

Memorandum

To: Honorable Carole Migden
Honorable Claude Parrish
Honorable Bill Leonard
Honorable John Chiang
Honorable Steve Westly

Date: October 30, 2003

From: Joe Fitz

Subject: Effects of Proposition 10 on Cigarette and Tobacco Products Consumption

Prior to January 1, 1999, the California cigarette excise tax rate was \$0.37 per pack. These taxes support the General Fund, various Proposition 99 programs, and various breast cancer programs. (See Attachment 1 for a detailed breakout of all the cigarette and tobacco products taxes.) California voters approved Proposition 10 in November 1998, and it became effective on January 1, 1999. Among other provisions, the proposition increased the \$0.37 per pack excise tax rate on cigarettes by \$0.50 per pack, to its current rate of \$0.87 per pack.

Section 130105(c) of the Health and Safety Code, as added by Proposition 10, requires the Board to determine the effect of Proposition 10 on the consumption of cigarettes and tobacco products and directs that a transfer of funds to Proposition 99 and Breast Cancer programs be made to backfill for revenue losses to those programs resulting from consumption changes triggered by Proposition 10.

These determinations do not affect the amount of taxes paid by taxpayers. The Proposition 10 backfill determination is strictly an issue of the magnitude of funds allocation from one set of funds to another. The determination increases funds specified by statute to be spent on health education, health research, breast cancer education, and breast cancer research and decreases funds that would have gone to the California Children and Families First Trust Fund without the determination.

On September 15, 2003 we sent letters to interested parties regarding the Proposition 10 determination (See Attachment 2). In the letter we asked for comments on our proposed fiscal year 2002-03 backfill amount or the methodology we used for the determination. We received three written responses. All three responses support our proposed backfill determination of \$21.7 million. (See attached letters and our responses, following Attachment 2.)

In past years the backfill recommended by the Board of Equalization staff has been within the range of \$22 to \$26 million. The exact figure depends on specific economic conditions. The \$21.7 million total backfill figure is approximately 3.5 percent of total \$627.1 million in tax revenues remitted to the California Children and Families First Trust Fund in Fiscal year 2001-2.

We recommend that a backfill determination of \$21.7 million for fiscal year 2002-03 be approved by the Board as an item on the Administrative Agenda of November 18, 2003. The transfer would be made from revenues received in fiscal year 2003-04 to backfill funds affected by changes in consumption during fiscal year 2002-03.

Table 1 of Attachment 2 summarizes the calculations necessary to derive the proposed backfill figure. Breaking down this \$21.7 million quantity, the transfer for Breast Cancer programs is \$5.0 million, and the transfer for targeted Proposition 99 programs is \$16.7 million.

JF:jf

Attachments

cc. Mr. Steve Peace, Department of Finance
Mr. Timothy W. Boyer, Interim Executive Director
Ms. Jean Ograd, Acting Chief Counsel
Ms. Janice Thurston
Ms. Monica Gonzalez Brisbane
Mr. David E. Hayes

bcc. Ms. Marcy Jo Mandel
Mr. Marcus Frishman
Executive Group
Ms. Marcia Davey
Ms. Vicky Kjer
Ms. Cindy Hanneman
Mr. Rene Gutierrez
Mr. Gil Haas
Mr. Dennis Maciel
Ms. Cindy Wilson

Recommendation by:

Joe Fitz 10-29-03
Joe Fitz, Chief Economist
Research and Statistics Section
Legislative Division

Approved:

Timothy W. Boyer
Mr. Timothy W. Boyer
Interim Executive Director

BOARD APPROVED

at the _____ Board Meeting

Deborah Pelligrini, Chief
Board Proceedings Division

Breakdown of Cigarette and Tobacco Products Taxes

Tax of 87 Cents on a 20-Count Pack of Cigarettes

Pack	Initial Fund	Target Fund or Agency	Account	Program	Purpose
87¢					
10¢	Cigarette Tax Fund	100 % General Fund			
2¢	Cigarette Tax Fund	100 % Breast Cancer Fund	Breast Cancer Research Account 1/	10% Cancer Surveillance Section	Conduct epidemiological research on the rate of breast cancer occurrence in the population.
				90% Breast Cancer Research Program	Research the cause, cure, treatment, and earlier detection of breast cancer.
			Breast Cancer Control Account 1/		Provide screening, referral, advocacy, outreach, and education services for uninsured and underinsured women.
25¢	Cigarette and Tobacco Products Surtax Fund	100 % Cigarette and Tobacco Products Surtax Fund	Health Education Account 1/	School and community health education programs	Prevent and reduce tobacco use, primarily among children.
			Hospital Services Account		Treat people who cannot afford to pay for hospital services and are not covered by insurance or a federal program.
			Physician Services Account		Treat people who cannot afford to pay physician services and are not covered by insurance or a federal program.
			Research Account 1/		Research tobacco-related diseases.
			Public Resources Account	50%	Restore, protect, enhance, or maintain fish, waterfowl, and wildlife habitat.
				50%	Enhance state and local park and recreation resources.
			Unallocated		Provide monies for any of the purposes to which money is allocated from the surtax fund.
				25%	

1/ Programs to receive transfers from Proposition 10 funds.

