

## **Survey Estimate of the Weighted Average Retail Price of Cigarettes in Minnesota**

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Revenue Estimating Conference  
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by

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## **Introduction**

### **Landscape of Cigarette Taxes in Minnesota**

#### **Tax**

- 48¢ from 7/1/92 – 8/1/05 (13 Years)

#### **Quantity**

- Excise Tax Collection Information
  - 321,387,500 packs sold in Fiscal Year 2005

#### **Price**

- Assumed to be \$3.01/pack for Fiscal Year 2005
- Assumed to be \$3.15/pack for Fiscal Year 2006

## 2005 Legislative Changes

**The 2005 Minnesota Legislature made two changes in cigarette and tobacco taxation:**

- ☞ Imposed health impact fees of 75¢ per pack of cigarettes (in addition to the existing 48¢ tax) and 35% of the wholesale price of tobacco products (in addition to the existing 35% tax), and
- ☞ Converted the 6.5% state general sales tax on cigarettes to a flat tax amount (25.5¢ per pack) charged to distributors (rather than as a percentage of the retail price – 6.5% – as other products are taxed under the sales tax). This was a compliance related issue.

2

## 2005 Legislative Changes (cont.)

**The imposition of the “fees”:**

- was widely debated,
- a budget balancing change,
- was configured to accommodate a “no new taxes” pledge,
- produced over \$200 million of revenue annually,
- required a special session for passage, and
- was subsequently challenged in court (upheld 3/16/06).

3

## 2005 Legislative Changes (cont.)

### By contrast, the replacement of the sales tax on cigarettes:

- was an administrative proposal,
- was aimed at compliance issues,
- did not raise significant revenues,
  - approximately \$5 million one-time shift,
  - approximately \$3 million compliance gain, and
- did not seem to have wide public awareness.

4

### General Fund

48¢ Cigarette Tax	}	\$193.1 million
35% Tobacco Products Tax		
26.3¢ Cigarette Sales Tax		

### Health Impact Fund

35% Tobacco Products	}	\$223.4 million
75¢ Cigarette Tax		

### Refunds and Dedications

\$27.9 million

### Total

**\$444.4 million**

5

### **Intent of Altering Sales Tax on Cigarettes**

- Compliance problem of collecting from approximately 9,000 retailers versus collecting from less than 100 distributors (about 70).
- Notable number of high profile collection cases related to cigarette shops.
- Originally, intended to be a one-time indexed addition to the excise tax that would have created some additional simplicity (in fact, internally it is still occasionally discussed this way).
- Other states are working with this also,
  - some require a prepayment of sales tax on gasoline purchased from wholesalers,
  - others have proposed a prepaid sales tax on cigarettes, and
  - some are concerned about convenience store tax fraud (66% of all cigarette sales in the U.S. occur in convenience stores while 34.4 percent of inside sales at convenience stores are cigarette sales).

6

### **The provisions for the substitute sales tax are in Minnesota Statutes 297F and include:**

- tax rate of 6.5 percent of the weighted average retail price,
- requirements that the weighted average retail price **must be determined annually**, to be published by May 1, effective August 1,
- the weighted average retail price must be established by surveying cigarette retailers statewide in a manner and time determined by the commissioner,
- tax rate of 6.5% of the weighted average retail price (25.5¢ per pack as of 8/1/2005), and
- must be paid by the distributor and evidenced by a dual-purpose single stamp.

7



### **Survey Process**

- Ø identified source data,
- Ø selected sampling strategy, and
- Ø determined the weighting methods.

8

### **Survey Assumptions**

9

### **Survey Outcomes/Comparisons**

- previous estimate – 25.5¢ per pack
- will be reset to 26.3¢ on August 1, 2006

10

### **Some Findings**

11

## Potential Legal Issue

- The survey price range for a pack of cigarettes:  
\$2.95 – \$6.49  
18¢ – 41¢
- All packs charged 25.5¢.
- Discriminates against lower priced cigarettes.
- This topic has received minimal attention.

