

## **Appendix D: Disproportionality of marijuana law enforcement in Virginia by locality (2015–2019)**

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JLARC staff assessed disproportionality of marijuana law enforcement at the locality level from 2015–2019. A five-year period was chosen instead of a 10-year period because this timeframe had the heaviest enforcement of marijuana possession laws. From 2010–2014, there were 20,700 marijuana possession arrests statewide, on average, but from 2015–2019 there were 23,300 average annual arrests.

Disproportionality was evaluated by comparing the Black arrest rate/rate of cases that were prosecuted or otherwise proceeded in court to the white arrest rate/rate of cases that were prosecuted or otherwise proceeded in court for marijuana possession from 2015–2019. The resulting rates of disproportionality reflect how many times more likely a Black individual was to be arrested for marijuana possession or have his or her case proceed in court than a white individual within the same locality during this time period.

Rates of cases that were prosecuted or otherwise proceeded in court were used instead of conviction rates because they are a better indicator of how strictly a locality is enforcing the law. Cases that proceeded in court included all cases with a final disposition on the merits, including dismissed cases, but excluded “nolle prossed” cases. (Nolle prossed cases are those in which prosecutors requested that the charges be dropped.) Some commonwealth’s attorneys have implemented policies not to prosecute possession cases, and these decisions would not be adequately captured in conviction rates. A separate analysis using solely nolle prossed cases could be a good indicator of prosecutorial discretion across localities, but an insufficient number of nolle prossed cases made it difficult to draw any reliable conclusions at the locality level.

Racial disparities in marijuana law enforcement were found in every Virginia locality where there was sufficient data to make an assessment. Localities were determined to have insufficient data if they had fewer than 10 Black arrests/cases and/or less than 30 percent resident arrests/cases per year. Requiring a locality to have a minimum average of 10 Black arrests/cases per year ensures there is sufficient data upon which to draw meaningful conclusions about the disproportionality within that locality. Establishing a threshold of 30 percent resident arrests controls for localities that may be arresting a high proportion of non-residents, such as those traveling through on the interstate. Some of the disproportionality in these localities is likely overstated because many of the people arrested for marijuana possession were not residents of that locality. The 30 percent resident arrest threshold partially controls for this effect but does eliminate it. However, even if arrest rates are overstated in some localities, these localities still appear to be disproportional to some extent.

A locality could have a high rate of disproportionality without having a high number of arrests or cases that proceed in court, and vice versa. For example, in Prince George County, Black individuals were nearly six times more likely to be arrested for marijuana possession, but only 56 Black individuals were arrested per year, on average. In contrast, in Prince William County, Black individuals were three times more likely to be arrested, with an average of over 700 Black arrests for marijuana possession each year.

TABLE D-1

Eighty-eight localities had disproportionate arrest rate ratios of Black to white individuals for marijuana possession from 2015–2019

Locality	Percent resident arrests	Percent Black population	Average Black arrests	Black rate per 1,000	Percent white population	Average white arrests	White rate per 1,000	Rate of disproportionality
Accomack County	69%	28%	28	3.07	60%	29	1.48	2.07
Albemarle County	68	9	56	5.50	77	56	0.68	8.11
Alexandria	49	22	200	5.77	52	63	0.76	7.57
Alleghany County	67	5	10	14.66	92	27	1.94	7.55
Amelia County	62	21	8	-	74	12	-	-
Amherst County	64	19	21	3.42	75	32	1.32	2.58
Appomattox County	81	19	10	3.24	77	13	1.09	2.96
Arlington County	36	9	219	10.52	62	108	0.75	14.01
Augusta County	82	4	12	3.65	91	40	0.59	6.23
Bath County	51	4	1	-	92	6	-	-
Bedford County	55	7	48	8.71	88	113	1.64	5.30
Bland County	30	4	4	-	94	12	-	-
Botetourt County	50	3	35	33.14	93	110	3.54	9.36
Bristol	38	6	4	-	89	37	-	-
Brunswick County	24	55	28	-	41	6	-	-
Buchanan County	88	3	0	-	95	17	-	-
Buckingham County	85	34	8	-	61	11	-	-
Buena Vista County	45	5	4	-	88	23	-	-
Campbell County	85	14	12	1.48	80	32	0.73	2.04
Caroline County	42	27	77	9.36	64	65	3.36	2.78
Carroll County	35	1	25	108.87	95	76	2.70	40.37
Charles City County	63	46	3	-	42	3	-	-
Charlotte County	49	28	5	-	68	7	-	-
Charlottesville	84	19	7	-	66	5	-	-
Chesapeake	53	29	632	8.93	58	233	1.69	5.29
Chesterfield County	67	23	798	10.09	62	532	2.50	4.03

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Clarke County	60	5	5	-	86	24	-	-
Colonial Heights	24	15	151	-	72	90	-	-
Covington	44	13	1	-	81	4	-	-
Craig County	46	0	0	-	97	4	-	-
Culpeper County	70	14	71	9.75	71	92	2.54	3.84
Cumberland County	69	31	5	-	63	9	-	-
Danville	67	50	196	9.46	42	60	3.43	2.76
Dickenson County	76	0	0	-	98	8	-	-
Dinwiddie County	36	32	22	2.37	62	10	0.57	4.19
Emporia	41	63	59	17.29	28	13	8.63	2.00
Essex County	51	38	12	2.81	55	8	1.29	2.17
Fairfax City	23	6	12	-	56	31	-	-
Fairfax County	68	10	1,230	11.05	51	1224	2.09	5.28
Falls Church	9	4	6	-	72	5	-	-
Fauquier County	48	7	46	8.79	80	90	1.61	5.46
Floyd County	85	2	0	-	93	15	-	-
Fluvanna County	71	15	11	2.85	78	23	1.10	2.58
Franklin City	56	57	13	2.69	37	3	0.93	2.88
Franklin County	66	8	65	14.69	87	173	3.52	4.17
Frederick County	58	4	20	5.65	83	68	0.94	6.03
Fredericksburg	39	23	89	13.49	60	73	4.29	3.14
Galax	51	6	3	-	75	29	-	-
Giles County	47	1	3	-	95	22	-	-
Gloucester County	66	8	28	9.42	85	71	2.23	4.22
Goochland County	59	16	4	-	78	6	-	-
Grayson County	66	5	3	-	90	24	-	-
Greene County	70	7	8	-	83	30	-	-
Greensville County	29	59	24	-	36	15	-	-
Halifax County	58	36	68	5.43	60	32	1.56	3.48
Hampton	64	49	366	5.50	38	77	1.47	3.73
Hanover County	30	9	377	39.08	84	235	2.65	14.75
Harrisonburg	65	7	51	13.33	66	141	4.01	3.33
Henrico County	64	30	675	6.92	53	232	1.33	5.21
Henry County	88	22	21	1.84	70	37	1.03	1.78
Highland County	47	1	0	-	97	1	-	-
Hopewell	75	41	29	3.17	46	7	0.65	4.87
Isle Of Wight County	41	23	40	4.79	71	28	1.08	4.43
James City County	60	13	74	7.57	76	83	1.45	5.21

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King and Queen County	54	26	17	9.11	66	21	4.42	2.06
King George County	46	16	24	5.80	74	26	1.35	4.30
King William County	59	16	5	-	77	9	-	-
Lancaster County	79	28	9	-	67	5	-	-
Lee County	72	4	0	-	93	12	-	-
Lexington	41	9	2	-	82	10	-	-
Loudoun County	74	7	151	5.23	56	252	1.13	4.62
Louisa County	78	16	21	3.62	78	35	1.26	2.88
Lunenburg County	70	33	17	4.26	59	12	1.67	2.55
Lynchburg	73	28	159	7.06	63	60	1.20	5.90
Madison County	47	9	10	8.58	85	23	2.06	4.16
Manassas	49	13	44	7.95	41	36	2.11	3.77
Manassas Park	49	13	31	13.92	33	36	6.34	2.20
Martinsville	58	46	43	7.21	44	23	4.02	1.79
Mathews County	75	9	2	-	86	7	-	-
Mecklenburg County	48	34	45	4.25	60	23	1.24	3.41
Middlesex County	41	17	2	-	78	3	-	-
Montgomery County	63	4	39	9.78	84	154	1.87	5.24
Nelson County	66	11	4	-	82	11	-	-
New Kent County	41	13	32	11.09	79	38	2.22	5.00
Newport News	84	41	400	5.49	43	72	0.93	5.90
Norfolk	80	41	482	4.81	44	91	0.86	5.61
Northampton County	51	34	9	-	54	7	-	-
Northumberland County	74	24	13	4.37	70	11	1.34	3.26
Norton	22	6	1	-	86	11	-	-
Nottoway County	61	39	19	3.10	54	9	1.05	2.95
Orange County	50	13	28	5.97	78	45	1.60	3.72
Page County	83	2	7	-	94	64	-	-
Patrick County	55	5	2	-	90	15	-	-
Petersburg	69	76	142	5.93	15	12	2.54	2.33
Pittsylvania County	76	21	13	1.02	74	20	0.45	2.30
Poquoson	62	1	4	-	91	17	-	-
Portsmouth	75	53	86	1.70	38	17	0.46	3.69

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Powhatan County	59	10	15	5.27	86	48	1.96	2.69
Prince Edward County	44	32	23	3.07	62	15	1.04	2.96
Prince George County	30	31	56	4.68	55	16	0.78	5.98
Prince William County	81	21	723	7.64	43	490	2.46	3.10
Pulaski County	56	5	14	8.10	91	51	1.64	4.96
Radford	47	9	50	31.35	83	100	6.76	4.64
Rappahannock County	35	4	4	-	89	24	-	-
Richmond City	73	48	272	2.51	41	37	0.40	6.35
Richmond County	59	29	14	5.38	61	8	1.41	3.81
Roanoke City	88	29	188	6.60	59	106	1.81	3.64
Roanoke County	40	6	82	15.01	86	186	2.30	6.52
Rockbridge County	42	3	38	55.97	92	111	5.33	10.49
Rockingham County	62	2	23	14.25	89	94	1.32	10.78
Russell County	75	1	2	-	97	31	-	-
Salem	40	7	34	18.47	86	92	4.25	4.35
Scott County	36	1	3	-	97	65	-	-
Shenandoah County	52	2	31	30.90	88	118	3.11	9.93
Smyth County	51	2	28	40.45	94	126	4.34	9.31
Southampton County	39	35	27	4.36	61	13	1.15	3.78
Spotsylvania County	66	16	159	7.53	68	182	2.00	3.77
Stafford County	65	18	181	6.87	62	165	1.82	3.78
Staunton	63	11	29	10.68	81	85	4.29	2.49
Suffolk	67	42	89	2.36	49	29	0.65	3.65
Surry County	31	42	3	-	53	4	-	-
Sussex County	33	57	20	3.10	38	7	1.65	1.88
Tazewell County	63	3	21	16.10	94	98	2.50	6.45
Virginia Beach	67	19	373	4.36	62	199	0.71	6.10
Warren County	60	5	26	14.03	87	95	2.75	5.09
Washington County	48	1	13	16.84	95	116	2.26	7.47
Waynesboro	70	12	8	-	75	20	-	-
Westmoreland County	63	26	30	6.55	64	25	2.17	3.02
Williamsburg	33	15	35	15.33	68	30	2.95	5.19
Winchester	41	11	35	11.74	66	87	4.73	2.48
Wise County	65	6	4	-	91	49	-	-

Wythe County	33	3	37	46.84	94	106	3.90	12.00
York County	54	13	37	4.11	71	52	1.07	3.85

SOURCE: JLARC staff analysis using arrest data from the Virginia State Police.

NOTE: The rate of disproportionality was calculated by dividing the locality arrest rate of Black individuals per 1,000 residents by the locality arrest rate of white individuals per 1,000 residents. Localities were categorized as having insufficient data if they had less than 30 percent resident arrests and/or fewer than 10 Black arrests per year. Many localities with disproportionate arrest rates are along the I-81 corridor, which make it appear as though most arrests are of travelers along the interstate. However, the localities that include portions of I-81 had an average of 55 percent resident arrests from 2015–2019.

**TABLE D-2**

**In 83 localities, cases of Black individuals proceeded in court at a higher rate than cases of white individuals, likely stemming from disproportionate arrest rates**

Locality	Percent resident cases	Percent Black population	Average Black cases	Black rate per 1,000	Percent white population	Average white cases	White rate per 1,000	Rate of disproportionality
Accomack County	62%	28%	31	3.42	60%	31	1.58	2.17
Albemarle County	38	9	67	6.59	77	104	1.25	5.27
Alexandria	37	22	160	4.63	52	99	1.21	3.83
Alleghany County <sup>a</sup>	33	7	18	12.35	89	55	2.97	4.15
Amelia County	41	21	9	-	74	15	-	-
Amherst County	47	19	29	4.81	75	51	2.12	2.27
Appomattox County	51	19	14	4.66	77	24	2.02	2.30
Arlington County	27	9	139	-	62	79	-	-
Augusta County	34	4	13	4.09	91	43	0.63	6.46
Bath County	40	4	2	-	92	11	-	-
Bedford County	47	7	26	4.76	88	54	0.79	6.03
Bland County	22	4	2	-	94	9	-	-
Botetourt County	23	3	29	-	93	81	-	-
Bristol	34	6	4	-	89	33	-	-
Brunswick County	22	55	33	-	41	5	-	-
Buchanan County	60	3	1	-	95	11	-	-
Buckingham County	54	34	7	-	61	11	-	-
Buena Vista County	35	5	6	-	88	46	-	-
Campbell County	38	14	22	2.76	80	43	0.98	2.81
Caroline County	32	27	47	5.77	64	34	1.75	3.30
Carroll County	21	1	31	-	95	96	-	-

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Charles City County	43	46	5	-	42	4	-	-
Charlotte County	47	28	10	2.91	68	10	1.25	2.33
Charlottesville	44	19	29	3.34	66	29	0.94	3.55
Chesapeake	49	29	653	9.24	58	245	1.77	5.21
Chesterfield County	54	23	489	6.19	62	260	1.22	5.06
Clarke County	14	5	4	-	86	18	-	-
Colonial Heights	25	15	126	-	72	64	-	-
Craig County	49	0	0	-	97	9	-	-
Culpeper County	67	14	80	10.96	71	111	3.09	3.55
Cumberland County	26	31	5	-	63	10	-	-
Danville	72	50	237	11.45	42	84	4.81	2.38
Dickenson County	80	0	0	-	98	6	-	-
Dinwiddie County	16	32	22	-	62	10	-	-
Emporia	46	63	51	14.96	28	9	6.14	2.44
Essex County	41	38	15	3.68	55	9	1.56	2.36
Fairfax City	26	6	7	-	56	12	-	-
Fairfax County	51	10	840	7.54	51	953	1.63	4.62
Falls Church	11	4	7	-	72	10	-	-
Fauquier County	46	7	44	8.52	80	95	1.71	4.98
Floyd County	61	2	0	-	93	9	-	-
Fluvanna County	43	15	10	2.49	78	22	1.08	2.32
Franklin City	58	57	17	3.54	37	2	0.80	4.43
Franklin County	59	8	36	8.28	87	90	1.83	4.51
Frederick County	49	4	34	9.63	83	134	1.86	5.18
Fredericksburg	36	23	96	14.68	60	96	5.65	2.60
Galax	64	6	2	-	75	26	-	-
Giles County	49	1	4	-	95	30	-	-
Gloucester County	56	8	29	9.89	85	72	2.28	4.34
Goochland County	34	16	19	5.22	78	27	1.54	3.39
Grayson County	36	5	1	-	90	24	-	-
Greene County	55	7	6	-	83	23	-	-
Greensville County	1	59	25	-	36	15	-	-
Halifax County	67	36	77	6.17	60	36	1.73	3.57
Hampton	63	49	55	0.83	38	15	0.29	2.83
Hanover County	23	9%	321	-	84	184	-	-
Harrisonburg/ Rockingham County	61	4	43	7.88	80	192	1.80	4.37
Henrico County	44	30	464	4.76	53	147	0.84	5.65

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Henry County	51	22	13	1.13	70	21	0.58	1.95
Highland County	67	1	0	-	97	3	-	-
Hopewell	54	41	54	5.93	46	20	1.92	3.09
Isle Of Wight County	38	23	49	5.82	71	33	1.27	4.59
James City County/ Williamsburg	56	13	88	7.29	75	88	1.32	5.52
King and Queen County	33	26	14	7.48	66	13	2.75	2.72
King George County	43	16	14	3.31	74	13	0.68	4.83
King William County	45	16	3	-	77	5	-	-
Lancaster County	79	28	6	-	67	5	-	-
Lee County	64	4	0	-	93	26	-	-
Lexington/ Rockbridge County	31	4	46	35.10	90	158	5.90	5.95
Loudoun County	64	7	134	4.64	56	262	1.17	3.95
Louisa County	53	16	23	4.05	78	46	1.64	2.46
Lunenburg County	48	33	17	4.26	59	13	1.84	2.32
Lynchburg	74	28	97	4.32	63	61	1.21	3.57
Madison County	36	9	7	-	85	18	-	-
Martinsville	66	46	22	3.69	44	13	2.20	1.67
Mathews County	75	9	1	-	86	4	-	-
Mecklenburg County	33	34	61	5.77	60	33	1.80	3.21
Middlesex County	47	17	3	-	78	4	-	-
Montgomery County	56	4	25	6.34	84	93	1.13	5.58
Nelson County	38	11	9	-	82	25	-	-
New Kent County	25	13	16	-	79	16	-	-
Newport News	71	41	536	7.36	43	120	1.54	4.78
Norfolk	70	41	508	5.07	44	106	1.00	5.08
Northampton County	17	34	31	-	54	20	-	-
Northumberland County	60	24	10	3.43	70	8	0.99	3.47
Nottoway County	68	39	14	2.37	54	11	1.26	1.87
Orange County	50	13	20	4.28	78	41	1.45	2.96
Page County	73	2	5	-	94	69	-	-