50¢	California Children and Families First Trust Fund	20%	CC&FF State Commission	6%	Mass Media Communications Account		Communicate to general public on childhood development, child care, and health and social services; prevention of tobacco, alcohol, and drug use by pregnant women; detrimental effect of second-hand smoke on children.
		5%	Education Account				Develop educational materials; provide professional and parental education and training; provide technical support to CC&FF county commissions.
		3%	Child Care Account				Educate and train child care providers; develop educational materials and guidelines for childcare workers.
		3%	Research and Development Account				Determine best practices of and assess early childhood development programs and services.
		1%	Administration Account				Cover administrative expenditures of the CC&FF State Commission.
		2%	Unallocated Account				Provide monies for any of the purposes of the CC&FF Act except administrative expenditures.
		80%	CC&FF County Commissions				Provide, sponsor, or facilitate programs relating to early childhood development; measure outcomes; integrate childhood development programs, services, and projects into a consumer-oriented and easily accessible system.



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STATE BOARD OF EQUALIZATION

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 State Controller, Sacramento

TIMOTHY W. BOYER
 Interim Executive Director

September 15, 2003

To: Interested Parties

In November 1998 the voters of California passed Proposition 10, which added Section 130105(c) to the Health and Safety Code. Section 130105(c) requires the Board of Equalization to determine the effect that additional taxes imposed on cigarettes and tobacco products¹ by Proposition 10 had on the consumption of cigarettes and tobacco products and directs that a transfer of funds to Proposition 99 and Breast Cancer programs be made to "backfill" for revenue losses to those programs resulting from consumption changes triggered by Proposition 10.

You have been identified as an interested party to the Proposition 10 determination. The enclosure summarizes our proposed methodology and results for the Proposition 10 backfill determination for fiscal year 2002-03. This item will be scheduled on the November 18 agenda for the Administrative Session meeting of the Board of Equalization. The Administrative Session will be held in the first floor Board Room at 450 N Street, in Sacramento.

The enclosure discusses the methodology used to determine the backfill figure, which results in a total Proposition 10 backfill determination of \$21.7 million for cigarettes and tobacco products for fiscal year 2002-03. If you have any comments on the fiscal year 2002-03 backfill amount or the methodology used, please respond by October 17. If you have any questions, please contact me at (916) 323-3802 or jfitz@boe.ca.gov.

Sincerely,

Joe Fitz, Chief Economist
 Research and Statistics Section
 Legislative Division

JF:ems

Enclosure

cc: Honorable Carole Migden, Chairwoman
 Honorable Claude Parrish, Vice Chairman
 Honorable Bill Leonard, Member, Second District
 Honorable John Chiang, Member, Fourth District
 Honorable Steve Westly, State Controller
 Ms. Betty Yee, Board Member's Office, First District

¹ As defined in statute, "tobacco products" exclude cigarettes.

Mr. Kenneth Topper, Board Member's Office, First District
Mr. Marcus Frishman Board Member's Office, Third District
Ms. Barbara Alby, Board Member's Office, Second District
Mr. John Thiella, Board Member's Office, Fourth District
Ms. Marcy Jo Mandel, Deputy Controller
Mr. Timothy W. Boyer, Interim Executive Director
Mr. David Gau
Mr. Dennis Maciel
Ms. Jean Ograd, Acting Chief Counsel
Ms. Janice Thurston
Ms. Monica Gonzalez Brisbane
Ms. Margaret S. Shedd
Mr. David E. Hayes
Ms. Cindy Wilson

Proposition 10 backfill Methodology and Documentation of Calculations

I. Methodology

Cigarette Consumption Impacts. As in previous years, we updated the data and used our econometric model to estimate the cigarette consumption impacts of Proposition 10.² The model isolates California excise taxes from other relevant factors affecting consumption.³ The difference between actual tax-paid consumption and the figure projected by the model represents the decline in apparent consumption due to Proposition 10.

In our baseline model, we estimate California cigarette consumption with an econometric equation. This model is similar to those used in other studies found in the literature. Percentage changes in cigarette consumption per capita are related to percentage changes in several standard economic variables including cigarette prices, federal excise taxes, California excise taxes, wages, and the unemployment rate. All dollar figures are converted to constant 1997 dollars using the California consumer price index.

Our model for estimating cigarette consumption is specified in terms of packs of cigarettes per capita. To calculate total consumption, we multiply the model-projected per capita consumption estimate by California civilian population.⁴ Our model run for this analysis assumed that Proposition 10 was not in effect. This is the only change made in the model. Because it is a statistical model with several explanatory variables, we were able to isolate the Proposition 10 tax increase from all other factors in the model and eliminate it. The impact of the Proposition 10 tax increase is the difference between total California consumption derived from the model and actual consumption, as indicated by cigarette stamp purchases.

Tobacco Products Consumption Impacts.

