 66.1         | 70.2    |
| 1978-79            | 157.5         | 113.1        | 107.4   | 192.7         | 138.4        | 132.1   |
| 1979-80            | 69.2          | 49.7         | 45.4    | 100.2         | 71.9         | 65.4    |
| 1980-81            | 155.3         | 111.5        | 132.1   | 193.6         | 139.0        | 158.4   |
| 1981-82            | 274.3         | 196.9        | 220.2   | 328.2         | 235.7        | 262.4   |
| 1982-83            | 259.9         | 186.6        | 214.8   | 391.0         | 280.7        | 317.1   |
| 1983-84            | 308.0         | 221.2        | 295.6   | 501.5         | 360.1        | 491.4   |
| 1984-85            | 375.2         | 269.4        | 460.8   | 634.4         | 455.5        | 778.7   |
| 1985-86            | 229.5         | 164.8        | 186.5   | 504.4         | 362.2        | 417.2   |
| 1986-87            | 273.7         | 196.5        | 206.2   | 553.6         | 397.5        | 423.5   |
| 1987-88            | 194.5         | 139.7        | 227.6   | 447.8         | 321.6        | 522.8   |
| 1988-89            | 154.3         | 110.8        | 197.1   | 379.5         | 272.5        | 493.4   |
| 1989-90            | 292.7         | 210.2        | 383.5   | 527.6         | 378.9        | 683.9   |
| 1990-91            | 185.8         | 133.4        | 167.8   | 319.8         | 229.6        | 287.0   |
| 1991-92            | 190.1         | 136.5        | 209.2   | 285.4         | 205.0        | 310.2   |
| 1992-93            | 165.4         | 118.8        | 116.5   | 298.3         | 214.2        | 195.2   |
| 1993-94            | 215.0         | 154.4        | 159.5   | 424.9         | 305.1        | 320.1   |
| 1994-95            | 98.8          | 70.9         | 74.7    | 240.4         | 172.6        | 191.0   |
| 1995-96            | 130.6         | 93.8         | 125.8   | 221.0         | 158.7        | 223.8   |
| 1996-97            | 177.5         | 127.5        | 133.9   | 294.9         | 211.8        | 240.1   |
| 1997-98            | 127.7         | 91.7         | 86.6    | 280.8         | 201.6        | 211.4   |
| 1998-99            | 188.5         | 135.3        | 146.4   | 350.2         | 251.5        | 285.9   |
| 1999-00            | 139.4         | 100.1        | 85.1    | 339.4         | 243.7        | 243.4   |
| 2000-01            | 125.2         | 89.9         | 77.8    | 257.7         | 185.0        | 185.0   |
| 2001-02            | 96.6          | 69.3         | 64.8    | 188.8         | 135.6        | 159.0   |
| 2002-03            | 155.2         | 111.5        | 123.5   | 290.9         | 208.9        | 239.8   |
| 2003-04            | 84.8          | 60.9         | 60.7    | 222.3         | 159.7        | 147.4   |
| 2004-05            | 129.9         | 93.3         | 99.3    | 357.5         | 256.7        | 257.0   |
| 2005-06            | 97.8          | 70.2         | 97.1    | 298.8         | 214.6        | 279.0   |
| 2006-07            | 169.0         | 121.4        | 239.9   | 399.2         | 286.7        | 580.6   |
| 2007-08            | 180.3         | 129.5        | 208.3   | 405.5         | 291.2        | 498.8   |
| 2008-09            | 126.9         | 91.1         | 130.7   | 317.4         | 227.9        | 330.4   |
| 2009-10            | 108.3         | 77.8         | 133.4   | 327.6         | 235.2        | 392.6   |
| 2010-11            | 96.6          | 69.4         | 149.4   | 265.2         | 190.5        | 406.2   |
| 2011-12            | 95.4          | 68.5         | 169.0   | 223.3         | 160.3        | 392.3   |
| 2012-13            | 186.9         | 134.2        | 250.2   | 420.5         | 302.0        | 567.5   |
| 2013-14            | 197.6         | 141.9        | 275.1   | 417.6         | 299.9        | 587.8   |
| 2014-15            | 252.2         | 181.1        | 309.8   | 458.4         | 329.1        | 614.9   |
| 2015-16            | 212.8         | 152.8        | 278.6   | 390.1         | 280.1        | 556.7   |
| 2016-17            | 251.2         | 180.4        | 440.1   | 416.8         | 299.3        | 774.3   |

SOURCE: U.S. Department of Commerce

## U.S. Citrus Juice Exports

| Oct-Sept<br>Season | Orange Juice  |         | Grapefruit Juice |         | Citrus Juice, NSPF <sup>a</sup> |         |
|--------------------|---------------|---------|------------------|---------|---------------------------------|---------|
|                    | Volume        | Value   | Volume           | Value   | Volume                          | Value   |
|                    | mil. SSE gal. | mil. \$ | mil. SSE gal.    | mil. \$ | mil. SSE gal.                   | mil. \$ |
| 1990-91            | 93.9          | 171.6   | 15.7             | 37.9    | 9.2                             | 14.8    |
| 1991-92            | 107.2         | 206.0   | 23.1             | 56.1    | 12.1                            | 18.3    |
| 1992-93            | 116.8         | 209.5   | 23.1             | 55.3    | 9.6                             | 16.0    |
| 1993-94            | 104.8         | 233.9   | 16.2             | 50.9    | 12.9                            | 18.9    |
| 1994-95            | 117.2         | 272.7   | 22.5             | 62.4    | 12.3                            | 21.4    |
| 1995-96            | 116.7         | 273.8   | 23.3             | 60.4    | 13.2                            | 25.2    |
| 1996-97            | 149.0         | 305.3   | 21.2             | 55.5    | 12.8                            | 28.2    |
| 1997-98            | 146.3         | 295.7   | 18.6             | 47.2    | 19.2                            | 32.2    |
| 1998-99            | 146.6         | 307.4   | 24.3             | 52.4    | 39.1                            | 57.2    |
| 1999-00            | 145.2         | 289.9   | 32.9             | 72.4    | 22.7                            | 43.6    |
| 2000-01            | 122.9         | 251.7   | 39.0             | 75.3    | 20.0                            | 36.5    |
| 2001-02            | 181.2         | 290.5   | 36.3             | 72.0    | 9.3                             | 22.9    |
| 2002-03            | 104.8         | 257.0   | 38.3             | 71.6    | 3.7                             | 11.5    |
| 2003-04            | 123.0         | 260.1   | 42.3             | 67.4    | 2.6                             | 8.6     |
| 2004-05            | 119.1         | 265.3   | 23.9             | 52.3    | 3.5                             | 11.6    |
| 2005-06            | 137.7         | 314.6   | 18.7             | 52.4    | 4.3                             | 14.6    |
| 2006-07            | 122.6         | 359.7   | 20.2             | 63.9    | 4.7                             | 17.3    |
| 2007-08            | 138.7         | 408.4   | 16.1             | 59.6    | 5.5                             | 20.4    |
| 2008-09            | 124.7         | 380.3   | 15.6             | 53.8    | 6.5                             | 24.6    |
| 2009-10            | 146.7         | 420.5   | 12.8             | 42.6    | 6.8                             | 26.1    |
| 2010-11            | 214.2         | 568.1   | 15.8             | 61.3    | 8.2                             | 31.4    |
| 2011-12            | 151.7         | 452.3   | 15.2             | 56.6    | 7.6                             | 30.6    |
| 2012-13            | 169.4         | 465.2   | 14.8             | 56.9    | 6.3                             | 28.6    |
| 2013-14            | 160.0         | 470.3   | 12.6             | 48.2    | 7.2                             | 32.0    |
| 2014-15            | 113.1         | 387.8   | 11.0             | 40.8    | 8.5                             | 37.6    |
| 2015-16            | 91.6          | 381.6   | 9.5              | 36.9    | 8.2                             | 36.6    |
| 2016-17            | 72.1          | 302.0   | 7.7              | 30.9    | 6.9                             | 29.8    |

<sup>a</sup>Includes lemon juice

SOURCE: U.S. Department of Commerce

## U.S. Imports of Fresh Citrus

| Season <sup>a</sup> | Oranges   |         | Grapefruit |         | Mandarins and Tangerines |         |
|---------------------|-----------|---------|------------|---------|--------------------------|---------|
|                     | Volume    | Value   | Volume     | Value   | Volume                   | Value   |
|                     | mil. lbs. | mil. \$ | mil. lbs.  | mil. \$ | mil. lbs.                | mil. \$ |
| 1991-92             | 30.62     | 6.62    | 23.35      | 1.24    | 42.63                    | 16.20   |
| 1992-93             | 18.90     | 3.22    | 27.33      | 1.30    | 43.21                    | 16.98   |
| 1993-94             | 30.15     | 11.71   | 32.41      | 1.43    | 39.22                    | 17.57   |
| 1994-95             | 42.21     | 12.65   | 29.44      | 1.21    | 47.43                    | 19.17   |
| 1995-96             | 48.37     | 17.43   | 33.01      | 1.59    | 42.49                    | 19.05   |
| 1996-97             | 53.70     | 20.95   | 28.23      | 1.24    | 72.94                    | 35.25   |
| 1997-98             | 84.42     | 36.90   | 11.40      | .50     | 88.82                    | 45.45   |
| 1998-99             | 229.01    | 82.46   | 34.19      | 1.30    | 122.58                   | 65.74   |
| 1999-00             | 97.03     | 40.93   | 12.62      | .91     | 207.52                   | 97.16   |
| 2000-01             | 117.11    | 38.70   | 41.62      | 2.02    | 202.03                   | 113.07  |
| 2001-02             | 118.87    | 37.99   | 61.55      | 2.77    | 142.42                   | 77.60   |
| 2002-03             | 119.10    | 50.45   | 37.96      | 1.54    | 185.53                   | 123.92  |
| 2003-04             | 121.22    | 49.12   | 40.61      | 1.76    | 198.63                   | 126.04  |
| 2004-05             | 140.56    | 57.63   | 33.01      | 1.67    | 199.24                   | 113.72  |
| 2005-06             | 152.15    | 73.37   | 36.62      | 1.79    | 225.04                   | 153.45  |
| 2006-07             | 262.64    | 123.31  | 47.20      | 2.93    | 266.30                   | 178.62  |
| 2007-08             | 158.53    | 73.37   | 31.60      | 2.12    | 202.16                   | 128.05  |
| 2008-09             | 180.09    | 77.45   | 28.67      | 2.05    | 283.85                   | 177.65  |
| 2009-10             | 211.11    | 96.52   | 25.46      | 2.69    | 265.92                   | 160.56  |
| 2010-11             | 207.91    | 90.16   | 16.62      | 1.92    | 319.57                   | 186.21  |
| 2011-12             | 262.87    | 110.47  | 2.54       | .83     | 321.80                   | 181.75  |
| 2012-13             | 284.85    | 116.84  | 10.98      | 3.70    | 306.91                   | 172.67  |
| 2013-14             | 354.03    | 166.76  | 39.05      | 6.64    | 401.02                   | 258.96  |
| 2014-15             | 325.84    | 132.02  | 19.29      | 5.02    | 424.99                   | 283.95  |
| 2015-16             | 354.15    | 135.91  | 29.67      | 9.19    | 476.67                   | 324.57  |
| 2016-17             | 407.86    | 162.54  | 52.17      | 11.79   | 506.34                   | 336.60  |

<sup>a</sup>August 1st through July 31st

SOURCE: U.S. Department of Commerce

## U.S. Exports of Fresh Citrus

| Season <sup>a</sup> | Oranges   |         | Grapefruit |         | Tangerines |         |
|---------------------|-----------|---------|------------|---------|------------|---------|
|                     | Volume    | Value   | Volume     | Value   | Volume     | Value   |
|                     | mil. lbs. | mil. \$ | mil. lbs.  | mil. \$ | mil. lbs.  | mil. \$ |
| 1991-92             | 995.7     | 254.8   | 1,011.7    | 252.2   | 43.4       | 17.4    |
| 1992-93             | 1,211.8   | 266.8   | 980.3      | 222.2   | 33.8       | 12.6    |
| 1993-94             | 1,183.9   | 291.4   | 999.8      | 224.8   | 49.3       | 16.4    |
| 1994-95             | 1,326.0   | 331.1   | 1,081.4    | 242.7   | 41.3       | 16.1    |
| 1995-96             | 1,158.0   | 293.9   | 1,105.2    | 261.0   | 48.5       | 18.6    |
| 1996-97             | 1,288.3   | 320.7   | 1,062.0    | 240.1   | 50.6       | 19.1    |
| 1997-98             | 1,394.8   | 358.4   | 865.5      | 191.5   | 55.4       | 19.8    |
| 1998-99             | 659.4     | 188.7   | 946.5      | 222.5   | 31.9       | 12.5    |
| 1999-00             | 1,049.4   | 265.3   | 855.8      | 206.3   | 61.4       | 19.6    |
| 2000-01             | 1,292.4   | 332.0   | 862.2      | 200.9   | 32.4       | 11.4    |
| 2001-02             | 1,114.0   | 302.3   | 875.8      | 201.8   | 33.6       | 13.0    |
| 2002-03             | 1,385.4   | 339.1   | 784.9      | 189.8   | 37.9       | 15.3    |
| 2003-04             | 1,419.3   | 379.6   | 868.7      | 241.4   | 44.1       | 16.1    |
| 2004-05             | 1,234.8   | 374.8   | 503.8      | 152.2   | 42.7       | 19.3    |
| 2005-06             | 1,241.7   | 372.1   | 553.4      | 199.3   | 45.5       | 22.7    |
| 2006-07             | 714.9     | 255.8   | 864.5      | 273.2   | 36.2       | 19.2    |
| 2007-08             | 1,329.1   | 449.4   | 593.8      | 198.8   | 70.3       | 40.8    |
| 2008-09             | 1,102.6   | 395.7   | 543.6      | 184.6   | 64.7       | 37.9    |
| 2009-10             | 1,445.1   | 538.8   | 533.8      | 193.9   | 75.9       | 47.9    |
| 2010-11             | 1,659.7   | 641.7   | 502.6      | 179.7   | 113.8      | 70.1    |
| 2011-12             | 1,543.3   | 656.7   | 462.1      | 161.0   | 80.8       | 55.4    |
| 2012-13             | 1,511.7   | 643.5   | 406.3      | 144.9   | 93.0       | 64.9    |
| 2013-14             | 1,128.7   | 573.0   | 325.7      | 126.5   | 69.2       | 51.5    |
| 2014-15             | 1,173.8   | 566.0   | 309.9      | 121.5   | 93.0       | 68.2    |
| 2015-16             | 1,435.9   | 623.5   | 273.5      | 106.6   | 80.1       | 56.3    |
| 2016-17             | 1,370.8   | 648.6   | 236.9      | 93.8    | 56.5       | 43.3    |

<sup>a</sup>August 1 through July 31.

SOURCE: U.S. Department of Commerce

## Florida and Imported FCOJ Prices<sup>a</sup>

| Oct-Sept<br>Season | Florida <sup>b</sup> |                 | Brazil          |                 | Mexico          |                 | Other           |                 | Imported<br>Average |                 |
|--------------------|----------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------------|-----------------|
|                    | MT <sup>c</sup>      | PS <sup>d</sup> | MT <sup>c</sup> | PS <sup>d</sup> | MT <sup>c</sup> | PS <sup>d</sup> | MT <sup>c</sup> | PS <sup>d</sup> | MT <sup>c</sup>     | PS <sup>d</sup> |
| -----dollars-----  |                      |                 |                 |                 |                 |                 |                 |                 |                     |                 |
| 1998-99            | 1,877                | 1.31            | 1,015           | .71             | 1,382           | .96             | 1,424           | .99             | 1,110               | .77             |
| 1999-00            | 1,519                | 1.06            | 1,015           | .71             | 1,295           | .90             | 1,404           | .98             | 954                 | .67             |
| 2000-01            | 1,290                | .90             | 782             | .55             | 1,044           | .73             | 1,759           | 1.23            | 955                 | .67             |
| 2001-02            | 1,490                | 1.04            | 681             | .48             | 1,147           | .80             | 2,282           | 1.59            | 1,115               | .78             |
| 2002-03            | 1,562                | 1.09            | 719             | .50             | 1,361           | .95             | 1,733           | 1.21            | 1,073               | .75             |
| 2003-04            | 1,204                | .84             | 907             | .63             | 970             | .68             | 1,112           | .78             | 866                 | .60             |
| 2004-05            | 1,533                | 1.07            | 763             | .53             | 1,001           | .70             | 1,193           | .83             | 940                 | .66             |
| 2005-06            | 2,178                | 1.52            | 843             | .59             | 1,363           | .95             | 1,610           | 1.12            | 1,256               | .88             |
| 2006-07            | 2,966                | 2.07            | 1,129           | .79             | 2,363           | 1.65            | 2,363           | 1.65            | 2,082               | 1.45            |
| 2007-08            | 2,092                | 1.46            | 1,909           | 1.33            | 2,089           | 1.46            | 1,819           | 1.27            | 1,702               | 1.19            |
| 2008-09            | 1,361                | .95             | 1,499           | 1.05            | 1,431           | 1.0             | 1,555           | 1.09            | 1,360               | .95             |
| 2009-10            | 2,035                | 1.42            | 1,213           | .85             | 1,724           | 1.20            | 1,972           | 1.38            | 1,562               | 1.09            |
| 2010-11            | NA                   | NA              | 1,326           | .93             | 2,079           | 1.45            | 2,524           | 1.76            | 2,098               | 1.46            |
| 2011-12            | NA                   | NA              | 1,922           | 1.34            | 2,362           | 1.65            | 2,826           | 1.97            | 2,405               | 1.68            |
| 2012-13            | NA                   | NA              | 2,144           | 1.50            | 1,978           | 1.38            | 2,527           | 1.76            | 1,814               | 1.27            |
| 2013-14            | NA                   | NA              | 1,545           | 1.08            | 2,121           | 1.48            | 2,443           | 1.70            | 1,885               | 1.32            |
| 2014-15            | NA                   | NA              | 1,709           | 1.19            | 3,402           | 2.37            | 2,504           | 1.75            | 1,817               | 1.27            |
| 2015-16            | NA                   | NA              | 2,443           | 1.70            | 3,670           | 2.56            | 2,525           | 1.76            | 1,889               | 1.32            |
| 2016-17            | NA                   | NA              | 1,885           | 1.32            | 6,236           | 4.35            | 3,011           | 2.10            | 2,604               | 1.82            |

<sup>a</sup>Price is defined as "market value in the foreign country and therefore excludes U.S. import duties, freight, charges from the foreign country to the U.S. & Insurance" (U.S. Guide to Foreign Trade Statistics). 1988-89 data include "other orange juice."

<sup>b</sup>Florida price=bulk price equivalent. Beginning Nov. 2010, bulk prices no longer reported. <sup>c</sup>Metric ton 65° Brix.

<sup>d</sup>Based on 1.029 PS per gallon of 11.8° Brix.

SOURCE: Processors Statistical Reports, FCM, and U.S. Department of Commerce

## History of the U.S. Orange Juice Tariff

| Year                                   | FCOJ          |         |       | NFC           |         |
|--|---------------|---------|-------|---------------|---------|
|  | ¢/SSE<br>gal. | ¢/liter | ¢/PS  | ¢/SSE<br>gal. | ¢/liter |
| <b>TARIFF ACT OF 1930</b> .....        |               |         |       |               |         |
| 1930-1947                              | 70.00         |         | 68.03 | 70.00         |         |
| <b>GATT - GENEVA SWITZERLAND</b> ..... |               |         |       |               |         |
| 1948-1971                              | 35.00         |         | 34.01 | 35.00         |         |
| <b>GATT - KENNEDY ROUND</b> .....      |               |         |       |               |         |
| 1972-1988                              | 35.00         |         | 34.01 | 20.00         |         |
| 1989-1994*                             | 35.02         | 9.25    | 34.04 | 20.07         | 5.3     |
| <b>GATT - URAGUAY ROUND</b> .....      |               |         |       |               |         |
| 1995                                   | 34.15         | 9.02    | 33.19 | 19.69         | 5.2     |
| 1996                                   | 33.24         | 8.78    | 32.31 | 18.93         | 5.0     |
| 1997                                   | 32.37         | 8.55    | 31.46 | 18.55         | 4.9     |
| 1998                                   | 31.50         | 8.32    | 30.62 | 18.17         | 4.8     |
| 1999                                   | 30.59         | 8.08    | 29.73 | 17.42         | 4.6     |
| 2000-2016                              | 29.72         | 7.85    | 28.89 | 17.04         | 4.5     |

\*Beginning 1989, Harmonized Tariff System based on metric units.

