

Policy Brief – Comparing SSB 3145 and HF 2406 on Iowa’s Youth

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The state is considering two tax proposals: SSB 3145, which increases Iowa’s cigarette tax to \$2.01 and imposes a 15% tax on vapor products; and HF 2406, which increases cigarette taxes to \$2.86 and imposes a 50% tax on all non-combustible nicotine products. This brief models the expected changes in behavior for youth and young adults. The base model assumes a 60% whole sale share price, [with a conservative validated pass through rate of 100%](#). However, to model variation in expected share (40%-70%) and tax pass-through (90%-160%), a dynamic model to estimates the net effect of SSB 3145’s and HF 2406’s cigarette tax and vapor tax under uncertainty. The model did not consider revenue appropriation or illicit markets. Youth are defined as 10th to 12th grade students.

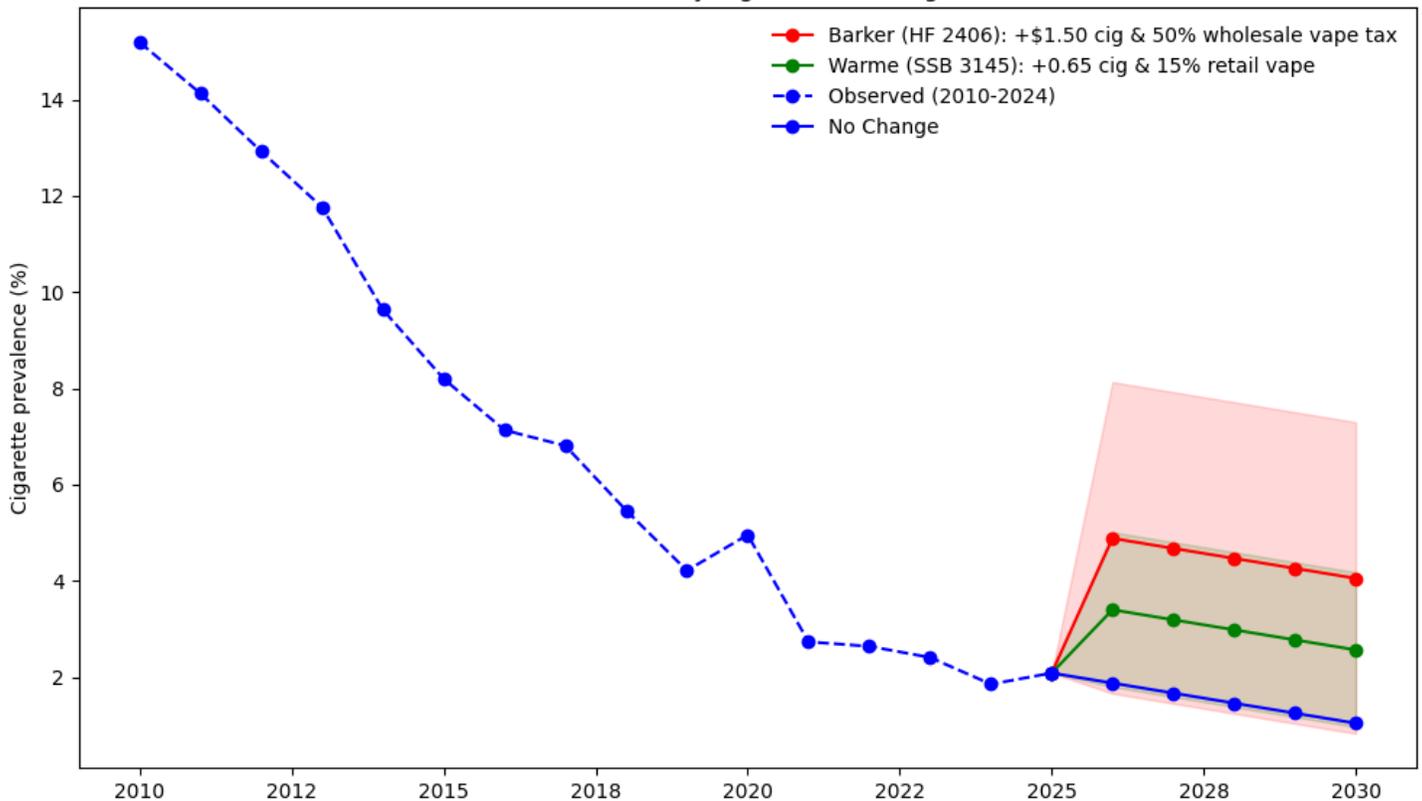
Unlike young adults, youth are less sensitive to cigarette taxes and are [unlikely to change behavior from either proposal’s cigarette tax increase](#). For youth, the key difference between the two proposals relates to the magnitude of the vape tax. In both proposals, there is a 98% probability that the vapor tax dominates the cigarette tax. For context, a cigarette tax +\$1 to +\$2 paired with a vape tax of 5 to 10% yields just a 10% probability that the effect of the cigarette tax dominates the effect of the vapor tax in youth.

