

# Citrus Reference Book



**Florida Department of Citrus**  
Economic and Market Research Department  
**2017**

Initial release May 2017

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**2017**

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# Florida Department of Citrus

## Economic and Market Research Department

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## Bearing Acreage: Oranges

Season	Florida	Texas	Calif.	Arizona	U.S. <sup>a</sup>	Florida 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						

<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					

<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				

<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				

<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				

<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				

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

SOURCE: NASS

## Production: Oranges

Season	Florida	Texas	Calif.	Arizona	U.S. <sup>a</sup>	Florida 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>
<b>2016-17<sup>c</sup></b>	<b>67.0</b>	<b>1.7</b>	<b>46.0</b>	<b>--</b>	<b>114.7</b>	<b>0.22</b>

<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 <sup>d</sup>	8.9	5.0	3.9	--	17.7

<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 forecast. 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 <sup>b</sup>	1,490	23,000	N/A	280	a	a	20,000	1,550

<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	133.6	-20.4	59.5	54.5	-5.0	1.4	1.8	+0.4	NF	--	--	214.9
2013-14	125.0	104.6	-20.4	56.5	49.5	-7.0	1.8	1.8	+0.0	NF	--	--	183.3
2014-15	108.0	96.8	-11.2	50.5	48.2	-2.3	2.0	1.5	-0.5	NF	--	--	160.5
2014-15	80.0	81.6	+1.6	52.5	54.2	+1.7	1.7	1.7	+0.0	NF	--	--	134.2
2015-16 <sup>d</sup>	70.0			50.5			1.35			NF	--	--	121.9

<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 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			4.0			4.7			NF	--	--	18.3

<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> -----

### 2016-17

OCT	70.0	1.4	50.5	9.6	4.7	4.0
NOV	72.0	1.4	50.5	9.6	4.7	4.0
DEC	72.0	1.4	50.5	9.3	4.7	4.0
JAN	71.0	1.8	53.0	9.0	5.3	4.1
FEB	70.0	1.8	53.0	9.0	5.3	4.1
MAR	67.0	1.8	51.8	8.9	5.3	4.1
APR	67.0	1.4	51.0	8.1	4.7	3.8
MAY	68.0	1.4	51.0	7.8	4.7	3.8
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		

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	21.25
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	3.75	2.9	13.5	14.7	.2	.2	23.29	20.6
2014-15	.9	.7	2.8	2.3	16.0	18.7	.22	.2	21.0	22.6
2015-16	.45	.4	1.75	1.4	19.0	21.7	-	-	21.1	22.25
2015-16	.32		1.7		23.0		-	-	22.8	

<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

## Utilization of Florida Oranges

Season	Fresh	Frozen Concen- trate	Chilled Juice	Non- 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	81.5

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

SOURCE: FDOC-EMRD

## Utilization of Florida Grapefruit

Season	Fresh	Frozen Concen- trate	Chilled Juice	Non- 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 <sup>c</sup>	4.5	2.8	3.0	.4	.0	10.8

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

SOURCE: FDOC-EMRD

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

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

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

Aug-July Season	Grapefruit	Oranges	Temples	Tangelos	Honey 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							

<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 Season	Domestic	Canada	Europe	Japan	Other 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	9,933	1,619	6,228	10,150	325	14	28,270
2003-04	8,995	1,780	6,912	12,123	529	11	30,350
2004-05	4,888	768	2,786	4,833	119	16	13,409
2005-06	4,787	773	2,115	4,559	232	7	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	6,109	1,151	3,455	6,277	426	4	17,421
2010-11	5,396	1,098	3,121	5,409	426	7	15,455
2011-12	5,529	992	2,799	4,807	360	5	14,491
2012-13	5,987	1,087	2,917	3,894	384	3	14,271
2013-14	5,126	987	2,609	2,898	482	5	12,108
2014-15	4,422	805	2,328	2,430	562	2	10,549
2015-16	3,791	655	1,926	2,125	574	0	9,071
2016-17							

SOURCE: FDOC-EMRD

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

Aug-July Season	Domestic	Canada	Europe	Japan	Other 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	0	119	23	9,349
2006-07	9,259	564	0	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	0	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	5,385	504	0	0	127	0	6,017
2016-17							