12

## Conclusion

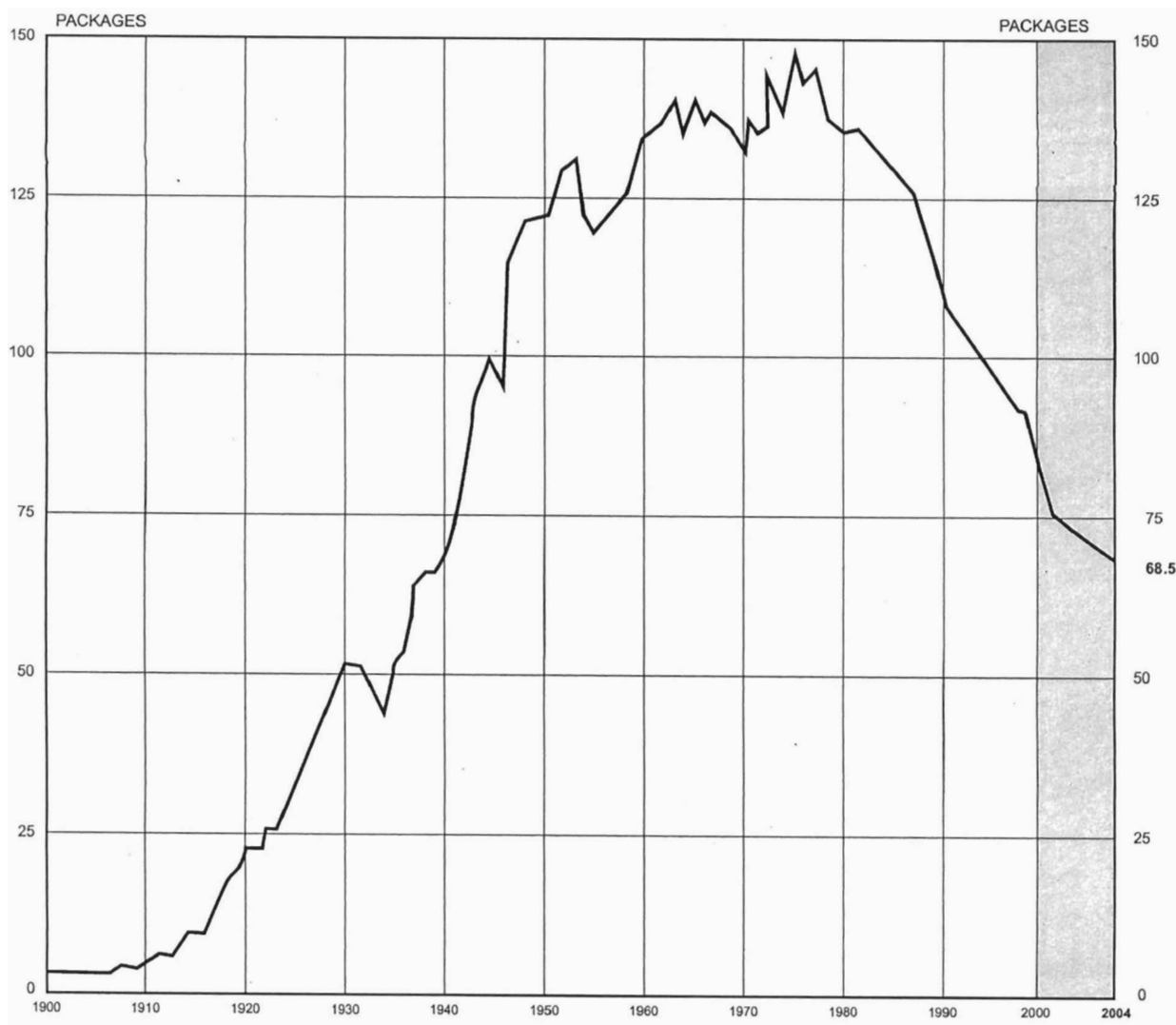
- This is a work in progress.
- The local tobacco industry lobbyists are currently questioning the process (mostly the number).
- Questions, suggestions, feedback encouraged.

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13

# Attachment #1

U.S. Total Per Capita Cigarette Consumption  
1900-2004





## Attachment #2

### **General Process for Estimating the Weighted Average Retail Price of Cigarettes in Minnesota - Survey Method"**

1) Wholesale Price Information.

Started process by reviewing Department of Commerce wholesale price information: "Presumed Legal Cigarette Prices"

2) Market Share Data.

Generally available national market share data reviewed.

Reviewed opportunities to purchase national market share data from IRI/Capstone or Jack Maxwell ("Maxwell Report").