To estimate the impacts of Proposition 10 on tobacco products, we assumed a typical relationship between price and consumption based on our review of studies of such relationships for cigarettes and tobacco products. Specifically, BOE staff assumed a price elasticity of demand of -0.50. This relationship implies that a 10 percent increase in the price of the product is associated with a 5 percent decline in tax paid consumption. We then applied this relationship to the increase in tax rates caused by Proposition 10 (as reflected in the price of the product to the consumer) to predict an expected decline in consumption of tobacco products. We assumed the entire tax increase was passed on to consumers in the form of higher prices, again based on our review of the literature.

² Copies of the documentation of the model are available upon request from Joe Fitz, Chief Economist, Research and Statistics Section, (916) 323-3802.

³ As used throughout this discussion, the term "consumption" refers to tax paid distributions.

⁴ The model uses California civilian population, beginning fiscal year July 1, to mathematically scale total California tax-paid cigarette distributions. Including minors in these calculations has no significant effect on model results since model results are multiplied by the same scaling factor.

The -0.5 price elasticity figure means that every 10 percent increase in the price of tobacco products would result in a 5 percent decline in quantity consumed or dollar volume sales. We have the data to calculate the percentage price increase resulting from additional taxes due to Proposition 10. Knowing this percentage price increase and assuming a price elasticity figure enabled us to determine an expected sales decline through an algebraic solution. Then we applied the Proposition 99 tax rate to the predicted amount by which these dollar sales declined to estimate the Proposition 99 revenues that would have been expected without the Proposition 10 tax increase.

While we used this same conceptual methodology in previous years for tobacco products, we believe we made a technical improvement mathematically. Based on feedback from one of last year's interested parties, in this year's calculations we used the *average* change in price (rather than the post-Proposition 10 price) as a base for calculating the percentage change in sales of tobacco products. In technical terms, this year we calculate arc elasticity, whereas in previous years we calculated point elasticity. This technical change (computing arc elasticity rather than point elasticity) adds approximately \$0.1 million to the tobacco products backfill this year.

II. Documentation and Explanation of backfill Calculations for Proposition 99 and Breast Cancer Programs

Cigarette Consumption Impacts. Sections 1 and 2 of Table 1 show the calculations necessary for estimating the backfill amount resulting from changes in cigarette consumption. Section 1 of Table 1 compares quantities of what total tax-paid cigarette consumption would have been without Proposition 10 (derived from our statistical model) to actual total tax-paid cigarette sales in fiscal year 2002-03. July 1, 2002 civilian population of California is estimated by the California Department of Finance to have been approximately 35.2 million people.⁵ The statistical model shows that per capita consumption of cigarettes would have been 41.2 packs per person. Multiplying these two figures yields an estimate of 1,448.3 million packs of cigarettes (far right column of Section 1 of Table 1). Actual consumption derived from the Excise Taxes Department data on cigarette stamp sales is 1,196.8 million packs.⁶ The difference in these two figures is 251.5 million fewer packs of cigarettes sold with Proposition 10 in effect than without Proposition 10. Some of this decline in consumption may have been caused by increased cigarette tax evasion. However, based on previous studies, most of the decline probably results from reduced cigarette consumption.

Section 2 of Table 1 shows the calculations necessary to derive revenue losses incurred by backfill-targeted programs associated with 251.5 million fewer packs of cigarettes. The Breast Cancer programs are funded by a tax rate of two cents per pack. Multiplying \$0.02 by 251.5 million packs yields a result of approximately \$5.0 million. The tax rate funding all Proposition 99 programs is twenty-five cents per pack, of which 25 percent is to be backfilled. Therefore, the backfill amount for Proposition 99 programs is \$0.0625 per pack ($\$0.25 \times .25 = \0.0625). Multiplying \$0.0625 times 251.5 million packs yields a result of approximately \$15.7 million.

⁵ The model is specified using July 1 California civilian population for the beginning day of the fiscal year. Therefore, to calculate total cigarette consumption for fiscal year 2002-03, we need to use July 1, 2002 California civilian population. The source of the July 1, 2002 population figure is the California Department of Finance web site.

⁶ The figure may not be identical to that which will be published in our forthcoming 2002-03 annual report. It is based on preliminary information available from the Excise Taxes Division as of August 27, 2002.

The total backfill amount related to decreased cigarette sales for the targeted Proposition 99 programs and the Breast Cancer programs combined is \$20.7 million ($\$5.0 + \$15.7 = \20.7).

Tobacco Products Consumption Impacts. Section 3 of Table 1 summarizes the result of calculations made to derive estimates of revenues from sales of tobacco products that would have funded Proposition 99 programs in the absence of the Proposition 10 tax.⁷ Our backfill estimate for tobacco products is \$1.0 million. The calculations are shown in Table 2.