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

SOURCE: FDOC-EMRD

## World Orange Production

Country	Average					2010	2011	2012	2013	2014
	1961-1969	1970-1979	1980-1989	1990-1999	2000-2009					
-----1,000 metric tons-----										
United States	5,235	8,491	7,808	9,513	9,715	7,478	8,078	8,148	7,574	6,140
% of U.S. to World	26.8%	27.4%	18.5%	16.6%	15.1%	10.8%	11.6%	11.8%	10.6%	8.7%
Florida <sup>a</sup>	4,097	6,841	5,821	7,551	7,754	5,458	5,736	5,989	5,454	4,270
% of Florida to World	20.9%	22.1%	13.8%	13.1%	12.1%	7.9%	8.2%	8.7%	7.6%	6.0%
Brazil	2,281	5,785	13,335	20,009	18,280	18,503	19,811	18,013	17,550	16,928
China, mainland	58	82	479	1,569	2,530	5,418	5,835	7,096	7,305	7,824
India	864	1,214	1,386	2,001	3,438	5,966	4,571	4,360	6,426	7,318
Mexico	1,262	1,672	1,954	3,159	4,070	4,052	4,080	3,667	4,410	4,533
Spain	1,748	1,878	1,976	2,622	2,889	3,115	2,819	2,956	3,394	3,494
Egypt	398	775	1,183	1,558	1,936	2,401	2,578	2,786	2,886	3,136
Italy	1,079	1,552	1,860	1,785	2,089	2,394	2,470	1,771	1,708	1,669
Turkey	306	541	694	869	1,364	1,711	1,730	1,661	1,781	1,780
South Africa	450	543	581	867	1,326	1,415	1,495	1,613	1,672	1,789
Indonesia	96	166	454	508	1,782	2,029	1,819	1,612	1,411	1,927
Pakistan	307	437	946	1,294	1,396	1,505	1,388	1,503	1,505	120
Iran (Islamic Republic of)	92	266	730	1,604	2,139	1,503	1,412	1,285	1,192	1,543
Morocco	548	679	763	907	762	849	850	962	759	1,001
Argentina	582	781	645	749	845	833	877	934	900	899
Algeria	291	338	196	245	433	582	815	803	891	955
Greece	362	493	729	930	920	901	895	792	806	859
Ghana	39	88	96	174	431	580	600	625	663	690
Syrian Arab Republic	3	17	75	281	515	669	734	542	792	693
All Others	3,567	5,199	6,331	6,819	7,421	7,142	6,903	7,690	7,820	7,559
WORLD TOTAL	19,568	30,996	42,221	57,463	64,282	69,045	69,759	68,817	71,445	70,856

<sup>a</sup>Temples included.

SOURCE: FAO-FAOSTAT-Agricultural Data

## World Grapefruit Production

Country	Average					2010	2011	2012	2013	2014
	1961-1969	1970-1979	1980-1989	1990-1999	2000-2009					
----- 1,000 metric tons -----										
United States	1,631	2,433	2,370	2,316	1,688	1,123	1,147	1,047	1,092	950
% of U.S. to World	68.5%	64.1%	55.6%	47.7%	29.8%	15.8%	14.7%	13.0%	13.1%	11.3%
Florida	1,310	1,802	1,861	1,889	1,285	783	761	727	707	603
% of Florida to World	55.0%	47.5%	43.7%	38.9%	22.7%	11.0%	9.7%	9.0%	8.5%	7.2%
China, mainland	8	7	34	135	952	2,784	3,528	3,800	3,520	3,702
Mexico	13	55	105	157	353	401	397	415	425	425
Viet Nam	b	b	b	b	b	b	b	b	440	467
India	b	b	b	b	b	b	b	b	285	249
Thailand	9	14	14	80	264	295	305	328	247	242
South Africa	67	101	90	137	346	343	416	305	443	418
Israel	165	410	422	384	260	204	184	247	211	227
Turkey	4	13	25	65	151	214	219	243	229	230
Argentina	70	159	161	200	220	189	189	200	164	198
India	22	26	40	94	159	261	196	200	285	249
Sudan	40	49	56	61	134	183	184	196	198	198
Tunisia	2	10	30	51	75	87	93	96	96	99
Cuba	12	31	210	295	207	138	112	85	64	41
Brazil	25	33	46	62	68	71	75	78	78	78
China, Taiwan Province of	10	15	19	82	93	101	83	78	76	80
Bangladesh	3	3	6	11	37	58	59	61	69	68
Spain	5	6	15	25	34	47	48	56	59	69
Belize	8	12	22	40	53	52	56	56	25	21
Paraguay	-	-	-	-	43	42	42	43	44	41
Iran (Islamic Republic of)	2	7	21	52	44	52	39	40	87	80
All Others	286	413	579	605	494	452	447	466	221	267
WORLD TOTAL	2,381	3,796	4,263	4,854	5,673	7,096	7,820	8,040	8,358	8,397

