

OREGON SMOKERS' CONTRIBUTIONS TO THE STATE ECONOMY - FY2012

In 2012, the 19.7% of adults who comprise OREGON'S smoker population paid more than their fair share in taxes and tobacco settlement payments because they chose to buy a legal product:

Excise Taxes	Tobacco Settlement Payments	Total Smoker Payments FY2010
\$204,179,000	\$78,940,000	\$283,119,000

TOTAL TOBACCO SETTLEMENT PAYMENTS TO OREGON TO DATE (1998-2012): \$1,016,900,000

OREGON Smokers' Economic/Tax Profile 2011:

- OREGON smokers' median household income **\$23,881**
- OREGON nonsmokers' median household income **\$45,014**
- 53.5% of OREGON smokers had household incomes **LESS THAN \$25,000.**
- **Only 10.2% of OREGON smokers had household incomes EQUAL TO or GREATER THAN \$75,000.**

The impact of smoker payments on the incomes of working families was disproportionately greater – more than **FIVE TIMES** higher – than the impact on the minority of smokers who have higher incomes.

Tax and settlement payment liability paid only by smokers in FY2012:

- Total average paid per OREGON smoker in excise taxes **\$349**
- Cost per OREGON smoker for settlement payments to OREGON **\$135**
- Total annual payments to OREGON per smoker **\$484**

Payments by OREGON smokers in FY2012 were:

- More than 2.5 times as large as the state liquor apportionment revenues in the General Fund for FY2012 (\$110.2 million)
- Nearly 6 times as large as Oregon insurance tax revenues for FY2012 (\$47.4 million)
- Nearly 3 times as large as Oregon estate tax revenues for FY2012 (\$101.8 million)

OREGON smoker payments of OVER \$283 MILLION were large enough to support FY2012 funding for:

- Fish and Wildlife Dept. (\$160.2 million) AND Oregon Health and Science University (\$83.5 million)
- OR
- Business Development Department (\$239.3 million) AND Oregon Student Access Commission (\$62 million)
- OR
- Department of Environmental Quality (\$163.1 million)

TOTAL SMOKER CIGARETTE PAYMENTS TO OREGON FY2011

Per year:	\$283,119,000
Per day:	\$ 777,266
Per hour:	\$ 32,386
Per minute:	\$ 540
Per second:	\$ 9.00

CIGARETTES DON'T PAY TAXES – OREGON SMOKERS DO!

Oregon Tobacco Prevention and Education Program Oregon adults who have lower income or have not finished high school Data Report – 2007

Eighteen percent of Oregon adults have incomes lower than the federal poverty line or have not finished high school. Seventy percent of this population lives outside of the Tri-county area (Multnomah, Clackamas and Washington Counties).

Adult smoking

Economic status is the single greatest predictor of tobacco use in the United States. Americans living below the federal poverty line are 40 percent more likely to smoke than those living at or above the federal poverty line.¹ Oregon adults who have lower income or have not finished high school are 1.8 times more likely to smoke than Oregonians whose income is above the poverty line and have higher than a high school education. Twenty-seven percent of current smokers in Oregon have lower income or have not finished high school.

Figure 1. Oregon adults who have lower income or have not finished high school by race and ethnicity, 2004-2005

