

Monitoring U.S. E-Cigarette Sales: *State Trends*

This data brief highlights trends in e-cigarette unit sales in selected states. Data is presented from January 2018 through October 2022.

- **Notice of Revision to Previous Data Estimates**

- The data in this brief have been updated to capture new e-cigarette products coded by IRI. Historical sales estimates may differ from previous briefs.

- **Federal Flavor Regulatory Initiatives**

- The U.S. Food and Drug Administration (FDA) issued an enforcement policy, effective February 2020, prohibiting the sale of flavored prefilled e-cigarette cartridges, which does not apply to tobacco-and menthol-flavored prefilled cartridges, e-liquids, or single use disposable products.
- FDA began issuing marketing denial orders for flavored e-cigarette products as of September 9, 2021. However, final marketing orders have not been issued for products making up at least two-thirds of the e-cigarette market.
- On April 15, 2022, FDA was granted authority to regulate products containing nicotine from any source, including synthetic nicotine produced in a laboratory.
- In April 2022, FDA issued a proposal to eliminate menthol cigarettes and flavored cigars.

- **Other Relevant Issues**

- The e-cigarette or vaping product use-associated lung injury (EVALI) outbreak in late 2019 and COVID-19 pandemic may have affected e-cigarette sales.
- During the period, additional flavored tobacco products continued to be marketed, such as flavored cigars; or entered the market, such as nicotine pouches.
- Units of e-cigarettes are not adjusted to account for variations in unit size. Large-format disposable e-cigarettes that allow for thousands of “puffs” are now available. Declines in unit sales may not signify declines in prevalence of use or consumption.

- **State and Local Legislative Initiatives**

- As of December 2022, five states (Massachusetts, New York, New Jersey, Rhode Island, and California) have passed laws prohibiting the sale of all non-tobacco flavored e-cigarettes and two states (Maryland, Utah) restrict the sale of some flavored e-cigarettes. In addition, over 360 local jurisdictions enacted laws that restrict the sale of flavored e-cigarettes.
- More information about state and local policies can be found on the [Truth Initiative’s website](#).

States Presented in the Data Brief

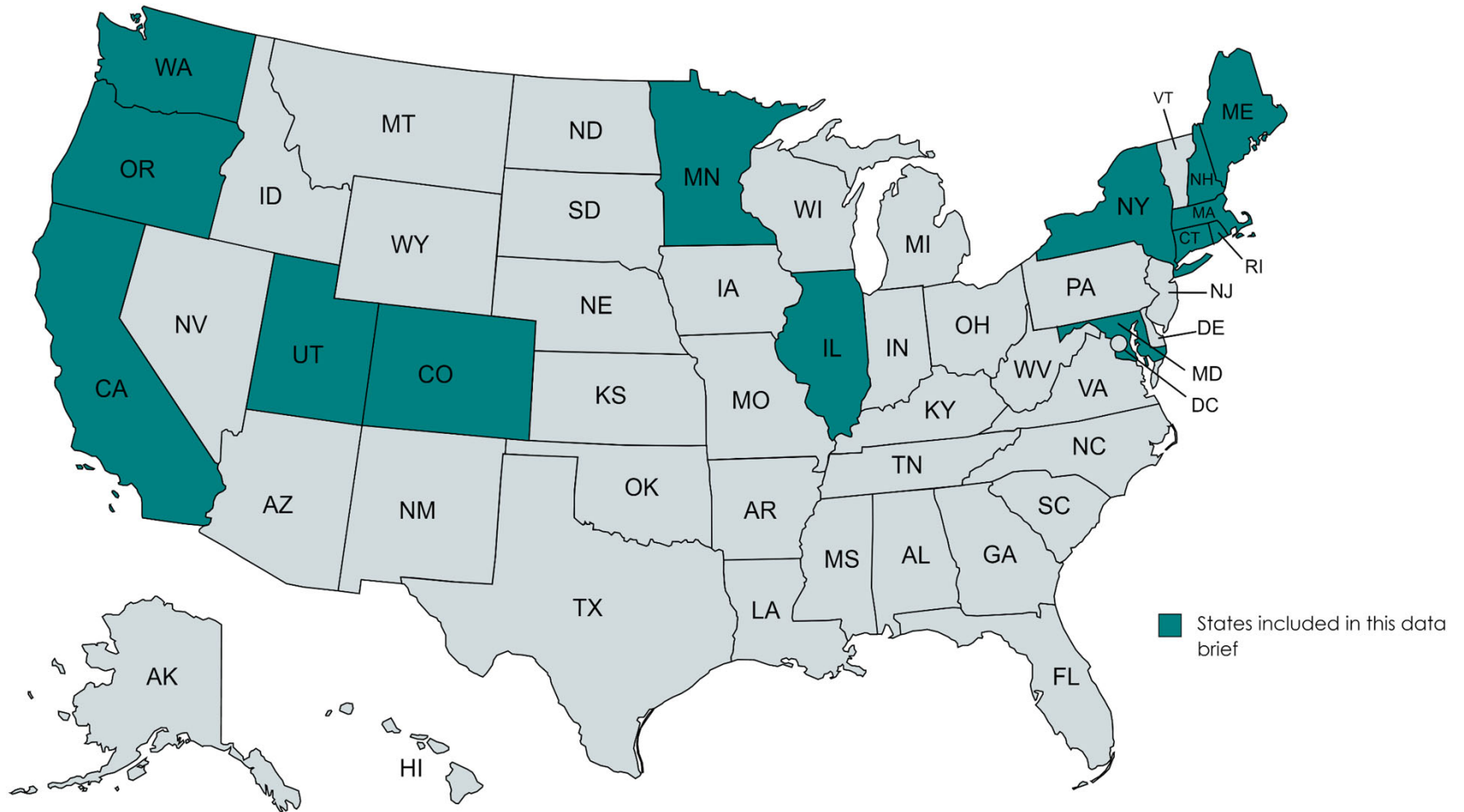
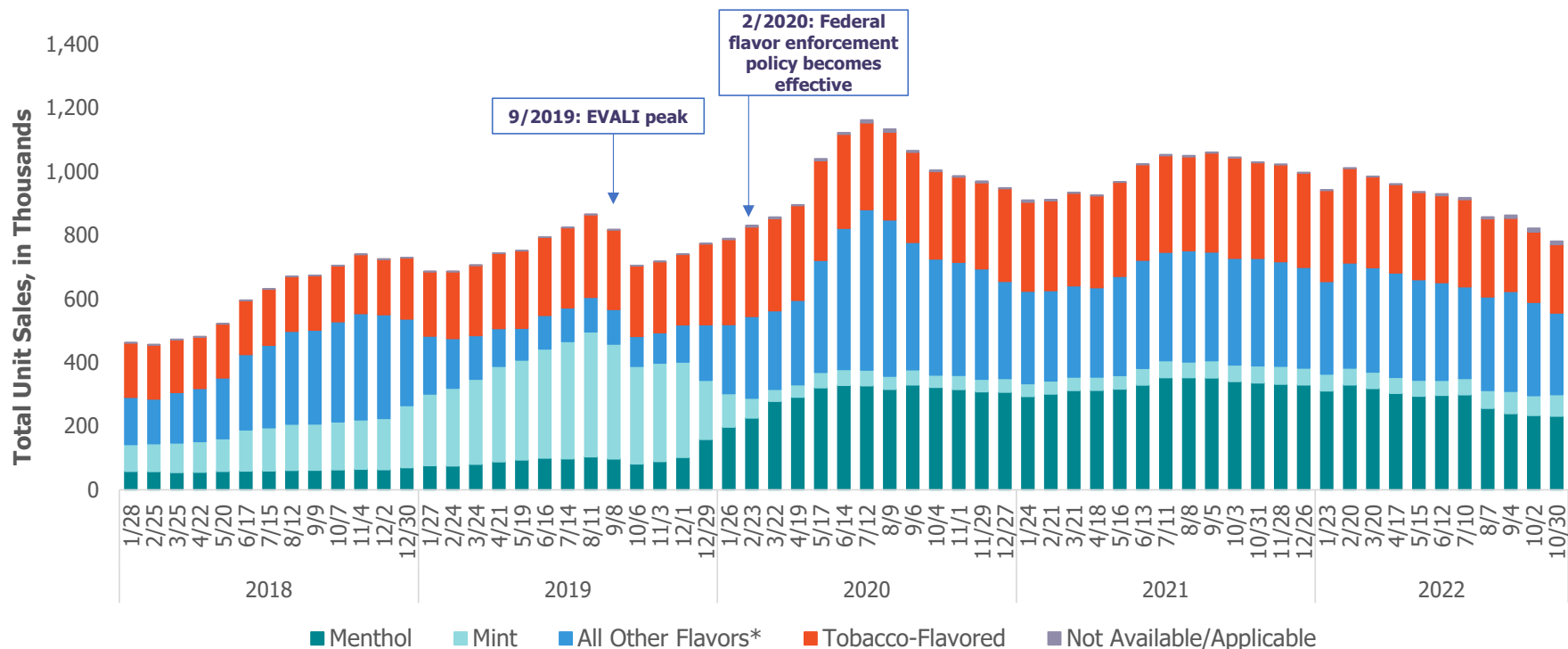


Figure 1. California E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*

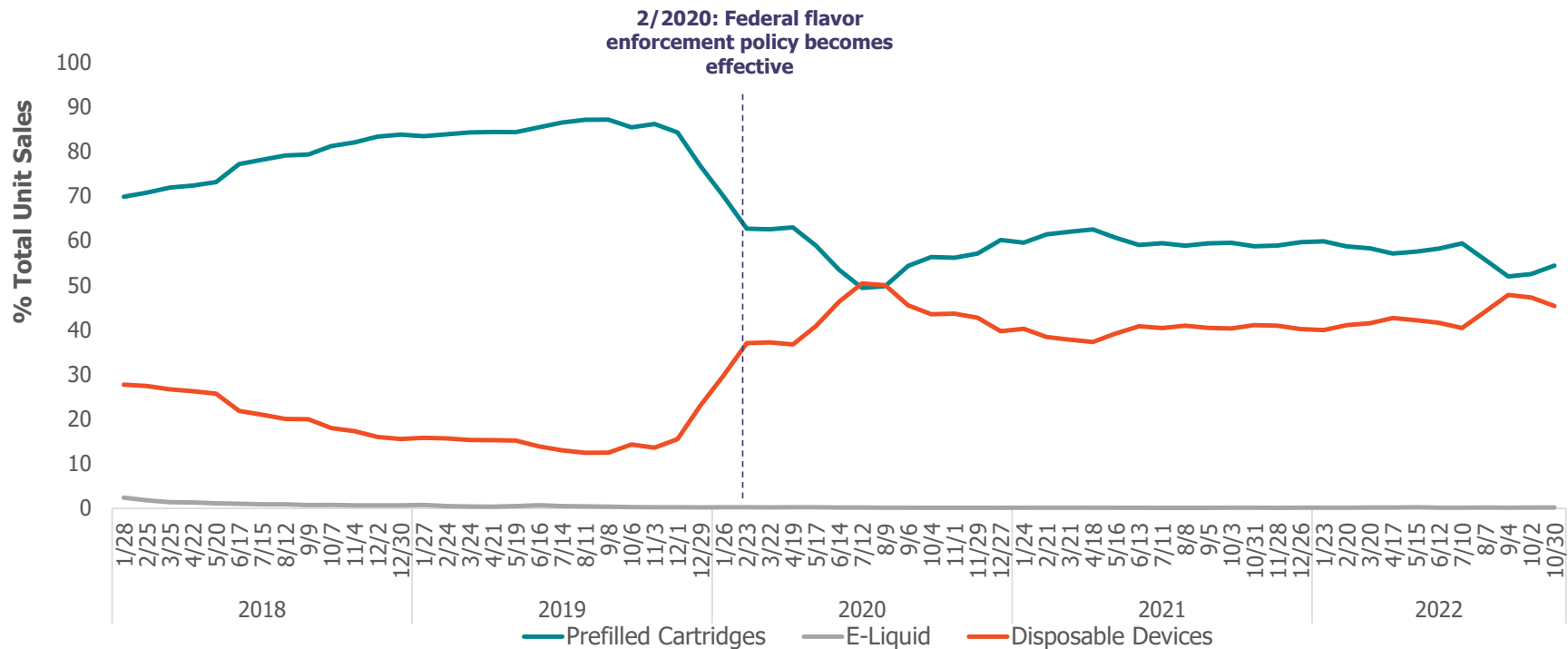


*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (2.6% of total dollar sales in October 2022).

Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From February 23, 2020 to October 30, 2022, monthly e-cigarette unit sales decreased by 6.0% from 831.0 to 781.4 thousand units.
- From February 23, 2020 to October 30, 2022:
 - Menthol-flavored e-cigarette sales increased by 2.5% (from 226.0 thousand to 231.6 thousand); unit share increased from 27.2% to 29.6%.
 - Tobacco-flavored e-cigarette sales decreased by 23.5% (from 281.3 thousand to 215.1 thousand); unit share decreased from 33.8% to 27.5%.
 - Mint-flavored e-cigarette sales increased by 9.0% (from 62.2 thousand to 67.8 thousand); unit share increased from 7.5% to 8.7%.
 - All other-flavored e-cigarette sales decreased by 0.1% (from 256.8 thousand to 256.4 thousand); unit share increased from 30.9% to 32.8%.

Figure 2. California E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices increased by 15.2% (from 307.9 thousand to 354.7 thousand); unit share increased from 37.1% to 45.4%.
 - Sales of prefilled cartridges decreased by 18.4% (from 521.1 thousand to 425.3 thousand); unit share decreased from 62.7% to 54.4%.

Figure 3. California E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 10/2022

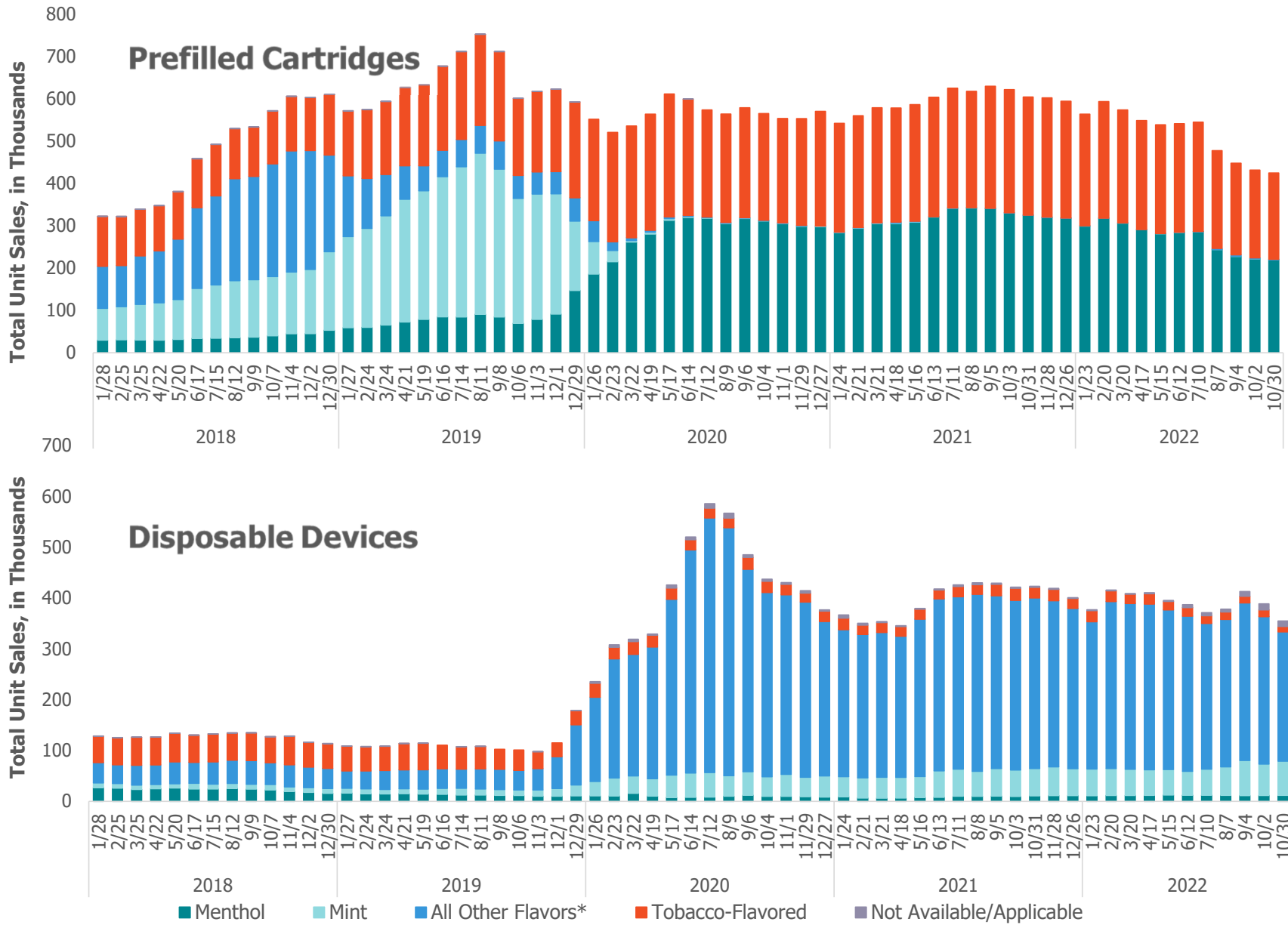
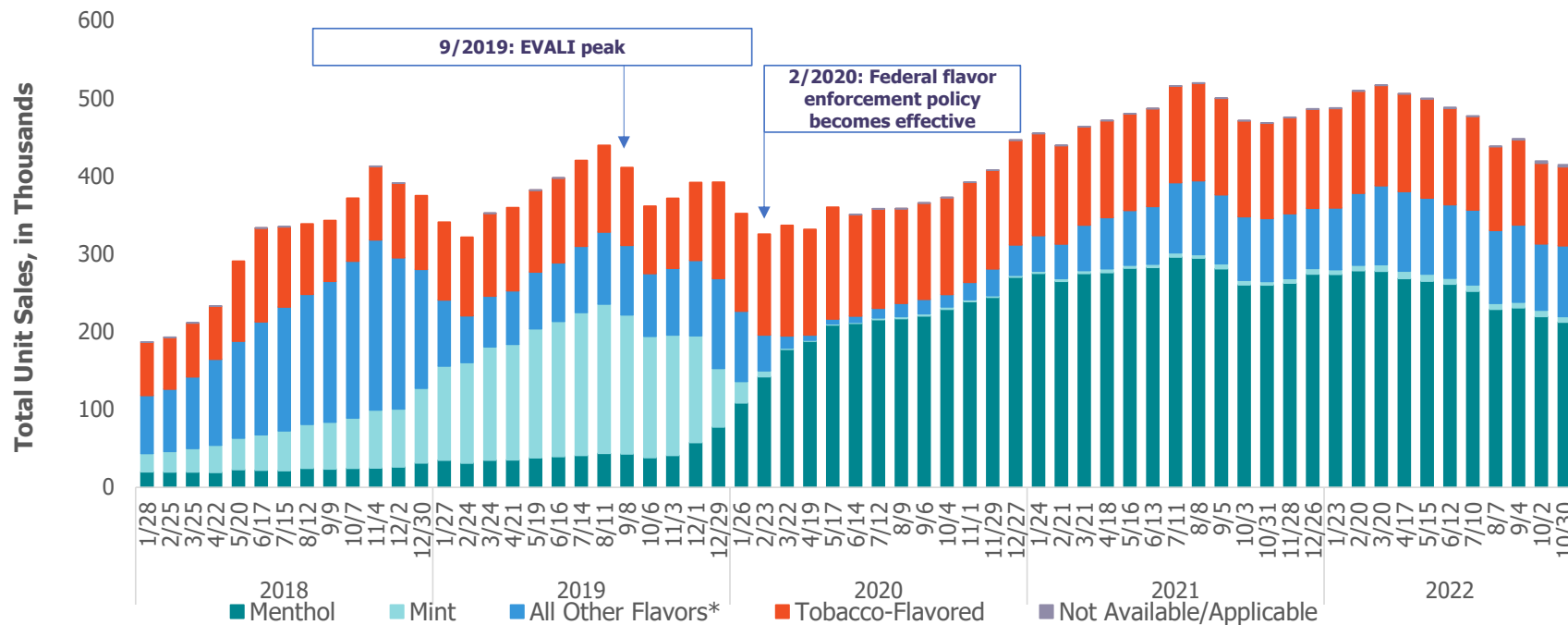