SOURCE: FAO-FAOSTAT-Agricultural Data

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

## World Tangerine Production

Country	Average					2010	2011	2012	2013	2014
	1961-1969	1970-1979	1980-1989	1990-1999	2000-2009					
----- 1,000 metric tons -----										
United States	302	572	539	474	421	541	596	588	584	664
% of U.S. to World	7.7%	7.6%	5.3%	3.0%	1.9%	2.3%	2.3%	2.2%	2.1%	2.2%
Florida	173	202	141	162	237	192	200	185	141	125
% of Florida to World	4.4%	2.7%	1.4%	1.0%	1.1%	0.8%	0.8%	0.7%	0.5%	0.4%
China, mainland	161	226	1,336	5,259	9,507	10,978	12,482	13,600	14,739	16,240
Spain	181	623	1,083	1,684	2,083	2,197	2,117	1,874	1,872	2,390
Brazil	282	420	620	731	1,164	1,122	1,005	960	960	965
Turkey	45	110	246	421	680	859	872	889	875	1,047
Egypt	66	88	115	355	669	797	848	885	885	957
Morocco	75	174	293	335	405	473	753	877	877	1,185
Japan	1,450	3,232	2,463	1,438	1,071	786	928	846	846	875
Iran (Islamic Republic of)	21	62	176	611	694	726	800	825	825	519
Republic of Korea	2	55	355	585	649	615	681	692	692	722
United States of America	302	572	539	474	421	541	596	588	584	664
Pakistan	108	156	350	481	519	559	515	525	558	9
Mexico	86	101	129	223	390	409	406	450	450	492
Argentina	165	238	423	556	501	424	401	415	374	386
Thailand	261	318	464	675	661	280	360	375	185	138
Peru	8	18	27	78	163	221	236	281	281	340
Algeria	-	-	-	93	136	152	218	208	208	228
China, Taiwan Province of	91	227	239	222	156	155	197	188	189	197
Israel	42	71	120	125	114	152	131	185	185	144
All Others	253	293	608	1,085	1,637	1,881	1,905	1,810	1,813	1,703
WORLD TOTAL	3,899	7,554	10,123	15,904	22,041	23,867	26,048	27,061	27,983	29,864

SOURCE: FAO-FAOSTAT-Agricultural Data

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

Production Season <sup>a</sup>	Bearing Trees	Oranges 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	300.7	262	87	921	1,283
2016-17 <sup>c</sup>	175.5	249	215	86	771	1,074
2017-18 <sup>d</sup>	175.5	340	295	87	1,144	1,593

<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. \$ per MT <sup>a</sup>	Season	Exports	U.S. \$ per MT <sup>a</sup>
	MT 65° Brix	dollars	July-June	MT 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			
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 Season	Florida			Texas <sup>a</sup>	Calif/ <sup>a</sup> Arizona	U.S. Imports		U.S. Exports	Total Domestic Availability
	FCOJ 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	392.4	94.3	792.4

<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 Season	Total Domestic Availability	Net Carry Over <sup>a</sup>	Total Presumed Consumption	Sales		Population	Per Capita 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	792	-87	880	464	415	324	2.7

<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 Season	Florida			Texas <sup>a</sup>	Calif/ <sup>a</sup> Arizona	U.S. Imports	Total Supply	U.S. Exports	Total Domestic 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	16.4	31.3	10.4	2.07	.7	44.5	17.9	26.7