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Patrick County	53	5	1	-	90	14	-	-
Petersburg	73	76	182	7.60	15	13	2.75	2.76
Pittsylvania County	47	21	27	2.05	74	34	0.74	2.77
Portsmouth	72	53	77	1.52	38	18	0.50	3.07
Powhatan County	42	10	11	3.84	86	30	1.21	3.16
Prince Edward County	33	32	26	3.53	62	26	1.87	1.88
Prince George County	21	31	67	-	55	24	-	-
Prince William County <sup>b</sup>	76	20	522	5.10	43	547	2.47	2.07
Pulaski County	55	5	15	8.81	91	61	1.98	4.46
Radford	41	9	35	21.61	83	53	3.59	6.02
Rappahannock County	23	4	4	-	89	22	-	-
Richmond City	53	48	443	4.10	41	93	1.00	4.09
Richmond County	25	29	13	-	61	6	-	-
Roanoke City	77	29	78	2.74	59	41	0.71	3.86
Roanoke County	35	6	58	10.66	86	127	1.57	6.78
Russell County	62	1	1	-	97	27	-	-
Salem	48	7	25	13.74	86	63	2.89	4.75
Scott County	32	1	4	-	97	60	-	-
Shenandoah County	50	2	25	25.65	88	101	2.66	9.65
Smyth County	43	2	14	19.51	94	56	1.93	10.13
Southampton County	17	35	11	-	61	7	-	-
Spotsylvania County	53	16	140	6.65	68	155	1.71	3.89
Stafford County	56	18	208	7.90	62	220	2.43	3.25
Staunton	61	11	32	11.62	81	96	4.86	2.39
Suffolk	63	42	185	4.94	49	58	1.31	3.76
Surry County	60	42	3	-	53	2	-	-
Sussex County	19	57	21	-	38	10	-	-
Tazewell County	60	3	15	11.35	94	62	1.60	7.11
Virginia Beach	63	19	324	3.79	62	235	0.84	4.49
Warren County	56	5	21	11.51	87	72	2.09	5.51
Washington County	40	1	11	14.51	95	87	1.68	8.63
Waynesboro	63	12	9	-	75	28	-	-
Westmoreland County	53	26	29	6.29	64	23	2.06	3.05
Winchester	45	11	37	12.42	66	99	5.39	2.30
Wise County <sup>c</sup>	60	6	3	-	91	44	-	-

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Wythe County	32	3	34	42.31	94	97	3.59	11.80
York County <sup>d</sup>	40	11	41	4.56	74	74	1.24	3.67

SOURCE: JLARC staff analysis using general district court data from the Office of the Executive Secretary of the Virginia Supreme Court. NOTE: <sup>a</sup> Includes Covington. <sup>b</sup> Includes Manassas and Manassas Park. <sup>c</sup> Includes Norton. <sup>d</sup> Includes Poquoson. The rate of disproportionality for cases that proceeded in court was calculated by dividing each locality's rate of cases for Black individuals per 1,000 by the locality's rate of cases for white individuals per 1,000. Localities were categorized as having insufficient data if they had less than 30 percent resident cases and/or fewer than 10 Black cases per year. This analysis includes dismissed cases but excludes "nolle prossed" cases (in which charges were dropped by prosecutors) to determine how strictly any given locality is enforcing the law. A separate analysis using solely nolle prossed cases could be a good indicator of prosecutorial discretion across localities, but was not possible given an insufficient number of nolle prossed cases to draw any reliable conclusions at the locality level.

## Appendix E: Marijuana policy changes and crime

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Virginia law enforcement officers have expressed concern about potential impacts of marijuana legalization. In interviews with Virginia law enforcement agencies and associations, police expressed varying levels of concern about several issues related to legalization, from continued or exacerbated illegal market activity, to robberies of new marijuana dispensaries, to other issues such as substance abuse and homelessness that could have broader consequences for crime and society.

Police in other states that have legalized marijuana have varied perceptions about marijuana legalization's impact on overall crime. In a Police Foundation report, Colorado officers perceived an increase in crime immediately following legalization. In contrast, focus groups with police in Washington revealed that officers generally did not believe marijuana legalization was directly related to any changes in crimes such as property crime. Anecdotal evidence from other states suggests some localized marijuana-related crime could differ under legalization. For example, Denver police reported that in 2012–2013, burglaries took place at 13 percent of the city's licensed marijuana facilities (which tend to be cash-based) compared to 2 percent at liquor stores. Sheriffs in jurisdictions with many unlicensed marijuana growers in California report that marijuana operations continue to attract organized crime.

Academic research on the relationship between marijuana policy and overall crime rates is inconclusive. A recent study from Washington State found little overall impact of legalization on serious crime rates. Some studies find that legalization is related to large decreases in property crime rates. Others associate legalization with small increases in violent and nonviolent crime in the short term that do not persist. One study indicated that crime *clearance* rates did not change or improve after legalization, indicating that legalization did not harm officers' abilities to solve crimes. Still some studies find that the presence of recreational or medical dispensaries increases local crime rates, while others find that dispensaries have no impact on local crime. Long-term impacts are largely unknown because marijuana legalization is relatively recent.

Recent studies examine the impact on crime rates from medical marijuana legalization, decriminalization, and adult use marijuana legalization. The following table summarizes a sample of recent academic studies on the relationship between marijuana policy changes and crime rates. Studies of the impacts of decriminalization and medical marijuana legalization are included because of the limited available research on adult use legalization. This sample of studies suggests a lack of consensus on the impact of marijuana policy changes on crime rates.

**TABLE E-1**  
**Sample of recent academic studies shows mixed impacts of marijuana policy change on crime**

<b>Study topic</b>	<b>Impact on crime</b>	<b>Primary findings</b>
Medical marijuana	Little impact	<ul style="list-style-type: none"> <li>• Medical marijuana has little overall effect on crime rates in most states. (Chu, 2019)</li> <li>• Medical marijuana dispensary density has no association with violent or property crime. (Kepple, 2012)</li> </ul>
	Increase	<ul style="list-style-type: none"> <li>• The density of medical marijuana dispensaries is associated with slightly higher property and violent crimes but not directly adjacent to dispensaries. (Freisthler, 2016)</li> <li>• Medicalization/legalization shows some association with increased petty crimes such as shoplifting. (Dills, 2017)</li> </ul>
	Decrease	<ul style="list-style-type: none"> <li>• Medical marijuana may have significantly reduced violent and property crime in California. (Chu, 2019)</li> <li>• There is evidence of 4–12% reductions in robberies, larcenies, and burglaries due to the legalization of medical marijuana. (Huber, 2016)</li> <li>• Medical dispensaries are associated with a significant decline in property crime. (Chang, 2017)</li> <li>• Legalization of medical marijuana decreases violent crime in states bordering Mexico; impact on crime in states not bordering Mexico is negligible. (Gavrilova, 2017)</li> </ul>
Decriminalization	Little impact	<ul style="list-style-type: none"> <li>• Decriminalization had little impact on self-reported criminal or healthy behaviors. (Dills, 2017)</li> </ul>
	Increase	<ul style="list-style-type: none"> <li>• Decriminalization is associated with an increase in burglaries (6.6%) and robberies (11.6%). (Huber, 2016)</li> </ul>
	Decrease	<ul style="list-style-type: none"> <li>• Offense rates for non-drug crime fell significantly (9.4%) following decriminalization. (Adda, 2014)</li> </ul>
Adult use marijuana	Little impact	<ul style="list-style-type: none"> <li>• Recreational dispensaries have no effect on overall crime rates. (Brinkman, 2019)</li> <li>• Marijuana legalization and sales have had minimal to no effect on violent or property crimes in Colorado or Washington in the medium-term. (Lu, 2019)</li> </ul>
	Increase	<ul style="list-style-type: none"> <li>• Slight increases in larceny, burglary, and assault immediately after legalization that do not persist. (Lu, 2019)</li> <li>• Medicalization/legalization shows some association with increased petty crimes such as shoplifting. (Dills, 2017)</li> <li>• Recreational/medical marijuana dispensaries in Denver are associated with large increases in drug and alcohol offenses, robberies, burglaries, and assault. (Hughes, 2020)</li> </ul>
	Decrease	<ul style="list-style-type: none"> <li>• Legalization reduced rapes by between 15% and 30%. (Dragone, 2019)</li> <li>• Violent and property crime <i>clearance</i> rates improved slightly after legalization, especially for burglary and motor vehicle theft. (Makin, 2019)</li> <li>• Recreational dispensaries are associated with large decreases in nonviolent crime. (Brinkman, 2019)</li> </ul>

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## Appendix F: Virginia's current marijuana laws

The General Assembly decriminalized simple marijuana possession for adults in the regular 2020 legislative session through HB 972 and SB 2, making simple marijuana possession punishable by a maximum \$25 civil penalty. However, Virginia law maintains criminal penalties for other marijuana violations. For example, convictions for possession with intent to distribute and sell marijuana are still penalized as criminal misdemeanors and felonies.

Table F-1 below outlines the primary changes made in the 2020 regular session. Notably, the bills also changed Virginia's marijuana law by removing hash oil (concentrated marijuana) from the list of Schedule I substances, which means hash oil is now treated in the same manner as marijuana flower. Additionally, there is now a presumption that possessing an amount of marijuana equal to or less than one ounce is for personal use. The felony threshold for marijuana distribution or possession with intent to distribute is now one ounce. These two changes makes it less likely individuals will be prosecuted for more serious marijuana offenses when an offender possesses an ounce or less of marijuana or hash oil.

**TABLE F-1**  
Virginia made several changes to primary marijuana laws in 2020 regular session

<b>Marijuana offense</b>	<b>Previous penalties</b>	<b>Primary changes</b>
Possess (marijuana)	First offense: Court can defer and dismiss case if probation terms are satisfied (or a misdemeanor).  Subsequent offense: Misdemeanor	Simple possession is now a \$25 civil penalty. Simple possession remains a delinquent act for those under 18 years of age.
Possess (hash oil)	First offense: Court can defer and dismiss case if probation terms are satisfied.  Subsequent offense: Class 5 felony.	Simple possession of hash oil is now a \$25 civil penalty. Simple possession remains a delinquent act for those under 18 years of age.
Distribute or possess with intent to distribute (PWID)	½ ounce or less: Class 1 misdemeanor  >½ ounce to 5 pounds: Class 5 felony  Over 5 pounds: Felony, 5–30 years	Now a rebuttable presumption that 1 ounce or less is for personal use.  1 ounce or less is now a misdemeanor, while over 1 ounce to 5 pounds is now a Class 5 felony. Penalties for offenses over 5 pounds did not change.  Distribution of hash oil is now aligned with distribution of marijuana.

SOURCE: Code of Virginia § 18.2-248.1, 18.2-250.1, 18.2-251, and 54.1-3446.

Marijuana offenses are included in several sections of the Code of Virginia beyond the most frequently charged marijuana statutes, § 18.2-250.1 and § 18.2-248.1. For example, § 18.2-248 includes penalties for manufacturing or distributing very large amounts of marijuana or engaging in criminal marijuana enterprises. Table F-2 below outlines additional key code sections that establish marijuana offenses.

**TABLE F-2**  
**Additional marijuana offenses and penalties under Virginia law**

<b>Code section</b>	<b>Description</b>	<b>Classification, imprisonment, fines</b>
§ 18.2-248	Manufacture, sell, give, distribute or possess with intent to sell, give, or distribute large amounts (more than 100 kg) of marijuana or mixture. Act as a principal in continuing criminal enterprise involving large amounts of marijuana and revenue.	Felony, 20 years–life, up to \$1 million fine. Different mandatory minimum sentences apply for different amounts of marijuana and when an ongoing criminal enterprise is involved.
§ 18.2-248.1(d)	After a third or subsequent felony distribution of offense under 18.2-248.1, offender must be sentenced to five years and up to life in prison.	Felony, 5 years–life, up to \$500,000 fine. <sup>a</sup>
§ 18.2-248.01	Transport 5 pounds or more of marijuana into Virginia.	Felony, 5–40 years, fine up to \$1 million. <sup>a</sup>
§ 18.2-474.1, 53.1-203	Deliver or attempt to deliver marijuana to a prisoner or possess or sell marijuana as a prisoner.	Felony, 0-10 years, fine up to \$2,500.
§ 18.2-255	Distribute marijuana to person under 18 or enlist person under 18 to distribute marijuana when juvenile is at least three years younger.	Felony, 2-50 years, up to \$100,000 fine. Penalties differ depending on amount of marijuana. <sup>a</sup>
§ 18.2-255.1, 18.2-265.3, 54.1-3466	Sell, distribute, possess, or intent to sell or distribute controlled drug paraphernalia, or advertise paraphernalia to minors.	Misdemeanor, 0–12 months, fine up to \$2,500.  Selling to a juvenile: Felony, 0–5 years, fine up to \$2,500.
§ 18.2-255.2	Sell, manufacture, distribute or possess with intent to distribute marijuana while on school property or within 1,000 feet of a school.	Felony, 1–5 years, fine up to \$100,000. <sup>a</sup>
§ 18.2-258	It is a “common nuisance” if a location is frequented by marijuana users or sellers. Owners and tenants are criminally liable for permitting or maintaining such a nuisance.	Misdemeanor, 0–12 months, fine up to \$2,500 (first offense)  Felony, 0–5 years, fine up to \$2,500. (subsequent offense)
§ 18.2-258.02	Maintain a fortified drug house used to manufacture or distribute marijuana.	Felony, 0–10 years, fine up to \$2,500.
§ 18.2-308.4	Use of a firearm while manufacturing, selling, distributing, or possessing more than 1lb of marijuana with intent to manufacture, sell, or distribute.	Felony, 5 years, fine up to \$2,500. <sup>a</sup>
§ 22.1-277.08	Schools may expel students who bring marijuana to school or school-sponsored activities. <sup>b</sup>	

SOURCE: Code of Virginia.

NOTE: This table is not intended to be a comprehensive list of all penalties and repercussions associated with marijuana in the Code of Virginia. Language is adapted from language used in Code for readability. Excludes Code sections related to medical marijuana or hemp.

<sup>a</sup> Low number of years shown is the mandatory minimum sentence. <sup>b</sup> Note that marijuana possession by juveniles is a delinquent act.

## Appendix G: Other states' marijuana laws

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As discussed in Chapter 4, Virginia will need to make decisions about which marijuana laws to enact, remove, keep, or alter if it legalizes recreational marijuana for adults. The state could reference laws in other states to guide decisions, though it is important to consider that criminal legal structures and sentencing practices differ across states.

States that have legalized marijuana have not removed all penalties related to marijuana. The 11 states (and Washington, D.C.) that legalized marijuana before 2020 maintain legal limits on marijuana. These states also assess criminal and civil penalties for violating legal limits. The four states that legalized marijuana in November 2020—Arizona, Montana, New Jersey, and South Dakota—are not considered in this appendix.

Adult use marijuana laws in legal states address a few main elements: (1) the amount of marijuana adults are allowed to possess, grow, or share, (2) where and when marijuana can and cannot be used, and (3) penalties for illegal activities, such as unlicensed distribution and exceeding possession limits. Additionally, states impose consequences for underage adults and juveniles who possess marijuana because marijuana remains illegal for individuals under 21. States with medical marijuana programs also have some special exceptions for registered patients, such as higher marijuana possession limits.

There are three main marijuana product types that states treat distinctly in statute (shown below). States set separate limits for products in part because the same weight or volume of two marijuana products can represent significantly different serving sizes or dosages. For example, concentrates are generally more restricted because they are more potent products. One study estimated that one gram of marijuana flower at 17 percent THC is roughly equivalent to .28 grams of marijuana concentrate at 62 percent THC and .03 grams of THC in marijuana-infused products.

- **Marijuana flower**, or usable marijuana, is the dried flowers or buds of the cannabis plant that contain THC and other compounds. Marijuana flower is typically smoked.
- **Marijuana concentrates** are concentrated marijuana products with higher percentages of THC. These products are made by removing THC from cannabis plants either mechanically or through the use of solvents, high heat, and/or pressure. Marijuana extracts are concentrates made by non-mechanical processes. Concentrates can take many forms such as butane hash oil or kief. Concentrates are often consumed using a vaping or “dabbing” device but can also be smoked in some forms.
- **Marijuana-infused products** are food or potable liquids into which marijuana concentrates or marijuana flower are incorporated. These products are frequently ingested in the form of marijuana “edibles,” such as brownies and gummies.

### All states limit the amount of marijuana adults can possess, grow, or share

All states that have legalized marijuana restrict marijuana possession and use to adults 21 years of age and older to prevent youth access. In addition, states set limits for the amounts of marijuana adults can possess, grow, and share to deter illicit market activity.