# NOTES

---

# NOTES

---



## Single Strength and Chilled Juice

Factors to convert cases of single strength or chilled juice to equivalent cases of 24 No. 2's.

| Cans per case | Container Size | Equivalent Cases of 24/2's | Cans per case | Container Size | Equivalent Cases of 24/2's |
|---------------|----------------|----------------------------|---------------|----------------|----------------------------|
| 24            | 4 - ounces     | .222                       | 1             | 1 - gallon     | .296                       |
| 24            | 4.25 - "       | .236                       | 24            | 7 - ounces     | .389                       |
| 24            | 6 - "          | .333                       | 48            | 4.25 - "       | .472                       |
| 24            | 8 - "          | .444                       | 12            | 24 - "         | .667                       |
| 48            | 4 - "          | .444                       | 12            | 26 - "         | .722                       |
| 48            | 5.5 - "        | .611                       | 12            | 32 - "         | .889                       |
| 48            | 6 - "          | .667                       | 64            | 6 - "          | .889                       |
| 24            | 12 - "         | .667                       | 6             | 64 - "         | .889                       |
| 48            | 8 - "          | .889                       | 12            | 1 - quart      | .889                       |
| 24            | 18 - "         | 1.000                      | 12            | 1 - liter      | .939                       |
| 12            | 46 - "         | 1.278                      | 72            | 6 - ounces     | 1.000                      |
| 6             | No.10          | 1.333                      | 4             | 1 - gallon     | 1.185                      |
|               |                |                            | 20            | 1 - quart      | 1.482                      |

## Canned & Chilled Sections

Factors to convert cases of canned and chilled sections to equivalent cases of 24 No. 2's.

| Cans per case | Container Size  | Equivalent Cases of 24/2's |
|---------------|-----------------|----------------------------|
| 12            | 303             | .444                       |
| 12            | 1 - pound       | .444                       |
| 4             | ½ - gallon      | .592                       |
| 6             | 3 - pounds      | .667                       |
| 2             | 10 - "          | .740                       |
| 48            | 8 - ounces      | .889                       |
| 24            | 303             | .889                       |
| 12            | 32 - ounces     | .889                       |
| 6             | 4 - pounds      | .889                       |
| 4             | 8 - "           | 1.185                      |
| 4             | 1 - gallon      | 1.185                      |
| 12            | No.3 cyl. (404) | 1.278                      |
| 12            | 48 - ounces     | 1.333                      |

## Concentrate Factors (3+1)

Factors to convert cases concentrate (retail size containers) to equivalent cases of 24 No. 2's.  
These factors apply to FCOJ, FCGJ, FCBJ, FCTJ, sugar-added FCOJ, FCGJ, FCBJ, lemonade, limeade, and/or other concentrated with 3+1 reconstitution.

| Cans<br>per case | Container Size | Equivalent<br>Cases of<br>24/2's | Cans<br>per case | Container Size | Equivalent<br>Cases of<br>24/2's |
|------------------|----------------|----------------------------------|------------------|----------------|----------------------------------|
| 24               | 6 - ounces     | 1.333                            | 9                | 32 - ounces    | 2.666                            |
| 24               | 8 - "          | 1.778                            | 12               | 25.6 - "       | 2.844                            |
| 48               | 4 - "          | 1.778                            | 24               | 16 - "         | 3.555                            |
| 6                | 42 - "         | 2.333                            | 48               | 8 - "          | 3.555                            |
| 6                | 46 - "         | 2.555                            | 12               | 32 - "         | 3.555                            |
| 48               | 6 - "          | 2.666                            | 72               | 6 - "          | 3.999                            |
| 24               | 12 - "         | 2.666                            | 36               | 12 - "         | 3.999                            |
|                  |                |                                  | 96               | 6 - "          | 5.332                            |

## FCOJ -- 42° Brix Equivalent Conversion Factors -- Bulk for Manufacturing

| Brix  | Factor           | Brix | Factor           |
|-------|------------------|------|------------------|
| 42°   | Gallons X 1.0000 | 59°  | Gallons X 1.5159 |
| 43°   | " X 1.0284       | 60°  | " X 1.5486       |
| 43.4° | " X 1.0397       | 61°  | " X 1.5818       |
| 44°   | " X 1.0570       | 62°  | " X 1.6150       |
| 45°   | " X 1.0857       | 63°  | " X 1.6487       |
| 46°   | " X 1.1148       | 64°  | " X 1.6826       |
| 47°   | " X 1.1441       | 65°  | " X 1.7168       |
| 48°   | " X 1.1735       | 66°  | " X 1.7512       |
| 49°   | " X 1.2033       | 67°  | " X 1.7861       |
| 50°   | " X 1.2334       | 68°  | " X 1.8210       |
| 51°   | " X 1.2637       | 69°  | " X 1.8566       |
| 52°   | " X 1.2943       | 70°  | " X 1.8922       |
| 53°   | " X 1.3253       | 71°  | " X 1.9281       |
| 54°   | " X 1.3564       | 72°  | " X 1.9644       |
| 55°   | " X 1.3876       | 73°  | " X 2.0010       |
| 56°   | " X 1.4194       | 74°  | " X 2.0380       |
| 57°   | " X 1.4512       | 75°  | " X 2.0751       |
| 58°   | " X 1.4834       |      |                  |

# Canned Citrus Fruit & Single Strength Juice

Factors to convert cases of canned citrus products in different sized cans to the equivalent number of cases packed 24 No. 2 cans per case.

| Cans per case | Name of Can                | Dimensions of Can | SSE Gal./Case <sup>a</sup> | Equivalent Cases of 24/2's |
|---------------|----------------------------|-------------------|----------------------------|----------------------------|
| 24            | 4 - ounces -- (baby juice) | 202 x 214         | .793                       | .235                       |
| 24            | 4 - ounces                 | 211 x 200         | .807                       | .239                       |
| 24            | 6 - "                      | 202 x 308         | .992                       | .294                       |
| 48            | 6 - "                      | 202 x 308         | 1.985                      | .588                       |
| 24            | 6 - "                      | 202 x 314         | 1.110                      | .329                       |
| 48            | 6 - "                      | 202 x 314         | 2.221                      | .658                       |
| 48            | 8 - ounces -- (short)      | 211 x 300         | 2.599                      | .770                       |
| 24            | 8 - ounces -- (tall)       | 211 x 304         | 1.424                      | .422                       |
| 48            | 8 - ounces                 | 211 x 304         | 2.849                      | .844                       |
| 48            | No. 1 -- (picnic)          | 211 x 400         | 3.591                      | 1.064                      |
| 24            | No. 211 -- (cylinder)      | 211 x 414         | 2.228                      | .660                       |
| 48            | No. 211                    | 211 x 414         | 4.455                      | 1.320                      |
| 24            | 12 - ounces                | 300 x 400         | 2.231                      | .661                       |
| 24            | No. 300                    | 300 x 407         | 2.498                      | .740                       |
| 36            | No. 300                    | 300 x 407         | 3.746                      | 1.110                      |
| 48            | No. 300                    | 300 x 407         | 4.995                      | 1.480                      |
| 48            | 12 - ounces                | 300 x 411         | 5.306                      | 1.572                      |
| 48            | No. 1 -- (tall)            | 301 x 411         | 5.468                      | 1.620                      |
| 24            | No. 303                    | 303 x 406         | 2.771                      | .821                       |
| 48            | No. 303                    | 303 x 406         | 5.542                      | 1.642                      |
| 24            | No. 303                    | 303 x 504         | 3.378                      | 1.001                      |
| 24            | No. 2                      | 307 x 409         | 3.375                      | 1.000                      |
| 24            | No. 2                      | 401 x 411         | 4.894                      | 1.450                      |
| 12            | No. 3 -- (32 - ounces)     | 404 x 414         | 2.886                      | .855                       |
| 24            | No. 3 -- (32 - ounces)     | 404 x 414         | 5.771                      | 1.710                      |
| 6             | No. 3 -- (cylinder)        | 404 x 700         | 2.126                      | .630                       |
| 12            | No. 3 -- (cylinder)        | 404 x 700         | 4.249                      | 1.259                      |
| 6             | No. 5                      | 502 x 510         | 2.433                      | .721                       |
| 6             | No. 10                     | 603 x 700         | 4.502                      | 1.334                      |
| 6             | No. 12 -- (gallon)         | 603 x 812         | 5.690                      | 1.686                      |
| 6             | No. 12 -- (gallon)         | 610 x 800         | 5.994                      | 1.776                      |

<sup>a</sup>Based on a case of 24/2's being 432 ounces.

SOURCE: National Canners Association, Washington, DC

| Citrus Box Weights: Approximate Net Weight<br>In Pounds by Fruit Type & States |                 |                 |                 |                 |       |
|--|-----------------|-----------------|-----------------|-----------------|-------|
| State  | Oranges         | Grapefruit      | Tangerines      | Lemons          | Limes |
| ----- pounds per 1-3/5 bushel box -----  |                 |                 |                 |                 |       |
| FL   | 90 <sup>a</sup> | 85              | 95              | 90              | 88    |
| CA   | 80 <sup>b</sup> | 80 <sup>c</sup> | 80 <sup>d</sup> | 80 <sup>e</sup> | --    |
| TX   | 85              | 80              | --              | --              | --    |
| AZ   | -- <sup>b</sup> | -- <sup>c</sup> | 80 <sup>d</sup> | 80 <sup>e</sup> | --    |

<sup>a</sup>Includes Temples & tangelos at 90 pounds.

<sup>b</sup>AZ was 75 lbs. prior to 2010-11. CA was 75 lbs. prior to 2010-11.

<sup>c</sup>AZ was 67 lbs. from 1993-94 to 2008-09 and 64 lbs. prior to 1993-94. CA was 67 lbs. from 1993-94 to 2009-10 and 65 lbs. prior to 1993-94.

<sup>d</sup>AZ was 75 lbs. prior to 2010-11. CA was 75 lbs. prior to 2010-11.

<sup>e</sup>AZ was 76 lbs. prior to 2010-11. CA was 76 lbs. prior to 2010-11.

| Florida Citrus Product<br>Seasons                  |
|--|
| <b>Fresh:</b><br><br>AUG 1 - JUL 31                |
| <b>Frozen Concentrate:</b><br><br>OCT 1 - SEP 30*  |
| <b>Chilled &amp; Canned:</b><br><br>OCT 1 - SEP 30 |

\*Historical frozen conc. season was Dec 1 - Nov 30. Data in this book have been converted to reflect current Oct-Sep season.

| Significant Florida Citrus Belt Freeze & Hurricane Dates |      |            |              |
|--|------|------------|--------------|
| FREEZES  |      | HURRICANES |              |
| DEC 12 - 13  | 1957 | Charley    | AUG 13, 2004 |
| DEC 11, 13 - 16  | 1962 | Frances    | SEP 5, 2004  |
| JAN 19 - 21  | 1971 | Jeanne     | SEP 26, 2004 |
| JAN 17 - 22  | 1977 | Wilma      | OCT 24, 2005 |
| JAN 12 - 13  | 1981 |            |              |
| JAN 11 - 14  | 1982 |            |              |
| DEC 24 - 25  | 1983 |            |              |
| JAN 21 - 22  | 1985 |            |              |
| DEC 23 - 24  | 1989 |            |              |

| CASE EQUIVALENTS           |                          |                          |
|----------------------------|--------------------------|--------------------------|
| Concentrate                | Chilled                  | Canned                   |
| 48/6 oz. = 2.25 conc. gal. | 12/32 oz. = 3.0 SSE gal. | 24/#2's = 3.375 SSE gal. |
| 24/12 oz. = 2.25 " "       | 6/64 oz. = 3.0 " "       | 12/46 oz. = 4.31 " "     |
| 24/6 oz. = 1.125 " "       |                          | 48/6 oz. = 2.25 " "      |
| 24/16 oz. = 3.0 " "        |                          | 24/12 oz. = 2.25 " "     |
| 12/32 oz. = 3.0 " "        |                          |                          |
| 6/64 oz. = 3.0 " "         |                          |                          |

## Basic Metric Conversions

1 metric ton = 2,204.6 pounds

1 pound = .454 kilograms

1 kilogram = 2.2046 pounds

1 90-lb. box = 40.8 kilograms

1 85-lb. box = 38.56 kilograms

1 gallon = 3.785 liters

1 liter = .2641 gallons

1 kiloliter = 1,000 liters

1 hectare = 2.47 acres

1 acre = .405 hectare

### 1 Metric Ton

| 65° Brix  | 66° Brix  |                    |
|-----------|-----------|--------------------|
| = 1,433   | = 1,455   | pounds solids (PS) |
| = 200.84  | = 203.92  | gallons 65° Brix   |
| = 196.89  | = 199.91  | gallons 66° Brix   |
| = 344.8   | = 350.1   | gallons 42° Brix   |
| = 1,392.6 | = 1,413.9 | gallons 11.8° Brix |
| = 760.5   | = 772.1   | liters 65° Brix    |
| = 745.5   | = 756.9   | liters 66° Brix    |
| = 1,305.6 | = 1,325.6 | liters 42° Brix    |
| = 5,273.0 | = 5,353.8 | liters 11.8° Brix  |

One (1) 55-gallon drum 65° Brix

= 370 pounds solids, contains about 52 gallons, & weighs about 625 pounds.

## Commonly Used Brix Equivalents

| Degrees Brix | PS Per Gallon | Weight/Gallon in Air at 20°C (pounds) | Equivalent Gallons |          |          |
|--------------|---------------|---------------------------------------|--------------------|----------|----------|
|              |               |                                       | 11.8° Brix         | 42° Brix | 65° Brix |
| 10.0         | 0.865         | 8.655                                 | 0.84062            | 0.20813  | 0.12123  |
| 11.8         | 1.029         | 8.717                                 | 1.00000            | 0.24759  | 0.14422  |
| 40.0         | 3.924         | 9.809                                 | 3.81341            | 0.94418  | 0.54996  |
| 42.0         | 4.156         | 9.896                                 | 4.03887            | 1.00000  | 0.58248  |
| 43.4         | 4.321         | 9.957                                 | 4.19922            | 1.03970  | 0.60561  |
| 45.0         | 4.512         | 10.027                                | 4.38484            | 1.08566  | 0.63238  |
| 50.0         | 5.126         | 10.253                                | 4.98154            | 1.23340  | 0.71843  |
| 58.0         | 6.165         | 10.630                                | 5.99125            | 1.48340  | 0.86405  |
| 65.0         | 7.135         | 10.977                                | 6.93920            | 1.71679  | 1.00000  |
| 66.0         | 7.278         | 11.028                                | 7.07289            | 1.75120  | 1.02004  |
| 66.5         | 7.350         | 11.053                                | 7.14286            | 1.76853  | 1.03013  |

SOURCE: C.S. Chen, "Brix and Pounds Solids Tables," Scientific Research Department, Florida Department of Citrus, Lake Alfred, FL, May 1983.

## Pounds Solids and Weight per Gallon at Various Degrees Brix

| Degrees Brix | Pounds Solids/Gallon | Weight/Gallon in Air at 20°C (pounds) | Degrees Brix | Pounds Solids/Gallon | Weight/Gallon in Air at 20°C (pounds) |
|--------------|----------------------|---------------------------------------|--------------|----------------------|---------------------------------------|
| 8.0          | 0.687                | 8.586                                 | 12.5         | 1.093                | 8.742                                 |
| 8.5          | 0.731                | 8.603                                 | 12.6         | 1.102                | 8.745                                 |
| 9.0          | 0.776                | 8.621                                 | 12.7         | 1.111                | 8.749                                 |
| 9.5          | 0.821                | 8.638                                 | 12.8         | 1.120                | 8.752                                 |
| 9.6          | 0.830                | 8.641                                 | 12.9         | 1.130                | 8.756                                 |
| 9.7          | 0.839                | 8.645                                 | 39.5         | 3.866                | 9.788                                 |
| 9.8          | 0.848                | 8.648                                 | 39.6         | 3.878                | 9.792                                 |
| 9.9          | 0.856                | 8.651                                 | 39.7         | 3.889                | 9.796                                 |
| 10.0         | 0.865                | 8.655                                 | 39.8         | 3.901                | 9.801                                 |
| 10.1         | 0.874                | 8.658                                 | 39.9         | 3.912                | 9.805                                 |
| 10.2         | 0.883                | 8.662                                 | 40.0         | 3.924                | 9.809                                 |
| 10.3         | 0.893                | 8.665                                 | 40.1         | 3.935                | 9.814                                 |
| 10.4         | 0.902                | 8.669                                 | 40.2         | 3.947                | 9.818                                 |
| 10.5         | 0.911                | 8.672                                 | 40.3         | 3.958                | 9.822                                 |
| 10.6         | 0.920                | 8.676                                 | 40.4         | 3.970                | 9.827                                 |
| 10.7         | 0.929                | 8.679                                 | 41.5         | 4.098                | 9.874                                 |
| 10.8         | 0.938                | 8.682                                 | 41.6         | 4.109                | 9.878                                 |
| 10.9         | 0.947                | 8.686                                 | 41.7         | 4.121                | 9.883                                 |
| 11.0         | 0.956                | 8.689                                 | 41.8         | 4.133                | 9.887                                 |
| 11.1         | 0.965                | 8.693                                 | 41.9         | 4.144                | 9.891                                 |
| 11.2         | 0.974                | 8.696                                 | 42.0         | 4.156                | 9.896                                 |
| 11.3         | 0.983                | 8.700                                 | 42.1         | 4.168                | 9.900                                 |
| 11.4         | 0.992                | 8.703                                 | 42.2         | 4.180                | 9.904                                 |
| 11.5         | 1.001                | 8.707                                 | 42.3         | 4.191                | 9.909                                 |
| 11.6         | 1.010                | 8.710                                 | 42.4         | 4.203                | 9.913                                 |
| 11.7         | 1.020                | 8.714                                 | 42.5         | 4.215                | 9.917                                 |
| 11.8         | 1.029                | 8.717                                 | 42.6         | 4.227                | 9.922                                 |
| 11.9         | 1.038                | 8.721                                 | 42.7         | 4.238                | 9.926                                 |
| 12.0         | 1.047                | 8.724                                 | 42.8         | 4.250                | 9.930                                 |
| 12.1         | 1.056                | 8.728                                 | 42.9         | 4.262                | 9.935                                 |
| 12.2         | 1.065                | 8.731                                 | 43.0         | 4.274                | 9.939                                 |
| 12.3         | 1.074                | 8.735                                 | 43.1         | 4.286                | 9.943                                 |
| 12.4         | 1.084                | 8.738                                 | 43.2         | 4.297                | 9.948                                 |

Continued . . .

## Pounds Solids and Weight per Gallon at Various Degrees Brix (Cont.)

| Degrees Brix | Pounds Solids/Gallon | Weight/Gallon in Air at 20°C (pounds) | Degrees Brix | Pounds Solids/Gallon | Weight/Gallon in Air at 20°C (pounds) |
|--------------|----------------------|---------------------------------------|--------------|----------------------|---------------------------------------|
| 43.3         | 4.309                | 9.952                                 | 57.6         | 6.112                | 10.611                                |
| 43.4         | 4.321                | 9.957                                 | 57.7         | 6.125                | 10.616                                |
| 43.5         | 4.333                | 9.961                                 | 57.8         | 6.139                | 10.620                                |
| 43.6         | 4.345                | 9.965                                 | 57.9         | 6.152                | 10.625                                |
| 43.7         | 4.357                | 9.970                                 | 58.0         | 6.165                | 10.630                                |
| 43.8         | 4.369                | 9.974                                 | 58.1         | 6.179                | 10.635                                |
| 43.9         | 4.381                | 9.978                                 | 58.2         | 6.192                | 10.640                                |
| 44.0         | 4.392                | 9.983                                 | 58.3         | 6.206                | 10.645                                |
| 44.1         | 4.404                | 9.987                                 | 58.4         | 6.219                | 10.649                                |
| 44.2         | 4.416                | 9.992                                 | 59.0         | 6.300                | 10.679                                |
| 44.3         | 4.428                | 9.996                                 | 64.0         | 6.993                | 10.927                                |
| 44.4         | 4.440                | 10.000                                | 64.5         | 7.064                | 10.952                                |
| 44.5         | 4.452                | 10.005                                | 64.6         | 7.078                | 10.957                                |
| 44.6         | 4.464                | 10.009                                | 64.7         | 7.092                | 10.962                                |
| 44.7         | 4.476                | 10.014                                | 64.8         | 7.107                | 10.967                                |
| 44.8         | 4.488                | 10.018                                | 64.9         | 7.121                | 10.972                                |
| 44.9         | 4.500                | 10.023                                | 65.0         | 7.135                | 10.977                                |
| 45.0         | 4.512                | 10.027                                | 65.1         | 7.149                | 10.982                                |
| 45.1         | 4.524                | 10.032                                | 65.2         | 7.164                | 10.987                                |
| 45.2         | 4.536                | 10.036                                | 65.3         | 7.178                | 10.992                                |
| 45.3         | 4.548                | 10.041                                | 65.4         | 7.192                | 10.997                                |
| 45.4         | 4.560                | 10.045                                | 65.5         | 7.207                | 11.002                                |
| 49.5         | 5.064                | 10.230                                | 65.6         | 7.221                | 11.007                                |
| 49.6         | 5.076                | 10.234                                | 65.7         | 7.235                | 11.013                                |
| 49.7         | 5.089                | 10.239                                | 65.8         | 7.250                | 11.018                                |
| 49.8         | 5.101                | 10.243                                | 65.9         | 7.264                | 11.023                                |
| 49.9         | 5.114                | 10.248                                | 66.0         | 7.278                | 11.028                                |
| 50.0         | 5.126                | 10.253                                | 66.1         | 7.293                | 11.033                                |
| 50.1         | 5.139                | 10.257                                | 66.2         | 7.307                | 11.038                                |
| 50.2         | 5.151                | 10.262                                | 66.3         | 7.322                | 11.043                                |
| 50.3         | 5.164                | 10.267                                | 66.4         | 7.336                | 11.048                                |
| 50.4         | 5.177                | 10.271                                | 66.5         | 7.350                | 11.053                                |
| 57.5         | 6.098                | 10.606                                | 66.6         | 7.365                | 11.058                                |

SOURCE: C.S. Chen, "Brix and Pounds Solids Tables," Scientific Research Department, Florida Department of Citrus, Lake Alfred, FL, May 1983.

# International Marketing Conversion Tables

|                              |   |                  |             |
|------------------------------|---|------------------|-------------|
| One (1) metric ton 65° Brix  | = | 1,392.6          | SSE gallons |
| One (1) metric ton 58° Brix  | = | 1,242.5          | " "         |
| One (1) kiloliter 65° Brix   | = | 1,831.2          | " "         |
| One (1) kiloliter 58° Brix   | = | 1,582.3          | " "         |
| 4/5-bushel carton oranges    | = | 3.0 <sup>a</sup> | " "         |
| 4/5-bushel carton grapefruit | = | 2.4 <sup>b</sup> | " "         |

<sup>a</sup>Based on an average yield of 6.0 SSE gallons/box. <sup>b</sup>Based on an average yield of 4.8 SSE gallons/box.

| 40-foot Shipping Container Capacity |   |     |  |
|-------------------------------------|---|-----|--|
| 55-gallon drums 65° Brix            | = | 84  |  |
| 55-gallon drums SSE                 | = | 103 |  |
| 300-gallon bins SSE                 | = | 21  |  |

| Concentrate                             |   |        |             |
|---|---|--------|-------------|
| One (1) case 24/12-ounce 58° Brix (1:5) | = | 13.48  | SSE gallons |
| One (1) case 24/12-ounce 65° Brix (1:6) | = | 15.60  | " "         |
| One (1) 55-gallon drum 58° Brix (1:5)   | = | 311.55 | " "         |
| One (1) 55-gallon drum 65° Brix (1:6)   | = | 360.56 | " "         |

| Chilled                 |   |      |             |
|-------------------------|---|------|-------------|
| One (1) case 6/64-ounce | = | 3.00 | SSE gallons |
| One (1) case 8/64-ounce | = | 4.00 | " "         |

| Canned                   |   |      |             |
|--------------------------|---|------|-------------|
| One (1) case 12/46-ounce | = | 4.31 | SSE gallons |
| One (1) case 48/6-ounce  | = | 2.25 | " "         |



# NOTES

---

## New York FCOJ Monthly Average Nearby Futures Settlement Price

| Month                              | 2010   | 2011   | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   |
|------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| ----- cents per pound solids ----- |        |        |        |        |        |        |        |        |        |
| JAN                                | 137.47 | 175.51 | 197.66 | 113.23 | 142.38 | 143.30 | 130.33 | 177.29 | 142.58 |
| FEB                                | 137.38 | 173.42 | 190.43 | 125.22 | 145.74 | 133.12 | 131.47 | 170.63 |        |
| MAR                                | 146.30 | 168.12 | 181.92 | 134.00 | 152.77 | 119.72 | 128.14 | 175.71 |        |
| APR                                | 132.96 | 168.87 | 149.18 | 143.90 | 160.10 | 115.72 | 134.94 | 160.57 |        |
| MAY                                | 140.29 | 180.07 | 114.39 | 146.74 | 157.96 | 115.06 | 144.57 | 144.05 |        |
| JUN                                | 141.05 | 187.99 | 116.13 | 143.78 | 158.62 | 119.08 | 165.50 | 136.62 |        |
| JUL                                | 143.48 | 198.06 | 118.26 | 140.65 | 148.03 | 121.01 | 183.53 | 131.32 |        |
| AUG                                | 138.88 | 174.65 | 121.99 | 136.35 | 145.22 | 129.36 | 181.34 | 135.54 |        |
| SEP                                | 150.29 | 163.65 | 119.86 | 131.93 | 145.70 | 119.46 | 198.53 | 149.69 |        |
| OCT                                | 150.68 | 170.00 | 112.54 | 123.12 | 138.41 | 124.90 | 201.27 | 155.37 |        |
| NOV                                | 156.51 | 180.26 | 115.81 | 134.78 | 135.71 | 145.28 | 217.25 | 162.50 |        |
| DEC                                | 163.16 | 170.23 | 130.44 | 139.92 | 145.43 | 145.32 | 203.60 | 146.22 |        |

SOURCE: New York Board of Trade and Intercontinental Exchange (ICE)

## Florida FCOJ Movement by Product Type

| Oct-Sep<br>Season                    | Retail | Institutional | Bulk               | Total <sup>a</sup> |
|--------------------------------------|--------|---------------|--------------------|--------------------|
| ----- million gallons 42° Brix ----- |        |               |                    |                    |
| 1990-91                              | 72.1   | 21.5          | 116.0              | 209.7              |
| 1991-92                              | 68.3   | 22.8          | 120.6              | 211.7              |
| 1992-93                              | 69.5   | 20.9          | 153.6              | 244.0              |
| 1993-94                              | 60.7   | 20.5          | 157.0              | 238.2              |
| 1994-95                              | 54.3   | 22.7          | 188.4              | 265.5              |
| 1995-96                              | 52.3   | 28.4          | 196.2              | 276.9              |
| 1996-97                              | 53.1   | 24.5          | 189.7              | 267.3              |
| 1997-98                              | 49.5   | 26.2          | 192.1              | 267.8              |
| 1998-99                              | 41.1   | 27.2          | 170.7              | 239.1              |
| 1999-00                              | 35.7   | 27.5          | 176.5 <sup>b</sup> | 239.7 <sup>b</sup> |
| 2000-01                              | 34.7   | 27.1          | 164.2 <sup>b</sup> | 226.0 <sup>b</sup> |
| 2001-02                              | 30.8   | 25.5          | 193.7              | 249.9              |
| 2002-03                              | 25.8   | 25.0          | 149.2              | 200.1              |
| 2003-04                              | 22.8   | 26.9          | 167.3              | 217.0              |
| 2004-05                              | 20.7   | 23.0          | 131.4              | 175.2              |
| 2005-06                              | 18.3   | 21.4          | 121.2              | 160.8              |
| 2006-07                              | 15.8   | 19.9          | 113.4              | 149.2              |
| 2007-08                              | 14.7   | 18.6          | 102.6              | 135.9              |
| 2008-09                              | 14.8   | 18.3          | 113.1              | 146.2              |
| 2009-10                              | 12.5   | 17.7          | 100.1              | 130.2              |
| 2010-11                              | 9.4    | 17.4          | 121.7              | 148.5              |
| 2011-12                              | 7.5    | 16.8          | 100.0              | 124.3              |
| 2012-13                              | 6.8    | 16.7          | 84.9               | 108.4              |
| 2013-14                              | 5.0    | 15.9          | 76.3               | 97.3               |
| 2014-15                              | 4.6    | 16.2          | 66.9               | 87.7               |
| 2015-16                              | 4.1    | 15.4          | 68.6               | 88.1               |
| 2016-17                              | 3.5    | 13.6          | 70.3               | 87.4               |
| 2017-18                              |        |               |                    |                    |

<sup>a</sup>May not add to total due to rounding.

