

March Monthly Public Meeting

Remote Via Teams
Union Station
2 Washington Square
Worcester, 01604



Meeting Book - March Monthly Public Meeting - Copy

Table of Contents

Call to Order & Chair's Comments/Updates

Chair Hoffman

20210216_MEETING AGENDA 03.11.21.docx

Minutes

20201008_Mins_Public Meeting_For Commission Consideration.docx

20201020 Mins Public Meeting For Commission Consideration.docx

Executive Director's Report

Shawn Collins

Staff Recommendations on Changes of Ownership

COO-XS-APICAL, INC.-v.2.docx

COO-XS-COMMUNITY GROWTH PARTNERS GREAT BARRINGTON v.2.docx

COO-XS-COMMUNITY GROWTH PARTNERS NORTHAMPTON v.2.docx

COO-XS-CURALEAF MASSACHUSETTS, INC.-v.2.docx

COO-XS-CURALEAF NORTH SHORE, INC.-v.2.docx

COO-XS-I.N.S.A., INC.-v.2.docx

COO-XS-LYNN ORGANICS, LLC-v.2.docx

COO-XS-NS AJO HOLDINGS, INC.-v.2.docx

COO-XS-TDMA ORANGE, LLC-v.2.docx

COO-XS-THE HEIRLOOM COLLECTIVE, INC.-v.2.docx

Staff Recommendations on Renewals

ME RENEWAL XS-MARCH-v.2.docx

MTC RENEWAL XS-MARCH-v.2.docx

Staff Recommendations on Final Licenses

FL XS-ASCEND MASS-MR282077-v.2.docx

FL XS-CCC WELLFLEET NV-MR282685-v.2.docx

FL XS-CLOUD CREAMERY-MP281412-v.2.docx

FL XS-ELEVATED ROOTS-MR283092-v.2.docx

FL XS-EMERALD GROVE-MR282808-v.2.docx

FL XS-GREENSTAR HERBALS-MR282207-v.2.docx

	FL X	S-HENNEP-MR281450-v.2.docx	
	FL X	S-HYECORP DBA GREEN4ALL-MR282460-v.2.docx	
	FL X	S-LEGAL GREENS-MR282937-v.2.docx	
	FL X	S-MASS WELLSPRING-MR281363-v.2.docx	
	FL X	S-NATURE'S EMBRACE-MR282669-v.2.docx	
	FL X	S-SUPERCRITICAL MASS LABORATORIES-MP281321-v.2.docx	
	MFL	XS-ACK NATURAL-MTC1627-v.2.docx	
Staff	f Rec	ommendation on Provisional Licenses	
	PL X	S-311 PAGE BLVD-MRN282714-v.2.docx	
	PL X	S-CHARLEMONT FARMWORKS-MCN281116-v.2.docx	
	PL X	S-ELEVATION-MRN281472-v.2.docx	
	PL X	S-FADED-DOA100108-v.2.docx	
	PL X	S-GTE MILLIS LLC-MPN281965-v.2.docx	
	PL X	S-LOVEWELL PROVISIONS-MRN283413-v.2.docx	
	PL X	S-NOBLE MANNA-MRN282984-v.2.docx	
	PL X	S-NUESTRA-MRN281469-v.2.docx	
	PL X v.2.d	S-PAPER CRANE PROVISIONS-MCN282687-MPN281904- ocx	
	PL X	S-PHARMACANNIS MASSACHUSETTS-MRN283436-v.2.docx	
	PL X	S-RC RETAIL WESTFIELD-MRN283816-v.2.docx	
	PL X	S-REVOLUTIONARY CLINICS II-MRN282412-v.2.docx	
	PL X	S-ROYAL SUN FARMS-MCN282001-v.2.docx	
	PL X	S-SOLAR RETAIL NORTON-MRN283896-v.2.docx	
	PL X	S-SUNHOUSE MASS-MCN283027-v.2.docx	
		S-THRIVE CULTIVATION & DISPENSARY-MCN282968- 281928-MRN283714-v.2.docx	
	PL X	S-ZGC-MCN283045-v.2.docx	
	MPL	XS-PHARMACANNIS-RMDA3045-v.2.docx	
Commission Discussion & Votes			
	Test	ing Protocols	Geneive Hall- Frison, Armond Enos
		Testing Protocol Cover Memo.docx	7 tilliona Ellos
		TAB A - Protocol for Sampling Analysis 2.26.21.Final.docx	
		TAB B - Environmental Media Protocol - 2.26.21.Final.docx	
		Exhibit 1 - Sampling and Analysis Requirement Flow Chart.docx	
		Exhibit 2 - Soils_Solids Sampling Frequency and Analyses.docx	
		Exhibit 3 - Water Sampling Frequency and Analyses.docx	

Exhibit 4 - Analysis Details - Soil and Solid Growing Media.docx

Exhibit 5 - Analysis Details - Water.docx

Exhibit 6 - Actions for Environmental Media Analysis Prior to Cultivation.docx

Exhibit 7 - Action for Ongoing Monitoring of Environmental Media.docx

Research Report: Disproportionate Impact Study

Dr. Julie Johnson, et. al.

1. 20210218_DI Study Report_FINAL.pdf

Next Meeting Date & Adjournment

20210216_PPT_Public Meeting v3.pptx



He March 9, 2021

In accordance with Sections 18-25 of Chapter 30A of the Massachusetts General Laws and the <u>Governor's Order suspending certain provisions of the Open Meeting Law</u>, M.G.L Ch. 30A §20, notice is hereby given of a meeting of the Cannabis Control Commission. The meeting will take place as noted below.

CANNABIS CONTROL COMMISSION

March 11, 2021 10:00AM

Remote Participation via Microsoft Teams Live*

PUBLIC MEETING AGENDA

- 1) Call to Order
- 2) Chairman's Comments and Updates
- 3) Minutes for Approval
- 4) Executive Director's Report
 - a. Updated Commission Website
 - b. Cannabis Advisory Board Update
- 5) Staff Recommendations on Changes of Ownership
 - a. Apical, Inc.
 - b. Community Growth Partners Great Barrington Operations, LLC
 - c. Community Growth Partners Northampton Operations, LLC
 - d. Curaleaf Massachusetts, Inc.
 - e. Curaleaf North Shore, Inc.
 - f. I.N.S.A., Inc.
 - g. Lynn Organics, LLC
 - h. NS AJO Holdings, Inc.
 - i. TDMA Orange, LLC
 - j. The Heirloom Collective, Inc.
- 6) Staff Recommendations on Renewals
 - a. 1620 Labs, LLC (#MCR139966)
 - b. 27 Broom Street, LLC (#MCR139964)



- c. 27 Broom Street, LLC (#MCR139973)
- d. 27 Broom Street, LLC (#MPR243589)
- e. Bask, Inc. (#MCR139958)
- f. Bask, Inc. (#MPR243579)
- g. BWell Holdings, Inc. (#MRR205689)
- h. Canna Provisions Inc (#MRR205685)
- i. Canna Provisions Inc (#MRR205686)
- j. Cannavanna, Inc. (#MRR205693)
- k. CNA Stores, Inc. (#MRR205691)
- 1. CNA Stores, Inc. (#MRR205692)
- m. Commcan, Inc. (#MCR139957)
- n. Commcan, Inc. (#MPR243581)
- o. Cultivate Holdings LLC (#MCR139953)
- p. Cultivate Holdings LLC (#MPR243575)
- q. Elev8 Cannabis Inc (#MRR205677)
- r. Evergreen Strategies, LLC (#MRR205688)
- s. Evergreen Strategies, LLC (#MRR205697)
- t. Frozen 4 Corporation (#MPR243580)
- u. Green Biz LLC (#MRR205687)
- v. Green Line Boston, Inc. (#MCR139955)
- w. Green Line Boston, Inc. (#MPR243578)
- x. Green Railroad Group, Inc. (#MRR205679)
- y. Greener Leaf, Inc. (#MRR205700)
- z. Healthy Pharms, Inc. (#MCR139962)
- aa. Healthy Pharms, Inc. (#MPR243582)
- bb. Healthy Pharms, Inc. (#MRR205690)
- cc. Holistic Industries, Inc. (#MCR139968)
- dd. Holistic Industries, Inc. (#MPR243583)
- ee. Jolly Green Inc (#MCR139967)
- ff. Lazy River Products, LLC (#MCR139976)
- gg. Lazy River Products, LLC (#MPR243591)
- hh. Lazy River Products, LLC (#MRR205704)
- ii. Nature's Remedy of Massachusetts, Inc. (#MPR139963)
- jj. Nature's Remedy of Massachusetts, Inc. (#MPR243590)
- kk. Nature's Remedy of Massachusetts, Inc. (#MRR205698)
- II. Nature's Remedy of Massachusetts, Inc. (#MRR205701)



- mm. Nova Farms, LLC (#MCR139969)
- nn. Platinum Hydrolab, Inc. (#MCR139942)
- oo. Platinum Hydrolab, Inc. (#MPR243568)
- pp. Resinate, Inc. (#MCR139971)
- qq. Resinate, Inc. (#MPR243586)
- rr. Resinate, Inc. (#MRR205694)
- ss. Resinate, Inc. (#MRR205696)
- tt. Theory Wellness Inc (#MCR139972)
- uu. Tower Three, LLC (#MCR139961
- vv. TYCA Green (#MCR139970)
- ww. TYCA Green (#MPR243585)
- xx. TYCA Green (#MRR205695)
- yy. Greencare Therapeutics Inc., Medical Marijuana Treatment Center
- zz. Green Meadows Farm, LLC, Medical Marijuana Treatment Center
- aaa. Heal, Inc., Medical Marijuana Treatment Center
- bbb. Just Healthy, LLC, Medical Marijuana Treatment Center
- ccc. Liberty Compassion, Inc. (#RMD1465), Medical Marijuana Treatment Center
- ddd. Mass Alternative Care, Inc. (#RMD1527), Medical Marijuana Treatment Center
- 7) Staff Recommendations on Final Licenses
 - a. Ascend Mass, LLC (#MR282077), Retail
 - b. CCC Wellfleet NV, LLC (#MR282685), Retail
 - c. Cloud Creamery, LLC (#MP281412), Product Manufacturer
 - d. Elevated Roots, LLC (#MR283092), Retail
 - e. Emerald Grove, Inc. (#MR282808), Retail
 - f. GreenStar Herbals, Inc. (#MR282207), Retail
 - g. Hennep, Inc. (#MR281450), Retail
 - h. HyeCorp, LLC (#MR282460), Retail
 - i. Legal Greens, LLC (#MR282937), Retail
 - j. Mass Wellspring (#MR281363), Retail
 - k. Nature's Embrace, Inc. (#MR282669), Retail
 - 1. Supercritical Mass Laboratories, Inc. (#MP281321), Product Manufacturer
 - m. ACK Natural, Inc. (#MTC1627), Medical Marijuana Treatment Center
- 8) Staff Recommendations on Provisional Licenses
 - a. 311 Page Blvd, LLC (#MRN282714), Product Manufacturer
 - b. Charlemont Farmworks, LLC (#MCN283116), Cultivation, Tier 11 / Outdoor



- c. Elevation, Inc. (#MRN281472), Retail
- d. Faded, LLC (#DOA100108), Delivery-Only
- e. GTE Millis, LLC (#MPN281965), Product Manufacturer
- f. Lovewell Provisions, LLC (#MRN283413), Retail
- g. Noble Manna, Inc. (#MRN282984), Retail
- h. Nuestra, LLC (#MRN281469), Retail
- i. Paper Crane Provisions, LLC (#MCN282687), Cultivation, Tier 3 / Indoor
- j. Paper Crane Provisions, LLC (#MPN281904), Product Manufacturer
- k. Pharmacannis Massachusetts, Inc. (#MRN283436), Retail
- 1. RC Retail Westfield, LLC (#MRN283816), Retail
- m. Revolutionary Clinics II, Inc. (#MRN282412), Retail
- n. Royal Sun Farm, LLC (#MCN282001), Cultivation, Tier 6 / Outdoor
- o. Solar Retail Norton, LLC (#MRN283896), Retail
- p. Sunhouse Mass, LLC (#MCN283027), Cultivation, Tier 6 / Indoor
- q. Thrive Cultivation & Dispensary, LLC (#MCN282968), Cultivation, Tier 3 / Indoor
- r. Thrive Cultivation & Dispensary, LLC (#MPN281928), Product Manufacturer
- s. Thrive Cultivation & Dispensary, LLC (#MRN283714), Retail
- t. ZGC, LLC (#MCN283045), Cultivation, Tier 11 / Outdoor
- u. Pharmacannis MA, Inc. (#RMDA3045), Medical Marijuana Treatment Center
- 9) Commission Discussion and Votes
 - a. Testing Protocols
 - b. Commissioner Liaison to CAB Subcommittees
 - c. Disproportionate Impact Study
- 10) New Business the Chair Did Not Anticipate at the Time of Posting
- 11) Next Meeting Date
- 12) Adjournment

Notice of Executive Session

Under the Open Meeting Law, G.L. c. 30A, § 21(a)(3) and (7) and the Public Records Law, G.L. c. 66, specifically the exemptions set forth in G.L. c. 4, § 7(26)(a), (d), (f), (g), and (n) the Commission may enter into executive session to discuss the following items if the relevant topic arises during the course of deliberations:



^{*}Closed captions available

- 1) Applicants' or licensees' plans or other application information if, in the opinion of the Chair, discussion of such information in an open meeting may pose a risk to the public health, safety, welfare or security.
- 2) Records if in the opinion of the Chair, discussion of such records in an open meeting may disclose confidential information under G. L. c. 94I, §§ 2 (e) and 3 and the regulations, 935 CMR 500.002, 500.820, 501.002 and 501.820.



CANNABIS CONTROL COMMISSION

October 8, 2020 10:00AM

Remote Participation via Microsoft Teams Live*

PUBLIC MEETING MINUTES

Documents:

- Licensing materials related to:
 - ATG/Curaleaf
 - Buds Goods and Provisions
 - Cannatech Medicinals
 - Compassionate Organics
 - Viridis Analytics
 - o Apical, Inc.
 - PHA Industries
 - o Curaleaf Massachusetts, Inc. (#MCR139905)
 - o Curaleaf Massachusetts, Inc. (#MRR205627)
 - o Curaleaf Massachusetts, Inc. (#MPR243542)
 - o Good Chemistry of Massachusetts, Inc. (#MRR205618)
 - o Pharmacannis Massachusetts Inc. (#MRR205606)
 - o Blackstone Valley Naturals, LLC (#MBR169265)
 - o New England Treatment Access, LLC. (#MRR205621)
 - New England Treatment Access, LLC. (#MRR205622)
 - New England Treatment Access, LLC. (#MPR243540)
 - New England Treatment Access, LLC. (#MCR139902)
 - o Nova Farms, LLC (#MCR139902)
 - o Nova Farms, LLC (#MPR243544)
 - o Sanctuary Medicinals, Inc. (#MPR243543)
 - o Sanctuary Medicinals, Inc. (#MCR139900)
 - o Sanctuary Medicinals, Inc. (#MRR205632)
 - o Ashli's Inc. (#MRR205628)
 - o Ashli's Farm, Inc. (#MCR139909)



- o Ashli's Extracts, Inc. (#MPR243547)
- o Berkshire Roots Inc. (#MRR205624)
- o TDMA LLC (#MRR205625)
- o Liberty Market (#MRR205613)
- o CDX Analytics, LLC (#ILR267890)
- o Evio Labs MA (#ILR267891)
- o Alternative Therapies Group, Inc. (#RMD1530)
- o Bask, Inc. (#RMD445)
- o Holistic Health Group, Inc. (#RMD1566)
- o Cresco HHH, Inc. (#RMD686)
- o HVV Massachusetts, Inc. (#RMD1185)
- Mass Wellspring, LLC (#RMD665)
- o Nature's Medicines, Inc. (#RMD1045)
- Seven Point of Massachusetts, Inc., Vertically Integrated Medical Marijuana Treatment Center (Ayer-Middleborough)
- Seven Point of Massachusetts, Inc., Vertically Integrated Medical Marijuana Treatment Center (Ayer-Gardner)
- o The Heirloom Collective, Inc. (#RMD825)
- o Theory Wellness, Inc. (#RMD525)
- o Buds Goods and Provisions Corp. (#MR282319), Retail
- o CNA Stores, Inc. (#MR281744), Retail
- o Green Gold Group, Inc. (#MR281791), Retail
- o Holistic Industries, Inc. (#MR282667), Retail
- o Mayflower Medicinals, Inc. (#MR281256), Retail
- o Nova Farms, LLC (#MPN281325), Product Manufacturing
- o Resinate, Inc. (#MCN281259), Cultivation, Tier 3/Indoor
- o Resinate, Inc. (#MRN282398), Retail
- o The Botanist, Inc. (#MR282186), Retail
- o The Botanist, Inc. (#MR282160), Retail
- o The Botanist, Inc. (#RMD-1225), Medical Marijuana Treatment Center
- o NS AJO Holdings, LLC. d/b/a Ethos Cannabis (#RMD-1546), Medical Marijuana Treatment Center
- Alternative Compassion Services (#RMDA3320), Medical Marijuana Treatment Center
- o Good Chemistry of Massachusetts, Inc. (#RMDA3061), Medical Marijuana Treatment Center
- o KRD Growers, LLC (#RMDA3322), Medical Marijuana Treatment Center
- o 208 Worcester Street, LLC. (#MRN283652), Retail



- o Alfred's Finest, Inc. (#MCN282494), Cultivation, Tier 1/Indoor
- o Alfred's Finest, Inc. (#MPN281807), Product Manufacturing
- o Alfred's Finest, Inc. (#MRN281616), Retail
- o Aspen Blue Cultures, Inc. (#MCN282515), Cultivation, Tier 5/Indoor
- o Aspen Blue Cultures, Inc. (#MPN281802), Product Manufacturing
- o Aspen Blue Cultures, Inc. (#MRN283141), Retail
- o Bold Coast Solutions, LLC. (#MPN281803)
- o Cannatech Medicinals, Inc. (#MCN282690), Cultivation, Tier 2/Indoor
- o Cannatech Medicinals, Inc. (#MPN281858), Product Manufacturing
- o Castlerock Agricultural Enterprises, Inc. (#MCN282454), Cultivation, Tier 11/Outdoor
- o Cedar Roots, LLC. (#MCN282746), Cultivation, Tier 1/Indoor
- o Cedar Roots, LLC. (#MPN281872), Product Manufacturing
- o Columbia Growth, Inc. (#MCN282622), Cultivation, Tier 11/Indoor
- o Columbia Growth, Inc. (#MPN281838), Product Manufacturing
- o Cultivation Experts, LLC. (#MCN281357), Cultivation, Tier 1/Indoor
- o DMA Holdings MA, LLC. (#MCN282703), Cultivation, Tier 8/Indoor
- o DMA Holdings MA, LLC. (#MPN281861), Product Manufacturing
- o DMA Holdings MA, LLC. (#MRN283264), Retail
- o Elevated Cultivation Co., LLC. (#MPN281907), Product Manufacturing
- o Essex Apothecary, LLC. (#MRN283192), Retail
- o Fresh Fields, LLC. (#MRN282952), Retail
- o Frozen Four Corporation (#DOA100106), Delivery-Only
- o Green Biz, LLC. (#MRN281989), Retail
- o Green Era, LLC. (#MRN282001), Retail
- o Green Era, LLC. (#MRN282211), Retail
- o Green Era, LLC. (#MRN282902), Retail
- o Grow One, Inc. (#MCN282527), Cultivation, Tier 3/Indoor
- o Grow One, Inc. (#MPN281810), Product Manufacturing
- o Grow Rite, LLC. (#MCN282541), Cultivation, Tier 1 / Indoor
- o High Hopes, LLC. (#MRN282161), Retail
- o Holland Brands NA, LLC (#MRN283288), Retail
- o J&L Enterprises, Inc. (#MCN282778), Cultivation, Tier 3/Outdoor
- o Lifted Genetics, LLC. (#MCN282183), Cultivation, Tier 2/Indoor
- o Littleton Apothecary, LLC. (#MRN283727), Retail
- o MACA Industries, LLC. (#MCN281307), Cultivation, Tier 3/Indoor
- o Major Bloom, LLC. (#MPN281879), Product Manufacturing