States typically allow adults to possess up to one ounce of marijuana flower and up to five grams of marijuana concentrates (Table G-1). Almost all states set separate possession limits for marijuana flower versus marijuana concentrates. Some states also set limits on infused products. For example, Illinois permits adults to possess 500 milligrams of THC in infused products, while Oregon and Washington allow adults to possess up to 16 ounces of solid, infused products such as edibles and 72 ounces of liquid, infused products such as beverages.

**TABLE G-1**  
**States typically limit adults to 1 oz. of marijuana, 5g of concentrates, and 2-6 plants**

<b>State</b>	<b>Marijuana flower</b>	<b>Concentrates</b>	<b>Infused products</b>	<b>Home cultivation</b>
Alaska	1 ounce	n/a <sup>a</sup>	n/a	6 plants per adult (3 can be mature) 12 plants per dwelling
California	1 ounce	8 grams	n/a	6 plants per private residence
Colorado	1 ounce	1 ounce	n/a	6 plants per adult (3 can be mature) 12 plants per residence
D.C.	2 ounces	n/a <sup>a</sup>	n/a	6 plants per adult (3 can be mature) 12 plants per residence (6 mature)
Illinois	1 ounce <sup>b</sup>	5 grams <sup>b</sup>	500 mg THC	Not permitted
Maine	2.5 ounces	5 grams	n/a	3 mature plants, 12 immature plants, and unlimited seedlings per adult
Massachusetts	1 ounce	5 grams	n/a	6 plants per adult 12 plants per property
Michigan	2.5 ounces	15 grams	n/a	12 plants per adult 12 plants per property
Nevada	1 ounce	3.5 grams	n/a	6 plants per adult <sup>c</sup> 12 plants per household
Oregon	1 ounce	1 ounce	16 ounces solid, 72 ounces liquid <sup>d</sup>	4 plants per residence
Vermont	1 ounce	5 grams	n/a	2 mature plants and 4 immature plants per household
Washington	1 ounce	7 grams	16 ounces solid, 72 ounces liquid <sup>d</sup>	Not permitted.

SOURCE: JLARC analysis of other states' laws; NORML; NCSL; NAMSDL.

NOTE: Some amounts are converted from other units of measure to ease comparisons among states. <sup>a</sup> Alaska and D.C. laws do not appear to distinguish between concentrates and marijuana flower, though possession of hashish (a concentrate) appears to remain a crime. <sup>b</sup> Illinois permits non-residents to possess half as much marijuana as residents; possession limit is 30 grams, or just over one ounce. <sup>c</sup> Nevada permits adults to grow marijuana at home only if they live 25 miles or more away from a marijuana retailer. <sup>d</sup> Purchase limits that function as possession limits.

Some states allow adults to possess more marijuana at home than in public. These laws might encourage marijuana to be kept at home rather than in public places and are practical if states permit adults to grow marijuana plants that can produce more marijuana than public possession limits allow. States that allow home cultivation typically allow adults to possess any marijuana they grow at home. Other states set additional limits for private possession. For example, Massachusetts permits adults to possess one ounce of marijuana in public, but up to 10 ounces at home as long as it is stored in a locked area, as well as any marijuana harvested from legally cultivated plants.

States also have alternative possession limits for registered medical marijuana patients and caregivers. For example, Illinois permits possession of 2.5 ounces of marijuana for medical use (relative to one ounce for adult recreational use). Oregon allows registered medical patients or caregivers to purchase eight ounces at one time and up to 32 ounces in one month.

Laws that allow adults to grow marijuana at home aim to balance a desire to provide adults with lower-cost access to marijuana while keeping individuals from growing marijuana for the purpose of selling it on the illegal market. As Table G-1 shows, most states permit adults to grow two to six marijuana plants at home. States often set specific limits for the number of “mature” or flowering plants that differ than limits for “immature” plants, because plants do not produce significant amounts of THC until they mature and produce flowers. To deter large home cultivation sites that can resemble commercial operations, all states that permit home cultivation also cap the number of plants that can be grown in a single dwelling, property, or household at six to 12 plants.

Home cultivation laws in other states often constrain how adults can grow marijuana to limit access by the public and youth. All states require that plants are (1) out of view of the public without the use of optical aids, (2) locked or reasonably secured, and (3) inaccessible to minors. Violations of these requirements typically result in fines. States also require that renters receive explicit permission from property owners or landlords before growing marijuana. Some other states’ home cultivation laws are even more restrictive. For example, Maine requires that home cultivators tag each plant with the grower’s and property owner’s identification information to facilitate enforcement of illicit home cultivation sites. Nevada only permits home cultivation if residents live more than 25 miles from a marijuana retailer to limit cultivation to those who do not have access to retail marijuana.

Most states also allow unlicensed adults to give to other adults (without payment) similar amounts of marijuana that they allow adults to possess, grow, or buy at one time. These laws allow individuals to share smaller amounts of marijuana without being subject to criminal penalties for marijuana distribution. Laws are typically carefully worded to prevent unlicensed adults from selling marijuana on the illicit market, for example:

- Michigan prohibits unlicensed individuals from advertising or promoting the transfer of marijuana to the public;

- Massachusetts prohibits individuals from “gifting” marijuana in conjunction of the sale of another item to evade laws governing the legal sale of marijuana; and
- Washington requires that transfers of marijuana without payment occur out of view of the public and that the marijuana must be in the retailer’s original packaging.

Most states that have legalized marijuana also permit adults to possess or purchase marijuana paraphernalia, while some still prohibit the sale of paraphernalia—especially to minors. These laws permit adults to possess, purchase, and use products that are complementary to legal marijuana while aiming to restrict youth access. For example, Massachusetts permits adults 21 and over to possess, purchase, obtain, manufacture, and transfer to other adults marijuana “accessories” used to plant, grow, manufacture, ingest, or inhale marijuana, among other activities.

### **Other states assess fines for consuming marijuana in public places**

All states that have legalized marijuana prohibit marijuana consumption in public. These laws are different than possession laws because they apply to the act of using or consuming marijuana rather than possessing it. However, public use laws vary somewhat among states. For example, California prohibits smoking or ingesting marijuana in public places, while Washington State prohibits opening a package containing marijuana in view of the public. Some states also prohibit marijuana use in specific locations and contexts in addition to public places generally. These include locations such as marijuana businesses, childcare facilities and schools, and facilities for the disabled. Using marijuana on federal land remains illegal, and all states prohibit marijuana use on federally owned property.

Most public use penalties are fines. Most states that have legalized marijuana penalize a first-offense public use of marijuana violation with a maximum fine of \$100. Penalties for public marijuana consumption range from a \$25 ticket in Washington, D.C., to a misdemeanor and maximum fine of \$600 in Nevada. Nevada is the only legalized state to maintain a criminal penalty for adult public consumption.

Public use laws can interact with existing smoking laws. Virginia’s current smoking law (Code of Virginia § 15.2-2824) assesses up to a \$25 fine for smoking in certain locations after being asked to stop smoking. Retail establishments in Virginia can also create no-smoking or smoking zones. Laws meant to curtail tobacco smoking in public places have since been applied to marijuana in states that have legalized marijuana. For example, Illinois prohibits marijuana consumers from smoking in any place prohibited by the Smoke Free Illinois Act, which initially applied to tobacco smokers. Oregon’s Indoor Clean Air Act prevents consumers from smoking or vaping marijuana inside most businesses.

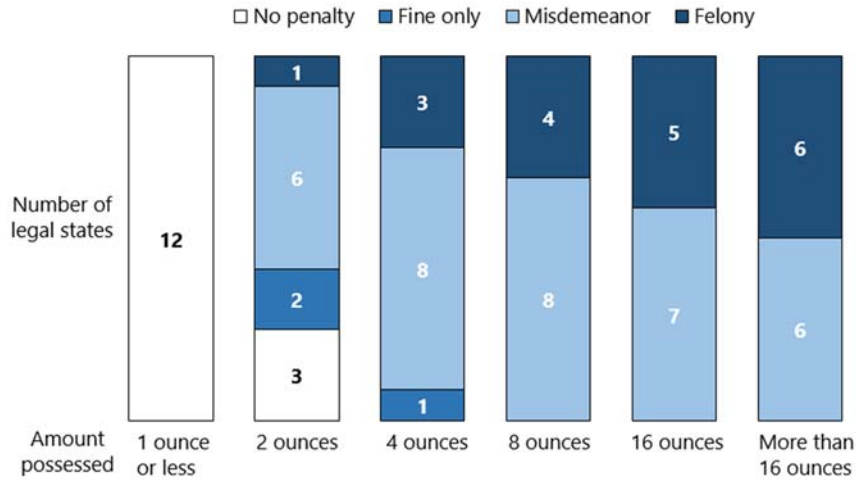
### **All states maintain criminal penalties or fines for illegally distributing, possessing, and growing more marijuana than is allowed**

To deter activities that can contribute to an illicit market and criminal or unlicensed enterprises, states that have legalized marijuana possession and/or home cultivation for adults continue to penalize adults who possess, grow, or share marijuana over legal limits or sell marijuana without a license.

**Possession over the legal limit**

All legal states have criminal penalties for some amount of marijuana possession, though the penalties differ across states. Figure G-1 indicates that about half of states consider any amount of simple marijuana possession over the legal limit to be a misdemeanor, while some consider possession of as little as two ounces of marijuana a felony.

**FIGURE G-1**  
**All legalized states maintain penalties for adult marijuana possession over the legal limit**



SOURCE: JLARC analysis of other states’ laws; NORML.  
 NOTE: Indicates the penalty an adult could face if he or she possessed the weight of marijuana listed in each state reviewed. Some limits were converted from other units to ounces and rounded for ease of comparison.

Specific penalty structures for violating marijuana possession limits differ significantly across states. For example, any amount of simple possession over the one ounce legal limit in California is a misdemeanor punishable by 10 days to six months in jail and/or a fine of \$250–\$500. In contrast, Colorado has a series of escalating penalties for different weights of marijuana possession, shown in Table G-2 below.

**TABLE G-2**  
**Legal states penalize possession over the legal limit with fines and/or jail time**

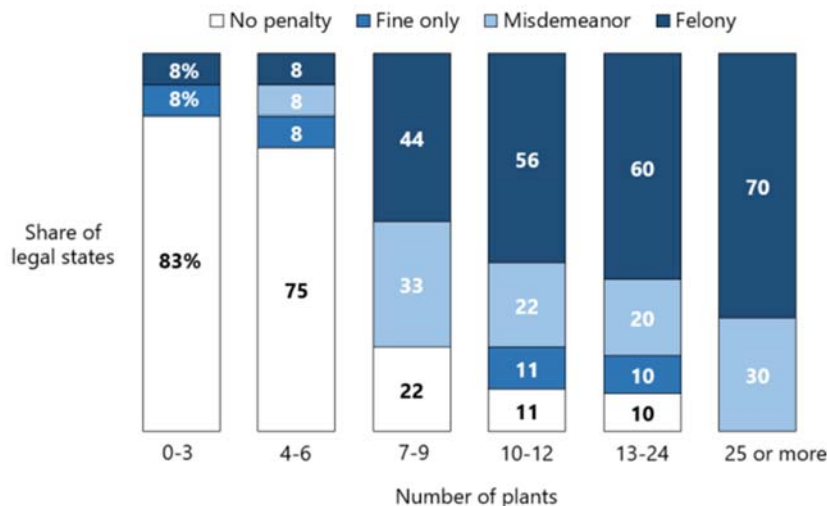
Amount Possessed	Colorado	California
1 ounce or less	No penalty	No penalty
1–2 ounces	Petty offense, \$100	Misdemeanor, 10 days, \$500
2–6 ounces	Misdemeanor, 0–12 months, \$700	Misdemeanor, 10 days, \$500
6–12 ounces marijuana	Misdemeanor, 6–18 months, \$5,000	Misdemeanor, 10 days, \$500
More than 12 ounces	Felony, 1–2 years, \$100,000	Misdemeanor, 10 days, \$500

SOURCE: Colorado Revised Statutes Title 18. Criminal Code § 18-18-406; California Health & Safety Code § 11357.  
 NOTE: In Colorado, possession of one to three ounces of marijuana concentrate is a misdemeanor; possession of more than three ounces is a felony. In California, possession of more than eight grams of concentrate is a misdemeanor. Note that possession of eight ounces or more is presumed to be possession with intent to distribute.

**Violations of home cultivation limits**

While most states permit home cultivation of a small number of marijuana plants, states maintain criminal penalties for exceeding plant limits. These penalties are meant to discourage growing more plants than are needed for personal use. For example, adults can grow up to four plants in Oregon without penalty, while growing five to eight plants is a misdemeanor and more than eight plants is a felony. In Illinois (which does not permit recreational home cultivation) growing one to five plants is a fine of \$200, and six or more plants is a felony. As Figure G-2 illustrates, most states allow adults to grow four to six plants without penalty, but most continue to penalize growing more than a dozen plants as a felony offense.

**FIGURE G-2**  
States have different civil and criminal penalties for growing more marijuana than is allowed



SOURCE: JLARC analysis of states law in states that have legalized marijuana for adult use; NORML.  
NOTE: Some states’ laws do not specify penalties for some ranges of plants and are excluded from calculations for those ranges. Two states do not permit any recreational home cultivation.

**Illegal distribution, sale, possession with intent, and manufacture**

All states that have legalized marijuana maintain criminal penalties for unlicensed marijuana sales to deter criminal activity involving marijuana and to promote a legal market. Virginia’s current penalties for illicit marijuana sale, distribution, or possession with intent to distribute appear to be within range of penalties in other states that have legalized marijuana. Similar to Virginia’s current law, all states that have legalized marijuana treat the unlicensed sale, delivery, or distribution of marijuana as a misdemeanor or felony, with convictions having the potential for significant fines and/or jail time. Table G-3 shows the amount of marijuana that must be sold, distributed, delivered, or possessed with intent to distribute to be considered a felony offense in states that have legalized marijuana. Virginia is between California and Nevada because marijuana distribution of one ounce or less is a misdemeanor offense, while distribution over one ounce is a felony offense.

TABLE G-3

**Virginia’s criminal penalties for illegal marijuana distribution are similar to other states’ penalties**

<b>Felony distribution amount</b>	<b>States</b>
None (least severe)	California, Oregon, Massachusetts <sup>a</sup>
Between 4 and 16 ounces	Colorado, D.C., Maine
Between ½ and 3 ounces	Alaska, Illinois, <b>Virginia</b> , Vermont
Any amount (most severe)	Michigan, Nevada, Washington

SOURCE: JLARC analysis of state laws; NORML.

NOTE: Unclassified violations are considered felonies if they can result in over one year of incarceration. California and Oregon consider any amount of unlicensed distribution without aggravating factors a misdemeanor. <sup>a</sup> Massachusetts considers distribution over 50 pounds a felony offense.

Distribution laws in some states, like California, are less severe. California considers unlicensed distribution of any amount of marijuana a misdemeanor with up to six months in jail and a \$500 fine. Other states, like Nevada, maintain more severe penalties. In Nevada, unlicensed sale of any amount of marijuana is punishable by a felony, one to four years in prison, and up to a \$5,000 fine.

Most states continue to include more severe or additional charges for aggravating factors associated with marijuana sale or distribution. These penalties are similar to Virginia’s current laws that penalize selling marijuana to minors or at schools. For example, while California and Oregon do not consider selling marijuana by itself a felony offense, each state considers selling marijuana to minors a felony offense.

All states also prohibit unlicensed adults from using flammable liquids, solvents, or high heat and pressure to make marijuana concentrates, such as butane hash oil. Because these methods can create significant fire and explosion hazards, penalties for unlicensed manufacturing of marijuana concentrates with gases such as butane are typically felony offenses. Some states have also established more substantial penalties for operations that result in harm. For example, Vermont penalizes home butane extraction with up to two years in prison and a \$2,000 fine, but also penalizes butane extraction operations that result in bodily injury to another person with up to five years in prison and a \$5,000 fine.

**Juveniles and young adults who possess marijuana are often required to complete drug counseling or community service and/or pay fines**

All states that have legalized marijuana prohibit marijuana possession by youth under age 21. Similar to alcohol and tobacco laws, these laws aim to deter youth access to and use of marijuana. Specific legal approaches vary. For example, some states have a statute for all minors under 21 who possess marijuana. Virginia’s tobacco and alcohol laws are similar. Alternatively, California law imposes different consequences for juveniles under 18 than for young adults aged 18 to 20.

A sample of states that have legalized marijuana—Alaska, California, Colorado, and Washington—show that states treat youth possession of marijuana differently.

- Alaska did not change how it treated marijuana possession by minors when legalizing marijuana for adults, and marijuana possession remains a criminal offense for those under 21. In juvenile cases, police refer marijuana possession cases to juvenile intake at the Alaska Department of Juvenile Justice, while juvenile alcohol and tobacco violations go directly to courts. There is no specific penalty for juveniles who possess marijuana, and DJJ may route juveniles into diversion programs for rehabilitation or competency development, or alternatively refer cases to juvenile courts.
- California does not consider simple marijuana possession under one ounce by any individual a crime or delinquent act. Juveniles under 18 who possess marijuana are required to perform six hours of drug education or counseling and 20 hours of community service. Youth between 18 and 20 years old who possess marijuana face a maximum \$100 fine.
- Colorado treats first-offense possession by anyone under 21 as a petty offense subject to a \$100 fine and/or substance abuse counseling. Minors are eligible for court diversion programs. Subsequent offenses can result in higher fines, mandatory substance abuse treatment, and community service.
- Washington State treats possession under 21 as a misdemeanor, punishable by probation, community service, and up to 30 days detention and a \$500 fine. First-time offenders must be diverted to local programs, and prosecutors have discretion to divert subsequent offenses.

