

## REPORT

To: Vapor Technology Association  
From: John Dunham  
Date: March 4, 2024  
Re: SB1006 and HB 1007's De Facto Vapor Ban Will Decimate Florida Small Businesses

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### OVERVIEW OF FINDINGS

The vapor product industry is an important part of Florida's economy. About \$1.4 billion in vapor sales lead to 7,440 jobs and almost \$1.3 billion in economic activity.<sup>1</sup> Of these 7,440 jobs:

- 2,471 are held by Floridians working for the 774 independent retail vape shops;
- 369 are held by Floridians working in 13 Florida manufacturing facilities;<sup>2</sup>
- 691 are held by Floridians working in wholesale and other retail establishments (like convenience stores); and
- Nearly 3,910 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 in Florida currently account for about 82.5 percent of sales volume. Therefore, a ban on flavored vapor products alone will:

- Cause the unemployment of nearly 5,230 Floridians.
- Cause the loss of \$267.5 million in wages and benefits.
- Cause the loss of \$87.2 million in state tax revenue.
- Cause the Florida economy to lose \$902.0 million in economic activity.

More importantly, if the *de facto* ban proposed in these bills 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 774 independent small vape shops in the state would likely have to close. No business can continue to exist were it to lose nearly all of its revenue.

Based on an analysis conducted by JDA, and using the product breaks from vapor retailers, if Governor DeSantis were to sign this legislation and effectively ban the sale of vapor products, it would:

- Cause the unemployment of nearly 6,237 Floridians.
- Cause the loss of \$319.1 million in wages and benefits.
- Cause the loss of \$149.9 million in state tax revenue.
- Cause the loss of \$845.4 million in direct sales revenue.<sup>3</sup>
- Cause the Florida economy to lose \$1.08 billion in economic activity.

### BACKGROUND ON SENATE BILL 1006 AND HOUSE BILL 1007

These two bills are under consideration in the Florida legislature.<sup>4</sup> The bills, amongst other things, require producers of nicotine vapor products to affirm that their products were being marketed as of August 8,

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<sup>1</sup> As of 2023, *The Vapor Industry Economic Impact Study (2023)*, Prepared for Vapor Technology Association, by John Dunham & Associates, February 2024.

<sup>2</sup> Note that this does not include vape shops the also manufacture of blend products.

<sup>3</sup> 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.

<sup>4</sup> Florida Senate Bill 1006, *Nicotine Products and Dispensing Devices*, Introduced December 19, 2023, at: <https://www.flsenate.gov/Session/Bill/2024/1006/?Tab=BillText>, and Florida House Bill 1007, *Nicotine Products and*

2016, or have been marketing order under 21 U.S.C. s. 387j from the FDA. To date, the FDA has granted marketing orders for a handful of tobacco-flavored closed-system vapor products, but no marketing orders for any menthol-flavored or other flavored closed or open system e-liquids or any open system devices (that do not contain e-liquids). In fact, FDA states that it has reviewed applications for more than 26 million products and has denied 99% of them. This is despite the fact that as of December 20, 2019, these products can only be sold to adults over 21 years of age in the United States.<sup>5</sup> Another major development in federal law is that on January 6, 2020, the FDA banned the sale of flavored vapor products sold in pod and cartridge closed system devices because FDA had identified those products specifically as being used by youth.<sup>6</sup> SB 1006 / HB 1007 would effectively ban the sale of all vapor products, save for the 7 that have been approved by the FDA.<sup>7</sup> This includes all of the vapor products that are primarily sold through Florida's 774 independent vape shops as well as other vapor retailers, and products that are manufactured in Florida and distributed through Florida businesses.

**OVERVIEW OF THE VALUE OF THE FLORIDA VAPOR INDUSTRY**

The vapor product industry remains an important part of Florida's economy. Our recently completed economic impact model of the vapor industry shows that, as of 2023, the vapor industry generates almost \$1.3 billion for the Florida economy. Nearly 7,440 full-time equivalent (FTE) jobs depend on the production and sale of vapor and electronic cigarette products. Floridians employed with these jobs are paid nearly \$404.8 million in wages and benefits.<sup>8</sup>

**Table 1**  
**Economic Impact of Vapor Industry in Florida (2023)**

	Direct	Supplier	Induced	Total
Jobs	3,530	1,705	2,203	7,438
Wages	\$ 155,543,616	\$ 119,592,920	\$ 129,620,454	\$ 404,756,990
Economic Impact	\$ 504,767,216	\$ 373,269,422	\$ 407,514,446	\$ 1,285,551,083

Of these, over 3,530 are direct industry jobs, including people working in the vapor product manufacturing and distribution chain, and most importantly, 2,471 jobs are at independent vapor retail stores, or vape shops.<sup>9</sup> See Table 2.