<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 Season	Total Domestic Availability	Net Florida Carry Over	Total Presumed Consumption	Sales		Population	Per Capita 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	27	-2	29	14	14	324	.09

<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 (1982-84 = 100)		Population	Disposable Personal 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**

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

<b>Impact Type</b>	<b>Value Added</b>	<b>Labor Income</b>	<b>Output/Sales</b>	<b>Employment</b>
----- million \$ -----				Job-Years
<b>Direct Effects</b>	<b>981</b>	<b>634</b>	<b>1,809</b>	<b>9,732</b>
<b>Indirect and Induced Effects</b>	<b>1,787</b>	<b>1,126</b>	<b>2,835</b>	<b>24,393</b>
<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/ Market/ Variety	WITH Canker/Greening NO Resetting-Tree Replacement					WITH Canker/Greening WITH Resetting-Tree Replacement					WITH Canker/Greening NO Resetting-Tree Replacement WITH Foliar Nutrient		WITH Canker/Greening WITH Resetting- Tree Replacement 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
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### 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
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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 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

SOURCE: U.S. Department of Commerce



## U.S. Citrus Juice Exports

Oct-Sept 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

<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

<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

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

SOURCE: U.S. Department of Commerce

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

Oct-Sept Season	Florida <sup>b</sup>		Brazil		Mexico		Other		Imported 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

<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 gal.	¢/liter	¢/PS	¢/SSE 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

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## NOTES

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## 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 per case	Container Size	Equivalent Cases of 24/2's	Cans per case	Container Size	Equivalent Cases of 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 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 Seasons
<b>Fresh:</b>  AUG 1 - JUL 31
<b>Frozen Concentrate:</b>  OCT 1 - SEP 30*
<b>Chilled &amp; Canned:</b>  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

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## New York FCOJ Monthly Average Nearby Futures Settlement Price

Month	2010	2011	2012	2013	2014	2015	2016	2017
----- cents per pound solids -----								
JAN	137.47	175.51	197.66	113.23	142.38	143.30	130.33	177.29
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	
JUN	141.05	187.99	116.13	143.78	158.62	119.08	165.50	
JUL	143.48	198.06	118.26	140.65	148.03	121.01	183.53	
AUG	138.88	174.65	121.99	136.35	145.22	129.36	181.34	
SEP	150.29	163.65	119.86	131.93	145.70	119.46	198.53	
OCT	150.68	170.00	112.54	123.12	138.41	124.90	201.27	
NOV	156.51	180.26	115.81	134.78	135.71	145.28	217.25	
DEC	163.16	170.23	130.44	139.92	145.43	145.32	203.60	

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

## Florida FCOJ Movement by Product Type

Oct-Sep 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				

<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 Season	Beginning Inventory	Pack		Movement <sup>a</sup>	Ending 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				

<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 Season	Beginning Inventory <sup>b</sup>	Pack		Movement	Ending Inventory <sup>ab</sup>
		From Fruit	From 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				

<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 Season	Beginning Inventory	Pack <sup>a</sup>	Movement		Ending Inventory <sup>b</sup>
			Retail and 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				

<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 Season <sup>b</sup>	Beginning Inventory	Pack		Movement	Ending Inventory <sup>a</sup>
		From Fruit	From 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	11.01	16.19	--	17.86	11.16
2016-17	11.16				

<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 <sup>a</sup>	17.75	6.95	13.00	8.80	15.67	7.99

<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 <sup>a</sup>	17.85	5.60	14.85	5.66	15.21	5.64

<sup>a</sup>Preliminary.

SOURCE: NASS



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

Season	Oranges	Temples	Grape-fruit	Tang-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 <sup>a</sup>	682,268	c	108,229	27,395	7,361	b	b	b	825,253

<sup>a</sup>Preliminary.