Cost was prohibitive – about \$1,750.

Special Taxes provided state specific quantity data by major brand.

3) Reviewed available data sources with Special Taxes. Consideration was given to merging sales tax data with cigarette file (MN ID issue). Decision was made to use existing file and floor stocks data.

4) Selected representative brands by manufacturer for sampling in consultation with Special Taxes.

5) Considered distributor price effects. Sampling strategy made to include this effect.

6) Established sample stratification process.

7) Chose sample of 200 business entities. Sampling for 10 representative brands – both pack and carton prices. 4000 expected data points.

8) Special Taxes Division collected sample.

9) Data aggregation and analysis.

10) Growth adjustments applied consistent with statute.



# Minnesota Department of Commerce

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## Presumed Legal Cigarette Prices Available As Of August 1st, 2006

The presumed prices for wholesalers and retailers, as provided for by Minnesota Statutes, chapter 325D, are shown in this schedule. The computations are based on manufacturers' list prices and the products listed are a SAMPLING of the total cigarette market in Minnesota including cigarette brands that ARE affected by the "Non-Settlement Fee" as well as brands that ARE NOT. Minimum prices may be calculated for unlisted products as follows:

### Wholesale Carton Price:

Manufacturer Price + \$14.93 (cigarette stamps) + \$3.50 (Non-Settlement Fee as applicable) +  
\$0.54 (Wholesale Cost of Doing Business) = Wholesale Price.

### Retail Carton Price:

Wholesale Price + 8% (Retail Cost of Doing Business) = Retail Price.

All cigarettes in a wholesaler's or retailer's inventory must be priced to reflect these presumed prices. A wholesaler or retailer may sell for less if they can show that their actual costs of doing business are lower than the presumed minimum. Prices include "Off-Invoice" promotions, though not "Buy-Down" promotions. For questions, contact the Department of Commerce, 85 7th Place East, Suite 500, St. Paul, MN 55101.

BRAND	Wholesale Carton Price	Retail Carton Price	Retail Pack Price
<b>COMMONWEALTH BRANDS, INC.</b>			
Montclair	34.21	36.95	3.70
USA Gold	34.21	36.95	3.70
<b>GENERAL TOBACCO</b>			
Bronco	30.62	33.07	3.31
Champion	30.32	32.75	3.28
GT One	30.62	33.07	3.31
Silver	28.92	31.23	3.13
<b>KEBLON S.A. (GLOBAL TRADING CORP.)</b>			
Euro	25.97	28.05	2.81
<b>LIGGETT GROUP LLC</b>			
Eve	32.56	35.16	3.52
Grand Prix	25.46	27.50	2.75
Jade	30.11	32.52	3.26
Liggett Pyramid	31.06	33.54	3.36
Liggett Select	30.11	32.52	3.26
<b>LORILLARD TOBACCO COMPANY</b>			
Kent	44.86	48.45	4.85
Maverick	29.41	31.76	3.18
Max	44.86	48.45	4.85
Newport	43.11	46.56	4.66
Old Gold	40.41	43.64	4.37
Satin	44.86	48.45	4.85
Triumph	44.86	48.45	4.85
True	44.86	48.45	4.85
<b>NATIONAL TOBACCO, INC.</b>			
American Hero	25.72	27.78	2.78
<b>PHILIP MORRIS, USA</b>			
Alpine	41.91	45.26	4.53
Benson & Hedges	44.61	48.18	4.82
Basic	35.41	38.24	3.83
Bristol	41.91	45.26	4.53
Bucks	41.41	44.72	4.48
Cambridge	41.91	45.26	4.53
Commander	44.61	48.18	4.82
L&M	44.61	48.18	4.82
Lark	44.61	48.18	4.82
Marlboro	38.11	41.16	4.12
Merit	44.61	48.18	4.82
Parliament	38.11	41.16	4.12
Players	44.61	48.18	4.82
Saratoga	44.61	48.18	4.82
Virginia Slims	38.11	41.16	4.12
<b>R.J. REYNOLDS TOBACCO, INC. (REYNOLDS AMERICAN, INC.)</b>			
Belair	44.86	48.45	4.85
Best Value	29.63	32.00	3.21
Camel	43.11	46.56	4.66
Camel Tins (5 pk crtn)	24.71	26.68	5.34
Camel Regular	44.86	48.45	4.85
Capri	44.86	48.45	4.85



