

Division of Measurement Standards  
8500 Fruitridge Road  
Sacramento, California 95826-4808

DMS NOTICE  
QC - 01 - 2

April 24, 2001

Discard: Retain

TO WEIGHTS AND MEASURES OFFICIALS

**SUBJECT: Statewide Automated Checkstand (Scanner) Survey**

The 2000 statewide scanner survey was completed in October. This was a follow-up to our 1998 survey and allows us to evaluate the changes in compliance conditions that have occurred during the previous two years. Your assistance in participating in this survey is very much appreciated. Using county staff to perform the inspections proves to be especially efficient, allowing the survey to be completed within a short period of time.

The results of the survey show that of the 14,684 items purchased, 2.0% were overcharged and 2.3% were undercharged. An aggregate algebraic undercharge amounted to 0.61% of the dollars spent. Of the 490 stores inspected, 91.4% either had no overcharges or were determined to be in the "level one" category (see Table 3). Except for a 1.5% increase in the "Level Two" category, this represents an improvement of conditions from the 1998 survey, in which 2.2% of the items were overcharged, 2.0% were undercharged, the aggregate algebraic undercharge was 0.17% of the dollars spent, and 92.6% of the stores inspected either had no overcharges or were determined to be in the "level one" category.

The attachment outlines the survey criteria and displays the survey results, by type of store, along with a comparison to the results of the 1992, 1994, 1996 and 1998 surveys.

Please review the attached report and contact Brett Saum, Program Supervisor, Measurement Compliance, at (916) 229-3047 if you have any questions.

Sincerely,

Mike Cleary  
Director  
(916) 229-3000

Attachments

## **DIVISION OF MEASUREMENT STANDARDS STATEWIDE AUTOMATED CHECKSTAND (SCANNER) SURVEY**

A statewide survey of establishments using automated pricing (scanner) systems was conducted throughout the state between September 5 and October 6, 2000.

### **Scope of Survey**

Establishments surveyed included both food and nonfood retail stores with centralized checkstands using a device to scan a code or a coded entry to determine sales price.

### **Sample Selection**

Five hundred (500) establishments were selected at random from a statewide population of approximately 10,900 establishments.

### **Inspection Procedure**

Thirty (30) items were randomly selected from each establishment. Approximately half of the items selected were sale items, price reduced or "special buys", including manufacturers' reduced price items, in-store specials or markdowns. After selecting the sample, the items were run through the automated pricing system (scanner) and the prices charged for the items were compared with the advertised, quoted, posted or marked prices. If the price charged for an item was more than the lowest of the advertised, quoted, posted or marked price, it was determined that an overcharge existed. If the price charged was less than the lowest of the advertised, quoted, posted or marked price, it was determined that an undercharge existed. If the price charged equaled the lowest of the advertised, quoted, posted or marked price, it was determined that no error existed.

### **Survey Results**

The following tables, summarize the survey results in comparison to the 1992, 1994, 1996, and 1998 surveys. These results may be useful for county weights and measures officials in determining which areas of the marketplace to focus enforcement activity.

**TABLE 1**

TYPE OF STORE		NUMBER OF ITEMS INSPECTED	OVERCHARGES		UNDERCHARGES	
			Number of Items	% of Items	Number of Items	% of Items
Food	<b>2000</b>	<b>5607</b>	<b>99</b>	<b>1.8</b>	<b>59</b>	<b>1.1</b>
	1998	4955	104	2.1	57	1.2
	1996	3816	77	2.0	49	1.3
	1994	3210	44	1.4	29	0.9
	1992	4741	100	2.1	49	1.0
Nonfood: Auto Supply	<b>2000</b>	<b>1256</b>	<b>24</b>	<b>1.9</b>	<b>39</b>	<b>3.1</b>
	1998	1594	29	1.8	25	1.6
	1996	990	22	2.2	10	1.0
	1994	1230	37	3.0	19	1.5
	1992	780	33	4.2	34	4.4
Building Supply	<b>2000</b>	<b>899</b>	<b>40</b>	<b>4.5</b>	<b>36</b>	<b>4.0</b>
	1998	598	20	3.3	15	2.5
	1996	270	7	2.7	7	2.6
	1994	390	18	4.6	13	3.3
	1992	600	16	2.7	9	1.5
Discount/Variety	<b>2000</b>	<b>899</b>	<b>10</b>	<b>1.1</b>	<b>34</b>	<b>3.8</b>
	1998	752	14	1.9	23	3.1
	1996	930	21	2.3	14	1.5
	1994	870	19	2.2	16	1.8
	1992	958	16	1.7	18	1.9
Drug	<b>2000</b>	<b>2339</b>	<b>31</b>	<b>1.3</b>	<b>48</b>	<b>2.1</b>
	1998	2972	82	2.8	56	1.9
	1996	1620	35	2.2	20	1.2
	1994	2220	43	1.9	27	1.2
	1992	1591	48	3.0	30	1.9
Miscellaneous	<b>2000</b>	<b>3684</b>	<b>90</b>	<b>2.4</b>	<b>126</b>	<b>3.4</b>
	1998	4112	78	1.9	131	3.2
	1996	1380	40	2.9	31	2.2
	1994	1080	16	1.5	11	1.0
	1992	329	13	4.0	6	1.8
Nonfood Total	<b>2000</b>	<b>9077</b>	<b>195</b>	<b>2.2</b>	<b>283</b>	<b>3.1</b>
	1998	10028	223	2.2	250	2.5
	1996	5190	125	2.4	82	1.6
	1994	5790	133	2.3	86	1.5
	1992	4258	126	3.0	97	2.3
GRAND TOTAL	<b>2000</b>	<b>14684</b>	<b>294</b>	<b>2.0</b>	<b>342</b>	<b>2.3</b>
	1998	14983	327	2.2	307	2.0
	1996	9006	202	2.2	131	1.5
	1994	9000	177	2.0	115	1.3
	1992	8999	226	2.5	146	1.6