In addition to possession laws for minors, several states added laws to help prevent youth from accessing marijuana legally available to adults. For example, other states penalize retail marijuana employees who knowingly provide marijuana to underage purchasers and other adults who knowingly allow youth to consume marijuana. Further, states penalize juveniles and underage adults who attempt to access marijuana retail locations, especially with the use of fraudulent identification.

### **States take varied statutory approaches to marijuana-impaired driving**

States that have legalized marijuana take three primary approaches to marijuana-impaired driving laws (Table G-4). Most maintain laws similar to Virginia's current law, which prevents driving under the influence of drugs to a degree that impairs the driver. Impairment is proven with a combination of blood tests, officer testimony, behavioral sobriety tests, and dash camera footage. Michigan (and some states that have not legalized marijuana) has a zero tolerance law, which means it is illegal for drivers to have any amount of THC in their blood while driving. Other states have "per se" laws that penalize drivers who have a specific amount of *active* THC in their blood, typically five nanograms per milliliter of blood. Per se and zero tolerance laws are generally easier to prosecute but can be prone to error because THC-blood content alone has not been established as a reliable indicator of impairment level.

**TABLE G-4****Adult use states take three primary legal approaches to marijuana-impaired driving**

<b>Law type</b>	<b>States</b>	<b>Description of law</b>
General driving under the influence statute	Alaska, California, D.C., Maine, Massachusetts, Oregon, Vermont, <b>Virginia</b>	Illegal to drive under the influence of or while affected by drugs. Impairment must be proven by law enforcement and then linked to drug use by presence of drug or metabolite in body.
Zero tolerance	Michigan	Illegal to drive with any measurable amount of drug in the body.
Per se	Colorado <sup>a</sup> , Illinois, Nevada, Washington	Illegal to drive with amount of drug in the body over a specified limit.

SOURCE: Governor's Highway Safety Association.

NOTE: <sup>a</sup> Colorado's law is a "reasonable inference" law with a statutory THC threshold.

To further deter and penalize impaired driving, states have also established "open container" laws for marijuana. States penalize violations of these laws as traffic infractions (fines) or misdemeanors. States that penalize open containers of marijuana typically prohibit in passenger areas of vehicles marijuana packages with broken seals, loose marijuana, and containers from which marijuana has been partially removed. For example, California, Colorado, Illinois, Massachusetts, Vermont, and Washington each have open container laws for marijuana.

States have also enacted laws that explicitly prohibit marijuana consumption in vehicles (in addition to impaired driving). For example, Colorado prohibits any marijuana consumption or use in the passenger area of a motor vehicle; Maine's law prohibits drivers and passengers from consuming marijuana. Washington, D.C., specifies that vehicles are considered public places and consuming marijuana in vehicles can result in a misdemeanor and jail time. Illinois, Michigan, Nevada, Oregon, Vermont, and Washington each have a similar statute.



## Appendix H: Additional considerations when revising criminal marijuana laws

If Virginia allows adults to legally use and possess marijuana for recreational purposes, it will need to consider the extent to which public and private entities can place restrictions on otherwise legal marijuana use. The General Assembly will need to make several other policy decisions governing public and private entities' ability to restrict marijuana possession and use (Table H-1). These policy areas continue to evolve in states that have legalized marijuana for adult use.

**TABLE H-1**  
Several other policy areas can be considered when legalizing marijuana for adult use

Policy area	Key policy decision	Examples in states with legal marijuana
Employment	Could employers make hiring and termination decisions based on employee marijuana use?	Most states allow employers to continue to make employment decisions based on drug testing and marijuana use. Employers can test employees and job candidates for marijuana use, and terminate or refuse to hire individuals who test positive for marijuana use. However, one state, Nevada prohibits employers from denying employment to prospective employees because of a positive marijuana drug test (with some exceptions).
Housing	To what extent could property owners restrict marijuana consumption?	Most states allow property owners to prohibit marijuana use on their properties. These include places of temporary residence, such as hotels, as well as permanent residences, such as rental housing and apartments. For example, in Maine, marijuana may be consumed in a person's private residence only if he or she is "explicitly permitted" to do so by the property owner. However, a few states only allow property owners to prohibit smoking of marijuana. For example, Massachusetts allows owners of rental properties to prohibit smoking but not other forms of marijuana consumption.
Families	To what extent could marijuana use by a parent/prospective parent affect custody, visitation, foster care, and adoption decisions?	Some states have passed laws to keep marijuana use from being used against parents or prospective parents. Massachusetts law indicates that marijuana cannot be the <i>sole</i> reason for decisions related to parental rights if there is not clear evidence that "the person's actions related to marijuana have created an unreasonable danger to the safety of a minor child."
Professional licensing	Could professional licenses or certifications be revoked or denied <i>solely</i> because of marijuana use?	Some states have passed laws to keep marijuana use from being used against people who hold a state license. Illinois law indicates that occupational and professional licensing boards cannot take disciplinary based <i>solely</i> on legal marijuana use if the adult is not impaired while practicing his or her profession.

SOURCE: JLARC review of other states' laws and state government websites; Marijuana Policy Project; NAMSDDL.

NOTE: Table does not represent all policy areas that could be affected by legalizing marijuana for adult use and does not consider laws that apply to medical marijuana users. Other states examples chosen for illustrative purposes only. Does not consider ballot initiatives passed in November 2020 that legalized marijuana in Arizona, Montana, New Jersey, and South Dakota.

Because marijuana remains illegal federally, marijuana use and possession in Virginia could continue to have implications for users regardless of state policy decisions. For example, the federal government may still deny security clearances (and employment) for federal jobs based on marijuana use. Juveniles or young adults who face charges for marijuana possession may continue to lose some student financial aid opportunities. Firearms and federally subsidized housing would continue to be subject to federal law, which can have implications for marijuana users.

## Appendix I: Additional laws needed for regulating the commercial market

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Virginia would need to establish dozens of new laws to ensure that the commercial market is well regulated. In some cases, the law should prescribe an exact process that must be followed or a specific requirement that a licensed marijuana operation must meet. However, in most cases, the law should simply direct the regulatory body to establish processes or requirements in a specific area.

The main chapters of this report provide numerous recommendations and options for the General Assembly to consider, including the laws needed to establish commercial market operations and licenses (Chapter 5), local authorities (Chapter 6), incorporation of the medical marijuana market (Chapter 6), social equity programs (Chapters 7 and 8), restrictions on products, labeling, and advertising (Chapter 9), taxation (Chapter 10), a regulatory board and agency (Chapter 11), license fees (Chapter 11), and a start date for commercial sales (Chapter 12).

This appendix is not a comprehensive listing of all legal changes needed to establish a commercial market. However, it does identify the additional areas in which the state would need to enact laws:

- license application, award, and renewal process,
- license qualifications,
- license holder restrictions,
- facility and operations compliance,
- compliance enforcement, sanctions, and disciplinary process,
- testing and sampling for product safety and quality,
- affirmation of marijuana business legitimacy, and
- registration of marijuana business employees.

Many of these laws do not involve a policy choice and simply facilitate an efficient market and effective regulation. A few requirements would require some minor policy decisions.

A separate appendix details the additional powers and duties the state should vest with the marijuana regulatory board and agency (Appendix P: Powers and duties to be vested with the marijuana regulatory body). Some of the powers and duties listed there may partially overlap with those listed here.

### License application, award, and renewal process

Virginia would need to have a clearly defined license application process. The application process should include (a) a window for applications to be submitted, (b) the forms and supporting materials that applicants need to submit, and (c) a way to make license awards *if* there is a cap or other limit on the number of licenses that can be awarded. The exact process can vary from one type of license to the next. The state would also need to establish the process for appealing license decisions and a process for license renewals. The laws the state should consider enacting in this area, and key regulations the regulator should enact, are summarized in Table I-1.

**TABLE I-1**  
**License application, award, and renewal process**

<b>Proposed law or regulation</b>	<b>Law</b>	<b>Regulation</b>
Direct regulator to establish an application and award process for each of the license types it awards (cultivation, processing, distribution, retail, testing, etc.)	✓	
Direct regulator to establish all required forms and specify all supporting materials that applicants are required to submit for each license type	✓	
Direct regulator to establish time periods for when applications would be accepted and awards made for each license type	✓	
Application time periods established by the regulator must allow sufficient time for applicants to assemble, submit, and revise applications as needed to complete their application packages	✓	
For uncapped licenses, require license awards to all qualified parties		✓
For state or locally capped licenses, make license awards to all qualified parties using a lottery <sup>a b</sup>		✓
To ensure equity, any lottery should have limits on the number of applications that can be submitted by or awarded to any single party, business, or controlling financial interest		✓
To ensure equity, clear consequences for applicants who attempt to submit more than the allowed number of applications, including but not limited to revocation of all the applicant's submissions and revocation of any licenses that were awarded to applicants who are later found to have violated submission rules		✓
Direct regulator to establish a process that allows applicants who are denied licenses to appeal this decision, in accordance with the Virginia Administrative Process Act (Title 22 Chapter 40)	✓	
Licenses must be renewed annually	✓	
Prohibit licenses from being revoked or not renewed based solely on a reduction in state or local caps on cultivation, retail stores, or other modifications to caps that occur after a license has already been awarded	✓	

SOURCE: JLARC analysis of other states' statutes.

NOTE: <sup>a</sup> For cultivation, because the cap would be at the state level, the regulator should establish either a single statewide pool for the lottery drawing or a few, smaller regional pools. A regional approach would help the state ensure that winning cultivators are located in each region of the state and not concentrated in a few areas, but may not be necessary. For retail, caps would be set at the local level so the regulator should perform an individual lottery drawing for each locality where the number of applicants exceeds the local cap. Because these awards would be made gradually, the regulator should initially make fewer retail license awards than are ultimately allowed under the local cap. For example, if Richmond capped its retail at 15 licenses, then the regulator could only make five license awards in the first year, five in the second, and five in the third.

<sup>b</sup> The report recommends a lottery selection process instead of a merit-scoring or auction selection process because a well-designed lottery system can be more fair to small businesses, and license awards under a lottery system appear more likely to reflect the diversity of license applicants. However, lottery systems need to be designed to prevent "gaming of the system" by people who submit multiple applications. Additionally, if a lottery system is used, it is especially important to place restrictions on the transferability of licenses to prevent applicants who have no intention of establishing a business from applying with the sole goal of re-selling their license. By design, merit-scoring and auction selection favor larger businesses with greater resources. Merit-scoring systems also increase the risk of lawsuits being filed against the state by applicants who were not selected. The Chapter 5 sections on cultivation and retail license structures includes additional discussion of the advantages of lottery systems compared with merit scoring systems.

## License qualifications

Virginia would need to set minimum qualification requirements for license applicants. Most states require applicants to name all parties with an ownership interest in the applying business. States then require background checks of all owners to identify any potentially relevant criminal history or any

disciplinary history for violating marijuana commercial regulations in another state. The best and most reliable way to perform these checks is by using an applicant's fingerprints. States also typically require applicants to disclose their business structure, including all financial arrangements. This allows the regulator to determine if the applicant has ties to organized crime or if there are other undisclosed, hidden ownership interests. Regulators need to know about hidden ownership interests to prevent a few large ownership groups from monopolizing the state market by using subsidiary businesses.

While background checks are important, the state does not need to automatically disqualify applicants based on past crimes or violations. The state also could choose not to consider misdemeanor marijuana arrests at all. Such requirements could disproportionately affect Black individuals, many of whom have been arrested and convicted of crimes at disproportionately high rates (see Chapters 2 and 7).

There are many other qualifications the state could require, or not require, depending on how stringent it wants initial requirements to be for license applicants. The state should generally set more stringent qualifications for commercial marijuana licenses that small businesses are unlikely to seek. For example, qualifications could be more stringent for licenses for medium and large cultivators, testing labs, and processors who produce vape oils and other concentrates or use potentially hazardous THC extraction methods. The businesses competing for those licenses would mostly be larger businesses. More stringent qualifications help ensure that the businesses that are awarded these licenses have the ability to quickly and successfully establish their facilities and operating procedures, pass compliance inspections, and start operations.

The state should set less stringent qualifications for licenses where it wants to encourage small business participation, such as licenses for small cultivators, simple processors, and retailers. Less stringent qualifications widen the potential applicant pool to include more small businesses and more diverse ownership. For example, regulators in several other states reported that their application qualifications are overly stringent because applicants are required to lease or purchase real estate before they apply. They said this requirement has been a significant barrier to small businesses and diversity, because many potential applicants do not have the resources to make real estate payments while their application is pending approval (a process which can take several months). Less stringent qualifications do not present a risk to the state because the license holder's facility and operating plans would need to be inspected and approved before it was allowed to handle marijuana. The only risk to the state is that fewer license holders would be able to quickly or successfully pass inspection and start operations.

The state would also need to set a few, straightforward renewal requirements.

The laws the state should consider enacting in this area, and key regulations the regulator should enact, are summarized in Table I-2. A few of these requirements are discussed in Chapter 7, and they have been flagged accordingly.

**TABLE I-2**  
**License qualifications**

<b>Proposed law or regulation</b>	<b>Law</b>	<b>Regulation</b>
<b><i>General application qualifications</i></b>		
Applicants must submit all forms and supporting materials required by the regulator	✓	
Applications must be complete and truthful	✓	
All parties with an ownership or financial interest must be disclosed	✓	
Business structure, contracts, and all other business arrangements must be disclosed	✓	
Applicants, including all persons with an ownership or financial interest, must be at least 21 years of age	✓	
Applicant must disclose criminal history and regulatory violations attributable to any and all parties with an ownership or financial interest	✓	
All applicants, including all persons with an ownership or financial interest, are subject to fingerprinting and criminal background checks <i>[Note: fingerprints are necessary to run a complete criminal background check]</i>	✓	
Regulator may take a person's criminal and regulatory history into consideration, but no crime or violation should automatically disqualify an applicant	✓ <sup>a</sup> Optional	
Misdemeanor marijuana crimes cannot be taken into consideration by the regulator	✓ <sup>a</sup> Optional	
Regulator should establish <u>more stringent qualification standards</u> for some license types, including medium and large cultivators, testing labs, and processors who manufacture vape oils and other concentrates or use potentially hazardous THC extraction methods		✓ Optional
Regulator should establish <u>less stringent qualification standards</u> for some license types, including small cultivators, some edible processors, and retailers		✓ Optional
<b><i>More stringent qualification standards for some license types</i></b>		
Applicant must secure real estate prior to license award		✓
Applicant must provide detailed operations and security plans for their proposed operation		✓
Applicant's current financial assets must meet certain minimum thresholds		✓
Applicant must have past experience in the commercial marijuana industry		✓
<b><i>Less stringent qualification standards for some license types</i></b>		
Applicant DOES NOT need to secure real estate prior to license award but MUST identify the locality—city, county, or town—within which they plan to locate their business; the applicant cannot change the location of their business to a different locality without approval of the board		✓ <sup>a</sup>
Applicant DOES NOT need to provide detailed operations and security plans for their proposed operation, but these must be provided, reviewed, and approved before the operation is allowed to begin handling marijuana		✓ <sup>a</sup>
Applicant's current financial assets DO NOT need to meet certain minimum thresholds		✓ <sup>a</sup>
Applicant DOES NOT need have past experience in the commercial marijuana industry		✓ <sup>a</sup>
<b><i>Renewal qualifications</i></b>		
License holders must be in good standing and be up-to-date on all fines and fees	✓	
License holders must fully disclose any new crimes or violations found to have been committed by parties with ownership or financial interests	✓	
Regulator may take a person's criminal and regulatory history into consideration when making a renewal decision, but no crime or violation should automatically disqualify an applicant	✓	

SOURCE: JLARC analysis of other states' statutes.

NOTE: <sup>a</sup> The reasons for these laws are discussed in more detail in Chapter 7: Promoting Social Equity in Marijuana Business Ownership.

## License holder restrictions

State law should clarify that receiving a license does not mean that the licensed business can immediately start operations and begin handling marijuana. The operation must be inspected and approved by the regulator before operations can begin. The state would need to put some limits on the amount of time a licensee can take to start its operation before the license becomes void. The regulator should determine what time period would be sufficient for most license holders and establish a process for allowing extensions on a case-by-case basis.

All licenses should be specific to one particular site and type of operation. For example, a retail license should only cover retail operations at a store located at a specific address. This site-specific approach makes it clear *who* is licensed, *what* operations they are allowed to perform, and *where* they are allowed to perform them. A business could be licensed to perform two operations at the same location, such as cultivation and processing, under two separate licenses. Licenses should not be transferable to a new location without board approval. This would prevent licensees from moving to new localities in ways that violate local caps or to new premises that do not meet state standards.

The state should set initial restrictions on the number of licenses a single party can hold. These restrictions should be in place *at least* until all initial licenses are issued. For example, if the state decides to stagger retail license awards over a three to five year period, then it should limit the number of licenses any single party can hold over that time period. This would prevent a few, well-funded parties from taking control of the commercial market while it is in the early stages of being established. The exact number of licenses could be determined by the regulator. These restrictions could stay in place after all of the initial licenses are awarded, but that could result in too much state interference in the market.