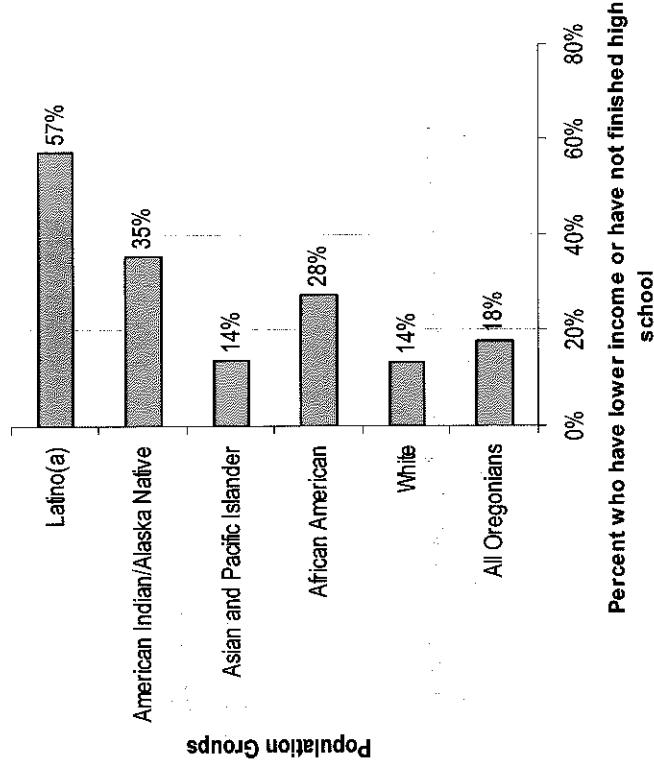
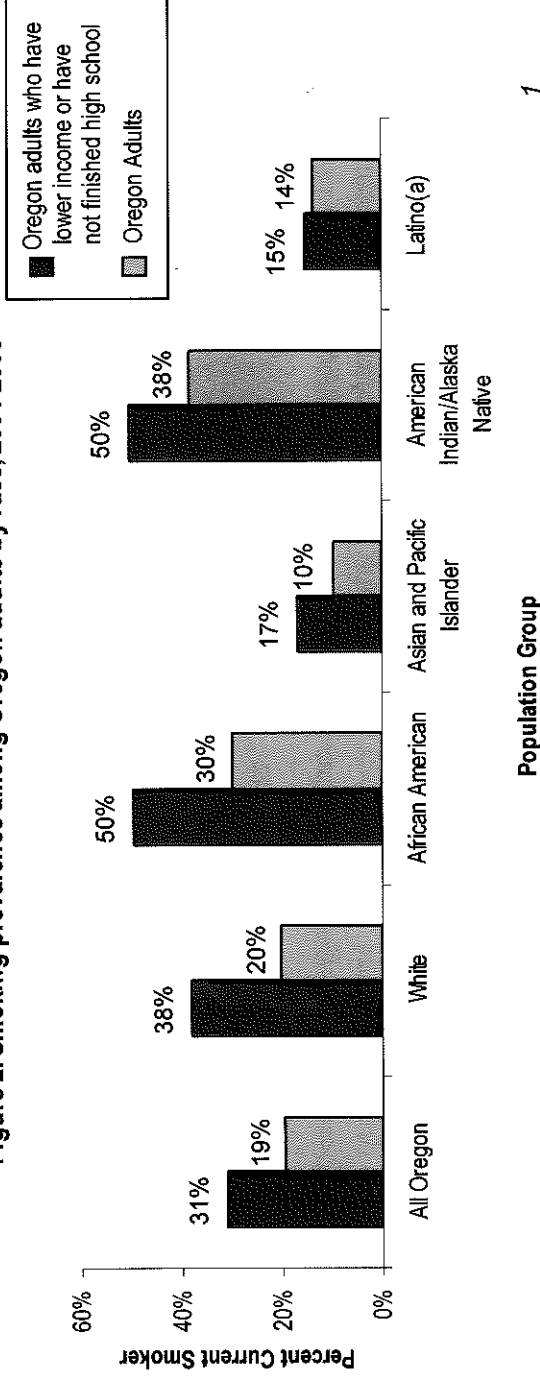
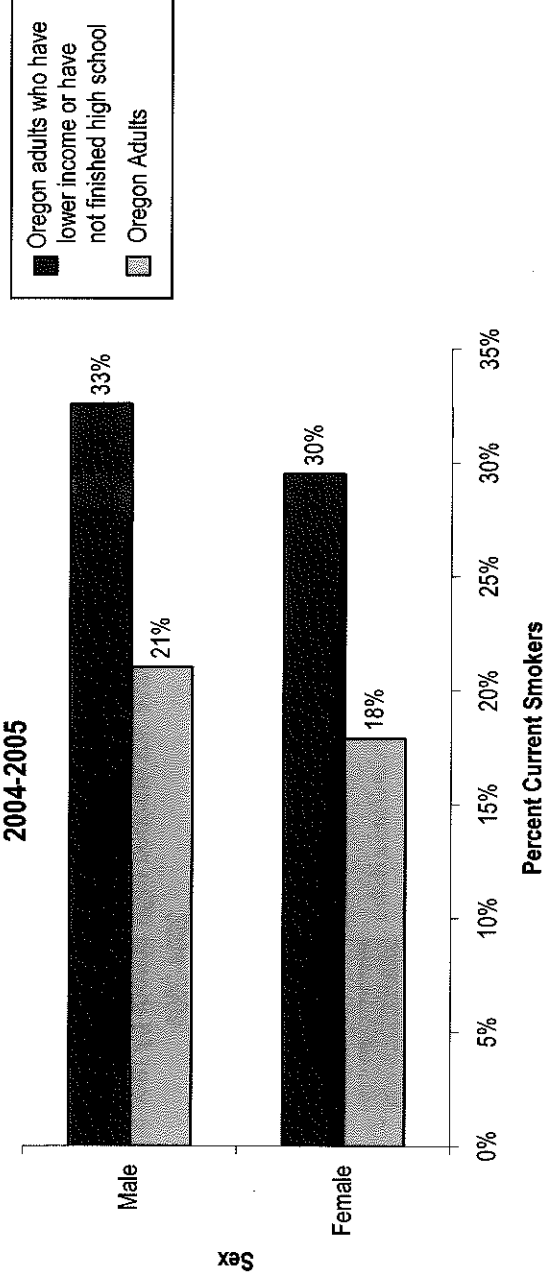