Under SSB 3145, the vapor tax is projected to reduce daily vaping by 1.6 percentage points, but it is also projected to increase daily cigarette smoking by 0.8 percentage points. Modelling both the cigarette and vapor tax simultaneously, the net effect is a 1.5 percentage point increase in youth smoking rate. In projected counts, this corresponds to 4,084 additional daily smokers.

Under HF 2406, which imposes a much larger vapor tax increase, the effects are amplified: current daily vaping is projected to fall 2.8 percentage points, while current daily cigarette smoking rises by 2.5 percentage points. Modelling both the cigarette and vapor tax simultaneously, the net effect is a 3.0 percentage point increase in youth smoking rate. In projected counts, this corresponds to 7,656 additional daily smokers.

	SSB 3145	HF 2406
Cigarette Tax	+\$0.65	+\$1.50
Change in Vapor use from cigarette tax	+0.6 [-0.1 to 1.2]	+1.4 [-0.1 to 2.9]
Change in Smoking from cigarette tax	-0.1 [-0.3 to 0.1]	-0.3 [-0.7 to 0.2]
Vapor Tax	+15% price	+50% wholesale price
Change in Regular (Daily) Vapor Use	-1.6	-2.8
Change in Regular (Daily) Cigarette Smoking	+0.8	+2.5
Net Effect (dynamic)		
Change in Vapor use	-1.1 [-2.9 to 0.8]	-1.8 [-3.9 to 1.9]
Change in Smoking	+1.5 [-0.1 to 3.1]	3.0 [-0.2 to 6.3]
Projected Change in Number of Youth Smoking Cigarettes	4,084 [-7,403 to 15,639]	7,656 [-16,140 to 31,560]

Iowa Youth - Daily Cigarette Smoking Rate



Shaded region represents 95% confidence interval of the projection.