The state should limit the transferability of licenses by sale or change in majority ownership in a licensed operation until all initial licenses are issued (a period of three to five years after commercial sales begin, or slightly longer than it takes to gradually make all initial license awards.) Under license transfer restrictions, a company could not buy another company's license. For example, if Company X wants to buy Retail Store Z, the license would not transfer to Company X. These restrictions are necessary to keep applicants from "speculating" on licenses by submitting applications in hope of winning a license and then selling their new license to the highest bidder, without making any effort to establish a business. Some other states that capped the number of commercial or medical marijuana licenses have seen such license speculation. Speculation could be an especially big problem in Virginia's retail market, assuming the state adopts less stringent qualification standards and low application fees. Under this approach, there would be an incentive to apply for a potentially lucrative retail license and few barriers to application. Speculation could be rampant if there are no restrictions to prevent resale of licenses. Restrictions on license transfers would allow the state to encourage small businesses to participate while preventing speculation.

In addition to initially restricting license transferability, the state should consider some permanent restrictions as well. The state should prohibit the sale of any license if (a) the licensed operation has not yet passed compliance inspections and begun operations or (b) the licensed operation has been in operation for less than a year.

Transferability restrictions can be highly technical and may best be left to the regulator's discretion.

The state could decide whether to explicitly prohibit publicly traded companies from acquiring licenses. Two states—Colorado and Washington—prohibited publicly traded companies from acquiring licenses. Many existing, multi-state marijuana businesses are publicly traded (on Canadian stock exchanges), so these bans can theoretically reduce competition from outside businesses and promote small, Virginia-owned businesses. The effectiveness of these laws is unclear. Washington’s law remains in place, but Colorado repealed its law last year to improve industry access to investment capital. Virginia could implement a modified prohibition that allows some investment by publicly traded companies in licensed businesses but does not allow them to have a controlling interest.

Virginia could choose to have residency restrictions to further try and promote small businesses, but they are not necessary. Some states have set residency requirements for license holders to promote participation by small businesses owned by state residents. For example, Washington requires license holders, or the manager or agent of a licensed business, to have been a state resident for at least six months. Most license holders are businesses rather than individuals, so Washington also requires that a licensed business must be incorporated in the state, and all owners must have been residents for at least six months. Regulators in other states indicated that resident restrictions are difficult, if not impossible, to enforce and the benefits are limited because a business can easily meet them. Michigan’s residency restrictions have no practical effect, and Colorado recently eliminated its residency restrictions because they harmed businesses’ ability to seek investors from outside the state.

The key considerations for regulations and laws governing license restrictions are summarized in Table I-3.

**TABLE I-3**  
**License holder restrictions**

<b>Proposed law or regulation</b>	<b>Law</b>	<b>Regulation</b>
A licensee may only begin operations and start handling marijuana after regulator has issued a separate approval to do so	✓	
Licenses expire if operations do not begin within set period of time from when the license is awarded; direct regulator to establish the time period and a process for granting extensions on a case-by-case basis		✓
All licenses specific to a designated site, and any transfers of a license to a new site must be approved according to transfer rules	✓	
Restrict the number of licenses, by license type, that a single party can own or have an ownership or financial interest in; restrictions should <i>at least</i> be in place until all initial licenses have been awarded (e.g. three to five years after commercial sales start)		✓
Prohibit the transferability of any license when a licensed business is sold or there is a change in the majority ownership until <i>at least</i> all initial licenses have been awarded (e.g., three to five years after commercial sales start)		✓
Prohibit the transferability of any license when (a) the licensed operation has not yet begun operations or (b) the licensed operation has been in operation for less than a year.		✓
Publicly traded companies could be prohibited from owning a majority share or having a controlling financial interest in a licensed marijuana business	✓ (Optional) <sup>a</sup>	



*[Note: alternatively, could prohibit publicly traded companies from owning any share or having any financial interest in a licensed marijuana business.]*

License holders could be required to be state residents or state-chartered businesses where the majority of owners are state residents	✓ (Optional) <sup>a</sup>
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SOURCE: JLARC analysis of other states’ statutes.

NOTE: <sup>a</sup> Virginia could choose to have residency restrictions to try to promote participation by small, Virginia-owned businesses, but they are not necessary. For additional discussion, see the paragraph preceding this table.

## Facility and operation compliance

Before a licensed marijuana business can begin operations and start handling marijuana, it should have to meet facility requirements set by the state. For example, the state should set key facility requirements for security and safety. Security requirements can include requirements for video monitoring of the facility, proper lighting, and restricting access to areas where marijuana plants are grown or products are stored. The state could also set requirements for setbacks, signage, store displays, and hours of operation, or it could leave this entirely at the discretion of the localities. (Setbacks are the distances that marijuana facilities must be from schools, playgrounds, daycare centers, and other places frequented by children. Most states set this distance at 1,000 feet, and Virginia has set a 1,000-foot setback for medical dispensaries.)

License holders should also have appropriate procedures and systems in place before they begin operations. This would help ensure they can operate in compliance with state requirements after they open. Several states require license holders to develop detailed operating and security plans that show how operations would comply. Some states require special employee training, such as training for cashiers on how to perform age verification checks.

After opening, license holders would need to conduct their businesses in accordance with many rules specific to their operation. For example, states generally set operating hours for retail stores. Alternatively, the state could give localities full discretion over operating hours. States also typically require their licensees to track and record the movement of all marijuana plants and products in a state-owned tracking system, among many other requirements.

The laws and regulations the state and regulator should consider governing facilities and operations compliance are summarized in Table I-4. A few of these requirements are discussed in Chapter 6 and have been flagged accordingly.

**TABLE I-4**  
**Facility and operation compliance**

<b>Proposed law or regulation</b>	<b>Law</b>	<b>Regulation</b>
<b><i>Compliance requirements that must be met before operations begin</i></b>		
Licensed operation cannot begin handling marijuana until the license holder has met all standards, and compliance with standards is verified through inspection of the license holder's facility and review of operating and security plans and procedures	✓	
License holder must have secured a property for the operation (e.g., leased or purchased)		✓
Operation property must meet setback requirements set by the regulator and local governments	✓ <sup>a</sup>	
License holder must meet all local zoning requirements and obtain proper local licenses and permits, such as general business licenses and occupancy permits, that are required by the locality and allowed under state law	✓ <sup>a</sup>	
Operation property must meet security requirements set by the regulator (e.g., physical security requirements such as doors and locks that restrict access to areas of buildings containing marijuana plants and products, fencing or other enclosures that restrict access to outdoor areas where marijuana is grown, alarm systems, video cameras, lighting, etc.)		✓
In addition to inspection by the regulator, license holder facilities must pass all relevant state and local inspections, including any health department inspections (for food processing facilities, such as processors who manufacture edibles), agriculture inspections (for use of pesticides by cultivators), and local occupancy inspections (for building and fire code compliance)		✓
License holder must meet any insurance and financial bonding requirements set for their license type and tier		✓
Completion of training and education by at least one of the license owners or a designated responsible employee, such as an operations or compliance manager		✓
<b><i>Compliance requirements in general</i></b>		
License holders must continue to meet all facility and operating standards and requirements	✓	
Licensees must make all premises and records available to the marijuana regulator	✓	
License holders must comply with all marijuana inventory tracking, monitoring, and disposal requirements	✓	
License holders must submit any reports, documents, data, or other information required	✓	
Any changes to ownership or financial interests or business structure must be reported	✓	
License holders must comply with all operations and security plans on file and report any changes to plans		✓
License holders cannot substantially change their premises without prior approval		✓
Marijuana plants and products can only be sold (a) by a licensed marijuana business to another licensed marijuana business through a recorded sale, or (b) by a licensed marijuana retailer to an of-age consumer through a recorded and taxed retail sale	✓	
Marijuana plants or products cannot be given away for free, given away with other products or services, or sold at steep discounts by any licensed party		✓
Samples of marijuana products can be provided to licensed testing labs for testing purposes at no cost		✓
All employees must be at least 21 years of age	✓	
No alcohol or marijuana can be consumed on the premises of a licensed marijuana operation	✓	

License holders are required to provide employees with basic training on state regulations that are pertinent to their operation	✓
Marijuana plants or products cannot be clearly visible or to the public from outside the premises	✓
Licenses must be prominently displayed on the premises of the licensed facility	✓
<b>Compliance requirements related to other state and local regulations</b>	
License holders must continue to meet all facility and operating standards and requirements for other state and local agencies (e.g., health sanitation requirements, fire code requirements)	✓
Licensees must make all premises and records available to other state and local agencies, as is necessary for the performance of their duties (e.g., make financial records available to income tax auditors, make premises available to local building inspectors)	✓
<b>Compliance requirements specifically for retail</b>	
Retailers cannot sell more than the legally allowed personal possession amount	✓
Retailers must verify customer age	✓
Retailers cannot sell alcohol or tobacco	✓
Retailers cannot sell products other than marijuana and marijuana paraphernalia	✓ (Optional)
Retailers must abide by the hours of operation set by the regulator or local government	✓
Retailers must collect marijuana sales taxes and remit taxes to the appropriate state and local agencies	✓

SOURCE: JLARC analysis of other states' statutes.

NOTE: <sup>a</sup> The reasons for these laws are discussed in more detail in Chapter 6: Local Authority, Medical Market, and Other Commercial Considerations.

## Compliance enforcement, sanctions, and disciplinary process

The regulator would need to enforce compliance requirements by looking for potential violations. The regulator can do this through inspections, investigations into complaints, underage compliance checks, and financial audits. The regulator could also be charged with performing criminal investigations, if the state chooses to vest it with law enforcement powers and duties. The regulator would need to develop policies and procedures for carrying out these enforcement duties.

License holders who violate compliance requirements—or other state laws and regulations—should be subject to corrective action. Corrective actions can include sanctions, such as license suspensions or fines. The state should make it clear that any violation can result in a corrective action against a license holder. The state should also charge the regulator with levying sanctions, and the regulator should develop policies and guidelines for when and how sanctions would be levied.

The state should allow license holders to contest any finding of a violation or sanction. This disciplinary process should be established by the regulator, consistent with the Virginia Administrative Process Act.

The laws and regulations the state and regulator should consider for compliance enforcement are summarized in Table I-5. Many of the enforcement powers and duties the regulator would need to have, such as the power and duty to perform inspections and investigations, are recommended in Appendix P: Powers and duties to be vested with the marijuana regulatory body.

**TABLE I-5**  
**Compliance enforcement, sanctions, and disciplinary process**

<b>Proposed law or regulation</b>	<b>Law</b>	<b>Regulation</b>
Any violation, or failure to disclose a violation, of state marijuana laws or regulations, other Virginia laws or regulations, or local government ordinances is grounds for a corrective action	✓	
Failure to disclose a criminal arrest or conviction of any party with an ownership or financial interest is grounds for a corrective action	✓	
Failure to be truthful with the regulator, including failure to provide requested information or the altering of information, is grounds for a corrective action	✓	
Failure to pay state or local taxes is grounds for a corrective action	✓	
Processes and procedures for monitoring licensed operations, including but not limited to video surveillance and financial transactions		✓
Processes and procedures for performing inspections, complaint investigations, underage compliance checks, and financial audits		✓
Process and procedures for <i>coordinating</i> with state and local law enforcement on criminal investigations and other actions necessary to stop or prevent criminal activity		✓
Processes and procedures for <i>conducting</i> criminal investigations, carrying out arrests, coordinating with other criminal justice agencies, and taking other actions necessary to stop or prevent criminal activity		✓ (Optional) <sup>a</sup>
Process and procedures for when marijuana can be seized from a license holder		✓ (Optional) <sup>a</sup>
Authority for regulator to levy sanctions for violations, including but not limited to suspending or revoking licenses, levying fines, or ordering remedial education	✓	
Process and procedures for levying sanctions for violations in accordance with the Virginia Administrative Process Act (Title 22 Chapter 40)		✓
Direct development of guidelines for making sanction decisions, such as when certain sanctions (e.g., license revocation), should be considered and what fine amounts should be levied		✓
Right of licensees to contest any finding of a violation or sanction through a disciplinary process established in accordance with the Virginia Administrative Process Act (Title 22 Chapter 40)	✓	

SOURCE: JLARC analysis of other states' statutes.

NOTE: <sup>a</sup> The regulator only needs to establish policies and procedures related to enforcement of criminal laws and seizure of marijuana if it is given the powers and duties to enforce criminal laws. For additional discussion of the reasons for and against giving the regulator criminal law enforcement powers and duties, see Chapter 11.

### **Testing and sampling for product safety and quality**

Commercial marijuana products should be tested to ensure they meet minimum product safety and quality standards. The state would need to determine what contaminants marijuana products should be tested for, and what trace quantities of contaminants are unacceptable. Most other states require products to be tested for biological contaminants, such as microbes mold and fungus, as well as chemical contaminants like pesticides, herbicides, and heavy metals. State regulatory bodies are then tasked with developing regulations that more clearly outline the specific contaminants labs must test for and what trace quantities of these contaminants are acceptable.

In addition to contaminants, the state should require testing of marijuana products for THC, the intoxicating chemical found in marijuana. These tests would confirm the THC content that would be put on the label to inform consumers. The state could also require testing for the content of other cannabinoids that may be claimed on a product label, such as CBD.

The state would also need to define a process for collecting product samples. The key parts of that process would include the method for collecting product samples and the frequency of collection.

The state should direct the marijuana regulatory body to develop standards for product safety, quality, and sample testing. When developing these regulations, the regulatory body should consult with the Division of Consolidated Laboratory Services (DCLS) in the Department of General Services, the Virginia Department of Health, the Virginia Board of Pharmacy, the Department of Environmental Quality, and the Virginia Department of Agriculture and Consumer Services, and regulatory agencies in other states. The standards adopted could be Virginia-specific standards, national standards, or standards set by other states.

Considerations for laws and regulations governing testing are summarized in Table I-6. (see Chapter 5: Commercial Market Licenses and Operations).

**TABLE I-6**  
**Testing and sampling for product safety and quality**

<b>Proposed law or regulation</b>	<b>Law</b>	<b>Regulation</b>
Direct regulator to establish product <i>safety</i> standards, including but not limited to requirements for what biological and chemical contaminants products must be tested for and the trace concentrations of these contaminants that are acceptable, if any, in different products	✓	
Direct regulator to establish product <i>quality</i> standards, including but not limited to requirements for products to be tested for THC content and other cannabinoids, as determined by the regulator	✓	
Product standards should be developed in consultation with the Division of Consolidated Laboratory Services (in the Department of General Services), the Virginia Department of Health, the Virginia Department of Agriculture and Consumer Services, and regulatory agencies in other states	✓	
Direct regulator to establish methodologically sound approach for collecting product samples to be tested	✓	
Direct regulator to establish requirements for reporting of product safety and quality test results	✓	
Require that testing labs report all test results to the regulator before or at the same time as they are reported to the product owner		✓

SOURCE: JLARC analysis of other states' statutes.

### **Affirmation of marijuana business legitimacy**

Several states have passed laws that positively affirm the legality of their commercial markets and the activities of licensed marijuana businesses (and their employees). State laws frequently affirm that other types of businesses, such as financial institutions, are free to legally provide goods and services to licensed marijuana businesses. State laws also affirm the enforceability of contracts with licensed

marijuana businesses. These laws can help eliminate any gray areas in state criminal or commercial marijuana laws, and give non-marijuana businesses the assurances they need to do business with legitimate marijuana operations. The laws the state should consider enacting in this area are summarized in Table I-7.

**TABLE I-7**  
**Affirmation of marijuana business legitimacy**

<b>Proposed law or regulation</b>	<b>Law</b>	<b>Regulation</b>
The goal of the state is to establish a legal, regulated commercial market for the production and sale of marijuana to most effectively restrict marijuana and protect public health and safety	✓	
Licensed marijuana businesses are not violating state criminal laws as long as they are generally in compliance with commercial laws and regulations for their licenses	✓	
Employees of licensed marijuana businesses are not violating state criminal laws as long as they are generally conducting their work in compliance with commercial laws and regulations	✓	
A violation of commercial marijuana laws or regulations by a licensed operation does not in and of itself constitute a violation of criminal law	✓	
It is legal under state law for financial institutions, including all banks, credit unions, investment companies, brokerages, mortgage lenders, and insurance companies, to conduct business in Virginia with a licensed marijuana business or its parent company	✓	
It is legal under state law for any provider of goods or services to conduct business in Virginia with a licensed marijuana business or its parent company	✓	
It is legal under state law for the owner of any real or other property to sell, lease, or rent property to a licensed marijuana business or its parent company	✓	
Contracts with licensed marijuana businesses, including contracts between license holders and contracts between a license holder and any other party, are legitimate and enforceable under state law as any other contract	✓	
Unlicensed cultivation, processing, distribution, sale, and testing of marijuana is not permitted under commercial laws and some unlicensed activity may be considered a crime under state criminal statutes	✓	

SOURCE: JLARC analysis of other states' statutes.