Figure 2. Smoking prevalence among Oregon adults by race, 2004-2005



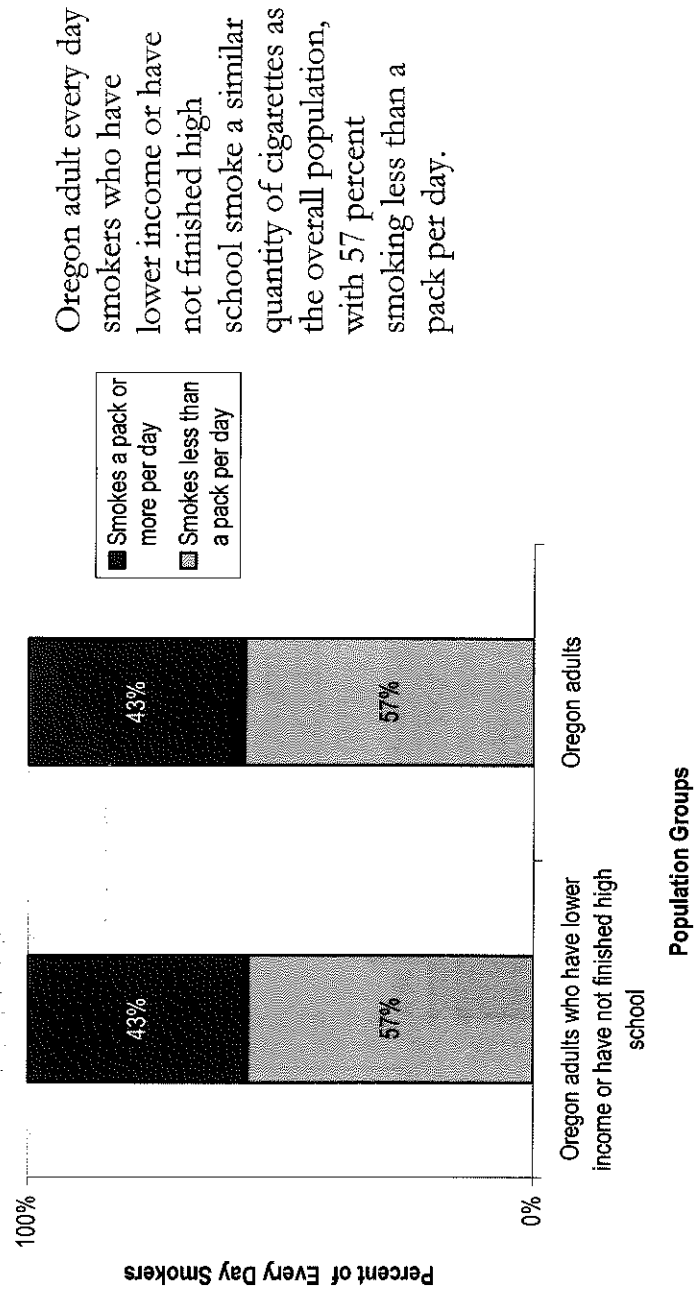
Poverty status is associated with higher smoking prevalence among all Oregonians and among specific populations, except for Latinos where prevalence is similar regardless of economic status.

Figure 3. Adult smoking prevalence by sex, 2004-2005



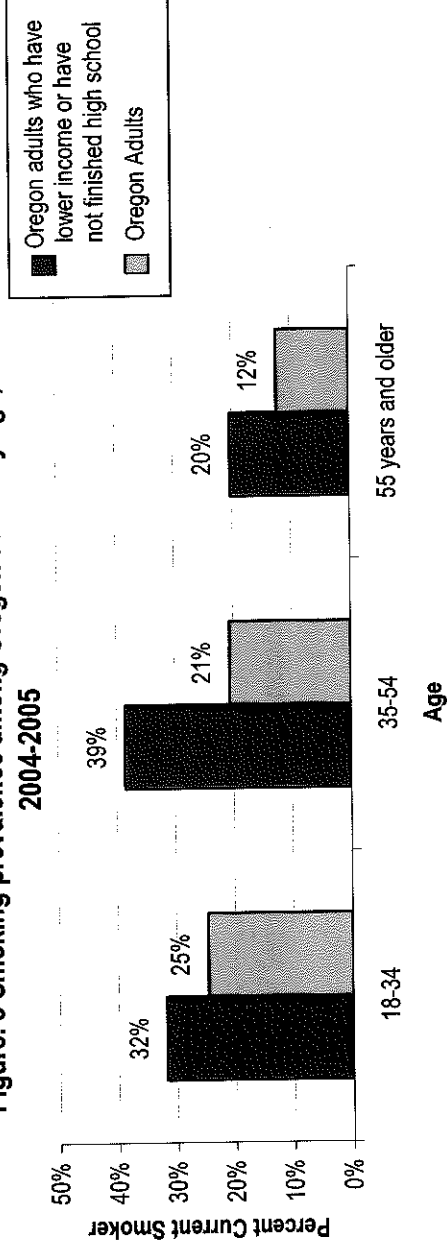
This increased smoking prevalence among the adults who have lower income or have not finished high school seems to affect both men and women proportionately.

Figure 4. Cigarette consumption among every day smokers, 2004-2005



Oregon adult every day smokers who have lower income or have not finished high school smoke a similar quantity of cigarettes as the overall population, with 57 percent smoking less than a pack per day.

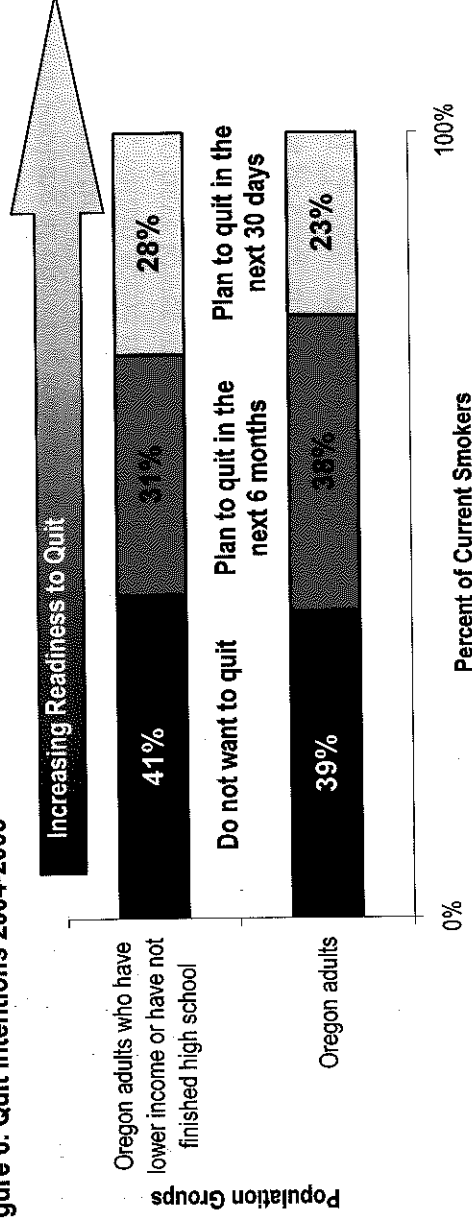
Figure 5 Smoking prevalence among Oregon adults by age, 2004-2005