<sup>b</sup>Adjusted.

SOURCE: Processors' Statistics Reports

## Florida FCOJ Inventories, Pack and Movement

| Oct-Sep<br>Season                    | Beginning<br>Inventory | Pack       |                    | Movement <sup>a</sup> | Ending<br>Inventory <sup>b</sup> |
|--------------------------------------|------------------------|------------|--------------------|-----------------------|----------------------------------|
|                                      |                        | From Fruit | Other              |                       |                                  |
| ----- million gallons 42° Brix ----- |                        |            |                    |                       |                                  |
| 1990-91                              | 57.64                  | 151.40     | 68.67              | 219.01                | 58.69                            |
| 1991-92                              | 58.69                  | 145.42     | 68.80              | 222.64                | 50.28                            |
| 1992-93                              | 50.28                  | 208.66     | 75.77              | 261.05                | 73.67                            |
| 1993-94                              | 73.67                  | 182.23     | 84.27              | 254.03                | 86.14                            |
| 1994-95                              | 86.14                  | 216.50     | 59.75              | 280.95                | 81.44                            |
| 1995-96                              | 81.44                  | 202.35     | 73.61              | 286.93                | 70.48                            |
| 1996-97                              | 70.48                  | 241.80     | 69.65              | 278.87                | 105.45 <sup>c</sup>              |
| 1997-98                              | 105.45 <sup>c</sup>    | 253.73     | 47.18              | 271.40                | 134.97                           |
| 1998-99                              | 134.97                 | 158.88     | 58.02              | 247.64                | 105.20 <sup>d</sup>              |
| 1999-00                              | 105.20 <sup>d</sup>    | 207.71     | 46.32              | 246.57                | 112.65 <sup>d</sup>              |
| 2000-01                              | 112.65 <sup>d</sup>    | 196.06     | 49.15              | 229.59                | 128.27                           |
| 2001-02                              | 128.27                 | 215.06     | 44.59 <sup>d</sup> | 261.26                | 126.66 <sup>d</sup>              |
| 2002-03                              | 126.66 <sup>d</sup>    | 156.84     | 47.35 <sup>d</sup> | 206.85                | 124.03                           |
| 2003-04                              | 124.03                 | 218.30     | 32.18              | 222.26                | 151.83                           |
| 2004-05                              | 151.83                 | 86.00      | 45.38              | 175.15                | 107.78                           |
| 2005-06                              | 107.78                 | 84.60      | 35.83              | 160.80                | 67.17                            |
| 2006-07                              | 67.17                  | 79.05      | 55.10              | 149.20                | 52.14                            |
| 2007-08                              | 52.14                  | 135.20     | 58.45              | 137.74                | 108.05                           |
| 2008-09                              | 108.05                 | 120.80     | 33.24              | 146.16                | 116.56                           |
| 2009-10                              | 116.56                 | 82.25      | 26.41              | 130.23                | 94.99                            |
| 2010-11                              | 94.99                  | 82.11      | 23.00              | 148.47                | 51.63                            |
| 2011-12                              | 51.63                  | 106.43     | 27.34              | 124.25                | 61.15                            |
| 2012-13                              | 61.15                  | 76.13      | 48.03              | 108.44                | 76.87                            |
| 2013-14                              | 76.87                  | 35.65      | 50.71              | 97.28                 | 65.96                            |
| 2014-15                              | 65.96                  | 28.88      | 62.48              | 87.72                 | 69.60                            |
| 2015-16                              | 69.60                  | 22.27      | 48.97              | 88.14                 | 52.70                            |
| 2016-17                              | 52.70                  | 17.92      | 62.98              | 87.35                 | 46.25                            |
| 2016-17                              | 46.25                  |            |                    |                       |                                  |

<sup>a</sup>Includes futures contract.

<sup>b</sup>May not calculate due to rounding deliveries.

SOURCE: Processors' Statistics Reports

<sup>c</sup>Reporting definition change.

<sup>d</sup>Adjusted.

## Florida COJ Inventories, Pack and Movement

| Oct-Sep<br>Season               | Beginning<br>Inventory <sup>b</sup> | Pack       |                     | Movement | Ending<br>Inventory <sup>ab</sup> |
|---------------------------------|-------------------------------------|------------|---------------------|----------|-----------------------------------|
|                                 |                                     | From Fruit | From<br>Concentrate |          |                                   |
| ----- million SSE gallons ----- |                                     |            |                     |          |                                   |
| 1990-91                         | NA                                  | NA         | NA                  | 349.86   | NA                                |
| 1991-92                         | NA                                  | NA         | NA                  | 384.73   | NA                                |
| 1992-93                         | NA                                  | NA         | NA                  | 408.42   | NA                                |
| 1993-94                         | 78.42                               | 311.12     | 142.20              | 444.20   | 89.00                             |
| 1994-95                         | 89.00                               | 326.66     | 126.89              | 463.99   | 78.88                             |
| 1995-96                         | 78.88                               | 384.12     | 116.30              | 472.60   | 108.27                            |
| 1996-97                         | 108.27                              | 400.28     | 86.35               | 477.41   | 119.06                            |
| 1997-98                         | 119.06                              | 452.07     | 96.08               | 583.61   | 83.69                             |
| 1998-99                         | 83.69                               | 505.51     | 85.10               | 588.06   | 86.69                             |
| 1999-00                         | 86.69                               | 558.82     | 86.71               | 577.87   | 163.42                            |
| 2000-01                         | 163.42                              | 543.28     | 72.90               | 635.17   | 152.32                            |
| 2001-02                         | 152.32                              | 531.27     | 58.80               | 602.61   | 154.36                            |
| 2002-03                         | 154.36                              | 561.69     | 53.36               | 603.15   | 179.68                            |
| 2003-04                         | 179.68                              | 559.08     | 39.49               | 615.81   | 181.54 <sup>c</sup>               |
| 2004-05                         | 181.54 <sup>c</sup>                 | 553.27     | 17.34               | 601.39   | 167.47                            |
| 2005-06                         | 167.47                              | 575.06     | 20.07               | 610.30   | 174.98                            |
| 2006-07                         | 174.98                              | 487.81     | 17.72               | 560.95   | 152.49                            |
| 2007-08                         | 152.49                              | 552.26     | 16.43               | 542.62   | 187.76                            |
| 2008-09                         | 187.76                              | 536.82     | 15.62               | 558.62   | 202.18                            |
| 2009-10                         | 202.18                              | 465.07     | 16.39               | 536.73   | 164.80                            |
| 2010-11                         | 164.80                              | 522.35     | 19.90               | 541.35   | 182.71                            |
| 2011-12                         | 182.71                              | 489.85     | 19.04               | 509.89   | 186.59                            |
| 2012-13                         | 186.59                              | 504.84     | 24.63               | 517.07   | 213.10                            |
| 2013-14                         | 213.10                              | 470.63     | 11.23               | 493.73   | 207.56                            |
| 2014-15                         | 207.56                              | 423.91     | 15.83               | 444.17   | 221.37                            |
| 2015-16                         | 221.97 <sup>d</sup>                 | 350.81     | 13.49               | 415.43   | 197.04                            |
| 2016-17                         | 197.04                              | 311.74     | 9.64                | 386.67   | 181.49                            |
| 2017-18                         | 181.49                              |            |                     |          |                                   |

<sup>a</sup>May not calculate due to rounding.

SOURCE: Processors' Statistics Reports

<sup>b</sup>Inventories include domestic receipts of non-Florida product and receipts of Florida product from non-reporting entities.

<sup>c</sup>Adjusted to "standard" 11.8° Brix gallons.

<sup>d</sup>New reporting facilities added increased carryover from previous season ending inventory.

## Florida FCGJ Inventories, Pack and Movement

| Oct-Sep<br>Season                    | Beginning<br>Inventory | Pack <sup>a</sup> | Movement                    |       | Ending<br>Inventory <sup>b</sup> |
|--------------------------------------|------------------------|-------------------|-----------------------------|-------|----------------------------------|
|                                      |                        |                   | Retail and<br>Institutional | Bulk  |                                  |
| ----- million gallons 40° Brix ----- |                        |                   |                             |       |                                  |
| 1990-91                              | 16.50 <sup>c</sup>     | 22.16             | 2.38                        | 24.07 | 12.21                            |
| 1991-92                              | 12.21                  | 20.55             | 2.28                        | 23.73 | 6.76                             |
| 1992-93                              | 6.76                   | 32.87             | 2.07                        | 24.42 | 13.14                            |
| 1993-94                              | 13.14                  | 27.27             | 1.72                        | 24.92 | 13.77                            |
| 1994-95                              | 13.77                  | 31.48             | 1.55                        | 26.39 | 17.31                            |
| 1995-96                              | 17.31                  | 27.42             | 1.45                        | 25.92 | 17.36                            |
| 1996-97                              | 17.36                  | 30.94             | 1.42                        | 25.72 | 21.15                            |
| 1997-98                              | 21.46 <sup>d</sup>     | 24.61             | 1.32                        | 27.10 | 17.64                            |
| 1998-99                              | 17.64                  | 24.77             | 1.37                        | 30.88 | 10.17                            |
| 1999-00                              | 10.10 <sup>c</sup>     | 30.05             | .97                         | 23.57 | 15.60                            |
| 2000-01                              | 13.47 <sup>c</sup>     | 27.50             | .81                         | 24.74 | 15.42                            |
| 2001-02                              | 15.42                  | 27.55             | .70                         | 23.92 | 18.36                            |
| 2002-03                              | 18.68 <sup>c</sup>     | 20.41             | .68                         | 22.75 | 15.65                            |
| 2003-04                              | 15.65                  | 21.11             | .60                         | 22.92 | 13.25                            |
| 2004-05                              | 13.25                  | 4.85              | .39                         | 12.37 | 5.35                             |
| 2005-06                              | 5.35                   | 10.25             | .38                         | 8.10  | 7.12                             |
| 2006-07                              | 7.12                   | 16.27             | .26                         | 12.37 | 10.76                            |
| 2007-08                              | 10.76                  | 14.61             | .23                         | 14.66 | 10.46                            |
| 2008-09                              | 10.46                  | 11.42             | .21                         | 12.91 | 8.85                             |
| 2009-10                              | 8.85                   | 7.72              | .17                         | 9.45  | 6.95                             |
| 2010-11                              | 6.95                   | 8.99              | .14                         | 11.13 | 4.69                             |
| 2011-12                              | 4.69                   | 9.37              | .12                         | 8.30  | 5.63                             |
| 2012-13                              | 5.63                   | 8.15              | .10                         | 8.41  | 5.27                             |
| 2013-14                              | 5.27                   | 6.07              | .09                         | 6.44  | 4.81                             |
| 2014-15                              | 4.81                   | 5.30              | .04                         | 5.85  | 4.10                             |
| 2015-16                              | 4.10                   | 4.05              | .02                         | 4.48  | 3.65                             |
| 2016-17                              | 3.65                   | 2.85              | .03                         | 4.03  | 2.44                             |
| 2017-18                              | 2.44                   |                   |                             |       |                                  |

<sup>a</sup>Includes non-Florida & foreign imports & Florida non-member & chilled GJ in FCGJ.

SOURCE: Processors' Statistics Reports

<sup>b</sup>May not calculate due to rounding.

<sup>c</sup>Adjusted.

<sup>d</sup>Includes definitional adjustment.

## Florida CGJ Inventories, Pack and Movement

| Oct-Sep<br>Season <sup>b</sup>  | Beginning<br>Inventory | Pack       |                     | Movement | Ending<br>Inventory <sup>a</sup> |
|---------------------------------|------------------------|------------|---------------------|----------|----------------------------------|
|                                 |                        | From Fruit | From<br>Concentrate |          |                                  |
| ----- million SSE gallons ----- |                        |            |                     |          |                                  |
| 1990-91                         | 3.14                   | 11.13      | 27.22 <sup>b</sup>  | 31.66    | NA                               |
| 1991-92                         | NA                     | 12.60      | 25.13 <sup>b</sup>  | 31.78    | NA                               |
| 1992-93                         | NA                     | 23.09      | 38.10 <sup>b</sup>  | 37.66    | NA                               |
| 1993-94                         | 6.77                   | 29.31      | 16.93               | 42.99    | 10.02                            |
| 1994-95                         | 10.02                  | 29.31      | 17.56               | 44.66    | 12.25                            |
| 1995-96                         | 12.25                  | 31.90      | 12.02               | 45.29    | 10.93                            |
| 1996-97                         | 10.93                  | 37.21      | 13.60               | 46.90    | 14.84                            |
| 1997-98                         | 14.84                  | 36.30      | 14.75               | 53.04    | 12.89                            |
| 1998-99                         | 12.89                  | 39.38      | 15.50               | 56.39    | 11.38                            |
| 1999-00                         | 11.38                  | 51.78      | 6.27                | 47.53    | 21.91                            |
| 2000-01                         | 21.91                  | 32.88      | 3.93                | 45.75    | 14.86                            |
| 2001-02                         | 14.86                  | 33.61      | 3.81                | 39.00    | 13.44                            |
| 2002-03                         | 13.44                  | 32.43      | 2.52                | 39.62    | 11.74                            |
| 2003-04                         | 11.74                  | 34.28      | .03                 | 34.45    | 12.03 <sup>c</sup>               |
| 2004-05                         | 12.03 <sup>c</sup>     | 16.01      | .03                 | 19.50    | 11.73                            |
| 2005-06                         | 11.73                  | 21.96      | .01                 | 20.67    | 12.51                            |
| 2006-07                         | 12.51                  | 26.60      | --                  | 23.56    | 13.84                            |
| 2007-08                         | 13.84                  | 30.99      | --                  | 25.09    | 17.43                            |
| 2008-09                         | 17.43                  | 21.87      | .01                 | 29.20    | 10.27                            |
| 2009-10                         | 10.27                  | 27.54      | --                  | 23.27    | 14.26                            |
| 2010-11                         | 14.26                  | 23.85      | .02                 | 24.41    | 14.34                            |
| 2011-12                         | 14.34                  | 22.92      | .77                 | 22.71    | 14.02                            |
| 2012-13                         | 14.02                  | 23.73      | 1.44                | 22.23    | 12.94                            |
| 2013-14                         | 12.94                  | 22.30      | --                  | 19.41    | 14.09                            |
| 2014-15                         | 14.09                  | 17.17      | --                  | 19.49    | 11.01                            |
| 2015-16                         | 14.09                  | 16.19      | --                  | 17.86    | 11.16                            |
| 2016-17                         | 11.01                  | 12.91      | --                  | 16.43    | 9.90                             |
| 2017-18                         | 9.90                   |            |                     |          |                                  |

<sup>a</sup>May not calculate due to rounding.

SOURCE: Processors' Statistics Reports

<sup>b</sup>Inventories include domestic receipts of non-Florida product and receipts of Florida product from non-reporting entities.

<sup>c</sup>Adjusted to "standard" 10.0° Brix gallons.

## Florida Orange On-Tree Earnings Per Box

| Season                             | Early & Midseason |       | Valencia |       | Total |       |
|------------------------------------|-------------------|-------|----------|-------|-------|-------|
|                                    | Fresh             | Proc. | Fresh    | Proc. | Fresh | Proc. |
| ----- dollars per 90-lb. box ----- |                   |       |          |       |       |       |
| 1993-94                            | 6.75              | 3.56  | 4.25     | 4.63  | 5.98  | 3.98  |
| 1994-95                            | 4.00              | 3.21  | 4.20     | 4.42  | 4.07  | 3.72  |
| 1995-96                            | 4.95              | 3.54  | 6.45     | 5.53  | 5.46  | 4.35  |
| 1996-97                            | 4.50              | 3.11  | 4.70     | 4.04  | 4.57  | 3.49  |
| 1997-98                            | 3.70              | 2.76  | 4.20     | 4.90  | 3.85  | 3.68  |
| 1998-99                            | 8.30              | 4.12  | 9.40     | 5.32  | 8.78  | 4.59  |
| 1999-00                            | 5.55              | 3.07  | 4.95     | 4.31  | 5.37  | 3.60  |
| 2000-01                            | 4.00              | 2.53  | 4.80     | 3.99  | 4.29  | 3.16  |
| 2001-02                            | 4.65              | 2.79  | 5.25     | 4.17  | 4.84  | 3.41  |
| 2002-03                            | 5.75              | 2.42  | 5.30     | 3.80  | 5.61  | 3.05  |
| 2003-04                            | 4.65              | 2.09  | 2.85     | 3.67  | 3.87  | 2.85  |
| 2004-05                            | 7.60              | 2.54  | 5.80     | 4.17  | 6.87  | 3.31  |
| 2005-06                            | 6.20              | 4.60  | 5.00     | 6.38  | 5.80  | 5.49  |
| 2006-07                            | 12.10             | 8.70  | 15.40    | 11.55 | 13.25 | 10.12 |
| 2007-08                            | 8.15              | 5.79  | 7.20     | 7.30  | 7.83  | 6.57  |
| 2008-09                            | 6.40              | 5.02  | 3.60     | 6.60  | 5.36  | 5.78  |
| 2009-10                            | 10.10             | 5.71  | 9.85     | 7.95  | 10.01 | 6.82  |
| 2010-11                            | 10.05             | 6.93  | 10.20    | 9.70  | 10.10 | 8.34  |
| 2011-12                            | 10.35             | 8.80  | 10.55    | 11.00 | 10.42 | 9.90  |
| 2012-13                            | 11.85             | 5.92  | 9.25     | 8.60  | 10.86 | 7.27  |
| 2013-14                            | 13.25             | 8.10  | 14.15    | 10.75 | 13.62 | 9.41  |
| 2014-15                            | 15.45             | 7.95  | 13.00    | 10.20 | 14.39 | 9.11  |
| 2015-16                            | 17.25             | 8.45  | 12.45    | 10.55 | 15.14 | 9.63  |
| 2016-17 <sup>a</sup>               | 17.75             | 8.05  | 17.25    | 10.50 | 17.51 | 9.33  |

<sup>a</sup>Preliminary.

SOURCE: NASS



## Florida Grapefruit On-Tree Earnings Per Box

| Season                             | White |       | Colored |       | Total |       |
|------------------------------------|-------|-------|---------|-------|-------|-------|
|                                    | Fresh | Proc. | Fresh   | Proc. | Fresh | Proc. |
| ----- dollars per 85-lb. box ----- |       |       |         |       |       |       |
| 1993-94                            | 7.55  | 1.69  | 4.70    | 1.13  | 5.52  | 1.51  |
| 1994-95                            | 6.75  | 1.39  | 3.05    | -.23  | 4.00  | .83   |
| 1995-96                            | 5.88  | .88   | 2.96    | -.06  | 3.71  | .56   |
| 1996-97                            | 5.23  | -.18  | 3.26    | .20   | 3.74  | -.01  |
| 1997-98                            | 5.38  | -.65  | 2.85    | -.05  | 3.42  | -.33  |
| 1998-99                            | 6.80  | .29   | 4.52    | .28   | 5.04  | .30   |
| 1999-00                            | 9.78  | 2.35  | 5.52    | 1.60  | 6.52  | 1.98  |
| 2000-01                            | 6.53  | .87   | 4.30    | .29   | 4.81  | .59   |
| 2001-02                            | 6.54  | .91   | 4.92    | .17   | 5.25  | .56   |
| 2002-03                            | 7.57  | .36   | 5.13    | .21   | 5.63  | .29   |
| 2003-04                            | 7.50  | .50   | 7.27    | .70   | 7.32  | .60   |
| 2004-05                            | 21.32 | 5.73  | 19.11   | 4.76  | 19.51 | 5.13  |
| 2005-06                            | 16.09 | 5.03  | 13.40   | 3.78  | 13.96 | 4.29  |
| 2006-07                            | 9.04  | .76   | 9.61    | 1.18  | 9.51  | .99   |
| 2007-08                            | 9.70  | .41   | 10.20   | .81   | 10.11 | .63   |
| 2008-09                            | 6.30  | .62   | 8.50    | .44   | 8.17  | .52   |
| 2009-10                            | 13.95 | 2.96  | 12.60   | 2.93  | 12.82 | 2.94  |
| 2010-11                            | 13.20 | 3.34  | 10.55   | 3.73  | 10.99 | 3.58  |
| 2011-12                            | 12.05 | 4.56  | 10.40   | 4.72  | 10.64 | 4.66  |
| 2012-13                            | 12.35 | 3.78  | 10.80   | 2.74  | 11.00 | 3.16  |
| 2013-14                            | 15.15 | 4.05  | 11.80   | 2.85  | 12.20 | 3.30  |
| 2014-15                            | 12.55 | 3.89  | 11.95   | 3.23  | 12.02 | 3.47  |
| 2015-16                            | 17.40 | 5.64  | 14.50   | 5.50  | 14.84 | 5.55  |
| 2016-17 <sup>a</sup>               | 18.50 | 6.20  | 15.70   | 7.70  | 16.02 | 7.32  |

<sup>a</sup>Preliminary.

