

The Economic and Fiscal Effects of Senate Bill 810's Flavor Ban

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OVERVIEW OF FINDINGS

The vapor product industry is an important part of Florida's economy. About \$543.1 million in vapor sales lead to 10,880 jobs and almost \$1.5 billion in economic activity. Of these 10,880 jobs:

- 2,976 are held by Floridians working for the 803 independent retail vape shops;
- 917 are held by Floridians working in 38 Florida manufacturing facilities;
- 1,460 are held by Floridians working in wholesale and other retail establishments (like convenience stores);
- 5,525 full-time-equivalent jobs in Florida depend on the manufacture, distribution and sale of vapor products in the state.

Based on independent vapor industry data, flavored vapor products account for about 85.7 percent of sales volume. Therefore, SB 810's ban on flavored vapor products will:

- Cause the unemployment of over 4,500 Floridians.
- Cause the loss of \$186.6 million on wages and benefits.
- Cause the loss of \$41.3 million in state tax revenue.
- Cause the Florida economy to lose \$605.6 million in economic activity.

More importantly, if Senate Bill 810 is signed into law, the independent vapor segment of the market would cease to exist in any meaningful way since the vast majority of the 803 independent small vape shops in the state would likely have to close. No business can continue to exist were it to lose almost 40 percent of its revenue.

BACKGROUND ON SENATE BILL 810

Senate Bill 810 recently passed the Florida legislature.¹ The bill, amongst other things, raises the age to purchase tobacco and vapor products in Florida to 21. However, 21 became the age to purchase tobacco and vapor products in Florida, and throughout the United States, last year when Congress passed and President Trump signed that provision into federal law on December 20, 2019.² Another major development in federal law is that on January 6, 2020, the FDA banned the sale of flavored vapor products sold in closed system devices because FDA had identified those products specifically as being used by youth. Senate Bill 810 would ban all flavors (except for tobacco and menthol) in those vapor products that are primarily sold through Florida's 803 vape shops and other specialty retailers.

OVERVIEW OF THE VALUE OF THE FLORIDA VAPOR INDUSTRY

The vapor product industry is an important part of Florida's economy. Nearly 10,880 jobs depend on the production and sale of vapor and electronic cigarette products. Those holding these jobs are paid nearly \$480.6 million in wages and benefits, while generating almost \$1.5 billion for the state's economy.³

¹ Florida Senate Bill 810, *Use of Tobacco Products and Nicotine Products*, Introduced November 6, 2019, at: <https://www.flsenate.gov/Session/Bill/2020/810/ByVersion>

² *Newly Signed Legislation Raises Federal Minimum Age of Sale of Tobacco Products to 21*, US Food and Drug Administration, Press Release, January 15, 2020, at: <https://www.fda.gov/tobacco-products/ctp-newsroom/newly-signed-legislation-raises-federal-minimum-age-sale-tobacco-products-21#:~:text=On%20Dec.,cigarettes%E2%80%94to%20anyone%20under%2021>.

³ *The Vapor Industry Economic Impact Study (2018)*, Prepared for Vapor Technology Association, by John Dunham & Associates, April 29, 2019.

Table 1
Economic Impact of Vapor Industry in Florida (2018)

	Direct	Supplier	Induced	Total
Jobs	5,353	2,164	3,361	10,878
Wages	\$ 198,112,400	\$ 128,582,400	\$ 153,886,700	\$ 480,581,500
Economic Impact	\$ 595,502,300	\$ 393,796,400	\$ 486,922,100	\$ 1,476,220,800

Of these, over 5,350 are direct industry jobs, including people working in the vapor product manufacturing and distribution chain, and most importantly, 2,976 jobs are at independent vapor retail stores, or vape shops.⁴ See Table 2.

Table 2
Breakdown of Independent Vapor Companies and Direct Jobs in Florida (2018)

	Jobs	Percent of Jobs	Facilities
Direct Jobs	5,353	100.0%	N/A
Vape Shop Jobs	2,976	55.6%	803
Manufacturing Jobs	917	17.1%	33
Other Wholesaling and Retailing Jobs	1,460	27.3%	N/A

ECONOMIC EFFECTS OF A BAN ON FLAVORED VAPOR PRODUCT SALES

Flavored products make up a substantial share of the market. While studies funded by the federal government have estimated that flavored products do not constitute a significant part of the market, this assumption is based on limited scanner data collected mostly from convenience store and grocery store sales which do not tend to sell open system (or liquid) vapor products.