- o Mellow Fellows, LLC. (#MRN281811), Retail
- o Mill Town Agriculture, LLC. (#MCN282596), Cultivation, Tier 1/Indoor
- o Mill Town Agriculture, LLC. (#MPN281832), Product Manufacturing
- o Minuteman Farm, LLC. (#MCN282504), Cultivation, Tier 1/Indoor
- o MME Newton Retail, LLC. (#MRN283123), Retail
- o NAP Advisors, LLC. (#MCN282250), Cultivation, Tier 11/Indoor
- Other Side Agronomy, Inc. (#MCN282507), Cultivation, Tier 2/Indoor
- o Other Side Agronomy, Inc. (#MPN281799), Product Manufacturing
- o ProVerde Laboratories, Inc. (#ILN281279), Independent Testing Laboratory
- o Sparkboro Wellness Corp. (#MRN283257), Retail
- o Treevit, LLC. (#DOA100105), Delivery-Only
- o Webber Road Ops, LLC. (#MRN283559), Retail
- Meeting Packet
- Annual Activities Report to the Legislature
- Delivery Endorsements

Minutes:

- 1) Call to Order
 - The Chairman recognized a quorum and called the meeting to order.
 - The Chairman gave notice that the meeting was being recorded.
- 2) Chairman's Comments and Updates 0:00:30
 - The Chairman gave an overview of the agenda.
 - The Chairman gave an overview of the anticipated executive session.
- 3) Minutes for Approval 0:03:19
 - There were two sets of minutes.
 - o July 20, 2020
 - Commissioner Title moved to approve the minutes
 - Commissioner Flanagan seconded the motion.
 - The Commission unanimously approved the minutes.
 - o July 9, 2020
 - Commissioner McBride moved to approve the minutes.
 - Commissioner Title seconded the motion.
 - The Commission unanimously approved the minutes.
- 4) Executive Director's Report 0:05:10



- The Executive Director gave an overview of Licensing Data. (See meeting packet for data slides starting on page 281.)
- The Chairman asked the Executive Director for additional information about the fact that no Marijuana Research Facilities licenses the have been approved.
 - The Executive Director confirmed that there are currently several applications in the queue for such license type.
- The Chairman asked whether the growth rate of the Certified Active Patients in the Medical-Use Program has continued.
 - o The Executive Director confirmed that the number of Certified Active Patients has leveled off in recent months compared with the growth seen early in the pandemic.
- Commissioner Title asked a question in regard to status of demographic data of owners and employees of medical establishments.
 - The Executive Director confirmed that this information is currently being collected as part
 of initial application and staff will work to get a snapshot of the data and begin reporting
 on it once a sufficient data is available.
- Commissioner Title asked a question about license limits with respect to delivery and, noting that until new amendments are adopted, asked whether the current FAQ on the website is accurate.
 - o The Executive Director confirmed this.
- 5) Staff Recommendations on Changes of Ownership 0:17:10
 - a. ATG/Curaleaf 0:17:42
 - Director Potvin presented the staff recommendation on the Change of Ownership.
 - Commissioner McBride asked questions with respect to the consulting agreements between the entities.
 - o Investigation Manager Eduardo Guardiola gave an overview of the nature of those relationships.
 - o Commissioner McBride asked whether this agreement was negotiated at arm's length.
 - o Investigation Manager Guardiola said there were no concerns that these agreements implicate ownership or control.
 - Commissioner Title said that she thinks the transaction violates the regulations, because of the way the transaction is structured, Curaleaf is technically over the licensing cap during the transition between the sale from ATG to Curaleaf to ATG II.
 - O Director Potvin said that there may be a moment in time that a cap could be construed as being violated, but due to the simultaneous nature of contract execution, and the addition of a specific condition, staff believes that the integrity of the license cap is maintained. Director Potvin read the condition.
 - o Commissioner Title said the condition helps a lot, but she still has concerns about the moment-in-time violation of the license cap.



- Commissioner Title also asked a question with respect to whether Curaleaf will be making a capital investment in ATG II.
 - o Investigation Manager Guardiola said that Curaleaf would not be investing in ATGII, and there would be outside financing to move forward with the transaction.
- Commissioner Title wanted to ensure that there will be no more than 3 retail stores using the name ATG, or ATG II, if the name change is approved.
 - o Director Potvin confirms that once the name change is approved, none of the stores will be named ATG, and instead will be named ATG II, Alternatives Therapy Group II.
- Commissioner Title wanted to propose a condition that the licensee go through an audit in a certain amount of time, not due to any wrong doing or concerns about the agreement, but rather due to the nature of the transaction, Curaleaf's history, the Consulting Agreements, Prepayments, and the very clear work around nature of the transaction collectively warrant additional scrutiny.
 - Commissioner Title proposed that within 12 months that the company should hire an independent auditor to review ownership control and sales and submit information from the audit report to the Commission.
 - o Commissioner Flanagan asked what would happen with the results on that report.
 - Commissioner Title said that she envisioned that the audit report would be submitted to the Commission, for staff to review and take any additional steps as necessary.
 - Commissioner McBride said that she imagined that the Commission's vendor
 Citrin Cooperman could help staff review the audit report. Commissioner McBride
 said she does not have an issue with the condition and sees the utility.
 - The Chairman also supported the condition.
- The Chairman asked for questions or comments.
- Commissioner McBride moved to approve the Change of Ownership, subject to the condition proposed by Commissioner Title and the condition recommended by staff.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve the Change of Ownership, subject to the conditions requested by Commissioner Title and recommended by staff.

b. Buds Goods and Provisions - 0:47:38

- Director Potvin presented the staff recommendation on the Change of Ownership.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve the Change of Ownership.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve the Change of Ownership.

c. Cannatech Medicinals – 0:49:19



- The Chairman moved that the Commission to enter into Executive Session to discuss Cannatech Medicinals Under Purpose (7), of the Open Meeting Law, G.L. c. 30A, § 21(a), to protect information subject to the Second Amended Protective Order entered in the matter of <u>United States v. Correia & another</u>, issued under Federal Rule of Civil Procedure 26(c), and promulgated under 28 U.S.C. § 2072. And under the Public Records Law, G.L. c. 66, and the exemptions set forth in G.L. c. 4, § 7(26)(a), (d) and (f).
- The Chairman gave an overview of the Commission's intent to enter executive session. The Chairman noted that the Commission will return into open session to complete its deliberations and vote on staff's recommendation for licensure. The Chairman also asked that in voting to enter executive session, due to the remote nature, each Commissioner affirm that no one will be able to hear the deliberations and discussions undertaken in executive session. The Chairman also listed the staff members who would be joining the executive session.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to enter executive session.
- The Commission returned to open session 1:31:45
- Director Potvin presented the staff recommendation on the Change of Ownership.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve the Change of Ownership.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Change of Ownership.

d. Compassionate Organics – 1:33:51

- Director Potvin presented the staff recommendation on the Change of Ownership.
- The Chairman asked for questions or comments.
- Commissioner Title moved to approve the Change of Ownership.
- Commissioner Flanagan seconded the motion.
- The Commission unanimously voted to approve the Change of Ownership.

e. Viridis Analytics - 1:35:03

- Director Potvin presented the staff recommendation on the Change of Ownership.
- Commissioner McBride asked for additional detail about suitability.
 - Director Potvin said that there was a concern raised, but ultimately if this change of ownership is approved, the company in question would be entirely removed with no remaining affiliation with the Licensee and therefore the suitability issue would be cured.
- Commissioner Title asked questions about the licensing actions taken against a particular owner in Oregon.
 - o Director Potvin confirmed.



- o Commissioner Title raised concerns about allowing this change when there are outstanding revocation procedures with respect to the Licensee.
- O Commissioner McBride said she agreed with the seriousness of the allegations and the concerns raised by Commissioner Title, but expressed her understanding that those allegations were some time ago and that this licensee was an Independent Testing Laboratory, which is an under represented license type, so wanted to know what would the Commission's options have been outside the Change of Ownership context and what the options are to cure with respect to the Change of Ownership.
- The Executive Director gave an overview of the options at the Commission's disposal, including the proposed change of ownership. Suitability matters come up over time and when matters in other jurisdictions implicate suitability and Commission staff conducts its own investigation. Options include confronting the licensee or entering dispute settlement resulting from violation of the Commission's regulations. Another option is to bring an Order to Show cause before the Commission. In this instance, the troublesome entity and individuals associated with the entity are now removed from the license to hopefully cure.
- Director Potvin noted that, while there is a dearth of Independent Testing Laboratories, the process and cure in this case followed the ordinary process that would be followed for any license type.
- The Chairman confirmed that if this change of ownership is approved, it would cure the suitability question.
- Commissioner Title echoed Mr. Potvin's point, that this should be treated like any other license type, and either priority or expedited review is available for Independent Testing Lab already to address the lack of testing labs in the state, so if the proposed new owner applied, it would receive that process. The dispute settlement process has gone well in the past, and therefore, Commissioner Title recommended that when a suitability review is initiated, that it be completed before the Commission allow the change of ownership and control to take place.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve the Change of Ownership.
- Commissioner McBride seconded the motion.
- The Commission voted to approve the Change of Ownership. By a vote of three in favor (Flanagan, Hoffman, McBride) and one against (Title).
- 6) Staff Recommendations on Changes of Location 1:49:00
 - a. Apical, Inc. -1:49:10
 - Director Potvin presented the staff recommendation on the Change of Location.
 - The Chairman asked for questions or comments.
 - Commissioner McBride moved to approve the Change of Location.
 - Commissioner Title seconded the motion.
 - The Commission unanimously voted to approve the Change of Location.



b. PHA Industries - 1:50:21

- Director Potvin presented the staff recommendation on the Change of Location.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve the Change of Location.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Change of Location.

7) Staff Recommendations on Renewals -1:51:44

- The Chairman noted that it is the Commission's practice to consider renewals as a roster. There has been no request for a specific consideration.
- Adult Use Renewals
 - The Chairman asked for questions or comments.
 - o Commissioner McBride moved to approve the adult-use renewals.
 - o Commissioner Title seconded the motion.
 - o The Commission unanimously voted to approve the Adult-Use Renewals.
- Medical use Renewals
 - o The Chairman asked for questions or comments.
 - o Commissioner Title moved to approve the adult-use renewals.
 - o Commissioner Flanagan seconded the motion.
 - o The Commission unanimously voted to approve the Adult-Use Renewals
- a. Curaleaf Massachusetts, Inc. (#MCR139905)
- b. Curaleaf Massachusetts, Inc. (#MRR205627)
- c. Curaleaf Massachusetts, Inc. (#MPR243542)
- d. Good Chemistry of Massachusetts, Inc. (#MRR205618)
- e. Pharmacannis Massachusetts Inc. (#MRR205606)
- f. Blackstone Valley Naturals, LLC (#MBR169265)
- g. New England Treatment Access, LLC. (#MRR205621)
- h. New England Treatment Access, LLC. (#MRR205622)
- i. New England Treatment Access, LLC. (#MPR243540)
- j. New England Treatment Access, LLC. (#MCR139902)
- k. Nova Farms, LLC (#MCR139902)
- 1. Nova Farms, LLC (#MPR243544)
- m. Sanctuary Medicinals, Inc. (#MPR243543)



- n. Sanctuary Medicinals, Inc. (#MCR139900)
- o. Sanctuary Medicinals, Inc. (#MRR205632)
- p. Ashli's Inc. (#MRR205628)
- q. Ashli's Farm, Inc. (#MCR139909)
- r. Ashli's Extracts, Inc. (#MPR243547)
- s. Berkshire Roots Inc. (#MRR205624)
- t. TDMA LLC (#MRR205625)
- u. Liberty Market (#MRR205613)
- v. CDX Analytics, LLC (#ILR267890)
- w. Evio Labs MA (#ILR267891) (End of Adult Use Renewals)
- x. Alternative Therapies Group, Inc. (#RMD1530)
- y. Bask, Inc. (#RMD445)
- z. Holistic Health Group, Inc. (#RMD1566)
- aa. Cresco HHH, Inc. (#RMD686)
- bb. HVV Massachusetts, Inc. (#RMD1185)
- cc. Mass Wellspring, LLC (#RMD665)
- dd. Nature's Medicines, Inc. (#RMD1045)
- ee. Seven Point of Massachusetts, Inc., Vertically Integrated Medical Marijuana Treatment Center (Ayer-Middleborough)
- ff. Seven Point of Massachusetts, Inc., Vertically Integrated Medical Marijuana Treatment Center (Ayer-Gardner)
- gg. The Heirloom Collective, Inc. (#RMD825)
- hh. Theory Wellness, Inc. (#RMD525)
- 8) Staff Recommendations on Final Licenses 1:54:36
 - The Chairman noted that these would be considered as a roster.
 - The Chairman asked for questions or comments.
 - Commissioner McBride moved to approve all the Final Licenses.
 - Commissioner Title seconded the motion.
 - The Commission unanimously voted to approve all the Final Licenses.
 - a. Buds Goods and Provisions Corp. (#MR282319), Retail
 - b. CNA Stores, Inc. (#MR281744), Retail
 - c. Green Gold Group, Inc. (#MR281791), Retail
 - d. Holistic Industries, Inc. (#MR282667), Retail



- e. Mayflower Medicinals, Inc. (#MR281256), Retail
- f. Nova Farms, LLC (#MPN281325), Product Manufacturing
- g. Resinate, Inc. (#MCN281259), Cultivation, Tier 3/Indoor
- h. Resinate, Inc. (#MRN282398), Retail
- i. The Botanist, Inc. (#MR282186), Retail
- j. The Botanist, Inc. (#MR282160), Retail
- k. The Botanist, Inc. (#RMD-1225), Medical Marijuana Treatment Center
- 1. NS AJO Holdings, LLC. d/b/a Ethos Cannabis (#RMD-1546), Medical Marijuana Treatment Center
- 9) Staff Recommendations on Provisional Licenses 1:56:52
 - The Chairman noted that the Commission considers provisional licenses separately but will group together applications from the same entity for the sake of the remote meeting.
 - a. Alternative Compassion Services (#RMDA3320), Medical Marijuana Treatment Center
 - Director Potvin presented the staff recommendation on the Provisional License.
 - The Chairman asked for questions or comments.
 - Commissioner Flanagan moved to approve the Provisional License.
 - Commissioner Title seconded the motion.
 - The Commission unanimously voted to approve the Provisional License.
 - b. Good Chemistry of Massachusetts, Inc. (#RMDA3061), Medical Marijuana Treatment Center
 - Director Potvin presented the staff recommendation on the Provisional Licenses
 - The Chairman asked for questions or comments.
 - Commissioner McBride moved to approve the Provisional License.
 - Commissioner Flanagan seconded the motion.
 - The Commission unanimously voted to approve the Provisional License.
 - c. KRD Growers, LLC (#RMDA3322), Medical Marijuana Treatment Center
 - Director Potvin presented the staff recommendation on the Provisional Licenses.
 - Commissioner Flanagan requested two conditions.
 - o Proposed Conditions:
 - Resubmit plan to include more than a donation
 - Clarification on how a donation to CultivatEd will directly benefit residents of Worcester
 - The Chairman asked for questions or comments.
 - Commissioner Title moved to approve the Provisional Licenses, subject to the conditions requested by Commissioner Flanagan.
 - Commissioner Flanagan seconded the motion.



- The Commission unanimously voted to approve the Provisional Licenses, subject to the conditions requested by Commissioner Flanagan.
- d. 208 Worcester Street, LLC. (#MRN283652), Retail
 - Director Potvin presented the staff recommendation on the Provisional License.
 - Commissioner Title requested a condition.
 - Proposed conditions
 - Revise diversity goal to "recruit 20% or more women and/or veterans in retail and management positions for its hiring initiatives."
 - Clarify what is meant by "retail and management positions" for cultivation and manufacturing applications.
 - The Chairman asked for questions or comments.
 - Commissioner Flanagan moved to approve the Provisional License, subject to the condition requested by Commissioner Title.
 - Commissioner McBride seconded the motion.
 - The Commission unanimously voted to approve the Provisional License, subject to the condition requested by Commissioner Title.
- e. Alfred's Finest, Inc. (#MCN282494), Cultivation, Tier 1/Indoor
- f. Alfred's Finest, Inc. (#MPN281807), Product Manufacturing
- g. Alfred's Finest, Inc. (#MRN281616), Retail
 - Director Potvin presented the staff recommendation on the Provisional Licenses.
 - Commissioner Title requested two conditions.
 - o Proposed conditions:
 - Revise diversity goal to "recruit 20% or more women and/or veterans in retail and management positions for its hiring initiatives."
 - Clarify what is meant by "retail and management positions" for cultivation and manufacturing applications.
 - The Chairman asked for questions or comments.
 - Commissioner Titled moved to approve all three Provisional Licenses, subject to the conditions requested by Commissioner Title.
 - Commissioner McBride seconded the motion.
 - The Commission unanimously voted to approve all three Provisional Licenses, subject to the conditions by Commissioner Title.
- h. Aspen Blue Cultures, Inc. (#MCN282515), Cultivation, Tier 5/Indoor
- i. Aspen Blue Cultures, Inc. (#MPN281802), Product Manufacturing
- j. Aspen Blue Cultures, Inc. (#MRN283141), Retail



- Director Potvin presented the staff recommendation on all three the Provisional License applications for Aspen Blue Cultures, Inc.
- Commissioner Title requested a condition.
 - o Proposed condition: Revise diversity plan goal to "recruit 15% women and 15% veterans for its hiring initiatives" to be objectively reasonable.
- The Chairman asked for questions or comments.
- Commissioner McBride moved to approve all three Provisional Licenses, subject to the condition requested by Commissioner Title.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve all three Provisional Licenses, subject to the condition by Commissioner Title.

k. Bold Coast Solutions, LLC. (#MPN281803)

- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve the Provisional License.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve the Provisional License.

1. Cannatech Medicinals, Inc. (#MCN282690), Cultivation, Tier 2/Indoor

- m. Cannatech Medicinals, Inc. (#MPN281858), Product Manufacturing
 - Director Potvin presented the staff recommendation on the Provisional License applications for Cannatech Medicinals, Inc.
 - The Chairman asked for questions or comments.
 - Commissioner Title moved to approve both Provisional Licenses.
 - Commissioner Flanagan seconded the motion.
 - The Commission unanimously voted to approve both Provisional Licenses.

n. Castlerock Agricultural Enterprises, Inc. (#MCN282454), Cultivation, Tier 11/Outdoor

- Director Potvin presented the staff recommendation on the Provisional License.
- Commissioner Flanagan requested a condition.
 - o Proposed Condition: Clarification on who the scholarship would apply to in a K-12 school district. The plan specifically mentions Worcester and Quabbin Regional School Districts.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve the Provisional License, subject to the condition requested by Commissioner Flanagan.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Provisional License, subject to the condition requested by Commissioner Flanagan.