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

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

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

<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

<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

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## NOTES

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

Dec-Nov Season	FCOJ			R-T-S OJ (except canned)			Canned OJ			Total OJ		
	Volume	Value	Price	Volume	Value	Price	Volume	Value	Price	Volume	Value	Price
	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE 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 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 gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE 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 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 gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million 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												

<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 Season	Frozen			Refrigerated - NFC			Refrigerated - Recon			Total OJ		
	Volume	Value	Price	Volume	Value	Price	Volume	Value	Price	Volume	Value	Price
	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE 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												

<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 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 gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE 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	19.2	94.2	4.91	281.2	2,134.6	7.59	163.5	805.5	4.93	464.2	3,037.6	6.54
2016-17												

<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 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 gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE 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	0.2	0.8	4.36	9.4	73.5	7.83	1.0	6.3	6.48	14.4	105.2	7.32
2016-17												

<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

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

Dec-Nov Season	FCGJ			R-T-S GJ (except canned)			Canned GJ			Total GJ		
	Volume	Value	Price	Volume	Value	Price	Volume	Value	Price	Volume	Value	Price
	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE 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 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 gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE 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 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 gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE 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	11.6	86.1	7.43
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												

<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 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 gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million 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												

<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 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 SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million SSE gals.	mil. \$	\$/gal.	million 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												

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



# Nielsen Total OJ Market Ranking

Over \$2MM Grocers - 2015-16 Season

Rank	Market	Mil Gal	Rank	Market	Mil Gal
	TOTAL U.S.	311.842			
1	NEW YORK	23.754	27	BUFFALO/ROCHESTER	3.628
2	LOS ANGELES	19.259	28	BALTIMORE	3.458
3	BOSTON	12.616	29	GRAND RAPIDS	3.438
4	PHILADELPHIA	12.010	30	SAN DIEGO	3.399
5	MIAMI	9.031	31	SACRAMENTO	3.345
6	WASHINGTON D.C.	8.692	32	INDIANAPOLIS	3.094
7	DETROIT	7.724	33	COLUMBUS	3.061
8	CHICAGO	7.480	34	ST. LOUIS	2.829
9	TAMPA	7.266	35	CHARLOTTE	2.752
10	ATLANTA	6.996	36	NASHVILLE	2.719
11	SAN FRANCISCO	6.728	37	ALBANY	2.539
12	HOUSTON	6.659	38	MILWAUKEE	2.478
13	PHOENIX	6.326	39	LOUISVILLE	2.469
14	DENVER	5.557	40	KANSAS CITY	2.463
15	SEATTLE	5.503	41	SYRACUSE	2.377
16	DALLAS/FT. WORTH	4.949	42	NEW ORLEANS/MOBILE	2.261
17	ORLANDO	4.629	43	JACKSONVILLE	2.234
18	PORTLAND	4.578	44	MEMPHIS	2.081
19	HARTFORD/NEW HAVEN	4.507	45	BIRMINGHAM	1.980
20	MINNEAPOLIS	4.415	46	GREENVILLE	1.929
21	RALEIGH/DURHAM	4.375	47	LAS VEGAS	1.824
22	CLEVELAND	4.032	48	OKLAHOMA CITY/TULSA	1.664
23	CINCINNATI	3.992	49	OMAHA	1.492
24	SALT LAKE CITY/BOISE	3.912	50	DES MOINES	1.234
25	RICHMOND/NORFOLK	3.888	51	WEST TEXAS	1.183
26	PITTSBURGH	3.662	52	LITTLE ROCK	1.097
				REMAINING U.S.	56.276