**Table 2**  
**Breakdown of Independent Vapor Companies and Direct Jobs in Florida (2023)**

Category	Jobs	Percent of Jobs	Facilities
Vape Shop Retail	2,471	70.0%	774
Manufacturing	369	10.5%	13
Other Wholesaling and Retailing	691	19.6%	N/A
Total Direct Industry	3,531	100.0%	N/A

*Dispensing Devices*, Introduced December 22, 2023, at:

<https://www.myfloridahouse.gov/Sections/Bills/billsdetail.aspx?BillId=79657>

<sup>5</sup> *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>.

<sup>6</sup> Since 2019, per the CDC, the youth vaping rate in the U.S. has dropped 60%, returning to pre-2014 levels.

<sup>7</sup> McDonald, Jim, *About FDA's New "Authorized E-Cigarette" List...*, Vaping360.com, September 20, 2023, at: <https://vaping360.com/vape-news/126330/about-fdas-new-authorized-e-cigarette-list/>

<sup>8</sup> *The Vapor Industry Economic Impact Study (2024)*, Prepared for Vapor Technology Association, by John Dunham & Associates, February 2024.

<sup>9</sup> *Ibid.* This does not include jobs lost to those in convenience stores, gas stations, tobacco stores or other retailers selling vapor products.

**ECONOMIC EFFECTS OF A DE FACTO BAN ON VAPOR PRODUCT SALES**

Flavored products make up a substantial share of the market, and only 7 products have been granted marketing orders by the FDA. 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 stores and grocery stores which do not tend to sell open system (or liquid) vapor products. Our analysis factors in data on the independent vaping industry not typically captured by other estimates.

**Table 3**  
**Estimates of Current Market Share of Vapor Product Sales by Flavoring (Volume ml)**

Flavored	Tobacco	Total
82.5%	17.5%	100.0%

Table 3 presents data based on a survey of 4 of the largest distributors in the independent vapor distribution chain which show that 82.5 percent of sales are of flavored or menthol vapor products, while just 17.5 percent are tobacco (or no) flavors.<sup>10</sup> 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 made at dedicated vapor and tobacco retailers.

Using these breaks, were the state government to ban flavored products, the immediate loss would be 82.5 percent of retail sales in volume terms. Were this to occur, adults who prefer these products will react in one of four ways. They could:

- Stop vaping altogether or switch to smoking cigarettes or other combustible products;
- Switch to vaping tobacco flavored products;
- Continue to vape flavored products but purchase them over the black market;
- Continue to vape flavored products by making them at home with do-it-yourself kits;
- 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

JDA’s 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, which suggest that a ban on all flavors (including menthol) would simply shift sales toward tobacco flavored products.<sup>11</sup> This research, however, relies on data from chain retailer sales of closed vapor systems (so-called e-cigarettes) over the period from 2012 to 2016.<sup>12</sup>

**Table 4**  
**Projected Losses Across Segments Under Flavored Vapor Product Ban (Dollar Sales)**

	Flavored	Tobacco	Total
Current Share	82.5%	17.5%	100.0%
Post Flavor Ban Share	15.8%	84.2%	100.0%
Current Sales	\$ 1,165,249,430	\$ 247,535,784	\$ 1,412,785,214
Post Ban Sales	\$ 89,643,091	\$ 477,718,247	\$ 567,361,338

<sup>10</sup> Survey data reported from four major distributors and a total of 6 business units. Weighted average results. Data were provided under a guarantee of confidentiality of individual firm reporting.  
<sup>11</sup> 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>.  
<sup>12</sup> 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.

However, the vast majority of vape shops, and tobacco shops would not be included in the data. Based data from the CDC, about 52.2 percent of open systems (e-liquid) product sales were flavored, while 25.2 percent were menthol.<sup>13</sup> Most tobacco stores and specialized vape shops focus more on flavored e-liquid sales than do conventional chain stores.

Were the ban to include the bulk of tobacco flavored products, the results would be even more devastating, and would essentially eliminate all but the manufacturing sector of vapor products currently operating in Florida.