- o. Cedar Roots, LLC. (#MCN282746), Cultivation, Tier 1/Indoor
- p. Cedar Roots, LLC. (#MPN281872), Product Manufacturing
 - Director Potvin presented the staff recommendation on both Provisional License applications for Cedar Roots, LLC.
 - Commissioner McBride requested a condition
 - Proposed condition: Within 60 days applicant shall update its security plan to indicate how
 they will limit access to individuals age 21 years of age or older, loitering prevention,
 securing entrances and creation of limited access areas.
 - Commissioner Title requested a condition.
 - Proposed Condition: Revise diversity plan goal to "give hiring preference to women (15%)" to be objectively reasonable.
 - The Chairman asked for questions or comments.
 - Commissioner Title moved to approve the Provisional Licenses, subject to the conditions requested by McBride and Title.
 - Commissioner Flanagan seconded the motion.
 - The Commission unanimously voted to approve the Provisional Licenses, subject to the conditions requested by Commissioners McBride and Title.
- q. Columbia Growth, Inc. (#MCN282622), Cultivation, Tier 11/Indoor
- r. Columbia Growth, Inc. (#MPN281838), Product Manufacturing
 - Director Potvin presented the staff recommendation on both of the Provisional License applications for Columbia Growth, Inc.
 - Commissioner Flanagan requested a condition.
 - o Proposed condition. Clarify how recruiting possible interns from trade schools will ensure the student is over 21.
 - Commissioner Title requested a condition.
 - o Proposed Condition: Revise diversity plan goal to "hire five women and other diverse candidates to be objectively reasonable relative to the expected size of the business.
 - Commissioner McBride requested a condition.
 - Proposed condition: Within 60 days applicant shall update its security plan to indicate how
 they will limit access to individuals age 21 years of age or older, loitering prevention,
 securing entrances and creation of limited access areas.
 - The Chairman asked for questions or comments.
 - Commissioner Flanagan moved to approve both Provisional Licenses, subject to the conditions requested by Commissioners Flanagan, McBride, and Title.
 - Commissioner Title seconded the motion.
 - The Commission unanimously voted to approve both Provisional Licenses, subject to the conditions requested by Commissioners Flanagan, Title and McBride.



- s. Cultivation Experts, LLC. (#MCN281357), Cultivation, Tier 1/Indoor
 - Director Potvin presented the staff recommendation on the Provisional License.
 - The Chairman asked for questions or comments.
 - Commissioner Title moved to approve the Provisional License.
 - Commissioner Flanagan seconded the motion.
 - The Commission unanimously voted to approve the Provisional License.
- t. DMA Holdings MA, LLC. (#MCN282703), Cultivation, Tier 8/Indoor
- u. DMA Holdings MA, LLC. (#MPN281861), Product Manufacturing
- v. DMA Holdings MA, LLC. (#MRN283264), Retail
 - Director Potvin presented the staff recommendation on the Provisional License applications for all three DMA Holdings MA, LLC.
 - The Chairman asked for questions or comments.
 - Commissioner McBride moved to approve all three Provisional Licenses.
 - Commissioner Title seconded the motion.
 - The Commission unanimously voted to approve all three Provisional Licenses.

w. Elevated Cultivation Co., LLC. (#MPN281907), Product Manufacturing

- Director Potvin presented the staff recommendation on the Provisional License.
- Commissioner Flanagan requested a condition.
 - Proposed condition: Clarify how a donation to the Crohn's and Colitis Foundation will directly impact the specified cohort.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve the Provisional License, subject to the condition requested by Commissioner Flanagan.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Provisional License, subject to the condition requested by Commissioner Flanagan.

x. Essex Apothecary, LLC. (#MRN283192), Retail

- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner Title moved to approve the Provisional License.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Provisional License.

y. Fresh Fields, LLC. (#MRN282952), Retail



- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner Title moved to approve the Provisional License.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Provisional License.

z. Frozen Four Corporation (#DOA100106), Delivery-Only

- The Chairman noted that this would be the first Delivery-Only license considered by the Commission.
- Director Potvin presented the staff recommendation on the Provisional License.
- Commissioner Flanagan requested two conditions.
 - o Proposed conditions:
 - Clarify how a donation to the Cannabis Center of Excellence will directly benefit the residents of Taunton, Walpole, Mansfield, and Brockton.
 - Submit letters from all organizations named in "Hiring Past Offenders" section of the plan stating they will accept donations.
- Commissioner McBride requested a condition.
 - o Proposed conditions:
 - Final license subject to Commission approval of any third-party platform to ensure compliance with 935 CMR 500.000, as applicable.
 - Amend delivery procedures MOP page 2, paragraph 1 to reflect that orders shall be placed through a Commission approved third-party technology platform.
- The Chairman asked for questions or comments.
- Commissioner Title moved to approve the Provisional License, subject to the conditions requested by Commissioners Flanagan and McBride.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Provisional License, subject to the conditions requested by Commissioners Flanagan and McBride.

The Commission took a 45-minute recess at 2:30:45

The Commission reconvened at 3:15:00

- The Chairman moved to reopen the consideration of 208 Worcester Street LLC.
- Commission McBride seconded the motion.
- The Commission unanimously approved reopening the license application.



- Commissioner Title moved to approve the Provisional License of 208 Worcester Street LLC replacing the misread condition with the following: "revise diversity goal to "recruit 10% minorities 10% women and 10% veterans for its hiring initiatives to be objectionably reasonable."
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Provisional License, subject to the conditions requested by Commissioners Title.

aa. Green Biz, LLC. (#MRN281989), Retail

- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner McBride moved to approve the Provisional License.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve the Provisional License.

bb. Green Era, LLC. (#MRN282001), Retail

- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner McBride moved to approve the Provisional License.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve the Provisional License.

cc. Green Era, LLC. (#MRN282211), Retail

- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner Title moved to approve the Provisional License.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Provisional License.

dd. Green Era, LLC. (#MRN282902), Retail

- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner McBride moved to approve the Provisional License.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve the Provisional License.

ee. Grow One, Inc. (#MCN282527), Cultivation, Tier 3/Indoor

ff. Grow One, Inc. (#MPN281810), Product Manufacturing



- Director Potvin presented the staff recommendation on both Provisional License applications for Grow One, Inc.
- Commissioner Flanagan requested three conditions.
 - o Proposed conditions:
 - Resubmit plan to include more than a donation.
 - Specify which cohort you are seeking to impact.
 - Clarification on how a donation to New England's Veterans Alliance will directly impact the specified cohort.
- Commissioner Title requested a condition.
 - o Proposed condition: Revise diversity plan goal to "achieve 20% of staffing needs from women (10%) and minorities (10%)" to be objectively reasonable.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve the Provisional Licenses, subject to the conditions requested by Commissioners Flanagan and Title.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve the Provisional Licenses, subject to the conditions requested by Commissioners Flanagan and Title.

gg. Grow Rite, LLC. (#MCN282541), Cultivation, Tier 1 / Indoor

- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve the Provisional License.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Provisional License.

hh. High Hopes, LLC. (#MRN282161), Retail

- Director Potvin presented the staff recommendation on the Provisional License.
- Commissioner Flanagan requested a condition.
 - o Proposed conditions:
 - Clarify which specific cohort you are seeking to impact.
 - Clarify how a donation to MRCC will directly impact the specified cohort,
- The Chairman asked for questions or comments.
- Commissioner Title moved to approve the Provisional License, subject to the conditions requested by Commissioner Flanagan.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Provisional License, subject to the conditions requested by Commissioner Flanagan.

ii. Holland Brands NA, LLC (#MRN283288), Retail



- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner McBride moved to approve the Provisional License.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve the Provisional License.

jj. J&L Enterprises, Inc. (#MCN282778), Cultivation, Tier 3/Outdoor

- Director Potvin presented the staff recommendation on the Provisional License.
- Commissioner Title requested a condition.
 - O Proposed condition: Revise diversity plan goal to "recruit 20% or more women and or veterans" to be objectively reasonable.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve the Provisional License, subject to the condition requested by Commissioner Title.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve the Provisional License, subject to the condition requested by Commissioner Title.

kk. Lifted Genetics, LLC. (#MCN282183), Cultivation, Tier 2/Indoor

- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner Title moved to approve the Provisional License.
- Commissioner Flanagan seconded the motion.
- The Commission unanimously voted to approve the Provisional License.

ll. Littleton Apothecary, LLC. (#MRN283727), Retail

- Director Potvin presented the staff recommendation on the Provisional License.
- Commissioner Flanagan requested three conditions.
 - o Proposed conditions:
 - Resubmit plan to include more than a donation
 - Specify which specific cohort you are seeking to impact
 - Clarification on how a donation to MRCC will directly impact the specified cohort you are seeking it impact.
- The Chairman asked for questions or comments.
- Commissioner McBride moved to approve the Provisional License, subject to the conditions requested by Commissioner Flanagan.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve the Provisional License, subject to the conditions requested by Commissioner Flanagan.



mm. MACA Industries, LLC. (#MCN281307), Cultivation, Tier 3/Indoor

- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve the Provisional License.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Provisional License.

nn. Major Bloom, LLC. (#MPN281879), Product Manufacturing

- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner Title moved to approve the Provisional License.
- Commissioner Flanagan seconded the motion.
- The Commission unanimously voted to approve the Provisional License.

oo. Mellow Fellows, LLC. (#MRN281811), Retail

- Director Potvin presented the staff recommendation on the Provisional License.
- Commissioner Flanagan requested a condition.
 - Proposed condition: Specify how a donation to CultivatEd will directly impact residents of Haverhill.
- The Chairman asked for questions or comments.
- Commissioner Title moved to approve the Provisional License, subject to the condition requested by Commissioner Flanagan.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Provisional License, subject to the condition requested by Commissioner Flanagan.

pp. Mill Town Agriculture, LLC. (#MCN282596), Cultivation, Tier 1/Indoor

qq. Mill Town Agriculture, LLC. (#MPN281832), Product Manufacturing

- Director Potvin presented the staff recommendation on both Provisional License applications for Mill Town Agriculture, LLC.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve both Provisional Licenses.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve both Provisional Licenses.

rr. Minuteman Farm, LLC. (#MCN282504), Cultivation, Tier 1/Indoor

- Director Potvin presented the staff recommendation on the Provisional License.
- Commissioner Flanagan requested a condition:



- o Proposed condition: Clarify with respect to seminars:
 - What will the specific content be?
 - How many seminars will be conducted throughout the year?
- The Chairman asked for questions or comments.
- Commissioner McBride moved to approve the Provisional License, subject to the condition requested by Commissioner Flanagan.
- Commissioner Flanagan seconded the motion.
- The Commission unanimously voted to approve the Provisional License, subject to the condition requested by Commissioner Flanagan.

ss. MME Newton Retail, LLC. (#MRN283123), Retail

- Director Potvin presented the staff recommendation on the Provisional License.
- Commissioner Title proposed a condition:
 - Proposed condition: Require a statement from company leadership responding to a pattern
 of allegations of misconduct and steps the company will take towards preventing that
 pattern from continuing in Massachusetts.
- The Chairman asked for questions or comments.
- Commissioner McBride moved to approve the Provisional License, subject to the condition requested by Commissioner Title.
- The Chairman seconded the motion.
- The Commission voted to approve the Provisional License, subject to the condition requested by Commissioner Title, by a vote of three in favor (Flanagan, Hoffman, McBride) and one against (Title).

tt. NAP Advisors, LLC. (#MCN282250), Cultivation, Tier 11/Indoor

- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve the Provisional License.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve the Provisional License.

uu. Other Side Agronomy, Inc. (#MCN282507), Cultivation, Tier 2/Indoor

vv. Other Side Agronomy, Inc. (#MPN281799), Product Manufacturing

- Director Potvin presented the staff recommendation on both of the Provisional License applications for Other Side Agronomy, Inc.
- The Chairman asked for questions or comments.
- Commissioner Flanagan moved to approve both Provisional Licenses.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve both Provisional Licenses.



ww. ProVerde Laboratories, Inc. (#ILN281279), Independent Testing Laboratory

- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked how quickly this licensee might be operational for adult use.
 - o Director Potvin stated the applicant indicated it could be operational within three months of provisional licensure.
- The Chairman asked for questions or comments.
- Commissioner McBride moved to approve the Provisional License.
- Commissioner Flanagan seconded the motion.
- The Commission unanimously voted to approve the Provisional License

xx. Sparkboro Wellness Corp. (#MRN283257), Retail

- Director Potvin presented the staff recommendation on the Provisional License.
- Commissioner Flanagan requested three conditions.
 - o Proposed conditions.
 - Resubmit positive impact plan to include more than a donation.
 - Specify which specific cohort you are seeking to impact.
 - Clarify how a donation to MRCC will directly impact the specified cohort.
- Commissioner Title requested a condition.
 - o Proposed condition: Revise diversity plan goal to "achieve at least 10% of our staffing needs from women and minorities" to be objectively reasonable.
- The Chairman asked for questions or comments.
- Commissioner Title moved to approve the Provisional License, subject to the conditions requested by Commissioners Flanagan and Title.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Provisional License, subject to the conditions requested by Commissioners Flanagan and Title.

yy. Treevit, LLC. (#DOA100105), Delivery-Only

- Director Potvin presented the staff recommendation on the Provisional License.
- Commissioner Flanagan requested a condition.
 - o Proposed conditions: Clarify whether the plan to assist recently incarcerated Massachusetts residents. The plans read as though it will assist those who are recently released.
- Commissioner McBride requested a condition, noting that anyone who will seek a delivery license moving forward that there needs to be a detail about the delivery procedures given that the greatest vulnerability exists between the car and the point of sale. There is room for more detail between provisional and final licensure but at the provisional phase, there should be a clear idea of the entity's delivery plan and be specific to that business. Generally, there are higher standards for delivery licensees than brick and mortar stores due to the inherent security risks, and the



applicant's plans could detail, but should not be limited to, anticipated vehicle descriptions and plans for vehicle housing, how to minimalize cash (e.g. platforms), types of secure communications, outfitting vehicles with cameras, and plan for transacting delivery.

- Within 60 days shall rewrite and resubmit delivery plans and procedures to make specific to applicants' operations.
- o Final license is subject to Commission approval of any third-party technology platform to ensure compliance with 935 CMR 500.000.
- The Chairman asked for questions or comments.
- Commissioner McBride moved to approve the Provisional License, subject to the conditions requested by Commissioners Flanagan and McBride.
- Commissioner Title seconded the motion.
- The Commission unanimously voted to approve the Provisional License, subject to the conditions requested Commissioners Flanagan and McBride.

zz. Webber Road Ops, LLC. (#MRN283559), Retail

- Director Potvin presented the staff recommendation on the Provisional License.
- The Chairman asked for questions or comments.
- Commissioner Title moved to approve the Provisional License.
- Commissioner McBride seconded the motion.
- The Commission unanimously voted to approve the Provisional License.
- Commissioner McBride noted that this would be her last licensing meeting, and thanked licensing and enforcement staff. Director Potvin expressed his department's thanks to Commissioner McBride.

10) Commission Discussion and Votes – 4:03:22

- a. Annual Activities Report to the Legislature
 - The Executive Director gave an overview of the Annual Activities Report to the Legislature.
 - Commissioner Title asked, with respect to a reference to a research poster, whether that poster, from a presentation by the Research Department could be attached as an appendix.
 - The Executive Director said that there may a way to link to it, but an appendix may not be the right approach given the volume of potential appendixes.
 - Commissioner Title recommended that, with respect to data for the Commission's work on equity, that data be included in the introduction with respect to the inclusive nature of the industry, noting that she believed that the Commission had gone above and beyond what is required under the statute.
 - Commissioner Title asked that the report be clarified to state what the definition for designating an applicant an SEP business.



- Commissioner Title noted that there wasn't reference to the positive impact plan, so for next year, if there was a way to quantify the success of those plans, it may be useful.
- Commissioner Title requested that there be a reference to the Commission's request to the legislature that it be given the authority to review HCAs.
- Commissioner Title also noted that with respect to social consumption, we may want to reference that the Secretary of the Commonwealth is holding up the regulations stating that the Commission doesn't have authority under G.L. c. 94g.
- Commissioner Flanagan moved to approve the legislative report, delegating to the Executive Director, the authority to finalize the report, including with respect to Commissioner Title's comments.
- Commissioner Title seconded the motion.
- The Commission unanimously approved the motion.

b. Delivery Endorsements

- The Executive Director presented the request for delegations approve Delivery Endorsements.
- Commissioner Title said she supports the proposal as written.
- Commissioner Title moved to delegate authority to the Executive Director to approve applications and authorize operations for Delivery Endorsements pursuant to 935 CMR 500.050(5) for licensed Marijuana Microbusinesses that have complied with Commission requirements pertaining to delivery operations.
- Commissioner McBride seconded the motion.
- The Commission unanimously approved the motion.
- 11) New Business the Chair Did Not Anticipate at the Time of Posting There were no last-minute items.
- 12) Next Meeting Date 4:14:25
 - The Chairman gave an overview of the upcoming meeting schedule.

13) Adjournment – 4:16:00

- Commissioner Flanagan moved to adjourn.
- Commissioner McBride seconded the motion.
- The Commission unanimously approved the motion.



CANNABIS CONTROL COMMISSION

October 20, 2020 10:00AM

Remote Participation via Microsoft Teams Live*

PUBLIC MEETING MINUTES

Documents:

<u>Public Comment on Proposed Delivery License Regulations – Part 1</u> <u>Public Comment on Proposed Delivery License Regulations – Part 2</u> <u>Public Comment on Proposed Delivery License Regulations – Part 3</u>

In Attendance:

Chairman Steven Hoffman Commissioner Jennifer Flanagan Commissioner Britte McBride Commissioner Shaleen Title

Minutes:

- 1) Call to Order 0:15
 - The Chairman recognized a quorum and called the meeting to order.
 - The Chairman gave notice to the public that the meeting is being recorded.
 - The Chairman thanked Matt Giancola, Director of Government Affairs and Policy, for his work managing the remote public meeting.
- 2) Chairman's Comments and Updates 0:54
 - The Chairman gave an overview of the agenda and the regulatory process to date and next steps, including changes to the draft regulations resulting from the policy discussions at this meeting.
 - The Chainman thanked the public for their extensive and well-reasoned comment on the regulations.
 - The Chairman noted that the Commission has reviewed all of the comment and has collectively identified 23 policy points of discussion, noting that the Commission will be voting on policy, not final draft regulations. The commission will then vote on final delivery policy.