# Nielsen Total GJ Market Ranking

Over \$2MM Grocers - 2015-16 Season

Rank	Market	Mil Gal	Rank	Market	Mil Gal
	TOTAL US	11.551			
1	NEW YORK	0.995	27	CLEVELAND	0.120
2	MIAMI	0.614	28	CHARLOTTE	0.116
3	LOS ANGELES	0.548	29	BALTIMORE	0.116
4	TAMPA	0.454	30	CINCINNATI	0.106
5	BOSTON	0.448	31	GRAND RAPIDS	0.100
6	ATLANTA	0.363	32	BUFFALO/ROCHESTER	0.099
7	PHILADELPHIA	0.345	33	PITTSBURGH	0.098
8	WASHINGTON D.C.	0.323	34	INDIANAPOLIS	0.097
9	SAN FRANCISCO	0.316	35	COLUMBUS	0.097
10	SEATTLE	0.258	36	GREENVILLE	0.096
11	ORLANDO	0.253	37	ALBANY	0.094
12	DENVER	0.242	38	ST. LOUIS	0.092
13	DETROIT	0.239	39	NASHVILLE	0.089
14	CHICAGO	0.233	40	BIRMINGHAM	0.084
15	PHOENIX	0.233	41	LOUISVILLE	0.080
16	PORTLAND	0.227	42	NEW ORLEANS/MOBILE	0.078
17	HOUSTON	0.196	43	SYRACUSE	0.069
18	MINNEAPOLIS	0.166	44	KANSAS CITY	0.069
19	DALLAS/FT. WORTH	0.162	45	MILWAUKEE	0.067
20	RALEIGH/DURHAM	0.159	46	MEMPHIS	0.064
21	HARTFORD/NEW HAVEN	0.155	47	LAS VEGAS	0.057
22	RICHMOND/NORFOLK	0.145	48	OKLAHOMA CITY/TULSA	0.046
23	SAN DIEGO	0.142	49	LITTLE ROCK	0.041
24	SACRAMENTO	0.139	50	WEST TEXAS	0.037
25	SALT LAKE CITY/BOISE	0.134	51	OMAHA	0.033
26	JACKSONVILLE	0.133	52	DES MOINES	0.020
				REMAINING U.S.	1.868

## OJ Buyer Demographics

### Gallons Per Buying Household

Demographic	10/28/01- 10/26/02	10/27/02- 10/25/03	10/26/03- 10/23/04	11/21/04- 11/19/05	10/30/05- 10/28/06	10/29/06- 10/27/07	01/01/09- 12/31/09	10/30/11- 10/27/12	10/31/15- 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- 10/26/02	10/27/02- 10/25/03	10/26/03- 10/23/04	11/21/04- 11/19/05	10/30/05- 10/28/06	10/29/06- 10/27/07	01/01/09- 12/31/09	10/30/11- 10/27/12	10/31/15- 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- 10/26/02	10/27/02- 10/25/03	10/26/03- 10/23/04	11/21/04- 11/19/05	10/30/05- 10/28/06	10/29/06- 10/27/07	01/01/09- 12/31/09	10/30/11- 10/27/12	10/31/15- 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- 10/26/02	10/27/02- 10/25/03	10/26/03- 10/23/04	11/21/04- 11/19/05	10/30/05- 10/28/06	10/29/06- 10/27/07	01/01/09- 12/31/09	10/30/11- 10/27/12	10/31/15- 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 Water <sup>b</sup>	Soft 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	NA	3.7	.2	1.7	.4	7.2
2011	20.1	29.2	NA	3.6	.2	1.7	.4	6.8
2012	19.7	30.8	NA	3.1	.2	1.9	.3	5.9
2013	19.1	32.0	NA	3.2	.2	1.8	.4	6.1
2014	18.4	34.0	NA	3.1	.2	1.7	.4	5.8
2015								

<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 VALUE	JUICE		FRESH		
		ORANGE	GRAPEFRUIT	ORANGES	GRAPEFRUIT	TANGERINES
SERVING SIZE		1 cup/8-oz.		154g/ 1 med. fruit	154g/ 1 med. fruit	109g/ 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%) 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, 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, 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, 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 Minimum Ratio			Minimum Total Solids (%)			Solids to Acid 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 through Nov. 15</b>	<b>Nov. 16 through March 1</b>	<b>March 2 through July 31</b>	<b>Juice 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 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 Minimum Ratio		
<sup>b</sup>	8.75	to (not incl)	9.1	8.75	to	1
	9.10	"	9.2	8.65	to	1
	9.20	"	9.3	8.55	to	1
	9.30	"	9.4	8.45	to	1
	9.40	"	9.5	8.35	to	1
	9.50	"	9.6	8.25	to	1
	9.60	"	9.7	8.15	to	1
	9.70	"	9.8	8.05	to	1
	9.80	"	9.9	7.95	to	1
	9.90	"	10.0	7.85	to	1
	10.00	"	10.1	7.75	to	1
	10.10	"	10.2	7.65	to	1
	10.20	"	10.3	7.55	to	1
	10.30	"	10.4	7.45	to	1
	10.40	"	10.5	7.35	to	1
	10.50	and above		7.25	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 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 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**

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

# NOTES

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