Figure 4. Colorado E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*

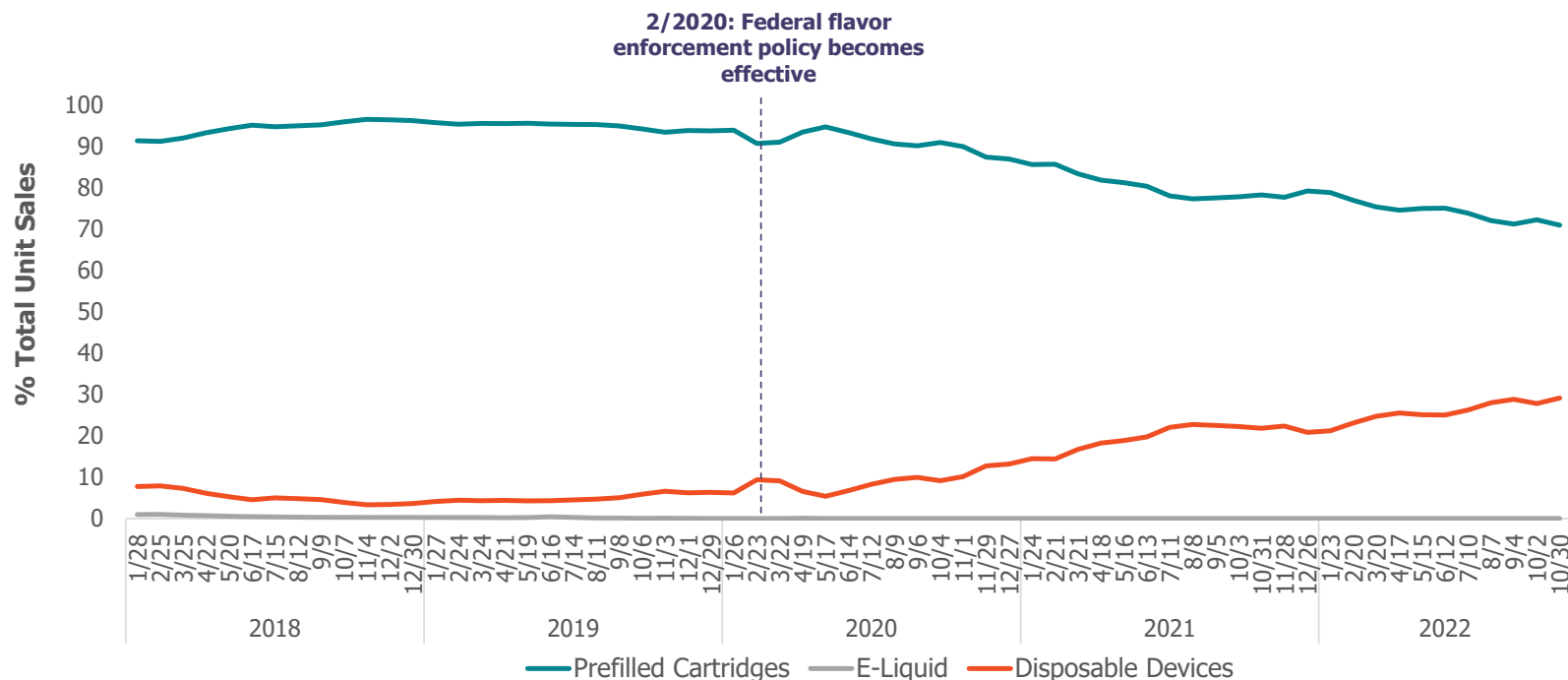


*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (2.6% of total dollar sales in October 2022).

Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From February 23, 2020 to October 30, 2022, monthly e-cigarette unit sales increased by 27.3% from 325.6 to 414.7 thousand units.
- From February 23, 2020 to October 30, 2022:
 - Menthol-flavored e-cigarette sales increased by 49.3% (from 142.2 thousand to 212.4 thousand); unit share increased from 43.7% to 51.2%.
 - Tobacco-flavored e-cigarette sales decreased by 21.6% (from 129.8 thousand to 101.7 thousand); unit share decreased from 39.9% to 24.5%.
 - Mint-flavored e-cigarette sales decreased by 2.5% (from 7.5 thousand to 7.3 thousand); unit share decreased from 2.3% to 1.8%.
 - All other-flavored e-cigarette sales increased by 96.9% (from 46.1 thousand to 90.8 thousand); unit share increased from 14.2% to 21.9%.

Figure 5. Colorado E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices increased by 295.2% (from 30.6 thousand to 120.8 thousand); unit share increased from 9.4% to 29.1%.
 - Sales of prefilled cartridges decreased by 0.4% (from 295.1 thousand to 293.9 thousand); unit share decreased from 90.6% to 70.9%.

Figure 6. Colorado E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 10/2022

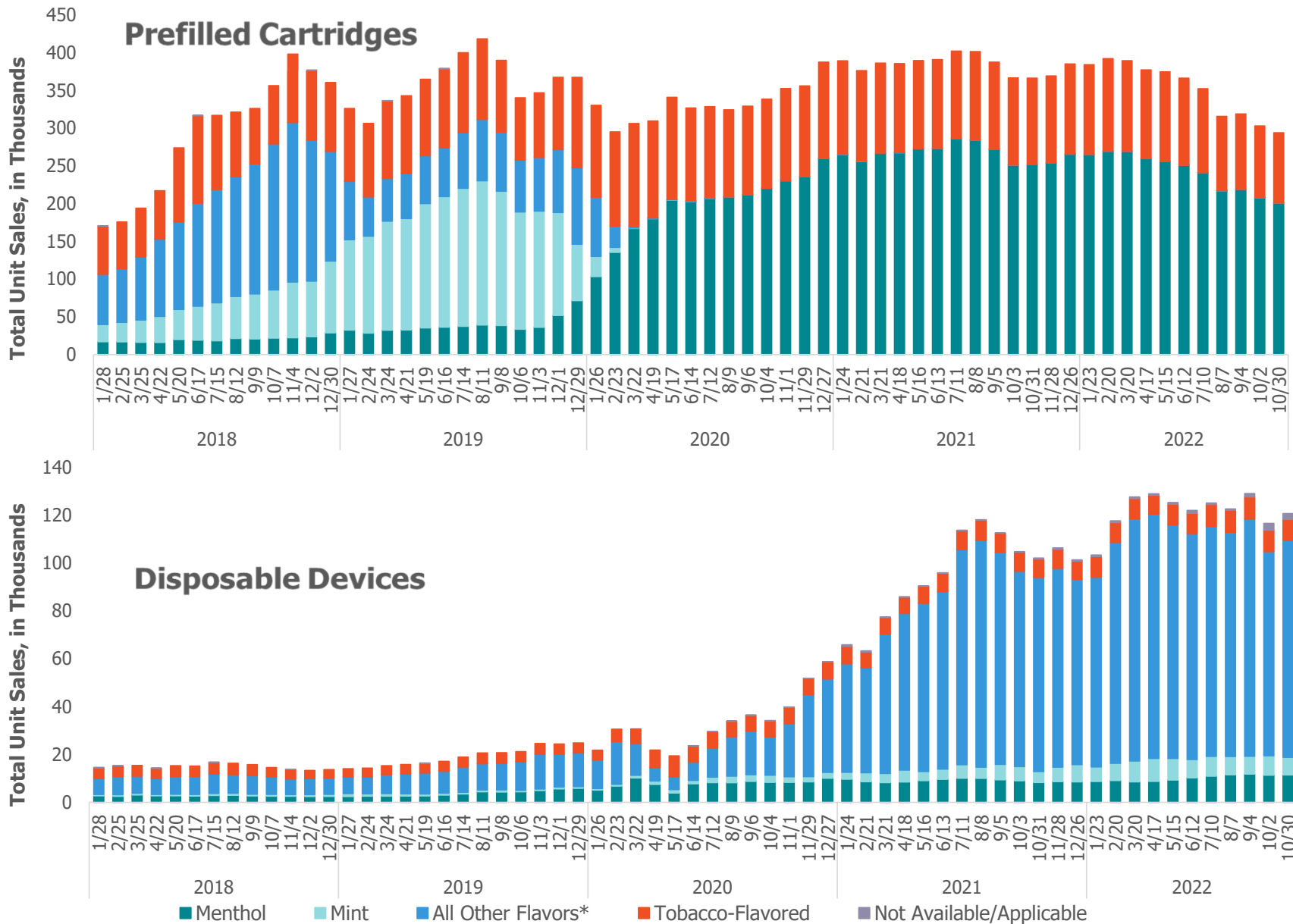
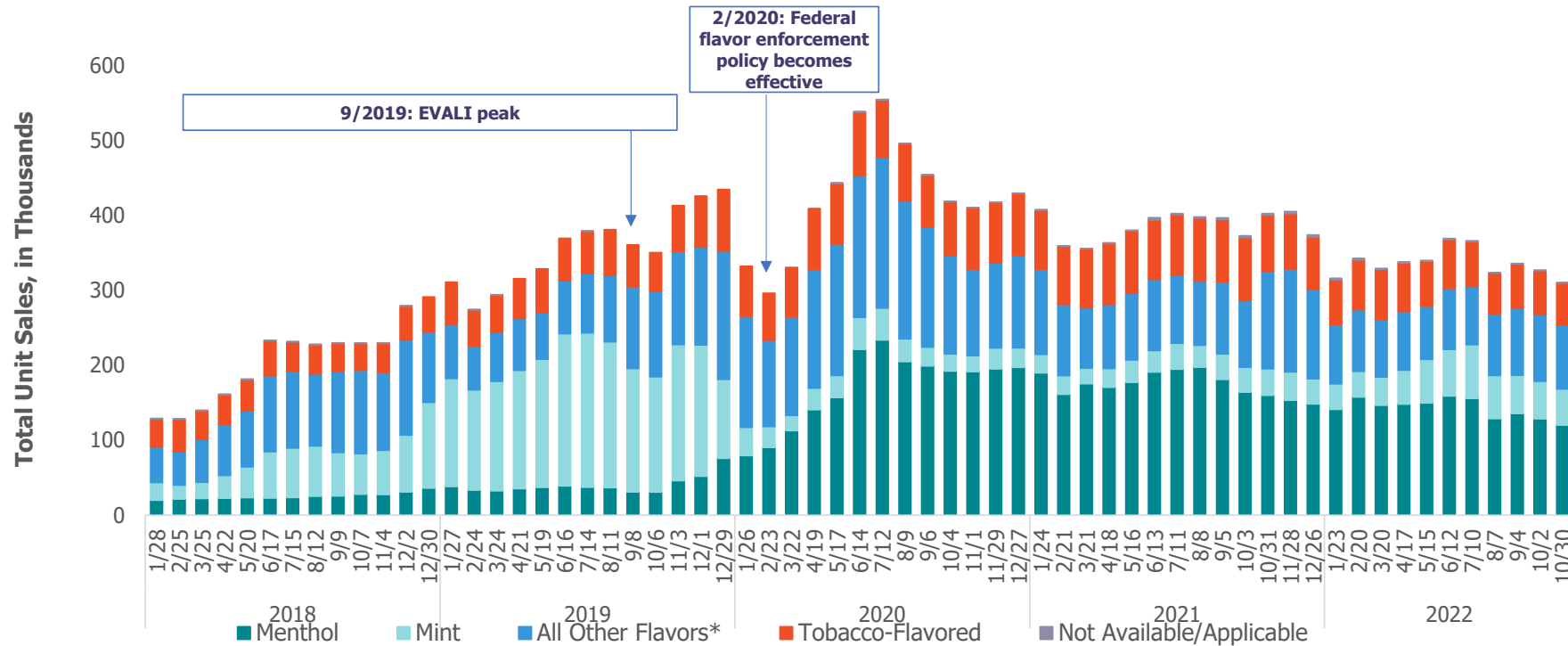


Figure 7. Connecticut E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*

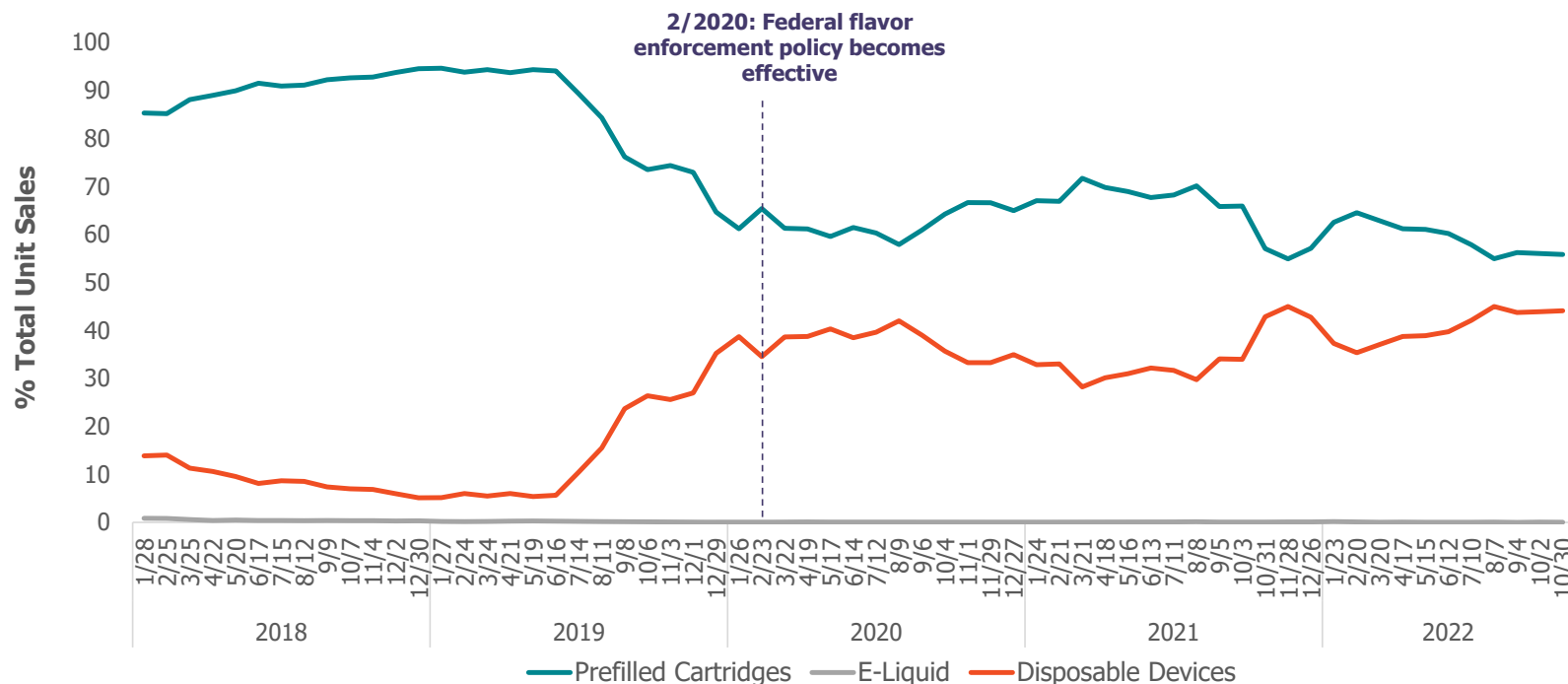


*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (2.6% of total dollar sales in October 2022).

Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From February 23, 2020 to October 30, 2022, monthly e-cigarette unit sales increased by 4.7% from 296.2 to 310.1 thousand units.
- From February 23, 2020 to October 30, 2022:
 - Menthol-flavored e-cigarette sales increased by 33.2% (from 90.3 thousand to 120.3 thousand); unit share increased from 30.5% to 38.8%.
 - Tobacco-flavored e-cigarette sales decreased by 10.6% (from 62.8 thousand to 56.2 thousand); unit share decreased from 21.2% to 18.1%.
 - Mint-flavored e-cigarette sales increased by 71.6% (from 27.9 thousand to 48.0 thousand); unit share increased from 9.4% to 15.5%.
 - All other-flavored e-cigarette sales decreased by 25.8% (from 115.2 thousand to 85.4 thousand); unit share decreased from 38.9% to 27.6%.

Figure 8. Connecticut E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices increased by 33.7% (from 102.4 thousand to 136.9 thousand); unit share increased from 34.5% to 44.1%.
 - Sales of prefilled cartridges decreased by 10.6% (from 193.7 thousand to 173.2 thousand); unit share decreased from 65.4% to 55.9%.

Figure 9. Connecticut E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 10/2022

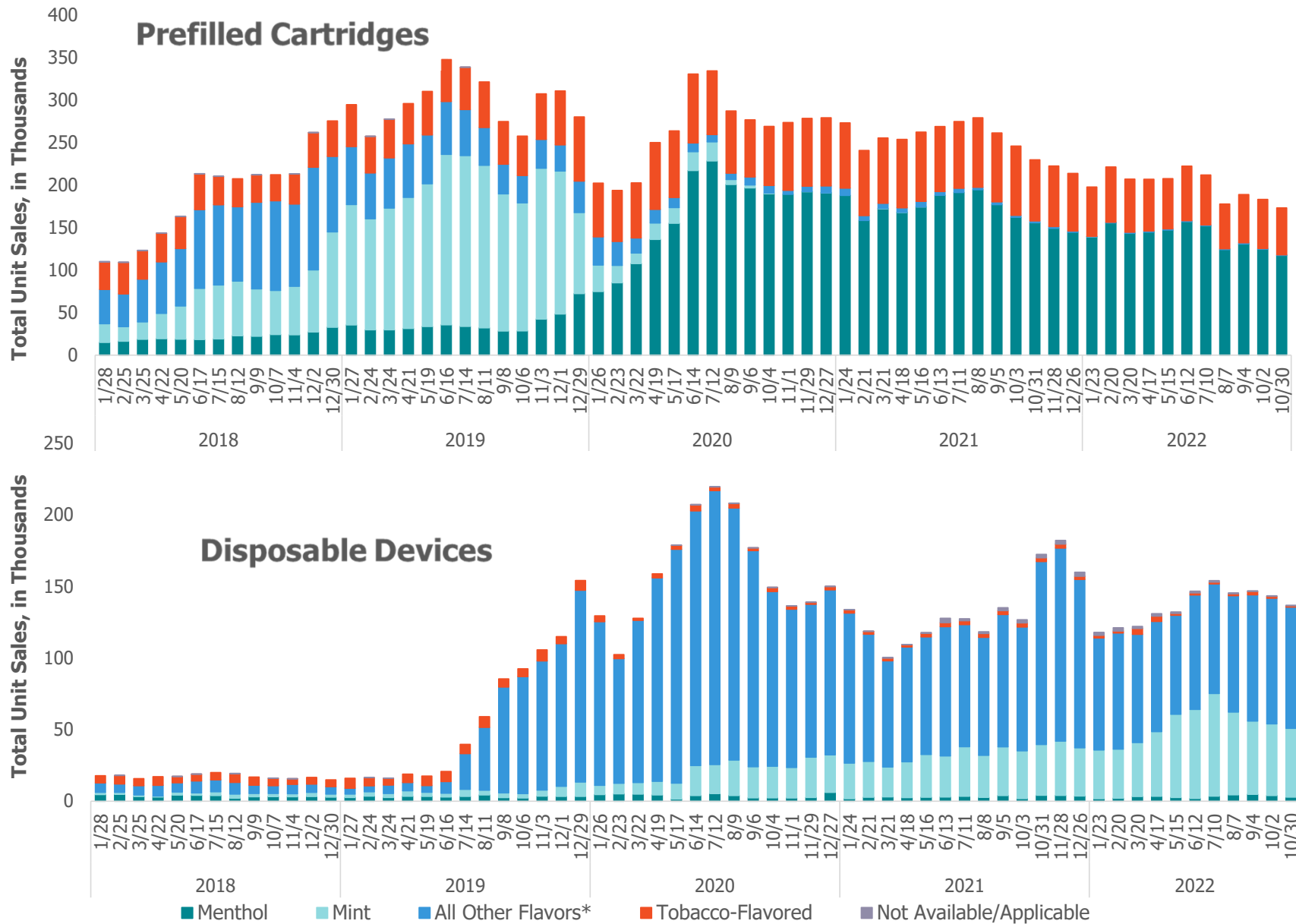
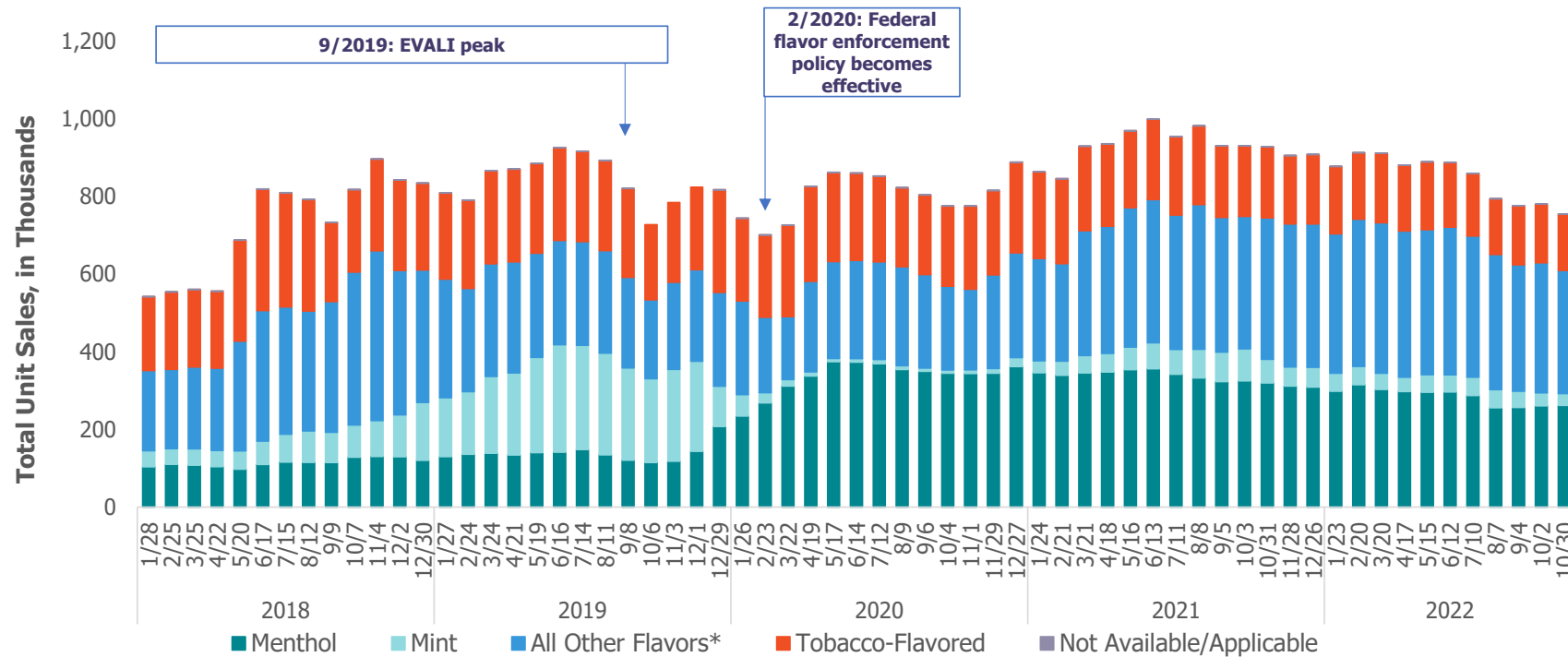


