

SUPPLEMENTAL FILE - APPENDIX A

Table A1. Sales per 100,000 persons, pack sizes and prices of little filtered cigars (LFCs) and cigarettes in the US (2016), by state

State	LFC Sales												Price, M (SD) ^a			Cigarettes				
	Equivalent units*	Dollars	Percentage of equivalent unit sales, by flavor ^b			FDA-cited LFCs		Pack sizes ^c					LFC 20-stick pack	Cigarette 20-stick pack	Pack mean difference	LFC 200-stick pack	Cigarette 200-stick pack	Carton mean difference	Equivalent units	Dollars
			Unflavored	Menthol/mint	Other flavor	Percentage of total sales	Percentage of flavored sales	Single	10 sticks	12 sticks	20 sticks	200 sticks								
Alabama	27,592	\$97,706	45.4%	16.0%	38.6%	1.7%	3.1%	0.3%	0.0%	13.4%	76.7%	9.0%	\$2.55 (\$1.21)	\$4.81 (\$0.68)	-\$2.26	\$17.65 (\$6.42)	\$41.93 (\$10.60)	-\$24.28	8,671,579	\$40,746,544
Arizona	18,800	\$110,763	32.7%	4.5%	62.8%	9.1%	13.5%	3.2%	0.9%	5.1%	88.9%	1.9%	\$4.69 (\$0.56)	\$6.61 (\$0.77)	-\$1.92	\$40.01 (\$6.14)	\$56.88 (\$15.89)	-\$16.87	1,823,971	\$11,948,384
Arkansas	18,656	\$73,336	49.8%	15.7%	34.6%	5.7%	11.3%	0.3%	0.0%	11.4%	81.6%	4.7%	\$2.95 (\$1.82)	\$5.45 (\$0.61)	-\$2.50	\$20.52 (\$4.17)	\$29.39 (\$23.56)	-\$8.87	5,620,717	\$29,275,978
California	4,588	\$35,022	20.2%	2.0%	77.9%	0.5%	0.6%	0.7%	0.1%	65.6%	32.4%	1.0%	\$3.82 (\$1.89)	\$5.77 (\$0.64)	-\$1.95	\$21.71 (\$9.94)	\$46.79 (\$17.34)	-\$25.08	1,349,854	\$7,643,520
Colorado	14,402	\$80,237	23.7%	3.0%	73.3%	4.5%	5.9%	5.0%	3.0%	3.3%	82.7%	5.4%	\$4.49 (\$1.38)	\$5.47 (\$0.71)	-\$0.98	\$40.91 (\$14.65)	\$48.51 (\$9.24)	-\$7.60	2,341,935	\$12,516,861
Connecticut	27,588	\$71,994	57.2%	29.1%	13.7%	3.1%	7.2%	0.0%	1.4%	1.7%	96.0%	0.9%	\$2.46 (\$0.80)	\$9.07 (\$0.75)	-\$6.61	\$22.42 (\$1.81)	\$69.15 (\$35.68)	-\$46.73	1,499,667	\$13,439,794
DC	330	\$1,527	54.6%	39.3%	6.1%	0.0%	0.0%	0.0%	0.0%	2.9%	84.2%	11.6%	\$4.29 (\$1.67)	\$8.43 (\$0.57)	-\$4.14	\$37.90 (\$0.00)	\$46.46 (\$34.34)	-\$8.56	449,650	\$3,759,016
Delaware	11,135	\$25,633	58.1%	27.0%	14.9%	6.1%	14.6%	0.05%	0.0%	0.4%	97.6%	1.1%	\$2.21 (\$1.40)	\$5.72 (\$0.61)	-\$3.51	\$14.10 (\$8.69)	\$54.75 (\$9.27)	-\$40.65	3,626,413	\$20,588,606
Florida	85,611	\$153,784	62.6%	26.3%	11.1%	1.3%	3.5%	0.05%	0.0%	4.4%	78.3%	16.7%	\$1.54 (\$1.09)	\$5.40 (\$0.92)	-\$3.86	\$12.29 (\$3.73)	\$30.45 (\$23.73)	-\$18.16	3,899,759	\$18,710,586
Georgia	29,188	\$77,147	45.2%	26.6%	28.3%	1.5%	2.8%	0.1%	0.0%	9.1%	75.7%	13.9%	\$2.01 (\$0.97)	\$4.65 (\$0.68)	-\$2.64	\$16.37 (\$7.60)	\$41.89 (\$8.35)	-\$25.52	6,126,117	\$27,776,734
Idaho	11,306	\$73,361	20.3%	1.2%	78.5%	6.4%	8.0%	10.1%	1.7%	5.9%	81.8%	0.0%	\$4.68 (\$1.18)	\$5.06 (\$0.60)	-\$0.38	\$46.05 (\$22.32)	\$47.30 (\$10.46)	-\$1.25	3,180,688	\$15,920,585
Illinois	6,451	\$28,589	52.5%	15.2%	32.3%	8.6%	18.2%	0.4%	0.01%	1.1%	89.3%	9.0%	\$4.72 (\$2.19)	\$6.85 (\$0.93)	-\$2.13	\$27.72 (\$16.09)	\$59.05 (\$12.09)	-\$31.33	2,931,006	\$19,624,636