- 3) Regulatory Policy Discussion on Delivery
 - a. Name for License Delivery Types 4:30
 - The Chairman described the topic.
 - Commissioner Title proposed new names for each of the delivery licenses. Commissioner Title
 said that these suggested names are in light of public comment and intended to be in line with the
 current license names such as Marijuana Retailer, Marijuana Cultivator, and Marijuana
 Transporter. Commissioner Title proposed changing "Wholesale Delivery Licensee" to
 "Marijuana Delivery Operator" and changing "Limited Delivery Licensee" to "Marijuana
 Courier."
 - Commissioner McBride said she was fine with the name changes but offered a friendly amendment to include the word "limited" in the name of the license, to indicate the limitations inherent in the activities in which each of these license types can participate.
 - o Commissioner Title asked if that distinction could be made in the definition, rather than the name of the license.
 - o Commissioner McBride accepted that suggestion.
 - Commissioner Title moved to change the name of "Wholesale Delivery Licensee" to "Marijuana Delivery Operator" and to change the name of "Limited Delivery Licensee" to "Marijuana Courier," and to include in the definition of both of those license types that it is a limited delivery license type.
 - Commissioner McBride seconded the motion.
 - The Commission unanimously approved the motion.
 - b. Changing language with respect to Substance Abuse Disorders. 8:57
 - The Chairman noted this was a suggestion from the Department of Public Health.
 - Commissioner Flanagan noted that the revision does not change the intent of the regulatory provisions, but updates terminology. Instead of "Substance Abuse" it will read "Substance Use Disorder." The revision also includes information with respect to the Substance Abuse Hotline, which is a resource to folks who may be struggling with substance use issues. Commissioner Flanagan noted the importance of making this information available.
 - Commissioner Flanagan moved that 935 CMR 500.146(5)(g) read "facts regarding substance use disorder signs and symptoms, referral information for substance use disorder treatment programs, and the telephone number for the Massachusetts Substance Use Helpline"
 - Commissioner Title seconded the motion.
 - The Commission unanimously approved the motion.
 - c. Ownership and Control Limitations with respect to Third Party Technology Providers [reference: several comments] -10:57
 - The Chairman described the topic.



- Commissioner McBride noted that there were quite a few comments from the public identified a
 concern over the potential ability for Third-Party Technology Platforms to monopolize or exercise
 outsized influence on the market through ownership or control of delivery licensees.
 Commissioner McBride, therefore, believed that it would be wise to craft language limiting the
 ability of Third-Party Technology Platforms from gaining too much ownership/control over the
 market.
- Commissioner Title asked for clarity around the meaning of financial interest, including any payment, such as basic delivery services.
 - Commissioner McBride confirmed that any arrangement, including a Delivery Agreement or other agreement for services would deem a Third-Party Technology Platform to be an Entity with Direct Control over a delivery licensee.
- Commissioner McBride moved to amend 935 CMR 500.002 by inserting at the end of the definition of Persons or Entities Having Direct Control, the following words: "(f) A Third Party Technology Platform Provider that possesses any financial interest in a Delivery License, including but not limited to, a Delivery Agreement or other agreement for services. And, further, that the definition of Third-party Technology Platform Provider is amended by adding at the end of the definition the following sentence: "A Third-Party Technology Platform Provider with a financial interest in a Delivery License shall be considered a Person or Entity Having Direct Control." And, further, that 935 CMR 500.050(1)(b) be amended by striking out the existing clause (6) and inserting in place thereof the following: "(6) Limitations on the Number and Type of Licenses. a. No Person or Entity Having Direct or Indirect Control shall be granted or hold more than a combined total of three Marijuana Retailer Licenses and/or Delivery Licenses. b. No Third Party Technology Provider that is a Person or Entity with Direct Control shall be granted, or hold, more than one Delivery License."
- Commissioner Flanagan seconded the motion.
- The Commission unanimously approved the motion.
- Commissioner Title noted the importance of the Commission's role as a source of information, both with respect to ensuring ownership and control limits are not violated, but also ensuring that Consumers know the difference between regulated and illicit delivery companies. Commissioner Title noted that other states have sited the confusion between licensed delivery companies and those operating in violation of the law. Commissioner Title indicated this may be a longer discussion to be had and that there is already a commitment by the Executive Director to ensure transparency and that the Commission is a reliable source of information but wanted to codify in the regulations a practice already undertaken by the Commission to ensure its continued practice, unless the Commission amends the regulations.
- Commissioner McBride expressed her support for this motion and believes the information would be extraordinarily helpful. Commissioner McBride also noted that licensees are required to include



- their license number on their web page to reduce such confusion and believes Commissioner Title's motion compliments that well.
- Commissioner Title moved to amend 935 CMR 500.103 by adding subsection (5) that reads: "the Commission shall maintain a publicly available and searchable source of information about all operating licenses, including Delivery Licensees, on its website."
- Commissioner McBride seconded the motion.
- The Commission unanimously approved the motion.
- d. Include limits on number of Marijuana Delivery Operator Licenses that may be held, to prevent monopolization of market 19:54
 - The Chairman gave an overview of the topic and comments received from the public. The Chairman expressed his hope that the market would serve as a check on dominant market players but said he could see circumstances that would allow a limited number of players to crowd out smaller business. The Chairman therefore indicated that it may make sense to establish license caps for Marijuana Delivery Operator Licenses, but to include a requirement to reevaluate those limits down the line if the Commission determines that they are no longer necessary to encourage participation by businesses of all sizes.
 - The Chairman therefore suggested limiting Marijuana Delivery Operator Licenses to one license per person/entity, ensuring that delivery vehicles are only carrying product associated against a specific order, and not extra product in anticipation of future orders, and including specific language with respect to reviewing regulations and guidance to determine whether these provisions have been effective and are still necessary to limit market dominance.
 - Commissioner Flanagan noted her general concern about delivery. Commissioner Flanagan also noted that the delivery licenses, and the structure the Commission has established, is targeted at righting the wrongs of marijuana prohibition and ensure inclusion in the market, and therefore expressed concern that a 1 license cap may be too limiting, especially when compared with the overall limit of 3 licenses for other license types, to still encourage the benefit to Economic Empowerment Applicants and Social Equity Participant owned businesses.
 - The Chairman recognized Commissioner Flanagan's concern and noted that there was a similar cap on microbusinesses and that the cap of a single license would not limit the size of such licensee, in terms of warehouse square footage or number of delivery vehicles. Therefore, the Chairman did not believe the cap limit would preclude anyone from building a successful business but worries about an operator being able to dominate the market.
 - Commissioner Title echoed Commissioner Flanagan's concern that a single license is too restrictive. If someone is limited to one license, they're going to want it to be centrally located to cover as much of the Commonwealth as possible with that one license. Commissioner Title also indicated that she believes the cap of one license is arbitrary, especially when other license types,



- such as retail, cultivation, and product manufacturer, have the cap of three and therefore believes it should be three licenses.
- The Chairman indicated that what it means to be centrally located could mean different things based on regions, so it would allow different businesses to cover different parts of the Commonwealth and therefore set up where they can be successful. The Chairman went on to explain that because the mobility of a delivery licensees allows them to cover a much larger geographic area, compared with retailers which are stationary, he believes the license cap should be lower for delivery licensees. The Chairman did note that there would not be size restrictions on the one license as opposed to restrictions on other licensees.
- Commissioner McBride acknowledged the tension between creating an equity pathway and preventing market dominance by a small number of players. Commissioner McBride expressed her view that, recognizing this tension, that a license cap, of the suggestions that came out of public comment, was the best option, especially given the differences between a Delivery Operator and a Retailer. Commissioner McBride said that part of the comfort with that approach is the determination to study the market and return to the decision in a few years, which is consistent with the Commission's data driven approach to regulation.
- The Chairman described his suggestion that the Commission should study how the market evolves at least one year after the initial certificate to commence operations of a Delivery Operator to ensure both that the equity goals of the delivery regulations are being met and that there is not market domination by any delivery licensees.
- The Chairman noted that a year timetable may not be the right time-frame, but he believes it should be at least a year from the date of the first delivery licensee commences operation. The Chairman noted this type of explicit declaration that the Commission will examine the issue is in line with its approach to the exclusivity period for delivery and social consumption.
- Commissioner McBride expressed that one year may be too short, given how quickly a year can go by, so suggested that the appropriate time frame would be 15 months to two years.
- Commissioner Flanagan echoed Commissioner McBride's assessment and cited public comment
 that the three year exclusivity period was insufficient to measure the viability of a business.
 Therefore, Commissioner Flanagan believes more time would be needed to allow the industry to
 settle into normal operations before the Commission changes the requirements. Commissioner
 Flanagan also noted that the composition of the Commission is certain to change in that time
 period, so it may make sense to allow a newly constituted Commission more time before they
 have to reassess the delivery market.
- Commissioner Title indicated it may make sense to put a time restriction on the time it will take to conduct the study, as it may impact the Commission's consideration of whether to extend the exclusivity period.
- The Chairman suggested a six month window to complete a study of the delivery market.



- The Chairman next raised the topic of the inventory contained in a vehicle, and the possibility that
 a delivery licensee could place vehicles with surplus inventory for orders it anticipates receiving,
 and the role that could play in dominating the market.
- Commissioner McBride suggested addressing this concern by limiting the inventory in a delivery vehicle to a maximum value of \$10,000 and that all inventory must be associated with a specific Individual Order.
- Commissioner Flanagan supported these restrictions and supported clearly spelling them out in the regulations.
- The Chairman recapped the three suggested changes and his belief that together they would limit monopolization or market dominance by only a few players.
- With respect to the license cap, Commissioner Title said it makes sense to her to looking at retail and see what the highest grossing retailer and use that as a benchmark. Commissioner Title asked whether this would apply to each wholesaler and courier model.
 - The Chairman suggested that the limits were intended to apply to the Delivery Operator only, given a Delivery Courier can only deliver orders that originate through a retail location.
 - Commissioner Title said she thinks it makes sense to have the same limits for both models, because it creates unfair competition between delivery operators and couriers working with Retailers, who could in turn dominate the market.
 - The Chairman said that the motivation for having a limit is to make sure there are as many participants as possible in this space.
- Commissioner Title asked whether it was a total of 3 licenses of any combination of retailer, wholesaler, or courier licenses.
 - The Chairman confirmed this.
 - o In that case, Commissioner Title said that if there is a total cap of 3 licenses, then only one of them could be a Delivery Operator *or* a Delivery Courier license to place the same restrictions on Couriers and Operators, noting still, however, that she supported allowing more than one delivery license.
- Commissioner Title talked through the practicalities of obtaining a license, in particular obtaining a property that is properly zoned and subsequently executing an HCA, and how those limitations may cap the size of a warehouse or vehicle fleet and therefore warrant the ability to obtain a second delivery license.
- Commissioner Flanagan asked if limiting the number of licenses hurts the equity mission of the
 wholesale model, citing the feedback received form the public that there wasn't sufficient
 opportunity for small and equity businesses. Commissioner Flanagan expressed her concern that
 the Commission established the Delivery Operator License for the purpose of entry into the
 cannabis market by small and equity businesses and limiting delivery licensees to a single license



cuts against that mission. Commissioner Flanagan expressed her concern that the Commission, in creating a license cap, may be over prescriptive, and in turn hurting the folks it is seeking to benefit.

- The Chairman expressed his agreement with Commissioner Flanagan that the goal is to support equity, and his view that the limits on the number of licenses furthers that by opening the market up to as many players as possible, but should not be construed as trying to preserve retailers market share.
- Commissioner Flanagan acknowledged the Chairman's aims and raised the issue of the difficulty equity applicants have raising capital and whether limiting the license numbers helps or impedes that, noting a feeling of being conflicted, but would be open to a cap of 2 delivery licenses.
- Commissioner McBride expressed that these licenses are meant to advance equity and see how
 market evolves, but this is meant to ensure that there are no dominant players, even if those
 dominant players are equity program members, because dominant players can crowd out other
 participants.
- Commissioner Title expressed support for the comments of Commissioners Flanagan and McBride. Commissioner Title expressed concern that the market players with the most centralized location and/or largest warehouse will have a greater chance of dominating the market, but thought increasing the cap to 2 might allow others with smaller warehouses at farther apart locations could balance against not having the largest or most centrally located warehouse.
- Commissioner Title suggested ensuring clarity that the mix of licenses could include two Delivery Operator Licenses *and/or* Delivery Courier Licenses.
- Commissioner McBride confirmed this was the intent of the language and that further clarification was acceptable in her view.
- The Chairman moved to modify the 500.050(1)(b)6. to say that no Person or Entity Having Direct or Indirect Control can be granted or hold a combination of three Marijuana Retailer and/or Licenses, provided that of those three, no more than two can be Delivery Only Licenses.
- Commissioner McBride seconded the motion.
- The Commission unanimously approved the motion.
- The Chairman moved that two years from the date that the first Delivery Operator Licensee receives a certificate to commence operations, the Commission or its designee shall commence, and complete within six months, an evaluation of the development of the cannabis delivery market in Massachusetts, which may include the competitiveness and concentration in the market and any other matter determined by the Commission. The Commission may take any action, including, but not limited to, issuing regulations or guidance, it deems necessary to address issues with market development and concentration. Commissioner Title asked that the Study would be completed within four months of commencement of the study.
- Commissioner Flanagan seconded the motion



- The Commission unanimously approved the motion.
- Commissioner McBride moved to amend 935 CMR 500.145(h) by inserting, after the number "\$10,000", the following words: "and each Marijuana Product shall be associated with a specific Individual Order". And, further, that 935 CMR 500.145(2)(d) is amended by inserting after the word "only" the following words: "acquire from a Marijuana Retailer and". And, further, that 935 CMR 500.145(2)(e) is amended by inserting after the word "only" the following words: "acquire from their inventory at the Marijuana Establishment premises and". And, further, that 935 CMR 500.145(3)(d) is amended by inserting after the words "only" the following words: "acquire from their inventory at their Warehouse and deliver".
- Commissioner Flanagan seconded the motion.
- The Commission unanimously approved the motion.
- Commissioner Title asked a clarifying question with respect to the expectation is that if, after the
 market study, it is discovered that market domination is occurring, then the Commission would
 consider additional licensing caps.
 - The Chairman said yes, but if, in the inverse, the market has proven not to have these issues, that the Commission would reduce caps.
- e. Clarification of what is allowed for markings on vehicles (RMV language) [internal request, Prince Lobel comments] 1:11:50
 - Commissioner McBride gave an overview of the topic.
 - Commissioner McBride moved that 935 CMR 500.105(13)(c)(3) be amended by striking out the clause it its entirety and replacing it with the following clause: 3. Any vehicle used to transport or deliver Marijuana or Marijuana Products must comply with applicable RMV requirements, but may not include any additional external marking that indicate the vehicle is being used to transport or deliver Marijuana or Marijuana Products. And, further, that 935 CMR 500.145(6)(d) as included in the Draft Regulations be amended by striking out the clause in its entirety and replacing it with the following clause: (d) Any vehicle used to transport or deliver Marijuana or Marijuana product must comply with applicable RMV requirements, but may not include any additional external marking that indicate the vehicle is being used to transport or deliver Marijuana or Marijuana Products.
 - Commissioner Title supported this indicated that it addressed, and therefore rendered moot, one of the points she raised for discussion relating to consistency.
 - Commissioner Title seconded the motion.
 - The Commission unanimously approved the motion.
- f. Clarification on imposition of taxes (DOR language) [internal request and reference: MMA comments] 1:15:15
 - Commissioner McBride gave an overview of the topic and reviewed the specific language she would include in the motion.



- Commissioner Title indicated her shock that this topic needed to be clarified but expressed her support.
- Commissioner McBride said this is out of an abundance of clarity and to message outward, both to potential licensees and municipalities that may have a misconception, what the tax implications of these license types would be.
- Commissioner McBride moved that 935 CMR 500.050(10) Marijuana Delivery Operator Licenses be amended by inserting, after clause (b), the following clause: (c) Notwithstanding that a Marijuana Delivery Operator License is not considered to be a Marijuana Retailer as defined under 935 CMR 500.002 or authorized to engage in permitted activities under 935 CMR 500.050 (8), but is authorized to sell Finished Marijuana Products directly to consumers, a Marijuana Delivery Operator Licensee shall register as a vendor with the Department of Revenue and collect and remit marijuana retail taxes in accordance with 830 CMR 64N.1.1: Marijuana Retail Taxes. And authorize the General Counsel to make changes consistent with these changes as applicable in other sections of the Regulations.
- Commissioner Title seconded the motion.
- The Commission unanimously approved the motion.
- Commissioner Title asked the Executive Director to discuss potential guidance for municipalities with respect to Delivery Licenses.
 - The Executive Director indicated that the guidance will be linked with the passage of the final regs. So once the regulations are promulgated, staff will focus on technological implementation and then propose guidance for the Commission's consideration perhaps in December or after the first of the new year. The Commission will also be available to municipalities and updating Frequently Asked Questions Documents.

The Commission took a 10 minute recess, returning at 11:40am. – 1:38:36

- g. Repackaging and white labeling
 - Commissioner Title gave an overview of the topic.
 - Commissioner Title asked if anyone on the Commission changed their views on this topic.
 - o Commissioners indicated that they have not changed their view.
 - Commissioner Title confirmed her understanding of the limits on white labeling and repackaging and who was allowed to do either activity.
 - Commissioner Title moved to add the topics of repackaging and white labeling to the study to see whether it is causing issues for licensees.
 - Commissioner McBride seconded the motion.
 - The Commission unanimously approved the motion.
- h. Requirement for Two Drivers 1:43:02



- Commissioner Title asked commissioners to indicate whether they have changed their stance based on public comment.
- Commissioner McBride indicated she did not, but also echoed sentiments of municipalities have relied on these security provisions to give them comfort for allowing delivery in their jurisdiction.
- Commissioner Flanagan echoed the municipal considerations Commissioner McBride made and also stated her belief that the two drive requirement is an economic sacrifice that has to be made for the sake of safety.
- The Chairman indicated that he did not change his viewpoint.
- Commissioner Title asked the Executive Director with respect to alternative security provisions, and whether the two driver requirement could be subject to an alternative security plan.
 - The Executive Director noted that the Commission's regulations allow local Law Enforcement to comment on the alternative, which is not determinative, but a consideration.
 - The Executive Director noted requests for alternative security are considerations and are considered on a case-by-case basis, and there has to be an alternative safeguard.
- Commissioner Title asked if there was a specific form for this process.
 - o The Executive Director noted that the waiver request form can be used for that.
- i. Clarify that under security updates Retailers or MEs w/ Delivery Endorsements need to let host community know when planning to commence delivery [reference: MMA comments] 1:49:39
 - Commissioner McBride gave an overview of the topic.
 - Commissioner McBride moved to insert the following words at the end of 935 CMR 500.110(1)(q): "including the addition of plans to deliver directly to consumers in the case of a Marijuana Retailer or Marijuana Establishment with a Delivery Endorsement" So, it would read as follows: "935 CMR 500.110 Security Requirements (1) General Requirements. A Marijuana Establishment shall implement sufficient security measures to deter theft of Marijuana and Marijuana Products, prevent unauthorized entrance into areas containing Marijuana and Marijuana Products and ensure the safety of Marijuana Establishment employees, Consumers, and the general public. Security measures taken by the Licensee to protect the Premises, employees, Marijuana Establishment Agents, Consumers, and general public shall include, but not be limited to, the following:... (q) Sharing the Marijuana Establishment's security plan and procedures with Law Enforcement Authorities, including police and fire departments, in the municipality where the Marijuana Establishment is located and periodically updating Law Enforcement Authorities, police and fire departments, if the plans or procedures are modified in a material way, including the addition of plans to deliver directly to consumers in the case of a Marijuana Retailer or Marijuana Establishment with a Delivery Endorsement"
 - Commissioner Flanagan second the motion.
 - The Commission unanimously approved the motion.