Figure 10. Illinois E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*

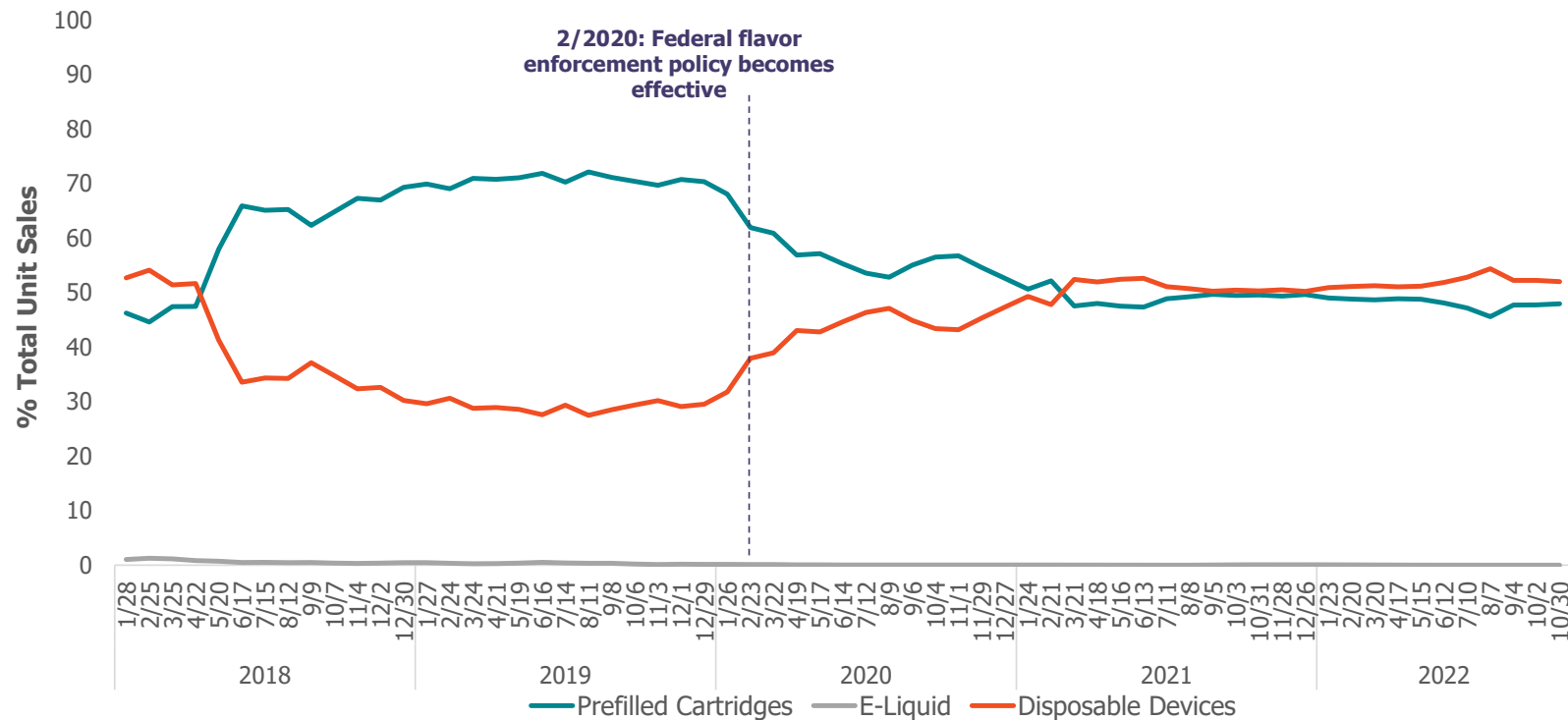


*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (2.6% of total dollar sales in October 2022).

Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From February 23, 2020 to October 30, 2022, monthly e-cigarette unit sales increased by 7.7% from 701.4 to 755.3 thousand units.
- From February 23, 2020 to October 30, 2022:
 - Menthol-flavored e-cigarette sales decreased by 2.4% (from 268.8 thousand to 262.3 thousand); unit share decreased from 38.3% to 34.7%.
 - Tobacco-flavored e-cigarette sales decreased by 31.7% (from 212.2 thousand to 145.0 thousand); unit share decreased from 30.3% to 19.2%.
 - Mint-flavored e-cigarette sales increased by 15.0% (from 26.3 thousand to 30.2 thousand); unit share increased from 3.7% to 4.0%.
 - All other-flavored e-cigarette sales increased by 63.4% (from 194.1 thousand to 317.3 thousand); unit share increased from 27.7% to 42.0%.

Figure 11. Illinois E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices increased by 47.7% (from 266.1 thousand to 393.1 thousand); unit share increased from 37.9% to 52.0%.
 - Sales of prefilled cartridges decreased by 16.6% (from 434.5 thousand to 362.2 thousand); unit share decreased from 62.0% to 48.0%.

Figure 12. Illinois E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 10/2022

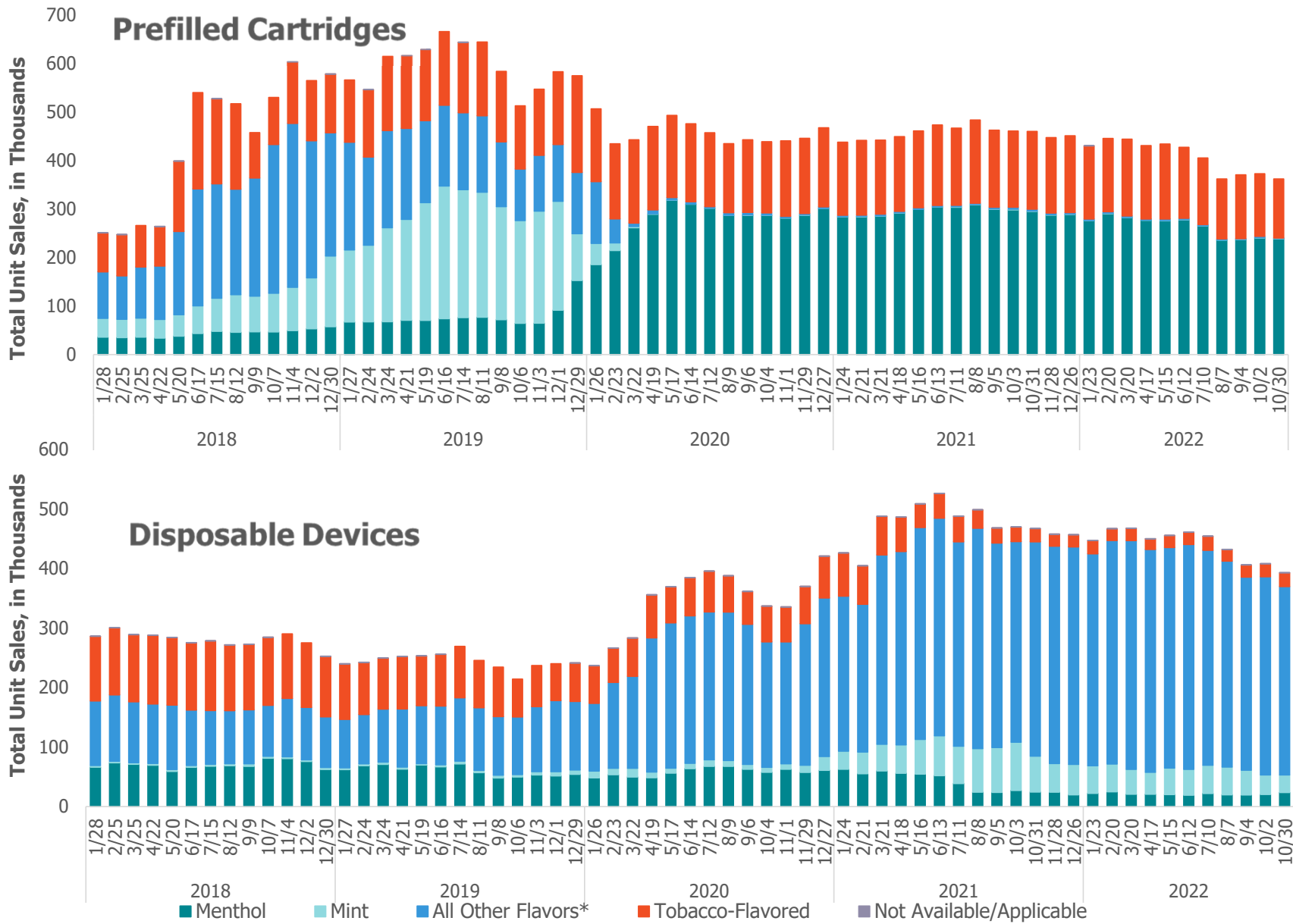
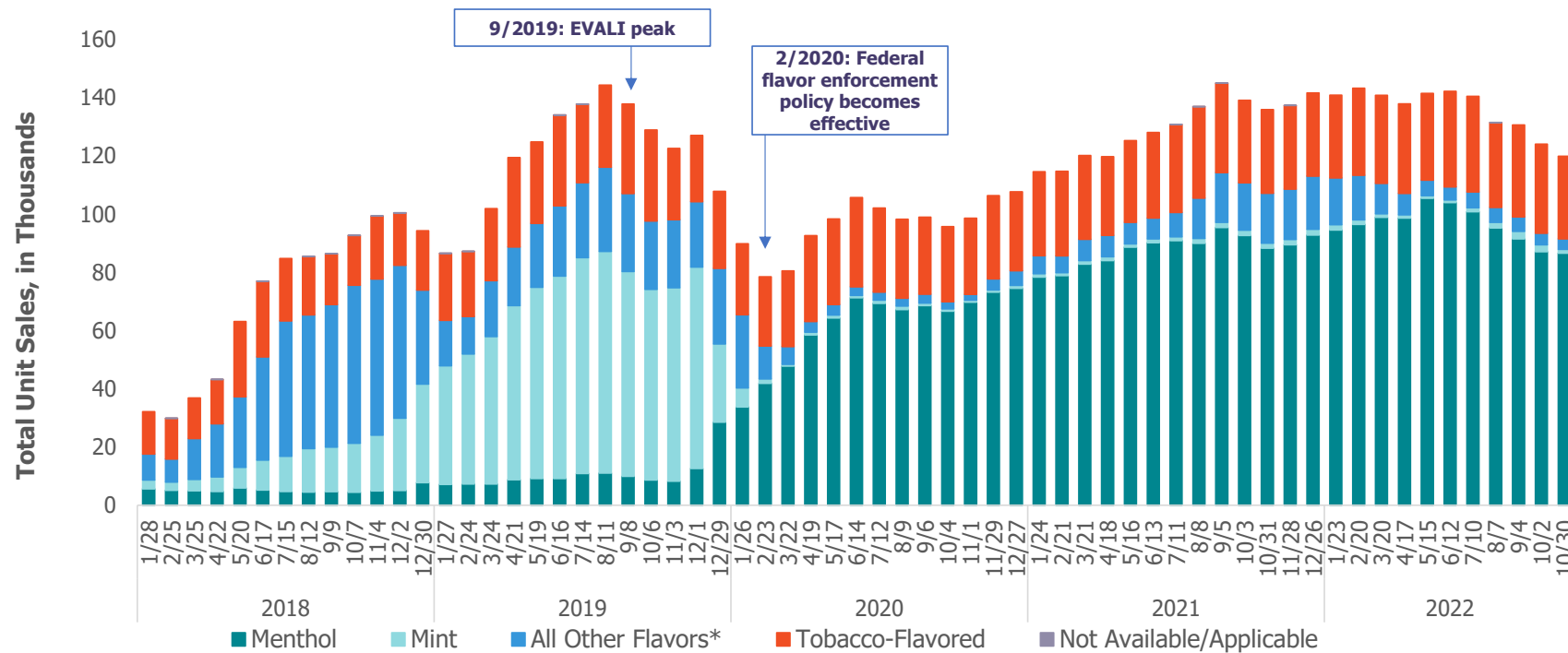


Figure 13. Maine E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*

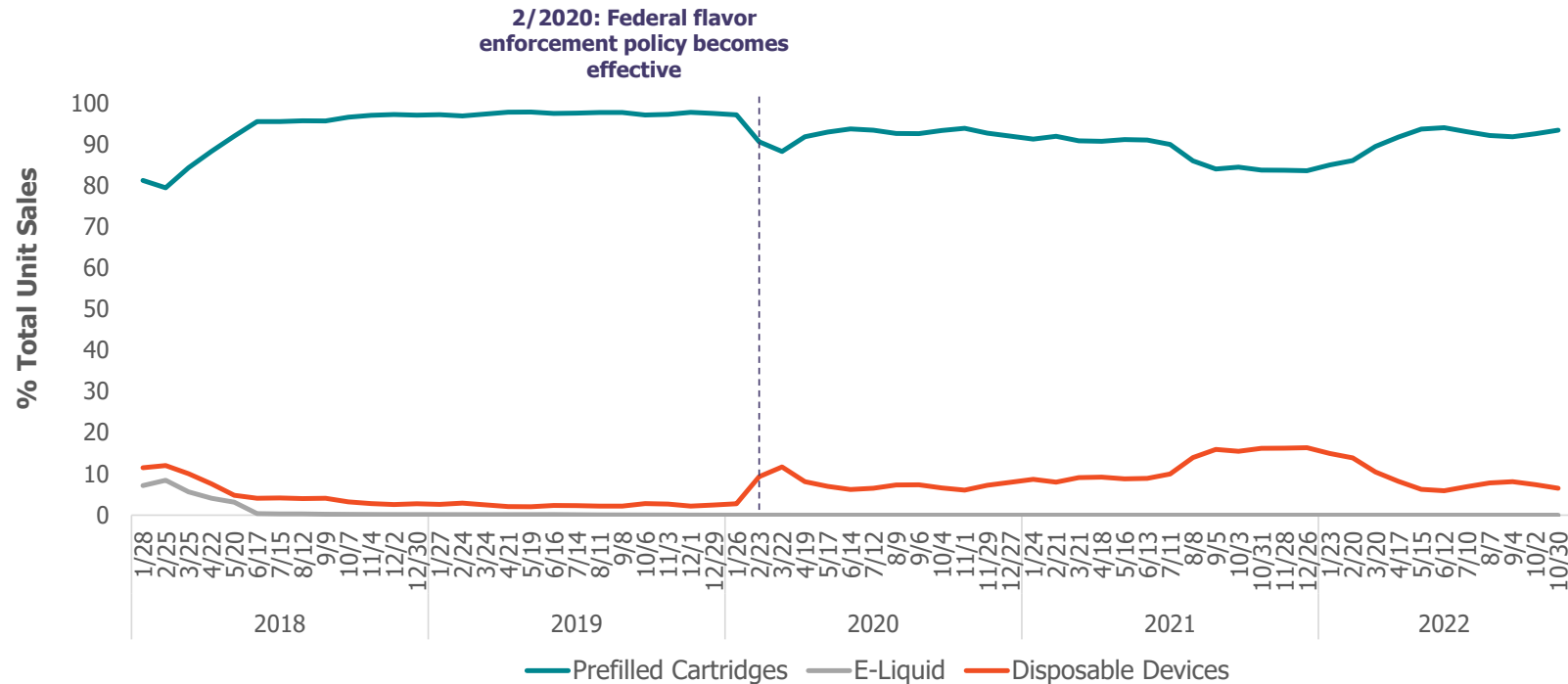


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Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From February 23, 2020 to October 30, 2022, monthly e-cigarette unit sales increased by 52.7% from 78.5 to 119.9 thousand units.
- From February 23, 2020 to October 30, 2022:
 - Menthol-flavored e-cigarette sales increased by 106.9% (from 41.9 thousand to 86.7 thousand); unit share increased from 53.3% to 72.3%.
 - Tobacco-flavored e-cigarette sales increased by 19.0% (from 23.8 thousand to 28.3 thousand); unit share decreased from 30.3% to 23.6%.
 - Mint-flavored e-cigarette sales decreased by 14.7% (from 1.5 thousand to 1.3 thousand); unit share decreased from 1.9% to 1.1%.
 - All other-flavored e-cigarette sales decreased by 68.0% (from 11.3 thousand to 3.6 thousand); unit share decreased from 14.4% to 3.0%.

Figure 14. Maine E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices increased by 6.4% (from 7.3 thousand to 7.8 thousand); unit share decreased from 9.3% to 6.5%.
 - Sales of prefilled cartridges increased by 57.4% (from 71.2 thousand to 112.1 thousand); unit share increased from 90.7% to 93.5%.