SOURCE: NASS

## Total On-Tree Earnings of the Florida Citrus Industry

| Season                       | Oranges   | Temples | Grape-<br>fruit | Tang-<br>erines | Tangelos | K-Early | Limes | Lemons | Total     |
|------------------------------|-----------|---------|-----------------|-----------------|----------|---------|-------|--------|-----------|
| ----- thousand dollars ----- |           |         |                 |                 |          |         |       |        |           |
| 2000-01                      | 716,055   | 2,565   | 100,869         | 35,867          | 2,671    | 84      | 2,999 | 921    | 862,031   |
| 2001-02                      | 797,602   | 3,395   | 107,653         | 51,554          | 5,307    | 36      | 929   | 299    | 966,775   |
| 2002-03                      | 643,804   | 2,615   | 94,518          | 46,217          | 6,114    | b       | b     | 2,061  | 795,329   |
| 2003-04                      | 699,927   | 1,502   | 136,295         | 48,464          | 7,484    | b       | b     | b      | 893,672   |
| 2004-05                      | 522,892   | 1,615   | 172,365         | 53,503          | 3,794    | b       | b     | b      | 754,169   |
| 2005-06                      | 813,322   | 2,214   | 149,655         | 51,907          | 7,512    | b       | b     | b      | 1,024,610 |
| 2006-07                      | 1,325,742 | c       | 120,280         | 58,152          | 10,298   | b       | b     | b      | 1,514,472 |
| 2007-08                      | 1,125,348 | c       | 117,507         | 36,830          | 4,309    | b       | b     | b      | 1,283,994 |
| 2008-09                      | 937,069   | c       | 82,696          | 24,986          | 1,984    | b       | b     | b      | 1,046,735 |
| 2009-10                      | 929,915   | c       | 152,156         | 45,134          | 3,902    | b       | b     | b      | 1,131,107 |
| 2010-11                      | 1,181,898 | c       | 132,747         | 47,558          | 6,423    | b       | b     | b      | 1,368,626 |
| 2011-12                      | 1,455,717 | c       | 135,229         | 38,554          | 11,101   | b       | b     | b      | 1,640,601 |
| 2012-13                      | 992,526   | c       | 118,658         | 43,370          | 10,209   | b       | b     | b      | 1,164,763 |
| 2013-14                      | 1,008,622 | c       | 111,154         | 46,308          | 9,839    | b       | b     | b      | 1,175,923 |
| 2014-15                      | 909,387   | c       | 93,548          | 39,857          | 6,951    | b       | b     | b      | 1,049,743 |
| 2015-16                      | 808,765   | c       | 105,884         | 25,883          | 7,010    | b       | b     | b      | 947,542   |
| 2016-17 <sup>a</sup>         | 664,636   | 2,195   | 87,574          | 23,272          | 5,218    | b       | b     | b      | 780,700   |

<sup>a</sup>Preliminary.

<sup>b</sup>No longer reported.

<sup>c</sup>Temples included with oranges.

<sup>d</sup>Tangelos and Temples included with Tangerines

SOURCE: NASS.

**Delivered-In Prices Reported by Florida Citrus Processors  
Association for Oranges Purchased<sup>a</sup>**

| Season/Item <sup>b</sup>   | To Midseason Break | After Midseason Break | Combined Early/Midseason and Valencia |
|----------------------------|--------------------|-----------------------|---------------------------------------|
| <b>2004-05</b>             |                    |                       |                                       |
| Priced Boxes               | 23,252,092         | 19,881,954            | 43,134,046                            |
| \$/PS Average              | .798043            | 1.028422              | .909710                               |
| \$/Box Average             | 4.784269           | 6.782594              | 5.705365                              |
| <b>2005-06</b>             |                    |                       |                                       |
| Priced Boxes               | 24,427,462         | 28,187,251            | 52,614,712                            |
| \$/PS Average              | 1.156686           | 1.466807              | 1.333074                              |
| \$/Box Average             | 6.864509           | 9.949923              | 8.517456                              |
| <b>2006-07</b>             |                    |                       |                                       |
| Priced Boxes               | 25,652,286         | 29,934,337            | 55,586,623                            |
| \$/PS Average              | 1.949092           | 2.225154              | 2.105940                              |
| \$/Box Average             | 12.096146          | 15.569794             | 13.966764                             |
| <b>2007-08</b>             |                    |                       |                                       |
| Priced Boxes               | 27,072,004         | 29,047,935            | 56,119,938                            |
| \$/PS Average              | 1.389960           | 1.385165              | 1.387342                              |
| \$/Box Average             | 8.775844           | 9.800748              | 9.306339                              |
| <b>2008-09</b>             |                    |                       |                                       |
| Priced Boxes               | 20,854,062         | 14,663,518            | 35,517,580                            |
| \$/PS Average              | 1.009965           | 1.133625              | 1.064156                              |
| \$/Box Average             | 6.276532           | 7.815865              | 6.912050                              |
| <b>2009-10<sup>d</sup></b> |                    |                       |                                       |
| Priced Boxes               | 15,051,846         | 13,149,967            | 28,201,813                            |
| \$/PS Average              | 1.335339           | 1.620300              | 1.474935                              |
| \$/Box Average             | 8.033363           | 10.714785             | 9.283659                              |
| <b>2010-11<sup>d</sup></b> |                    |                       |                                       |
| Priced Boxes               | 19,402,884         | 16,433,930            | 35,836,814                            |
| \$/PS Average              | 1.540521           | 1.849534              | 1.690325                              |
| \$/Box Average             | 9.192988           | 12.261151             | 10.599977                             |
| <b>2011-12<sup>d</sup></b> |                    |                       |                                       |
| Priced Boxes               | 21,135,709         | 17,534,709            | 38,670,418                            |
| \$/PS Average              | 1.768390           | 2.042142              | 1.898821                              |
| \$/Box Average             | 11.101336          | 14.062827             | 12.444194                             |
| <b>2012-13<sup>d</sup></b> |                    |                       |                                       |
| Priced Boxes               | 11,793,325         | 8,175,236             | 19,684,951                            |
| \$/PS Average              | 1.362686           | 1.666304              | 1.495231                              |
| \$/Box Average             | 8.100968           | 11.012758             | 9.288143                              |
| <b>2013-14<sup>d</sup></b> |                    |                       |                                       |
| Priced Boxes               | 4,471,122          | 3,792,059             | 8,225,527                             |
| \$/PS Average              | 1.711115           | 2.376897              | 2.033652                              |
| \$/Box Average             | 10.202280          | 15.439524             | 12.611879                             |
| <b>2014-15<sup>d</sup></b> |                    |                       |                                       |
| Priced Boxes               | 4,708,853          | 3,397,105             | 8,105,958                             |
| \$/PS Average              | 1.935445           | 2.161759              | 2.036065                              |
| \$/Box Average             | 11.046950          | 13.943537             | 12.260873                             |
| <b>2015-16<sup>d</sup></b> |                    |                       |                                       |
| Priced Boxes               | 1,727,623          | 2,841,332             | 4,568,955                             |
| \$/PS Average              | 1.888284           | 2.289316              | 2.148065                              |
| \$/Box Average             | 10.467793          | 14.191818             | 12.783681                             |
| <b>2016-17<sup>d</sup></b> |                    |                       |                                       |
| Priced Boxes               | 4,118,559          | 5,389,711             | 9,508,270                             |
| \$/PS Average              | 2.405466           | 2.738309              | 2.603083                              |
| \$/Box Average             | 13.472594          | 17.126843             | 15.543985                             |

<sup>a</sup>Excludes participation and intermediate prices, and prices for oranges purchased for chilled orange juice production.

<sup>b</sup>Total boxes and weighted average price of spot, contract, and final prices combined.

<sup>c</sup>Excludes chilled orange juice production.

<sup>d</sup>In order to accurately report the total boxes and prices reported during the season, boxes that are reported in the month prior to the official start of the season are included in the following season.

SOURCE: Processors' Statistics Reports

**Delivered-In Prices Reported by Florida Citrus Processors  
Association for Grapefruit Purchased**

| Season/Item                       | White     | Red/Pink  | Combined  |
|-----------------------------------|-----------|-----------|-----------|
| <b><u>2004-05</u></b>             |           |           |           |
| Priced Boxes                      | 927,887   | 1,415,237 | 2,343,124 |
| \$/PS Average                     | 1.884147  | 1.817692  | 1.843014  |
| \$/Box Average                    | 8.395907  | 8.626136  | 8.534964  |
| <b><u>2005-06</u></b>             |           |           |           |
| Priced Boxes                      | 2,159,375 | 3,157,416 | 5,316,791 |
| \$/PS Average                     | 2.343180  | 1.874818  | 2.059679  |
| \$/Box Average                    | 10.119715 | 8.492313  | 9.153270  |
| <b><u>2006-07</u></b>             |           |           |           |
| Priced Boxes                      | 2,298,216 | 2,841,651 | 5,139,867 |
| \$/PS Average                     | .694941   | .657774   | .673897   |
| \$/Box Average                    | 3.349633  | 3.346866  | 3.348103  |
| <b><u>2007-08</u></b>             |           |           |           |
| Priced Boxes                      | 3,919,432 | 3,876,471 | 7,795,903 |
| \$/PS Average                     | .576178   | .522523   | .548555   |
| \$/Box Average                    | 2.729923  | 2.656154  | 2.693242  |
| <b><u>2008-09</u></b>             |           |           |           |
| Priced Boxes                      | 2,376,880 | 3,158,131 | 5,535,011 |
| \$/PS Average                     | .585195   | .648937   | .622628   |
| \$/Box Average                    | 2.682537  | 3.185626  | 2.969586  |
| <b><u>2009-10<sup>a</sup></u></b> |           |           |           |
| Priced Boxes                      | 2,117,531 | 1,603,361 | 3,720,892 |
| \$/PS Average                     | 1.161781  | 1.118270  | 1.142544  |
| \$/Box Average                    | 5.515225  | 5.556240  | 5.532898  |
| <b><u>2010-11<sup>a</sup></u></b> |           |           |           |
| Priced Boxes                      | 2,366,765 | 2,366,978 | 4,733,743 |
| \$/PS Average                     | 1.240731  | 1.299146  | 1.271174  |
| \$/Box Average                    | 5.786112  | 6.593248  | 6.189698  |
| <b><u>2011-12<sup>a</sup></u></b> |           |           |           |
| Priced Boxes                      | 2,503,669 | 2,451,624 | 4,955,293 |
| \$/PS Average                     | 1.506843  | 1.538184  | 1.522664  |
| \$/Box Average                    | 7.401543  | 7.865760  | 7.631214  |
| <b><u>2012-13<sup>a</sup></u></b> |           |           |           |
| Priced Boxes                      | 2,550,493 | 1,922,167 | 4,472,660 |
| \$/PS Average                     | 1.398048  | 1.033087  | 1.238451  |
| \$/Box Average                    | 6.395456  | 4.873277  | 5.741285  |
| <b><u>2013-14<sup>a</sup></u></b> |           |           |           |
| Priced Boxes                      | 1,657,793 | 1,646,775 | 3,304,568 |
| \$/PS Average                     | 1.508122  | .982265   | 1.244038  |
| \$/Box Average                    | 6.619484  | 4.378551  | 5.502753  |
| <b><u>2014-15<sup>a</sup></u></b> |           |           |           |
| Priced Boxes                      | 1,168,761 | 949,108   | 2,117,869 |
| \$/PS Average                     | 1.344332  | .974866   | 1.176437  |
| \$/Box Average                    | 5.881457  | 4.374624  | 5.206181  |
| <b><u>2015-16<sup>a</sup></u></b> |           |           |           |
| Priced Boxes                      | 695,095   | 793,822   | 1,488,917 |
| \$/PS Average                     | 1.834339  | 1.889938  | 1.864454  |
| \$/Box Average                    | 8.206310  | 8.748605  | 8.495437  |
| <b><u>2016-17<sup>a</sup></u></b> |           |           |           |
| Priced Boxes                      | 454,158   | 843,960   | 1,298,118 |
| \$/PS Average                     | 2.074301  | 2.388819  | 2.281848  |
| \$/Box Average                    | 9.112890  | 10.957269 | 10.311997 |

<sup>a</sup>In order to accurately report the total boxes and prices reported during the season, boxes that are reported in the month prior to the official start of the season are included in the following season.

SOURCE: Processors' Statistics Reports

# NOTES

---

# NOTES

---

# Nielsen Retail OJ Sales, U.S.<sup>a,b</sup>

| Dec-Nov<br>Season | FCOJ                 |         |         | R-T-S OJ<br>(except canned) |         |         | Canned OJ            |         |         | Total OJ             |         |         |
|-------------------|----------------------|---------|---------|-----------------------------|---------|---------|----------------------|---------|---------|----------------------|---------|---------|
|                   | Volume               | Value   | Price   | Volume                      | Value   | Price   | Volume               | Value   | Price   | Volume               | Value   | Price   |
|                   | million SSE<br>gals. | mil. \$ | \$/gal. | million SSE<br>gals.        | mil. \$ | \$/gal. | million SSE<br>gals. | mil. \$ | \$/gal. | million SSE<br>gals. | mil. \$ | \$/gal. |
| 1972-73           | 425.0                | 524.1   | 1.23    | 100.3                       | 176.1   | 1.76    | 27.1                 | 42.7    | 1.58    | 552.4                | 742.9   | 1.34    |
| 1973-74           | 460.9                | 587.4   | 1.27    | 110.7                       | 203.6   | 1.84    | 28.5                 | 47.8    | 1.68    | 600.1                | 838.8   | 1.40    |
| 1974-75           | 498.6                | 687.2   | 1.38    | 132.5                       | 250.0   | 1.89    | 28.2                 | 53.1    | 1.88    | 659.2                | 990.3   | 1.50    |
| 1975-76           | 521.3                | 735.4   | 1.41    | 160.9                       | 310.2   | 1.93    | 27.4                 | 56.0    | 2.04    | 709.5                | 1,101.6 | 1.55    |
| 1976-77           | 497.3                | 849.4   | 1.71    | 188.9                       | 411.5   | 2.18    | 28.7                 | 65.5    | 2.28    | 714.9                | 1,326.4 | 1.86    |
| 1977-78           | 446.9                | 999.7   | 2.24    | 204.1                       | 545.2   | 2.67    | 30.0                 | 84.7    | 2.82    | 681.0                | 1,629.6 | 2.39    |
| 1978-79           | 457.1                | 1,097.0 | 2.40    | 223.4                       | 655.1   | 2.93    | 28.2                 | 90.3    | 3.20    | 708.6                | 1,842.3 | 2.60    |
| 1979-80           | 501.1                | 1,178.1 | 2.35    | 277.6                       | 824.8   | 2.97    | 29.3                 | 95.1    | 3.25    | 808.0                | 2,098.0 | 2.60    |
| 1980-81           | 491.7                | 1,341.9 | 2.73    | 289.0                       | 964.8   | 3.34    | 27.2                 | 98.4    | 3.62    | 807.9                | 2,405.1 | 2.98    |
| 1981-82           | 484.0                | 1,382.3 | 2.86    | 295.0                       | 1,020.3 | 3.46    | 24.9                 | 95.5    | 3.83    | 803.9                | 2,498.0 | 3.11    |
| 1982-83           | 493.7                | 1,380.7 | 2.80    | 345.8                       | 1,156.2 | 3.34    | 23.1                 | 90.7    | 3.93    | 862.6                | 2,627.6 | 3.05    |
| 1983-84           | 457.4                | 1,483.4 | 3.24    | 378.3                       | 1,418.3 | 3.75    | 20.3                 | 91.0    | 4.49    | 856.0                | 2,992.7 | 3.50    |
| 1984-85           | 425.9                | 1,502.3 | 3.53    | 373.4                       | 1,511.8 | 4.05    | 18.0                 | 87.8    | 4.89    | 817.2                | 3,102.0 | 3.80    |
| 1985-86           | 429.5                | 1,244.0 | 2.90    | 437.2                       | 1,550.2 | 3.55    | 17.3                 | 77.0    | 4.44    | 884.0                | 2,871.0 | 3.25    |
| 1986-87           | 393.9                | 1,166.3 | 2.96    | 447.6                       | 1,626.1 | 3.63    | 16.6                 | 73.8    | 4.45    | 858.1                | 2,866.2 | 3.34    |
| 1987-88           | 353.1                | 1,245.2 | 3.53    | 427.4                       | 1,840.2 | 4.31    | 15.9                 | 77.7    | 4.89    | 796.5                | 3,163.1 | 3.97    |

<sup>a</sup>This data series is no longer available. For current data see pages 64-67.

<sup>b</sup>Numbers may not calculate due to rounding.

## Nielsen Retail OJ Sales in Grocery Stores >\$2 Million Annual Sales

| Oct-Sept<br>Season | Frozen               |         |                    | Refrigerated - NFC   |         |                    | Refrigerated - Recon |         |                    | Total OJ <sup>a</sup> |         |                    |
|--------------------|----------------------|---------|--------------------|----------------------|---------|--------------------|----------------------|---------|--------------------|-----------------------|---------|--------------------|
|                    | Volume               | Value   | Price <sup>b</sup> | Volume               | Value   | Price <sup>b</sup> | Volume               | Value   | Price <sup>b</sup> | Volume                | Value   | Price <sup>b</sup> |
|                    | million SSE<br>gals. | mil. \$ | \$/gal.            | million SSE<br>gals. | mil. \$ | \$/gal.            | million SSE<br>gals. | mil. \$ | \$/gal.            | million SSE<br>gals.  | mil. \$ | \$/gal.            |
| 1988-89            | 321.9                | 1,046.3 | 3.25               | 105.4                | 524.8   | 4.98               | 313.4                | 1,164.3 | 3.72               | 755.2                 | 2,811.8 | 3.72               |
| 1989-90            | 286.9                | 1,044.3 | 3.64               | 112.6                | 618.7   | 5.50               | 288.1                | 1,201.6 | 4.17               | 701.9                 | 2,944.6 | 4.20               |
| 1990-91            | 305.4                | 944.6   | 3.09               | 125.7                | 652.9   | 5.20               | 309.7                | 1,177.8 | 3.80               | 754.2                 | 2,848.0 | 3.78               |
| 1991-92            | 290.1                | 897.9   | 3.10               | 140.6                | 735.5   | 5.23               | 305.7                | 1,170.1 | 3.83               | 749.9                 | 2,874.4 | 3.83               |
| 1992-93            | 287.3                | 777.7   | 2.71               | 175.4                | 833.7   | 4.75               | 332.6                | 1,067.4 | 3.21               | 807.9                 | 2,742.1 | 3.39               |
| 1993-94            | 263.6                | 720.3   | 2.73               | 191.6                | 882.3   | 4.60               | 336.2                | 1,071.3 | 3.19               | 803.8                 | 2,732.6 | 3.40               |
| 1994-95            | 243.3                | 660.8   | 2.72               | 207.5                | 965.5   | 4.65               | 345.0                | 1,090.3 | 3.16               | 806.7                 | 2,768.6 | 3.43               |
| 1995-96            | 218.8                | 635.9   | 2.91               | 216.4                | 1,031.2 | 4.76               | 344.3                | 1,159.6 | 3.37               | 789.9                 | 2,877.1 | 3.64               |
| 1996-97            | 197.1                | 594.2   | 3.01               | 223.8                | 1,098.4 | 4.91               | 365.8                | 1,289.2 | 3.52               | 796.4                 | 3,030.3 | 3.80               |
| 1997-98            | 179.4                | 518.8   | 2.89               | 260.9                | 1,240.7 | 4.76               | 369.6                | 1,277.0 | 3.46               | 818.9                 | 3,082.6 | 3.76               |
| 1998-99            | 154.7                | 487.8   | 3.15               | 286.4                | 1,488.7 | 5.20               | 344.5                | 1,320.4 | 3.83               | 794.4                 | 3,344.1 | 4.21               |
| 1999-00            | 139.6                | 455.9   | 3.26               | 293.8                | 1,602.1 | 5.45               | 366.9                | 1,429.8 | 3.90               | 808.5                 | 3,532.2 | 4.37               |

Continued on next page . . .