Table 3
Estimates of Current Market Share of Vapor Product Sales by Flavoring

	Flavored	Menthol	Tobacco	Total
Current Market Share	79.4%	10.8%	9.7%	100.0%

Table 3 presents data based on a survey of the 3 largest distributors in the independent vapor distribution chain which show that 79.4 percent of sales are of flavored vapor products, and just 10.8 percent are menthol flavors, 9.7% are tobacco flavors.⁵ These data should be more representative of the total market than scanner data (which are discussed below) since well more than half of all vapor sales are of open-systems (or e-liquids), and are made at dedicated vapor and tobacco retailers.

Using these breaks, were the state government to ban flavored products, the immediate loss would be 37.8 percent of retail sales. Were this to occur, adults who prefer these products will react in one of four ways. They could:

- Stop vaping altogether or switch to another tobacco product;
- Switch to vaping menthol and tobacco flavored products;
- Continue to vape flavored products but purchase them from other jurisdictions not subject to Florida laws including other states, other countries (e.g. the Bahamas) or Native American reservations; or

⁴ Ibid.

⁵ Survey data reported from three major distributors and a total of 5 business units. Weighted average results, weighted by dollar sales. Data were provided under a guarantee of confidentiality of individual firm reporting.

- Continue to vape flavored products but purchase them over the black market or make flavored products at home.

Detailed modeling suggests that a large portion of consumers would react by purchasing unregulated products from other jurisdictions and over the black market, or make their own flavored e-liquids. This differs from government sponsored research, published by the National Bureau of Economic Research (NBER) concludes that were all flavors (including menthol) to be banned, there would be a large shift toward tobacco flavored products.⁶

The NBER research estimates that flavored products do not constitute a significant part of the market. This assumption, however, is based on limited scanner data collected mostly from convenience store and grocery store sales which do not tend to sell open system (or liquid) vapor products. These data are reported in research conducted by the Centers for Disease Control and Prevention and report that about 10.2 percent of the analyzed vapor products were flavored, roughly 37 percent were menthol, and the remaining 52.8 percent were tobacco flavored.⁷ This essentially reflects chain retailer sales of closed vapor systems (so-called e-cigarettes) over the period from 2012 to 2016. The Nielsen data that this research relies on comes from contracted retailers' scanner systems.

However, the vast majority of vape shops, and tobacco shops would not be included in the data. Based on the CDC paper, about 52.2 percent of open systems (e-liquid) product sales were flavored, while 25.2 percent were menthol. Most tobacco stores and specialized vape shops focus more on e-liquid sales than do the conventional chain stores that are included in the Nielsen data. This suggests that the analysis performed here is extremely conservative since conventional retailers represent only about half of the market for vapor products.

Table 4
Projected Losses Across Segments Under SB 810's Flavored Vapor Product Ban

	Flavored	Menthol	Tobacco	Total
Current Share	79.4%	10.8%	9.7%	100.0%
Post Ban Share	0.0%	51.4%	48.6%	100.0%
Current Sales	\$364,184,000	\$93,852,000	\$85,049,000	\$543,085,000
Post Ban Sales	\$0	\$172,891,000	\$164,720,000	\$337,611,000

Based on a demand analysis, and using the product breaks from vapor retailers, if Governor DeSantis were to sign SB 810 and ban the sale of flavored vapor products, the impact on the Florida economy would be nearly \$605.6 million, with as much as \$205.5 million in direct sales losses.⁸

Table 5
Economic Impact of Lost Sales Under SB 810's Flavored Vapor Product Ban

	Direct	Supplier	Induced	Total
Jobs Lost	(2,277)	(920)	(1,306)	(4,503)
Wages Lost	\$ (72,154,000)	\$ (54,707,000)	\$ (59,757,000)	\$ (186,618,000)
Economic Impact	\$ (248,925,000)	\$ (167,546,000)	\$ (189,081,000)	\$ (605,552,000)

⁶ Buckell, John, et. al., *Should Flavors Be Banned In E-Cigarettes? Evidence On Adult Smokers And Recent Quitters From A Discrete Choice Experiment*, NBER Working Paper 23865, at: <http://www.nber.org/papers/w23865>.