Figure 15. Maine E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 10/2022

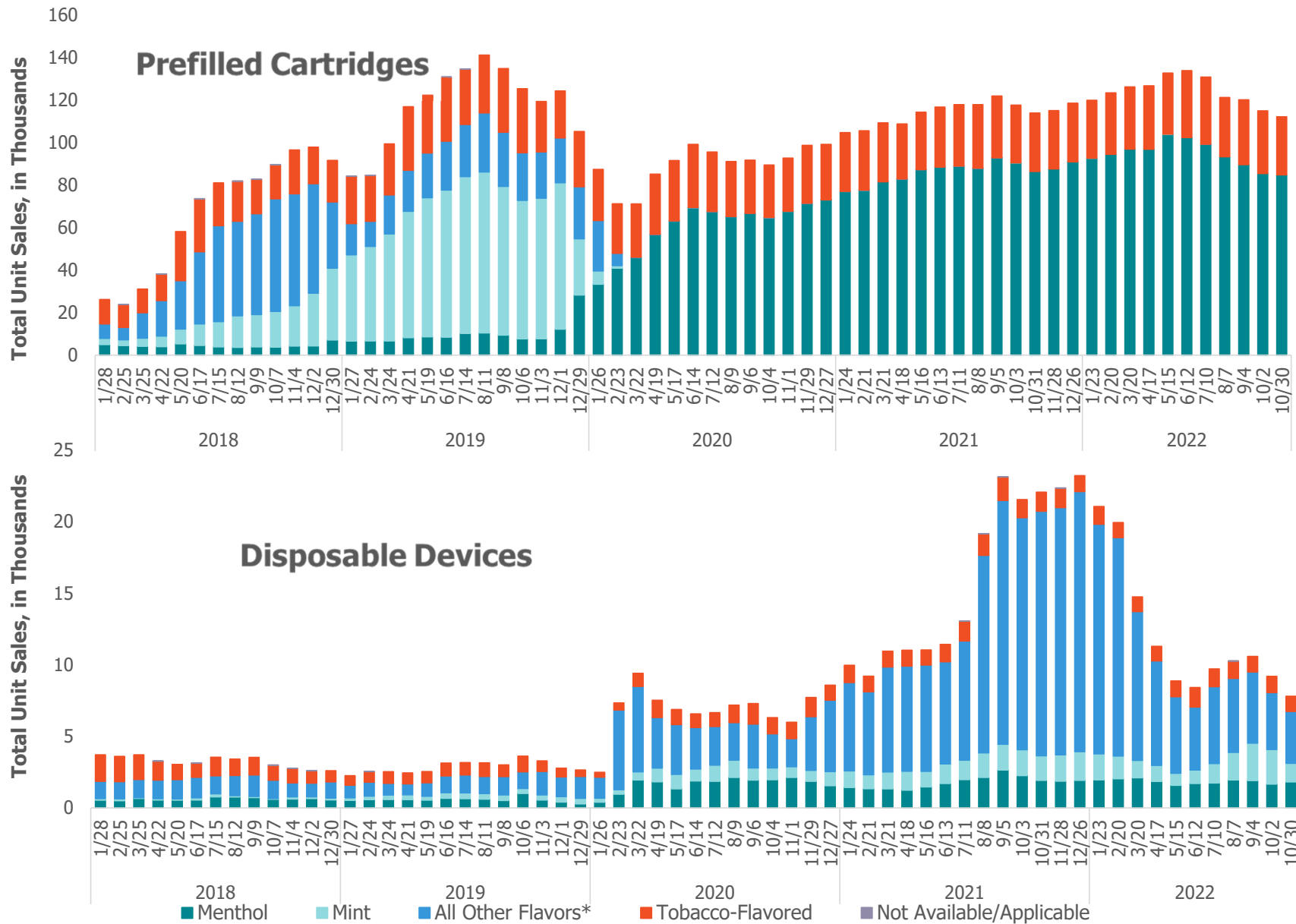
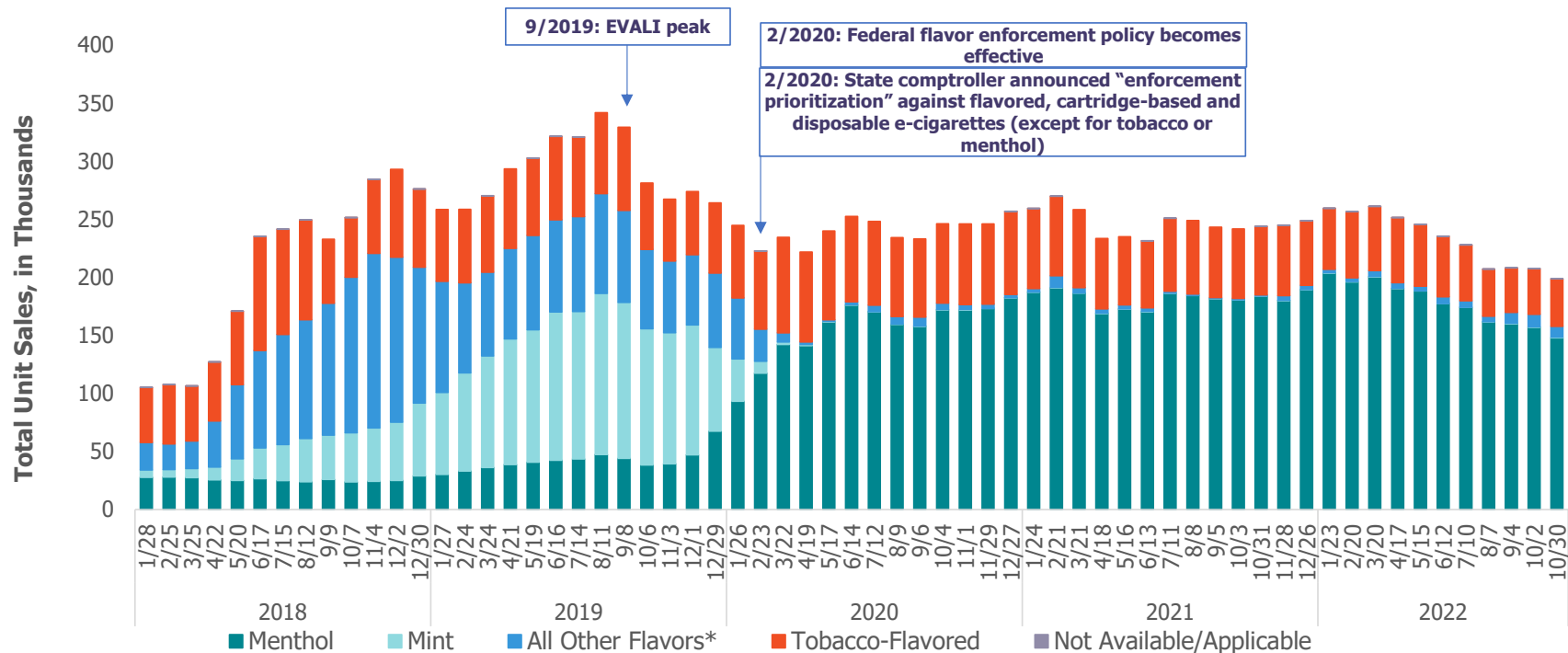


Figure 16. Maryland E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*

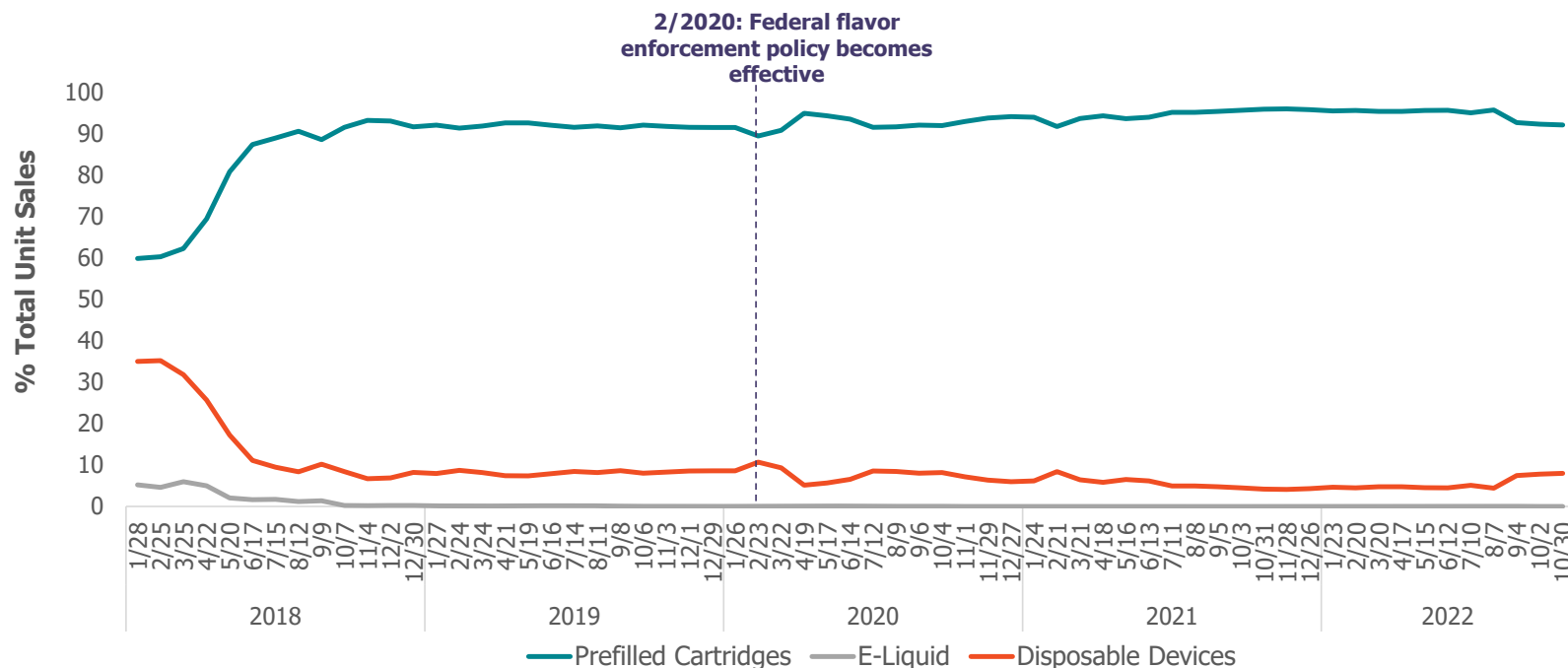


*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (2.6% of total dollar sales in October 2022).

Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From February 23, 2020 to October 30, 2022, monthly e-cigarette unit sales decreased by 10.8% from 227.8 to 198.8 thousand units.
- From February 23, 2020 to October 30, 2022:
 - Menthol-flavored e-cigarette sales increased by 25.9% (from 117.5 thousand to 148.0 thousand); unit share increased from 52.7% to 74.4%.
 - Tobacco-flavored e-cigarette sales decreased by 39.2% (from 67.3 thousand to 41.0 thousand); unit share decreased from 30.2% to 20.6%.
 - Mint-flavored e-cigarette sales decreased by 93.7% (from 10.2 thousand to 0.6 thousand); unit share decreased from 4.6% to 0.3%.
 - All other-flavored e-cigarette sales decreased by 66.8% (from 27.7 thousand to 9.2 thousand); unit share decreased from 12.4% to 4.6%.

Figure 17. Maryland E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices decreased by 33.1% (from 23.7 thousand to 15.9 thousand); unit share decreased from 10.7% to 8.0%.
 - Sales of prefilled cartridges decreased by 8.1% (from 199.0 thousand to 182.9 thousand); unit share increased from 89.3% to 92.0%.

Figure 18. Maryland E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 10/2022

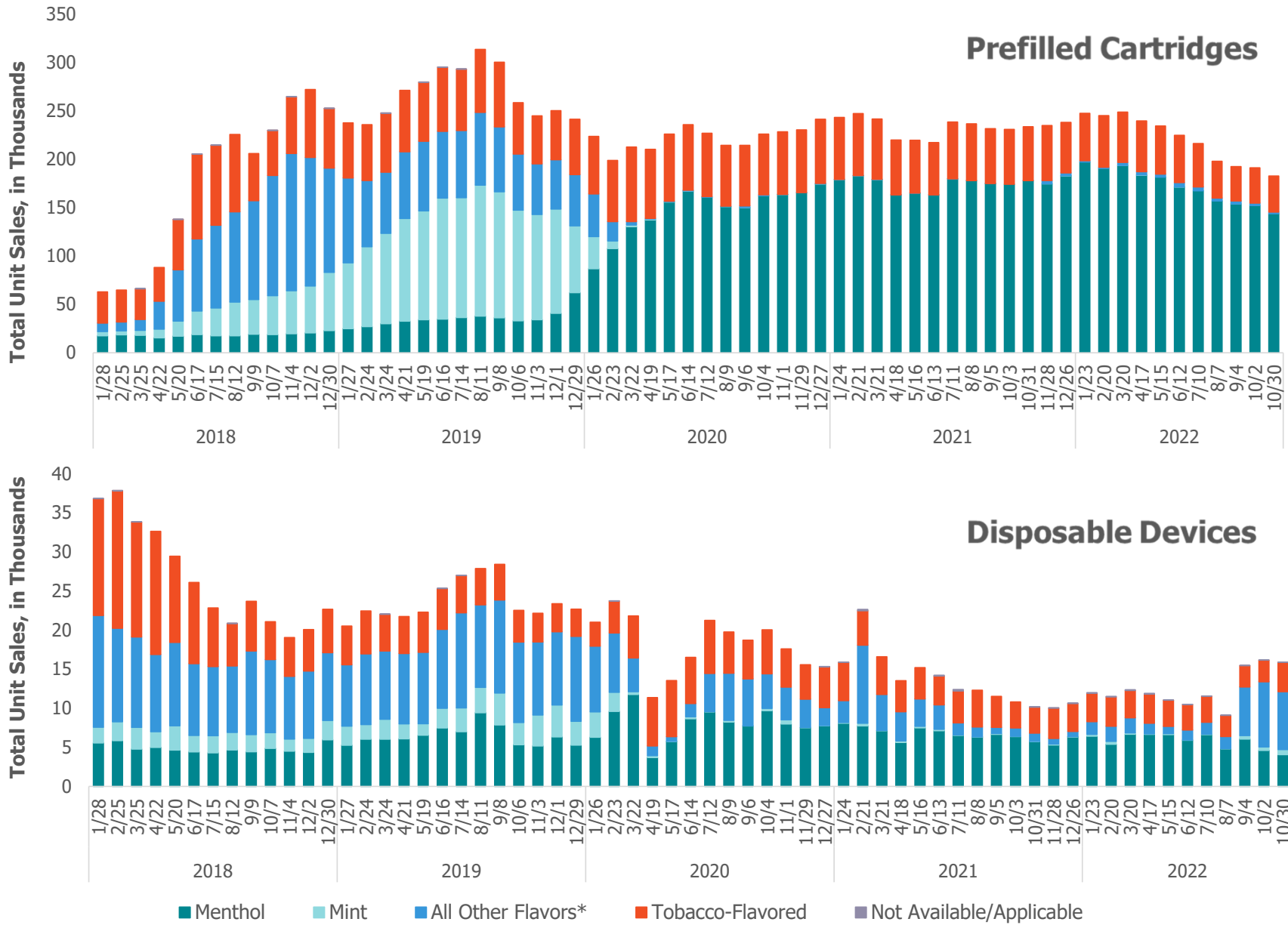
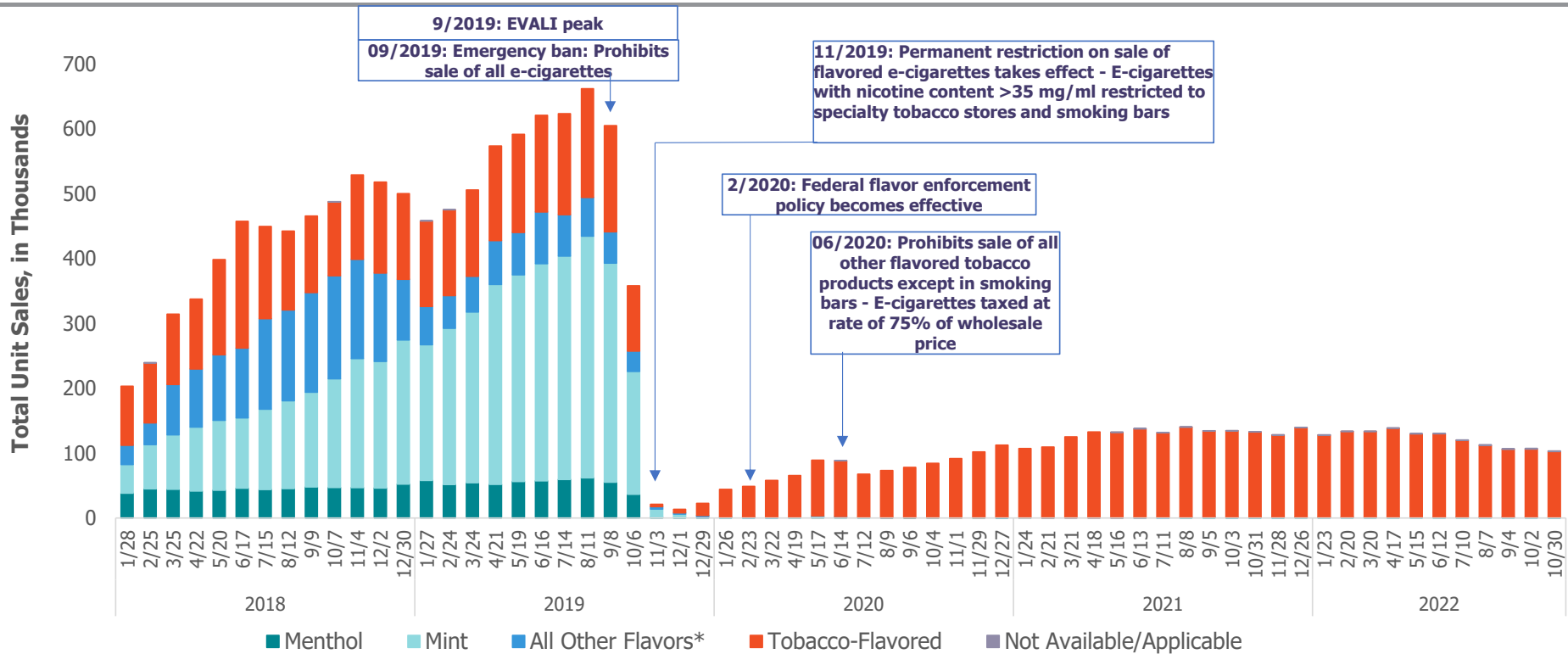


Figure 19. Massachusetts E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*

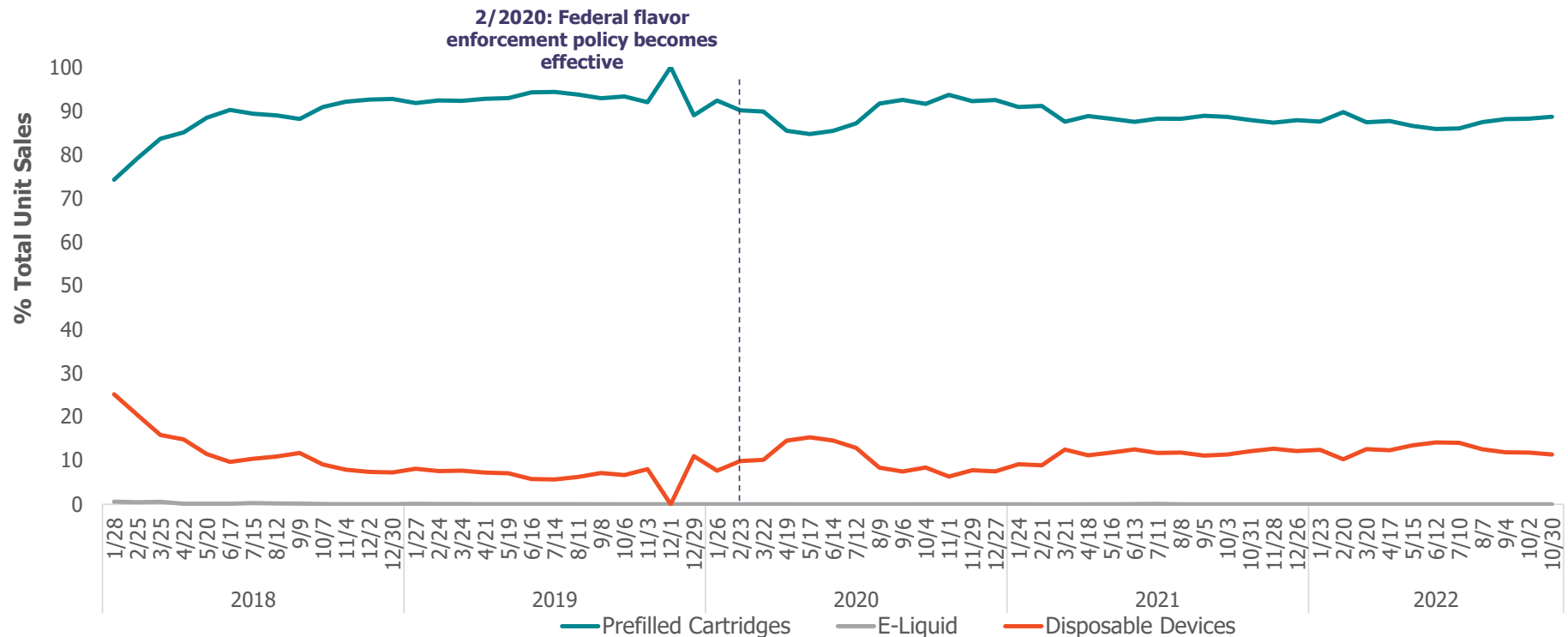


*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (2.6% of total dollar sales in October 2022).