Table 2 shows how we algebraically solved for the predicted sales change in the price elasticity of demand formula shown at the top of Table 2. The table has four components in addition to the formula, which are marked off by horizontal lines. The first column of the table shows the row numbers of each line. Lines (a) through (e) show the steps involved in determining the percentage increase in price caused by Proposition 10. As shown in line (e) of the table, Proposition 10 increased the price of tobacco products in fiscal year 2002-03 by 27.25 percent. Lines (f) and (g) show the calculations made to determine the resulting decrease in sales of 13.63 percent. Lines (h) through (i) display calculations made to apply the tax to the decline in sales. BOE tax return data show fiscal year sales of \$80.55 million in 2002-03 (line h). Line (j) shows that a 13.63 percent decline implies a sales decline of \$12.71 million (line h / (100% - [line g])). Multiplying this figure by the Proposition 99 tax rate of 31.05 percent results in a total Proposition 99 revenue loss of \$3.95 million (line l). Multiplying this figure by 0.25 (since Proposition 99 programs to be backfilled receive 25 percent of Proposition 99 revenues collected) results in a figure of \$0.99 million (line m). Mathematically rounding off this figure produces a result of \$1.0 million less in revenues from sales of tobacco products that would have funded Proposition 99 programs, as shown in Table 1.

Summary of Total Backfill Changes. Cigarette tax revenues comprise about 95 percent of the entire backfill estimate amount. (Approximately \$20.7 million of the \$21.7 million backfill total is related to cigarette consumption changes. The rest, \$1.0 million, is related to changes in tax paid consumption of tobacco products.) Section 4 of Table 1 summarizes the figures computed for the backfill amounts from Sections 1 through Section 3. The total backfill amount is \$21.7 million, with \$5.0 million going to Breast Cancer programs and \$16.7 million going to the specified Proposition 99 programs. Of the \$16.7 million going to Proposition 99 programs, \$13.4 million will go to the Health Education Account (which receives 20 percent of Proposition 99 revenues) and \$3.3 million will go to the Research Account (which receives 5 percent of Proposition 99 revenues).

Historical Consumption and Sales. Table 3 provides some additional background information on tax-paid cigarette and tobacco products consumption. The table shows tax-paid cigarette distributions from fiscal years 1987-88 through 2002-03 (preliminary). The Proposition 10 tax increase became effective on January 1, 1999. For the five fiscal years prior to the passage of Proposition 10 (1993-94 through 1997-98), cigarette consumption declined an average of 2.8 percent per year. The table shows that cigarette distributions declined 8.7 percent in fiscal year 1998-99 and an additional 11.2 percent in 1999-00, the first complete fiscal year under Proposition 10. Preliminary data show that cigarette distributions declined 3.3 percent in 2002-03. Tax-paid distributions have declined a cumulative (annual additive) total of 32.1 percent since fiscal year 1997-98.

⁷ The Breast Cancer programs do not receive revenues from sales of tobacco products, only from sales of cigarettes.

Prior to the passage of Proposition 10, there was no consistent historical pattern in sales of tobacco products. Sales increased briskly through the mid-1990's, rocketing up 62.7 percent in fiscal year 1996-97, coinciding with what has been referred to as a cigar consumption craze. Then sales plummeted 26.5 percent in 1997-98 (the last fiscal year before Proposition 10). In the five years since the passage of Proposition 10 sales of tobacco products have declined an average of 8.9 percent per year.

Prepared by Joe Fitz
Research and Statistics Section
Legislative Division
Board of Equalization
September 15, 2003

Table 1			
Summary of backfill Calculations for Proposition 99 and Breast Cancer Programs			
Fiscal Year 2002-03			
(1) Change in California Cigarette Consumption a/			
	Estimated July 1, 2002 Civilian California Population (Millions) b/	Estimated Per Capita Consumption (Nonlinear Regression Model, Packs/Person) c/	California Cigarette Consumption (Million Packs)
Model Estimated Cigarette Consumption Without Proposition 10	35.153	41.2	1,448.3
Actual California Cigarette Consumption d/ Difference			1,196.8 -251.5
(2) Changes in Cigarette Revenue			
	Backfill Tax Rate (Dollars Per Pack)	Estimated Change in Consumption (Million Packs) e/	Estimated Change in Revenue (\$ Millions)
Breast Cancer Programs	\$0.0200	-251.5	-\$5.0
Proposition 99 Programs f/	\$0.0625	-251.5	-\$15.7
Total	\$0.0825		-\$20.7
(3) Change in Tobacco Products Revenue <i>(See Table 2 for Calculations)</i>			
			Estimated Change in Revenue (\$ Millions)
Proposition 99 Programs g/			-\$1.0
(4) Summary of Total Fund Backfill Changes			
		Accounts (Millions of Dollars)	Programs (Millions of Dollars)
Breast Cancer Programs			-\$5.0
Proposition 99 Programs			-\$16.7
Health Education Account (20% of Proposition 99 Funds)		-\$13.4	
Research Account (5% of Proposition 99 Funds)		-\$3.3	
Total Backfill Amount, All Programs			-\$21.7
Note: All numbers are rounded off from original spreadsheet figures in order for them to sum to the specified totals.			
a/ Consumption here and throughout the rest of this table refers to tax-paid consumption.			
b/ Source: California Department of Finance.			
c/ Source: BOE Research and Statistics Section econometric cigarette consumption estimation model.			
d/ Source: Property and Special Taxes Department, Excise Taxes Division. Preliminary figures.			
e/ Source: Total change in consumption calculated above.			
f/ As specified in Proposition 10, 25 percent of the Proposition 99 tax rate of \$0.25 per pack tax is to be backfilled. This percentage is \$0.0625 per pack (\$0.25 x 0.25).			
g/ This figure is 25% of the revenue loss due to decreased sales caused by the Proposition 10 tax increase.			

