10 July 1997

NOTE TO: Gary Claxton, ASPE

From: Lee Wilson, SAMHSA

Subject: Tobacco Price Elasticities

I am attaching a revision of document we prepared on price elasticities a few months ago. It hasn't been written to address specifics around the proposed settlement, however, it does give a pretty succinct presentation about what is known in the field.

Let me know if this is helpful and/or whether you would like for us to make some edits. I will be out of town through Monday morning, but I will be retrieving my voice-mail while away. My number oi 301-443-6085

Analysis of Tobacco Price Elasticity Research

From the literature on the price elasticities of cigarettes this review, the following conservative estimates of price elasticities by age group for cigarettes are shown in the table below. The summarized results are quite robust across studies:

Age Group	Total Elasticity	Smoking Rate	Quantity per Smoker
12–19	-1.2	-0.70	-0.50
20–25	-0.90	-0.55	-0.35
26–35	-0.45	-0.25	-0.20
36–74	-0.40	-0.20	-0.20

Based on these studies, the rate of smoking may be distinguished from the quantity of cigarettes consumed by smokers. For youth smoking rates the reductions result from decisions not to start smoking (reduced initiation rates), while with adult smokers the reductions are due to decisions to quit smoking (quit rates).

For smokeless tobacco, the price elasticity for those in high school is -0.60 (-0.40 for smoking rate and -0.20 for smoking quantity). For older groups, no studies are available, but based on the age-price elasticities for cigarettes we estimate the price elasticities for smokeless tobacco to be -0.55 for those 20–25 and -0.35 for those 26 and older. Researchers note that an increase in cigarette taxes, without a commensurate increase in taxes on smokeless tobacco, leads to an increase in use of smokeless tobacco.

Additional findings include:

- The projected elasticities are based on a percentage increase in tobacco prices. As tobacco taxes are unit based and not price based, the effect of tobacco tax increases is impacted by tobacco industry decisions regarding tax "pass through" policies on price and on "erosion" over time because of increases in the CPI. Overall, the percentage increase in tobacco prices due to tobacco taxes will likely diminish over time, with resultant diminished effects in the projected elasticities.

- Short-term effects (within 1 year) differ from long-term effects (within 3 years). When the increase in price is long-term, the elasticity is found to be greater. For example, for adults, the elasticity in the first year following a tax increase is -0.30, but after 3 years the elasticity increases to -0.60.

- Education and/or income appear to impact elasticities. Those with higher education/income are unresponsive to price, while those with lower education/income are more responsive to price (-0.60).

- There are presently too few studies of women to establish differential price elasticities for men and women.
- The studies establish that price differentials between a state and neighboring states may be an important determinant of demand. For most states, however, this variable does not have a substantial effect.
- One study finds that as price goes up, smokers substitute toward higher nicotine cigarettes. While this implies that the price effect on quantity smoked would overstate the expected health benefits of reductions in smoking quantity, it does not alter the expected changes in initiation and quit rates.
- The studies do not provide estimates for the effect of introduction of lower priced generic brands of tobacco in the marketplace following a tax increase.

As a final note, there is evidence that the tobacco industry has been creative in reducing the impact of mandated price increases on the actual price of tobacco paid by the consumer. Therefore, the price elasticities provided above, while based on the research to date, are overly optimistic, especially as to long-term effects. Related research and modeling have been performed in the area of alcohol pricing and elasticity which supports these conclusions. This research has shown that projected price effects over time were overstated, and significant reductions in effects had to be factored for the model to successfully project historical patterns.

Tobacco Mtg. July 11, 1997

BUDGET

* President will be the final arbiter of how the $ is spent so the group will give him a list of options.

What to do w/$ that's not part of the $100 bill set aside for public edu. + other recommendations.

- How closely should these funds be tied to tobacco?
  trust fund v. yr. to yr. approp.
- If trust fund, what accountability measures
- You need to keep in mind that as we are more successful in reducing smoking, the pot o' $ shrinks. This is where a trust fund might help.

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— They'd like to expand some services for kids unrelated to health → maybe have a health trust fund + a children's fund that would also have some health programs

Tobacco — July 14, 1997

Budget

Report describing how each handles tob-related research

Ding funds available:

1) \$ for sec. for tob research
2) annual \$ for prev + cess res.
3) cess trust fund
4) over 8 yrs, \$25 bill trust fund for research

\+ Research that's connected to ↓ tob use + effects of tob use. (reduce burden on society caused by tob use).

indir burdens	dir burdens
	coronary artery disease (multiple causation disease accelerated + aggravated by smoking) define attack broadly any aspect of it.

genetics, behavior, pharmacology of addiction; surveillance; community-based-initiatives; enforcement; risk factors - general areas of research

2 issues re how to use this $.

1.) allocation by Prez commission (Y/N?) or an external one

2.) how best to administer the $

more insulated fr. polit. pressure — BUT their research priorities might not be in synch w/ those of the fed agencies that are already looking into this.

3) can you invest the trust fund assets

4.) sort out the overlaps btw. research areas

Basic v. Behav./P.H.

If you see rates go down you can shift funds back to basic