Trends of Unit Sales by Flavor following Massachusetts’s flavor restrictions

- Following Massachusetts's flavored e-cigarette restrictions, monthly e-cigarette total unit sales decreased by 82.9% from September 8, 2019 to October 30, 2022 (from 605.4 thousand to 103.5 thousand).
- From September 8, 2019 to October 30, 2022:
 - Menthol-flavored e-cigarette sales decreased by 99.2% (from 55.2 thousand to 0.4 thousand); unit share decreased from 9.1% to 0.4%.
 - Tobacco-flavored e-cigarette sales decreased by 37.9% (from 163.7 thousand to 101.6 thousand); unit share increased from 27.0% to 98.1%.
 - Mint-flavored e-cigarette sales decreased by 100.0% (from 338.2 thousand to 0.0 thousand); unit share decreased from 55.9% to 0.0%.
 - All other-flavored e-cigarette sales decreased by 98.7% (from 48.3 thousand to 0.6 thousand); unit share decreased from 8.0% to 0.6%.

Figure 20. Massachusetts E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices increased by 144.7% (from 4.8 thousand to 11.8 thousand); unit share increased from 9.9% to 11.4%.
 - Sales of prefilled cartridges increased by 109.1% (from 43.9 thousand to 91.8 thousand); unit share decreased from 90.1% to 88.6%.

**Figure 21. Massachusetts E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates
1/2018 – 10/2022**

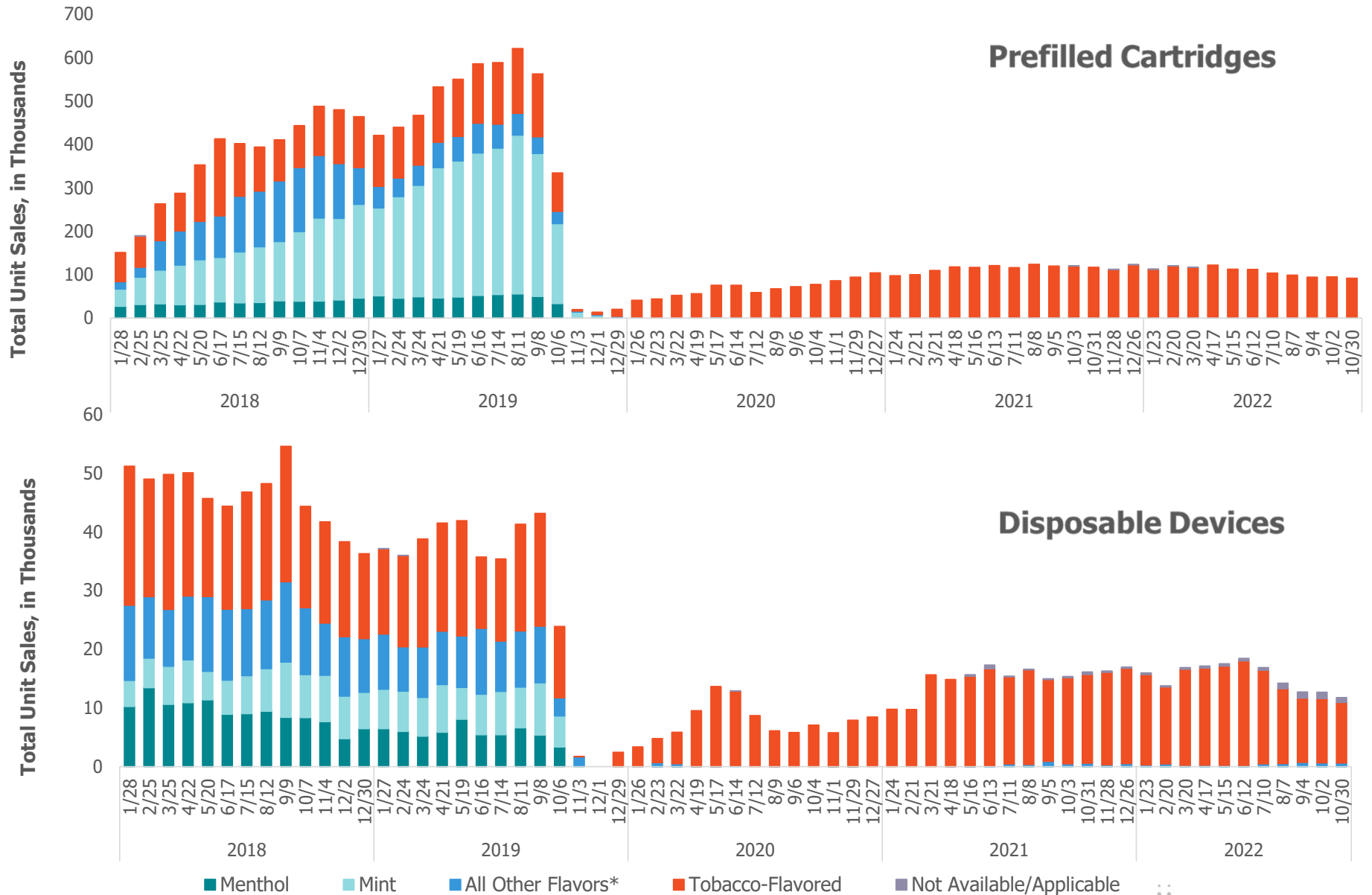
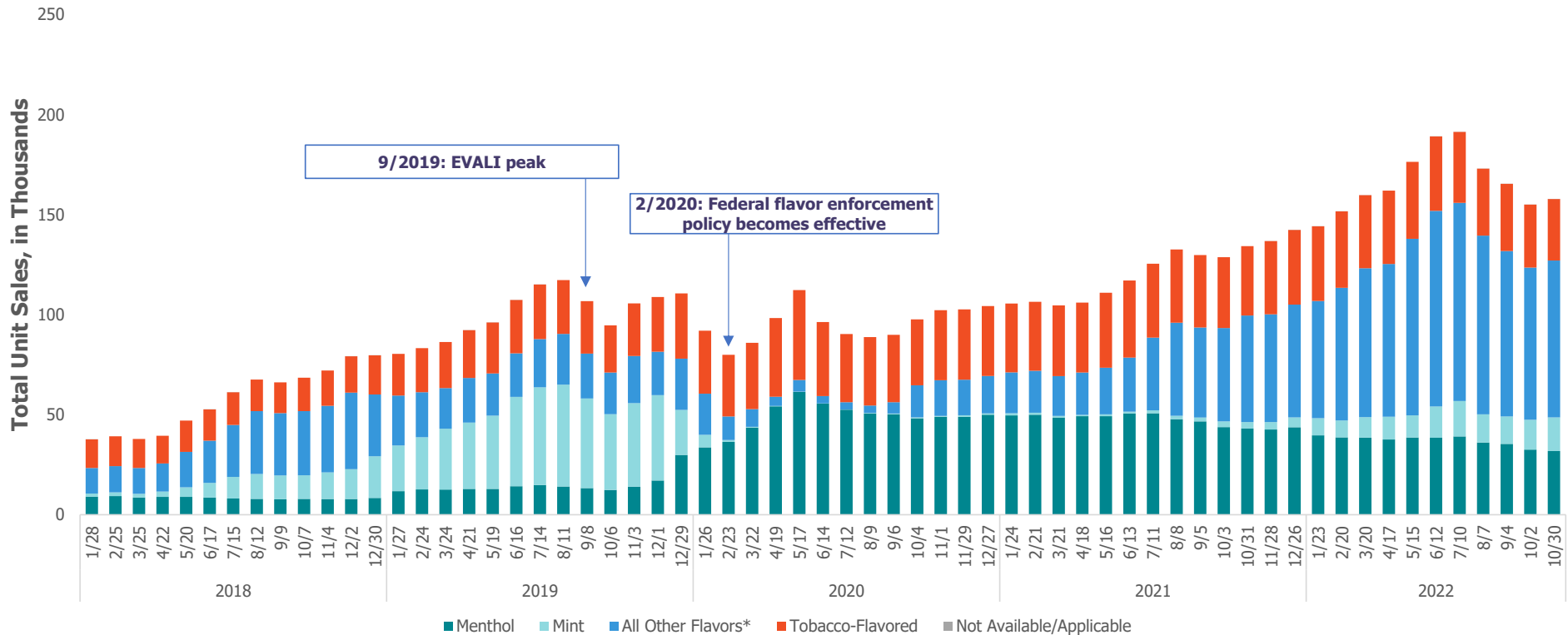


Figure 22. Minnesota E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*

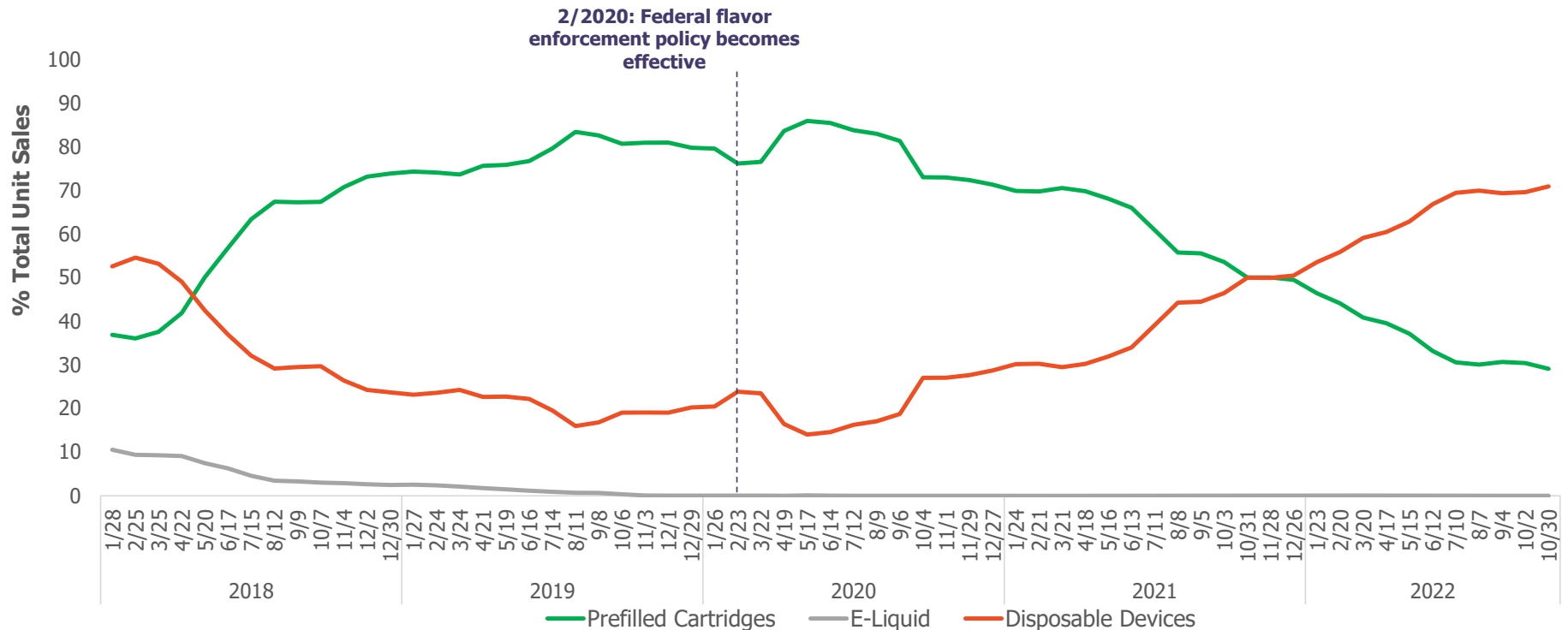


*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (2.6% of total dollar sales in October 2022).

Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From February 23, 2020 to October 30, 2022, monthly e-cigarette unit sales increased by 97.5% from 79.9 to 157.9 thousand units.
- From February 23, 2020 to October 30, 2022:
 - Menthol-flavored e-cigarette sales decreased by 12.5% (from 36.4 thousand to 31.9 thousand); unit share decreased from 45.5% to 20.2%.
 - Tobacco-flavored e-cigarette sales decreased by 0.1% (from 30.8 thousand to 30.8 thousand); unit share decreased from 38.5% to 19.5%.
 - Mint-flavored e-cigarette sales increased by 1685.0% (from 0.9 thousand to 16.8 thousand); unit share increased from 1.2% to 10.7%.
 - All other-flavored e-cigarette sales increased by 565.3% (from 11.8 thousand to 78.4 thousand); unit share increased from 14.7% to 49.6%.

Figure 23. Minnesota E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices increased by 487.0% (from 19.1 thousand to 111.9 thousand); unit share increased from 23.9% to 70.9%.
 - Sales of prefilled cartridges decreased by 24.5% (from 60.9 thousand to 45.9 thousand); unit share decreased from 76.1% to 29.1%.

Figure 24. Minnesota E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 10/2022

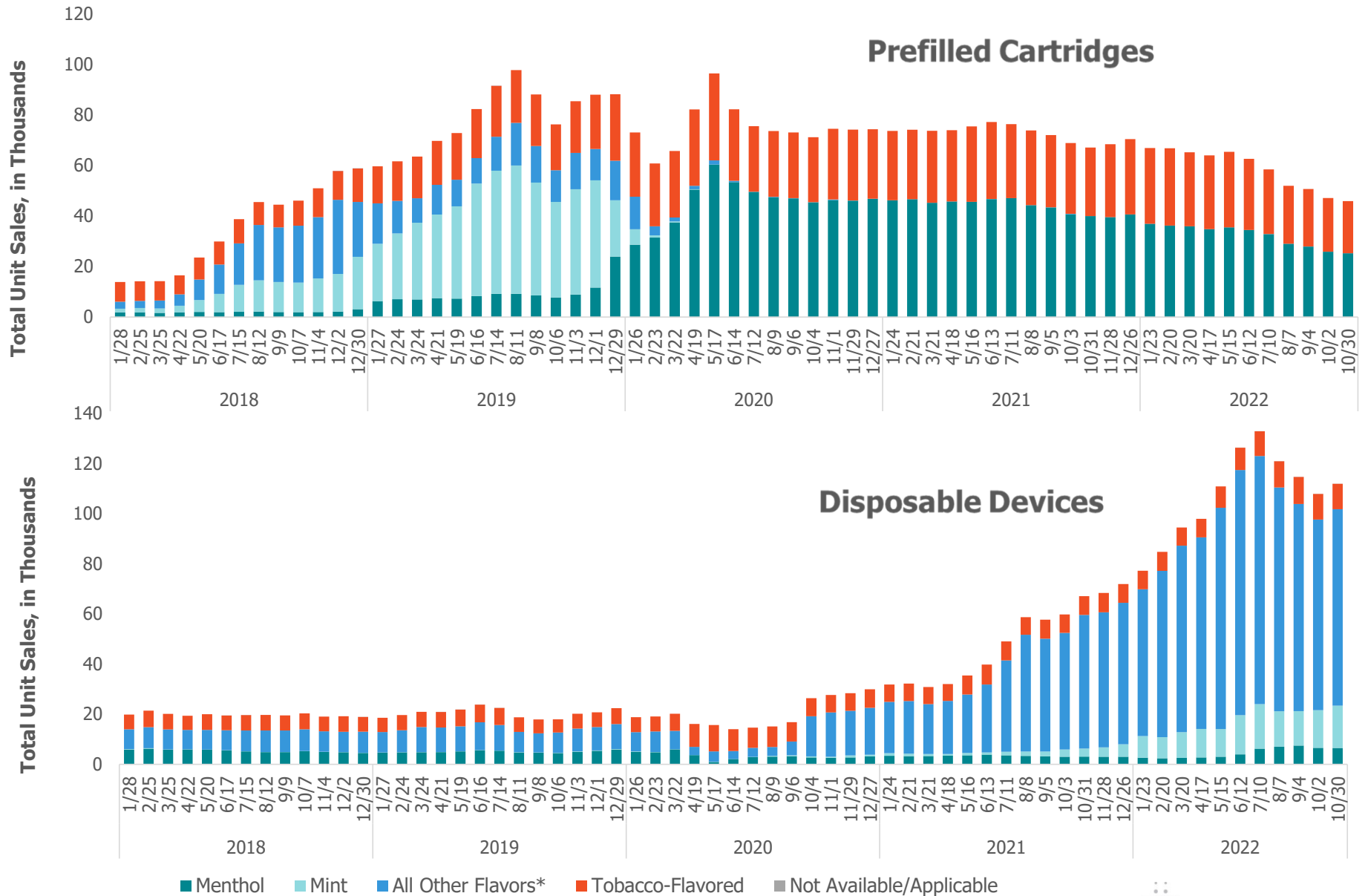
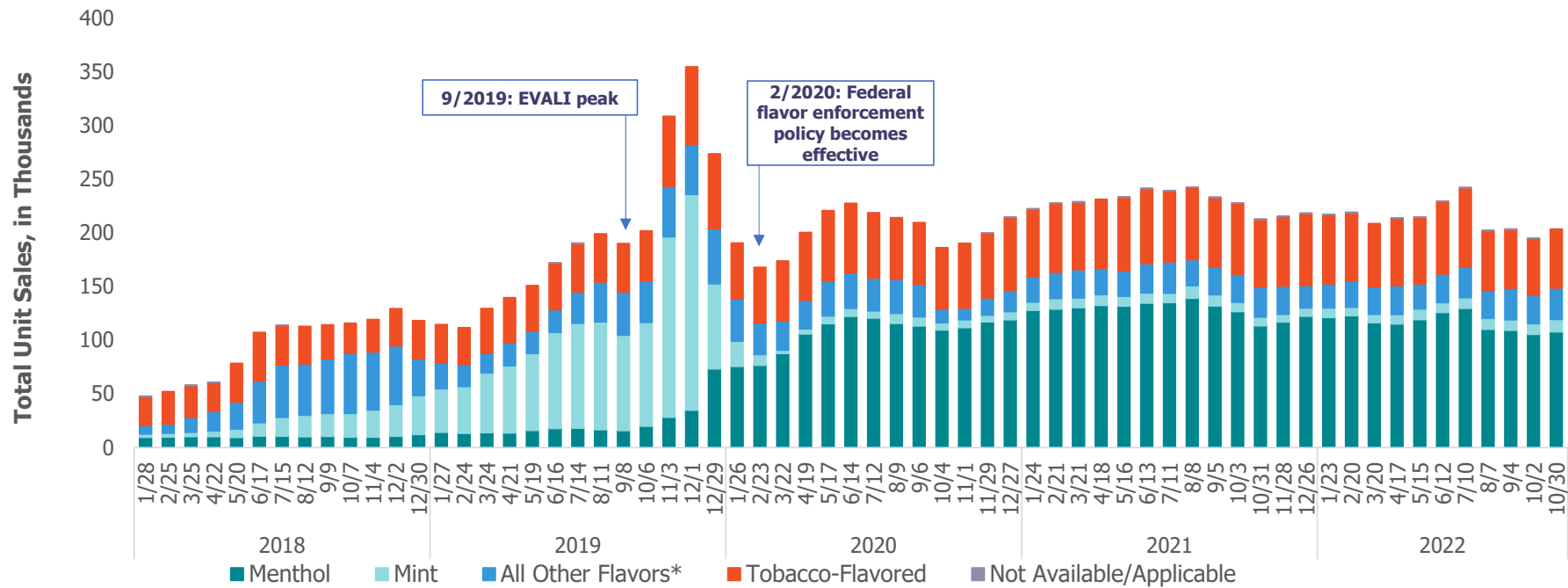


Figure 25. New Hampshire E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*

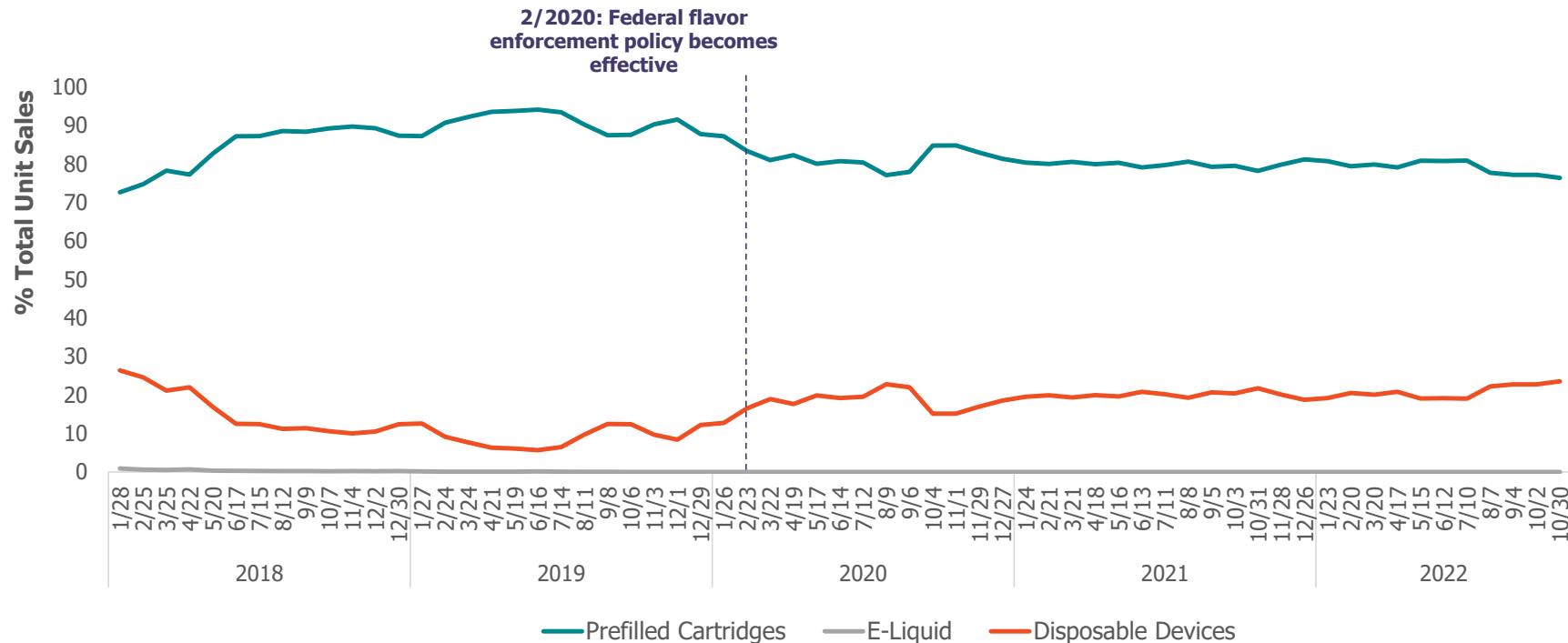


*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (2.6% of total dollar sales in October 2022).

Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From February 23, 2020 to October 30, 2022, monthly e-cigarette unit sales increased by 21.2% from 168.0 to 203.6 thousand units.
- From February 23, 2020 to October 30, 2022:
 - Menthol-flavored e-cigarette sales increased by 40.7% (from 76.7 thousand to 107.8 thousand); unit share increased from 45.6% to 53.0%.
 - Tobacco-flavored e-cigarette sales increased by 6.2% (from 51.8 thousand to 55.0 thousand); unit share decreased from 30.8% to 27.0%.
 - Mint-flavored e-cigarette sales increased by 13.8% (from 10.1 thousand to 11.5 thousand); unit share decreased from 6.0% to 5.6%.
 - All other-flavored e-cigarette sales decreased by 0.7% (from 29.5 thousand to 29.3 thousand); unit share decreased from 17.5% to 14.4%.

Figure 26. New Hampshire E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*

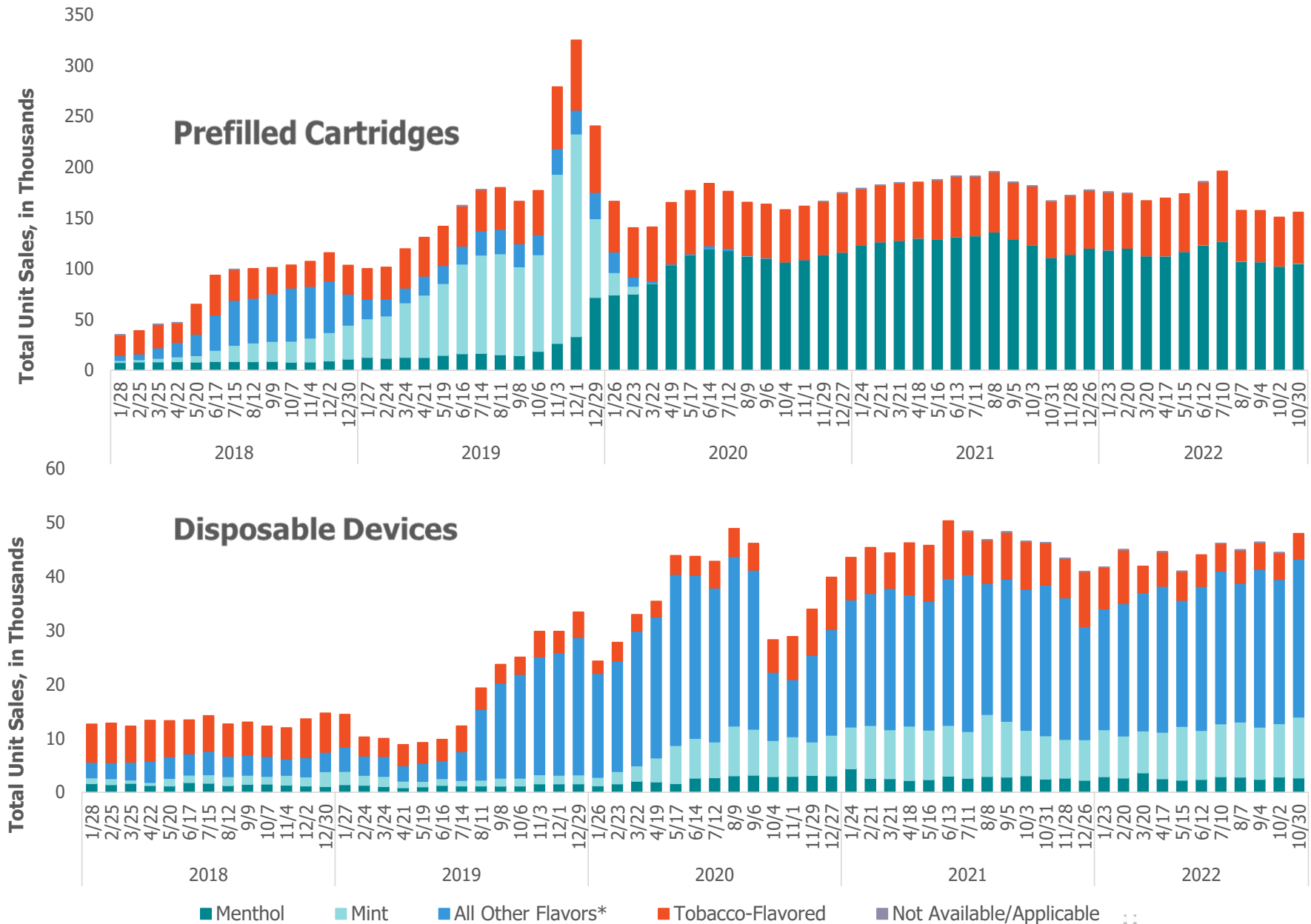


*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

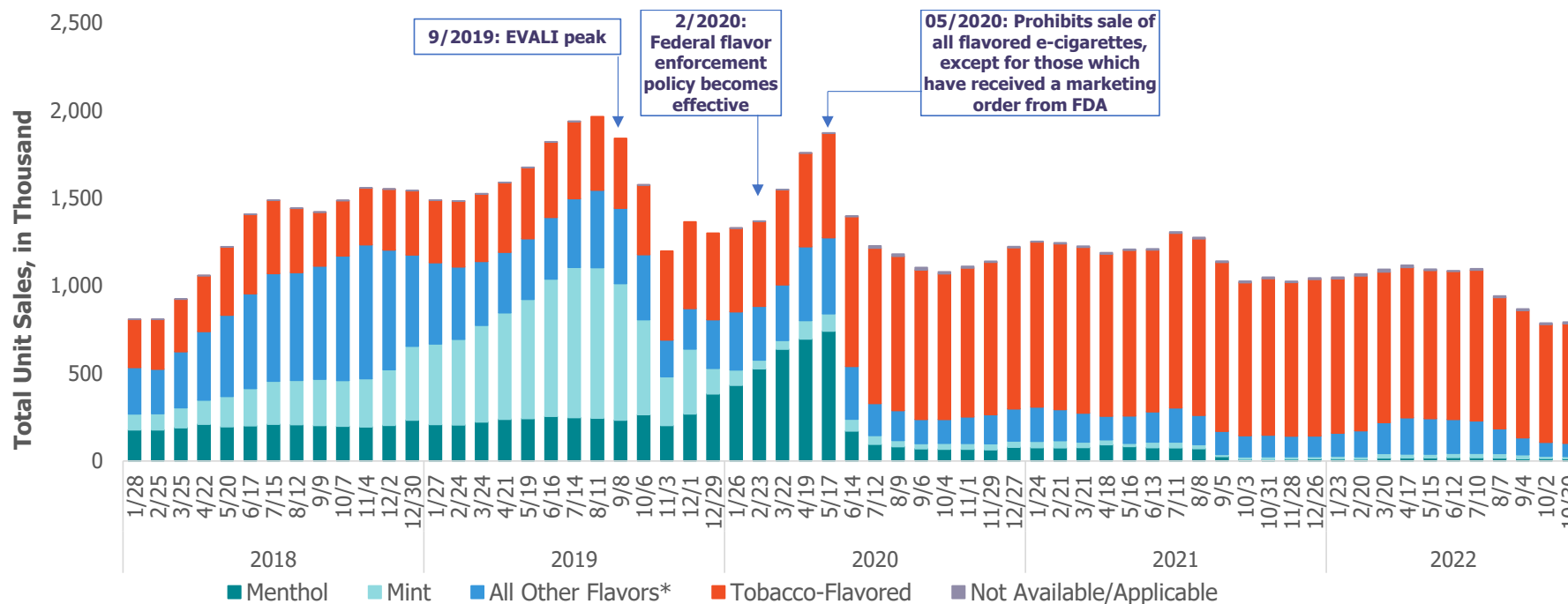
- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices increased by 72.6% (from 27.8 thousand to 48.0 thousand); unit share increased from 16.5% to 23.6%.
 - Sales of prefilled cartridges increased by 11.0% (from 140.2 thousand to 155.6 thousand); unit share decreased from 83.5% to 76.4%.

**Figure 27. New Hampshire E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates
1/2018 – 10/2022**



■ Menthol
 ■ Mint
 ■ All Other Flavors*
 ■ Tobacco-Flavored
 ■ Not Available/Applicable

Figure 28. New York E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*

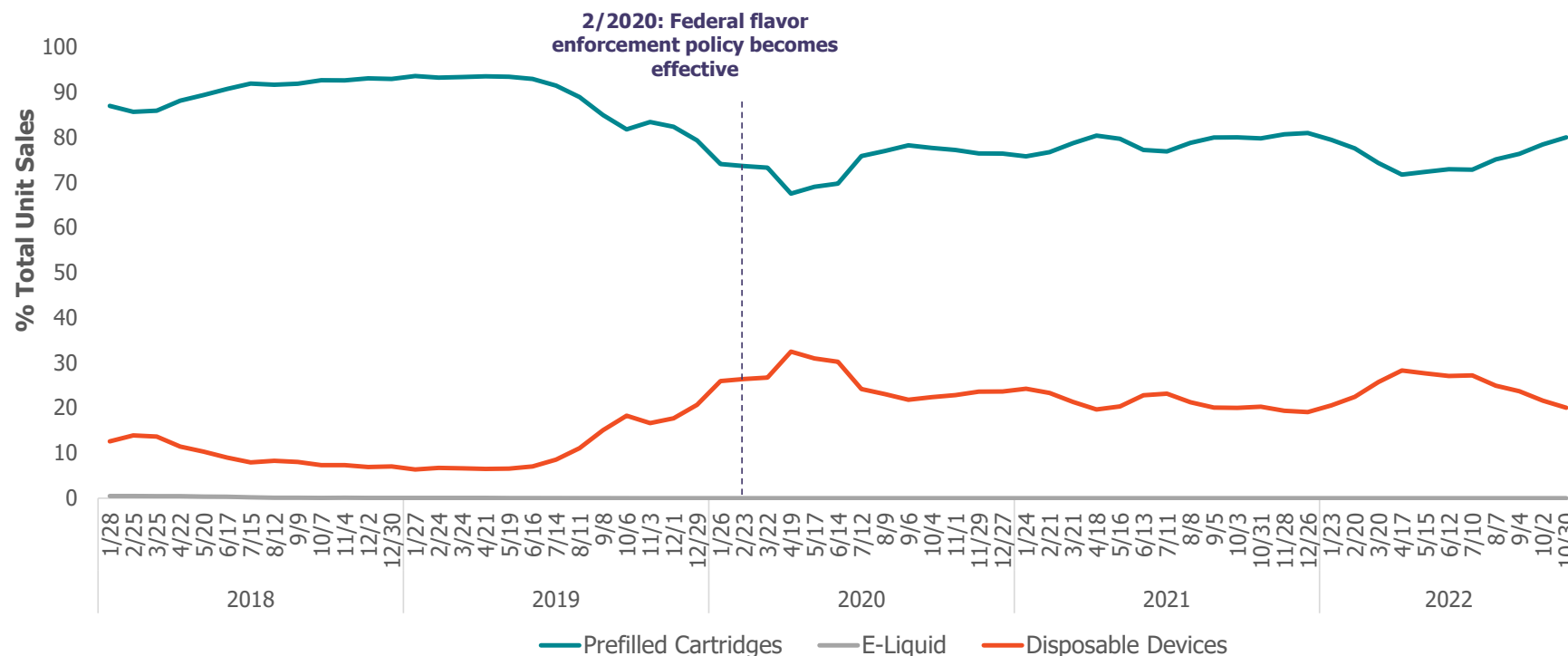


*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (2.6% of total dollar sales in October 2022).

Trends of Unit Sales by Flavor (5/17/20 - 10/30/22)

- Following New York’s flavored e-cigarette restriction, monthly e-cigarette total unit sales decreased by 57.6% between May 17, 2020 and October 30, 2022 (from 1871.9 thousand to 793.0 thousand).
- From May 17, 2020 to October 30, 2022:
 - Menthol-flavored e-cigarette sales decreased by 98.2% (from 741.6 thousand to 13.3 thousand); unit share decreased from 39.6% to 1.7%.
 - Tobacco-flavored e-cigarette sales increased by 14.7% (from 594.8 thousand to 682.3 thousand); unit share increased from 31.8% to 86.0%.
 - Mint-flavored e-cigarette sales decreased by 87.1% (from 98.8 thousand to 12.7 thousand); unit share decreased from 5.3% to 1.6%.
 - All other-flavored e-cigarette sales decreased by 82.7% (from 434.0 thousand to 75.1 thousand); unit share decreased from 23.2% to 9.5%.

Figure 29. New York E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices decreased by 56.0% (from 361.8 thousand to 159.0 thousand); unit share decreased from 26.4% to 20.1%.
 - Sales of prefilled cartridges decreased by 37.1% (from 1007.6 thousand to 633.9 thousand); unit share increased from 73.6% to 79.9%.

Figure 30. New York E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 10/2022

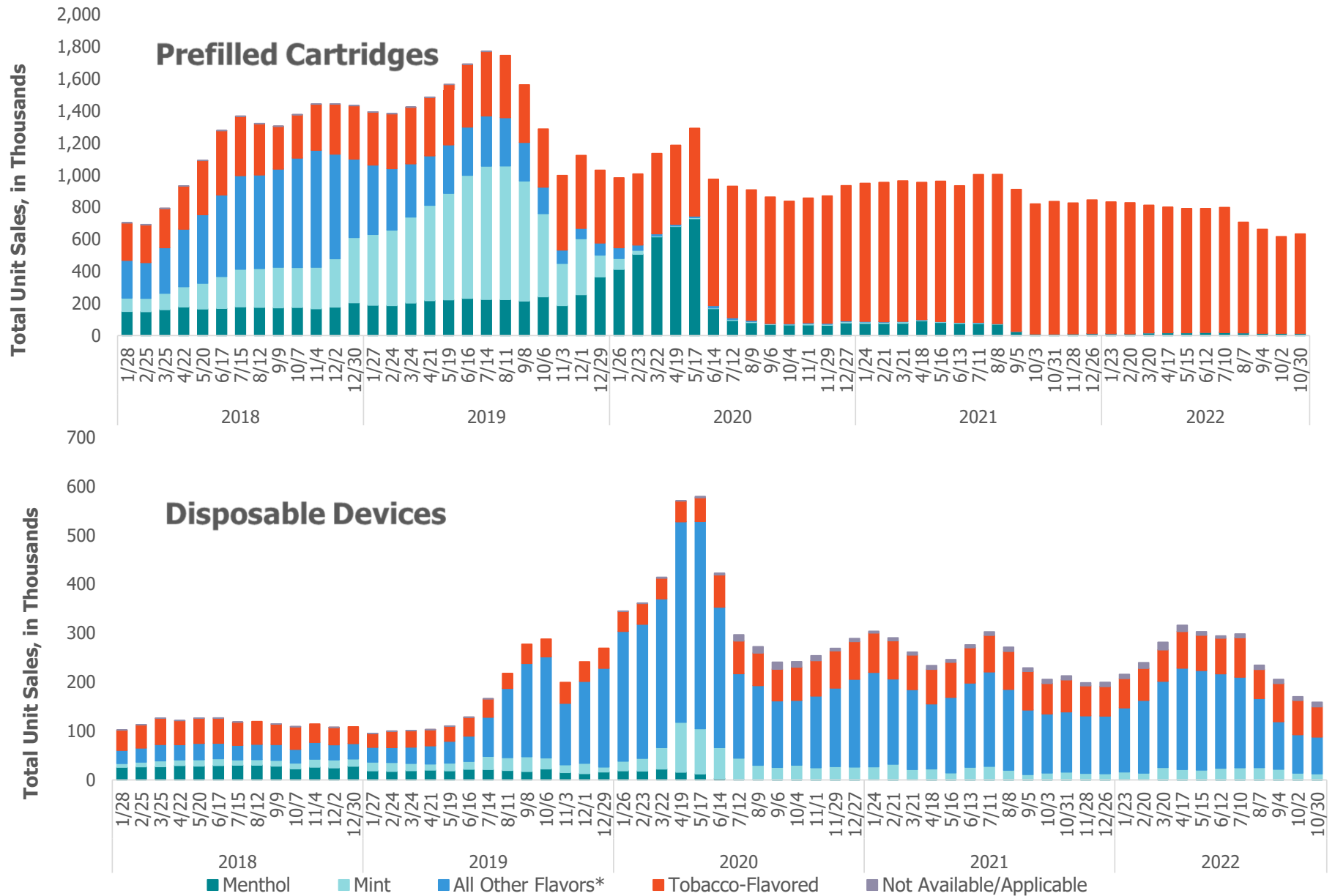
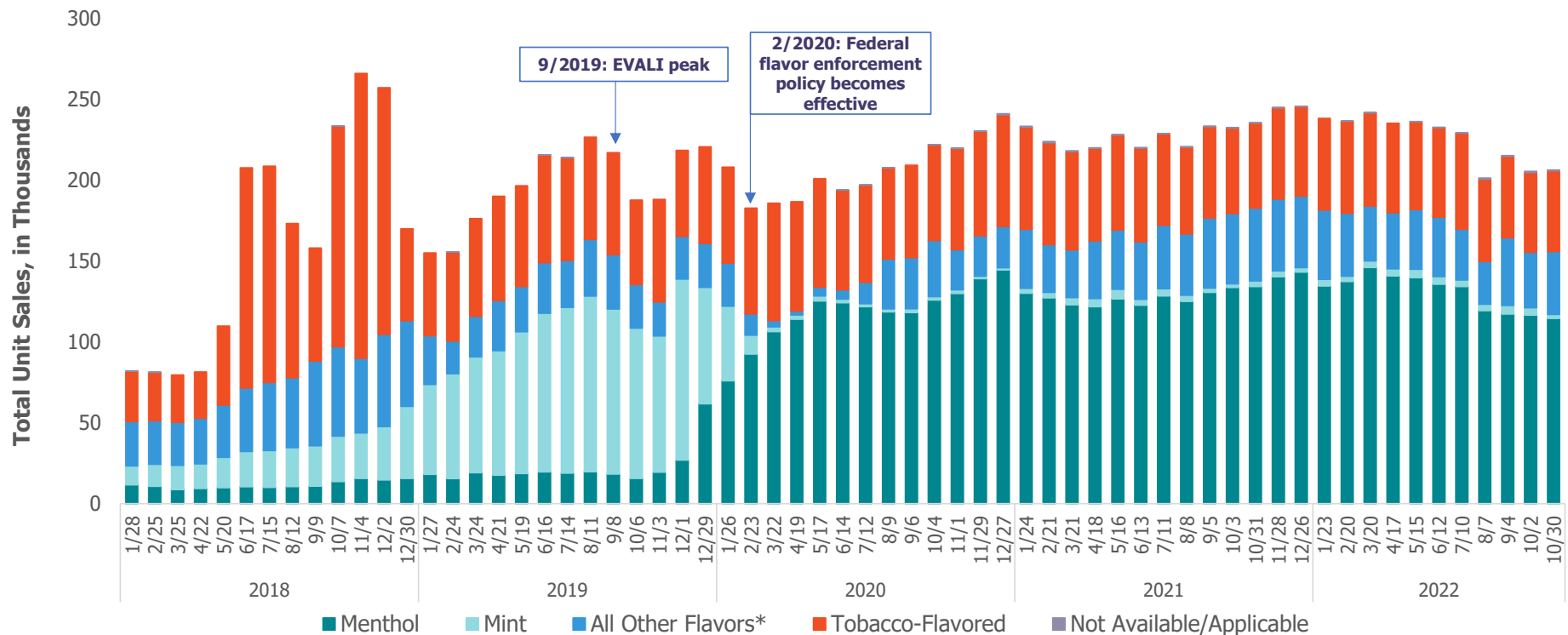