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	Equivalent units*	Dollars	Percentage of equivalent unit sales, by flavor ^b			FDA-cited LFCs		Pack sizes ^c					LFC 20-stick pack	Cigarette 20-stick pack	Pack mean difference	LFC 200-stick pack	Cigarette 200-stick pack	Carton mean difference	Equivalent units	Dollars
			Unflavored	Menthol/mint	Other flavor	Percentage of total sales	Percentage of flavored sales	Single	10 sticks	12 sticks	20 sticks	200 sticks								
Indiana	41,607	\$82,727	45.3%	20.4%	34.2%	6.7%	12.3%	0.1%	0.2%	6.7%	77.7%	11.1%	\$1.83 (\$0.84)	\$5.38 (\$0.70)	-\$3.55	\$15.77 (\$2.26)	\$51.64 (\$11.59)	-\$35.87	4,541,128	\$24,316,824
Iowa	20,301	\$75,407	45.2%	12.9%	41.8%	7.7%	14.1%	0.1%	0.0%	3.5%	73.4%	11.1%	\$3.49 (\$2.03)	\$5.86 (\$0.55)	-\$2.37	\$22.64 (\$9.80)	\$52.85 (\$12.87)	-\$30.21	3,014,876	\$17,392,992
Kansas	40,726	\$89,353	54.2%	13.4%	32.3%	9.4%	20.5%	0.04%	0.0%	2.2%	93.7%	3.2%	\$2.04 (\$1.02)	\$5.69 (\$0.63)	-\$3.65	\$23.22 (\$9.01)	\$45.91 (\$17.45)	-\$22.69	3,452,268	\$19,120,480
Kentucky	27,887	\$61,588	56.2%	18.2%	25.7%	2.7%	6.2%	0.4%	0.1%	0.0%	76.2%	20.3%	\$1.81 (\$1.00)	\$4.47 (\$0.66)	-\$2.66	\$17.58 (\$11.58)	\$42.97 (\$7.95)	-\$25.39	7,643,746	\$33,840,900
Louisiana	40,950	\$70,899	35.3%	25.2%	39.5%	0.9%	1.5%	0.2%	0.0%	4.0%	92.7%	2.9%	\$1.37 (\$0.66)	\$5.49 (\$0.67)	-\$4.12	\$14.15 (\$3.39)	\$47.86 (\$13.44)	-\$33.71	4,184,507	\$22,620,918
Maine	84,090	\$264,946	79.4%	10.9%	9.8%	0.0%	0.0%	0.0%	0.04%	4.0%	95.7%	0.2%	\$2.91 (\$1.62)	\$6.72 (\$0.69)	-\$3.81	\$19.36 (\$0.76)	\$58.00 (\$13.80)	-\$38.64	6,991,850	\$46,549,208
Maryland	16,582	\$58,128	39.8%	43.8%	16.3%	0.9%	1.5%	0.1%	0.0%	3.5%	93.1%	3.1%	\$3.20 (\$1.62)	\$6.44 (\$0.64)	-\$3.24	\$21.64 (\$12.90)	\$56.94 (\$15.66)	-\$35.30	2,306,250	\$14,716,888