Unlike the overall population in which smoking prevalence is highest for 18 – 24 year olds and then decreases with age, Oregon adults who have lower income or have not finished high school experience the highest prevalence among 35-54 year olds (39 percent).

Adult quitting

Figure 6. Quit Intentions 2004-2005



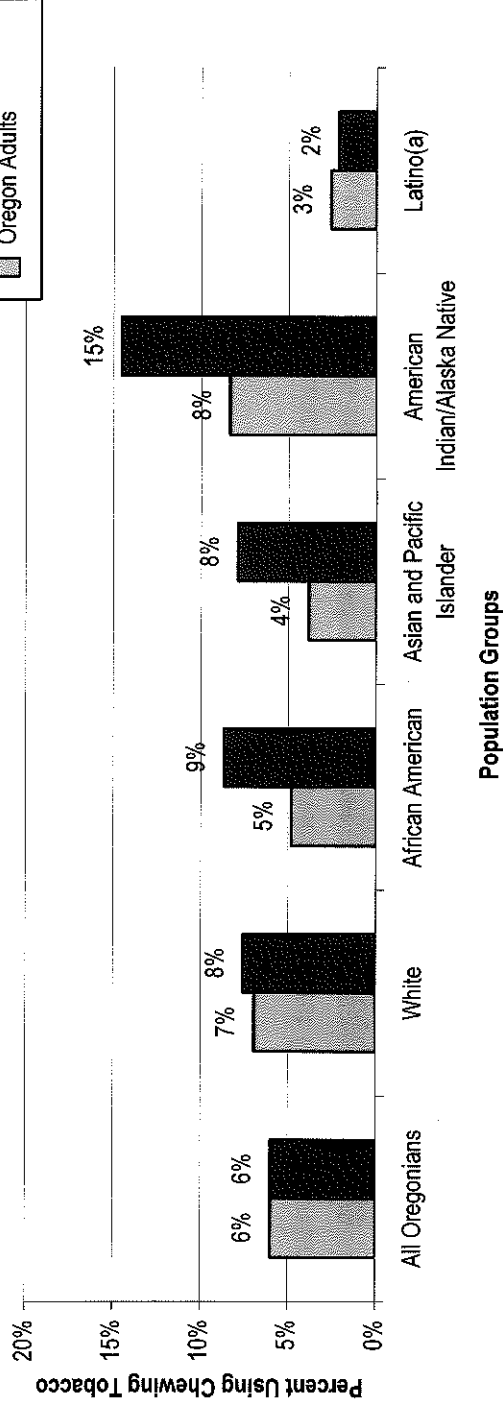
The figure above shows readiness to quit using the categories of the Transtheoretical Model.ⁱⁱ According to this model, smokers who do not want to quit are in the pre-contemplation phase. Those planning to quit in the next six months are contemplating, while those planning to quit in the next 30 days are in the preparation stage of change.

Quitting smoking is a complicated, nonlinear process for many people. A person often plans to quit, and then may quit for some period of time, before relapsing and starting the process again. The diagram above includes those who have relapsed, as well as those who have yet to attempt to quit smoking. The average person attempts to quit smoking two to three times before achieving lasting success.ⁱⁱⁱ

Twenty-eight percent of Oregon adults who have lower income or have not finished high school plan to quit in the next 30 days. They are preparing for change and have accepted responsibility to quit smoking. However, only 31 percent as compared with 38 percent of the overall Oregon population are contemplating quitting.