Line #	Data Description or Calculations	Result
<p>Table 2 Revenue Change in Tobacco Products, Proposition 10 Backfill Fiscal Year 2002-03</p>		
<p>Price Elasticity of Demand Formula: $e_p = (Q_1 - Q_2) / ((Q_1 + Q_2) / 2) / (P_1 - P_2) / ((P_1 + P_2) / 2)$ Where (generally): P = price, and Q = sales of tobacco products Alternatively stated, e_p = average % change in sales / average % change in price Assume e_p = -0.50, based on review of the literature</p>		
<p>Solving for the percentage change in tobacco products price:</p>		
a	Average wholesale cost per pack of 20 cigarettes (\$0.1401/stick x 20 sticks/pack = \$2.802)	\$2.80
b	Proposition 10 tobacco products equivalent per pack rate	\$1.00
c	Other per pack taxes	\$0.37
d	Estimated per pack cost, including taxes (line a + line b + line c)	\$4.17
e	Estimated change in per pack cost due to Proposition 10, % ((line d+ line a + line c) /2)	27.25%
<p>Solving for the percentage change in tobacco products sales:</p>		
f	Assumed price elasticity of demand = -0.50	-0.50
g	Estimated percent change in sales of tobacco products, % (line e x line f)	-13.63%
<p>Applying Proposition 99-only portion of 2002-03 tax to predicted change in sales:</p>		
h	California wholesale sales of tobacco products (excluding taxes), FY 2002-03, millions of dollars	\$80.55
i	Estimated wholesale sales of tobacco products without Proposition 10, million \$ (line h / (100% - [line g]))	\$93.26
j	Estimated decline in wholesale sales of tobacco products due to Proposition 10, million \$ (line h - line i)	-\$12.71
k	Tobacco products tax rate, excluding Prop. 10, % (\$0.87 / 20-pack / wholesale cigarette cost of \$0.1401 / stick)	31.05%
l	Estimated taxes lost due to the decline in sales caused by Proposition 10, million \$ (line j x line k)	-\$3.95
<p>Applying proportion of Proposition 99 revenue loss to backfill Proposition 99 target accounts:</p>		
m	Estimated 2002-03 backfill, million \$, line l * 0.25 (25% of all Proposition 99 programs are backfilled)	-\$0.99
<p>A/ Substituting the equivalent per-pack rate of \$1.00 for the tobacco products tax change caused by Proposition 10 and using the sum of wholesale cost per pack and total per-pack taxes to calculate change in price isolates the change in price of tobacco products caused by Proposition 10. This is because the tax rate on tobacco products is the sum of the combined rate of tax on cigarettes imposed by Proposition 99 and the rate of tax on cigarettes imposed by Proposition 10 divided by the wholesale price of cigarettes. The change in the numerator of the tobacco products tax rate formula brought about by Proposition 10 is \$1.00 per pack--50 cents from the Proposition 99 combined rate of tax on cigarettes and 50 cents from the Proposition 10 tax on cigarettes. An increase in cigarette taxes will increase the tobacco products tax rate if wholesale cost is held constant. Conversely, an increase in wholesale cost will decrease the tobacco products tax rate if cigarette taxes are held constant. When the tobacco products tax rate is set each year, the wholesale cost of cigarettes is obtained from the <i>Tobacco Situation and Outlook Report</i> published by the U.S. Department of Agriculture.</p>		
<p>B/ Source: Board of Equalization Excise Taxes Division, "Big Return Report Annual Summary," line number 7, run 8/25/03.</p>		
<p>C/ Note: The tobacco products tax rate excluding Proposition 10 is comprised of the original tobacco products rate (\$0.25), the general fund rate (\$0.10), the breast cancer rate (\$0.02) and the rate associated with Proposition 10 (\$0.50), for a total rate excluding Proposition 10 of \$0.87. There are no separate non-Proposition 99 rates on tobacco products. Tobacco products are only taxed by Propositions 99 and 10; general fund and breast cancer excise taxes only apply to cigarettes.</p>		

Source: BOE Research and Statistics Section.