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<b>BRAND</b>	<b>Wholesale Carton Price</b>	<b>Retail Carton Price</b>	<b>Retail Pack Price</b>
Carlton	44.86	48.45	4.85
Doral	40.41	43.64	4.37
Gold Coast	29.32	31.67	3.17
GPC	33.41	36.08	3.61
KOOL	43.11	46.56	4.66
Magna	40.41	43.64	4.37
Misty	32.01	34.57	3.46
Monarch	29.63	32.00	3.21
More	44.86	48.45	4.85
Now	44.86	48.45	4.85
Pall Mall Box	40.41	43.64	4.37
Raleigh Extra	39.21	42.35	4.24
Salem	43.11	46.56	4.66
Sterling	40.41	43.64	4.37
Vantage	44.86	48.45	4.85
Viceroy	33.91	36.62	3.67
Winston	43.11	46.56	4.66
Worth	27.82	30.05	3.01
<b>SANTA FE NATURAL TOBACCO COMPANY, INC. (REYNOLDS AMERICAN, INC.)</b>			
American Spirit	45.27	48.89	4.89
American Spirit Organic	52.07	56.24	5.63
<b>STAR SCIENTIFIC, INC.</b>			
Gsmoke	26.50	28.62	2.87
Main Street	28.32	30.59	3.06
Sport	28.32	30.59	3.06
<b>VECTOR TOBACCO INC.</b>			
Omni	40.61	43.86	4.39
<b>WINNER COMPANY</b>			
Winner	26.47	28.59	2.86
<b>OTHER</b>			
AM Light	40.41	43.64	4.37
CT	26.46	28.58	2.86
Stars & Bars	43.91	47.42	4.75

# Attachment #4

## Sticks of Cigarettes Sold in Minnesota (From Excise Tax Return Information)

<u>Year</u>	<u>Philip-Morris</u>	<u>RJR / Brown</u>	<u>Lorillard</u>	<u>Liggett</u>	<u>Others</u>	<u>Total Sticks</u>
1997	3,786,754,940 52.7%	2,801,255,200 39.0%	494,666,990 6.9%	64,494,000 0.9%	34,090,489 0.5%	7,181,261,619
1998	3,574,263,000 51.9%	2,672,627,800 38.8%	519,799,500 7.6%	66,618,000 1.0%	48,433,460 0.7%	6,881,741,760
1999	2,852,073,000 49.9%	2,127,492,000 37.2%	597,357,510 10.4%	26,556,000 0.5%	116,306,093 2.0%	5,719,784,603
2000	2,951,501,560 48.1%	2,035,158,060 33.2%	530,489,700 8.6%	23,916,000 0.4%	593,722,834 9.7%	6,134,788,154
2001	2,786,560,600 45.0%	1,915,357,800 30.9%	431,340,660 7.0%	79,710,000 1.3%	975,923,127 15.8%	6,188,892,187
2002	3,168,574,160 53.4%	1,906,474,400 32.1%	361,605,800 6.1%	166,920,000 2.8%	326,726,325 5.5%	5,930,300,685
2003	3,168,574,160 53.4%	1,906,474,400 32.1%	361,605,800 6.1%	166,920,000 2.8%	326,726,325 5.5%	5,930,300,685
2004	2,926,556,460 54.4%	1,724,673,000 32.1%	290,170,110 5.4%	204,714,000 3.8%	232,120,820 4.3%	5,378,234,390
2005	2,807,293,560 55.0%	1,644,129,000 32.2%	292,538,610 5.7%	177,288,000 3.5%	182,463,615 3.6%	5,103,712,785

## Attachment #5

### Cigarette Survey – Estimate for the Weighted Average Retail Price of Cigarettes in Minnesota – Process and Assumptions"

1) Chose primary source data for the survey selection (limited alternatives). Recently aggregated floor stocks tax data assumed to provide representative data from which the sample was drawn and for allocating the industry into quintiles. There were 8,655 reports.

Comment: Floor stocks tax is not a perfect measure of relative sales volume. The ratio of annual sales to average daily floor stock will vary by type of store, and floor stocks in an individual store also vary across time depending on delivery schedules. Nevertheless, this was the best retail-level measure of relative sales volume available.