⁷ Kuiper, Nicole, et. al., *Trends in Unit Sales of Flavored and Menthol Electronic Cigarettes in the United States, 2012–2016, Preventing Chronic Disease*, August 23, 2018.

⁸ Throughout this analysis the term *flavored* means all flavorings other than tobacco, mint and menthol, while the term menthol includes mint. Sales is economic output by producers, wholesalers and retailers. It is equal to retail sales less consumption taxes (sales taxes, excise taxes), and adjusted for inventory fluctuations.

Table 4 on the prior page outlines the expected sales changes under this scenario where 37.8 percent of vapor product sales would be lost.

Thus, even with menthol exempted, passage of Senate Bill 810 will lead to the loss of about 4,503 jobs in Florida, and a \$605.5 billion dollar hit to the Florida economy (Table 5 on the prior page).

Table 6
Economic Impact of SB 810 on Jobs, Wages, Output, and Tax Revenue

	Jobs (lost)	Wages (lost)	Consumption Tax Revenue (lost)	Total State Tax Revenue (lost)	Economic Output (lost)
2018 FL Vapor Metrics	10,878	\$720,491,000	\$30,740,651	\$113,587,535	\$1,476,220,000
Estimated FL Vapor Metrics	10,779	\$474,975,000	\$30,741,000	\$112,830,000	\$1,453,969,000
Losses From New Federal Laws	(2,350)	(\$103,638,000)	(\$4,554,000)	(\$22,454,000)	(\$316,863,000)
Losses From State Flavor Ban	(4,503)	(\$186,619,000)	(\$7,077,000)	(\$41,303,000)	(\$605,551,000)
% Change Following State Ban	-53.4%	-50.3%	-27.0%	-45.7%	-53.3%

Table 6 above shows the impact of the taxes and regulations that have been put on the industry to date. Already, new federal restrictions on the sale of vapor products have led to the loss of about 2,350 jobs in Florida, while taxes and flavor bans in other states have reduced jobs in Florida by about 100 (due to less manufacturing activity).

A flavor ban in the state will have an even more dramatic impact. In addition to the loss of an additional 4,500 full-time equivalent jobs, a flavor ban will cost the state nearly \$41.3 million in revenues.

Table 7
Detailed Economic Impact of SB 810 on State and Local Revenue Sources

Tax Name	2020 Estimate	Flavor Ban Impact	New Estimate
Product Sales Tax	\$26,187,000	(\$6,982,000)	\$19,205,000
Corporate Profits Taxes	\$1,607,000	(\$855,000)	\$752,000
Dividends	\$184,000	(\$98,000)	\$86,000
Licenses	\$5,886,000	(\$3,131,000)	\$2,755,000
Property Taxes	\$22,227,000	(\$11,824,000)	\$10,403,000
Indirect Sales Taxes	\$29,533,000	(\$15,711,000)	\$13,822,000
Other Taxes	\$4,751,000	(\$2,528,000)	\$2,224,000
Business Taxes Subtotal	\$64,189,000	(\$34,147,000)	\$30,042,000
Total	\$90,376,000	(\$41,129,000)	\$49,247,000

As sales losses in Florida will reach over \$116.3 million dollars, there will be a substantial decline in collected sales tax revenue, amounting to a nearly \$7.0 million dollar loss for the state. The bulk of the losses however, will come from declines in business tax collection, tied primarily to industry output. Dropping 53 percent, this fall in output leads to an over \$34.1 million decline in business tax revenue, with the bulk of the losses coming from a nearly \$11.9 million drop in property tax revenue and over \$15.7 million drop in indirect sales taxes, that is sales taxes paid for operations within the vapor industry.

With the total impact working out to an over \$41.1 million loss in tax revenue, in an industry already reeling from the effects of federal regulations, and in a state suffering from the economic losses created by the ongoing pandemic, SB 810 would create a lose-lose scenario for small business owners and the state government alike.

⁹ Tax figures include state consumption and business tax revenues but do not account for local sales taxes, which vary from 0% to 2% depending on jurisdiction.

¹⁰ Due to rounding adjustments made to the model, figures in this table may differ from the above table by 0.2 percent.