### **Registration of marijuana business employees**

In addition to licensing marijuana business, Virginia could also require all employees of marijuana businesses to be registered and badged by the state. By registering employees, the regulator can hold individuals directly accountable for violation of regulations. For example, the regulator could revoke an employee's registration. If a violation is not that egregious, the regulator can take other, lesser corrective actions, such as levying fines or requiring that the employee attend a remedial education course. The regulator can also keep people who have been fired for egregious violations by one license holder from becoming re-employed at another without first having their history re-evaluated. For example, the regulator would be immediately able to see if a person who had their license revoked for repeatedly selling marijuana to minors was attempting to get a job with another retailer.

By holding individuals directly accountable, the regulator may be able to improve industry compliance and reduce the risk of illegal diversion. People are more likely to follow rules if there are personal consequences for violations. They are also more likely to encourage employees and coworkers to follow regulations. A registration program also helps reinforce that employees are monitored and face consequences if they do not comply with laws and regulations.

State employee registration programs also allow states to badge employees. Badging employees is helpful for enforcement inspectors, because it allows them to quickly determine if the facility is giving unauthorized people access to restricted areas.



Other states have taken different approaches to employee registration. Colorado has the most intensive employee registration program. All industry employees must apply for a personal license and have a criminal background check performed by the state. Licensed employees must pay annual fees to keep their licenses current. This program is labor intensive and costly; Colorado regulators said about one in 10 of its licensing and enforcement positions are dedicated to employee licensing program. Illinois, Nevada, and Oregon also register, badge, and perform background checks on all industry employees. These regulators indicated they find their programs beneficial, but some said they were administratively challenging given the large volume of licensees and high turnover, especially in lower-level and seasonal employees.

Although most states require employee registration, some do not. Washington and Michigan do not require employees to register. Michigan regulators do register employees but place responsibility for performing background checks on employers.

If Virginia decides to require employee registration, it could model its program after other states or it could implement a less intensive program. A less intensive program could focus on registering higher-level employees, such as supervisors, managers, and salaried staff. Virginia could also consider only requiring background checks for these personnel, like Illinois recently considered. Alternatively, the state could choose not require background checks for any employees (with the exception of ownership).

The six main ways the state could implement an employee registration program are summarized in Table I-8. Required background checks would likely need to be established in law so that the regulator would have the authority needed to perform background checks. Requiring employee background checks, especially for all employees, would likely increase costs for the Virginia State Police, which runs criminal background checks for state agencies.

**TABLE I-8**  
**Registration of marijuana business employees**

Implementation options	Level of scrutiny	Program staffing and costs
<p>OPTION 1 Require <i>all</i> industry employees to be registered and badged by the regulator. Regulator collects fingerprints and performs criminal background checks on <i>all</i> employees as part of the registration process.</p>	HIGH	HIGH
<p>OPTION 2 Require <i>all</i> industry employees to be registered and badged by the regulator. Regulator collects fingerprints and performs criminal background checks <i>for managers, supervisors, and salaried employees only</i>.</p>		
<p>OPTION 3 Require <i>only managers, supervisors, and salaried employees</i> to be registered and badged by the regulator. Regulator collects fingerprints and performs criminal background checks for these employees.</p>		
<p>OPTION 4 Require all industry employees to be registered and badged by the regulator. Employers are responsible for any background checks.</p>		
<p>OPTION 5 Require <i>only managers, supervisors, and salaried employees</i> to be registered and badged by the regulator. Employers are responsible for any background checks.</p>		
<p>OPTION 6</p>		
<p>No employee registration program.</p>		

SOURCE: JLARC analysis of other states' statutes.



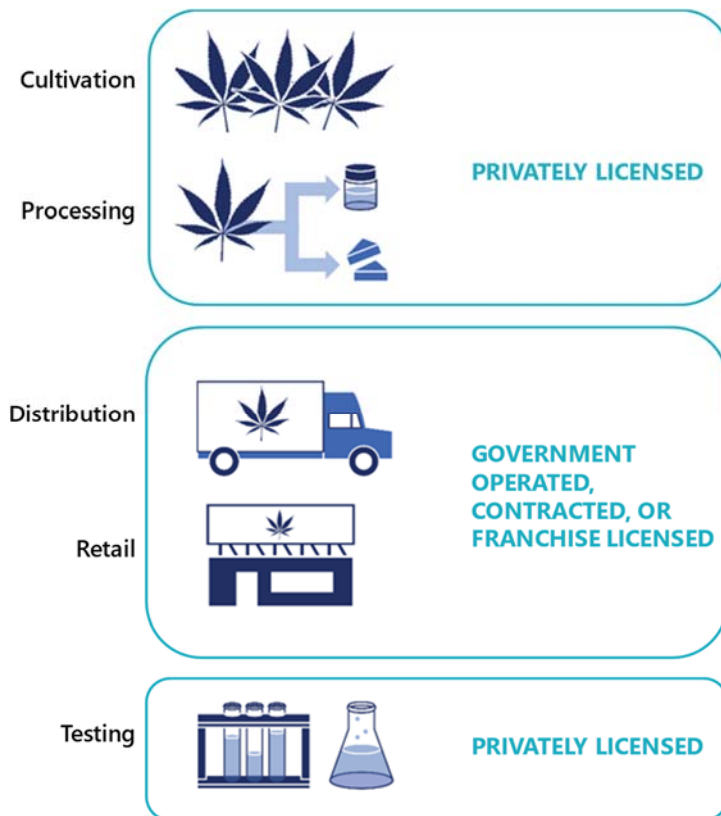
## Appendix J: Government-controlled market operations and licensing

Under the government control model, the state would exercise greater control over distribution and retail (Figure J-1). The state could directly control one or both of these functions, like it does for liquor, where the Virginia Alcoholic Beverage Control Authority (VABC) distributes all liquor through its central warehouse and sells liquor at ABC-operated retail stores. Alternatively, instead of directly performing these operations, the state could contract these functions out to private parties. For retail stores, the state could issue licenses to private parties that have strict franchise-like requirements.

Regardless of the approach used, cultivation, processing, and testing operations would be performed by private, licensed businesses. These licensees would operate under rules and requirements that would be similar to those in place under fully private models. This is also similar to the state’s liquor model, where all aspects of production are performed by private parties.

FIGURE J-1

In a government control model, the government has greater involvement in two of the five major commercial marijuana operations



SOURCE: JLARC analysis of other state marijuana markets, industry publications, and research literature.

Government-controlled marijuana distribution and retail has been attempted in Canada but not in the U.S. Marijuana is nationally legal in Canada, and the national government has allowed provincial governments to control these operations. In Quebec, a province-owned corporation controls both distribution and retail. In Ontario, the province controls distribution and private retailers are treated similar to franchise owners.

### **Government control likely best protects public health and prevents illegal diversion, but is riskier and more challenging to implement**

A government control model is likely best able to achieve public health goals. Unlike private businesses, the state would not have a profit motive to advertise or otherwise promote marijuana use. Limiting advertising and promotions is important, because research studies show a link between advertising and increased marijuana use among youth, and other states have had problems with inappropriate advertising (see Chapter 9). By placing distribution and retail under government control, these problems are largely avoided. The state can directly control the visibility and promotion of commercial marijuana. State-run retail stores would also be less likely to sell to underage customers. Looking at underage alcohol sales, for example, VABC reports its stores have an underage buyer check compliance rate of 99 percent, compared to 89 percent for the private sector. (Underage buyer checks are when VABC sends an underage adult into an establishment to try and buy alcohol.)

A government control model would also reduce the risk of legally produced marijuana being diverted to the illegal market. In its role as distributor, the state would have direct control over all legal movement of commercial marijuana in the state, enhancing its ability to monitor the entire supply chain and reduce the risk of marijuana being “lost” in business transactions. It would also directly control or closely oversee retail operations, improving its ability to monitor final sales. Additionally, the more operations are under state control, the less likely it is for marijuana to be diverted. Unlike a private company, the state would not have a financial incentive or survival motive to illegally divert marijuana for profit.

Despite the potential benefits, the government control model may not be feasible. Government control of marijuana distribution and retail has not been attempted in the U.S. because marijuana remains federally illegal. If a state government became involved in marijuana distribution or retail, it would become an active participant in a federally illegal enterprise, instead of just acting as a regulator. While the U.S. Department of Justice has tolerated states that regulate commercial marijuana (and hence enforce restrictions on the substance), it is unclear how the department would respond to a state taking on an expanded role and actually distributing and selling marijuana.

Virginia could also face legal challenges from residents and neighbor states if it implements a government control model. Colorado was sued by two of its neighbor states—Oklahoma and Nebraska—shortly after it established its fully private commercial market. Oklahoma and Nebraska argued that, by legalizing marijuana, Colorado had increased marijuana trafficking in their states and strained state and local police departments. The Supreme Court declined to hear the case, and no similar lawsuits have since been filed. However, if Virginia state government becomes an *active* participant in the marijuana industry, its neighbors may be able to make a stronger case that they have been harmed by Virginia’s actions.

The government control model would also take much longer to implement than a fully private approach because the state would have to establish its own operations before the commercial market could open. State government usually moves at a slower pace than the private sector, so it would likely take longer to establish operations. The state would be further slowed by the sheer volume of additional work required. For example, the private sector could establish retail stores across the state fairly quickly, with each licensed business taking all the steps needed to establish one or a few stores. In contrast, the state would need to lease or purchase hundreds of properties across the state, renovate each property, and hire and train retail staff. This would take months if not years. In Canada, the Ontario state government attempted to establish its own retail stores but gave up after a year, largely because of logistical challenges.

The upfront costs of a government control model are also significantly higher because of the additional functions the state would perform. If the state takes on distribution, it would have to set-up its own warehouse or at least contract with one or a few private distributors. Under either approach, the state would likely have to begin making payments before the commercial market opens and tax revenues are collected. If the state attempted to directly operate retail, these costs would grow exponentially because of the cost of leasing and renovating stores and hiring and training staff.

### **The most practical government control model would be for the state to contract out distribution and have franchise-like private retail licenses**

There are three potential ways for Virginia to implement a government control model, but only one of those options appears practical. The three options are (1) state directly operates distribution and retail, possibly under VABC (2) state contracts out distribution and retail, or (3) state contracts out distribution and franchises retail. Of the three, only the last option appears practical. Even so, as noted above, this option is still more risky and challenging than any of the fully private approaches.

#### ***Direct state control of distribution and retail, under VABC or a new agency, would be beneficial in the long term but appears impractical to implement***

The state could attempt to directly operate distribution or retail, either under a new agency or at VABC. This approach could result in the most revenue for the state *in the long term*, because the state could fully capture profits from distribution and retail. However, this approach requires the most time to implement (possibly several years) and entails the highest upfront costs (tens of millions of dollars). It also has the highest risk of federal intervention and lawsuits against the state. Consequently, this approach does not appear to be practical.

The upfront time and costs of establishing directly controlled distribution and retail would be somewhat similar to establishing VABC's liquor operations from scratch. The state would need to establish warehouses, distribution networks, and retail stores throughout the state. It would need to pay for these efforts before any new revenues from marijuana sales were available. The cost of establishing all of these operations would be exponentially higher than the \$8 to \$20 million it would already cost the state to establish regulatory and other functions (see Chapter 12). By comparison, the budget for VABC's retail and distribution operations ( $\approx$ \$170 million, not including cost of inventory) is more than seven times higher than its budget for enforcement and regulation (\$22 million). If this ratio held

true for marijuana operations, it could cost the state upwards of \$100 million to establish new functions.

The state could attempt to reduce the implementation time and costs associated with the direct approach by vesting VABC with these responsibilities. However, it is not clear that tactic would have any practical advantages. VABC officials indicated that the agency's warehouse and distribution networks are designed around liquor. Marijuana distribution would likely require new, or almost entirely new, supporting infrastructure. Similarly, while some existing VABC stores could potentially be used to sell marijuana, many are likely too small to accommodate both liquor *and* marijuana. Consequently, VABC would still need to purchase or lease new retail space. Even VABC stores that are large enough to accommodate dual liquor-marijuana sales would need to be renovated, because marijuana will need to be stored and displayed differently than liquor.

On the staffing side, it's not clear that giving VABC authority for distribution and retail would reduce staffing needs. VABC would need to hire new employees to help perform many, if not all, of its new marijuana-related operations. The state may not be able to use any current VABC employees to assist with marijuana operations. The state could not ethically tell current VABC employees that, as part of their job, they are now required to commit federal crimes by aiding in the distribution and sale of a Schedule I controlled substance.

***State could reduce risks and costs of government control by (1) contracting out distribution and (2) licensing retail under franchise-like agreements***

The state could maintain control over distribution, but reduce costs and risks, by contracting out this function. It could then create franchise-like arrangements for retailers that would make privately-owned and operated stores resemble state-owned stores, in both appearance and operations.

Contracting out distribution would be relatively easy because the state would need only a few contracts to provide statewide coverage. This approach includes some risk, though, because it is unclear whether the state would find enough competent businesses to perform this function. Existing distributors of other products, such as beer and wine, may or may not be interested in taking on this new function. Additionally, few businesses, if any, may be interested in distributing to more remote—and less profitable—parts of the state. Additionally, the state would be relying on a small number of contractors to provide adequate distribution capacity at a statewide scale. If these contractors are not able to scale up and meet demand, the state could have regional or statewide product shortages.

The state could try to contract out retail, but this would likely be too time consuming and costly. Unlike distribution contracts, the state would probably need several dozen retail contracts. Before awarding these contracts, the state would need to hold a procurement process and solicit bids, select winners, and make contract awards. The procurement process can be time consuming, especially for a large number of bidders and contract awards. The state would also have to deal with potential challenges from parties who are not awarded contracts. Following contract awards, the state would still need to do the same sort of facility inspections and opening approvals that it would do for licensed businesses. These inspections would be needed to make sure contractors are ready to begin handling marijuana. Because contractors would be performing work on behalf of the state, rather than being licensed to operate on their own behalf, many of the costs of setting up new stores would also be

borne by the state through contractor payments. Consequently, the cost advantages of this approach are likely limited. This approach would also likely harm the ability of the state to promote small businesses, because contracts would have to be for multiple retail stores, and only larger businesses would be well positioned to compete for those contracts.

Instead of contracting out retail, the state could license retailers under franchise-like agreements. Franchise licensees would receive licenses to operate retail stores. These licensees would not have the same autonomy that a licensed retailer would have under a non-franchise regime. For example, franchise licensees would be required to locate their stores in the geographic areas identified by the state. They would have to adhere to strict requirements on store appearance, signs, and displays. They would be forbidden from any advertising or promotions. Those functions would be a state responsibility. Franchise licensees would be required to send employees to participate in standard training and buy employees a standard “uniform” (e.g., a polo shirt with standard logo). Essentially, the stores would have the appearance and function of a state-owned store, but the profits would flow to the franchise owner instead of the state.

The proposed government controlled approach—contracting distribution and franchising retail—would not generate significant profits for the state. Profits from wholesale mark-ups would pay for the cost of the distribution contracts. Consequently, distribution contractors would capture any wholesale profits. Similarly, any retail profits would flow to the retail franchise license holders.

The proposed government controlled approach is summarized in Table J-1.

**TABLE J-1**  
**Virginia could adopt a government control model that (1) contracts out distribution and (2) licenses retailers under franchise-like agreements**

<b>Operation</b>	<b>License structure</b>
<b>Cultivation</b> ≈100–800 operations	<p><b>Types:</b> Licenses divided into small, medium, and large tiers.</p> <p><b>Caps:</b> License awards capped based on market demand. Awards made via lottery with stringent qualification standards for applicants.</p> <hr/> <p><b>Options to promote small business &amp; industry diversity:</b> State can exempt small cultivators from license caps and award any qualified party a small cultivation license. Qualification standards for these licenses could be less stringent, but operations would not be allowed to start until all facility and operating compliance requirements are met. Small cultivators could also have special permission to sell their products from their own premises, for off-site consumption, without a retail license.</p>
<b>Processing</b> ≈25–100 operations	<p><b>Types:</b> Licensees can process all types of products (edibles, vape oils, concentrates) or specialize in specific products. Licenses can be divided into different types or tiers to simplify requirements for specialized operations.</p> <p><b>Caps:</b> No license caps and all qualified applicants are awarded a license.</p>

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**Options to promote small business & industry diversity:** The structure proposed above (specialized license types, no caps) would allow small businesses to enter the market and compete.

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**Distribution  
(gov't contract)**  
≈5-15  
operations

**Contracts:** Contractors are the only operations allowed to perform transport or wholesale marijuana raw materials or finished products to retailers. Some functions that could be performed by distributors in a fully private market, such as packaging, would be performed by cultivators or processors instead.

**Number:** State would award enough contracts to provide sufficient, statewide coverage.

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**Options to promote small business & industry diversity:** Contracted distributors could not hold retail, cultivation, or processing licenses.

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**Retail  
(licensed state  
franchises,  
independent)**  
≈200-400  
operations  
(depending on  
demand)

**Types:** Retail stores allowed, but not home delivery services or on-site consumption venues. Home delivery and on-site consumption venues could begin 3 to 5 years after store sales. Retailers would have to meet exceptionally strict standards, including standards for store design and appearance, locations, and employee training (similar to the requirements that a franchise owner would be required to meet). The state would provide license holders with guidance and programs to assist them.

**Caps:** License awards capped by the state, which would also determine where retail stores would be located. Awards made via a lottery.

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**Options to promote small business & industry diversity:** State can choose to set less exclusionary qualification standards for applicants to promote a larger and more diverse applicant pool. Operations would not be allowed to start until all facility and operations compliance requirements are met. Awards made gradually over period of 3 to 5 years until caps are reached.