Fiscal Year	Tax Paid Cigarette Distributions (Millions of Packs) a/	Percent Change	Sales of Tobacco Products (Millions of Dollars) b/	Percent Change
1987-88	2,570	-1.0%	n.a.	n.a.
1988-89	2,353	-8.4%	n.a.	n.a.
1989-90	2,219	-5.7%	n.a.	n.a.
1990-91	2,102	-5.3%	67.9	n.a.
1991-92	2,050	-2.5%	74.0	9.0%
1992-93	1,923	-6.2%	77.0	4.1%
1993-94	1,824	-5.1%	83.9	9.0%
1994-95	1,791	-1.8%	92.4	10.1%
1995-96	1,742	-2.7%	109.4	18.3%
1996-97	1,716	-1.5%	178.0	62.7%
1997-98 c/	1,668	-2.8%	130.7	-26.5%
1998-99	1,523	-8.7%	113.9	-12.9%
1999-00	1,353	-11.2%	95.8	-15.9%
2000-01	1,288	-4.9%	90.6	-5.4%
2001-02	1,237	-4.0%	77.1	-14.9%
2002-03	1,197d/	-3.3%	80.6	4.5%

a/ Source: 2001-02 Board of Equalization Annual Report.
b/ Source: Board of Equalization Excise Taxes Division. Represents wholesale sales of tobacco products as reported by distributors.
c/ Fiscal year 1997-98 was the last year unaffected by Proposition 10, which became law on January 1, 1999.
d/ Preliminary data. Source: Board of Equalization Excise Taxes Division.
n.a. not applicable

Source: BOE Research and Statistics Section.
September 15, 2003



Children & Families
Commission of Orange County

Joe Fitz, Chief Economist
State Board Of Equalization
Research and Statistics Section, MIC: 67
Legislative Division
450 N Street
Sacramento, California 94379-0087

RECEIVED

OCT 15 2003

RESEARCH & STATISTICS

Subject: Proposition 10 Backfill Determination for FY 2002-2003

Dear Mr. Fitz:

We appreciate the opportunity to review the staff report and attachments your office prepared for the State Board Of Equalization (SBOE) meeting scheduled for November 18, 2003. At that meeting, the SBOE is expected to fulfill its responsibility under Section 130105(c) to determine the direct effect that additional taxes imposed under Proposition 10 have had on tobacco consumption, and the resultant impact on the Proposition 99 and Breast Cancer cigarette and tobacco tax receipts. The Board's determination leads to a transfer of funds from Proposition 10 to those programs as the "backfill" to compensate for their lost revenue tied to consumption changes directly triggered by the Proposition 10 levy of 50 cents per pack of cigarettes.

We have carefully reviewed your methodology and resulting schedules/calculations. Overall, we commend your effort to arrive at a rational and fair estimation of the impact of Proposition 10 on the other programs. We accept your estimate of \$21.7 Million for fiscal year 2002-2003 given the current tools available to your office for assessing impact.

While we support your current calculation and methodology, we want to raise several considerations that we believe can lead to an even more accurate and appropriate determination of the "backfill" amounts in future years. Our concerns are:

1. Recognizing/incorporating the effects of counterfeit and other cigarette tax evasion schemes.

Our discussions with state and local finance experts, as well as the many articles in the printed media, confirms that illegal sales of untaxed cigarettes is a growing and major impact on the tobacco tax revenues collected by the State. SBOE's current modeling approach does not account for this evasion. Therefore, any reduction in cigarette sales (and corresponding revenues to Prop 99 and Breast Cancer Program) caused by evasion is attributed to Proposition 10 and the Prop 10 Backfill amount may be increased inappropriately.

COMMISSIONERS

EXECUTIVE DIRECTOR

- 2. The historically used elasticity coefficient of $-.50$ is likely overstating the impact of Proposition 10 because it is probable that the coefficient is not constant over any price range.**

We expect that as the price of cigarettes increases, the impact of the Prop 10 surcharge of 50 cents becomes less pronounced because the 50 cent amount becomes a smaller portion of the total price paid. The historical coefficient presumes that a 10 percent increase in the price of the product will cause a 5 percent decline in tax paid consumption. We believe it is highly unlikely that a 50 cent tax on a \$2/pack sale would have the same impact on consumption as a 50 cent tax on a \$4/pack sale. Therefore, we would expect the elasticity coefficient to move toward zero as the price of tobacco products continues to increase. For example, the State has considered additional taxes of over \$1 on cigarettes as a means of addressing the current budget deficit. Under the SBOE model calculation, the impact of the Prop 10 increment would remain the same even if the State imposed this major tax increase.

- 3. While the impact is minor (\$100,000), we question changing the calculation to use *average change in price* rather than the post-Proposition 10 price as a base for calculating the percentage change in sales of tobacco products.**

This mathematical change is permanently biased towards increasing the backfill amount. We believe any component involved in measuring the impact of Proposition 10 should not go back beyond the day preceding the effective date of the Proposition. While the "arc" vs "point" elasticity argument you make in your paper is academically interesting, we do not believe the merit of the position is sufficient to lead to a change in methodology without adequate consideration and analysis by all parties—both the beneficiaries and the bearers of the impact.

Please cause a copy of this letter to be included in the Board agenda packets. If for any reason the Board proposes to direct a transfer of a backfill amount in a larger amount, or "pursuant to" a different methodology, we would respectfully request an opportunity to be heard by the Board and to comment on any alternative methodology. While we believe refinements could more adequately identify revenue losses directly "attributable" to sources other than the Prop. 10 tax, we are skeptical that revenue losses greater than those estimated by your office are supportable by the available data.