Massachusetts	32,079	\$104,518	55.4%	28.1%	16.5%	4.9%	11.1%	0.0%	4.4%	3.8%	81.7%	4.0%	\$2.95 (\$1.46)	\$8.97 (\$1.05)	-\$6.02	\$22.91 (\$4.90)	\$71.58 (\$26.01)	-\$48.67	2,002,020	\$17,813,746
Michigan	62,344	\$136,368	50.9%	17.6%	31.6%	10.7%	21.8%	0.03%	0.0%	1.3%	86.1%	12.4%	\$2.12 (\$0.98)	\$6.26 (\$0.61)	-\$4.14	\$17.11 (\$3.39)	\$56.77 (\$12.51)	-\$39.66	3,810,723	\$23,652,066
Minnesota	7,253	\$60,549	68.2%	1.7%	30.1%	11.7%	36.8%	0.01%	0.6%	0.6%	92.8%	4.7%	\$8.36 (\$0.70)	\$8.26 (\$0.60)	\$0.10	\$72.59 (\$2.36)	\$79.81 (\$13.86)	\$7.22	2,294,656	\$18,913,996
Mississippi	22,700	\$64,145	40.8%	19.9%	39.3%	0.4%	0.7%	0.2%	0.0%	14.7%	66.9%	16.4%	\$1.81 (\$1.04)	\$4.94 (\$0.57)	-\$3.13	\$13.94 (\$3.54)	\$45.82 (\$10.21)	-\$31.88	5,633,334	\$27,471,344
Missouri	16,828	\$55,096	39.4%	14.1%	46.5%	4.0%	6.5%	0.3%	0.05%	16.3%	76.7%	3.3%	\$2.43 (\$1.42)	\$4.38 (\$0.78)	-\$1.95	\$19.64 (\$12.84)	\$40.79 (\$8.80)	-\$21.15	4,869,457	\$20,862,278
Montana	3,920	\$22,928	67.7%	1.8%	30.5%	3.7%	11.5%	0.02%	0.0%	0.0%	99.9%	0.0%	\$5.84 (\$0.93)	\$6.36 (\$0.73)	-\$0.52	\$60.96 \$0.00	\$61.12 (\$10.41)	-\$0.16	1,637,290	\$10,361,483
Nebraska	21,729	\$94,338	42.9%	4.1%	53.0%	3.2%	5.6%	0.1%	0.0%	4.4%	86.4%	6.3%	\$2.77 (\$1.57)	\$5.58 (\$0.63)	-\$2.81	\$20.74 (\$12.36)	\$50.53 (\$8.29)	-\$29.79	5,467,095	\$29,982,094
Nevada	21,227	\$100,932	35.1%	18.3%	46.5%	3.6%	5.5%	6.2%	0.0%	2.6%	90.3%	0.7%	\$1.90 (\$1.46)	\$6.73 (\$0.93)	-\$4.83	\$20.87 (\$10.22)	\$48.64 (\$20.15)	-\$27.77	4,243,460	\$27,981,952
New Hampshire	46,627	\$236,783	60.8%	9.0%	30.3%	14.1%	36.0%	0.01%	0.3%	5.7%	83.3%	7.7%	\$4.86 (\$1.28)	\$6.28 (\$0.69)	-\$1.42	\$32.81 (\$8.77)	\$58.08 (\$7.06)	-\$25.27	10,380,718	\$63,765,216