Male chewing tobacco use

Figure 7. Chewing tobacco use among Oregon adult men, 2004-2005

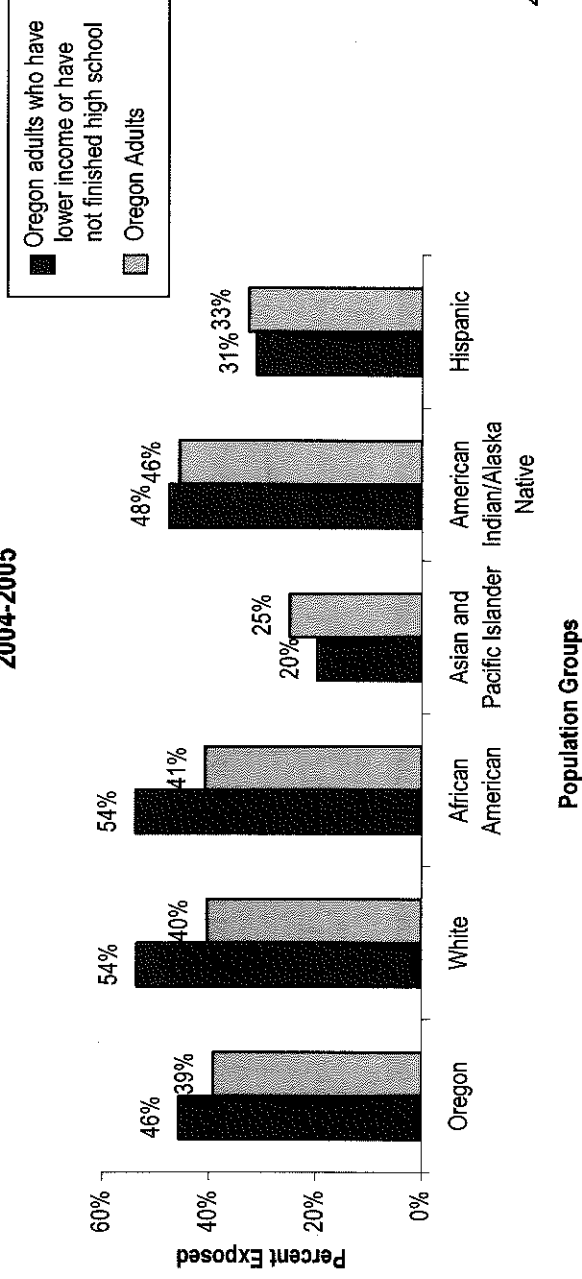


When looking at chewing tobacco usage in Oregon, Oregon adults who have lower income or have not finished high school report similar usage to the overall Oregon population. However, within some race/ethnicities, chewing tobacco use is significantly higher for adults who have lower income or have not finished high school. American Indian/Alaska Native adult males who have lower income or have not finished high school are 2.6 times more likely to chew tobacco than American Indian/Alaska Native adult males living above the federal poverty line or possessing at least a high school education.

Adult exposure to secondhand smoke

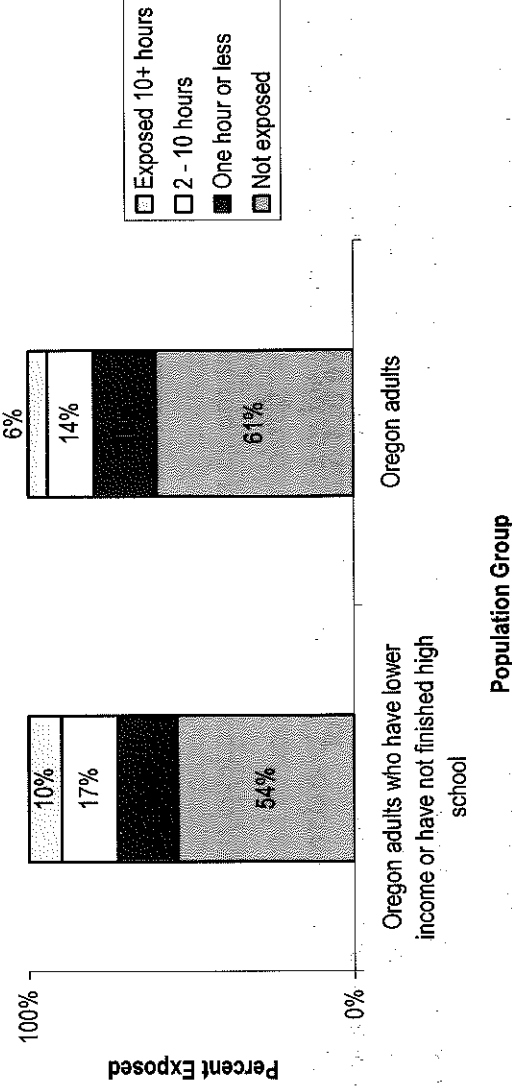
According to the 2006 Surgeon General's Report – *The Health Consequences of Involuntary Exposure to Tobacco Smoke* – “There is no risk-free level of exposure to secondhand smoke: even small amounts of secondhand smoke exposure can be harmful to people’s health.”^{21V}

Figure 8. Exposure to secondhand smoke from all sources during a typical week by race, 2004-2005



Exposure to all sources of secondhand smoke is higher among Oregon adults who have lower income or have not finished high school (46 percent) than the overall population (39 percent). White and African American adults who have lower income or have not finished high school are more likely to be exposed to secondhand smoke.

Figure 9. Hours of secondhand smoke exposure from all sources during a typical week, 2004-2005



Forty-six percent of Oregon adults who have lower income or have not finished high school are exposed to secondhand smoke in a typical week, as compared with 39 percent of all Oregonians. Among those exposed, Oregon adults who have lower income or have not finished high school have longer exposure than overall Oregonian adults, with 27 percent reported exposure in excess of 2 hours per week. Nonsmokers exposed to secondhand smoke at home or work increase their risk of developing heart disease by 25 to 30 percent and lung cancer by 20 to 30 percent.^{iv}

Methods

Denominator sizes for the survey data depicted in figures

Figure Number	Oregon adults	Oregon adults who have lower income or have not finished high school
4	4,173	1,108
5	23,359	3,648
6	6,719	1,167
8	6,719	1,167
9	6,719	1,167
10	6,719	1,167
11	10,735	1,740

General

All survey data, unless otherwise specified, are age-adjusted and weighted. “Age adjustment is used to compare risks of two or more populations at one point in time or one population at two or more points in time.”^v This method helps to better depict what is really happening in a population where age may be correlated with the outcome, in this case, tobacco use.