## Nielsen Retail OJ Sales in Grocery Stores >\$2 Million Annual Sales

| Oct-Sept<br>Season | Frozen               |         |                    | Refrigerated - NFC   |         |                    | Refrigerated - Recon |         |                    | Total OJ <sup>a</sup> |         |                    |
|--------------------|----------------------|---------|--------------------|----------------------|---------|--------------------|----------------------|---------|--------------------|-----------------------|---------|--------------------|
|                    | Volume               | Value   | Price <sup>b</sup> | Volume               | Value   | Price <sup>b</sup> | Volume               | Value   | Price <sup>b</sup> | Volume                | Value   | Price <sup>b</sup> |
|                    | million<br>SSE gals. | mil. \$ | \$/gal.            | million<br>SSE gals. | mil. \$ | \$/gal.            | million<br>SSE gals. | mil. \$ | \$/gal.            | million<br>SSE gals.  | mil. \$ | \$/gal.            |
| 2000-01            | 122.9                | 397.5   | 3.24               | 320.0                | 1,727.1 | 5.40               | 356.2                | 1,397.0 | 3.92               | 806.4                 | 3,561.6 | 4.42               |
| 2001-02            | 100.2                | 328.9   | 3.28               | 335.1                | 1,770.9 | 5.28               | 322.9                | 1,255.8 | 3.89               | 766.7                 | 3,401.3 | 4.44               |
| 2002-03            | 81.7                 | 279.2   | 3.42               | 342.3                | 1,780.4 | 5.20               | 293.8                | 1,139.3 | 3.88               | 725.2                 | 3,238.8 | 4.47               |
| 2003-04            | 66.6                 | 226.2   | 3.40               | 339.6                | 1,736.2 | 5.11               | 266.8                | 1,004.1 | 3.76               | 679.5                 | 3,002.0 | 4.42               |
| 2004-05            | 57.4                 | 194.5   | 3.39               | 321.7                | 1,712.5 | 5.32               | 266.8                | 996.4   | 3.73               | 651.6                 | 2,934.9 | 4.50               |
| 2005-06            | 49.9                 | 177.9   | 3.57               | 316.3                | 1,736.7 | 5.49               | 228.8                | 920.6   | 4.02               | 598.7                 | 2,854.1 | 4.77               |
| 2006-07            | 43.1                 | 193.6   | 4.49               | 276.7                | 1,818.9 | 6.57               | 186.2                | 939.7   | 5.05               | 509.2                 | 2,975.0 | 5.84               |
| 2007-08            | 39.2                 | 188.3   | 4.80               | 265.9                | 1,808.1 | 6.80               | 174.1                | 883.8   | 5.08               | 482.3                 | 2,905.5 | 6.02               |
| 2008-09            | 36.1                 | 172.3   | 4.78               | 253.0                | 1,685.8 | 6.66               | 189.5                | 850.9   | 4.49               | 482.7                 | 2,737.2 | 5.67               |
| 2009-10            | 29.4                 | 138.4   | 4.70               | 248.0                | 1,635.7 | 6.59               | 184.7                | 805.4   | 4.36               | 464.6                 | 2,596.7 | 5.59               |
| 2010-11            | 25.4                 | 125.3   | 4.94               | 241.4                | 1,675.3 | 6.94               | 164.9                | 790.4   | 4.79               | 433.5                 | 2,605.1 | 6.01               |
| 2011-12            | 21.4                 | 110.2   | 5.14               | 230.6                | 1,678.3 | 7.28               | 140.7                | 699.3   | 4.97               | 393.4                 | 2,493.7 | 6.34               |
| 2012-13            | 18.4                 | 93.6    | 5.08               | 230.3                | 1,687.3 | 7.33               | 136.9                | 641.5   | 4.69               | 386.3                 | 2,428.1 | 6.29               |
| 2013-14            | 16.4                 | 83.5    | 5.10               | 218.3                | 1,609.9 | 7.38               | 123.4                | 586.3   | 4.75               | 358.6                 | 2,285.5 | 6.37               |
| 2014-15            | 15.0                 | 77.4    | 5.17               | 203.0                | 1,565.2 | 7.71               | 114.1                | 547.5   | 4.80               | 332.6                 | 2,194.8 | 6.60               |
| 2015-16            | 13.9                 | 70.1    | 5.04               | 194.8                | 1,496.2 | 7.68               | 104.1                | 496.8   | 4.77               | 313.1                 | 2,066.2 | 6.60               |
| 2016-17            | 12.3                 | 63.1    | 5.14               | 178.5                | 1,393.2 | 7.81               | 91.6                 | 461.7   | 5.04               | 282.6                 | 1,920.3 | 6.80               |
| 2017-18            |                      |         |                    |                      |         |                    |                      |         |                    |                       |         |                    |

<sup>a</sup>Total includes shelf stable product not listed separately in this table.

<sup>b</sup>Reflects actual price paid after discounts (coupons, sales, etc.).

### Nielsen Retail OJ Sales in All Outlet Stores<sup>a</sup>

| Oct-Sept<br>Season | Frozen               |         |         | Refrigerated - NFC   |         |         | Refrigerated - Recon |         |         | Total OJ             |         |         |
|--------------------|----------------------|---------|---------|----------------------|---------|---------|----------------------|---------|---------|----------------------|---------|---------|
|                    | Volume               | Value   | Price   | Volume               | Value   | Price   | Volume               | Value   | Price   | Volume               | Value   | Price   |
|                    | million SSE<br>gals. | mil. \$ | \$/gal. | million SSE<br>gals. | mil. \$ | \$/gal. | million SSE<br>gals. | mil. \$ | \$/gal. | million SSE<br>gals. | mil. \$ | \$/gal. |
| 1998-99            | 165.0                | 517.2   | 3.13    | 287.0                | 1,508.5 | 5.26    | 391.2                | 1,500.6 | 3.84    | 852.6                | 3,576.4 | 4.19    |
| 1999-00            | 149.3                | 479.8   | 3.21    | 311.4                | 1,671.9 | 5.37    | 403.4                | 1,582.9 | 3.92    | 872.5                | 3,780.3 | 4.33    |
| 2000-01            | 135.5                | 429.6   | 3.17    | 346.4                | 1,835.4 | 5.30    | 398.8                | 1,578.8 | 3.96    | 888.7                | 3,886.6 | 4.37    |
| 2001-02            | 112.8                | 363.5   | 3.22    | 363.4                | 1,906.9 | 5.25    | 375.8                | 1,458.0 | 3.88    | 861.2                | 3,777.5 | 4.39    |
| 2002-03            | 95.3                 | 317.3   | 3.33    | 379.7                | 1,959.8 | 5.16    | 352.9                | 1,355.3 | 3.84    | 836.4                | 3,677.2 | 4.40    |
| 2003-04            | 79.2                 | 262.7   | 3.32    | 386.7                | 1,961.8 | 5.07    | 333.9                | 1,248.0 | 3.74    | 807.3                | 3,511.6 | 4.35    |
| 2004-05            | 69.3                 | 228.4   | 3.30    | 370.6                | 1,954.9 | 5.27    | 348.4                | 1,295.3 | 3.72    | 809.7                | 3,514.9 | 4.34    |
| 2005-06            | 60.9                 | 211.8   | 3.48    | 372.0                | 2,026.6 | 5.45    | 306.5                | 1,221.4 | 3.98    | 745.3                | 3,494.6 | 4.69    |
| 2006-07            | 54.6                 | 238.1   | 4.36    | 332.0                | 2,156.8 | 6.50    | 258.0                | 1,285.3 | 4.98    | 650.4                | 3,716.4 | 5.71    |
| 2007-08            | 49.3                 | 230.2   | 4.67    | 323.3                | 2,177.3 | 6.73    | 245.3                | 1,239.2 | 5.05    | 623.7                | 3,684.7 | 5.91    |
| 2008-09            | 45.2                 | 210.7   | 4.66    | 314.5                | 2,077.7 | 6.61    | 263.6                | 1,203.1 | 4.56    | 628.6                | 3,527.5 | 5.61    |
| 2009-10            | 38.6                 | 175.3   | 4.54    | 310.7                | 2,036.4 | 6.55    | 255.9                | 1,129.9 | 4.42    | 608.6                | 3,365.1 | 5.53    |
| 2010-11            | 26.0                 | 128.1   | 4.92    | 253.5                | 1,769.6 | 6.98    | 172.8                | 835.8   | 4.84    | 454.5                | 2,750.0 | 6.05    |
| 2011-12            | 21.9                 | 112.5   | 5.14    | 244.3                | 1,789.2 | 7.32    | 147.6                | 740.1   | 5.01    | 414.4                | 2,647.8 | 6.39    |
| 2012-13            | 18.9                 | 96.0    | 5.07    | 244.9                | 1,806.0 | 7.38    | 142.8                | 679.0   | 4.76    | 407.2                | 2,586.6 | 6.35    |
| 2013-14            | 16.7                 | 85.4    | 5.10    | 232.9                | 1,728.6 | 7.42    | 128.5                | 618.0   | 4.81    | 378.7                | 2,437.8 | 6.44    |
| 2014-15            | 15.2                 | 79.0    | 5.18    | 216.5                | 1,680.7 | 7.76    | 118.0                | 573.5   | 4.86    | 350.3                | 2,338.0 | 6.67    |
| 2015-16            | 14.1                 | 71.5    | 5.07    | 208.0                | 1,609.0 | 7.74    | 106.9                | 516.6   | 4.83    | 329.3                | 2,200.1 | 6.68    |
| 2016-17            | 12.5                 | 64.2    | 5.15    | 190.2                | 1,495.6 | 7.86    | 94.1                 | 479.7   | 5.10    | 297.0                | 2,041.8 | 6.87    |
| 2017-18            |                      |         |         |                      |         |         |                      |         |         |                      |         |         |

<sup>a</sup>Data include supercenter sales through 11/24/01 and Walmart estimates thereafter through 2/20/10.

### Nielsen Retail OJ Sales, Expanded All Outlets Combined (xAOC)<sup>a</sup>

| Oct-Sept<br>Season | Frozen               |         |         | Refrigerated - NFC   |         |         | Refrigerated - Recon |         |         | Total OJ <sup>b</sup> |         |         |
|--------------------|----------------------|---------|---------|----------------------|---------|---------|----------------------|---------|---------|-----------------------|---------|---------|
|                    | Volume               | Value   | Price   | Volume               | Value   | Price   | Volume               | Value   | Price   | Volume                | Value   | Price   |
|                    | million SSE<br>gals. | mil. \$ | \$/gal. | million SSE<br>gals. | mil. \$ | \$/gal. | million SSE<br>gals. | mil. \$ | \$/gal. | million SSE<br>gals.  | mil. \$ | \$/gal. |
| 2010-11            | 37.2                 | 170.6   | 4.59    | 326.9                | 2,237.0 | 6.84    | 251.0                | 1,210.3 | 4.82    | 607.8                 | 3,638.4 | 5.99    |
| 2011-12            | 32.1                 | 152.6   | 4.75    | 318.3                | 2,283.6 | 7.17    | 217.4                | 1,091.5 | 5.02    | 568.6                 | 3,534.3 | 6.22    |
| 2012-13            | 27.5                 | 131.2   | 4.77    | 320.9                | 2,324.7 | 7.25    | 213.0                | 1,021.1 | 4.79    | 562.1                 | 3,483.4 | 6.20    |
| 2013-14            | 23.4                 | 114.5   | 4.89    | 310.6                | 2,257.7 | 7.27    | 191.5                | 932.5   | 4.87    | 526.1                 | 3,310.7 | 6.29    |
| 2014-15            | 21.2                 | 105.3   | 4.96    | 291.6                | 2,221.6 | 7.62    | 176.7                | 876.4   | 4.96    | 490.1                 | 3,208.4 | 6.55    |
| 2015-16            | 20.0                 | 96.5    | 4.82    | 282.8                | 2,137.3 | 7.56    | 164.9                | 810.8   | 4.92    | 468.1                 | 3,047.7 | 6.51    |
| 2016-17            | 18.1                 | 89.2    | 4.93    | 265.4                | 2,035.9 | 7.67    | 148.6                | 765.0   | 5.15    | 432.4                 | 2,892.6 | 6.69    |
| 2017-18            |                      |         |         |                      |         |         |                      |         |         |                       |         |         |

<sup>a</sup>Expanded All Outlets Combined (xAOC) data are for U.S. grocery stores doing \$2 million and greater annual sales, drug stores doing \$1 million and greater annual sales, mass merchandisers, Walmart, club (Sam's and BJ's), dollar stores (Dollar General, Family Dollar and Fred's), and military/DECA. Walmart data is point-of sale (POS) data.

<sup>b</sup>Total includes shelf stable product not listed separately in this table.

### Nielsen Retail GJ Sales, Expanded All Outlets Combined (xAOC)<sup>a</sup>

| Oct-Sept<br>Season | Frozen               |         |         | R-T-S NFC            |         |         | R-T-S Recon          |         |         | Total GJ             |         |         |
|--------------------|----------------------|---------|---------|----------------------|---------|---------|----------------------|---------|---------|----------------------|---------|---------|
|                    | Volume               | Value   | Price   | Volume               | Value   | Price   | Volume               | Value   | Price   | Volume               | Value   | Price   |
|                    | million SSE<br>gals. | mil. \$ | \$/gal. | million SSE<br>gals. | mil. \$ | \$/gal. | million SSE<br>gals. | mil. \$ | \$/gal. | million SSE<br>gals. | mil. \$ | \$/gal. |
| 2010-11            | 0.5                  | 2.1     | 4.53    | 12.7                 | 88.8    | 6.99    | 7.1                  | 40.8    | 5.76    | 20.3                 | 131.7   | 6.50    |
| 2011-12            | 0.4                  | 2.0     | 4.50    | 11.7                 | 85.4    | 7.32    | 6.4                  | 36.9    | 5.79    | 18.5                 | 124.3   | 6.73    |
| 2012-13            | 0.4                  | 1.7     | 4.46    | 10.7                 | 81.0    | 7.55    | 6.0                  | 35.7    | 6.00    | 17.1                 | 118.4   | 6.94    |
| 2013-14            | 0.3                  | 1.5     | 4.61    | 10.1                 | 76.5    | 7.57    | 5.1                  | 32.4    | 6.34    | 15.5                 | 110.4   | 7.11    |
| 2014-15            | 0.2                  | 0.9     | 5.25    | 9.7                  | 76.1    | 7.84    | 1.0                  | 6.1     | 6.20    | 14.9                 | 108.8   | 7.33    |
| 2015-16            | 0.1                  | 0.6     | 4.21    | 9.4                  | 73.4    | 7.81    | 1.0                  | 6.5     | 6.52    | 14.4                 | 7.3     | 0.51    |
| 2016-17            | 0.1                  | 0.5     | 4.33    | 9.2                  | 71.7    | 7.81    | 0.8                  | 7.0     | 8.36    | 13.9                 | 7.4     | 0.53    |
| 2017-18            |                      |         |         |                      |         |         |                      |         |         |                      |         |         |

<sup>a</sup>Expanded All Outlets Combined (xAOC) data are for U.S. grocery stores doing \$2 million and greater annual sales, drug stores doing \$1 million and greater annual sales, mass merchandisers, Walmart, club (Sam's and BJ's), dollar stores (Dollar General, Family Dollar and Fred's), and military/DECA. Walmart data is point-of sale (POS) data.

# NOTES

---

# Nielsen Retail GJ Sales, U.S. <sup>a,b</sup>

| Dec-Nov<br>Season | FCGJ                 |         |         | R-T-S GJ<br>(except canned) |         |         | Canned GJ            |         |         | Total GJ             |         |         |
|-------------------|----------------------|---------|---------|-----------------------------|---------|---------|----------------------|---------|---------|----------------------|---------|---------|
|                   | Volume               | Value   | Price   | Volume                      | Value   | Price   | Volume               | Value   | Price   | Volume               | Value   | Price   |
|                   | million SSE<br>gals. | mil. \$ | \$/gal. | million SSE<br>gals.        | mil. \$ | \$/gal. | million SSE<br>gals. | mil. \$ | \$/gal. | million SSE<br>gals. | mil. \$ | \$/gal. |
| 1976-77           | 10.9                 | 18.7    | 1.72    | 21.4                        | 52.6    | 2.46    | 64.1                 | 125.0   | 1.95    | 96.4                 | 196.3   | 2.04    |
| 1977-78           | 12.2                 | 23.7    | 1.94    | 25.2                        | 69.4    | 2.75    | 68.3                 | 142.0   | 2.08    | 105.7                | 235.1   | 2.22    |
| 1978-79           | 14.1                 | 28.6    | 2.03    | 29.0                        | 85.7    | 2.96    | 61.2                 | 146.7   | 2.40    | 104.3                | 261.1   | 2.50    |
| 1979-80           | 13.7                 | 32.4    | 2.36    | 29.9                        | 101.5   | 3.39    | 53.0                 | 151.2   | 2.85    | 96.6                 | 285.1   | 2.95    |
| 1980-81           | 14.0                 | 36.5    | 2.61    | 29.8                        | 113.6   | 3.81    | 47.7                 | 148.9   | 3.12    | 91.5                 | 299.1   | 3.27    |
| 1981-82           | 13.5                 | 35.3    | 2.61    | 27.8                        | 113.0   | 4.06    | 49.4                 | 142.2   | 2.88    | 90.7                 | 290.4   | 3.20    |
| 1982-83           | 13.9                 | 32.0    | 2.30    | 28.3                        | 112.8   | 3.99    | 47.4                 | 129.4   | 2.73    | 89.6                 | 274.1   | 3.06    |
| 1983-84           | 13.2                 | 32.4    | 2.45    | 28.5                        | 117.9   | 4.14    | 39.8                 | 128.7   | 3.23    | 81.5                 | 278.9   | 3.42    |
| 1984-85           | 14.0                 | 37.6    | 2.69    | 34.2                        | 150.4   | 4.40    | 42.4                 | 151.8   | 3.58    | 90.6                 | 339.8   | 3.75    |
| 1985-86           | 12.3                 | 35.8    | 2.90    | 36.6                        | 163.0   | 4.45    | 36.0                 | 134.4   | 3.73    | 85.0                 | 333.2   | 3.92    |
| 1986-87           | 10.9                 | 34.1    | 3.13    | 37.0                        | 174.3   | 4.71    | 30.2                 | 118.7   | 3.93    | 78.1                 | 327.1   | 4.19    |
| 1987-88           | 9.7                  | 33.1    | 3.41    | 35.5                        | 175.4   | 4.94    | 26.7                 | 109.9   | 4.12    | 71.9                 | 318.4   | 4.43    |

<sup>a</sup>This data series is no longer available. For current data see pages 67, 70-73.

<sup>b</sup>Numbers may not calculate due to rounding.

## Nielsen Retail GJ Sales in Grocery Stores >\$2 Million Annual Sales<sup>a</sup>

| Oct-Sept<br>Season | Frozen               |         |                    | Carton/Plastic/Glass |         |                    | Canned/Aseptic       |         |                    | Total GJ             |         |                    |
|--------------------|----------------------|---------|--------------------|----------------------|---------|--------------------|----------------------|---------|--------------------|----------------------|---------|--------------------|
|                    | Volume               | Value   | Price <sup>b</sup> | Volume               | Value   | Price <sup>b</sup> | Volume               | Value   | Price <sup>b</sup> | Volume               | Value   | Price <sup>b</sup> |
|                    | million SSE<br>gals. | mil. \$ | \$/gal.            | million SSE<br>gals. | mil. \$ | \$/gal.            | million SSE<br>gals. | mil. \$ | \$/gal.            | million SSE<br>gals. | mil. \$ | \$/gal.            |
| 1988-89            | 8.8                  | 28.8    | 3.29               | 28.3                 | 126.4   | 4.46               | 21.8                 | 79.3    | 3.64               | 59.0                 | 234.9   | 3.98               |
| 1989-90            | 7.8                  | 27.2    | 3.49               | 26.4                 | 126.5   | 4.80               | 19.3                 | 71.4    | 3.70               | 53.6                 | 225.6   | 4.21               |
| 1990-91            | 7.3                  | 24.9    | 3.39               | 27.9                 | 135.6   | 4.87               | 18.9                 | 69.2    | 3.67               | 54.2                 | 230.2   | 4.25               |
| 1991-92            | 6.7                  | 23.0    | 3.44               | 26.8                 | 135.1   | 5.04               | 17.3                 | 63.8    | 3.69               | 50.9                 | 222.3   | 4.37               |
| 1992-93            | 5.9                  | 19.9    | 3.36               | 27.1                 | 134.1   | 4.96               | 13.7                 | 53.3    | 3.90               | 46.8                 | 207.6   | 4.44               |
| 1993-94            | 5.4                  | 17.6    | 3.23               | 29.3                 | 140.6   | 4.80               | 12.9                 | 47.9    | 3.72               | 47.7                 | 206.2   | 4.32               |
| 1994-95            | 5.0                  | 15.5    | 3.13               | 28.9                 | 138.5   | 4.79               | 12.0                 | 43.0    | 3.58               | 45.9                 | 197.1   | 4.29               |
| 1995-96            | 4.8                  | 14.5    | 3.05               | 28.5                 | 140.3   | 4.91               | 12.0                 | 41.8    | 3.47               | 45.3                 | 196.6   | 4.34               |
| 1996-97            | 4.5                  | 13.7    | 3.07               | 30.5                 | 150.3   | 4.93               | 11.6                 | 40.1    | 3.46               | 46.6                 | 204.2   | 4.38               |
| 1997-98            | 4.2                  | 12.9    | 3.05               | 35.2                 | 170.3   | 4.84               | 13.5                 | 47.2    | 3.49               | 53.0                 | 230.4   | 4.35               |
| 1998-99            | 4.0                  | 12.2    | 3.07               | 38.0                 | 193.8   | 5.11               | 12.3                 | 45.6    | 3.70               | 54.3                 | 251.7   | 4.64               |
| 1999-00            | 2.6                  | 9.0     | 3.42               | 35.5                 | 192.4   | 5.42               | 8.6                  | 36.5    | 4.27               | 46.6                 | 237.8   | 5.10               |

Continued on next page . . .

## Nielsen Retail GJ Sales in Grocery Stores >\$2 Million Annual Sales<sup>a</sup>

| Oct-Sept<br>Season | Frozen               |         |                    | Carton/Plastic/Glass |         |                    | Canned/Aseptic       |         |                    | Total GJ             |         |                    |
|--------------------|----------------------|---------|--------------------|----------------------|---------|--------------------|----------------------|---------|--------------------|----------------------|---------|--------------------|
|                    | Volume               | Value   | Price <sup>b</sup> | Volume               | Value   | Price <sup>b</sup> | Volume               | Value   | Price <sup>b</sup> | Volume               | Value   | Price <sup>b</sup> |
|                    | million SSE<br>gals. | mil. \$ | \$/gal.            | million SSE<br>gals. | mil. \$ | \$/gal.            | million SSE<br>gals. | mil. \$ | \$/gal.            | million SSE<br>gals. | mil. \$ | \$/gal.            |
| 2000-01            | 2.3                  | 8.2     | 3.59               | 31.5                 | 173.9   | 5.52               | 6.6                  | 30.3    | 4.58               | 40.5                 | 212.5   | 5.25               |
| 2001-02            | 2.1                  | 7.4     | 3.45               | 26.9                 | 146.8   | 5.45               | 5.7                  | 25.9    | 4.54               | 34.8                 | 180.1   | 5.18               |
| 2002-03            | 1.6                  | 5.9     | 3.60               | 25.1                 | 132.3   | 5.26               | 5.1                  | 23.1    | 4.49               | 31.9                 | 161.2   | 5.05               |
| 2003-04            | 1.3                  | 4.5     | 3.61               | 22.8                 | 117.2   | 5.15               | 4.1                  | 18.7    | 4.55               | 28.1                 | 140.4   | 5.00               |
| 2004-05            | 1.1                  | 3.8     | 3.57               | 15.6                 | 97.8    | 6.27               | 3.0                  | 16.3    | 5.39               | 19.7                 | 117.9   | 5.98               |
| 2005-06            | 0.6                  | 2.5     | 4.07               | 13.2                 | 90.3    | 6.83               | 2.2                  | 13.3    | 5.96               | 16.0                 | 106.0   | 6.63               |
| 2006-07            | 0.4                  | 1.9     | 4.71               | 13.6                 | 92.3    | 6.77               | 1.9                  | 11.3    | 6.10               | 15.9                 | 105.5   | 6.64               |
| 2007-08            | 0.4                  | 1.9     | 4.85               | 15.5                 | 105.7   | 6.83               | 1.7                  | 10.2    | 5.95               | 17.6                 | 117.8   | 6.69               |
| 2008-09            | 0.3                  | 1.6     | 4.87               | 15.6                 | 102.7   | 6.60               | 1.6                  | 9.3     | 5.95               | 17.4                 | 113.6   | 6.51               |
| 2009-10            | 0.3                  | 1.3     | 4.74               | 15.4                 | 101.1   | 6.57               | 1.0                  | 6.1     | 6.16               | 16.6                 | 108.5   | 6.52               |
| 2010-11            | 0.2                  | 1.1     | 4.84               | 14.8                 | 101.3   | 6.83               | 0.6                  | 4.0     | 7.31               | 15.6                 | 104.3   | 6.68               |
| 2011-12            | 0.2                  | 0.9     | 5.19               | 13.8                 | 97.1    | 7.06               | 0.4                  | 3.1     | 7.92               | 14.3                 | 101.2   | 7.06               |
| 2012-13            | 0.2                  | 0.8     | 5.07               | 13.0                 | 93.0    | 7.17               | 0.3                  | 2.7     | 8.42               | 13.5                 | 96.5    | 7.17               |
| 2013-14            | 0.2                  | 0.8     | 5.12               | 11.9                 | 89.7    | 7.53               | 0.3                  | 2.7     | 8.41               | 12.4                 | 90.5    | 7.31               |
| 2014-15            | 0.2                  | 0.9     | 5.28               | 11.4                 | 85.9    | 7.51               | 0.3                  | 2.5     | 8.57               | 11.1                 | 84.5    | 7.61               |
| 2015-16            | 0.2                  | 0.8     | 4.36               | 11.4                 | 85.3    | 7.48               | 7.7                  | 61.1    | 7.94               | 0.0                  | 0.0     | 0.00               |
| 2016-17            | 0.1                  | 0.7     | 4.59               | 11.0                 | 83.8    | 7.65               | 7.5                  | 59.6    | 7.96               | 0.0                  | 0.0     | 0.00               |
| 2017-18            |                      |         |                    |                      |         |                    |                      |         |                    |                      |         |                    |

<sup>a</sup>Numbers may not calculate due to rounding.