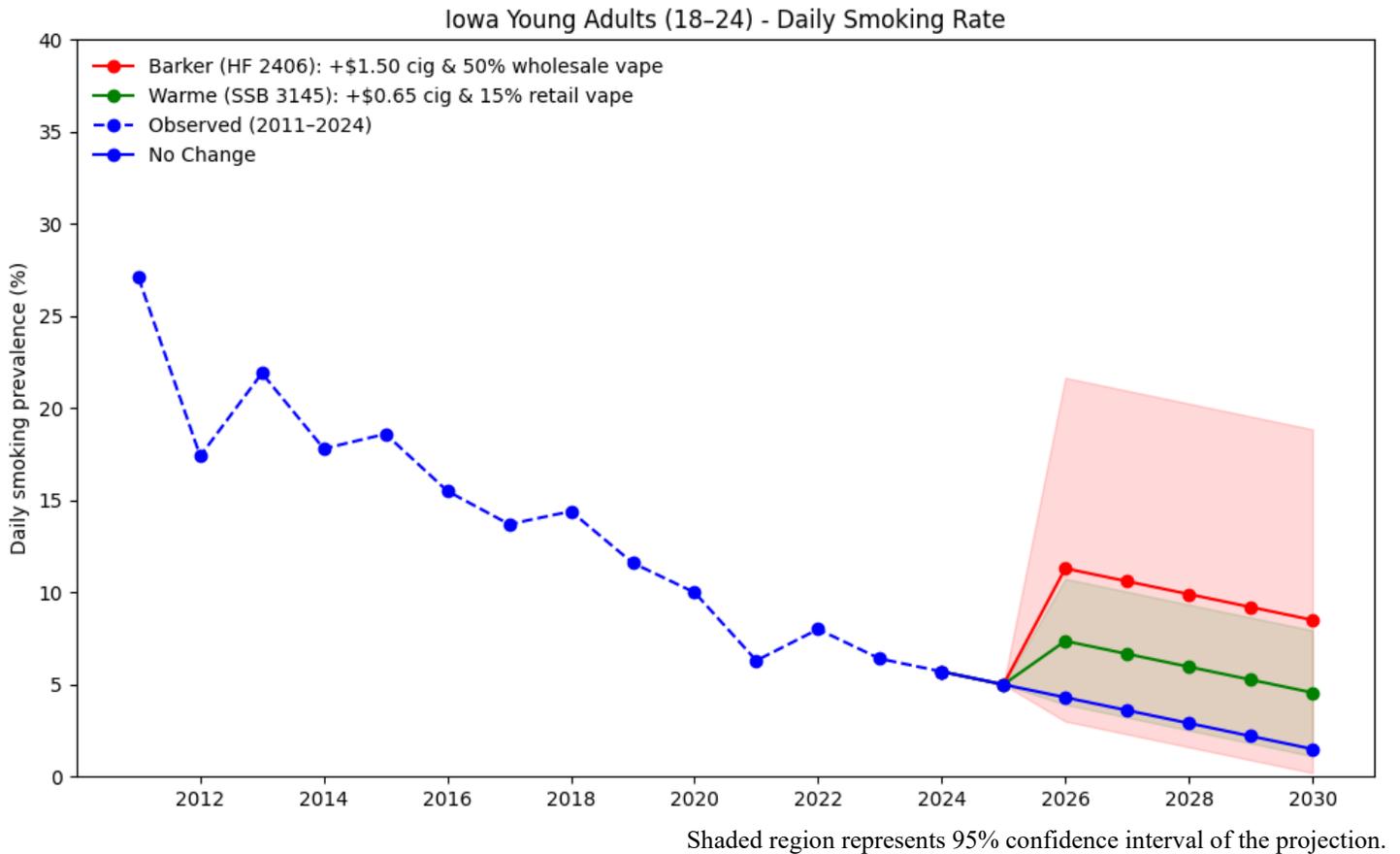
Policy Brief – Comparing SSB 3145 and HF 2406 on Iowa’s Young Adults (18-24)

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The young adult (YA) projections are based on policy evaluation [evidence](#) from leading tobacco-control economists. This brief’s model applies peer-reviewed estimates of how YA respond to price changes on real-world smoking prevalence rate data, then translates those responses into projected behavioral changes under each proposal.

Under both proposals, projected current cigarette smoking declines from the cigarette tax and increases points due to substitution effects from the e-cigarette tax. This yields a net increase in cigarette smoking. When modelling uncertainty of both the estimated effect and tax dynamics, both proposals have a 95% chance that the substitution effect from the vape tax dominates the effect of the cigarette tax. For HF 2406 specifically, the net gain in cigarette smoking increases with whole share of price, pass-through rate, and vape prices. While the model cannot rule out declines in smoking, the most likely scenario is that SSB 3145 adds 9,861 daily smokers while HF 2406 adds 22,588 daily smokers.

	SSB 3145	HF 2406
Cigarette Tax	+ \$ 0.65	+ \$1.50
Change in Daily Smoking from cigarette tax	-1.6	-3.3
Vapor Tax	+15% retail price	+50% wholesale price
Change in Daily Smoking from cigarette tax	+4.7	+9.4
Net Effect (base)	+3.1	+6.1
Net Effect (dynamic)	3.1 [-0.4, 6.4]	+7.0 [-1.3, 17.3]
Projected Change in Number of Smoking Cigarettes	9,861 daily smokers [-1,230 to 20,757]	22,588 daily smokers [-4,161 to 55,896]



The following policy options yield a proposal where the cigarette tax likely dominates the vapor tax effect for young adults:

Cigarette Tax Increase	Vapor Tax (on retail price)
\$0.50	5%
\$1.00	10%
\$2.00	15%