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**Testing  
(licensed,  
independent)**  
≈5-20  
operations

**Types:** Testing labs must be independent. They cannot hold any other type of license. Testing labs must also be certified by the state's Division of Consolidated Laboratory Services (DCLS).

**Caps:** None.

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SOURCE: JLARC summary analysis.

NOTE: The range of potential licensees shown are estimates based on a review of mature, commercial markets in other states, Virginia's anticipated marijuana demand at market maturity, and the license structure, including caps on cultivation and retail, JLARC is recommending.

## Appendix K: Defining Disproportionately Impacted Areas (DIAs) for social equity program eligibility

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Virginia would need to define program eligibility for social equity initiatives. Selected criteria should (1) accurately target intended beneficiaries and (2) be unlikely to face legal challenges that could delay program implementation.

Because Black individuals have historically been arrested and convicted for marijuana offenses at higher rates than other races or ethnicities, many states' social equity programs aim to direct economic benefits to Black communities through marijuana legalization. However, as discussed in Chapter 7, race cannot explicitly be used as a criterion unless a state can withstand the two-prong test of "strict scrutiny," showing both that (1) there is a compelling government interest and (2) the remedy is sufficiently narrowly tailored (*City of Richmond v. J.A. Croson Co*, 1989; *Pharmacann Ohio v. Ohio Dep't Commerce*, 2018). Virginia could not demonstrate a compelling government interest to use race as a criterion for its social equity programs without evidence of past discrimination that is specific to the marijuana industry. Evidence of previous disproportionality in marijuana law enforcement does not appear to be enough to justify the use of race-based benefits in the commercial marijuana industry. Therefore, implementing social equity programs with race as a criterion is unlikely to withstand legal challenges.

Because race likely cannot be used, states must develop other criteria for determining social equity program eligibility. Residency appears to be the best criterion for social equity programs. Other states have typically denoted eligible populations by designating Disproportionately Impacted Areas (DIAs). DIAs are commonly defined as cities, neighborhoods, or census tracts with a combination of high arrest/conviction rates for marijuana crimes and some measure of poverty, such as high rates of unemployment or participation in income-based state or federal programs. Virginia would similarly need to define geographic areas to determine which communities are eligible for social equity program benefits.

First, Virginia would need to determine the geographic unit to use in defining its DIAs. Based on the experiences of other states, using smaller geographic areas could better target intended beneficiaries. A few states have designated entire localities or certain zip codes as DIAs, but these designations have been too broad to effectively direct benefits to intended groups. Therefore, the best geographic unit for designating DIAs appears to be census tracts.

Virginia would also need to set criteria for how census tracts are identified as DIAs (Table K-1). Because social equity programs are intended to direct benefits to populations that have been negatively affected by prior marijuana law enforcement, Virginia could first identify areas with high rates of arrests and convictions for marijuana-related offenses. Virginia could select one of several options to determine how this criterion should be measured. For example, Virginia could select the top 25 percent of census tracts with the highest rates of arrests and convictions for marijuana possession over the past decade.

Aside from areas with highest *rates* of marijuana arrests and convictions, Virginia could also incorporate criteria that considers high *disproportionality* of marijuana arrests and convictions. JLARC staff conducted a similar analysis to determine which localities had the highest racial disproportionality in

marijuana possession arrests and cases that were prosecuted or otherwise proceeded in court. (For additional details of this analysis, see Appendix D.) Virginia could use a similar analysis, narrowed down to the census tract level, to define DIAs; however, census tracts with the greatest disproportionality may not necessarily be the communities with greatest number of marijuana-related arrests/convictions, and vice versa. Therefore, using disproportionality to define DIAs without regard to the total number of arrests or convictions may not result in the intended communities being eligible for social equity program benefits.

In addition to marijuana crime rates, the state could also incorporate a poverty measure into the DIA designation (e.g., census tracts with average poverty rates of 20 percent or greater). In defining its DIAs, Illinois outlines several criteria that measure poverty or economic disadvantage and requires that census tracts meet at least one of these criteria to be selected as a DIA (in addition to having high rates of marijuana-related arrests and convictions).

**TABLE K-1**  
**Virginia could use several criteria to designate census tracts as DIAs**

<b>Type of criteria</b>	<b>Criteria options</b>	<b>Example criteria</b>
Rate of arrests and convictions for marijuana-related offenses	1. Possession only 2. All marijuana-related offenses (including more serious offenses, such as trafficking)	Top 25 percent of census tracts with the highest rates of arrests and convictions for marijuana possession over the past decade
Racial disproportionality of arrests and convictions for marijuana related offenses	1. Possession only 2. All marijuana-related offenses (including more serious offenses, such as trafficking)	Any census tracts with higher rates of racial disproportionality for marijuana-related convictions than the statewide average rate over the past decade
Measure of poverty or economic disadvantage	1. Poverty rate 2. Unemployment rate 3. Rate of participation in income-based state or federal programs (e.g. Supplemental Nutrition Assistance Program)	Census tracts with a poverty rate of at least 20 percent, according to latest federal decennial census

SOURCE: JLARC summary analysis.

Once DIAs have been identified, Virginia would need to decide whether to set additional parameters to determine DIA residents who are eligible for program benefits. For example, other states commonly require individuals to have lived in a DIA for a certain period of time, such as five of the past 10 years. This helps to ensure that only longstanding community residents are eligible, and that outside individuals are not able to move into DIAs to disingenuously qualify for program benefits. Virginia could also require individuals to have a prior marijuana-related arrest or conviction on their record to be eligible. As discussed in Chapter 7, this would more closely target the program to people who have been negatively affected by prior marijuana law enforcement, should the state wish to further narrow eligibility for social equity program benefits.

Virginia should periodically monitor and adjust DIA designations as needed. Based on other states' experiences, Virginia should ensure DIAs accurately target intended beneficiaries as part of its ongoing evaluations of social equity programs' effectiveness. In Michigan, for example, many DIAs initially identified were in localities that prohibited commercial marijuana activities in their jurisdictions. As a



result, the state had to adjust eligibility criteria to expand the number of DIAs. Even if initial designations effectively target intended beneficiaries, Virginia would still need to update DIAs periodically to adjust for any changes in community eligibility. For example, DIAs that currently have high rates of poverty may not be the same areas that have high rates in the future, as communities evolve and change over time.

## Appendix L: Therapeutic effects of marijuana use

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There is increasing support for the use of marijuana to help treat various health conditions. Currently, all but three states have approved some sort of medical marijuana program.

In the past few years, many research studies have attempted to draw conclusions on marijuana's effectiveness in treating health conditions. JLARC staff examined systematic reviews and research articles on the association between marijuana products and the alleviation of symptoms. The high volume of recent studies examining marijuana use's health effects led the National Academies of Sciences, Engineering, and Medicine to publish a comprehensive review on the effects of marijuana use. This review was published in 2017 and included research up to 2016. JLARC staff reviewed the findings from this project and examined more recent systematic reviews up to 2020 that aimed to draw further conclusions on these findings. Based on the research examined, only a few health conditions have conclusive evidence of therapeutic relief from marijuana use.

Evidence strength is based on the number and quality of studies that show an association between marijuana use and certain health incomes. High quality research uses rigorous research methods, controls for outside factors, and has enough participants that outcomes can be generalized to the larger population.

The 2017 National Academies review included mostly systematic reviews and some articles. The authors made determinations on whether there was substantial or conclusive, moderate, limited, or insufficient evidence of an association between marijuana use and improved health outcomes studied. For health conditions with substantial or conclusive evidence of an association between marijuana use and improved health outcomes, enough high quality and rigorous studies found evidence of an association. There was determined to be moderate evidence of improved health outcomes if there were a fair number of quality studies to support marijuana use and improved outcomes. For health conditions with limited or insufficient evidence, few or no quality studies demonstrated the association between marijuana use and the health outcomes measured. Limited or insufficient evidence does not mean that marijuana is ineffective in providing therapeutic relief. Rather, it means that the current evidence to support the association between marijuana use and certain health outcomes is weak.

The National Academies reviewed research for approximately 24 symptoms. For 14 symptoms, the National Academies found no evidence or insufficient evidence of ineffectiveness of marijuana use. For 10 symptoms, the National Academies found moderate or limited evidence of effectiveness of marijuana. Three conditions were found to have conclusive or substantial evidence of an association between use and relief of symptoms. These symptoms are included in table L-1, along with the strength of evidence. More recent systematic reviews have confirmed the findings for these symptoms

**TABLE L-1**  
**Research on the therapeutic effects of marijuana**

	<b>Evidence strength of effectiveness</b>
Chronic pain	Substantial evidence
Nausea and vomiting	Conclusive evidence
Multiple Sclerosis spasticity symptoms	Substantial evidence

SOURCE: Adopted from findings included in the National Academies of Sciences, Engineering, and Medicine's comprehensive review on the effects of marijuana.

NOTE: This table does not include all health conditions reviewed in the book, only conditions for which researchers deemed evidence was sufficient to support an association.

The National Academies determined that the moderate or limited evidence available for the remaining conditions with some evidence of improved outcomes was insufficient to fully draw conclusions on the effectiveness of marijuana use. [In contrast to negative health outcomes, only outcomes with substantial or conclusive evidence were considered strong enough to draw conclusions by the National Academies.](#) Health conditions with moderate evidence include improved short-term sleep outcomes for individuals with sleep disturbances associated with: sleep apnea, fibromyalgia, pain, and multiple sclerosis. Outcomes with limited evidence include conditions such as increased appetite and decreased weight loss for HIV/AIDS patients and the improvement of Tourette syndrome symptoms. The National Academies determined there was inconclusive evidence to support symptom relief from other health conditions. Though more recent research has been conducted since the National Academies review, it has not been sufficiently rigorous or conclusive to strengthen study findings.

One exception is recent research on the impact on epilepsy. Recent systematic reviews have suggested an association between the use of marijuana and the alleviation of symptoms associated with epilepsy, particularly for children. This health condition was referenced in the National Academies review as having insufficient evidence to draw a conclusion, though the authors acknowledged that more rigorous studies were in process during the publication of their review. More recent research supports evidence of an association between the use of marijuana products and improved health outcomes for those with epilepsy.

Research is limited on differences between types of products such as edibles versus smoking, the impact of potency, and consumption trends. Research findings presented here and in the studies examined were not exclusive to a specific form of cannabis. The studies reviewed involved use of various forms of marijuana including flower, oil, extract, spray, and the pill form of cannabis. Findings discussed here should not be associated with one specific type of product unless stated.

Despite the abundance of studies, findings on the medical benefits of marijuana use are limited for several reasons. Interactions with other therapeutic treatments, biases related to reported symptom relief, and limitations on study design all influence the interpretation of study outcomes according to researchers. Research examining differences between types of products or method of use will also be critical to policymaking moving forward. Current research provides evidence that marijuana may help alleviate symptoms for a wide variety of conditions, though evidence is currently limited to adequately identify the full list of conditions.

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## Appendix M: Research on the health effects of marijuana use

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Marijuana has been associated with negative health outcomes. As more states implement adult use laws, understanding the current research is critical. Currently, 15 states and three territories have approved laws to legalize adult cannabis use. As the state explores general adult use legalization, understanding how marijuana use affects individuals and communities will be important. With legalization, more adults will likely use marijuana. Therefore, states are likely to see an increase in the negative health outcomes related to marijuana use. While research findings are limited, research does provide some insight into the negative health effects associated with marijuana use.

The high volume of recent studies examining the effects of marijuana use led the National Academies of Sciences, Engineering, and Medicine to publish a comprehensive review on the health effects of marijuana use. This review was published in 2017 and included research up to 2016. Because of the large volume of research studies and health conditions studied, the authors used discretion in selecting health conditions to review. JLARC staff reviewed the findings from this project and examined more recent systematic reviews up to 2020 that aimed to draw further conclusions from the 2017 findings.

The 2017 National Academies review included mostly systematic reviews and some articles. The authors made determinations on whether there was substantial or conclusive, moderate, limited, or insufficient evidence of an association between marijuana use and improved health outcomes studied. For health conditions with substantial or conclusive evidence of an association between marijuana use and improved health outcomes, enough high quality and rigorous studies found evidence of an association. There was determined to be moderate evidence of improved health outcomes if there were a fair number of quality studies to support marijuana use and improved outcomes. For health conditions with limited or insufficient evidence, few or no quality studies demonstrated the association between marijuana use and the health outcomes measured. Limited or insufficient evidence does not mean that marijuana is ineffective in providing therapeutic relief. Rather, it means that the current evidence to support the association between marijuana use and certain health outcomes is weak.

For the negative health effects related to marijuana use, the National Academies used health endpoints to narrow research topics. The health effects reviewed are not all inclusive. Instead, the researchers focused on some major health effects that have seen consistent evidence of an association, or have been assumed to be connected to marijuana use. The following is a modified list of the health endpoints used by the National Academies:

- mental health;
- cognition, social, and educational outcomes;
- maternal health;
- cardiovascular symptoms;
- respiratory symptoms;
- problem cannabis use
- use of other substances;
- injury and mortality;

- immunity; and
- cancer.

The National Academies and other researchers have found evidence of an association between marijuana use and each of these categories. While some of the health endpoints presented above had several negative health outcomes with substantial or moderate evidence, not all categories had outcomes with enough evidence to provide an in-depth analysis. Below is a discussion of notable research findings.

### ***Mental health***

Research on the association between marijuana use and mental health is growing but complicated. In the National Academies research, the authors conclude that marijuana use is associated with losing touch with reality (psychotic episodes) and schizophrenia, especially for heavy users. Other outcomes such as suicidal thoughts and worsened mental health symptoms for those already experiencing mental health problems have been found as well. Recent systematic reviews have provided additional support for these outcomes. Therefore, there is evidence to support an association between the use of marijuana and negative mental health problems.

While marijuana use is one factor, researchers argue that these negative outcomes are influenced by other factors. Factors such as family history, environment, and age can also influence these outcomes. The likelihood of developing mental health problems is partially hereditary, and marijuana use could increase or worsen symptoms for marijuana users, particularly heavy users. Younger users may be more likely to experience negative mental health outcomes as well. The relationship between mental health and substance use is complex, and researchers continue to conduct studies aimed at understanding their association. Regardless, state leaders should be aware of this research and inform the public about these risks.

### ***Cognitive, social, and educational outcomes***

According to the National Academies, marijuana use is associated with cognitive impairment, including memory, learning, and attention. These outcomes can be especially detrimental for youth and supports the need to prohibit the use of marijuana for individuals under 21. Because youth's brains are still developing, any substances that can impact cognition are of concern. Overall, there is moderate evidence of an association between the use of marijuana and negative cognitive outcomes related to memory, learning, and attention.

Additionally, worsened social and educational outcomes are associated with use, particularly for younger users. Researchers found that marijuana use led to worse school and work performance. While limited evidence supports these findings, it is additional support to develop policies that restrict youth access to products and educate the community about the harms of use.

### ***Maternal health***

Maternal health research aims to examine the potential harm of marijuana use before, during, and after pregnancy (while breastfeeding). For maternal health, smoking marijuana during pregnancy has

been associated with pregnancy complications, lower birth rate, and admittance to the neonatal intensive care unit. However at this time, evidence supporting these conclusions is limited, and not all studies have reached those conclusions. For example, the National Academies found substantial evidence of lower birth weight but newer studies did not. Other factors, such as the use of other substances or a mother's medical history may also influence negative health outcomes. Some studies have begun to examine the trend of using multiple substances and recognize that this could affect outcomes. States with legalization are beginning to conduct more rigorous data collection to better understand trends in use for pregnant women, as well as how to navigate the conflicting information about the use of marijuana during pregnancy. Specifically, some pregnant women may be interested in using marijuana to relieve pregnancy symptoms, such as vomiting.

### ***Cardiovascular and respiratory symptoms***

The heart and lungs can also be affected by marijuana use. In recent years the primary mode of use has been smoking, which has led many researchers to examine the impact of smoking on the respiratory system. At this time, there is evidence to support the association between smoking marijuana and chronic cough, worse respiratory symptoms, and bronchitis. The National Academies state there is limited evidence of an association between marijuana smoke and chronic obstructive pulmonary disease. Other factors, including the use of other substances, like tobacco, can have a substantial influence on health outcomes related to the lungs. Since many people use both tobacco and marijuana, it can be difficult to distinguish health outcomes related only to marijuana use.

Major research is emerging on the effects of marijuana use on the heart, with a recent statement published by the American Heart Association's journal outlining some potential negative outcomes related to heart function (Page et al, 2020). Studies have shown an association between marijuana use, heart attack, and stroke. For heart attack, marijuana use has been associated with the triggering of heart attacks. Evidence is limited on the association between marijuana use and stroke. Reviews published since the National Academies' review have found an association between marijuana use and Tachycardia (rapid heartbeat). Tachycardia was a number one or number two complaint from individuals seeking assistance from poison control and emergency departments in several states with legalization.

### ***Problem cannabis use and use of other substances***

Broadly, problem cannabis use and cannabis use disorder (CUD, a clinically defined disorder) are related to the excessive use of marijuana. Individuals may be dependent on marijuana, and marijuana use may interfere with their day to day life. Research has demonstrated that the more a person uses marijuana, the more likely he or she is to develop problem use or CUD. More adults will likely use marijuana as more states legalize the substance, so states can expect problem marijuana use to increase as well. Research has shown mixed evidence to support increased CUD after legalization, but part of that is a result of the difficulties of measuring CUD prevalence. However, because individuals with CUD often suffer from other substance use disorders, understanding these trends will be important to designing adequate policies.