<sup>b</sup>Reflects actual price paid after discounts (coupons, sales, etc.).

## Nielsen Retail GJ Sales in All Outlet Stores<sup>a</sup>

| Oct-Sept<br>Season | Frozen               |         |         | R-T-S NFC            |         |         | R-T-S Recon          |         |         | Total GJ             |         |         |
|--------------------|----------------------|---------|---------|----------------------|---------|---------|----------------------|---------|---------|----------------------|---------|---------|
|                    | Volume               | Value   | Price   | Volume               | Value   | Price   | Volume               | Value   | Price   | Volume               | Value   | Price   |
|                    | million<br>SSE gals. | mil. \$ | \$/gal. | million<br>SSE gals. | mil. \$ | \$/gal. | million<br>SSE gals. | mil. \$ | \$/gal. | million<br>SSE gals. | mil. \$ | \$/gal. |
| 2000-01            | 2.5                  | 8.8     | 3.51    | 20.4                 | 114.7   | 5.63    | 23.4                 | 111.2   | 4.76    | 46.3                 | 234.8   | 5.08    |
| 2001-02            | 2.4                  | 8.1     | 3.35    | 18.8                 | 104.0   | 5.53    | 18.6                 | 86.6    | 4.64    | 39.9                 | 198.6   | 4.98    |
| 2002-03            | 1.8                  | 6.4     | 3.48    | 17.9                 | 94.1    | 5.26    | 17.1                 | 78.8    | 4.60    | 36.8                 | 179.4   | 4.87    |
| 2003-04            | 1.6                  | 5.4     | 3.40    | 17.0                 | 87.1    | 5.13    | 15.4                 | 69.4    | 4.49    | 34.0                 | 161.9   | 4.76    |
| 2004-05            | 1.6                  | 5.2     | 3.25    | 11.2                 | 71.0    | 6.35    | 11.6                 | 63.5    | 5.49    | 24.3                 | 139.7   | 5.74    |
| 2005-06            | 1.3                  | 4.2     | 3.37    | 9.1                  | 64.1    | 7.03    | 10.0                 | 59.0    | 5.90    | 20.4                 | 127.4   | 6.25    |
| 2006-07            | 0.9                  | 3.6     | 4.03    | 9.5                  | 66.3    | 6.97    | 9.4                  | 54.9    | 5.85    | 19.8                 | 124.8   | 6.30    |
| 2007-08            | 0.9                  | 3.7     | 4.14    | 12.6                 | 87.1    | 6.92    | 8.3                  | 49.2    | 5.92    | 21.8                 | 140.1   | 6.42    |
| 2008-09            | 0.8                  | 3.3     | 4.26    | 12.4                 | 84.0    | 6.75    | 7.9                  | 46.1    | 5.83    | 21.1                 | 133.3   | 6.32    |
| 2009-10            | 0.5                  | 2.1     | 4.45    | 12.8                 | 85.8    | 6.70    | 7.2                  | 42.3    | 5.88    | 20.5                 | 130.2   | 6.36    |
| 2010-11            | 0.2                  | 1.1     | 4.94    | 10.8                 | 77.1    | 7.15    | 5.0                  | 30.8    | 6.19    | 16.0                 | 109.0   | 6.82    |
| 2011-12            | 0.2                  | 0.9     | 5.19    | 10.1                 | 74.9    | 7.45    | 4.4                  | 27.8    | 6.28    | 13.5                 | 103.6   | 7.70    |
| 2012-13            | 0.2                  | 0.8     | 5.07    | 9.3                  | 70.6    | 7.62    | 4.5                  | 28.1    | 6.31    | 13.9                 | 99.5    | 7.17    |
| 2013-14            | 0.2                  | 0.8     | 5.13    | 8.6                  | 65.9    | 7.65    | 3.9                  | 26.1    | 6.64    | 12.7                 | 92.7    | 7.30    |
| 2014-15            | 0.2                  | 0.9     | 5.28    | 8.2                  | 65.3    | 7.97    | 3.8                  | 25.4    | 6.64    | 12.2                 | 91.6    | 7.51    |
| 2015-16            | 0.2                  | 0.8     | 4.36    | 8.0                  | 63.2    | 7.94    | 3.7                  | 24.2    | 6.53    | 11.9                 | 88.3    | 7.44    |
| 2016-17            | 0.1                  | 0.7     | 4.60    | 7.7                  | 61.6    | 7.96    | 3.5                  | 24.4    | 7.02    | 11.4                 | 86.7    | 7.63    |
| 2017-18            |                      |         |         |                      |         |         |                      |         |         |                      |         |         |

<sup>a</sup>Data include supercenter sales through 3/18/00 and Walmart estimates thereafter through 2/20/10.



**Nielsen Retail GJ and GJ Cocktail Sales in Grocery Stores<sup>a</sup>**  
**>\$2 Million Annual Sales**

| Oct-Sept<br>Season | R-T-S NFC            |         |         | R-T-S Recon          |                    |                   | Total GJ             |         |         | GJ Cocktail          |         |         |
|--------------------|----------------------|---------|---------|----------------------|--------------------|-------------------|----------------------|---------|---------|----------------------|---------|---------|
|                    | Volume               | Value   | Price   | Volume               | Value              | Price             | Volume               | Value   | Price   | Volume               | Value   | Price   |
|                    | million<br>SSE gals. | mil. \$ | \$/gal. | million<br>SSE gals. | mil. \$            | \$/gal.           | million<br>SSE gals. | mil. \$ | \$/gal. | million<br>SSE gals. | mil. \$ | \$/gal. |
| 1999-00            | 20.7                 | 118.2   | 5.71    | 23.3 <sup>a</sup>    | 110.7 <sup>a</sup> | 4.75 <sup>a</sup> | 46.6                 | 237.8   | 5.10    | 15.8                 | 78.5    | 4.97    |
| 2000-01            | 19.2                 | 109.2   | 5.69    | 19.0                 | 95.0               | 5.00              | 40.5                 | 212.5   | 5.25    | 14.1                 | 70.6    | 5.01    |
| 2001-02            | 18.2                 | 101.3   | 5.57    | 14.4                 | 71.5               | 4.97              | 34.8                 | 180.1   | 5.18    | 12.4                 | 63.2    | 5.10    |
| 2002-03            | 17.1                 | 90.2    | 5.27    | 13.2                 | 65.1               | 4.93              | 31.9                 | 161.2   | 5.05    | 10.4                 | 54.2    | 5.21    |
| 2003-04            | 15.7                 | 81.0    | 5.16    | 11.2                 | 54.9               | 4.90              | 28.1                 | 140.4   | 5.00    | 9.6                  | 50.3    | 5.24    |
| 2004-05            | 9.5                  | 62.1    | 6.54    | 9.1                  | 52.1               | 5.73              | 19.7                 | 117.9   | 5.98    | 8.5                  | 45.3    | 5.33    |
| 2005-06            | 7.9                  | 57.2    | 7.24    | 7.5                  | 46.3               | 6.17              | 16.0                 | 106.0   | 6.63    | 7.6                  | 41.5    | 5.46    |
| 2006-07            | 8.2                  | 59.5    | 7.26    | 7.2                  | 44.1               | 6.13              | 15.9                 | 105.5   | 6.64    | 7.3                  | 41.1    | 5.63    |
| 2007-08            | 10.7                 | 76.1    | 7.11    | 6.5                  | 39.9               | 6.14              | 17.6                 | 117.8   | 6.69    | 6.8                  | 39.3    | 5.78    |
| 2008-09            | 10.8                 | 74.2    | 6.90    | 6.7                  | 39.2               | 5.85              | 17.4                 | 113.6   | 6.51    | 6.5                  | 37.9    | 5.79    |
| 2009-10            | 10.6                 | 72.8    | 6.86    | 6.0                  | 35.7               | 5.95              | 16.6                 | 108.5   | 6.52    | 6.3                  | 36.3    | 5.75    |
| 2010-11            | 10.5                 | 73.6    | 7.02    | 4.9                  | 29.6               | 6.05              | 15.6                 | 104.3   | 6.68    | 6.2                  | 35.8    | 5.75    |
| 2011-12            | 9.8                  | 72.8    | 7.46    | 4.4                  | 27.5               | 6.26              | 14.3                 | 101.2   | 7.06    | 6.0                  | 36.6    | 6.14    |
| 2012-13            | 8.9                  | 67.8    | 7.64    | 4.4                  | 27.9               | 6.31              | 13.5                 | 96.5    | 7.17    | 5.9                  | 37.6    | 6.36    |
| 2013-14            | 8.3                  | 63.7    | 7.66    | 3.9                  | 25.9               | 6.63              | 12.4                 | 90.5    | 7.31    | 5.6                  | 36.7    | 6.57    |
| 2014-15            | 7.9                  | 63.2    | 7.97    | 3.8                  | 25.2               | 6.64              | 11.9                 | 89.4    | 7.51    | 5.4                  | 37.1    | 6.82    |
| 2015-16            | 7.7                  | 61.1    | 7.94    | 3.7                  | 24.1               | 6.53              | 11.6                 | 86.1    | 7.43    | 5.3                  | 37.3    | 7.04    |
| 2016-17            | 7.5                  | 59.6    | 7.96    | 3.5                  | 24.2               | 7.00              | 11.1                 | 84.5    | 7.61    | 5.2                  | 35.9    | 6.94    |
| 2017-18            |                      |         |         |                      |                    |                   |                      |         |         |                      |         |         |

<sup>a</sup>Includes unidentified GJ.

# Nielsen Total OJ Market Ranking

Over \$2MM Grocers - 2016-17 Season

| Rank | Market               | Mil Gal | Rank | Market              | Mil Gal |
|------|----------------------|---------|------|---------------------|---------|
|      | TOTAL U.S.           | 284.858 |      |                     |         |
| 1    | NEW YORK             | 20.763  | 27   | BUFFALO/ROCHESTER   | 3.348   |
| 2    | LOS ANGELES          | 17.005  | 28   | EASTERN CAROLINAS   | 3.299   |
| 3    | BOSTON               | 11.624  | 29   | SACRAMENTO          | 3.299   |
| 4    | PHILADELPHIA         | 10.778  | 30   | BALTIMORE           | 3.143   |
| 5    | MIAMI                | 8.371   | 31   | GRAND RAPIDS        | 3.067   |
| 6    | WASHINGTON D.C.      | 7.637   | 32   | SAN DIEGO           | 2.856   |
| 7    | DETROIT              | 6.927   | 33   | INDIANAPOLIS        | 2.846   |
| 8    | CHICAGO              | 6.748   | 34   | CENTRAL WISCONSIN   | 2.819   |
| 9    | TAMPA                | 6.567   | 35   | ST. LOUIS           | 2.575   |
| 10   | ATLANTA              | 6.413   | 36   | NASHVILLE           | 2.570   |
| 11   | SAN FRANCISCO        | 6.003   | 37   | CHARLOTTE           | 2.490   |
| 12   | PHOENIX              | 5.951   | 38   | ALBANY              | 2.366   |
| 13   | HOUSTON              | 5.893   | 39   | KANSAS CITY         | 2.258   |
| 14   | SEATTLE              | 5.359   | 40   | SYRACUSE            | 2.236   |
| 15   | DENVER               | 5.077   | 41   | MILWAUKEE           | 2.186   |
| 16   | PORTLAND             | 4.539   | 42   | NEW ORLEANS/MOBILE  | 2.034   |
| 17   | ORLANDO              | 4.449   | 43   | JACKSONVILLE        | 1.998   |
| 18   | DALLAS/FT. WORTH     | 4.447   | 44   | MEMPHIS             | 1.926   |
| 19   | MINNEAPOLIS          | 4.111   | 45   | GREENVILLE          | 1.838   |
| 20   | RALEIGH/DURHAM       | 4.032   | 46   | LAS VEGAS           | 1.819   |
| 21   | HARTFORD/NEW HAVEN   | 3.989   | 47   | BIRMINGHAM          | 1.798   |
| 22   | SALT LAKE CITY/BOISE | 3.775   | 48   | OKLAHOMA CITY/TULSA | 1.479   |
| 23   | RICHMOND/NORFOLK     | 3.740   | 49   | OMAHA               | 1.397   |
| 24   | CLEVELAND            | 3.481   | 50   | DES MOINES          | 1.230   |
| 25   | PITTSBURGH           | 3.390   | 51   | WEST TEXAS          | 1.066   |
| 26   | GREATER MAINE        | 3.363   | 52   | LITTLE ROCK         | 0.982   |
|      |                      |         |      | REMAINING U.S.      | 51.500  |

# Nielsen Total GJ Market Ranking

Over \$2MM Grocers - 2015-16 Season

| Rank | Market             | Mil Gal | Rank | Market               | Mil Gal |
|------|--------------------|---------|------|----------------------|---------|
|      | TOTAL US           | 11.103  |      |                      |         |
| 1    | NEW YORK           | 0.895   | 27   | SALT LAKE CITY/BOISE | 0.124   |
| 2    | MIAMI              | 0.567   | 28   | SACRAMENTO           | 0.121   |
| 3    | LOS ANGELES        | 0.510   | 29   | CLEVELAND            | 0.117   |
| 4    | TAMPA              | 0.438   | 30   | BALTIMORE            | 0.114   |
| 5    | BOSTON             | 0.423   | 31   | CHARLOTTE            | 0.111   |
| 6    | ATLANTA            | 0.363   | 32   | NASHVILLE            | 0.107   |
| 7    | PHILADELPHIA       | 0.331   | 33   | PITTSBURGH           | 0.103   |
| 8    | WASHINGTON D.C.    | 0.306   | 34   | INDIANAPOLIS         | 0.102   |
| 9    | SAN FRANCISCO      | 0.281   | 35   | GRAND RAPIDS         | 0.099   |
| 10   | SEATTLE            | 0.244   | 36   | ALBANY               | 0.098   |
| 11   | PHOENIX            | 0.242   | 37   | BUFFALO/ROCHESTER    | 0.098   |
| 12   | DENVER             | 0.240   | 38   | GREENVILLE           | 0.097   |
| 13   | DETROIT            | 0.239   | 39   | BIRMINGHAM           | 0.087   |
| 14   | ORLANDO            | 0.233   | 40   | NEW ORLEANS/MOBILE   | 0.077   |
| 15   | CHICAGO            | 0.220   | 41   | ST. LOUIS            | 0.072   |
| 16   | PORTLAND           | 0.205   | 42   | CENTRAL WISCONSIN    | 0.072   |
| 17   | HOUSTON            | 0.181   | 43   | SYRACUSE             | 0.070   |
| 18   | EASTERN CAROLINAS  | 0.167   | 44   | KANSAS CITY          | 0.068   |
| 19   | MINNEAPOLIS        | 0.162   | 45   | MILWAUKEE            | 0.065   |
| 20   | RALEIGH/DURHAM     | 0.160   | 46   | MEMPHIS              | 0.064   |
| 21   | DALLAS/FT. WORTH   | 0.160   | 47   | LAS VEGAS            | 0.058   |
| 22   | RICHMOND/NORFOLK   | 0.150   | 48   | OKLAHOMA CITY/TULSA  | 0.051   |
| 23   | HARTFORD/NEW HAVEN | 0.144   | 49   | LITTLE ROCK          | 0.038   |
| 24   | GREATER MAINE      | 0.143   | 50   | WEST TEXAS           | 0.037   |
| 25   | SAN DIEGO          | 0.136   | 51   | OMAHA                | 0.035   |
| 26   | JACKSONVILLE       | 0.126   | 52   | DES MOINES           | 0.025   |
|      |                    |         |      | REMAINING U.S.       | 1.728   |

## OJ Buyer Demographics

### Gallons Per Buying Household

| Demographic           | 10/28/01-<br>10/26/02 | 10/27/02-<br>10/25/03 | 10/26/03-<br>10/23/04 | 11/21/04-<br>11/19/05 | 10/30/05-<br>10/28/06 | 10/29/06-<br>10/27/07 | 01/01/09-<br>12/31/09 | 10/30/11-<br>10/27/12 | 10/31/15-<br>10/29/16 |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| -----gallons-----     |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| <b><u>AGE</u></b>     |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Under 35              | 7.51                  | 7.26                  | 7.27                  | 7.07                  | 6.10                  | 5.42                  | 5.61                  | 4.28                  | 4.15                  |
| 35 to 44              | 8.69                  | 8.41                  | 8.21                  | 7.44                  | 7.03                  | 6.06                  | 6.21                  | 5.13                  | 4.25                  |
| 45 to 54              | 8.78                  | 8.38                  | 8.47                  | 7.61                  | 7.29                  | 6.32                  | 6.21                  | 5.30                  | 4.77                  |
| 55 to 64              | 8.93                  | 8.62                  | 8.45                  | 7.76                  | 7.33                  | 6.70                  | 6.49                  | 5.09                  | 4.48                  |
| 65 and Over           | 9.84                  | 9.80                  | 9.62                  | 8.95                  | 8.23                  | 7.42                  | 6.91                  | 5.80                  | 5.08                  |
| <b><u>HH SIZE</u></b> |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 1 Member              | 7.05                  | 7.26                  | 6.88                  | 6.32                  | 6.06                  | 5.31                  | 5.43                  | 4.73                  | 4.05                  |
| 2 Members             | 8.88                  | 8.34                  | 8.30                  | 7.66                  | 7.07                  | 6.64                  | 6.27                  | 5.30                  | 4.47                  |
| 3 to 4 Members        | 9.10                  | 9.00                  | 8.85                  | 8.23                  | 7.57                  | 6.55                  | 6.68                  | 5.40                  | 4.40                  |
| 5 or More             | 10.66                 | 10.58                 | 10.13                 | 9.23                  | 8.52                  | 6.99                  | 7.60                  | 5.62                  | 4.95                  |
| <b><u>INCOME</u></b>  |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Under \$20,000        | 6.87                  | 7.18                  | 6.94                  | 6.36                  | 5.80                  | 5.09                  | 5.01                  | 4.40                  | 3.68                  |
| \$20,000-29,999       | 7.96                  | 7.77                  | 8.04                  | 7.25                  | 6.45                  | 5.90                  | 5.70                  | 4.82                  | 4.41                  |
| \$30,000-39,999       | 8.83                  | 8.08                  | 8.41                  | 7.94                  | 6.80                  | 6.05                  | 6.14                  | 4.88                  | 4.12                  |
| \$40,000-49,999       | 9.11                  | 8.98                  | 8.31                  | 7.53                  | 7.16                  | 6.11                  | 6.05                  | 4.96                  | 4.20                  |
| \$50,000-69,999       | 9.20                  | 9.21                  | 8.97                  | 8.08                  | 7.44                  | 6.55                  | 6.45                  | 5.25                  | 4.44                  |
| \$70,000+             | 10.15                 | 9.88                  | 9.44                  | 8.93                  | 8.05                  |                       |                       |                       |                       |
| \$70,000-99,999       |                       |                       |                       |                       |                       | 6.89                  | 6.94                  | 5.56                  | 4.61                  |
| \$100,000+            |                       |                       |                       |                       |                       | 7.25                  | 7.45                  | 6.21                  | 4.83                  |
| <b><u>KIDS</u></b>    |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| None Under 18         | 8.50                  | 8.37                  | 8.14                  | 7.52                  | 6.98                  | 6.29                  | 6.30                  | 5.25                  | 4.44                  |
| Under 18              | 9.22                  | 8.94                  | 8.79                  | 8.08                  | 7.50                  | 6.47                  | 6.54                  | 5.28                  | 4.39                  |

SOURCE: Nielsen

## OJ Buyer Demographics

### Household Penetration (% Buying)

| Demographic           | 10/28/01-<br>10/26/02 | 10/27/02-<br>10/25/03 | 10/26/03-<br>10/23/04 | 11/21/04-<br>11/19/05 | 10/30/05-<br>10/28/06 | 10/29/06-<br>10/27/07 | 01/01/09-<br>12/31/09 | 10/30/11-<br>10/27/12 | 10/31/15-<br>10/29/16 |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| ----- % -----         |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| <b><u>AGE</u></b>     |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Under 35              | 83.42                 | 84.25                 | 82.85                 | 79.91                 | 78.99                 | 76.47                 | 76.12                 | 71.59                 | 67.24                 |
| 35 to 44              | 83.43                 | 81.62                 | 81.94                 | 80.05                 | 80.13                 | 75.17                 | 75.51                 | 72.80                 | 68.09                 |
| 45 to 54              | 81.91                 | 81.36                 | 78.92                 | 76.82                 | 77.48                 | 71.27                 | 71.29                 | 68.06                 | 62.74                 |
| 55 to 64              | 80.68                 | 79.66                 | 78.59                 | 76.60                 | 74.63                 | 70.29                 | 68.97                 | 62.53                 | 57.94                 |
| 65 and Over           | 81.43                 | 81.08                 | 79.74                 | 79.80                 | 76.20                 | 72.07                 | 69.64                 | 64.28                 | 58.01                 |
| <b><u>HH SIZE</u></b> |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 1 Member              | 70.46                 | 69.40                 | 67.18                 | 66.04                 | 64.20                 | 59.20                 | 57.54                 | 51.31                 | 46.33                 |
| 2 Members             | 81.33                 | 80.79                 | 79.58                 | 77.40                 | 75.80                 | 71.65                 | 70.85                 | 65.35                 | 60.41                 |
| 3 to 4 Members        | 84.81                 | 84.80                 | 83.77                 | 82.14                 | 81.81                 | 77.02                 | 77.33                 | 73.01                 | 68.19                 |
| 5 or More             | 87.86                 | 86.79                 | 85.48                 | 84.41                 | 82.37                 | 79.06                 | 79.93                 | 75.29                 | 71.78                 |
| <b><u>INCOME</u></b>  |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Under \$20,000        | 72.45                 | 71.33                 | 70.62                 | 69.20                 | 68.20                 | 61.06                 | 59.77                 | 54.49                 | 48.93                 |
| \$20,000-29,999       | 78.66                 | 75.30                 | 76.54                 | 73.88                 | 70.61                 | 66.34                 | 64.64                 | 60.53                 | 55.67                 |
| \$30,000-39,999       | 78.68                 | 80.04                 | 77.52                 | 77.25                 | 74.66                 | 69.24                 | 68.15                 | 63.39                 | 57.97                 |
| \$40,000-49,999       | 81.50                 | 82.04                 | 80.75                 | 78.30                 | 74.60                 | 71.53                 | 72.58                 | 65.25                 | 61.03                 |
| \$50,000-69,999       | 84.34                 | 84.29                 | 81.57                 | 79.71                 | 77.49                 | 73.41                 | 72.95                 | 69.16                 | 62.87                 |
| \$70,000+             | 85.73                 | 85.95                 | 83.68                 | 82.34                 | 80.19                 |                       |                       |                       |                       |
| \$70,000-99,999       |                       |                       |                       |                       |                       | 75.38                 | 75.20                 | 69.85                 | 64.62                 |
| \$100,000+            |                       |                       |                       |                       |                       | 77.31                 | 76.39                 | 70.91                 | 65.49                 |
| <b><u>KIDS</u></b>    |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| None Under 18         | 77.85                 | 76.78                 | 75.40                 | 73.67                 | 71.52                 | 67.30                 | 66.21                 | 60.50                 | 55.83                 |
| Under 18              | 85.24                 | 85.45                 | 83.94                 | 82.25                 | 82.17                 | 77.37                 | 78.28                 | 74.51                 | 69.34                 |