- j. Exclusivity Period for Delivery 1:51:16
 - Commissioner Title gave an overview of the topic.
 - Commissioner McBride said that there are a lot of factors at play that are out of the control of the Commission that could impact when licensees will enter the delivery market, but it does make sense from an administrative perspective to tie the exclusivity period to the first Certificate to Commence Operations to Delivery Operator Licensees.
 - Commissioner Title moved to make the exclusivity period for two years from the date that the first Certificate to Commence Operations to a Delivery Operator Licensee.
 - Commissioner McBride seconded the motion.
 - The Commission approved the motion by a vote of three in favor (McBride, Hoffman, and Title) and one against (Flanagan).
- k. Clarification on which entities may sell branded goods. 1:59:49
 - Commissioner Title gave an overview of the topic.
 - Commissioner Flanagan said she believes this is addressed in a recent draft change that will be voted on at an upcoming meeting and all Marijuana Retailers are allowed to sell Branded goods.
 - Commissioner McBride said that it is also her understanding that that all Marijuana Retailers can sell branded goods.
 - Commissioner Title said that she would raise this in a subsequent meeting if further clarification is needed.
- 1. Need to extend time Pre-Certification is valid for Delivery Operators because some towns may take a longer time to put zoning into place. Extend from 1 year to 2 years, or other appropriate time period. 2:03:42
 - Commissioner McBride gave an overview of the topic.
 - Commissioner Title supported this change.
 - Commissioner McBride moved that 935 CMR 500.101(2)(f)1. be amended by striking out the number "12" and inserting in place thereof the number: "24."
 - Commissioner Flanagan seconded the motion.
 - The Commission unanimously approved the motion.
- m. Possible restriction of ownership by alcohol distributors. 2:05:50
 - Commissioner Title gave an overview of the topic raised by public comment.
 - The Chairman expressed his opinion that if alcohol distributors want to invest in becoming a
 Delivery Licensee, there are now requirements in place to protect against potential market
 domination by alcohol distributors.



- Commissioner Flanagan that she does not believe that any particular type of licensee should be restricted.
- Commissioner McBride said she believes the Commission has established significant restrictions with respect to market domination to protect against this concern. Commissioner McBride echoed Commissioner Flanagan's discomfort with singling out certain types of potential licensees.
- n. Clarifying of language with respect to Delivery Agreements compared with Wholesale Agreement. 2:09:27
 - Commissioner McBride gave an overview of the topic.
 - Commissioner McBride moved that 935 CMR 500.120 (12)(j) be amended by striking out the words "Delivery Agreement" and inserting in place thereof the words: "Wholesale Agreement." And further that 935 CMR 500.130(5)(l) be amended by striking out the words "Delivery Agreement" and inserting in place thereof the words: "Wholesale Agreement."
 - Commissioner Flanagan seconded the motion.
 - The Commission unanimously approved the motion.
- o. Clarification that attempt or solicitation to violate ownership/control regulations constitutes grounds for suspension and revocation of license. 2:11:36
 - Commissioner Title gave an overview of the topic.
 - Commissioner Flanagan asked if the Commission already have this authority.
 - The Chairman also asked a similar question with respect to what additional authority this would create and what type of circumstances it might address.
 - Commissioner Title said the Commission likely does, but this change would explicitly spell out
 that the Commission has and would exercise this authority. Commissioner Title also described a
 scenario that this would apply to.
 - Commissioner McBride asked how attempt is defined.
 - Commissioner Title said the definition of attempt would be that a person had the specific intent of
 violating the regulations and taking an overt act into accomplishing that attempt but did not rise to
 the level of actually accomplishing the violation.
 - The Executive Director said that there would need to be a jurisdictional hook.
 - Commissioner Title just clarified that the attempt language would only apply to applicants and licensees, so would only apply to people and entities under the Commission's jurisdiction.
 - Commissioner McBride noted the evidentiary burden of proving such offenses.
 - The Chairman said he did not feel comfortable assessing intent with respect to applicants.
 - Commissioner Title offered a compromise to make this only apply to those already licensed and leave applicants out of it.
 - The Chairman expressed he would not feel much more comfortable with assessing intent with respect to licensees.



- Commissioner Title reiterated that, like criminal offenses, these offenses would require an overt action to further the intent to violate the ownership and control limitations.
- Commissioner McBride said that she is concerned there will be potential unforeseen consequences, though she supports the spirit of the regulations.
- Commissioner Flanagan said that she believes the Commission has sufficient authority in this area, so does not see the need for the change.
- Commissioner Title distinguished between existing relationships, which is currently spelled out and well enforced, but described circumstances brought to light relating to attempted ownership and control circumvention through equity applicants, and though those attempts were not successful due to the scruples of equity applicants, this language would act as a deterrent, so it does not take an equity applicant getting ensnared in one of these schemes to enforce on it. Commissioner Title also said that she feels, given the evidentiary burden of proving an attempt, the use of these provisions would be limited, and therefore are less likely to have unintended consequences.
- Commissioner McBride said that she is having trouble drawing the distinction between a prospective business deal or an incubator program and an attempt to circumvent ownership and control issues. Commissioner McBride also went on to say that businesses need to be able to test the waters of what they can get in a business deal.
- The Chairman shared his view that the addition was not necessary, but also that he did not believe the Commission should be trying to determine what is a predatory practice in business dealings.
- Commissioner Title said that the language was not meant to capture incubator programs or to
 deem something predatory. Commissioner Title said, based on her legal and business background,
 she has a clear idea of the narrow circumstances to which this language would apply.
 Commissioner Title said she was open to suggestion on whether the language could be revised to
 be more narrowly tailored to those specific circumstances where a party only failed to violate the
 regulations because they couldn't get a second party to agree to the scheme.
- Commissioner Flanagan said that in her view the current regulations would capture the scenario Commissioner Title is trying to address, so does not think the change is needed.
- Commissioner McBride reiterated her concerns with respect to potential unforeseen consequences.
- Commissioner Title said she would take this feedback into consideration and may revisit the topic in the future in light of this discussion.
- p. Incorporate clarifying language into definition of Delivery Courier Licensee to make clear that it is not a retailer but is subject to caps. [reference: Prince Lobel comments] 2:37:00
 - Commissioner McBride gave an overview of the topic.
 - Commissioner McBride moved that the definition of Marijuana Courier Licensee as included in 935 CMR 500.002 be amended by adding at the end the following sentence: "Delivery Courier Licensee shall not be considered to be a Marijuana Retailer under 935 CMR 500.002:



Definitions or 935 CMR 500.050: *Marijuana Establishments* and shall be subject to 935 CMR 500.050 (1)(b): *Control Limitations*."

- Commissioner Title seconded the motion.
- The Commission unanimously approved the motion.
- The Chairman asked for any additional topics.
- Commissioner Title noted a ministerial change needed to make the prohibition on Repackaging clear in the definitions consistent for each type of Delivery Licensee.
- Commissioner Flanagan noted how there are a lot of questions around delivery, and that public comment makes it clear that two strong lobbying efforts with opposing views on how the Commission should proceed. Therefore, Commissioner Flanagan believes there are too many outstanding issues to work through.
- Commissioner McBride said that Commissioner Flanagan's comments are well taken. Commissioner McBride said that, as with previous regulatory revisions, there are a lot of unknowns, though the Commission has honed its ability to foresee potential consequences. That being said, there has been clear intentionality for delivery to be a lower barrier entry way to the market for equity applicants, recognizing that in the industry as developed to date, very important compliance requirements have resulted in costs that price out certain market participants. Commissioner McBride expressed that, given her hope that the Delivery Licenses will make a substantial difference in furthering the Commission's equity mission and mandate and impacting the illicit market, it is important to not further delay the availability of those licenses and the intended positive impact for disproportionately impacted areas and communities.
- Commissioner Title expressed her pride with the work and thoughtfulness that went into the Delivery Licenses and thanked Commissioner McBride and her writing team that put a lot of work into the delivery regulations.
- The Chairman expressed his support for the comments of Commissioners McBride and Title. The Chairman also expressed his respect for Commissioner Flanagan's courage in expressing a minority viewpoint and sticking to her beliefs. The Chairman, noted, however, that the conversations held at this meeting gave him even greater confidence about moving forward with the delivery regulations. The Chairman said that over the years, the Commission has demonstrated the ability to draft workable regulations that support the establishment of an industry, protect public health, safety, and welfare, and help level the playing field for all users. Therefore, the Chairman stated that he does not support a delay in approving delivery regulations.
- Commissioner Flanagan moved to table the promulgation of regulations enabling delivery until January 2023.



- Commissioner McBride seconded the motion.
- The Commission voted against the motion with one in favor (Flanagan) and three against (Hoffman, McBride, Title).
- Commissioner Title asked the Executive Director if he had a general roll out time frame for these new licenses.
 - The Executive Director described the steps that will be required, including modifying current delivery application and establishing a new license, updating guidance's and FAQs, and it can be expected that the licenses would be ready for use within several months of promulgation of the regulations.
- Commissioner McBride moved that the Commission, acting consistent with the authority to establish and provide for the issuance of additional types or classes of licenses to operate marijuana-related businesses as granted to it under General Law chapter 94G, section 4 (b), adopt the Draft Regulations relative to Delivery Licenses as further amended here today.
- Commissioner Title seconded the motion.
 The Commission approved the motion by a vote of three in favor (Hoffman, McBride, Title) and one against (Flanagan).
- Commissioner Flanagan wanted to thank Commissioner McBride for the work of drafting the delivery regulations.
- 4) Next Meeting Date -2.58.05
 - The Chairman gave an overview of the tentative upcoming meeting schedule.
- 5) Adjournment 2:58:42
 - Commissioner Title moved to adjourn the meeting.
 - Commissioner Flanagan seconded the motion.
 - The Commission unanimously voted to adjourn the meeting.



APICAL, INC.

ESTABLISHMENT OVERVIEW

1. Name, license number(s), and types of license(s) affected by the change in ownership and control request:

Apical, Inc.

Cultivation (MC281385) Product Manufacturing (MP281333) Retail (MR281246)

BACKGROUND OVERVIEW

2. The individual(s) requesting to acquire ownership or control interests over the license(s) include the following:

Individual	Role
Robert McKinley	Sole Manager

3. The entity(ies) requesting to acquire ownership or control interests over the license(s) include the following:

Entity	Role
Apical LLC	Owner of Apical, Inc.
Apical Investments, LLC	Owner of Apical LLC

- 4. Background checks were conducted on the individual and entities disclosed within the application, as applicable. No suitability issues were discovered.
- 5. The individual and entities that are requesting ownership and control over the license(s) do not appear to have exceeded any ownership and control limits over any particular license type or cultivation canopy.
- 6. Commission staff conducted an organizational and financial inspection into the individual and entities associated with this change of ownership and control request. Commission staff



found no issues or inconsistencies with the information provided to the Commission in the application.

RECOMMENDATION

- 1. The licensee and the individual/entities associated with this change in ownership and control may now effectuate any outstanding business agreements related to the change. The licensee will notify the Commission when the change in ownership and control has occurred;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. The licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) after effectuating the change in ownership and control, if applicable, and shall give Commission staff adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.



COMMUNITY GROWTH PARTNERS GREAT BARRINGTON OPERATIONS, LLC

ESTABLISHMENT OVERVIEW

1. Name, license number(s), and types of license(s) affected by the change in ownership and control request:

Community Growth Partners Great Barrington Operations, LLC

Retail (MR282695)

BACKGROUND OVERVIEW

2. The individual(s) requesting to acquire ownership or control interests over the license(s) include the following:

Individual	Role
Adam Berk	Chief Executive Officer, Director, Board Member of Stem Holdings, Inc.
Steven Hubbard	Director, Board Member of Stem Holdings, Inc.
Garrett Bender	Director, Board Member of Stem Holdings, Inc.
Ellen Deutsch	Chief Operating Officer of Stem Holdings, Inc.
Lindy Snider	Director, Board Member of Stem Holdings, Inc.
Dennis Suskind	Director, Board Member of Stem Holdings, Inc.
Ernest Hanna	Board Member of Community Growth Partners Holdings, Inc.

3. The entity(ies) requesting to acquire ownership or control interests over the license(s) include the following:

Entity	Role
Stem Holdings, Inc.	Minority owner of Community Growth Partners Holdings, Inc.



- 4. Background checks were conducted on the individuals and entities disclosed within the application, as applicable. No suitability issues were discovered.
- 5. The individuals and entity that are requesting ownership and control over the license(s) do not appear to have exceeded any ownership and control limits over any particular license type or cultivation canopy.
- 6. Commission staff conducted an organizational and financial inspection into the individuals and entity associated with this change of ownership and control request. Commission staff found no issues or inconsistencies with the information provided to the Commission in the application.

RECOMMENDATION

- 1. The licensee and the individuals/entity associated with this change in ownership and control may now effectuate any outstanding business agreements related to the change. The licensee will notify the Commission when the change in ownership and control has occurred;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. The licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) after effectuating the change in ownership and control, if applicable, and shall give Commission staff adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.





COMMUNITY GROWTH PARTNERS NORTHAMPTON OPERATIONS, LLC

ESTABLISHMENT OVERVIEW

1. Name, license number(s), and types of license(s) affected by the change in ownership and control request:

Community Growth Partners Northampton Operations, LLC

Cultivation (MC282162) Product Manufacturing (MP281677)

BACKGROUND OVERVIEW

2. The individual(s) requesting to acquire ownership or control interests over the license(s) include the following:

Individual	Role
Adam Berk	Chief Executive Officer, Director, Board Member of Stem
	Holdings, Inc.
Steven Hubbard	Director, Board Member of Stem Holdings, Inc.
Garrett Bender	Director, Board Member of Stem Holdings, Inc.
Ellen Deutsch	Chief Operating Officer of Stem Holdings, Inc.
Lindy Snider	Director, Board Member of Stem Holdings, Inc.
Dennis Suskind	Director, Board Member of Stem Holdings, Inc.
Ernest Hanna	Board Member of Community Growth Partners Holdings, Inc.

3. The entity(ies) requesting to acquire ownership or control interests over the license(s) include the following:

Entity	Role
--------	------



Stem Holdings, Inc.	Minority owner of Community Growth Partners Holdings, Inc.	

- 4. Background checks were conducted on the individuals and entity disclosed within the application, as applicable. No suitability issues were discovered.
- 5. The individuals and entity that are requesting ownership and control over the license(s) do not appear to have exceeded any ownership and control limits over any particular license type or cultivation canopy.
- 6. Commission staff conducted an organizational and financial inspection into the individuals and entity associated with this change of ownership and control request. Commission staff found no issues or inconsistencies with the information provided to the Commission in the application.

RECOMMENDATION

- 1. The licensee and the individual associated with this change in ownership and control may now effectuate any outstanding business agreements related to the change. The licensee will notify the Commission when the change in ownership and control has occurred;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. The licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) after effectuating the change in ownership and control, if applicable, and shall give Commission staff adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.





CURALEAF MASSACHUSETTS, INC.

ESTABLISHMENT OVERVIEW

1. Name, license number(s), and types of license(s) affected by the change in ownership and control request:

Curaleaf Massachusetts, Inc.

RMD765

RMD385

Cultivation (MC281309)

Product Manufacturing (MP281318)

Retail (MR281263)

Retail (MR282052)

Retail (MR282183)

BACKGROUND OVERVIEW

2. The individual(s) requesting to acquire ownership or control interests over the license(s) include the following:

Individual	Role
Joseph Bayern	President and Director of Curaleaf, Inc.
Neil Davidson	Secretary, Treasurer and Director of Curaleaf, Inc.

- 3. Background checks were conducted on all individuals disclosed within the application, as applicable. No suitability issues were discovered.
- 4. The individuals that are requesting ownership and control over the license(s) do not appear to have exceeded any ownership and control limits over any particular license type or cultivation canopy.

RECOMMENDATION

Commission staff recommend review and decision on the request for change of ownership and control, and if approved, request that the approval be subject to the following conditions:



- 1. The licensee and the individuals associated with this change in ownership and control may now effectuate any outstanding business agreements related to the change. The licensee will notify the Commission when the change in ownership and control has occurred;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. The licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) and/or 935 CMR 501.105(1) after effectuating the change in ownership and control, if applicable, and shall give Commission staff adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.



CURALEAF NORTH SHORE, INC.

ESTABLISHMENT OVERVIEW

1. Name, license number(s), and types of license(s) affected by the change in ownership and control request:

Curaleaf North Shore, Inc.

RMD765 Cultivating (MC281255) Product Manufacturing (MP281300)

BACKGROUND OVERVIEW

2. The individual(s) requesting to acquire ownership or control interests over the license(s) include the following:

Individual	Role
Joseph Bayern	CEO, President and Director of Curaleaf, Inc.
Neil Davidson	Secretary, Treasurer and Director of Curaleaf, Inc.

- 3. Background checks were conducted on all individuals disclosed within the application, as applicable. No suitability issues were discovered.
- 4. The individuals that are requesting ownership and control over the license(s) do not appear to have exceeded any ownership and control limits over any particular license type or cultivation canopy.

RECOMMENDATION

Commission staff recommend review and decision on the request for change of ownership and control, and if approved, request that the approval be subject to the following conditions:

1. The licensee and the individuals associated with this change in ownership and control may now effectuate any outstanding business agreements related to the change. The licensee will notify the Commission when the change in ownership and control has occurred;



- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. The licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) and/or 935 CMR 501.105(1) after effectuating the change in ownership and control, if applicable, and shall give Commission staff adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.



I.N.S.A., INC.

ESTABLISHMENT OVERVIEW

1. Name, license number(s), and types of license(s) affected by the change in ownership and control request:

I.N.S.A., Inc.

RMD365

RMD845

Cultivating (MC281268)

Product Manufacturing (MP281426)

Retail (MR281680)

Retail (MR281892)

Retail (MR282632)

BACKGROUND OVERVIEW

2. The individual(s) requesting to acquire ownership or control interests over the license(s) include the following:

Individual	Role
Lewis Goldstein	Chief Marketing Officer
Thomas Davis	Chief Financial Officer

- 3. Background checks were conducted on all individuals disclosed within the application, as applicable. No suitability issues were discovered.
- 4. The individuals that are requesting ownership and control over the license(s) do not appear to have exceeded any ownership and control limits over any particular license type or cultivation canopy.

RECOMMENDATION

Commission staff recommend review and decision on the request for change of ownership and control, and if approved, request that the approval be subject to the following conditions:



- 1. The licensee and the individuals associated with this change in ownership and control may now effectuate any outstanding business agreements related to the change. The licensee will notify the Commission when the change in ownership and control has occurred;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. The licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) and/or 935 CMR 501.105(1) after effectuating the change in ownership and control, if applicable, and shall give Commission staff adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.



LYNN ORGANICS, LLC

ESTABLISHMENT OVERVIEW

1. Name, license number(s), and types of license(s) affected by the change in ownership and control request:

Lynn Organics, LLC

Retail (MR282618)

BACKGROUND OVERVIEW

2. The individual(s) requesting to acquire ownership or control interests over the license(s) include the following:

Individual	Role
Marjorie Honickman	Owner
Shirley Honickman Hahn	Owner

- 3. Background checks were conducted on all individuals disclosed within the application, as applicable. No suitability issues were discovered.
- 4. The individuals that are requesting ownership and control over the license(s) do not appear to have exceeded any ownership and control limits over any particular license type or cultivation canopy.

RECOMMENDATION

Commission staff recommend review and decision on the request for change of ownership and control, and if approved, request that the approval be subject to the following conditions:

- 1. The licensee and the individuals associated with this change in ownership and control may now effectuate any outstanding business agreements related to the change. The licensee will notify the Commission when the change in ownership and control has occurred;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and



5.	The licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) after effectuating the change in ownership and control, if applicable, and shall give Commission staff adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.
	COO Executive Summary 2



NS AJO HOLDINGS, INC.