Again, we thank you for your efforts to produce a workable recommendation to your Board. We are available to provide additional input prior to or at the November meeting.

Very truly yours,



Michael M. Ruane
Executive Director



October 10, 2003

Honorable Carole Migden, Chairwoman
California Board of Equalization
450 N Street, MIC 71
Sacramento, California 95814

RECEIVED

OCT 16 2003

RESEARCH & STATISTICS

Re: Proposition 10 Backfill to Proposition 99 and other Agencies

Dear Ms. Migden:

I have received your letter of September 17, 2003 on the subject of the Proposition 10 backfill to Proposition 99 and other programs, as well as the separate correspondence from the Research and Statistics Section at the Board of Equalization (BOE) that details the proposed backfill amounts for fiscal 2002/03. Upon review of the backfill amount BOE has proposed, our staff is in full support of both the methodology employed by Joe Fitz, Chief Economist, Research and Statistics Section, and the resultant proposed backfill amount. As such, we are requesting time to testify at your November 18, 2003 Administrative Session meeting to this effect. Please notify us of the proper procedures for testifying at this session, including alerting us as to whether we should testify at a scheduled time or as part of the general public comment on this agenda item.

I would like to reiterate our appreciation for the excellent work of Mr. Fitz in preparing and utilizing a sound econometric model for determining the backfill amount for 2002/03 and will utilize our testimony at your upcoming meeting to express our opinion that this year, Mr. Fitz's proposed backfill is the amount that should be approved and implemented by the Board.

If we can provide any information, please contact Joseph Munso, Chief Deputy Director, at (916) 323-0056.

Sincerely,

Rob Reiner
Chair

cc: Bill Leonard, 2nd District BOE Board Member
Claude Parrish, 3rd District BOE Board Member
John Chiang, 4th District BOE Board Member
Steve Westley, State Controller
Timothy W. Boyer, Interim Executive Director
David E. Hayes, Manager, Research & Statistics Section, BOE
✓ Joe Fitz, Chief Economist, BOE

10/16 cc: Margaret Shedd

CALIFORNIA CHILDREN AND FAMILIES COMMISSION

501 J STREET, SUITE 530, SACRAMENTO, CA 95814 • TEL 916/323-0056 • FAX 916/323-0069 • WWW.CCFC.CA.GOV

FIRST 5 Association of California

October 17, 2003

Joe Fitz, Chief Economist
State Board of Equalization
Research and Statistics Section, MIC: 67
Legislative Division
450 N Street
Sacramento, California 94279-0087

RECEIVED

OCT 27 2003

RESEARCH & STATISTICS

Subject: Proposition 10 Backfill Determination for FY 2002-2003

Dear Mr. Fitz:

Thank you for the opportunity to review the annual Proposition 99 backfill determination, made pursuant to Section 130105 (c) of the Health and Safety Code. The First 5 Association of California represents the 58 county commissions that receive Proposition 10 tobacco tax revenues to fund child health and development programs throughout California. The annual determination is of direct concern to our Association members.

At our October 15th Association meeting, the attached policy statement regarding the backfill determination was adopted. A consistent and predictable backfill determination is critical to the operation of the county commissions and the health and development programs they fund.

The Association agrees with your backfill estimate of \$21.7 million for Fiscal Year 2002-2003. However, in the event the State Board of Equalization proposes to use a different methodology or consider a different amount, we would appreciate the opportunity to testify before the Board at its meeting on November 18th.

Please do not hesitate to contact me at (510) 526-9999 if you have any questions. Thank you.

Sincerely,



Sherry Novick
Executive Director

719 El Cerrito Plaza ♦ El Cerrito ♦ CA ♦ 94530 ♦ 510-526-9999

FIRST 5 Association of California

POLICY STATEMENT REGARDING ANNUAL PROPOSITION 99 BACKFILL DETERMINATION BY STATE BOARD OF EQUALIZATION (BOE)

A. Background

1. Proposition 10, enacted by the voters in 1998, added an additional tax on cigarettes to fund early childhood development programs. This measure increased the tobacco taxes in the state beyond the level previously enacted by Proposition 99 in 1988 and by the legislature.
2. Anticipating that any additional tobacco tax increases would lead to a reduction of tobacco consumption and thus a reduction of revenue for anti-tobacco programs, Proposition 10 included a requirement that the State Board of Equalization annually determine an amount needed to backfill specific tobacco tax revenue accounts (tobacco education and breast cancer research). This annual determination is known as the "Proposition 99 Backfill."
3. In FY 2000/01, the Proposition 99 Backfill determination amount was approximately \$25.9 million. In 2002 it increased to approximately \$35.9 million. In arriving at this amount, the BOE opted not to follow the staff recommendation based on standard revenue-forecasting methodology. The consequence of this action was to reduce the amount received by the Proposition 10 Commissions by \$10 million, compared to prior years.
4. The California Children and Families Commission and several county commissions requested reconsideration of the determination. The BOE did not consider the request, and revenues were transferred from Proposition 10 to the other state accounts.