SOURCE: Nielsen

## GJ Buyer Demographics

### Gallons Per Buying Household

| Demographic           | 10/28/01-<br>10/26/02 | 10/27/02-<br>10/25/03 | 10/26/03-<br>10/23/04 | 11/21/04-<br>11/19/05 | 10/30/05-<br>10/28/06 | 10/29/06-<br>10/27/07 | 01/01/09-<br>12/31/09 | 10/30/11-<br>10/27/12 | 10/31/15-<br>10/29/16 |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| -----gallons-----     |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| <b><u>AGE</u></b>     |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Under 35              | 1.64                  | 1.55                  | 2.11                  | 1.86                  | 1.32                  | 1.35                  | 1.37                  | 1.31                  | 1.09                  |
| 35 to 44              | 2.14                  | 2.34                  | 2.01                  | 1.86                  | 1.84                  | 1.90                  | 1.84                  | 1.48                  | 1.41                  |
| 45 to 54              | 2.85                  | 2.82                  | 2.52                  | 1.80                  | 2.27                  | 1.72                  | 1.89                  | 2.03                  | 1.68                  |
| 55 to 64              | 2.55                  | 2.55                  | 2.38                  | 2.26                  | 2.34                  | 2.04                  | 2.26                  | 2.23                  | 1.82                  |
| 65 and Over           | 2.81                  | 2.56                  | 2.56                  | 2.58                  | 2.52                  | 2.39                  | 1.94                  | 1.76                  | 1.89                  |
| <b><u>HH SIZE</u></b> |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 1 Member              | 2.82                  | 2.35                  | 2.56                  | 2.20                  | 2.31                  | 2.20                  | 2.24                  | 2.13                  | 2.19                  |
| 2 Members             | 2.99                  | 2.96                  | 2.77                  | 2.31                  | 2.50                  | 2.17                  | 2.23                  | 2.04                  | 1.92                  |
| 3 to 4 Members        | 2.43                  | 2.24                  | 2.29                  | 2.11                  | 1.92                  | 1.85                  | 1.59                  | 1.61                  | 1.42                  |
| 5 or More             | 2.15                  | 1.94                  | 1.82                  | 1.51                  | 1.36                  | 1.17                  | 1.62                  | 1.81                  | 1.93                  |
| <b><u>INCOME</u></b>  |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Under \$20,000        | 2.05                  | 2.06                  | 2.16                  | 1.53                  | 1.60                  | 1.39                  | 1.77                  | 1.57                  | 1.95                  |
| \$20,000-29,999       | 2.86                  | 1.93                  | 2.12                  | 2.12                  | 1.70                  | 1.73                  | 1.82                  | 1.71                  | 1.68                  |
| \$30,000-39,999       | 2.26                  | 2.24                  | 2.53                  | 1.95                  | 1.56                  | 1.52                  | 1.94                  | 2.11                  | 1.57                  |
| \$40,000-49,999       | 2.97                  | 2.25                  | 2.29                  | 1.84                  | 2.44                  | 1.73                  | 1.42                  | 1.94                  | 1.48                  |
| \$50,000-69,999       | 3.21                  | 3.31                  | 2.90                  | 2.72                  | 2.43                  | 2.27                  | 2.03                  | 1.97                  | 1.81                  |
| \$70,000+             | 2.74                  | 2.76                  | 2.66                  | 2.47                  | 2.50                  |                       |                       |                       |                       |
| \$70,000-99,999       |                       |                       |                       |                       |                       | 2.32                  | 2.64                  | 2.31                  | 1.92                  |
| \$100,000+            |                       |                       |                       |                       |                       | 2.30                  | 1.90                  | 1.82                  | 1.99                  |
| <b><u>KIDS</u></b>    |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| None Under 18         | 3.00                  | 2.69                  | 2.62                  | 2.27                  | 2.38                  | 2.19                  | 2.21                  | 2.08                  | 1.93                  |
| Under 18              | 2.04                  | 2.02                  | 2.13                  | 1.88                  | 1.73                  | 1.54                  | 1.49                  | 1.53                  | 1.60                  |

SOURCE: Nielsen

## GJ Buyer Demographics

### Household Penetration (% Buying)

| Demographic           | 10/28/01-<br>10/26/02 | 10/27/02-<br>10/25/03 | 10/26/03-<br>10/23/04 | 11/21/04-<br>11/19/05 | 10/30/05-<br>10/28/06 | 10/29/06-<br>10/27/07 | 01/01/09-<br>12/31/09 | 10/30/11-<br>10/27/12 | 10/31/15-<br>10/29/16 |
|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| ----- % -----         |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| <b><u>AGE</u></b>     |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Under 35              | 9.95                  | 11.58                 | 9.41                  | 7.36                  | 6.41                  | 6.78                  | 6.07                  | 4.64                  | 3.88                  |
| 35 to 44              | 13.55                 | 12.30                 | 11.33                 | 8.22                  | 8.32                  | 7.78                  | 7.11                  | 5.27                  | 3.79                  |
| 45 to 54              | 15.78                 | 13.41                 | 11.79                 | 8.94                  | 8.61                  | 8.72                  | 7.73                  | 6.23                  | 4.43                  |
| 55 to 64              | 14.47                 | 12.76                 | 12.45                 | 8.58                  | 8.34                  | 8.75                  | 7.28                  | 6.38                  | 4.05                  |
| 65 and Over           | 11.47                 | 10.30                 | 9.56                  | 6.96                  | 6.66                  | 6.13                  | 6.21                  | 6.09                  | 3.74                  |
| <b><u>HH SIZE</u></b> |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| 1 Member              | 11.89                 | 11.32                 | 10.75                 | 7.18                  | 6.16                  | 6.91                  | 6.70                  | 5.64                  | 3.66                  |
| 2 Members             | 14.27                 | 12.32                 | 11.45                 | 8.73                  | 8.26                  | 8.46                  | 7.74                  | 6.73                  | 4.56                  |
| 3 to 4 Members        | 13.53                 | 12.57                 | 11.17                 | 8.38                  | 7.88                  | 7.49                  | 7.34                  | 5.65                  | 4.22                  |
| 5 or More             | 11.71                 | 12.85                 | 10.20                 | 7.66                  | 8.28                  | 8.22                  | 5.87                  | 5.20                  | 3.73                  |
| <b><u>INCOME</u></b>  |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| Under \$20,000        | 11.74                 | 10.51                 | 10.27                 | 7.25                  | 6.54                  | 6.62                  | 6.02                  | 5.46                  | 2.63                  |
| \$20,000-29,999       | 12.15                 | 11.27                 | 9.82                  | 7.22                  | 7.07                  | 6.84                  | 7.25                  | 4.95                  | 3.59                  |
| \$30,000-39,999       | 12.13                 | 11.42                 | 10.03                 | 8.38                  | 7.80                  | 7.46                  | 5.79                  | 5.75                  | 3.37                  |
| \$40,000-49,999       | 13.05                 | 12.29                 | 11.79                 | 8.37                  | 7.40                  | 7.33                  | 7.04                  | 5.70                  | 3.91                  |
| \$50,000-69,999       | 13.86                 | 12.26                 | 12.14                 | 8.25                  | 7.29                  | 7.78                  | 7.42                  | 5.37                  | 4.49                  |
| \$70,000+             | 15.24                 | 15.15                 | 12.34                 | 9.24                  | 8.47                  |                       |                       |                       |                       |
| \$70,000-99,999       |                       |                       |                       |                       |                       | 8.16                  | 7.83                  | 6.06                  | 4.70                  |
| \$100,000+            |                       |                       |                       |                       |                       | 9.34                  | 8.05                  | 7.74                  | 5.13                  |
| <b><u>KIDS</u></b>    |                       |                       |                       |                       |                       |                       |                       |                       |                       |
| None Under 18         | 13.59                 | 12.28                 | 11.48                 | 8.22                  | 7.50                  | 7.80                  | 7.30                  | 6.17                  | 4.30                  |
| Under 18              | 12.32                 | 12.02                 | 10.18                 | 7.89                  | 7.76                  | 7.61                  | 6.85                  | 5.50                  | 3.73                  |

SOURCE: Nielsen

## U.S. Per Capita Beverage Consumption

| Year                | Milk | Bottled<br>Water <sup>b</sup> | Soft<br>Drinks <sup>b</sup> | Selected Fruit Juices |    |       |       |                    |
|---------------------|------|-------------------------------|-----------------------------|-----------------------|----|-------|-------|--------------------|
|                     |      |                               |                             | OJ                    | GJ | Apple | Grape | Total <sup>a</sup> |
| ----- gallons ----- |      |                               |                             |                       |    |       |       |                    |
| 1970                | 31.1 | NA                            | 24.3                        | 3.7                   | .6 | .5    | .3    | 5.5                |
| 1975                | 29.4 | NA                            | 28.2                        | 4.7                   | .7 | .9    | .2    | 6.7                |
| 1980                | 27.5 | 2.7                           | 35.1                        | 5.0                   | .6 | 1.5   | .3    | 7.4                |
| 1985                | 26.6 | 5.1                           | 35.7                        | 4.8                   | .6 | 1.5   | .3    | 7.8                |
| 1990                | 25.6 | 8.8                           | 46.2                        | 3.7                   | .9 | 1.8   | .3    | 7.0                |
| 1995                | 23.9 | 11.6                          | 47.4                        | 4.9                   | .6 | 1.8   | .4    | 8.1                |
| 1996                | 23.8 | 12.4                          | 46.6                        | 5.1                   | .6 | 1.8   | .3    | 8.7                |
| 1997                | 23.4 | 13.4                          | 46.8                        | 5.3                   | .6 | 1.8   | .3    | 8.5                |
| 1998                | 23.0 | 14.4                          | 47.9                        | 5.7                   | .6 | 1.8   | .4    | 9.2                |
| 1999                | 22.9 | 15.8                          | 49.7                        | 5.7                   | .6 | 1.9   | .4    | 9.0                |
| 2000                | 22.8 | 16.7                          | 49.3                        | 5.6                   | .5 | 2.1   | .4    | 8.9                |
| 2001                | 22.4 | 18.2                          | 46.7                        | 5.2                   | .5 | 1.9   | .5    | 8.5                |
| 2002                | 22.2 | 20.1                          | 46.6                        | 5.0                   | .5 | 2.2   | .4    | 8.4                |
| 2003                | 21.9 | 21.6                          | 46.5                        | 4.9                   | .4 | 2.3   | .6    | 8.5                |
| 2004                | 21.5 | 23.2                          | NA                          | 4.9                   | .4 | 2.1   | .5    | 8.5                |
| 2005                | 21.4 | 25.4                          | NA                          | 4.8                   | .2 | 2.1   | .4    | 8.1                |
| 2006                | 21.2 | 27.6                          | NA                          | 4.4                   | .2 | 2.2   | .4    | 8.0                |
| 2007                | 21.0 | 29.0                          | NA                          | 4.1                   | .3 | 1.7   | .4    | 7.9                |
| 2008                | 20.7 | 28.5                          | NA                          | 3.8                   | .3 | 1.9   | .3    | 7.4                |
| 2009                | 20.6 | 27.6                          | NA                          | 3.9                   | .3 | 1.8   | .4    | 7.4                |
| 2010                | 20.5 | 28.3                          | 45.5                        | 3.7                   | .2 | 1.7   | .4    | 7.2                |
| 2011                | 20.1 | 29.2                          | 44.6                        | 3.6                   | .2 | 1.7   | .4    | 6.8                |
| 2012                | 19.7 | 30.8                          | 43.8                        | 3.1                   | .2 | 1.9   | .3    | 5.9                |
| 2013                | 19.1 | 32.0                          | 42.1                        | 3.2                   | .2 | 1.8   | .4    | 6.1                |
| 2014                | 18.4 | 34.1                          | 41.4                        | 3.1                   | .2 | 1.7   | .4    | 5.8                |
| 2015                | 18.0 | 36.5                          | 40.7                        | 2.9                   | .2 | 1.9   | .4    | 5.7                |
| 2016                |      | 39.3                          | 38.5                        |                       |    |       |       |                    |

<sup>a</sup>Includes lemon, lime, pineapple, cranberry & prune juice.

SOURCE: USDA-ERS

<sup>b</sup>Beverage Marketing Corporation



## Nutrition Values of Citrus

| ITEM                | REFERENCE<br>VALUE | JUICE  |                                  | FRESH                 |                        |                       |
|---------------------|--------------------|--|----------------------------------|-----------------------|------------------------|-----------------------|
|                     |                    | ORANGE   | GRAPEFRUIT                       | ORANGES               | GRAPEFRUIT             | TANGERINES            |
| SERVING SIZE        |                    | 1 cup/8-oz.                                    |                                  | 154g/<br>1 med. fruit | 154g/<br>1 med. fruit  | 109g/<br>1 med. fruit |
|                     |                    | ----- Amount Per Serving (% Daily Value) ----- |                                  |                       |                        |                       |
| Calories            | 2000               | 110  | 90                               | 70                    | 60                     | 50                    |
| Calories from Fat   | NA                 | 0  | 0                                | 0                     | 0                      | 0                     |
| Cholesterol         | <300 mg            | 0  | 0                                | 0                     | 0                      | 0                     |
| Total Fat           | 65 g               | 0  | 0                                | 0                     | 0                      | 0                     |
| Saturated Fat       | 20 g               | 0  | 0                                | 0                     | 0                      | 0                     |
| Sodium              | <2400 mg           | 0  | 0                                | 0                     | 0                      | 0                     |
| Potassium           | 3500 mg            | 450 (13%)                                      | 300 (9%)                         | 260 (7%)              | 230 (7%)               | 180 (5%)              |
| Total Carbohydrates | 400 g              | 26 (9%)  | 22 (7%)                          | 21 (7%)               | 16 (5%)                | 15 (5%)               |
| Sugar               | NA                 | 22   | 20                               | 14                    | 10                     | 8                     |
| Protein             | 50 g               | 2  | 1                                | 1                     | 1                      | 1                     |
| Dietary Fiber       | 25 g               | 0 (0%)   | 0 (0%)                           | 7 (28%)               | 6 (24%)                | 3 (12%)               |
| Folate              | 400 mcg            | 60 (15%)                                       | 24 (6%)                          | 40 (10%)              | 16 (4%)                | 8 (2%)                |
| Vitamin A           | 5000 IU            | 0 (0%)   | 0 (0%)<br>600 (12%) <sup>a</sup> | 100 (2%)              | 750 (15%) <sup>a</sup> | 750 (15%)             |
| Vitamin C           | 60 mg              | 72 (120%)                                      | 60 (100%)                        | 78 (130%)             | 66 (110%)              | 30 (50%)              |
| Calcium             | 1000 mg            | 20 (2%)  | 20 (2%)                          | 60 (6%)               | 20 (2%)                | 40 (4%)               |
| Thiamin             | 1.5 mg             | .15 (10%)                                      | .09 (6%)                         | .15 (10%)             | .06 (4%)               | .12 (8%)              |
| Magnesium           | 400 mg             | 24 (6%)  | 24 (6%)                          | 16 (4%)               | 16 (4%)                | 16 (4%)               |

SOURCE: Daily values are based on a 2000 calorie diet for moderately active adults. FDA National Fact (61 FR at 42761) 5/21/96;  
FDOC Scientific Research (04/11/05).

<sup>a</sup>Colored Varieties

# U.S. Grade A

## Frozen Concentrated Juice Standards

| SCORING FACTORS     | ORANGE                                    | GRAPEFRUIT             |
|---------------------|---|------------------------|
| Color               | Minimum 36 points,<br>but OJ 5 color tube | Minimum 18 points      |
| Defects             | Minimum 18 points                         | Minimum 18 points      |
| Flavor              | Minimum 36 points                         | Minimum 54 points      |
| Minimum Total Score | 90 points <sup>a</sup>                    | 90 points <sup>a</sup> |

### OTHER FACTORS

|                    |                   |                 |
|--------------------|-------------------|-----------------|
| Ratio              | 12.5:1 to 19.5:1  | 9.0:1 to 14.0:1 |
| Concentrate Brix   | Minimum 41.8°     | Minimum 38.0°   |
| Reconstituted Brix | Minimum 11.8°     | Minimum 10.6°   |
| Sinking Pulp       | No requirement    | Maximum 10%     |
| Recoverable Oil    | Maximum 0.035%    | Maximum 0.020%  |
| Gel Test           | No requirement    | No requirement  |
| Washed Pulp Solids | In-line permitted | Not permitted   |

<sup>a</sup>The lowest score of any one factor (color, defects, or flavor) determines the grade even though the total score for the product places it in a higher grade. Florida requires that FCOJ scored Grade B must have a Grade A Flavor.

SOURCE: Federal Register.

# U.S. Grade A

## Concentrated Juice for Manufacturing Standards

| SCORING FACTORS     | ORANGE                                    | GRAPEFRUIT        |
|---------------------|---|-------------------|
| Color               | Minimum 36 points,<br>but OJ 6 color tube | Minimum 18 points |
| Defects             | Minimum 18 points                         | Minimum 18 points |
| Flavor              | Minimum 36 points                         | Minimum 54 points |
| Minimum Total Score | 90 points                                 | 90 points         |

### OTHER FACTORS

|                    |                   |                |
|--------------------|-------------------|----------------|
| Ratio              | 8:1 to 24:1       | Minimum 6.0:1  |
| Concentrate Brix   | Minimum 20°       |                |
| Reconstituted Brix | Minimum 11.8°     |                |
| Sinking Pulp       | No requirement    | Maximum 10%    |
| Recoverable Oil    | No requirement    | No requirement |
| Gel Test           | No requirement    | No requirement |
| Washed Pulp Solids | In-line permitted | Not permitted  |

SOURCE: Federal Register.

# U.S. Grade A Juice from Concentrate Standards

| SCORING FACTORS     | ORANGE                                    | GRAPEFRUIT        |
|---------------------|---|-------------------|
| Color               | Minimum 36 points,<br>but OJ 5 color tube | Minimum 18 points |
| Defects             | Minimum 18 points                         | Minimum 18 points |
| Flavor              | Minimum 36 points                         | Minimum 54 points |
| Minimum Total Score | 90 points                                 | 90 points         |

## OTHER FACTORS

|                    |                   |                 |
|--------------------|-------------------|-----------------|
| Ratio              | 12.5 to 20.5:1    | 8.0:1 to 14.0:1 |
| ° Brix             | Minimum 11.8°     | Minimum 10.0°   |
| Sinking Pulp       | No requirement    | Maximum 10%     |
| Recoverable Oil    | Maximum 0.035%    | Maximum 0.020%  |
| Washed Pulp Solids | In-line permitted | Not permitted   |

SOURCE: Federal Register.

# U.S. Grade A Juice Standards

| SCORING FACTORS     | ORANGE            | GRAPEFRUIT        |
|---------------------|-------------------|-------------------|
| Color               | Minimum 36 points | Minimum 18 points |
| Defects             | Minimum 18 points | Minimum 18 points |
| Flavor              | Minimum 36 points | Minimum 54 points |
| Minimum Total Score | 90 points         | 90 points         |

## OTHER FACTORS

|                    |                |                 |
|--------------------|----------------|-----------------|
| Ratio              | 12.5 to 20.5:1 | 8.0:1 to 14.0:1 |
| ° Brix             | Minimum 11.0°  | Minimum 9.0°    |
| Sinking Pulp       | No requirement | Maximum 10%     |
| Recoverable Oil    | Maximum 0.035% | Maximum 0.020%  |
| Washed Pulp Solids | Not permitted  | Not permitted   |

SOURCE: Federal Register.

## Florida Orange Standards

| Minimum Total Solids (%) |               |     | Solids to Acid<br>Minimum Ratio |    |   | Minimum Total Solids (%) |               |      | Solids to Acid<br>Minimum Ratio |    |                |
|--------------------------|---------------|-----|---------------------------------|----|---|--------------------------|---------------|------|---------------------------------|----|----------------|
| <sup>a</sup> 8.0         | to (not incl) | 8.1 | 10.50                           | to | 1 | 9.6                      | to (not incl) | 9.7  | 9.70                            | to | 1              |
| 8.1                      | "             | 8.2 | 10.45                           | to | 1 | 9.7                      | "             | 9.8  | 9.65                            | to | 1              |
| 8.2                      | "             | 8.3 | 10.40                           | to | 1 | 9.8                      | "             | 9.9  | 9.60                            | to | 1              |
| 8.3                      | "             | 8.4 | 10.35                           | to | 1 | 9.9                      | "             | 10.0 | 9.55                            | to | 1              |
| 8.4                      | "             | 8.5 | 10.30                           | to | 1 | 10.0                     | "             | 10.1 | 9.50                            | to | 1              |
| <sup>b</sup> 8.5         | "             | 8.6 | 10.25                           | to | 1 | 10.1                     | "             | 10.2 | 9.45                            | to | 1              |
| 8.6                      | "             | 8.7 | 10.20                           | to | 1 | 10.2                     | "             | 10.3 | 9.40                            | to | 1              |
| <sup>c</sup> 8.7         | "             | 8.8 | 10.15                           | to | 1 | 10.3                     | "             | 10.4 | 9.35                            | to | 1              |
| 8.8                      | "             | 8.9 | 10.10                           | to | 1 | 10.4                     | "             | 10.5 | 9.30                            | to | 1              |
| 8.9                      | "             | 9.0 | 10.05                           | to | 1 | 10.5                     | "             | 10.6 | 9.25                            | to | 1              |
| <sup>d</sup> 9.0         | "             | 9.1 | 10.00                           | to | 1 | 10.6                     | "             | 10.7 | 9.20                            | to | 1              |
| 9.1                      | "             | 9.2 | 9.95                            | to | 1 | 10.7                     | "             | 10.8 | 9.15                            | to | 1              |
| 9.2                      | "             | 9.3 | 9.90                            | to | 1 | 10.8                     | "             | 10.9 | 9.10                            | to | 1              |
| 9.3                      | "             | 9.4 | 9.85                            | to | 1 | 10.9                     | "             | 11.0 | 9.05                            | to | 1              |
| 9.4                      | "             | 9.5 | 9.80                            | to | 1 | 11.0 and above           |               |      | 9.00                            | to | 1 <sup>e</sup> |
| 9.5                      | "             | 9.6 | 9.75                            | to | 1 |                          |               |      |                                 |    |                |

**NEW VARIETIES: Ambersweet (orange), Sunburst & Fallglo (tangerines) Not exempt. (Page, Osceola, Lee, Robinson, Dancy, K-Early, Ortanique and Pummelo exempt from inspection.)**

<sup>a</sup>Minimum solids for processing December 1 through July 31.