ESTABLISHMENT OVERVIEW

1. Name, license number(s), and types of license(s) affected by the change in ownership and control request:

NS AJO Holdings, Inc.

Cultivating (MC281884)
Product Manufacturing (MP281564)
Retail (MR282236)
Retail (MR283095)
MTC (RMD1425)
MTC (RMD1546)

BACKGROUND OVERVIEW

2. The individual(s) requesting to acquire ownership or control interests over the license(s) include the following:

Individual	Role
Marjorie Honickman	Owner
Shirley Honickman Hahn	Owner

- 3. Background checks were conducted on all individuals disclosed within the application, as applicable. No suitability issues were discovered.
- 4. The individuals that are requesting ownership and control over the license(s) do not appear to have exceeded any ownership and control limits over any particular license type or cultivation canopy.

RECOMMENDATION

Commission staff recommend review and decision on the request for change of ownership and control, and if approved, request that the approval be subject to the following conditions:



- 1. The licensee and the individuals associated with this change in ownership and control may now effectuate any outstanding business agreements related to the change. The licensee will notify the Commission when the change in ownership and control has occurred;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. The licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) and 935 CMR 501.105(1) after effectuating the change in ownership and control, if applicable, and shall give Commission staff adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.



TDMA ORANGE, LLC

ESTABLISHMENT OVERVIEW

1. Name, license number(s), and types of license(s) affected by the change in ownership and control request:

TDMA Orange, LLC

Cultivation (MC282031) Cultivation (MC281982) Product Manufacturing (MP281616)

BACKGROUND OVERVIEW

2. The individual(s) requesting to acquire ownership or control interests over the license(s) include the following:

Individual	Role
Brad Rogers	CEO of Red White and Bloom Brands, Inc.
Theo van der Linde	CFO of Red White and Bloom Brands, Inc.

3. The entity(ies) requesting to acquire ownership or control interests over the license(s) include the following:

Entity	Role	
RLTY Development MA 1 LLC	Direct Owner of TDMA Orange, LLC	
RLTY USA Corp.	Indirect Owner of TDMA Orange, LLC	
Red White and Bloom Brands, Inc.	Indirect Owner of TDMA Orange, LLC	

- 4. Background checks were conducted on all individuals and entities disclosed within the application, as applicable. No suitability issues were discovered.
- 5. The individuals and entities that are requesting ownership and control over the license(s) do not appear to have exceeded any ownership and control limits over any particular license type or cultivation canopy.



6. Commission staff conducted an organizational and financial inspection into the individuals and entities associated with this change of ownership and control request. Commission staff found no issues or inconsistencies with the information provided to the Commission in the application.

RECOMMENDATION

- 1. The licensee and the individuals/entities associated with this change in ownership and control may now effectuate any outstanding business agreements related to the change. The licensee will notify the Commission when the change in ownership and control has occurred;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure:
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. The licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) after effectuating the change in ownership and control, if applicable, and shall give Commission staff adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.



THE HEIRLOOM COLLECTIVE, INC.

ESTABLISHMENT OVERVIEW

1. Name, license number(s), and types of license(s) affected by the change in ownership and control request:

The Heirloom Collective, Inc.

MTC (RMD825) Cultivating (MC281438) Product Manufacturing (MP281497) Retail (MR283029)

BACKGROUND OVERVIEW

2. The individual(s) requesting to acquire ownership or control interests over the license(s) include the following:

Individual	Role
Timothy Van Epps	Owner
Marcus Stetson	Owner

3. The entity(ies) requesting to acquire ownership or control interests over the license(s) include the following:

Entity	Role
THC Holding, LLC	Holding Company, Owner
C.A.N. Investments, LLC	Owner through THC Holding, LLC
Clear Power, LLC	Owner through THC Holding, LLC
Future Enterprises, LLC	Owner through THC Holding, LLC

- 4. Background checks were conducted on all individuals and entities disclosed within the application, as applicable. No suitability issues were discovered.
- 5. The individuals and entities that are requesting ownership and control over the license(s) do not appear to have exceeded any ownership and control limits over any particular license type or cultivation canopy.



6. Commission staff conducted an organizational and financial inspection into the individuals and entities associated with this change of ownership and control request. Commission staff found no issues or inconsistencies with the information provided to the Commission in the application.

RECOMMENDATION

- 1. The licensee and the individuals/entities associated with this change in ownership and control may now effectuate any outstanding business agreements related to the change. The licensee will notify the Commission when the change in ownership and control has occurred;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. The licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) and 935 CMR 501.105(1) after effectuating the change in ownership and control, if applicable, and shall give Commission staff adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.



MARIJUANA ESTABLISHMENT RENEWALS EXECUTIVE SUMMARY

COMMISSION MEETING: MARCH 11, 2021

RENEWAL OVERVIEW

1. Name, license number, renewal application number, host community, and funds deriving from a Host Community Agreement allocated for the municipality for each Marijuana Establishment presented for renewal:

Marijuana Establishment	License	Renewal	Location	Funds
Name	Number	Application		
		Number		
1620 LABS, LLC	MC281775	MCR139966	ATHOL	\$0.00
27 BROOM STREET, LLC	MC281723	MCR139964	PLAINFIELD	\$0.00
27 BROOM STREET, LLC	MC281880	MCR139973	PLAINFIELD	\$0.00
27 BROOM STREET, LLC	MP281490	MPR243589	PLAINFIELD	\$0.00
BASK, INC.	MC282211	MCR139958	FREETOWN	\$0.00
BASK, INC.	MP281702	MPR243579	FREETOWN	\$0.00
BWELL HOLDINGS, INC	MR282825	MRR205689	PROVINCETOWN	\$44,050.32
CANNA PROVISIONS INC	MR281778	MRR205685	HOLYOKE	\$124,085.00
CANNA PROVISIONS INC	MR281796	MRR205686	LEE	\$559,069.00
CANNAVANNA, INC.	MR282801	MRR205693	ROCKLAND	\$243,499.36
CNA STORES, INC.	MR281744	MRR205691	HAVERHILL	\$8,394.27
CNA STORES, INC.	MR282576	MRR205692	AMESBURY	\$1,448.70
COMMCAN, INC.	MC281642	MCR139957	MESWAY	\$462,400.00
COMMCAN, INC.	MP281508	MPR243581	MEDWAY	\$462,400.00
CULTIVATE HOLDINGS	MC282053	MCR139953	UXBRIDGE	\$0.00
LLC				
CULTIVATE HOLDINGS	MP281742	MPR243575	UXBRIDGE	\$0.00
LLC				
ELEV8 CANNABIS INC	MR281810	MRR205677	ATHOL	\$5,000.00
EVERGREEN STRATEGIES,	MR281834	MRR205688	WORCESTER	\$0.00
LLC				
EVERGREEN STRATEGIES,	MR282032	MRR205697	NORTH ADAMS	\$0.00
LLC				
FROZEN 4 CORPORATION	MP281759	MPR243580	BELLINGHAM	\$0.00
GREEN BIZ LLC	MR281793	MRR205687	NORTHAMPEQUITY	\$38,517.76



GREEN LINE BOSTON, INC.	MC281336	MCR139955	BOSTON	\$0.00
GREEN LINE BOSTON, INC.	MP281327	MPR243578	BOSTON	\$0.00
GREEN RAILROAD GROUP,	MR281745	MRR205679	GREAT	\$0.00
INC.			BARRINGTON	7 0 0 0
GREENER LEAF, INC.	MR281790	MRR205700	FALL RIVER	\$0.00
HEALTHY PHARMS, INC.	MC281631	MCR139962	GEORGETOWN	\$20,371.00
HEALTHY PHARMS, INC.	MP281450	MPR243582	GEORGETOWN	\$20,371.00
HEALTHY PHARMS, INC.	MR281754	MRR205690	GEORGETOWN	\$20,371.00
HOLISTIC INDUSTRIES,	MC282056	MCR139968	MONSON	\$0.00
INC.				
HOLISTIC INDUSTRIES,	MP281630	MPR243583	MONSON	\$0.00
INC.				
JOLLY GREEN INC	MC281283	MCR139967	WINCHENDON	\$0.00
LAZY RIVER PRODUCTS,	MC282085	MCR139976	DRACUT	\$0.00
LLC				
LAZY RIVER PRODUCTS,	MP281644	MPR243591	DRACUT	\$0.00
LLC				
LAZY RIVER PRODUCTS, LLC	MR282562	MRR205704	DRACUT	\$0.00
NATURE'S REMEDY OF	MC281482	MCR139963	LAKEVILLE	\$134,795.42
MASSACHUSETTS, INC.	1,10201.02	1,101(10)		410 1,7501.2
NATURE'S REMEDY OF	MP281524	MPR243590	LAKEVILLE	\$134,795.42
MASSACHUSETTS, INC.				
NATURE'S REMEDY OF	MR281553	MRR205698	MILLBURY	\$285,270.84
MASSACHUSETTS, INC.				
NATURE'S REMEDY OF	MR282118	MRR205701	TYNGSBOROUGH	\$288,237.83
MASSACHUSETTS, INC.				
NOVA FARMS, LLC	MC281841	MCR139969	SHEFFIELD	\$118,815.52
PLATINUM HYDROLAB,	MC281510	MCR139942	LOWELL	\$0.00
INC				
PLATINUM HYDROLAB,	MP281540	MPR243568	LOWELL	\$0.00
INC		L CD L CO	- CT10T	440,000,000
RESINATE, INC.	MC281259	MCR139971	DOUGLAS	\$40,000.00
RESINATE, INC.	MP281753	MPR243586	DOUGLAS	\$0.00
RESINATE, INC.	MR281249	MRR205694	WORCESTER	\$85,232.43
RESINATE, INC.	MR282398	MRR205696	NORTHAMPTON	\$10,302.99
THEORY WELLNESS INC	MC281928	MCR139972	SHEFFIELD	\$30,000.00
TOWER THREE, LLC	MC281652	MCR139961	TAUNTON	\$0.00
TYCA GREEN	MC281844	MCR139970	CLINTON	\$0.00
TYCA GREEN	MP281555	MPR243585	CLINTON	\$0.00
TYCA GREEN	MR282035	MRR205695	CLINTON	\$0.00



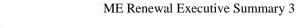
- 2. All licensees have submitted renewal applications pursuant to 935 CMR 500.103(4) which include the licensee's disclosure of their progress or success towards their Positive Impact and Diversity Plans.
- 3. All licensees have submitted documentation of good standing from the Secretary of the Commonwealth, Department of Revenue, and Department of Unemployment Assistance, if applicable.
- 4. All licensees have paid the appropriate annual license fee.
- 5. The licensees, when applicable, have been inspected over the previous year. Commission staff certify that, to the best of our knowledge, no information has been found that would prevent renewal of the licenses mentioned above pursuant to 935 CMR 500.450.

RECOMMENDATION

Commission staff recommend review and decision on the above-mentioned licenses applying for renewal, and if approved, request that the approval be subject to the licensee remaining in compliance with the Commission regulations and applicable law.

The following licensees must comply with additional conditions:

- 1. 1620 Labs, LLC (MC281775)
 - a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
 - b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
 - c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
 - d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).
- 2. 27 Broom Street, LLC (MC281723/ MC281880/ MP281490)
 - a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.





- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

3. Bask, Inc. (MC282211/ MP281702)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

4. BWell Holdings, Inc. (MR282825)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).



5. Canna Provisions Inc (MR281778/ MR281796)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).

6. Canna Vanna, Inc. (MR282801)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).

7. CNA Stores, Inc. (MR281744/MR282576)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).

8. Commcan, Inc. (MC281642/ MP281508)

a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.



- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

9. Cultivate Holdings LLC (MC282053/ MP281742)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

10. Elev8 Cannabis Inc (MR281810)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).



11. Evergreen Strategies, LLC (MR281834/ MR282032)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).

12. Frozen 4 Corporation (MP281759)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).

13. Green Biz LLC (MR281793)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).

14. Green Line Boston, Inc. (MC281336/MP281327)

a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.



- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

15. Green Railroad Group, Inc (MR281745)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).

16. Greener Leaf, Inc (MR281790)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).

17. Healthy Pharms, Inc. (MC281631/MP281588/MR281754)

a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.



- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

18. Jolly Green Inc (MC281283)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

19. Lazy River Products, LLC (MC282085/MP281644/ MR282562)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).



d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

20. Nature's Remedy of Massachusetts, Inc. (MC281482/MP281524/ MR281553/ MR282118)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

21. Nova Farms, LLC (MC281841)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

22. Platinum Hydrolab, Inc (MC281510/ MP281540)

a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.



- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

23. Resinate, Inc. (MC281259/ MP281753/ MR281249/ MR282398)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

24. Theory Wellness Inc (MC281928)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (Remark) Examplian Submit 11



exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

25. Tower Three, LLC (MC281652)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).

26. TYCA Green (MC281844/ MP281555/ MR282035)

- a. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Plan to Positively Impact Disproportionately Harmed People.
- b. Within 90 days of the removal of the State of Emergency declaration, the licensee shall notify the Cannabis Control Commission of updated actions taken on their Diversity Plan.
- c. Within 90 days, the licensee shall submit documentation that it requested from its Host Community the records of any cost to the city or town, whether anticipated or actual, resulting from the licensee's operation within its borders. Additionally, the licensee shall submit any response received from the Host Community, and if no response received, an attestation to that effect. The licensee shall comply with this requirement as stated within 935 CMR 500.103(4)(f).
- d. Within 60 days, or upon a post-provisional license inspection if this inspection has not yet taken place, the licensee shall submit documentation (energy compliance or exemption letter) regarding its requirement to comply with the Commission's energy regulations pursuant to 935 CMR 500.120(11).





MEDICAL MARIJUANA TREATMENT CENTER RENEWALS EXECUTIVE SUMMARY

COMMISSION MEETING: MARCH 11, 2021

RENEWAL OVERVIEW

1. Name, license number, location(s), for each Medical Marijuana Treatment Center presented for renewal:

Medical Marijuana Treatment	License	Location	Location
Center Name	Number	(Cultivation &	(Dispensing)
		Processing)	
GREENCARE THERAPEUTICS	MTC	ROCKLAND	ROCKLAND
INC.			
GREEN MEADOWS FARMS, LLC	MTC	SOUTHBRIDGE	SOUTHBRIDGE
HEAL, INC.	MTC	WARREN	PROVINCETOWN
JUST HEALTHY, LLC	MTC		NORTHAMPTON
LIBERTY COMPASSION, INC.	RMD1465	CLINTON	WEST
			SPRINGFIELD
MASS ALTERNATIVE CARE, INC.	RMD1527	CHICOPEE	AMHERST

- 2. All licensees have submitted renewal applications pursuant to 935 CMR 501.103(4).
- 3. All licensees have paid the appropriate annual license fee, where applicable.
- 4. The licensees, when applicable, have been inspected over the previous year. Commission staff certify that, to the best of our knowledge, no information has been found that would prevent renewal of the licenses mentioned above pursuant to 935 CMR 501.450.

RECOMMENDATION

Commission staff recommend review and decision on the above-mentioned licenses applying for renewal, and if approved, request that the approval be subject to the licensee remaining in compliance with the Commission regulations and applicable law.





ASCEND MASS, LLC

MR282077

ESTABLISHMENT OVERVIEW

1. Name and address of the Marijuana Establishment:

Ascend Mass, LLC 268-274 Friend Street, Boston, MA 02114

2. Type of final license sought (if cultivation, its tier level and outside/inside operation):

Retail

3. The licensee is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Туре	Status	Location
Retail	Provisional License	Newton

LICENSING OVERVIEW

- 4. The licensee was approved for provisional licensure for the above-mentioned license(s) on January 9, 2020.
- 5. The licensee has paid all applicable license fees.
- 6. No new information has been reported to Commission staff regarding the organizational structure of the entity since the issuance of the provisional license(s).
- 7. No new information has been discovered by Commission staff regarding the suitability of the licensees previously disclosed since the issuance of the provisional license(s).

INSPECTION OVERVIEW

8. Commission staff inspected the licensee's facility on the following date(s): February 16, 2021.



- 9. The licensee's facility was inspected by Commission staff and found to be in full compliance with the requirements listed in 935 CMR 500.105 through 935 CMR 500.160 as applicable.
- 10. No evidence was discovered during the inspection(s) that indicated the Marijuana Establishment was not in compliance with all applicable state laws and local bylaws or ordinances.
- 11. Specific information from Commission staff's inspection is highlighted below:

Enforcement staff verified that all security-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. The security of all entrances and exits;
- ii. Visitor procedures;
- iii. Limited access areas;
- iv. Verification of a primary and back-up security company;
- v. Presence of perimeter and duress alarms; and
- vi. All cameras complied with Commission requirements.

b. Inventory and Storage

Enforcement staff verified that all inventory-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Secure storage of marijuana and marijuana products;
- ii. Sanitation and pest control measures; and
- iii. Inventory controls and procedures.

c. Retail Operation

Enforcement staff verified that all retail-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Verification of identifications for access;
- ii. Layout of the sales floor; and
- iii. Availability and contents of adult-use consumer education materials.

d. Transportation

The licensee will not be performing transportation activities at this time.

RECOMMENDATION



Commission staff recommend final licensure with the following conditions:

- 1. The licensee may possess and otherwise acquire marijuana, but shall not dispense, sell, or otherwise transport marijuana to other Marijuana Establishments, or to consumers, until upon inspection, receiving permission from the Commission to commence full operations;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. Licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) prior to the issuance of a commencement of operations and that Commission staff be given adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.

The licensee has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the licensee is recommended for final licensure.





CCC WELLFLEET NV, LLC

MR282685

ESTABLISHMENT OVERVIEW

1. Name and address of the Marijuana Establishment:

CCC Wellfleet NV, LLC d/b/a Cape Cod Cannabis 1446 State Highway, Route 6, Wellfleet, MA 02667

2. Type of final license sought (if cultivation, its tier level and outside/inside operation):

Retail

3. The licensee is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Individuals associated with this application are also associated with a cultivation and product manufacturing application under the name CCC Mashpee Holdings, LLC.

LICENSING OVERVIEW

- 4. The licensee was approved for provisional licensure for the above-mentioned license(s) on August 6, 2020.
- 5. The licensee has paid all applicable license fees.
- 6. No new information has been reported to Commission staff regarding the organizational structure of the entity since the issuance of the provisional license(s).
- 7. No new information has been discovered by Commission staff regarding the suitability of the licensees previously disclosed since the issuance of the provisional license(s).

INSPECTION OVERVIEW

8. Commission staff inspected the licensee's facility on the following date(s): February 10, 2021.



- 9. The licensee's facility was inspected by Commission staff and found to be in full compliance with the requirements listed in 935 CMR 500.105 through 935 CMR 500.160 as applicable.
- 10. No evidence was discovered during the inspection(s) that indicated the Marijuana Establishment was not in compliance with all applicable state laws and local bylaws or ordinances.
- 11. Specific information from Commission staff's inspection is highlighted below:

Enforcement staff verified that all security-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. The security of all entrances and exits;
- ii. Visitor procedures;
- iii. Limited access areas;
- iv. Verification of a primary and back-up security company;
- v. Presence of perimeter and duress alarms; and
- vi. All cameras complied with Commission requirements.

b. <u>Inventory and Storage</u>

Enforcement staff verified that all inventory-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Secure storage of marijuana and marijuana products;
- ii. Sanitation and pest control measures; and
- iii. Inventory controls and procedures.

c. Retail Operation

Enforcement staff verified that all retail-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Verification of identifications for access;
- ii. Layout of the sales floor; and
- iii. Availability and contents of adult-use consumer education materials.

d. Transportation

The licensee will not be performing transportation activities at this time.