Weights were applied to survey data to account for Oregon’s population distribution by age and sex during the survey year. Weights are an artificial adjustment to ensure that survey data reflect the population being studied.

All significance testing was conducted at the 95 percent confidence level using an immediate form of a Student’s t-test in Stata 9.0.

Adults who have lower income or have not finished high school

Estimates were calculated using the 2004–2005 BRFSS race oversample, and were age-adjusted. The same weighting strategy used for adult estimates was applied to this analysis. Adults who have lower income or have not finished high school is defined as respondents living below 100 percent of the federal poverty line and/or possessing less than a high school education. The 100 percent federal poverty line variable was calculated using household size and income. Income on BRFSS is collected using categories rather than actual numbers. At the lower end of income, these categories increase by \$5000 increments. The category that matched the 100 percent federal poverty line for household size in the year the survey was conducted was used for the calculation.

Adult smoking, quitting and secondhand smoke exposure

Adult estimates were calculated using the 2004–2005 Behavioral Risk Factor Surveillance System (BRFSS) dataset. “The Behavioral Risk Factor Surveillance System (BRFSS) is the world’s largest, on-going telephone health survey system, tracking health conditions and risk behaviors in the United States yearly since 1984.”^{vi} All data are age-adjusted and weighted.

A current smoker is defined as someone who has smoked at least 100 cigarettes in his or her life and currently smokes. Chewing tobacco use is only assessed for males as less than 0.1 percent of females in Oregon use smokeless tobacco.

Potential limitations

BRFSS is the main source of population-level data to assess tobacco use and exposure among adults in the state of Oregon. The survey is administered using random-digit-dialing of landline phones.

According to a national study in 2006, 15.8 percent of American homes do not have a landline.^{vi} Assuming the trend is similar in Oregon, the current BRFSS methodology might exclude almost one-sixth of the population from the sample.

A majority of those without landlines have converted to cell phone only households, although approximately three percent of homes cannot afford any type of telephone. Additionally, 22.4 percent of households below the federal poverty line have wireless only households. Thus almost one-quarter of individuals who have lower incomes may not be included in BRFSS.

Nationally, wireless only households have a significantly higher prevalence of smoking (29.6 percent) as compared with landline only households (18.9 percent). Households without telephone service have the highest smoking prevalence (41.5 percent).^{xii} These limitations may lead to underreporting of smoking prevalence, as multiple studies have confirmed the correlation between cell phone usage and smoking.^{viii,ix}

Additionally, institutionalized populations (e.g. individuals in hospitals, prisons, nursing homes, mental health facilities, etc.) are not included in BRFSS. These populations may have higher rates of smoking than the general population, but would not be counted in overall prevalence estimates.

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- ⁱ Smoking Habits and Prevention Strategies in Low Socio-economic Status Populations. *National Network on Tobacco Prevention and Poverty*. Centers for Disease Control and Prevention, Office on Smoking and Health, 2004.
- ⁱⁱ Prochaska, James O. *Changing for good: the revolutionary program that explains the six stages of change and teaches you how to free yourself from bad habits*. New York: W. Morrow, 1994.
- ⁱⁱⁱ *You Can Quit Smoking: Consumer Guide*. U.S. Department of Health and Human Services, Public Health Service. June 2000.
- ^{iv} U.S. Department of Health and Human Services. *The Health Consequences of Involuntary Exposure to Tobacco Smoke: A Report of the Surgeon General*. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2006.
- ^v National Center for Health Statistics Definitions Web Page. 22 May 2007
www.cdc.gov/mill1.sitlibrary.org/nchs/data/wh/nchsdefs/ageadjustment.htm.
- ^{vi} "Turning Information into Health, Behavioral Risk Factor and Surveillance System." Center for Disease Control. 11 July 2007 www.cdc.gov/brfss/index.htm.
- ^{vii} Blumeberg SJ, Luke JV. "Wireless Substitution: Early release of estimates based on data from the national Health Interview Survey, July – December 2006." National Center for Health Statistics. 14 May 2007 www.cdc.gov/nchs/nhis.htm.
- ^{viii} Blumeberg et al. "Telephone Coverage and Health Survey Estimates: Evaluating the Need for Concern About Wireless Substitution." *American Journal of Public Health*. vol. 96, no. 5, May 2006.
- ^{ix} Nelson et al. "A Comparison of National Estimates from the National Health Interview Survey and the Behavioral Risk Factor Surveillance System." *American Journal of Public Health*. vol. 93, no. 8, August 2003.