Table 4 on the prior page outlines the expected sales changes under this scenario where 59.8 percent of vapor product sales in dollar terms would be lost.<sup>14</sup> Interestingly some of the loss in flavored vapor sales would be offset by increases in the sale of more expensive closed-system products and, perhaps more importantly, cigarettes.<sup>15</sup> A recent study funded by the Federal government, found that in every state and local jurisdiction which banned vaping products, cigarette sales increased by a factor of 15 cigarettes for every 0.7 ml of e-liquid banned.<sup>16</sup>

**Table 5**  
**Economic Impact of Lost Sales Under De Facto Vapor Product Ban**

	Direct	Supplier	Induced	Total
Jobs Lost	(3,034)	(1,465)	(1,737)	(6,237)
Wages Lost	\$ (114,175,090)	\$ (102,784,997)	\$ (102,212,761)	\$ (319,172,848)
Economic Impact	\$ (433,825,823)	\$ (320,809,096)	\$ (321,347,252)	\$ (1,075,982,171)

Based on an analysis conducted by JDA, and using the product breaks from vapor retailers, if the legislature were to pass and Governor DeSantis were to sign this legislation and effectively ban the sale of vapor products, the adverse impact on the Florida economy would be nearly \$1.1 billion, with \$845.4 million in direct sales losses.<sup>17</sup>

Thus, even with the limited exemptions for 7 products, passage of this legislation will lead to the loss of about 6,240 jobs in Florida and a \$1.1 billion dollar hit to the Florida economy (Table 5).

Table 6 on the following page shows the impact of the state taxes and rampant federal regulations that have been placed on Florida's industry to date. Since 2018, government restrictions on the sale of vapor products led to the loss of about 3,440 FTE jobs in Florida.

This year, a flavor ban in Florida will have an even more dramatic impact. In addition to the loss of about 5,230 additional FTE jobs, a flavor ban will cost the state nearly \$87.2 million in revenues due to lower sales taxes and reduced personal and business taxes resulting from the loss of economic activity.<sup>18</sup>

<sup>13</sup> Ibid.

<sup>14</sup> Volume sales are expected to fall by 74.8 percent, with much of the loss in flavored open-system liquids moving to more expensive closed system devices.

<sup>15</sup> It should be noted that some segment of flavored vapor product sales would continue as Florida retailers currently sell significant amounts of vapor products to consumers in other states, through the internet. It is assumed that these sales would continue.

<sup>16</sup> Friedman, et al., *E-cigarette Flavor Restrictions' Effects on Tobacco Product Sales*, February 1, 2024, at [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=4586701](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4586701) (publication pending).

<sup>17</sup> 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.

<sup>18</sup> Note that only state sales taxes are included in this figure, not additional local option levies.

However, the *de facto* vaping ban represented by SB 1006 and HB 1007 on virtually all vapor products would be even more harmful, with a loss of almost 6,240 FTE jobs, and about \$149.9 million in state and local taxes.

**Table 6**  
**Economic Impact of De Facto Ban on Jobs, Wages, Output, and Tax Revenue**

	Jobs	Wages	Consumption Tax Revenue	Total State Tax Revenue	Total Economic Output
2018 Florida Vapor Industry	10,878	\$480,581,000	\$30,740,651	\$113,587,535	\$1,476,220,000
2020 Florida Vapor Industry (impacted by federal/state laws)	8,429	\$371,337,000	\$26,187,000	\$90,376,000	\$1,137,106,000
2023 Florida Vapor Industry (impacted by COVID-19 & increased regulations)	7,437	\$404,757,000	\$79,969,000	\$166,678,157	\$1,285,551,000
<b>Losses from Flavor Ban</b>	<b>(5,228)</b>	<b>(\$267,546,707)</b>	<b>(\$26,332,300)</b>	<b>(\$87,171,275)</b>	<b>(\$901,999,645)</b>
<b>% Change from Flavor Ban</b>	<b>-70.30%</b>	<b>-66.10%</b>	<b>-32.93%</b>	<b>-52.30%</b>	<b>-70.16%</b>
<b>Losses from Total Ban</b>	<b>(6,237)</b>	<b>(\$319,172,848)</b>	<b>(\$77,294,000)</b>	<b>(\$149,867,928)</b>	<b>(\$1,075,982,171)</b>
<b>% Change from Total Ban</b>	<b>-83.86%</b>	<b>-78.86%</b>	<b>-96.66%</b>	<b>-89.91%</b>	<b>-83.70%</b>

To be clear, a ban on vapor products in Florida, will not only result in the closure of nearly 800 small businesses spread throughout Florida,<sup>19</sup> but also will significantly impact state and local revenues through reduced collections of sales, property, and other business taxes. The tax losses Florida will suffer are summarized in Table 7 below.