RECOMMENDATION



Commission staff recommend final licensure with the following conditions:

- 1. The licensee may possess and otherwise acquire marijuana, but shall not dispense, sell, or otherwise transport marijuana to other Marijuana Establishments, or to consumers, until upon inspection, receiving permission from the Commission to commence full operations;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. Licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) prior to the issuance of a commencement of operations and that Commission staff be given adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.

The licensee has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the licensee is recommended for final licensure.





CLOUD CREAMERY, LLC

ESTABLISHMENT OVERVIEW

1. Name and address of the Marijuana Establishment:

Cloud Creamery, LLC 119 Herbert Street, Framingham, MA 01702

2. Type of final license sought (if cultivation, its tier level and outside/inside operation):

Product Manufacturing

3. The licensee is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The licensee is not an applicant or licensee for any other license type.

LICENSING OVERVIEW

- 4. The licensee was approved for provisional licensure for the above-mentioned license(s) on August 6, 2020.
- 5. The licensee has paid all applicable license fees.
- 6. No new information has been reported to Commission staff regarding the organizational structure of the entity since the issuance of the provisional license(s).
- 7. No new information has been discovered by Commission staff regarding the suitability of the licensees previously disclosed since the issuance of the provisional license(s).

INSPECTION OVERVIEW

8. Commission staff inspected the licensee's facility on the following date(s): February 4, 2021.



- 9. The licensee's facility was inspected by Commission staff and found to be in full compliance with the requirements listed in 935 CMR 500.105 through 935 CMR 500.160 as applicable.
- No evidence was discovered during the inspection(s) that indicated the Marijuana
 Establishment was not in compliance with all applicable state laws and local bylaws or
 ordinances.
- 11. Specific information from Commission staff's inspection is highlighted below:

Enforcement staff verified that all security-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. The security of all entrances and exits;
- ii. Visitor procedures;
- iii. Limited access areas;
- iv. Verification of a primary and back-up security company;
- v. Presence of perimeter and duress alarms; and
- vi. All cameras complied with Commission requirements.

b. <u>Inventory and Storage</u>

Enforcement staff verified that all inventory-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Secure storage of marijuana and marijuana products;
- ii. Sanitation and pest control measures; and
- iii. Inventory controls and procedures.

c. Product Manufacturing Operation

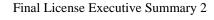
Enforcement staff verified that all manufacturing-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Proposed product compliance; and
- ii. Safety, sanitation, and security of the area and products.

d. Transportation

The licensee will not be performing transportation activities at this time.

RECOMMENDATION





Commission staff recommend final licensure with the following conditions:

- 1. The licensee may possess, prepare, produce, and otherwise acquire marijuana, but shall not sell, or otherwise transport marijuana to other Marijuana Establishments, until upon inspection, receiving permission from the Commission to commence full operations;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. Licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) prior to the issuance of a commencement of operations and that Commission staff be given adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.

The licensee has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the licensee is recommended for final licensure.





ELEVATED ROOTS, LLC

MR283092

ESTABLISHMENT OVERVIEW

1. Name and address of the Marijuana Establishment:

Elevated Roots, LLC 44 William C. Gould Jr. Way, Kingston, MA 02364

2. Type of final license sought (if cultivation, its tier level and outside/inside operation):

Retail

3. The licensee is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The licensee is not an applicant or licensee for any other license type.

LICENSING OVERVIEW

- 4. The licensee was approved for provisional licensure for the above-mentioned license(s) on June 4, 2020.
- 5. The licensee has paid all applicable license fees.
- 6. No new information has been reported to Commission staff regarding the organizational structure of the entity since the issuance of the provisional license(s).
- 7. No new information has been discovered by Commission staff regarding the suitability of the licensees previously disclosed since the issuance of the provisional license(s).

INSPECTION OVERVIEW

8. Commission staff inspected the licensee's facility on the following date(s): January 27, 2021.



- 9. The licensee's facility was inspected by Commission staff and found to be in full compliance with the requirements listed in 935 CMR 500.105 through 935 CMR 500.160 as applicable.
- 10. No evidence was discovered during the inspection(s) that indicated the Marijuana Establishment was not in compliance with all applicable state laws and local bylaws or ordinances.
- 11. Specific information from Commission staff's inspection is highlighted below:

Enforcement staff verified that all security-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. The security of all entrances and exits;
- ii. Visitor procedures;
- iii. Limited access areas;
- iv. Verification of a primary and back-up security company;
- v. Presence of perimeter and duress alarms; and
- vi. All cameras complied with Commission requirements.

b. <u>Inventory and Storage</u>

Enforcement staff verified that all inventory-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Secure storage of marijuana and marijuana products;
- ii. Sanitation and pest control measures; and
- iii. Inventory controls and procedures.

c. Retail Operation

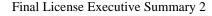
Enforcement staff verified that all retail-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Verification of identifications for access;
- ii. Layout of the sales floor; and
- iii. Availability and contents of adult-use consumer education materials.

d. Transportation

The licensee will not be performing transportation activities at this time.

RECOMMENDATION





Commission staff recommend final licensure with the following conditions:

- 1. The licensee may possess and otherwise acquire marijuana, but shall not dispense, sell, or otherwise transport marijuana to other Marijuana Establishments, or to consumers, until upon inspection, receiving permission from the Commission to commence full operations;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. Licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) prior to the issuance of a commencement of operations and that Commission staff be given adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.

The licensee has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the licensee is recommended for final licensure.





EMERALD GROVE, INC.

MR282808

ESTABLISHMENT OVERVIEW

1. Name and address of the Marijuana Establishment:

Emerald Grove, Inc.

3 Main Street, Unit 1, Eastham, MA 02642

2. Type of final license sought (if cultivation, its tier level and outside/inside operation):

Retail

3. The licensee is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Туре	Status	Location
Cultivation, Tier 1/Indoor	Provisional License	Middleborough
(up to 5,000 sq. ft.)		
Product Manufacturing	Provisional License	Middleborough
MTC	Provisional License	Eastham-Middleborough

LICENSING OVERVIEW

- 4. The licensee was approved for provisional licensure for the above-mentioned license(s) on June 4, 2020.
- 5. The licensee has paid all applicable license fees.
- 6. No new information has been reported to Commission staff regarding the organizational structure of the entity since the issuance of the provisional license(s).
- 7. No new information has been discovered by Commission staff regarding the suitability of the licensees previously disclosed since the issuance of the provisional license(s). One individual associated with this license provided documentation to Commission staff that demonstrated a legitimate hardship that prevented them from being fingerprinted at this time.



INSPECTION OVERVIEW

- 8. Commission staff inspected the licensee's facility on the following date(s): February 9, 2021.
- 9. The licensee's facility was inspected by Commission staff and found to be in full compliance with the requirements listed in 935 CMR 500.105 through 935 CMR 500.160 as applicable.
- 10. No evidence was discovered during the inspection(s) that indicated the Marijuana Establishment was not in compliance with all applicable state laws and local bylaws or ordinances.
- 11. Specific information from Commission staff's inspection is highlighted below:

a. Security

Enforcement staff verified that all security-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. The security of all entrances and exits;
- ii. Visitor procedures;
- iii. Limited access areas;
- iv. Verification of a primary and back-up security company;
- v. Presence of perimeter and duress alarms; and
- vi. All cameras complied with Commission requirements.

b. Inventory and Storage

Enforcement staff verified that all inventory-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Secure storage of marijuana and marijuana products;
- ii. Sanitation and pest control measures; and
- iii. Inventory controls and procedures.

c. Retail Operation

Enforcement staff verified that all retail-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Verification of identifications for access;
- ii. Layout of the sales floor; and
- iii. Availability and contents of adult-use consumer education materials.



d. Transportation

The licensee will not be performing transportation activities at this time.

RECOMMENDATION

Commission staff recommend final licensure with the following conditions:

- 1. The licensee may possess and otherwise acquire marijuana, but shall not dispense, sell, or otherwise transport marijuana to other Marijuana Establishments, or to consumers, until upon inspection, receiving permission from the Commission to commence full operations;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff;
- 5. Within 60 days of the removal of the State of Emergency declaration in Massachusetts, the licensee shall have the remaining individual fingerprinted and provide documentation to Commission staff to that effect; and
- 6. Licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) prior to the issuance of a commencement of operations and that Commission staff be given adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.

The licensee has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the licensee is recommended for final licensure.





GREENSTAR HERBALS, INC.

MR282207

ESTABLISHMENT OVERVIEW

1. Name and address of the Marijuana Establishment:

GreenStar Herbals, Inc. 22-24 Main Street, Maynard, MA 01754

2. Type of final license sought (if cultivation, its tier level and outside/inside operation):

Retail

3. The licensee is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Type	Status	Location
Retail	Commence Operations	Dracut
Retail	Provisional License	Chelsea

LICENSING OVERVIEW

- 4. The licensee was approved for provisional licensure for the above-mentioned license(s) on February 6, 2020.
- 5. The licensee has paid all applicable license fees.
- 6. No new information has been reported to Commission staff regarding the organizational structure of the entity since the issuance of the provisional license(s).
- 7. No new information has been discovered by Commission staff regarding the suitability of the licensees previously disclosed since the issuance of the provisional license(s).

INSPECTION OVERVIEW



- 8. Commission staff inspected the licensee's facility on the following date(s): February 10, 2021.
- 9. The licensee's facility was inspected by Commission staff and found to be in full compliance with the requirements listed in 935 CMR 500.105 through 935 CMR 500.160 as applicable.
- No evidence was discovered during the inspection(s) that indicated the Marijuana
 Establishment was not in compliance with all applicable state laws and local bylaws or
 ordinances.
- 11. Specific information from Commission staff's inspection is highlighted below:

Enforcement staff verified that all security-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. The security of all entrances and exits;
- ii. Visitor procedures;
- iii. Limited access areas;
- iv. Verification of a primary and back-up security company;
- v. Presence of perimeter and duress alarms; and
- vi. All cameras complied with Commission requirements.

b. <u>Inventory and Storage</u>

Enforcement staff verified that all inventory-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Secure storage of marijuana and marijuana products;
- ii. Sanitation and pest control measures; and
- iii. Inventory controls and procedures.

c. Retail Operation

Enforcement staff verified that all retail-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Verification of identifications for access;
- ii. Layout of the sales floor; and
- iii. Availability and contents of adult-use consumer education materials;

d. Transportation

The licensee will not be performing transportation activities at this time.



RECOMMENDATION

Commission staff recommend final licensure with the following conditions:

- 1. The licensee may possess and otherwise acquire marijuana, but shall not dispense, sell, or otherwise transport marijuana to other Marijuana Establishments, or to consumers, until upon inspection, receiving permission from the Commission to commence full operations;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. Licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) prior to the issuance of a commencement of operations and that Commission staff be given adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.

The licensee has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the licensee is recommended for final licensure.





HENNEP, INC. MR281450

ESTABLISHMENT OVERVIEW

1. Name and address of the Marijuana Establishment:

Hennep, Inc.

246 Commercial street, Provincetown, MA 02657

2. Type of final license sought (if cultivation, its tier level and outside/inside operation):

Retail

3. The licensee is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

An individual associated with this application are also associated with a cultivation and product manufacturing application under the name Hennep Cultivation, LLC.

LICENSING OVERVIEW

- 4. The licensee was approved for provisional licensure for the above-mentioned license(s) on April 9, 2020.
- 5. The licensee has paid all applicable license fees.
- 6. No new information has been reported to Commission staff regarding the organizational structure of the entity since the issuance of the provisional license(s).
- 7. No new information has been discovered by Commission staff regarding the suitability of the licensees previously disclosed since the issuance of the provisional license(s).

INSPECTION OVERVIEW

8. Commission staff inspected the licensee's facility on the following date(s): January 20, 2021.



- 9. The licensee's facility was inspected by Commission staff and found to be in full compliance with the requirements listed in 935 CMR 500.105 through 935 CMR 500.160 as applicable.
- No evidence was discovered during the inspection(s) that indicated the Marijuana
 Establishment was not in compliance with all applicable state laws and local bylaws or
 ordinances.
- 11. Specific information from Commission staff's inspection is highlighted below:

Enforcement staff verified that all security-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. The security of all entrances and exits;
- ii. Visitor procedures;
- iii. Limited access areas;
- iv. Verification of a primary and back-up security company;
- v. Presence of perimeter and duress alarms; and
- vi. All cameras complied with Commission requirements.

b. <u>Inventory and Storage</u>

Enforcement staff verified that all inventory-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Secure storage of marijuana and marijuana products;
- ii. Sanitation and pest control measures; and
- iii. Inventory controls and procedures.

c. Retail Operation

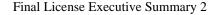
Enforcement staff verified that all retail-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Verification of identifications for access;
- ii. Layout of the sales floor; and
- iii. Availability and contents of adult-use consumer education materials.

d. Transportation

The licensee will not be performing transportation activities at this time.

RECOMMENDATION





Commission staff recommend final licensure with the following conditions:

- 1. The licensee may possess and otherwise acquire marijuana, but shall not dispense, sell, or otherwise transport marijuana to other Marijuana Establishments, or to consumers, until upon inspection, receiving permission from the Commission to commence full operations;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. Licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) prior to the issuance of a commencement of operations and that Commission staff be given adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.

The licensee has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the licensee is recommended for final licensure.





HYECORP, LLC

MR282460

ESTABLISHMENT OVERVIEW

1. Name and address of the Marijuana Establishment:

HyeCorp, LLC d/b/a Green4all 327 North Pear Street, Brockton, MA 02301

2. Type of final license sought (if cultivation, its tier level and outside/inside operation):

Retail

3. The licensee is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The licensee is not an applicant or licensee for any other license type.

LICENSING OVERVIEW

- 4. The licensee was approved for provisional licensure for the above-mentioned license(s) on May 7, 2020.
- 5. The licensee has paid all applicable license fees.
- 6. No new information has been reported to Commission staff regarding the organizational structure of the entity since the issuance of the provisional license(s).
- 7. No new information has been discovered by Commission staff regarding the suitability of the licensees previously disclosed since the issuance of the provisional license(s).

INSPECTION OVERVIEW

8. Commission staff inspected the licensee's facility on the following date(s): February 4, 2021.



- 9. The licensee's facility was inspected by Commission staff and found to be in full compliance with the requirements listed in 935 CMR 500.105 through 935 CMR 500.160 as applicable.
- 10. No evidence was discovered during the inspection(s) that indicated the Marijuana Establishment was not in compliance with all applicable state laws and local bylaws or ordinances.
- 11. Specific information from Commission staff's inspection is highlighted below:

Enforcement staff verified that all security-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. The security of all entrances and exits;
- ii. Visitor procedures;
- iii. Limited access areas;
- iv. Verification of a primary and back-up security company;
- v. Presence of perimeter and duress alarms; and
- vi. All cameras complied with Commission requirements.

b. <u>Inventory and Storage</u>

Enforcement staff verified that all inventory-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Secure storage of marijuana and marijuana products;
- ii. Sanitation and pest control measures; and
- iii. Inventory controls and procedures.

c. Retail Operation

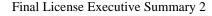
Enforcement staff verified that all retail-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Verification of identifications for access;
- ii. Layout of the sales floor; and
- iii. Availability and contents of adult-use consumer education materials.

d. Transportation

The licensee will not be performing transportation activities at this time.

RECOMMENDATION





Commission staff recommend final licensure with the following conditions:

- 1. The licensee may possess and otherwise acquire marijuana, but shall not dispense, sell, or otherwise transport marijuana to other Marijuana Establishments, or to consumers, until upon inspection, receiving permission from the Commission to commence full operations;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. Licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) prior to the issuance of a commencement of operations and that Commission staff be given adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.

The licensee has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the licensee is recommended for final licensure.





LEGAL GREENS, LLC

MR282937

ESTABLISHMENT OVERVIEW

1. Name and address of the Marijuana Establishment:

Legal Greens, LLC 73-75 Pleasant Street, Brockton, MA 02301

2. Type of final license sought (if cultivation, its tier level and outside/inside operation):

Retail

3. The licensee is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Туре	Status	Location
Delivery-Only (now, Marijuana Courier)	Provisional License	N/A

LICENSING OVERVIEW

- 4. The licensee was approved for provisional licensure for the above-mentioned license(s) on March 5, 2020.
- 5. The licensee has paid all applicable license fees.
- 6. No new information has been reported to Commission staff regarding the organizational structure of the entity since the issuance of the provisional license(s).
- 7. No new information has been discovered by Commission staff regarding the suitability of the licensees previously disclosed since the issuance of the provisional license(s).

INSPECTION OVERVIEW

8. Commission staff inspected the licensee's facility on the following date(s): January 9, 2021.



- 9. The licensee's facility was inspected by Commission staff and found to be in full compliance with the requirements listed in 935 CMR 500.105 through 935 CMR 500.160 as applicable.
- 10. No evidence was discovered during the inspection(s) that indicated the Marijuana Establishment was not in compliance with all applicable state laws and local bylaws or ordinances.
- 11. Specific information from Commission staff's inspection is highlighted below:

Enforcement staff verified that all security-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. The security of all entrances and exits;
- ii. Visitor procedures;
- iii. Limited access areas;
- iv. Verification of a primary and back-up security company;
- v. Presence of perimeter and duress alarms; and
- vi. All cameras complied with Commission requirements.

b. Inventory and Storage

Enforcement staff verified that all inventory-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Secure storage of marijuana and marijuana products;
- ii. Sanitation and pest control measures; and
- iii. Inventory controls and procedures.

c. Retail Operation

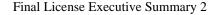
Enforcement staff verified that all retail-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Verification of identifications for access;
- ii. Layout of the sales floor; and
- iii. Availability and contents of adult-use consumer education materials.

d. Transportation

The licensee will not be performing transportation activities at this time.

RECOMMENDATION





Commission staff recommend final licensure with the following conditions:

- 1. The licensee may possess and otherwise acquire marijuana, but shall not dispense, sell, or otherwise transport marijuana to other Marijuana Establishments, or to consumers, until upon inspection, receiving permission from the Commission to commence full operations;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. Licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) prior to the issuance of a commencement of operations and that Commission staff be given adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.

The licensee has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the licensee is recommended for final licensure.





MASS WELLSPRING

MR281363

ESTABLISHMENT OVERVIEW

1. Name and address of the Marijuana Establishment:

Mass Wellspring 4-6 Nason Street, Maynard, MA 01754

2. Type of final license sought (if cultivation, its tier level and outside/inside operation):

Retail

3. The licensee is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Туре	Status	Location
MTC	Commence Operations	Acton - Acton

LICENSING OVERVIEW

- 4. The licensee was approved for provisional licensure for the above-mentioned license(s) on September 10, 2020.
- 5. The licensee has paid all applicable license fees.
- 6. No new information has been reported to Commission staff regarding the organizational structure of the entity since the issuance of the provisional license(s).
- 7. No new information has been discovered by Commission staff regarding the suitability of the licensees previously disclosed since the issuance of the provisional license(s).