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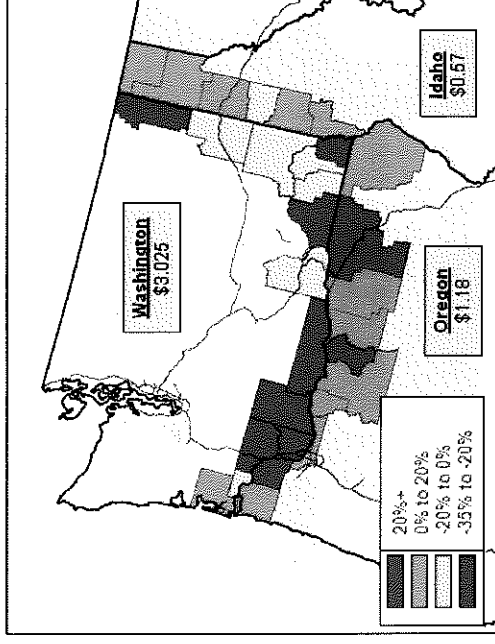
Washington Cigarette Excise Tax: Cross-Border Purchasing Impacts Retailers

Washington State's increase in state cigarette excise tax has hurt retailers in a time of economic difficulty. States should carefully weigh the effects an increase in the cigarette SET can have on retailers.

On May 1st 2010, Washington increased the cigarette SET by **\$1.00 to \$3.025**, an increase of **49%**. Due to this increase, Washington now has a higher cigarette SET than its two bordering states; Idaho and Oregon. The effect of this higher SET is that border counties within Washington have suffered a significant decline in cigarette sales volume which has hurt retailers.

73 weeks following SET increase vs. 73 weeks preceding SET increase¹

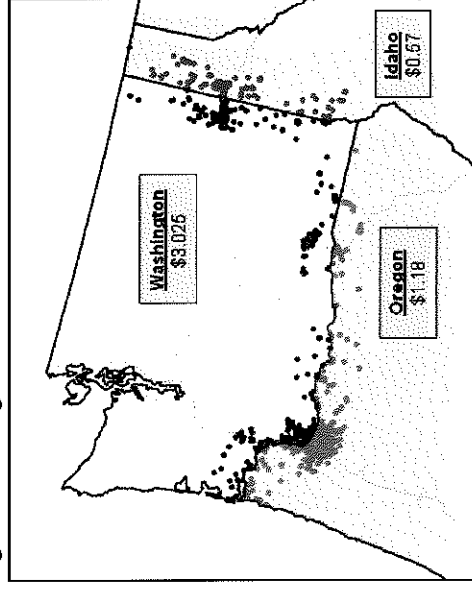
Border Counties	Volume Change (Packs in Thousands)	Volume Change (Percent)	Equivalent SET Revenue ²
Oregon (6)	13,182.7	+17.3%	\$15,555,619
Idaho (10)	3,840.1	+14.2%	\$2,188,868
Washington (14)	-10,210.8	-21.8%	(\$20,676,787)



There are **1,010** Washington retailers who sell cigarettes within 25 miles of the border.³ Many consumers make purchasing decisions based on the best price. The resulting price differentials between Washington and its neighbors could provide incentives for adult cigarette consumers to cross the border to buy cigarettes. This cross-border purchasing undermines the stability of this revenue source and may be harmful to retailers. The impact of this purchasing shift on retailers becomes even more pronounced when tobacco purchases are bundled with other products, such as gasoline and groceries.

- Retailers within Washington border counties saw an overall **decrease of 21.8%** in cigarette pack volume in the 17 months following the SET increase compared to the 17 months immediately preceding the increase.⁴

- According to the National Association of Convenience Stores, cigarette sales account for **35.9%** of total in-store sales for retailers⁵



^{1,3,4} ALCs STARS Database as of 10/29/2011

² SET Revenue calculated by Multiplying SET by change in number of packs. Note: for Washington, the SET Revenue is based on the pre-SET increase rate (\$2.025 per pack). This calculation does not consider any volume or SET revenues beyond the stated change in volume.

⁵ State of the Industry: Convenience Store Totals, Trends & Averages, NATIONAL ASSOCIATION OF CONVENIENCE STORES, 2010.



The Economic Impact of a \$1.00 per pack Oregon State Cigarette Tax Hike

A recent proposal would raise the Oregon state cigarette excise tax from \$1.18 to \$2.18 per pack. This tax would damage Oregonian retailers who depend on tobacco sales and put Oregonian jobs at risk. Cigarette revenues would rise from an estimated \$201 million in FY 2013 to about \$303 million in FY 2014 -- an increase of \$102 million.

- **Oregon retailers depend on tobacco sales.** Oregon stores sold approximately 173 million packs of cigarettes in FY2012 with a gross retail value of about \$945 million. Oregon merchants earned nearly \$160 million in gross profits on these sales.
- **Tobacco sales support Oregonian jobs.** Nearly 1,800 retailer and wholesaler jobs in Oregon were supported by in-state tobacco sales (based on estimated gross profits).
- **Tobacco sales have a magnified impact on C-Stores.** Nearly 66% of all tobacco sales occur in the nation's 148,126 C-Stores, according to a 2011/2012 National Association of Convenience Stores (NACS) study. The average C-store sells about \$674,000 worth of cigarettes and other tobacco products each year. These products are the top in-store sales item for such stores.
- **Oregon's 1,755 C- Stores sold an estimated \$625 million worth of cigarettes, with gross profits of nearly \$100 million in FY 2012.**
- **Tax Increases Threaten Retailers.** Cigarette volume is sensitive to state tax hikes. Oregon is next to low-tax Idaho (57¢). After a \$1.00 increase, the Oregon tax would be \$2.18/pack. Oregon consumers could save \$16.10 per carton in Idaho and smugglers could bring in \$91,000 per vanload. Large savings of \$13.10 per carton and \$13.80 per carton would be available in California (87¢) and Nevada (80¢) respectively. The tax hike would also reduce the large tax advantage Oregon retailers have over their counterparts in high-tax Washington (\$3.025).