Figure 31. Oregon E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*

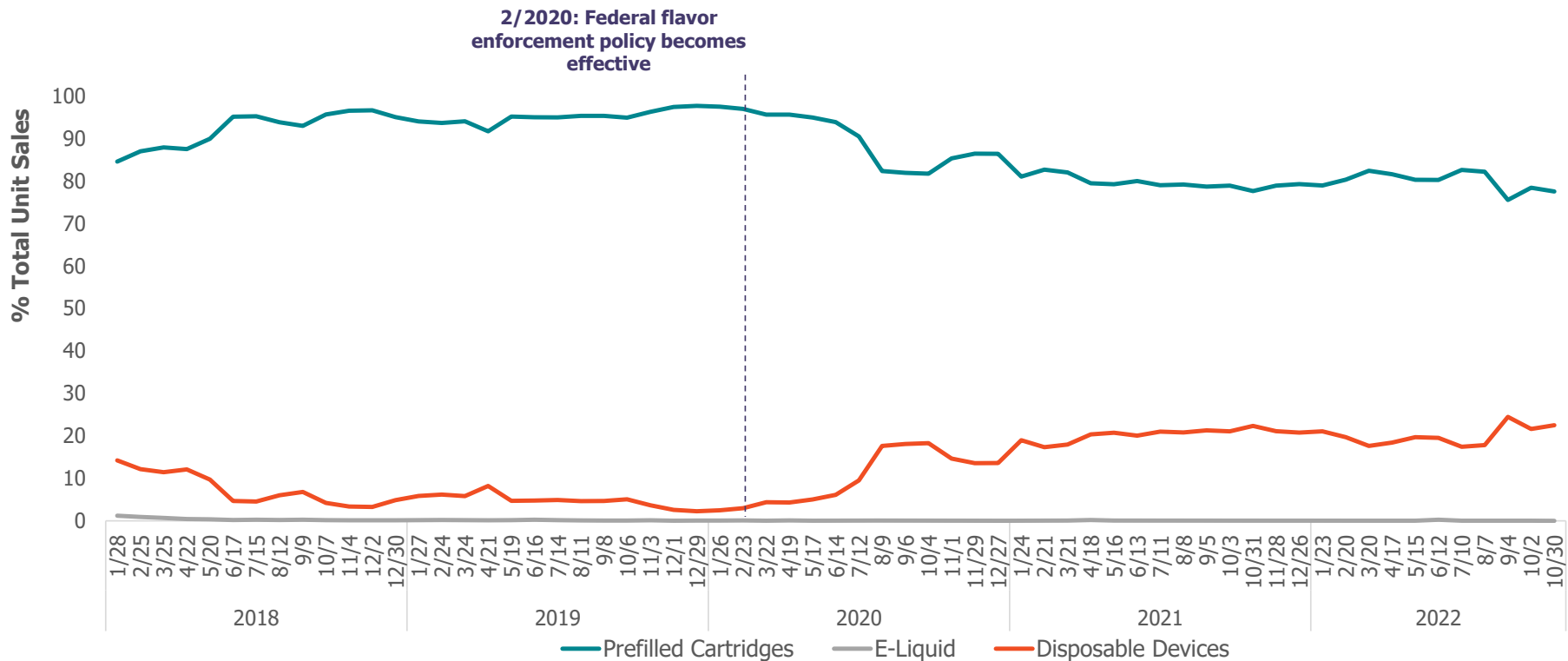


*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (2.6% of total dollar sales in October 2022).

Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From February 23, 2020 to October 30, 2022, monthly e-cigarette unit sales increased by 12.9% from 182.8 to 206.5 thousand units.
- From February 23, 2020 to October 30, 2022:
 - Menthol-flavored e-cigarette sales increased by 23.9% (from 92.5 thousand to 114.6 thousand); unit share increased from 50.6% to 55.5%.
 - Tobacco-flavored e-cigarette sales decreased by 23.6% (from 65.5 thousand to 50.0 thousand); unit share decreased from 35.8% to 24.2%.
 - Mint-flavored e-cigarette sales decreased by 79.2% (from 11.7 thousand to 2.4 thousand); unit share decreased from 6.4% to 1.2%.
 - All other-flavored e-cigarette sales increased by 195.5% (from 13.2 thousand to 38.9 thousand); unit share increased from 7.2% to 18.9%.

Figure 32. Oregon E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices increased by 761.3% (from 5.4 thousand to 46.4 thousand); unit share increased from 2.9% to 22.5%.
 - Sales of prefilled cartridges decreased by 9.7% (from 177.3 thousand to 160.0 thousand); unit share decreased from 97.0% to 77.5%.

Figure 33. Oregon E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 10/2022

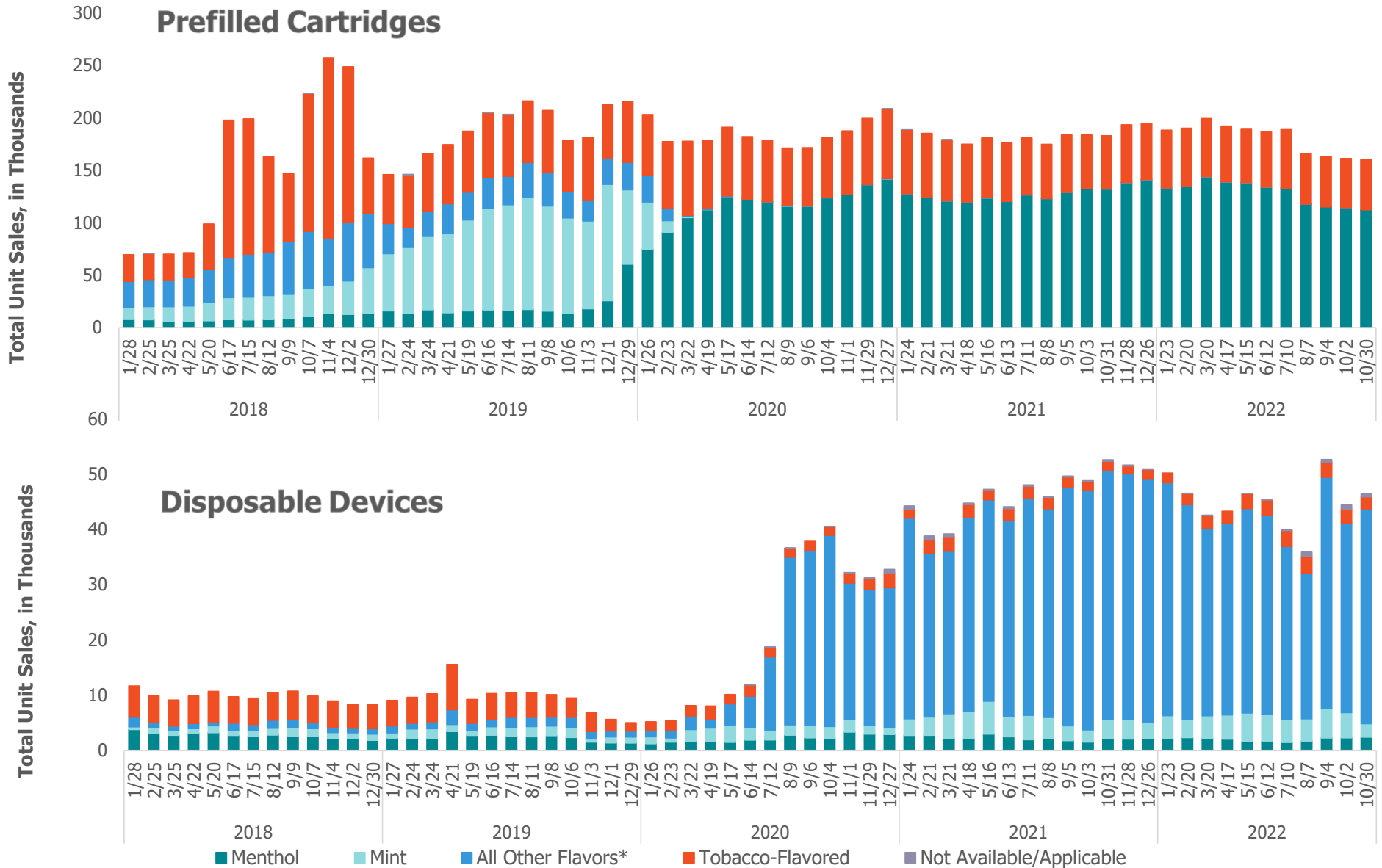
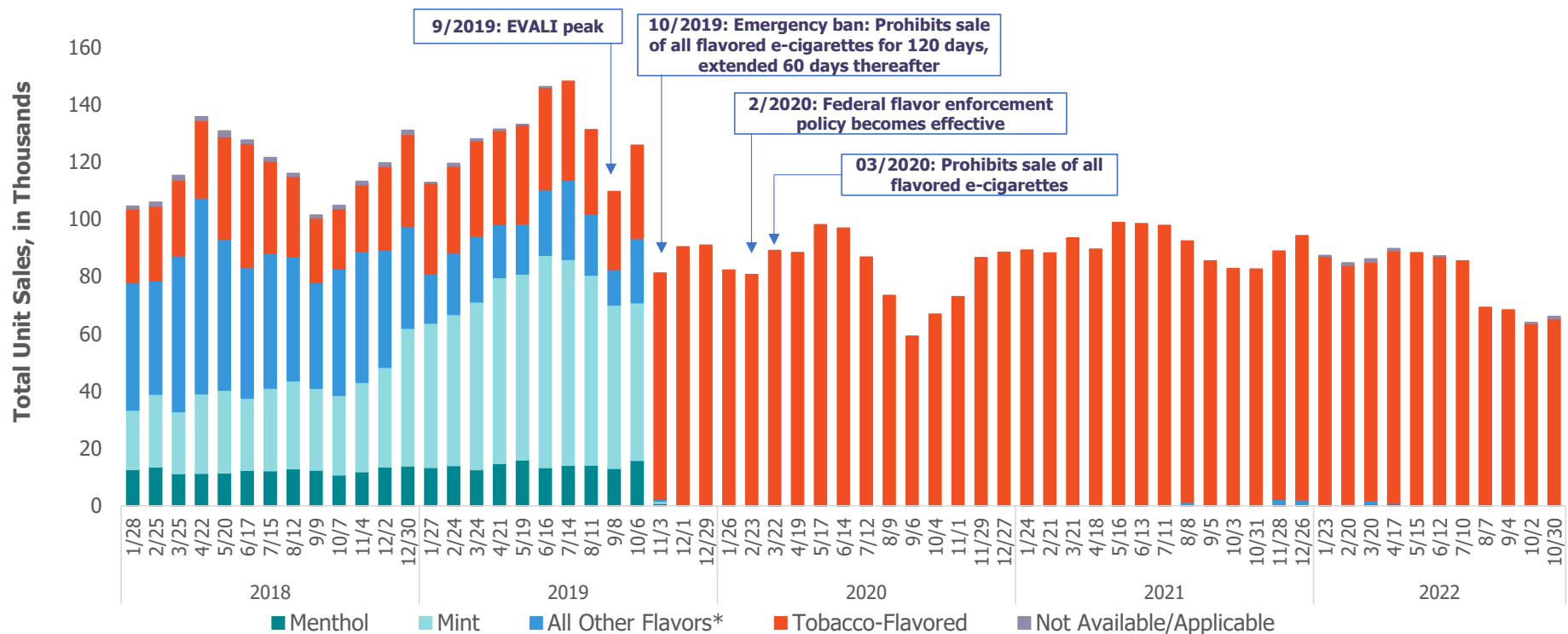


Figure 34. Rhode Island E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*

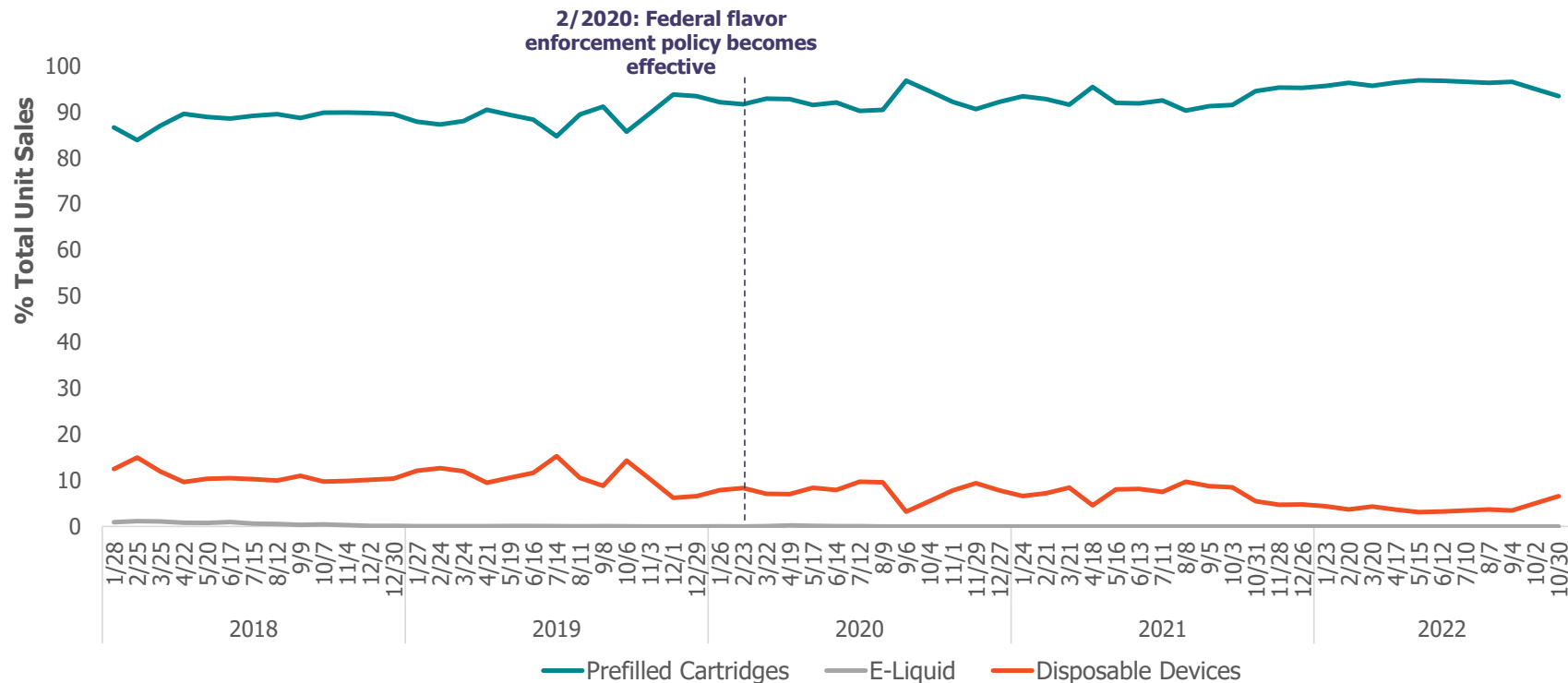


*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (2.6% of total dollar sales in October 2022).

Trends of Unit Sales by Flavor (10/6/19 - 10/30/22)

- Following Rhode Island's flavored e-cigarette restriction, monthly e-cigarette total unit sales decreased by 47.5% from October 6, 2019 to October 30, 2022 (from 125.8 thousand to 66.1 thousand).
- From October 6, 2019 to October 30, 2022:
 - Menthol-flavored e-cigarette sales decreased by 100.0% (from 15.8 thousand to 0.0 thousand); unit share decreased from 12.6% to 0.0%.
 - Tobacco-flavored e-cigarette sales increased by 99.8% (from 32.5 thousand to 64.9 thousand); unit share increased from 25.8% to 98.3%.
 - Mint-flavored e-cigarette sales decreased by 100.0% (from 55.0 thousand to 0.0 thousand); unit share decreased from 43.8% to 0.0%.
 - All other-flavored e-cigarette sales decreased by 98.6% (from 22.4 thousand to 0.3 thousand); unit share decreased from 17.8% to 0.5%.

Figure 35. Rhode Island E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices decreased by 35.7% (from 6.7 thousand to 4.3 thousand); unit share decreased from 8.3% to 6.5%.
 - Sales of prefilled cartridges decreased by 16.6% (from 74.0 thousand to 61.7 thousand); unit share increased from 91.7% to 93.5%.

**Figure 36. Rhode Island E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates
1/2018 – 10/2022**

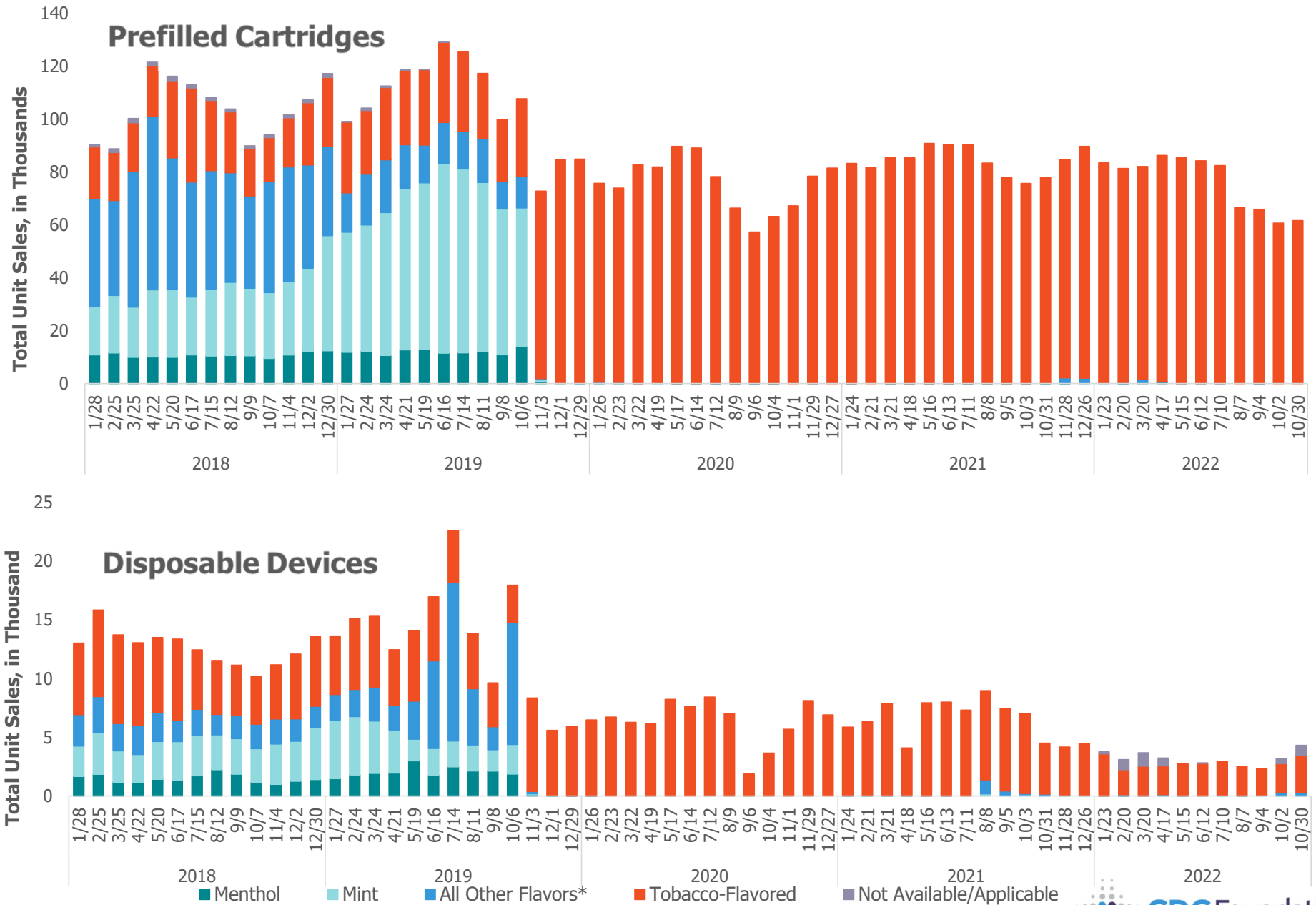
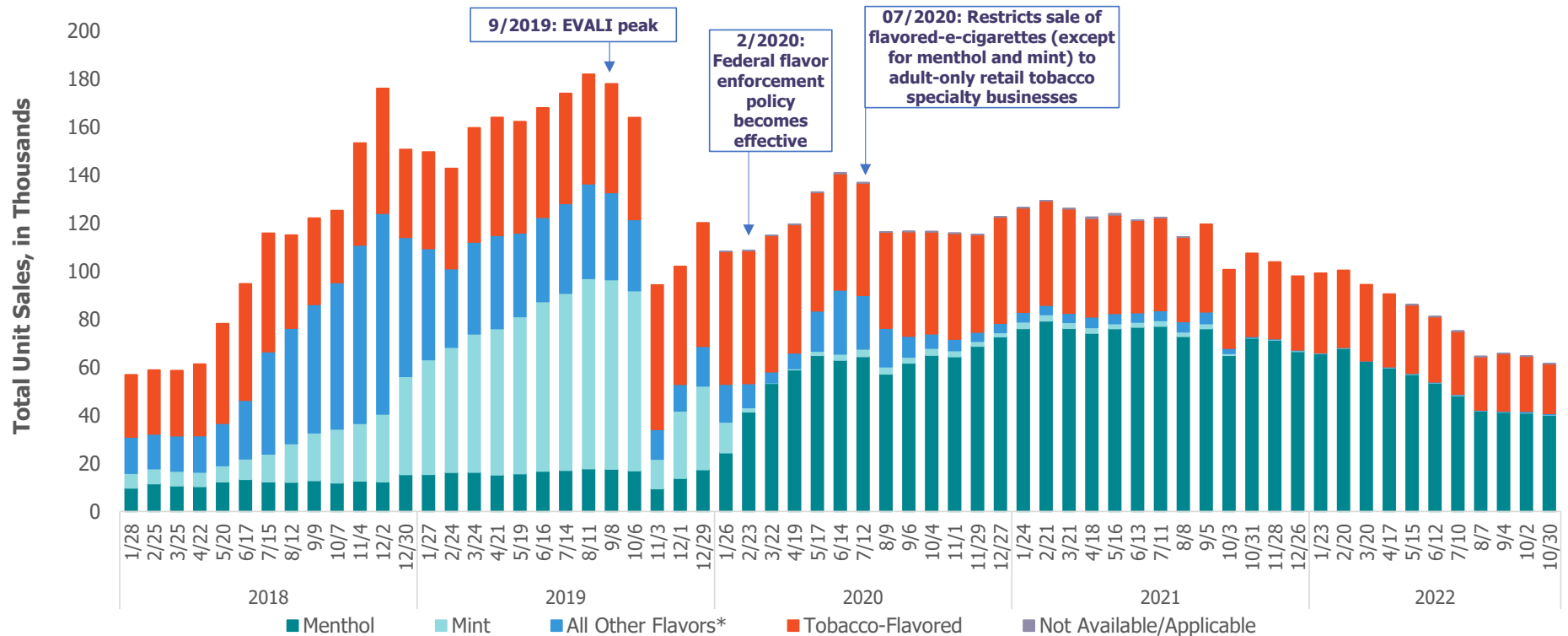