<sup>b</sup>Minimum solids for oranges fresh November 16 through July 31, and processing November 16 through November 30.

<sup>c</sup>Minimum solids for oranges November 1 through November 15.

<sup>d</sup>Minimum solids for oranges August 1 through October 31.

<sup>e</sup>11.00 and higher solids, minimum 9.00 to 1 ratio. Juice requirements 4½ gallons per box, minimum acid 0.40.

**NOTE 1:** Until December 1 of each year, all oranges for processing must meet fresh fruit requirements unless otherwise noted. From December 1 through July 31, no juice content, minimum acid or color break requirements for processed fruit. Apply minimum solids and ratio requirements as indicated in table.

**NOTE 2:** For color break requirements and individual fruit testing, see *Citrus Fruit Laws*.

SOURCE: FDACS

## Florida Grapefruit Standards

| Minimum Total Solids (%) |  |                   | Solids to Acid Minimum Ratio |    |                | Minimum Total Solids (%) |               |      | Solids to Acid Minimum Ratio |    |                |
|--------------------------|--|-------------------|------------------------------|----|----------------|--------------------------|---------------|------|------------------------------|----|----------------|
| <sup>a</sup> 6.5         |  |                   |                              |    |                |                          |               |      |                              |    |                |
| <sup>b</sup> 7.0         |  |                   | 7.00                         | to | 1              | 10.4                     | to (not incl) | 10.5 | 6.40                         | to | 1              |
| <sup>c</sup> 7.5         |  |                   | 7.50                         | to | 1 <sup>e</sup> | 10.5                     | "             | 10.6 | 6.375                        | to | 1              |
| <sup>d</sup> 8.0         |  |                   | 8.00                         | to | 1 <sup>f</sup> | 10.6                     | "             | 10.7 | 6.35                         | to | 1              |
| 8.1                      |  | to (not incl) 9.1 | 7.00                         | to | 1              | 10.7                     | "             | 10.8 | 6.325                        | to | 1              |
| 9.1                      |  | " 9.2             | 6.95                         | to | 1              | 10.8                     | "             | 10.9 | 6.30                         | to | 1              |
| 9.2                      |  | " 9.3             | 6.90                         | to | 1              | 10.9                     | "             | 11.0 | 6.275                        | to | 1              |
| 9.3                      |  | " 9.4             | 6.85                         | to | 1              | 11.0                     | "             | 11.1 | 6.25                         | to | 1              |
| 9.4                      |  | " 9.5             | 6.80                         | to | 1              | 11.1                     | "             | 11.2 | 6.225                        | to | 1              |
| 9.5                      |  | " 9.6             | 6.75                         | to | 1              | 11.2                     | "             | 11.3 | 6.20                         | to | 1              |
| 9.6                      |  | " 9.7             | 6.70                         | to | 1              | 11.3                     | "             | 11.4 | 6.175                        | to | 1              |
| 9.7                      |  | " 9.8             | 6.65                         | to | 1              | 11.4                     | "             | 11.5 | 6.15                         | to | 1              |
| 9.8                      |  | " 9.9             | 6.60                         | to | 1              | 11.5                     | "             | 11.6 | 6.125                        | to | 1              |
| 9.9                      |  | " 10.0            | 6.55                         | to | 1              | 11.6                     | "             | 11.7 | 6.10                         | to | 1              |
| 10.0                     |  | " 10.1            | 6.50                         | to | 1 <sup>g</sup> | 11.7                     | "             | 11.8 | 6.075                        | to | 1              |
| 10.1                     |  | " 10.2            | 6.475                        | to | 1              | 11.8                     | "             | 11.9 | 6.05                         | to | 1              |
| 10.2                     |  | " 10.3            | 6.45                         | to | 1              | 11.9                     | "             | 12.0 | 6.025                        | to | 1              |
| 10.3                     |  | " 10.4            | 6.425                        | to | 1              | 12.0                     | and above     |      | 6.00                         | to | 1 <sup>h</sup> |

<sup>a</sup>Minimum solids all grapefruit for processing, Jan. 1 through July 31.

<sup>b</sup>Minimum solids seedless grapefruit fresh, Jan. 1 through July 31. Minimum solids all grapefruit for processing, Dec. 1 through Dec. 31.

<sup>c</sup>Minimum solids seedy grapefruit fresh, Jan. 1 through July 31. Minimum solids seedless grapefruit for processing, Aug. 1 through Nov 30. Minimum solids seedless grapefruit fresh, Aug. 1, through Dec. 31.

<sup>d</sup>Minimum solids seedy grapefruit for processing, Aug. 1 through Nov. 30. Minimum solids seedy grapefruit fresh, Aug. 1 through Dec. 31.

<sup>e</sup>Minimum 7.50 ratio packinghouse eliminations for processing, Aug. 1 through Jan 31. Less than 7.50 to 1 but meeting minimum maturity, beverage base only.

<sup>f</sup>Minimum 8.00 ratio field run grapefruit for processing, Aug. 1 through Jan. 31. Sections and eliminations thereof must meet minimum maturity.

<sup>g</sup>Minimum 6.50 ratio for sectionizing, Jan. 1 through April 14. Minimum 6.50 ratio for all grapefruit for processing, Feb. 1 through April 14.

<sup>h</sup>Minimum 6.00 ratio for all grapefruit, April 15 through July 31.

**NOTE 1:** Until Dec. 1 of each year, all grapefruit for processing must meet fresh fruit requirements unless otherwise noted. From Dec. 1 through July 31, no juice content, minimum acid or color break requirements for processed fruit. Apply minimum solids and ratio requirements as indicated in table.

**NOTE 2:** For color break requirements and individual fruit testing, see *Citrus Fruit Laws*.

SOURCE: FDACS

# Florida Grapefruit Juice Requirements

**D.O.C. 20-34.006**

**Weight/Weight Method: 4-1/4" in diameter or less requires a minimum 52% juice content. Greater than 4-1/4" in diameter requires a minimum 49% juice content.**

| <b>Size</b>                                  | <b>Aug. 1<br/>through<br/>Nov. 15</b> | <b>Nov. 16<br/>through<br/>March 1</b> | <b>March 2<br/>through<br/>July 31</b> | <b>Juice<br/>Content</b> |
|--|---------------------------------------|--|--|--------------------------|
| ----- cubic centimeters per grapefruit ----- |                                       |  |  | ---- % ----              |
| <b>14</b>                                    | <b>400</b>                            | <b>380</b>                             | <b>360</b>                             | <b>49</b>                |
| <b>18</b>                                    | <b>350</b>                            | <b>335</b>                             | <b>320</b>                             | <b>49</b>                |
| <b>23</b>                                    | <b>305</b>                            | <b>290</b>                             | <b>275</b>                             | <b>49</b>                |
| <b>27</b>                                    | <b>275</b>                            | <b>265</b>                             | <b>250</b>                             | <b>49</b>                |
| <b>32</b>                                    | <b>245</b>                            | <b>230</b>                             | <b>220</b>                             | <b>52</b>                |
| <b>36</b>                                    | <b>230</b>                            | <b>220</b>                             | <b>210</b>                             | <b>52</b>                |
| <b>40</b>                                    | <b>210</b>                            | <b>200</b>                             | <b>190</b>                             | <b>52</b>                |
| <b>48</b>                                    | <b>185</b>                            | <b>180</b>                             | <b>170</b>                             | <b>52</b>                |
| <b>56</b>                                    | <b>170</b>                            | <b>165</b>                             | <b>155</b>                             | <b>52</b>                |
| <b>64</b>                                    | <b>165</b>                            | <b>160</b>                             | <b>150</b>                             | <b>52</b>                |

SOURCE: FDACS



# Florida Temple Orange Standards

| Minimum Total Solids (%) |      |               |      | Solids to Acid<br>Minimum Ratio |    |                |
|--------------------------|------|---------------|------|---------------------------------|----|----------------|
| <sup>a</sup>             | 9.0  | to (not incl) | 9.1  | 9.0                             | to | 1              |
|                          | 9.1  | "             | 9.2  | 8.9                             | to | 1              |
|                          | 9.2  | "             | 9.3  | 8.8                             | to | 1              |
|                          | 9.3  | "             | 9.4  | 8.7                             | to | 1              |
|                          | 9.4  | "             | 9.5  | 8.6                             | to | 1              |
|                          | 9.5  | "             | 9.6  | 8.5                             | to | 1 <sup>b</sup> |
|                          | 9.6  | "             | 9.7  | 8.4                             | to | 1              |
|                          | 9.7  | "             | 9.8  | 8.3                             | to | 1              |
|                          | 9.8  | "             | 9.9  | 8.2                             | to | 1              |
|                          | 9.9  | "             | 10.0 | 8.1                             | to | 1              |
|                          | 10.0 | "             | 10.1 | 8.0                             | to | 1              |
|                          | 10.1 | "             | 10.2 | 7.9                             | to | 1              |
|                          | 10.2 | "             | 10.3 | 7.8                             | to | 1              |
|                          | 10.3 | "             | 10.4 | 7.7                             | to | 1              |
|                          | 10.4 | "             | 10.5 | 7.6                             | to | 1              |
|                          | 10.5 | and above     |      | 7.5                             | to | 1 <sup>c</sup> |

<sup>a</sup>Minimum solids for all Temples.

SOURCE: FDACS

<sup>b</sup>8.50 to 1 minimum ratio for fresh.

<sup>c</sup>8.50 to 1 minimum ratio for processing.

NOTE 1: Until December 1 of each year, all Temples for processing must meet fresh fruit requirements unless otherwise noted. From December 1 through July 31, no juice content, minimum acid or color break requirements for processed fruit. Apply minimum solids and ratio requirements as indicated in tables.

NOTE 2: For color break requirements and individual fruit testing, see *Citrus Fruit Laws*.

# Florida Tangerine Standards<sup>a</sup>

## (November 15 through July 31)

| Minimum Total Solids (%) |              |                      |             | Solids to Acid<br>Minimum Ratio |           |          |
|--------------------------|--------------|----------------------|-------------|---------------------------------|-----------|----------|
| <sup>b</sup>             | <b>8.75</b>  | <b>to (not incl)</b> | <b>9.1</b>  | <b>8.75</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>9.10</b>  | <b>"</b>             | <b>9.2</b>  | <b>8.65</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>9.20</b>  | <b>"</b>             | <b>9.3</b>  | <b>8.55</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>9.30</b>  | <b>"</b>             | <b>9.4</b>  | <b>8.45</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>9.40</b>  | <b>"</b>             | <b>9.5</b>  | <b>8.35</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>9.50</b>  | <b>"</b>             | <b>9.6</b>  | <b>8.25</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>9.60</b>  | <b>"</b>             | <b>9.7</b>  | <b>8.15</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>9.70</b>  | <b>"</b>             | <b>9.8</b>  | <b>8.05</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>9.80</b>  | <b>"</b>             | <b>9.9</b>  | <b>7.95</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>9.90</b>  | <b>"</b>             | <b>10.0</b> | <b>7.85</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>10.00</b> | <b>"</b>             | <b>10.1</b> | <b>7.75</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>10.10</b> | <b>"</b>             | <b>10.2</b> | <b>7.65</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>10.20</b> | <b>"</b>             | <b>10.3</b> | <b>7.55</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>10.30</b> | <b>"</b>             | <b>10.4</b> | <b>7.45</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>10.40</b> | <b>"</b>             | <b>10.5</b> | <b>7.35</b>                     | <b>to</b> | <b>1</b> |
|                          | <b>10.50</b> | <b>and above</b>     |             | <b>7.25</b>                     | <b>to</b> | <b>1</b> |

<sup>a</sup>Murcotts fresh: maximum 1.00 acid any ratio, 1.01 acid and up minimum 12.00 to 1 ratio.  
Murcotts processed: minimum 10 to 1 ratio.

<sup>b</sup>Minimum solids November 15 through July 31.

**NOTE 1:** Until December 1 of each year, all tangerines for processing must meet fresh fruit requirements unless otherwise noted. From December 1 through July 31, no juice content, minimum acid or color break requirements for processed fruit. Apply minimum solids and ratio requirements as indicated in tables.

**NOTE 2:** For color break requirements and individual fruit testing, see *Citrus Fruit Laws*.

SOURCE: FDACS

# Florida Tangerine Standards<sup>a</sup>

## (August 1 through November 14)

| Minimum Total Solids (%) |      |               |      | Solids to Acid<br>Minimum Ratio |    |   |
|--------------------------|------|---------------|------|---------------------------------|----|---|
| <sup>b</sup>             | 9.0  | to (not incl) | 9.1  | 9.0                             | to | 1 |
|                          | 9.1  | "             | 9.2  | 8.9                             | to | 1 |
|                          | 9.2  | "             | 9.3  | 8.8                             | to | 1 |
|                          | 9.3  | "             | 9.4  | 8.7                             | to | 1 |
|                          | 9.4  | "             | 9.5  | 8.6                             | to | 1 |
|                          | 9.5  | "             | 9.6  | 8.5                             | to | 1 |
|                          | 9.6  | "             | 9.7  | 8.4                             | to | 1 |
|                          | 9.7  | "             | 9.8  | 8.3                             | to | 1 |
|                          | 9.8  | "             | 9.9  | 8.2                             | to | 1 |
|                          | 9.9  | "             | 10.0 | 8.1                             | to | 1 |
|                          | 10.0 | "             | 10.1 | 8.0                             | to | 1 |
|                          | 10.1 | "             | 10.2 | 7.9                             | to | 1 |
|                          | 10.2 | "             | 10.3 | 7.8                             | to | 1 |
|                          | 10.3 | "             | 10.4 | 7.7                             | to | 1 |
|                          | 10.4 | "             | 10.5 | 7.6                             | to | 1 |
|                          | 10.5 | and above     |      | 7.5                             | to | 1 |

<sup>a</sup>Murcotts fresh: maximum 1.00 acid any ratio, 1.01 acid and up minimum 12.00 to 1 ratio.

Murcotts processed: minimum 10 to 1 ratio.

<sup>b</sup>Minimum solids August 1 through November 14.

**NOTE 1:** Until December 1 of each year, all tangerines for processing must meet fresh fruit requirements unless otherwise noted. From December 1 through July 31, no juice content, minimum acid or color break requirements for processed fruit. Apply minimum solids and ratio requirements as indicated in tables..

**NOTE 2:** For color break requirements and individual fruit testing, see *Citrus Fruit Laws*.

SOURCE: FDACS

## Florida Tangelo Standards<sup>a</sup>

| Minimum Total Solids (%) |      |                   | Solids to Acid Minimum Ratio |    |   | Minimum Total Solids (%)    |                    |      | Solids to Acid Minimum Ratio |   |  |
|--------------------------|------|-------------------|------------------------------|----|---|-----------------------------|--------------------|------|------------------------------|---|--|
| <sup>b</sup>             | 8.0  | to (not incl) 8.1 | 10.50                        | to | 1 | 10.1                        | to (not incl) 10.2 | 9.45 | to                           | 1 |  |
|                          | 8.1  | " 8.2             | 10.45                        | to | 1 | 10.2                        | " 10.3             | 9.40 | to                           | 1 |  |
|                          | 8.2  | " 8.3             | 10.40                        | to | 1 | 10.3                        | " 10.4             | 9.35 | to                           | 1 |  |
|                          | 8.3  | " 8.4             | 10.35                        | to | 1 | 10.4                        | " 10.5             | 9.30 | to                           | 1 |  |
|                          | 8.4  | " 8.5             | 10.30                        | to | 1 | 10.5                        | " 10.6             | 9.25 | to                           | 1 |  |
| <sup>c</sup>             | 8.5  | " 8.6             | 10.25                        | to | 1 | 10.6                        | " 10.7             | 9.20 | to                           | 1 |  |
|                          | 8.6  | " 8.7             | 10.20                        | to | 1 | 10.7                        | " 10.8             | 9.15 | to                           | 1 |  |
|                          | 8.7  | " 8.8             | 10.15                        | to | 1 | 10.8                        | " 10.9             | 9.10 | to                           | 1 |  |
|                          | 8.8  | " 8.9             | 10.10                        | to | 1 | 10.9                        | " 11.0             | 9.05 | to                           | 1 |  |
|                          | 8.9  | " 9.0             | 10.05                        | to | 1 | 11.0                        | " 11.1             | 9.00 | to                           | 1 |  |
| <sup>d</sup>             | 9.0  | " 9.1             | 10.00                        | to | 1 | 11.1                        | " 11.2             | 8.95 | to                           | 1 |  |
|                          | 9.1  | " 9.2             | 9.95                         | to | 1 | 11.2                        | " 11.3             | 8.90 | to                           | 1 |  |
|                          | 9.2  | " 9.3             | 9.90                         | to | 1 | 11.3                        | " 11.4             | 8.85 | to                           | 1 |  |
|                          | 9.3  | " 9.4             | 9.85                         | to | 1 | 11.4                        | " 11.5             | 8.80 | to                           | 1 |  |
|                          | 9.4  | " 9.5             | 9.80                         | to | 1 | 11.5                        | " 11.6             | 8.75 | to                           | 1 |  |
| <sup>e</sup>             | 9.5  | " 9.6             | 9.75                         | to | 1 | 11.6                        | " 11.7             | 8.70 | to                           | 1 |  |
|                          | 9.6  | " 9.7             | 9.70                         | to | 1 | 11.7                        | " 11.8             | 8.65 | to                           | 1 |  |
|                          | 9.7  | " 9.8             | 9.65                         | to | 1 | 11.8                        | " 11.9             | 8.60 | to                           | 1 |  |
|                          | 9.8  | " 9.9             | 9.60                         | to | 1 | <sup>f</sup> 11.9 and above |                    | 8.55 | to                           | 1 |  |
|                          | 9.9  | " 10.0            | 9.55                         | to | 1 | <sup>g</sup> See Below      |                    | 8.00 | to                           | 1 |  |
|                          | 10.0 | " 10.1            | 9.50                         | to | 1 |                             |                    |      |                              |   |  |

<sup>a</sup>Minimum acid 0.40 Tangelo.

<sup>b</sup>Minimum solids for processing November 16 through November 30.

<sup>c</sup>Minimum solids for processing November 1 thru November 15. Minimum solids for fresh November 16 through November 30.

<sup>d</sup>Minimum solids for processing August 1 through October 31. Minimum solids for fresh November 1 through November 15.

<sup>e</sup>Minimum solids for fresh August 1 through October 31.

<sup>f</sup>Flat 8.55 to 1 ratio for fresh December 1 through January 31, with NO minimum solids.

<sup>g</sup>Flat 8 to 1 ratio for fresh Feb. 1 through July 31, with NO minimum solids. Flat 8 to 1 ratio for processing Dec. 1 through July 31, with NO minimum solids.

**NOTE 1:** Until December 1 of each year, all tangelos for processing must meet fresh fruit requirements unless otherwise noted. From December 1 through July 31, no juice content, minimum acid or color break requirements for processed fruit. Apply minimum solids and ratio requirements as indicated in table.

**NOTE 2:** For color break requirements and individual fruit testing, see *Citrus Fruit Laws*.

SOURCE: FDACS

# **Glossary of Acronyms**

---

|               |  |
|---------------|--|
| <b>CAC:</b>   | <b>Citrus Administrative Committee</b>                             |
| <b>CACEX:</b> | <b>Carteira de Comercio Exterior</b>                               |
| <b>CGJ:</b>   | <b>Chilled Grapefruit Juice</b>                                    |
| <b>COJ:</b>   | <b>Chilled Orange Juice</b>  |
| <b>CPI:</b>   | <b>Consumer Price Index</b>  |
| <b>CSSGJ:</b> | <b>Canned Single-Strength Grapefruit Juice</b>                     |
| <b>CSSOJ:</b> | <b>Canned Single-Strength Orange Juice</b>                         |
| <b>DECEX:</b> | <b>Departamento de Comercio Exterior</b>                           |
| <b>EMRD:</b>  | <b>Economic and Market Research Department</b>                     |
| <b>FAO:</b>   | <b>Food and Agriculture Organization of the United Nations</b>     |
| <b>FAS:</b>   | <b>Foreign Agricultural Service</b>                                |
| <b>FASS:</b>  | <b>Florida Agricultural Statistics Service</b>                     |
| <b>FCBJ:</b>  | <b>Frozen Concentrated Blended Juice</b>                           |
| <b>FCGJ:</b>  | <b>Frozen Concentrated Grapefruit Juice</b>                        |
| <b>FCM:</b>   | <b>Florida Citrus Mutual</b>                                       |
| <b>FCOJ:</b>  | <b>Frozen Concentrated Orange Juice</b>                            |
| <b>FCPA:</b>  | <b>Florida Citrus Proc. Assoc. (Replaced by Processor Reports)</b> |
| <b>FCTJ:</b>  | <b>Frozen Concentrated Tangerine Juice</b>                         |
| <b>FDACS:</b> | <b>Florida Department of Agriculture and Consumer Services</b>     |
| <b>FDOC:</b>  | <b>Florida Department of Citrus</b>                                |
| <b>FOB:</b>   | <b>Free on Board</b>   |
| <b>FRED:</b>  | <b>Food and Resource Economics Department</b>                      |
| <b>GJ:</b>    | <b>Grapefruit Juice</b>  |
| <b>ICE:</b>   | <b>Intercontinental Exchange</b>                                   |
| <b>IFAS:</b>  | <b>Institute of Food and Agricultural Sciences</b>                 |
| <b>MT:</b>    | <b>Metric Ton</b>  |
| <b>NA:</b>    | <b>Not Available</b>   |
| <b>NASS:</b>  | <b>National Agricultural Statistics Service</b>                    |
| <b>NFC:</b>   | <b>Not From Concentrate</b>  |
| <b>NSPF:</b>  | <b>Not Specifically Provided For</b>                               |
| <b>OJ:</b>    | <b>Orange Juice</b>  |
| <b>PS:</b>    | <b>Pounds Solids</b>   |
| <b>RTS:</b>   | <b>Ready to Serve</b>  |
| <b>SSE:</b>   | <b>Single Strength Equivalent</b>                                  |
| <b>UF:</b>    | <b>University of Florida</b>                                       |
| <b>USDA:</b>  | <b>United States Department of Agriculture</b>                     |

# NOTES

---