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			Unflavored	Menthol/mint	Other flavor	Percentage of total sales	Percentage of flavored sales	Single	10 sticks	12 sticks	20 sticks	200 sticks								
New Jersey	14,542	\$39,319	68.9%	16.3%	14.8%	0.3%	0.8%	0.0%	0.0%	2.9%	89.7%	6.1%	\$2.36 (\$0.93)	\$7.71 (\$0.67)	-\$5.35	\$23.23 (\$4.68)	\$73.16 (\$15.86)	-\$49.93	2,217,935	\$17,051,050
New Mexico	12,552	\$38,515	42.8%	22.5%	34.7%	0.3%	0.5%	1.4%	7.9%	29.2%	60.9%	0.6%	\$1.63 (\$0.68)	\$6.24 (\$0.86)	-\$4.61	\$20.21 (\$5.34)	\$52.26 (\$16.44)	-\$32.05	1,570,488	\$9,612,038
New York	4,624	\$32,290	63.7%	10.9%	25.4%	5.7%	15.7%	0.0%	0.0%	6.9%	92.4%	0.04%	\$6.53 (\$2.07)	\$9.68 (\$0.84)	-\$3.15	\$32.19 (\$24.33)	\$66.98 (\$39.08)	-\$34.79	1,516,936	\$14,537,522
North Carolina	26,984	\$60,633	40.6%	26.4%	32.9%	3.4%	5.8%	0.2%	0.6%	3.9%	63.6%	27.3%	\$1.95 (\$1.01)	\$4.85 (\$0.70)	-\$2.90	\$18.62 (\$7.56)	\$42.13 (\$8.01)	-\$23.51	4,152,365	\$19,560,474
North Dakota	6,794	\$30,172	39.0%	3.9%	57.1%	20.9%	34.2%	1.8%	1.3%	25.5%	55.0%	3.8%	\$4.36 (\$1.06)	\$4.84 (\$0.74)	-\$0.48	\$34.33 (\$12.32)	\$42.61 (\$10.61)	-\$8.28	2,542,459	\$11,875,564
Ohio	47,514	\$117,573	56.4%	17.1%	26.5%	7.1%	16.2%	0.2%	0.03%	0.4%	84.3%	12.9%	\$2.28 (\$1.06)	\$5.75 (\$0.66)	-\$3.47	\$19.98 (\$8.15)	\$54.98 (\$13.01)	-\$35.00	5,748,978	\$32,961,462
Oklahoma	9,712	\$43,216	53.8%	10.4%	35.9%	4.4%	9.6%	0.7%	0.0%	11.7%	67.5%	9.0%	\$3.98 (\$1.32)	\$5.66 (\$0.65)	-\$1.68	\$40.69 (\$3.46)	\$45.06 (\$12.75)	-\$4.37	2,826,411	\$15,505,178
Oregon	9,385	\$62,923	38.9%	0.1%	61.0%	11.0%	18.0%	1.0%	1.3%	34.1%	63.6%	0.1%	\$3.47 (\$1.91)	\$5.92 (\$0.67)	-\$2.45	\$37.35 (\$10.45)	\$51.88 (\$14.31)	-\$14.53	1,854,638	\$10,867,600
Pennsylvania	11,985	\$48,839	62.0%	14.9%	23.1%	5.6%	14.8%	0.0%	0.0%	6.4%	90.1%	2.9%	\$3.72 (\$2.39)	\$6.55 (\$0.89)	-\$2.83	\$36.88 (\$21.29)	\$57.49 (\$19.49)	-\$20.61	3,915,685	\$25,310,516
Rhode Island	3,811	\$20,346	63.2%	29.2%	7.7%	7.3%	19.7%	0.0%	0.0%	0.0%	99.9%	0.0%	\$5.33 (\$2.23)	\$8.40 (\$0.67)	-\$3.07	-	\$80.51 (\$18.72)	-	3,364,161	\$28,220,146
South Carolina	24,064	\$59,175	40.3%	22.4%	37.4%	2.9%	4.9%	0.05%	0.0%	8.0%	60.7%	20.0%	\$2.16 (\$1.28)	\$5.09 (\$0.69)	-\$2.93	\$14.90 (\$9.07)	\$44.84 (\$9.21)	-\$29.94	5,017,768	\$25,056,518
South Dakota	24,402	\$111,791	53.0%	9.8%	37.2%	6.7%	14.2%	0.5%	0.0%	6.3%	70.2%	20.1%	\$4.53 (\$1.42)	\$6.15 (\$0.55)	-\$1.62	\$31.58 (\$16.89)	\$59.57 (\$9.95)	-\$27.99	2,844,286	\$17,419,340
Tennessee	9,465	\$34,143	59.9%	17.5%	22.6%	2.8%	6.9%	0.1%	0.0%	5.0%	86.5%	4.4%	\$3.28 (\$1.43)	\$4.93 (\$0.58)	-\$1.65	\$18.94 (\$4.52)	\$47.14 (\$9.08)	-\$28.20	5,065,236	\$24,821,040
Texas	18,511	\$36,491	65.3%	19.2%	15.5%	1.0%	2.8%	0.1%	0.0%	1.7%	74.7%	15.5%	\$1.96 (\$0.83)	\$5.80 (\$0.78)	-\$3.84	\$15.81 (\$4.35)	\$37.96 (\$16.91)	-\$22.15	2,555,519	\$14,107,437
Utah	15,933	\$129,027	18.3%	0.5%	81.1%	4.5%	5.5%	11.4%	7.1%	1.4%	79.4%	0.4%	\$6.03 (\$0.91)	\$6.30 (\$0.60)	-\$0.27	\$43.95 (\$14.02)	\$59.46 (\$7.88)	-\$15.51	2,378,514	\$14,916,513
Vermont	9,509	\$57,846	36.8%	5.9%	57.3%	54.7%	86.6%	0.01%	0.4%	0.0%	97.8%	0.03%	\$6.07 (\$1.23)	\$7.85 (\$0.86)	-\$1.78	\$58.34 (\$58.48)	\$70.13 (\$23.87)	-\$11.79	1,488,135	\$11,620,860