**TABLE 2**

TYPE OF STORE		\$ SALES	\$ ALGEBRAIC OVERCHARGE*	% ALGEBRAIC OVERCHARGE*
Food	<b>2000</b>	<b>18,844.18</b>	<b>35.72</b>	<b>0.19</b>
	1998	15,448.54	11.54	0.07
	1996	10,880.46	32.07	0.29
	1994	8,953.68	6.40	0.07
	1992	12,329.00	39.12	0.32
Nonfood: Auto Supply	<b>2000</b>	<b>9,660.29</b>	<b>&lt;54.36&gt;</b>	<b>&lt;0.56&gt;</b>
	1998	12,941.15	4.77	0.04
	1996	7,096.02	11.93	0.17
	1994	7,881.58	39.92	0.51
	1992	5,559.46	10.38	0.19
Building Supply	<b>2000</b>	<b>10,637.71</b>	<b>&lt;22.98&gt;</b>	<b>&lt;0.22&gt;</b>
	1998	9,351.42	4.43	0.05
	1996	2,867.79	<0.06>	0.00
	1994	2,596.98	16.24	0.63
	1992	7,610.61	1.84	0.02
Discount/Variety	<b>2000</b>	<b>11,524.10</b>	<b>&lt;35.67&gt;</b>	<b>&lt;0.31&gt;</b>
	1998	6,899.02	<42.97>	<0.62>
	1996	7,643.72	5.26	0.07
	1994	6,821.83	<20.89>	<0.31>
	1992	7,215.10	<20.07>	<0.28>
Drug	<b>2000</b>	<b>11,743.70</b>	<b>&lt;11.19&gt;</b>	<b>&lt;0.10&gt;</b>
	1998	19,293.71	<32.85>	<0.17>
	1996	7,190.79	34.49	0.48
	1994	9,620.43	16.68	0.17
	1992	7,179.08	43.86	0.61
Miscellaneous	<b>2000</b>	<b>56,218.33</b>	<b>&lt;632.15&gt;</b>	<b>&lt;1.12&gt;</b>
	1998	76,730.84	<188.90>	<0.25>
	1996	21,492.79	44.55	0.21
	1994	22,733.55	23.64	0.10
	1992	3,645.65	6.98	0.19
Nonfood Total	<b>2000</b>	<b>99,784.13</b>	<b>&lt;756.35&gt;</b>	<b>&lt;0.76&gt;</b>
	1998	125,216.14	<255.60>	<0.20>
	1996	46,291.11	96.17	0.21
	1994	49,654.55	75.59	0.15
	1992	31,209.90	42.99	0.14
GRAND TOTAL	<b>2000</b>	<b>118,628.31</b>	<b>&lt;720.63&gt;</b>	<b>&lt;0.61&gt;</b>
	1998	140,664.68	<244.07>	<0.17>
	1996	57,171.57	128.24	0.22
	1994	58,608.23	81.99	0.14
	1992	43,538.90	82.11	0.19

\* Algebraic overcharge equals total overcharge minus total undercharge.