Figure 37. Utah E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*

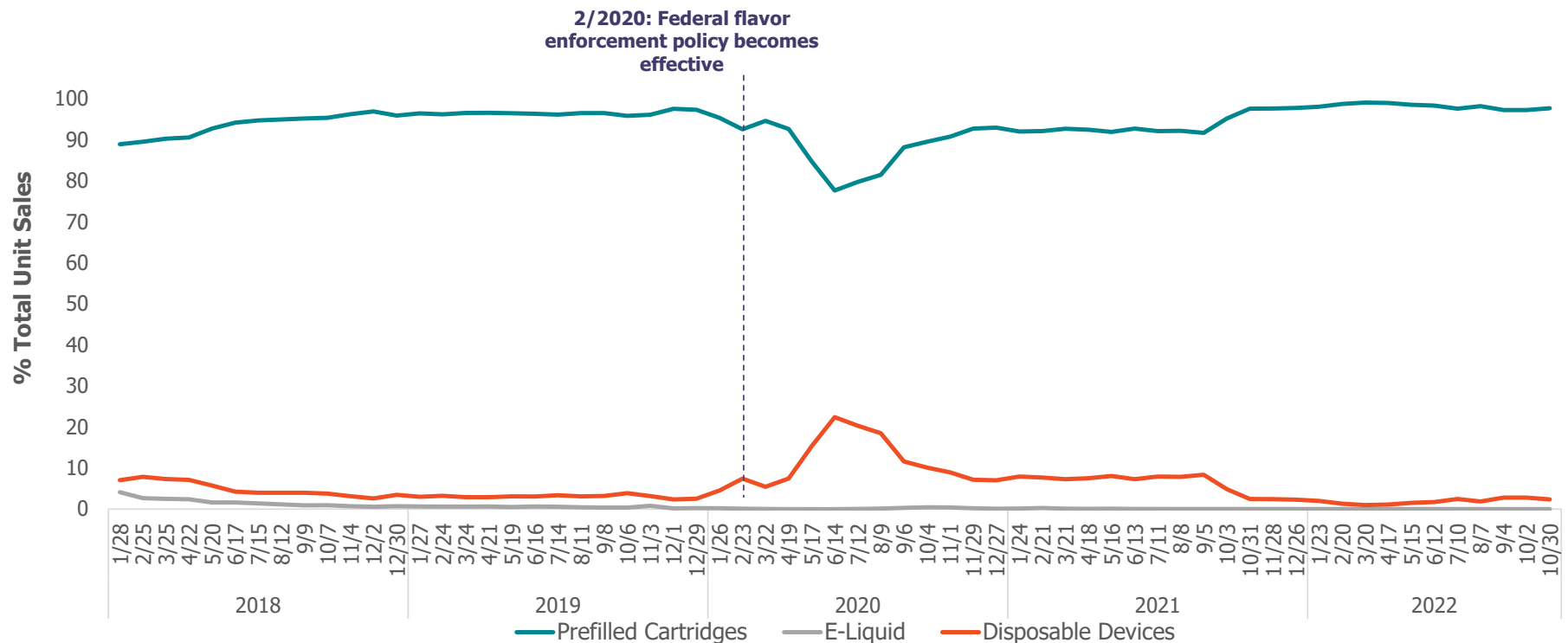


*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (2.6% of total dollar sales in October 2022).

Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From February 23, 2020 to October 30, 2022, monthly e-cigarette unit sales decreased by 43.4% from 108.8 to 61.5 thousand units.
- From February 23, 2020 to October 30, 2022:
 - Menthol-flavored e-cigarette sales decreased by 3.1% (from 41.5 thousand to 40.2 thousand); unit share increased from 38.1% to 65.3%.
 - Tobacco-flavored e-cigarette sales decreased by 62.7% (from 55.5 thousand to 20.7 thousand); unit share decreased from 51.0% to 33.6%.
 - Mint-flavored e-cigarette sales decreased by 95.0% (from 1.8 thousand to 0.1 thousand); unit share decreased from 1.6% to 0.1%.
 - All other-flavored e-cigarette sales decreased by 94.8% (from 10.0 thousand to 0.5 thousand); unit share decreased from 9.2% to 0.8%.

Figure 38. Utah E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices decreased by 82.2% (from 8.1 thousand to 1.4 thousand); unit share decreased from 7.4% to 2.3%.
 - Sales of prefilled cartridges decreased by 40.3% (from 100.6 thousand to 60.1 thousand); unit share increased from 92.5% to 97.7%.

Figure 39. Utah E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates 1/2018 – 10/2022

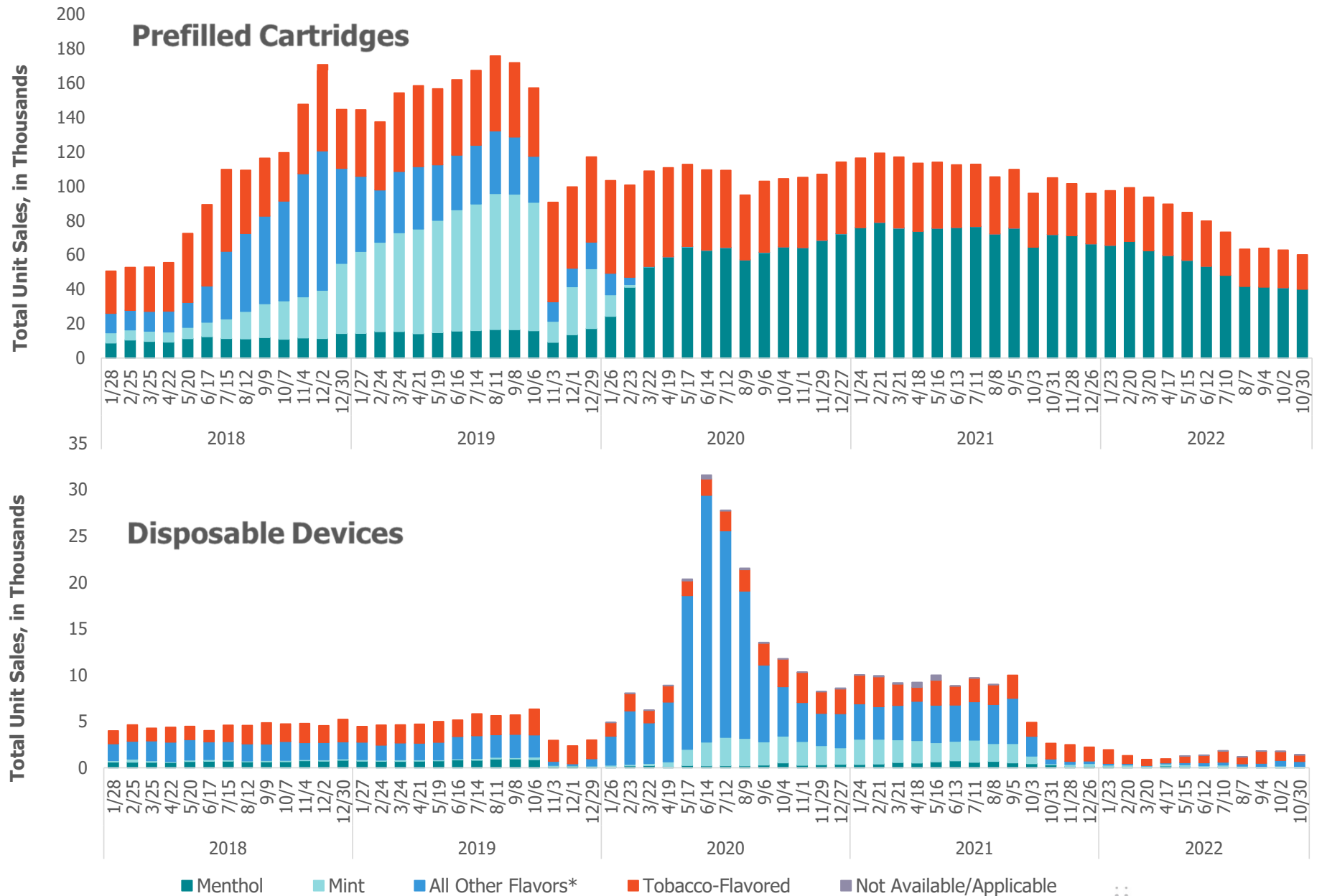
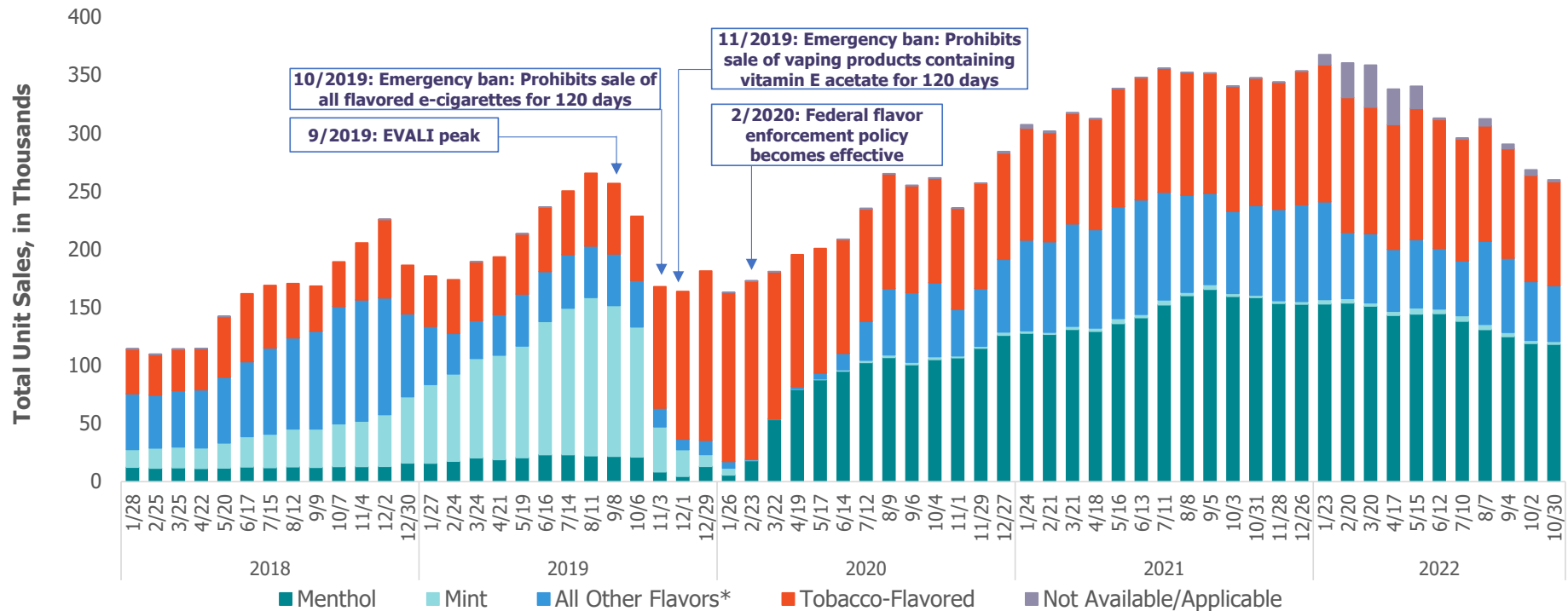


Figure 40. Washington E-Cigarette Unit Sales by Flavor, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; All Other Flavors category includes fruit, clove/spice, chocolate, alcoholic drink (such as wine, cognac, or other cocktails), candy/desserts/other sweets, some other flavor; e-cigarette accessories and devices sold without e-liquids were excluded (2.6% of total dollar sales in October 2022).

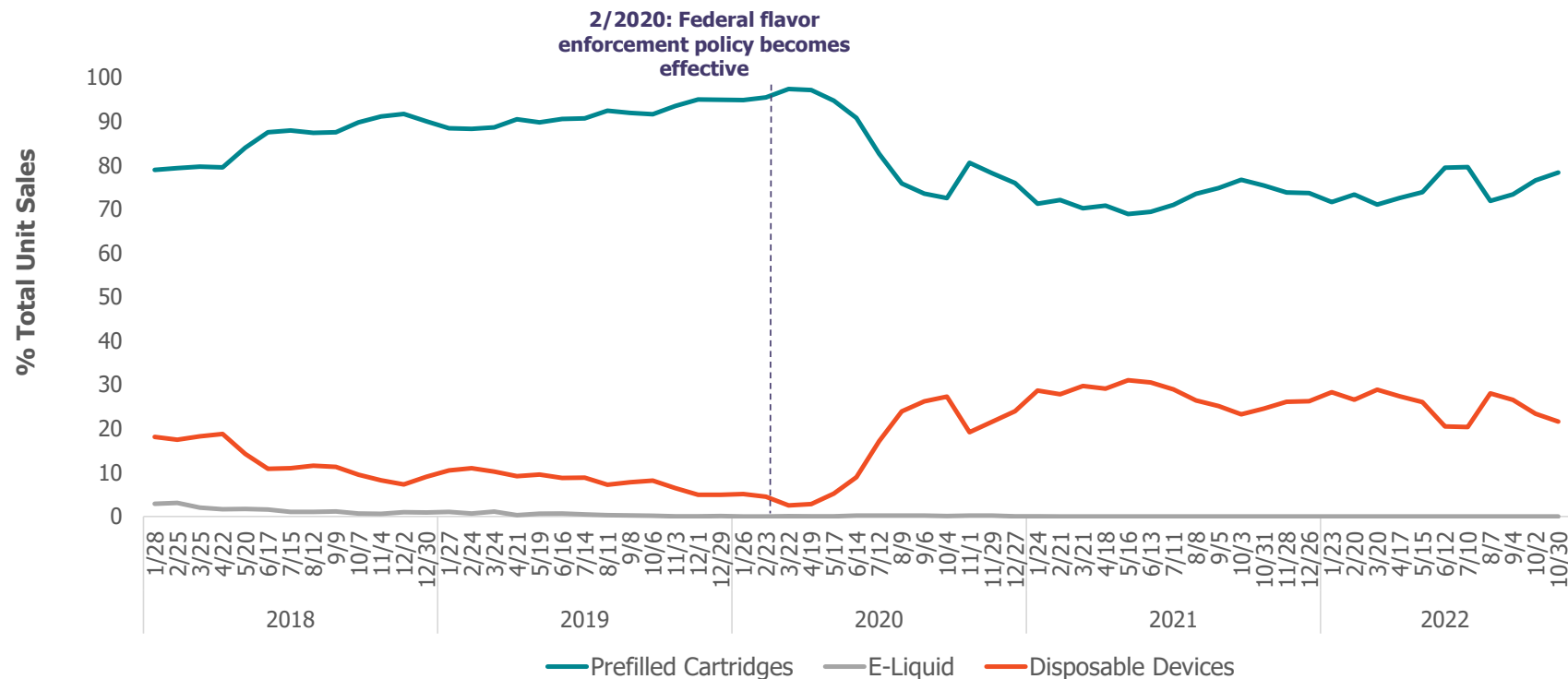
Trends of Unit Sales by Flavor (10/6/19 - 1/26/20)

- Following Washington’s temporary flavored e-cigarette restriction, monthly e-cigarette total unit sales decreased by 28.7% from October 6, 2019, to January 26, 2020 (from 228.4 thousand to 162.9 thousand).

Trends of Unit Sales by Flavor Following FDA’s Flavor Enforcement Policy

- From February 23, 2020 to October 30, 2022, monthly e-cigarette unit sales increased by 50.3% to 260.0 thousand units.
- From February 23, 2020 to October 30, 2022:
 - Menthol-flavored e-cigarette sales increased by 553.2% (from 18.1 thousand to 118.4 thousand); unit share increased from 10.5% to 45.5%.
 - Tobacco-flavored e-cigarette sales decreased by 41.7% (from 153.5 thousand to 89.5 thousand); unit share decreased from 88.8% to 34.4%.
 - Mint-flavored e-cigarette sales increased by 383.6% (from 0.5 thousand to 2.4 thousand); unit share increased from 0.3% to 0.9%.
 - All other-flavored e-cigarette sales increased by 6598.0% (from 0.7 thousand to 48.1 thousand); unit share increased from 0.4% to 18.5%.

Figure 41. Washington E-Cigarette Unit Sales by Product Type, 4 Week Estimates 1/2018 – 10/2022*



*Sales data does not reflect sales from vape shops or online retailers; dates represent end of 4-week periods; prefilled cartridges include tanks, cartridges, and pods used in rechargeable and reusable e-cigarette device; disposable devices include nonrechargeable and nonreusable e-cigarette devices that are not intended to be refilled with e-liquid after being depleted; e-liquids are containers of the liquid used in e-cigarette devices, which typically contains a humectant (e.g., propylene glycol), nicotine, and flavoring.

Trends of Unit Sales by Product Following FDA’s Flavor Enforcement Policy

- Following FDA’s flavor enforcement policy, which prohibited the sale of flavored prefilled cartridges but exempted disposable devices and menthol and tobacco prefilled cartridges, between February 23, 2020 and October 30, 2022:
 - Sales of disposable devices increased by 622.7% (from 7.8 thousand to 56.3 thousand); unit share increased from 4.5% to 21.6%.
 - Sales of prefilled cartridges increased by 23.4% (from 165.1 thousand to 203.7 thousand); unit share decreased from 95.5% to 78.4%.

**Figure 42. Washington E-Cigarette Unit Sales by Product Type and Flavor, 4 Week Estimates
1/2018 – 10/2022**