2) There were 8,655 floor stocks returns. 4,779 were included for determining the quintile determinations. Assumed that deleting the smallest 3,875 retailers would not materially affect the calculations (likely not enough brand distinction from which to get complete samples of 10 brands). The share of total floor stocks paid by the 3,875 retailers was \$122,926 (0.8% of the total paid).

3) Floor stocks information listed by validation number and every xth record chosen depending on the quintile size. Concurrently, determination made for sample size of 200.

	Sample		Population			Sampling
	Metro	Other	Metro	Other	Total	Rate
Quintile 1	10	5	97	24	124	12.1%
Quintile 2	15	10	146	98	244	10.2%
Quintile 3	20	20	207	188	395	10.1%
Quintile 4	25	25	302	338	640	7.8%
Quintile 5	<u>35</u>	<u>35</u>	<u>1,453</u>	<u>1,927</u>	<u>3,380</u>	<u>2.1%</u>
	105	95	2,205	2,575	4,780	4.2%

4) Population used to weight regions. Considered seven-county metro area – 1,972,288 – 40.1% and eleven-county metro area – 59.1%. Used 11-county area, but assumed slightly greater weighting for the metro – (approximately 60/40).

5) Initially, we considered store type as a possible selection criteria. Quintile 1 retailer population was distributed as follows:

- 81% convenience stores
- 12% smoke shops
- 4% supermarkets
- 3% discount retailers

Instead, it was assumed that a representatively drawn sample would result in the correct store distribution.



- 6) Selected representative brands to be included in sample based on price variations.
- 7) Both pack prices and carton prices were recorded. Industry analyst advised that the pack/carton ratio is trending up and approaching 70/30 (i.e. 70 packs for every 3 cartons). Orzechowski confirmed this trend but suggested using a more conservative 65/35 ratio. We assumed a pack/carton ratio of 60/40.
- 8) Created weighted average metro / non-metro price chart. Created imputed price chart. Expanded sample information to the population.
- 9) Brand weighting – used statewide count by manufacturer, combined with national brand information to distribute each manufacturer’s share among its brands.
- 10) Each quintile was weighted by its share of total floor stock tax (20%). The regional distribution of retailers within each quintile was as follows: – metro / non-metro percentage divisions combined with predetermined quintile distributions results in following weighting pattern:

	Quintile 1	Quintile 2	Quintile 3	Quintile 4	Quintile 5
Metro	16.42%	12.24%	10.36%	9.46%	9.52%
Greater	<u>3.58</u> 20.00%	<u>7.76</u> 20.00%	<u>9.64</u> 20.00%	<u>10.54</u> 20.00%	<u>10.48</u> 20.00%

- 11) -----see final summary table-----
- 12) Price before inflationary adjustment was estimated at \$4.20. After subtracting the 25.5 cents per pack sales tax, the price was \$3.94. An inflation adjustment of 2.5% was applied based on the forecast increase in the consumer price index “...as published in the most recent budget forecast”.
- 12) Multiplying by 6.5% yielded the new sales tax rate of 26.3¢ per pack is the determined substitute sales tax amount.

**ALL BRANDS**

	Quintile 1		Quintile 2		Quintile 3		Quintile 4		Quintile 5		
<b>Metro</b>	\$4.08	\$40.79	\$4.12	\$40.72	\$4.22	\$40.96	\$4.34	\$41.63	\$4.67	\$41.48	
per pack	\$4.08	\$4.08	\$4.12	\$4.07	\$4.22	\$4.10	\$4.34	\$4.16	\$4.67	\$4.15	\$42.00
											\$4.20
<b>Greater MN</b>	\$4.14	\$40.67	\$4.06	\$40.40	\$4.11	\$40.57	\$4.27	\$41.68	\$4.60	\$41.85	
per pack	\$4.14	\$4.07	\$4.06	\$4.04	\$4.11	\$4.06	\$4.27	\$4.17	\$4.60	\$4.19	\$41.70
											\$4.17
Metro Packs	\$4.08	\$4.12	\$4.22	\$4.34	\$4.67						
Greater MN Packs	\$4.14	\$4.06	\$4.11	\$4.27	\$4.60						
Metro Cartons	\$4.08	\$4.12	\$4.10	\$4.16	\$4.16						
Greater MN Cartons	\$4.07	\$4.04	\$4.06	\$4.17	\$4.19						