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			Unflavored	Menthol/mint	Other flavor	Percentage of total sales	Percentage of flavored sales	Single	10 sticks	12 sticks	20 sticks	200 sticks								
Virginia	16,768	\$38,541	46.7%	20.3%	33.0%	3.3%	6.2%	0.1%	0.0%	4.4%	86.9%	7.7%	\$1.97 (\$1.04)	\$4.95 (\$0.67)	-\$2.98	\$15.45 (\$9.32)	\$44.81 (\$6.73)	-\$29.36	4,495,547	\$21,638,644
Washington	6,687	\$58,126	31.1%	6.3%	62.7%	2.7%	3.9%	11.4%	0.2%	18.5%	69.0%	0.1%	\$5.92 (\$2.06)	\$7.98 (\$0.79)	-\$2.06	\$74.52 (\$2.44)	\$53.35 (\$26.19)	-\$-21.17	1,790,157	\$14,105,437
West Virginia	76,573	\$146,575	49.3%	12.1%	38.5%	9.2%	18.1%	0.2%	0.2%	1.5%	79.0%	18.8%	\$1.82 (\$1)	\$4.83 (\$0.79)	-\$3.01	\$15.07 (\$8.43)	\$46.72 (\$8.50)	-\$31.65	9,101,863	\$43,728,736
Wisconsin	40,575	\$110,452	42.7%	27.0%	30.2%	2.8%	5.0%	0.2%	0.0%	0.5%	79.1%	19.6%	\$2.71 (\$1.38)	\$6.99 (\$0.68)	-\$4.28	\$21.14 (\$8.37)	\$65.33 (\$13.95)	-\$44.19	3,190,419	\$22,137,558
Wyoming	5,256	\$19,380	45.1%	10.1%	44.8%	2.5%	4.6%	0.3%	0.01%	9.1%	78.6%	9.0%	\$3.09 (\$1.69)	\$5.01 (\$0.70)	-\$1.92	\$23.94 (\$10.72)	\$47.79 (\$7.39)	-\$23.85	1,102,795	\$5,448,848

Note: One equivalent unit = 20 sticks.

^a Average prices are weighted by unit sales

^b Flavor categorization based on coder understanding of Nielsen flavor descriptions, results may over/underestimate flavored product sales.

^c Reporting package size proportions for most frequently sold package sizes.