Further, researchers are looking to learn more about the relationship between substance use and mental health issues, because many people with substance use disorders also have serious mental illness. Consequently, increases in individuals experiencing substance use disorders like CUD could create an increased need for mental health services for communities. An understanding of CUD trends can help states develop better strategies that will address these interconnected issues. While research is still growing on whether CUD increases after legalization, states should begin increased data collection to help guide future policymaking. Researchers urge policymakers to consider all of these factors when developing prevention and intervention policies addressing legalization:

“Although most people will not be harmed [by legalization], those that are likely to be harmed will not be drawn equally from the population, as with problems associated with other drugs, they will be some of the most vulnerable and disadvantaged in society, problematic cannabis use like other drugs is just one disadvantage of many for these groups” (Hamilton & Tracy, 2020).

Researchers are also attempting to understand how marijuana use affects the use of other substances. If people choose to use more marijuana and use more of other substances, then additional efforts to address substance use issues as a whole rather than by substance type becomes even more important. Most research supports the likelihood that increased marijuana use could increase the use of some substances; current research is inconclusive about the use of other substances and marijuana legalization.

### ***Cannabis Hyperemesis and Cyclical Vomiting Syndromes***

The legalization of marijuana has increased awareness and prevalence of Cannabis Hyperemesis Syndrome (CHS) and Cyclical Vomiting Syndrome (CVS). These two health conditions are related to the overconsumption of marijuana products. Symptoms of these conditions typically include severe nausea and vomiting as well as abdominal pain. Symptoms are not typically life threatening. Relief from these symptoms usually occurs after discontinued marijuana use. Researchers have found increased incidences after legalization, though part of that is likely due to increased awareness of the condition. Education about how overconsumption can lead to health outcomes such as these should be a part of states’ prevention efforts.

### ***Other health outcomes with limited and insufficient evidence of an association***

For the endpoints on injury and mortality, cancer, and immunity, the only notable finding is that marijuana use has an association with increased risk of vehicle crashes. This conclusion has been supported by other research studies and systematic reviews. However, increased risk of crash does not necessarily translate into more crashes for states with legalization, as discussed in chapter 9. Regardless, states should understand these risks and develop policies or guidelines to help minimize these effects at the state level through education and law enforcement training.

Research on injuries focused primarily on negative health outcomes for youth who accidentally ingest marijuana. Though serious outcomes are rare, they can include respiratory distress and seizures, providing additional support that states should educate adults about safe storage and the dangers of



accidental consumption. Other outcomes related to injuries did not yield notable findings. Specifically, the National Academies and more recent systematic reviews determined there is not enough evidence to demonstrate an association between marijuana use and occupational injuries.

There were no major findings on the association between marijuana use and cancer, though limited evidence of an association between marijuana use and Testicular Germ Cell Tumor was found. This is a specific type of tumor found in the testicles, but evidence is limited. Further systematic reviews concluded the same findings. Last, information on the association between marijuana use and the immune system shows a limited association between marijuana use and inflammation in immune system cells.

While there are many studies attempting to review the effects of marijuana use, the current findings are limited, and more rigorous studies are necessary to form stronger conclusions. Longer studies, studies that control for the effects of other substances or behaviors on study outcomes, and experimental studies could help researchers draw stronger conclusions. There is enough evidence to demonstrate that marijuana is harmful, but the extent of that harm, including long-term effects, are still mostly unknown. Research regarding the effects of marijuana legalization on public health can be found in Chapter 9.

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## Appendix N: Potential revenue from commercial marijuana market at different tax rates

Most states that have legalized commercial marijuana sales assess a total tax rate on marijuana of between 20 and 30 percent of the sales price. This total tax rate includes special state and local taxes on marijuana as well as standard state and local sales taxes. This appendix includes projected revenue over a five-year period at each percentage point rate between 20 and 30 percent, and at the low-end and high-end of expected sales volume. Low-end and high-end sales volumes are based on a variety of factors, including rate of conversion of illegal market to legal market.

**TABLE N-1**  
**Projected revenue of differing marijuana tax rates assuming *lower-end* of sales volume**

Projected revenue from marijuana retail sales tax (\$M)					
Total tax rate on marijuana sales	Year 1	Year 2	Year 3	Year 4	Year 5
20%	\$25	\$50	\$78	\$101	\$122
21%	26	53	81	106	128
22%	27	55	85	111	134
23%	28	58	89	116	140
24%	30	60	93	122	146
25%	31	63	97	127	152
26%	32	66	101	132	158
27%	33	68	105	137	165
28%	35	71	109	142	171
29%	36	73	112	147	177
30%	37	76	116	152	183

SOURCE: JLARC analysis of MPG Consulting projections, 2020.

**TABLE N-2**  
**Projected revenue of differing marijuana tax rates assuming *high-end* of sales volume**

Projected revenue from marijuana retail sales tax (\$M)					
<b>Total tax rate on marijuana sales</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
20%	\$41	\$84	\$129	\$169	\$203
21%	43	88	136	177	213
22%	45	92	142	186	224
23%	47	97	149	194	234
24%	49	101	155	203	244
25%	52	105	162	211	254
26%	54	109	168	219	264
27%	56	113	174	228	274
28%	58	118	181	236	284
29%	60	122	187	245	295
30%	62	126	194	253	305

SOURCE: JLARC analysis of MPG Consulting projections, 2020.

NOTE: Projections shown are only for a new marijuana retail sales tax and exclude the existing 5.3 percent sales tax to more precisely illustrate the differences in changes in the marijuana tax rate. Projections are *total* tax collected through the marijuana retail sales tax and do not distinguish between any state and local portions that the General Assembly may determine.



## Appendix O: Proposed organizational structure and staffing for a new marijuana regulatory agency

A new marijuana regulatory agency should be organized into an executive office, administrative support, and three key regulatory functions: licensing, investigations, and field enforcement. The new agency would need between 110 and 140 staff. The following table provides an overview of the basic organization, duties, and staffing requirements. Position salaries are estimates based on the cost of similar positions in Virginia and other states. This structure assumes that the Office of the Attorney General will provide the new agency with all legal services, which is the standard practice for state agencies.

**TABLE O-1**  
Potential organization structure and staffing for new marijuana regulatory agency

<b>Section</b>	<b>Duties</b>	<b>Positions</b>
<b>Executive office</b>		<b>≈10 positions</b>
Director's office	Responsible for leadership and management oversight of the regulatory agency.	Director (\$175,000 to \$185,000) Executive assistant (\$65,000 to \$75,000)
Policy & communications	Provide policy support to the board and director. Research emerging issues within the cannabis industry and resolve policy issues with the regulated industry and other stakeholders. Analyze data for the benefit of other groups within the regulatory agency including testing data, inventory tracking data, production data, licensing data, tax revenue data, etc. Serves as the main contact for legislators on behalf of the agency and manages all legislative affairs for the agency. Coordinates all methods of communicating public information including website, list services, etc. Handle all external requests for information including media, other regulatory agencies and stakeholders.	Analyst manager (\$100,000 to \$110,000) Analyst (\$70,000 to \$75,000) Legislative liaison (\$105,000 to \$115,000) Public information officer (\$80,000 to \$90,000) Admin/clerical (\$30,000 to \$40,000)
<b>Administrative support</b>		<b>10-15 positions</b>
Accounting, Budgeting & Human Resources	Provides administrative support functions for the agency including accounting and budgetary services. Manages the personnel process on behalf of the agency. Provides forecasting and other related services as necessary for the agency.	Controller (\$125,000 to \$135,000) Accountant (\$62,000 to \$72,000) Budget officer (\$88,000 to \$98,000) Budget analyst (\$62,000 to \$72,000) HR specialist (\$55,000 to \$65,000)
Information technology	Provide or oversee contracts for all information technology services, agency website, and systems for licensing, marijuana tracking, enforcement case management, finance, etc.	IT director (\$120,000 to \$140,000) IT specialist (\$50,000 to \$115,000)
<b>Licensing</b>		<b>30-40 positions</b>

Appendixes

Application intake & processing	Responsible for accepting all license applications, entering them in the licensing system, ensuring completeness of applications, conducting all cursory checks (e.g. tax checks, credit checks, fingerprints, etc.). Coordinating with investigations group for assignment of applications for further investigation.	Licensing supervisor (\$50,000 to \$60,000) Licensing specialist (\$30,000 to \$40,000) Forms design specialist (\$45,000 to \$55,000)
License issuance & renewal	Responsible for processing license approvals following the completion of all required investigations and reviews. Responsible for the issuance of business licenses and employee/owner badging (as required).	Program professional (\$75,000 to \$85,000) Admin/clerical (\$30,000 to \$40,000)
Employee registration	Responsible for processing employee registrations and issuing badges or certifications.	
Forms development	Develop and updated licensing forms as required, such as license renewal or change of ownership forms	
Compliance assistance	Develop training and education program for regulated industry and other stakeholders. Coordinate internal training program for new agency employees and other internal training areas for employees.	
Social equity	Manage and oversee the state's social equity assistance programs. Provide staff support to the Social Equity Committee, including reviewing and assessing grant applications for the community reinvestment fund. Monitor program outcomes and trends in industry diversity and social equity businesses.	Program manager (\$90,000 to \$100,000) Program professional (\$45,000 to \$75,000) Program assistant (\$30,000 to \$40,000)
<b>Investigations</b>		<b>15-20 positions</b>
General background investigations	Conduct background investigations of all businesses and owners. Investigations include review of all contracts, financing, ownership structures, etc.	Criminal invest. superv. (\$65,000 to \$75,000) Criminal investigator (\$45,000 to \$60,000)
Financial investigations	Conduct complex background investigations involving publicly traded companies and other complex business structures, including changes of ownership.	Compliance investigator (\$40,000 to \$55,000) Financial investigator (\$70,000 to \$80,000)
Regulatory & criminal investigations <sup>a</sup>	Perform criminal and regulatory investigations involving a wide variety of issues including licensed premises, hidden ownership, other potential regulatory violations associated with ownership and application disclosures.	Financial analyst (\$55,000 to \$70,000) Admin/clerical (\$30,000 to \$40,000)
<b>Field Enforcement</b>		<b>45-55 positions</b>
Compliance inspections	Conduct compliance inspections of licensed businesses, pre-opening inspections, underage compliance operations, other compliance issues of operating businesses.	Criminal invest. superv. (\$65,000 to \$75,000) Criminal investigator (\$45,000 to \$60,000)
Complaint investigations	Conduct investigations into complaints lodged against licensed businesses and licensed employees.	Compliance investigator & inspector (\$45,000 to \$60,000) Analyst (\$40,000 to \$50,000)
Regulatory and criminal investigations <sup>a</sup>	Conduct special investigations into potential regulatory and criminal violations at licensed businesses. Work cooperatively with other state and local law enforcement agencies on criminal investigations involving licensed businesses.	Audit manager (\$90,000 to \$100,000) Auditor (\$40,000 to \$65,000)
Tax compliance <sup>b</sup>	Responsible for processing marijuana related tax returns, auditing licensed business reporting of information, and collecting marijuana sales taxes.	Admin/clerical (\$30,000 to \$40,000)
Compliance coordination	Serve as the liaison between the regulator and the third-party provider of the inventory tracking system and licensed businesses using the system. Identify and resolve issues involving compliance with the	

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requirements for inventory tracking system reporting. Review and analyze trends in data.

Serve as the liaison between the regulator, the Division of Consolidated Laboratory Services, and licensed testing facilities. Coordinate and monitor sample collection, verify lab compliance with accreditation standards, and review test result reports.

Serve as the liaison between licensed businesses and the Department of Agriculture and Consumer Services pesticide application program, and coordinate access to ensure compliance.

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SOURCE: JLARC analysis of Virginia and other states and analysis performed by Kammerzell Consulting.

NOTE: <sup>a</sup> Criminal investigations and enforcement would be needed only if the agency is given law enforcement authority. <sup>b</sup> Staff position counts includes five positions for tax collection and compliance audits. However, if this function is given to the tax department, this section and these positions would no longer be needed.

## Appendix P: Powers and duties to be vested with the marijuana regulatory body

Virginia will need to vest several basic powers and duties with the board and agency it designates to regulate the commercial marijuana market. These include powers and duties related to: (1) general operations, (2) licensing, (3) employee registration, (4) enforcement, (5) commercial products, and (6) transparency and accountability. The key powers and duties that could or should be vested with the regulatory board and agency are summarized in Table P-1. Marijuana regulators in other states have been vested with many of same powers and duties that are outlined here. Virginia also generally vests its regulatory agencies, especially those charged with licensing businesses or occupations, with similar powers and duties.

The state can decide whether to vest the regulatory board and agency with tax compliance and law enforcement powers and duties. Virginia and other states sometimes vest with regulators with these authorities, but sometimes do not. Tax compliance powers and duties are discussed in more detail in Chapter 10, and law enforcement powers and duties are discussed in more detail in Chapter 11.

The state can decide whether to register employees. Employee registration programs and options are discussed in more detail in Appendix I.

**TABLE P-1**

**Virginia should grant specific powers and duties to the marijuana regulatory body, while others are optional**

<b>Power or duty to be granted in statute</b>	<b>Recommended</b>	<b>Optional</b>
<b>General</b>		
Regulate the commercial, adult use marijuana market	✓	
Regulate the medical marijuana market, starting 3-5 years after commercial legalization	✓	(3-5 year delay)
Promulgate all rules and regulations necessary to establish and regulate a commercial marijuana market	✓	
Establish and operate an agency, including hiring personnel, entering into contracts, etc.	✓	
<b>Licensing</b>		
Set qualifications for licenses	✓	
Approve or deny licenses	✓	
If a license is denied, preside over any appeals of license decision and make final administrative rulings	✓	
Establish process and procedures necessary for awarding and renewing licenses	✓	
Establish process and procedures for reviewing appeals of license decisions, in accordance with the Virginia Administrative Process Act (Title 22 Chapter 40)	✓	
Investigate license applicants, including all parties with an ownership or financial interests, including the power to conduct fingerprint criminal background checks and audits or reviews of financial histories, business structures, etc.	✓	
Set, charge, and collect all <i>license</i> related fees, including application, issuance, & renewal fees	✓	

<b>Power or duty to be granted in statute</b>	<b>Recommended?</b>	<b>Optional?</b>
<b><i>Employee registration</i></b>		
Approve or deny employee registration applications		✓
Perform fingerprint criminal background checks of applicants		✓
Issue employee badges		✓
Set, charge, and collect all <i>employee registration</i> related fees, including application & renewal fees		✓
<b><i>Enforcement</i></b>		
Set facility and operation compliance requirements that must be met <i>before</i> a license holder can begin operations and start handling marijuana	✓	
Grant or deny permission for a license holder to begin operations	✓	
Inspect license holder premises, plans, procedures, and records before the license holder begins operations	✓	
Set facility and operation compliance requirements	✓	
Set appropriate penalties for noncompliance	✓	
Maintain & monitor a "seed-to-sale" tracking system	✓	
Monitor, inspect, investigate, audit, and otherwise check licensees for compliance	✓	
Monitor video surveillance, if necessary	✓	
Inspect licensed premises and any and all documents and records	✓	
Investigate complaints made against licensed businesses	✓	
Perform audits of financial records to affirm legitimacy of transactions	✓	
Perform underage compliance checks of licensed retailers	✓	
Perform tax compliance audits and inspections		✓
Investigate criminal activity or take direct action to stop and prevent criminal activity		✓
Employ sworn law enforcement officers and grant them limited powers to enforce criminal laws related to marijuana		✓
Seize and dispose of marijuana belonging to a license holder, in accordance with established policies and procedures		✓
Take corrective enforcement actions and levy sanctions (e.g. suspend or revoke licenses, levy fines, order remedial education, etc.)	✓	
Establish disciplinary process and procedures for contesting findings of violations or sanctions, in accordance with the Virginia Administrative Process Act (Title 22 Chapter 40)	✓	
Preside over disciplinary process and make final rulings	✓	
<b><i>Commercial products</i></b>		
Set product standards (e.g. types of products that can be sold, potency requirements, etc.)	✓	
Set product testing requirements (e.g. who tests, what they test, frequency of testing, which tests are used, & reporting requirements)	✓	
Set packaging & labeling requirements/restrictions	✓	
Set promotion & advertising requirements/restrictions	✓	
<b><i>Transparency &amp; accountability</i></b>		

Employees & board members cannot have ownership interests in commercial marijuana industry	✓	
<b>Power or duty to be granted in statute</b>	<b>Recommended?</b>	<b>Optional?</b>
Hold regular public meetings and solicit public input, in accordance with Virginia laws	✓	
Submit annual reports to legislature and governor	✓	
Make information on the commercial marijuana market widely available to the public, including the location of all licensed businesses, information on marijuana sales, and information on tax revenues generated	✓	
Protect certain licensee information from disclosure (e.g. confidential information disclosed on license applications, such as social security numbers)	✓	
Share licensee information with financial institutions, as appropriate		✓
Run a license confirmation hotline		✓

SOURCE: JLARC staff review of other states' statutes authorizing regulation of commercial, adult use marijuana and other Virginia regulatory agencies.