**STATEWIDE SCANNING SURVEY  
 COMPARED TO STATE ENFORCEMENT ACTION POINTS  
 TABLE 3**

TYPE OF STORE		NUMBER OF STORES INSPECTED	NO OVER-CHARGES		LEVEL ONE		LEVEL TWO		LEVEL THREE	
			# of Stores	% of Stores	# of Stores	% of Stores	# of Stores	% of Stores	# of Stores	% of Stores
Food	<b>2000</b>	<b>187</b>	<b>119</b>	<b>63.6</b>	<b>55</b>	<b>29.4</b>	<b>9</b>	<b>4.8</b>	<b>4</b>	<b>2.2</b>
	1998	165	104	63.0	50	30.3	8	4.8	3	1.8
	1996	127	81	63.8	35	27.6	5	3.9	6	4.7
	1994	107	70	65.4	35	32.7	2	1.9	0	0.0
	1992	158	99	62.7	48	30.4	7	4.4	4	2.5
Nonfood: Auto Supply	<b>2000</b>	<b>42</b>	<b>26</b>	<b>61.9</b>	<b>13</b>	<b>31.0</b>	<b>3</b>	<b>7.1</b>	<b>0</b>	<b>0.0</b>
	1998	53	34	64.2	16	30.2	3	5.7	0	0.0
	1996	33	17	51.5	14	42.4	2	6.1	0	0.0
	1994	41	18	43.9	14	34.1	7	17.1	2	4.9
	1992	26	9	34.6	12	46.2	3	11.5	2	7.7
Building Supply	<b>2000</b>	<b>30</b>	<b>14</b>	<b>46.7</b>	<b>10</b>	<b>33.3</b>	<b>3</b>	<b>10.0</b>	<b>3</b>	<b>10.0</b>
	1998	20	10	50.0	8	40.0	1	5.0	1	5.0
	1996	9	6	66.7	2	22.2	0	0.0	1	11.1
	1994	13	3	23.1	7	53.8	2	15.4	1	7.7
	1992	20	10	50.0	9	45.0	1	5.0	0	0.0
Discount/Variety	<b>2000</b>	<b>30</b>	<b>21</b>	<b>70.0</b>	<b>8</b>	<b>26.7</b>	<b>1</b>	<b>3.3</b>	<b>0</b>	<b>0</b>
	1998	25	13	52.0	12	48.0	0	0.0	0	0.0
	1996	31	20	64.5	7	22.6	2	6.5	2	6.5
	1994	29	20	69.0	5	17.2	3	10.3	1	3.4
	1992	32	19	59.4	12	37.5	1	3.1	0	0.0
Drug	<b>2000</b>	<b>78</b>	<b>54</b>	<b>69.2</b>	<b>16</b>	<b>20.5</b>	<b>5</b>	<b>6.4</b>	<b>3</b>	<b>3.9</b>
	1998	99	50	50.5	37	37.4	4	4.0	8	8.1
	1996	54	34	63.0	14	25.9	3	5.6	3	5.6
	1994	74	43	58.1	27	36.5	2	2.7	2	2.7
	1992	53	23	43.4	22	41.5	5	9.4	3	5.7
Miscellaneous	<b>2000</b>	<b>123</b>	<b>73</b>	<b>59.3</b>	<b>39</b>	<b>31.7</b>	<b>6</b>	<b>4.9</b>	<b>5</b>	<b>4.1</b>
	1998	137	91	66.4	37	27.0	4	2.9	5	3.6
	1996	46	27	58.7	11	23.9	4	8.7	4	8.7
	1994	36	25	69.4	7	19.4	2	5.6	2	5.6
	1992	11	5	45.5	4	36.4	2	18.2	0	0.0
Nonfood Total	<b>2000</b>	<b>303</b>	<b>188</b>	<b>62.1</b>	<b>86</b>	<b>28.4</b>	<b>18</b>	<b>5.9</b>	<b>11</b>	<b>3.6</b>
	1998	334	198	59.3	110	32.9	12	3.6	14	4.2
	1996	173	104	60.1	48	27.7	11	6.4	10	5.8
	1994	193	109	56.5	60	31.1	16	8.3	8	4.1
	1992	142	66	46.5	59	41.5	12	8.5	5	3.5
GRAND TOTAL	<b>2000</b>	<b>490</b>	<b>307</b>	<b>62.6</b>	<b>141</b>	<b>28.8</b>	<b>27</b>	<b>5.5</b>	<b>15</b>	<b>3.1</b>
	1998	499	302	60.5	160	32.1	20	4.0	17	3.4
	1996	300	185	61.7	83	27.7	16	5.3	16	5.3
	1994	300	179	59.7	95	31.7	18	6.0	8	2.7
	1992	300	165	55.0	107	35.7	19	6.3	9	3.0

**STATEWIDE SCANNING SURVEY  
COMPARED TO STATE ENFORCEMENT ACTION POINTS**

**TABLE 3**

**LEVEL ONE:** One or two overcharges (less than 10% of items inspected) and the total algebraic overcharge (total \$ value of overcharges minus total \$ value of undercharges) is less than 2% of the correct total price. This is considered to be a minor violation, usually resulting in a Notice of Violation being issued and the establishment remaining on its current inspection frequency.

**LEVEL TWO:** Three overcharges (10% up to but not including 12% of items inspected), or the total algebraic overcharge is 2% or more but less than 4% of the correct total price. This is considered to be a significant violation, usually resulting in a Notice of Violation being issued and the establishment being subject to more frequent inspections.

If the establishment is already on an increased frequency as a result of previous violations, additional enforcement action such as being issued a Notice to Appear (court citation) is appropriate.

**LEVEL THREE:** Four or more overcharges (12% or more of items inspected), or the total algebraic overcharge is 4% or more of the correct total price, or if the violation is willful or grossly negligent. This is considered to be a serious violation, usually resulting in enforcement action such as being issued a Notice to Appear (court citation) and being subject to more frequent inspections.