Commercial Losses from a \$1.00 Oregon Cigarette Tax Increase

Oregon retailers along the Washington border are likely to be losers under the proposed tax change. In FY2012 Oregon tax-paid per capita sales (44.0 packs) were 116% greater than such sales in Washington (20.3 packs). This has occurred even though government statistics show that the adult smoking prevalence in Oregon (19.7%) is fairly close to the same measure in Washington (17.7%). This suggests that Oregon merchants sell a considerable amount of tobacco products to Washington consumers. Most likely the largest portion of such activity takes place in the relatively populous Portland-Vancouver area. A \$1 tax increase would imperil this advantage for Oregon merchants.

- **Oregon tax-paid cigarette sales are projected to fall by nearly 18% -- 31 million packs -- in the year after the tax hike.** A large part of this would be due to loss of competitive advantage with surrounding states. Oregon tax-paid sales fell by nearly 15% in the 2 years after a 60¢ tax hike in 2002.
- **The gross retail value of lost cigarette sales is estimated at approximately \$133 million (31 million packs evaluated at a pre-tax price of \$4.29 per pack).**
- **Sundry product sales, or products normally bought in conjunction with tobacco products, would fall by about \$40 million** (based on past estimates of this phenomenon by Price Waterhouse).
- **Gross profits lost to Oregon retailers and wholesalers would be about \$35 million.**
- **C-Stores are highly dependent on cigarette sales. C-Store cigarette sales would fall by 22 million packs.**
- **The average Oregon C-Store would lose about \$14,500 in gross profits from the decline in cigarette and sundry product cigarette sales.** This means each store would have to boost gross retail sales of other items by \$80,000 to make up for the damage wrought by the tax hike. Damages to C-Store would likely be larger than average along the borders.
- **It is estimated that about 320 Oregon retailer and wholesaler jobs could be displaced due to the tax increase (based on estimated gross profit losses).**

Discriminatory Taxation

- **The total tax burden on a pack of cigarettes would be extremely high in Oregon if the state cigarette tax is raised by \$1.00 per pack.** The Oregon cigarette excise tax would stand at \$2.18 per pack. In addition, Oregon also received Master Settlement Payments of about \$78.9 million in FY2012. This settlement tax adds another 50¢ per pack. The federal excise tax is now \$1.01. Add those taxes up and they total \$3.69 per pack or \$1,350 annually for a pack per day smoker.
- **It is important to realize that these high cigarette taxes would be aimed at the working man or blue collar worker in Oregon.** According to a 2005 BLS report, average annual expenditures on tobacco were \$582 per consumer unit for construction workers and mechanics, \$482 for operators and laborers, and \$377 for service workers. By contrast, tobacco expenditures for managers and professionals were \$251. In other words, construction workers are spending on average about 131% more than do professionals on tobacco. Clearly Oregon's high cigarette tax would be discriminating against blue collar workers¹. These results were complemented by a 2011 study where it was found that workers in

¹ "Tobacco Expenditures By Education, Occupation and Age," Consumer Expenditure Survey Anthology, Bureau of Labor Statistics, 2005.

mining, food services and construction had smoking prevalence rates that were more than double the rates found in professional services such as public administration, finance, management and education. Whether it's the state's intent or not, Oregon's cigarette taxes are discriminating against blue collar workers.²

² "Tobacco Expenditures By Education, Occupation and Age," Consumer Expenditure Survey Anthology, Bureau of Labor Statistics, 2005. See also, "Current Cigarette Smoking Prevalence Among Working Adults --- 2004-2010," MMWR, CDC, September 30, 2011.

**CIGARETTE TAX EVASION ESTIMATE - FY 2012
CIGARETTE TAX RATE - \$3.025 PER PACK**

The estimates below are determined by comparing WA taxable consumption to US consumption. The data are not detailed enough to quantify enforcement efforts.

Per Capita Estimates:	
U.S. Per Capita Consumption	53.2 packs
Washington Per Capita Consumption *	42.0 packs
Washington Taxable Consumption **	20.3 packs
Washington Per Capita Gap Estimate	<u>21.7 packs</u>
Washington Population	6.8 million
Total Washington Loss	147.9 million packs
Less: Military Sales ***	(15.8) million packs
Less: Indian Sales	
a. Compact and contract cigarettes	(30.0) million packs
b. Indian allotments not included above	(0.7) million packs
Loss from Evasion	101.4 million packs
Loss as a percent of total packs purchased	35.5%

Revenue Losses:	\$7.72 Tax Per Pack	Cost Per Pack	Revenues
	Cents	Cents	Millions
State Revenue Losses:			
State Cigarette Tax:	302.5		\$306.7
	<u>302.5</u>		<u>\$306.7</u>
Other State Excise Tax:			
Sales Tax 6.5%	50.2		50.9
Total	<u>352.7</u>		<u>\$357.5</u>
Local Revenue Loss:			
Local Sales Tax 2.41%	18.6		18.9
Total	<u>371.3</u>		<u>\$376.4</u>

* Assumes that Washington residents per capita consumption is 79% of the U.S. rate (2006 DOR Study).

** Taxable per capita consumption is based on the actual Fiscal Year 2012 sale of cigarette stamps.

*** Assumes 375,525 military and dependents consuming at the Washington per capita rate of 42.0 packs.