**Table 7**  
**Impact of De Facto Ban on State and Local Revenue Sources**

	2023 Estimate	Lost Revenue	Projected Revenue	Percent Loss
Product Consumption Taxes	\$79,969,000	(\$77,294,000)	\$2,675,000	-96.70%
Indirect Sales Taxes	\$42,645,900	(\$35,693,800)	\$6,952,100	-83.70%
Sales Tax Subtotal	\$122,614,900	(\$112,987,800)	\$9,627,100	-92.10%
Corporate Profits Taxes	\$1,021,500	(\$855,000)	\$166,500	-83.70%
Licenses	\$541,700	(\$453,400)	\$88,300	-83.70%
Property Taxes	\$31,673,500	(\$26,510,100)	\$5,163,400	-83.70%
Other Taxes	\$10,826,600	(\$9,061,700)	\$1,764,900	-83.70%
Business Taxes Subtotal	\$44,063,300	(\$36,880,200)	\$7,183,100	-83.70%
Total	\$166,678,200	(\$149,868,000)	\$16,810,200	-89.90%

With vapor sales losses in Florida reaching over \$845.4 million dollars,<sup>20</sup> there will be a substantial 96.7 percent (\$77.3 million) decline in state sales tax revenue collected from these products. Added to this would be a decrease of over \$35.7 million in state sales taxes as a result of reduced spending on the part of

<sup>19</sup> By banning the primary product sold by small business vape stores, most or all of those businesses will be forced to close.

<sup>20</sup> This loss represents a net change in sales, accounting for shifts in consumer preferences from flavored to unflavored or menthol products. The model estimates that the majority of consumers will not cease or reduce usage, but instead shift to purchasing from the black market, or outside the state's jurisdiction, such as out of state or other areas exempt from state taxation such as military bases.

businesses and employees who lose their jobs as a result of the ban. This means that the total sales tax loss to the state would be almost \$113.0 million.<sup>21</sup>

Sizable additional revenue losses will come from declines in taxes collected from businesses, including the 774 specialty vape shops currently operating in the state. An expected 78.5 percent reduction in sales translates to a decline over of \$36.9 million in other business tax revenue, with the bulk of the losses coming from a \$26.5 million drop in local property tax revenue and nearly \$900,000 in reduced taxes on corporate profits at both the state and local levels.<sup>22</sup>

The overall fiscal impact from a de facto ban would be a reduction of over \$149.9 million in lost in state and local tax revenue, within a market sector already reeling from the effects of draconian federal regulations.<sup>23</sup>

### **BACKGROUND ON JOHN DUNHAM & ASSOCIATES**

John Dunham & Associates is a econometric analysis firm based in Florida. Mr. Dunham resides in Florida. Since 2018, John Dunham & Associates (JDA) has analyzed the economic impact of the vapor product industry in the U.S. at the national and state level and has projected, tracked and reported on the adverse economic impact of federal and state regulations on the independent vaping industry. In July 2020, JDA provided the Florida EDR Revenue Estimating Conference an analysis of the adverse impact that would have been caused had SB 810 been signed into law in 2020.

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<sup>21</sup> Note that this figure does not include any local sales taxes.

<sup>22</sup> Business taxes derived from IMPLAN, an input-output impact model. For more information visit: <https://www.implan.com/>

<sup>23</sup> It cannot be assumed that the economic impact from this bill, including sales tax revenue losses, would be recaptured elsewhere in Florida as consumers switch from vaping to either other forms of nicotine or to purchases of other products. That argument assumes that all goods and services are perfectly interchangeable. While there are substitutes for flavored vapor products, if consumers wish to use them, they would already be purchasing them. By definition, anything other than a flavored vapor product would be considered an imperfect substitute by consumers. Imperfect substitutes have a lesser level of substitutability, and therefore exhibit variable marginal rates of substitution by consumers. In this case, a consumer who prefers a flavored vapor product will not be willing to exchange that for another product and may either consume less overall or find another source for the good that they want. Consider colas. As the price of Coca-Cola rises, consumers could be expected to substitute Pepsi. However, consumers who prefer one brand over the other will not trade between them one-to-one. Rather, a consumer who prefers Coca-Cola may not be willing to exchange more Pepsi for less Coca-Cola.