B. Policy Statement

1. The utilization of a consistent reliable tobacco tax revenue projection model is critical to both state and county commission funding programs. It is

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recommended that the Proposition 99 Backfill Determination be based upon the most recent update of the forecasting model utilized by BOE staff.

2. A backfill amount in excess of the forecasting model will have an immediate and significant negative impact on the funding of services for children by the state and county commissions, including but not limited to, children's health access, prenatal care, and specialty medical services.
3. The programs funded by both Proposition 99 and Proposition 10 revenues are critical to the health and vitality of the state. However, the annual determination of the backfill of lost revenues should not be utilized by one deserving party at the cost of the other.

Adopted by the First 5 Association of California, representing the 58 county Children and Families Commissions, October 15, 2003



STATE BOARD OF EQUALIZATION

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Third District, Santa Ana

JOHN CHIANG
Fourth District, Los Angeles

STEVE WESTLY
State Controller, Sacramento

TIMOTHY W. BOYER
interim Executive Director

October 30, 2003

Mr. Michael M. Ruane
Executive Director
Children & Families Commission of Orange County
17320 Redhill Avenue, Suite 200
Irvine, CA 92614

Dear Mr. Ruane:

This is to acknowledge receipt of your letter commenting on the proposed Proposition 10 backfill determination for fiscal year 2002-03. Thank you very much for your comments.

The Proposition 10 backfill item is scheduled to be heard by the Board at the Administrative Session on November 18. The Administrative Session will be in the afternoon. However, the exact time of the Administrative Session is uncertain, as it depends on the amount of time the Board needs for items scheduled earlier in the day. Please see the following link to the Board's web site for details on the agenda: <http://www.boe.ca.gov/meetings/boardcomm.htm>. A copy of the materials sent to the Board is attached.

You have requested an opportunity to testify. By copying this letter, I am informing the Board Proceedings Division of your interest. The recommended procedure for parties interested in testifying is to sign up on the day of the meeting, stating their name and the organization they represent. A sign-up sheet and a Board representative will be available to assist those interested in testifying.

Your letter also raised three concerns for future backfill determinations regarding cigarette tax evasion, the stability of the elasticity coefficient, and the use of arc elasticity. There are many factors to consider in next year's backfill, including the impact on evasion of Assembly Bill 71, which will license retailers selling cigarettes and tobacco products. In addition, the average price of cigarettes has nearly doubled since Proposition 10 was passed in 1998, which has provided incentives for offshore cigarette counterfeiting. We will take these and other factors into account in addressing next year's backfill determination.

Should you have any further questions, please feel free to contact me at (916) 323-3802.

Sincerely,

A handwritten signature in black ink that reads "Joe Fitz".

Joe Fitz, Chief Economist
Research and Statistics Section
Legislative Division

JF:jf
Attachment
cc. Mr. Gary Evans, Board Proceedings Division



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TIMOTHY W. BOYER
interim Executive Director

October 30, 2003

Mr. Rob Reiner
Chair
California Children and Families Commission
501 J Street, Suite 530
Sacramento, CA 95814

Dear Mr. Reiner:

This is to acknowledge receipt of your letter commenting on the proposed Proposition 10 backfill determination for fiscal year 2002-03. Thank you very much for your comments.

The Proposition 10 backfill item is scheduled to be heard by the Board at the Administrative Session on November 18. The Administrative Session will be in the afternoon. However, the exact time of the Administrative Session is uncertain, as it depends on the amount of time the Board needs for items scheduled earlier in the day. Please see the following link to the Board's web site for details on the agenda: <http://www.boe.ca.gov/meetings/boardcomm.htm>. A copy of the materials sent to the Board is attached.

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Should you have any further questions, please feel free to contact me at (916) 323-3802.

Sincerely,

A handwritten signature in black ink that reads "Joe Fitz". The signature is written in a cursive, flowing style.

Joe Fitz, Chief Economist
Research and Statistics Section
Legislative Division

JF:jf

Attachment

cc. Mr. Gary Evans, Board Proceedings Division



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October 30, 2003

Ms. Sherry Novick
Executive Director
First 5 Association of California
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El Cerrito, CA 94530

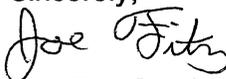
Dear Ms. Novick:

This is to acknowledge receipt of your letter commenting on the proposed Proposition 10 backfill determination for fiscal year 2002-03. Thank you very much for your comments.

The Proposition 10 backfill item is scheduled to be heard by the Board at the Administrative Session on November 18. The Administrative Session will be in the afternoon. However, the exact time of the Administrative Session is uncertain, as it depends on the amount of time the Board needs for items scheduled earlier in the day. Please see the following link to the Board's web site for details on the agenda: <http://www.boe.ca.gov/meetings/boardcomm.htm>. A copy of the materials sent to the Board is attached.

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Should you have any further questions, please feel free to contact me at (916) 323-3802.

Sincerely,

Joe Fitz, Chief Economist
Research and Statistics Section
Legislative Division

JF:jf

Attachment

cc. Mr. Gary Evans, Board Proceedings Division