INSPECTION OVERVIEW

8. Commission staff inspected the licensee's facility on the following date(s): January 21, 2021.

Final License Executive Summary 1



- The licensee's facility was inspected by Commission staff and found to be in full
 compliance with the requirements listed in 935 CMR 500.105 through 935 CMR 500.160 as
 applicable.
- No evidence was discovered during the inspection(s) that indicated the Marijuana
 Establishment was not in compliance with all applicable state laws and local bylaws or
 ordinances.
- 11. Specific information from Commission staff's inspection is highlighted below:

a. Security

Enforcement staff verified that all security-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. The security of all entrances and exits;
- ii. Visitor procedures;
- iii. Limited access areas;
- iv. Verification of a primary and back-up security company;
- v. Presence of perimeter and duress alarms; and
- vi. All cameras complied with Commission requirements.

b. Inventory and Storage

Enforcement staff verified that all inventory-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Secure storage of marijuana and marijuana products;
- ii. Sanitation and pest control measures; and
- iii. Inventory controls and procedures.

c. Retail Operation

Enforcement staff verified that all retail-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Verification of identifications for access;
- ii. Layout of the sales floor;
- iii. Availability and contents of adult-use consumer education materials;

d. Transportation

The licensee will not be performing transportation activities at this time.

RECOMMENDATION



Commission staff recommend final licensure with the following conditions:

- 1. The licensee may possess and otherwise acquire marijuana, but shall not dispense, sell, or otherwise transport marijuana to other Marijuana Establishments, or to consumers, until upon inspection, receiving permission from the Commission to commence full operations;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. Licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) prior to the issuance of a commencement of operations and that Commission staff be given adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.

The licensee has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the licensee is recommended for final licensure.

As part of the approval of final licensure, the Commission authorizes staff to take all necessary actions to review compliance with the above-referenced conditions and to approve the commencement of operations.





NATURE'S EMBRACE, INC.

MR282669

ESTABLISHMENT OVERVIEW

1. Name and address of the Marijuana Establishment:

Nature's Embrace, Inc. 747 Centre Street, Brockton, MA 02302

2. Type of final license sought (if cultivation, its tier level and outside/inside operation):

Retail

3. The licensee is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The licensee is not an applicant or licensee for any other license type.

LICENSING OVERVIEW

- 4. The licensee was approved for provisional licensure for the above-mentioned license(s) on May 7, 2020.
- 5. The licensee has paid all applicable license fees.
- 6. No new information has been reported to Commission staff regarding the organizational structure of the entity since the issuance of the provisional license(s).
- 7. No new information has been discovered by Commission staff regarding the suitability of the licensees previously disclosed since the issuance of the provisional license(s).

INSPECTION OVERVIEW

8. Commission staff inspected the licensee's facility on the following date(s): February 10, 2021.

Final License Executive Summary 1



- 9. The licensee's facility was inspected by Commission staff and found to be in full compliance with the requirements listed in 935 CMR 500.105 through 935 CMR 500.160 as applicable.
- No evidence was discovered during the inspection(s) that indicated the Marijuana
 Establishment was not in compliance with all applicable state laws and local bylaws or
 ordinances.
- 11. Specific information from Commission staff's inspection is highlighted below:

a. Security

Enforcement staff verified that all security-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. The security of all entrances and exits;
- ii. Visitor procedures;
- iii. Limited access areas;
- iv. Verification of a primary and back-up security company;
- v. Presence of perimeter and duress alarms; and
- vi. All cameras complied with Commission requirements.

b. <u>Inventory and Storage</u>

Enforcement staff verified that all inventory-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Secure storage of marijuana and marijuana products;
- ii. Sanitation and pest control measures; and
- iii. Inventory controls and procedures.

c. Retail Operation

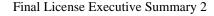
Enforcement staff verified that all retail-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Verification of identifications for access;
- ii. Layout of the sales floor;
- iii. Availability and contents of adult-use consumer education materials;

d. Transportation

The licensee will not be performing transportation activities at this time.

RECOMMENDATION





Commission staff recommend final licensure with the following conditions:

- 1. The licensee may possess and otherwise acquire marijuana, but shall not dispense, sell, or otherwise transport marijuana to other Marijuana Establishments, or to consumers, until upon inspection, receiving permission from the Commission to commence full operations;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. Licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) prior to the issuance of a commencement of operations and that Commission staff be given adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.

The licensee has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the licensee is recommended for final licensure.

As part of the approval of final licensure, the Commission authorizes staff to take all necessary actions to review compliance with the above-referenced conditions and to approve the commencement of operations.





SUPERCRITICAL MASS LABORATORIES, INC.

MP281321

ESTABLISHMENT OVERVIEW

1. Name and address of the Marijuana Establishment:

Supercritical Mass Laboratories, Inc. 251 Brooks St., Worcester, MA 01606

2. Type of final license sought (if cultivation, its tier level and outside/inside operation):

Product Manufacturing

3. The licensee is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The licensee is not an applicant or licensee for any other license type.

LICENSING OVERVIEW

- 4. The licensee was approved for provisional licensure for the above-mentioned license(s) on April 9, 2020.
- 5. The licensee has paid all applicable license fees.
- 6. No new information has been reported to Commission staff regarding the organizational structure of the entity since the issuance of the provisional license(s).
- 7. No new information has been discovered by Commission staff regarding the suitability of the licensees previously disclosed since the issuance of the provisional license(s).

INSPECTION OVERVIEW

8. Commission staff inspected the licensee's facility on the following date(s): February 1, 2021.

Final License Executive Summary 1



- 9. The licensee's facility was inspected by Commission staff and found to be in full compliance with the requirements listed in 935 CMR 500.105 through 935 CMR 500.160 as applicable.
- 10. No evidence was discovered during the inspection(s) that indicated the Marijuana Establishment was not in compliance with all applicable state laws and local bylaws or ordinances.
- 11. Specific information from Commission staff's inspection is highlighted below:

a. Security

Enforcement staff verified that all security-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. The security of all entrances and exits;
- ii. Visitor procedures;
- iii. Limited access areas;
- iv. Verification of a primary and back-up security company;
- v. Presence of perimeter and duress alarms; and
- vi. All cameras complied with Commission requirements.

b. <u>Inventory and Storage</u>

Enforcement staff verified that all inventory-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Secure storage of marijuana and marijuana products;
- ii. Sanitation and pest control measures; and
- iii. Inventory controls and procedures.

c. Product Manufacturing Operation

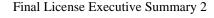
Enforcement staff verified that all manufacturing-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Proposed product compliance; and
- ii. Safety, sanitation, and security of the area and products.

d. Transportation

The licensee will not be performing transportation activities at this time.

RECOMMENDATION





Commission staff recommend final licensure with the following conditions:

- 1. The licensee may possess, prepare, produce, and otherwise acquire marijuana, but shall not sell, or otherwise transport marijuana to other Marijuana Establishments, until upon inspection, receiving permission from the Commission to commence full operations;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff; and
- 5. Licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 500.105(1) prior to the issuance of a commencement of operations and that Commission staff be given adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business.

The licensee has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the licensee is recommended for final licensure.

As part of the approval of final licensure, the Commission authorizes staff to take all necessary actions to review compliance with the above-referenced conditions and to approve the commencement of operations.





ACK NATURAL, INC.

ESTABLISHMENT OVERVIEW

1. Name and address(es) of the Medical Marijuana Treatment Center:

ACK Natural, Inc.

Cultivation: 17 Spearhead Drive, Nantucket, MA 02254

Product Manufacturing: 17 Spearhead Drive, Nantucket, MA 02254

Dispensary: 17 Spearhead Drive, Nantucket, MA 02254

2. The licensee is a licensee or applicant for other Medical Marijuana Treatment Center and/or Marijuana Establishment license(s):

Туре	Status	Location
Cultivation, Tier 1/Indoor/	Provisional License	Nantucket
(up to 5,000 sq. ft.)		
Product Manufacturing	Provisional License	Nantucket
Retail	Provisional License	Nantucket

LICENSING OVERVIEW

- 3. The licensee was approved for provisional licensure on October 10, 2019.
- 4. The licensee has paid all applicable license fees.
- 5. No new information has been reported to Commission staff regarding the organizational structure of the entity since the issuance of the provisional license.
- 6. No new information has been discovered by Commission staff regarding the suitability of the licensee(s) previously disclosed since the issuance of the provisional license.

INSPECTION OVERVIEW

7. Commission staff inspected the licensee's Medical Marijuana Treatment Center on the following date(s): February 4, 2021.

MTC Final License Executive Summary 1



- 8. The licensee's Medical Marijuana Treatment Center was inspected by Commission staff and found to be in full compliance with the requirements listed in 935 CMR 501.000, as applicable.
- 9. No evidence was discovered during the inspection(s) that indicated the Medical Marijuana Treatment Center was not in compliance with all applicable state and local bylaws or ordinances.
- 10. Specific information from Commission staff's inspection is highlighted below:

a. Security

Enforcement staff verified that all security-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. The security of all entrances and exits;
- ii. Visitor procedures;
- iii. Limited access areas;
- iv. Verification of a primary and back-up security company;
- v. Presence of perimeter and duress alarms; and
- vi. All cameras complied with Commission requirements.

b. <u>Inventory and Storage</u>

Enforcement staff verified that all inventory-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Secure storage of marijuana and marijuana products;
- ii. Sanitation and pest control measures; and
- iii. Inventory controls and procedures.

c. Cultivation Operation

Enforcement staff verified that all cultivation operations were in compliance with the Commission's regulations. Some of the requirements verified include the following:

- i. Seed-to-sale tracking;
- ii. Compliance with applicable pesticide laws and regulations; and
- iii. Best practices to limit contamination.

d. Product Manufacturing Operation

Enforcement staff verified that all manufacturing-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

MTC Final License Executive Summary 2



- i. Proposed product compliance; and
- ii. Safety, sanitation, and security of the area and products.

e. Retail Operation

Enforcement staff verified that all retail-related requirements were in full compliance with Commission regulations. Some of the requirements verified include the following:

- i. Verification of identifications for access;
- ii. Layout of the sales floor;
- iii. Availability and contents of patient education materials; and
- iv. Policies to ensure dispensing limits are followed.

f. Transportation

The licensee will not be performing transportation activities at this time.

Additionally, the licensee presented Commission staff with their alternative testing protocols pursuant to 935 CMR 501.200.

RECOMMENDATION

Commission staff recommend final licensure with the following conditions:

- 1. The licensee may cultivate, harvest, possess, prepare, produce, and otherwise acquire marijuana, but shall not dispense, sell, or otherwise transport marijuana to other Medical Marijuana Treatment Centers, or to patients, until upon inspection, receiving permission from the Commission to commence full operations;
- 2. The licensee is subject to inspection to ascertain compliance with Commission regulations and proposed alternative testing protocols;
- 3. The licensee remains suitable for licensure;
- 4. The licensee shall cooperate with and provide information to Commission staff;
- 5. Licensure is subject to notification to the Commission of any update to written operations plans required by 935 CMR 501.105(1) prior to the issuance of a commencement of operations and that Commission staff be given adequate opportunity to review said plans at the business location or the location where any such plans are maintained in the normal course of business;
- 6. The licensee may perform on-site laboratory testing operations for its marijuana and marijuana products in accordance with the proposed testing protocols provided to the Commission pursuant to 935 CMR 501.200;
- 7. The licensee shall maintain, and make available to the Commission, all laboratory testing results:
- 8. The licensee shall inform the Commission of any non-compliant laboratory testing results within 48 hours of detection;



- 9. The licensee shall inform the Commission of any defective or non-working equipment used in the establishment's on-site testing laboratory within 48 hours of detection; and
- 10. The licensee shall inform the Commission when any device or piece of equipment used at the establishment's on-site testing laboratory is sent out for calibration, repair, or maintenance within 48 hours.

The licensee has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the licensee is recommended for final licensure.

As part of the approval of final licensure, the Commission authorizes staff to take all necessary actions to review compliance with the above-referenced conditions and to approve the commencement of operations.



311 PAGE BLVD, LLC

MRN282714

BACKGROUND & APPLICATION OF INTENT REVIEW

1.	Name an	d address	of the	proposed	Marijuana	Establishment:

- 311 Page Blvd, LLC
- 311 Page Boulevard, Springfield, MA 01104
- 2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Retail

The application was reopened one (1) times for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The applicant is not an applicant or licensee for any other license type.

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Timothy Rooke	Owner / Partner
John Gallaher	Owner / Partner

5. List of all required entities and their roles in the Marijuana Establishment:

No other entity appears to have ownership or control over this proposed Marijuana Establishment.

6. Applicant's priority status:

General Applicant



- 7. The applicant and municipality executed a Host Community Agreement on September 23, 2019.
- 8. The applicant conducted a community outreach meeting on November 19, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission sent the municipal notice to the City/Town of Springfield on December 17, 2020. To date, the Commission has not received a response.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Commit to provide all employees with a minimum of eight (8) hours paid
	time to participate in a neighborhood clean-up initiative that serves identified
	areas of disproportionate impact, specifically Springfield.
2	Contribute a minimum annual financial contribution of at least \$5,000 to the
	CultivatED program to help promote participation in the cannabis industry by
	those who have been disproportionately harmed by marijuana prohibition.

SUITABILITY REVIEW

- 11. There were no disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

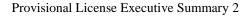
MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within four (4) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Monday – Sunday: 9:00 a.m. – 8:00 p.m.

- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:

- 11	
#	Goal
TT	Ovai





- Recruit a diverse workforce that is as inclusive as possible with a goal of having a workforce made up of at least 50% women, 25% minorities, and 10% individuals who are LGBTQ+, have disabilities and/or are veterans.
- Ensure that at least 15% of participants in its supply chain and ancillary services are owned and/or managed by minorities, women, veterans, people with disabilities, and/or LGBTQ+ individuals.
- 17. Plan for obtaining marijuana or marijuana products (if applicable):
 - 311 Page Blvd, LLC will obtain marijuana or marijuana products by contracting with other licensed establishments.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. The applicant shall cooperate with and provide information to Commission staff; and
- 4. Provisional licensure is subject to the payment of the appropriate license fee.

The applicant has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the applicant is recommended for provisional licensure.





CHARLEMONT FARMWORKS, LLC

MCN283116

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

Charlemont Farmworks, LLC 1947 Route 2, Charlemont, MA 01339

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Cultivation, Tier 11/ Outdoor (90,001 – 100,000 sq. ft.)

The application was reopened two (2) times for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The applicant is not an applicant or licensee for any other license type.

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Jonathan Healy	Owner

5. List of all required entities and their roles in the Marijuana Establishment:

No other entity appears to have ownership or control over this proposed Marijuana Establishment.

6. Applicant's priority status:

Expedited Applicant (License Type)

7. The applicant and municipality executed a Host Community Agreement on October 14, 2020.



- 8. The applicant conducted a community outreach meeting on November 18, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission received a municipal response from the municipality on January 28, 2021 stating the applicant was in compliance with all local ordinances or bylaws.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Recruit 20% of employees that are from disproportionately harmed by
	cannabis prohibition, specifically Amherst, Greenfield, and North Adams.
2	Provide educational sessions on the types of jobs available in the cannabis
	industry, business planning, finance, operations, and farming and licensing
	two (2) times a year for a minimum of 4 hours per session.
3	Provide one on one mentoring sessions a minimum of four (4) times per year
	to benefit two (2) people from disproportionately impacted areas, specifically
	Amherst, Greenfield, and North Adams.
4	Encourage a minimum of 30% of its employees to volunteer at the Food Bank
	of Western Massachusetts for 16 hours per year.
5	Contribute an annual donation to the Food Bank of Western Massachusetts.

SUITABILITY REVIEW

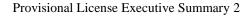
- 11. There were disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions. None of the disclosures raised suitability issues.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within one (1) year of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Monday – Sunday: 4:00 a.m. – 11:00 p.m.

15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.





16. The applicant proposed the following goals for its Diversity Plan:

#	Goal
1	Recruit 30% of minorities, women, veterans, people with disabilities, and
	LGBTQ+ for its hiring initiatives.
2	Host two (2), four (4) hour industry-specific educational sessions annually.
3	Obtain quotes and bids from four (4) businesses or service providers per year
	that are owned or have a large percentage of employees that are minorities,
	women, veterans, people with disabilities, and LGBTQ+ when looking to hire
	outside contracting work and service providers.

17. Summary of cultivation plan (if applicable):

The applicant submitted a cultivation plan that demonstrates the ability to comply with the Commission's regulations.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. The applicant shall cooperate with and provide information to Commission staff; and
- 4. Provisional licensure is subject to the payment of the appropriate license fee.

The applicant has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the applicant is recommended for provisional licensure.





ELEVATION, INC.

MRN281472

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

Elevation, Inc. 156-162 Main Street, Brockton, MA 02301

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Retail

The application was reopened two (2) times for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The applicant is not an applicant or licensee for any other license type.

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Victor Teixeira	Owner / Partner
Jose Andrade	Owner / Partner

5. List of all required entities and their roles in the Marijuana Establishment:

No other entity appears to have ownership or control over this proposed Marijuana Establishment.

6. Applicant's priority status:

Expedited Applicant (Social Equity Participant) (Minority-Owned) (51% ownership—Victor Teixeira—SE303907)



- 7. The applicant and municipality executed a Host Community Agreement on November 7, 2019.
- 8. The applicant conducted a community outreach meeting on February 5, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission received a municipal response from the municipality on February 18, 2021 stating the applicant was in compliance with all local ordinances or bylaws.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Recruit 10% of staff that are past or present residents of the City of Brockton
	and 10% of staff that are Massachusetts residents who have past drug
	convictions or whose parents or spouses have drug convictions.
2	Provide business assets or other benefits for past or present residents of
	Brockton through annual monetary donations of \$2,000 to the Old Colony
	YMCA.

SUITABILITY REVIEW

- 11. There were disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions. None of the disclosures raised suitability issues.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within ten (10) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Monday – Sunday: 8:00 a.m. – 8:00 p.m.

- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:



#	Goal
1	Recruit and maintain a staff of individuals with diverse backgrounds consisting
	of women (35%) and minorities (35%).
2	Host one (1) annual career fair, in Brockton, in partnership with local
	organizations to assist minorities, women, veterans, people with disabilities, and
	individuals who identify as LGBTQ+.
3	Host, mandatory, bi-annual trainings for all staff members on cultural sensitivity
	and recognizing unconscious bias.

17. Plan for obtaining marijuana or marijuana products (if applicable):

Elevation, Inc. will obtain marijuana or marijuana products by contracting with other licensed establishments.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. The applicant shall cooperate with and provide information to Commission staff; and
- 4. Provisional licensure is subject to the payment of the appropriate license fee.

The applicant has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the applicant is recommended for provisional licensure.





FADED, LLC

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

Faded, LLC d/b/a Your Green Package 190 Farm Street, Suite B, Bellingham, MA 02019

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Delivery-Only (now, Marijuana Courier)

The application was reopened two (2) times for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The applicant is not an applicant or licensee for any other license type.

- 4. The applicant was pre-certified by the Commission for Delivery-Only (Marijuana Courier) on July 7, 2020 under application number PDOA103132. Pursuant to 935 CMR 500.101(2)(c)(3), the applicant demonstrated a propensity to successfully operate a Marijuana Establishment.
- 5. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Lourdharry Pauyo	Manager
Christopher Fevry	Manager
John Muise	Manager

6. List of all required entities and their roles in the Marijuana Establishment:

Entity	Role



Grow Global Investments, Inc.	Capital Contributor
Grow Grobal investments, inc.	Capital Collinoutor

7. Applicant's priority status:

Expedited Applicant (Social Equity Participant, Minority- and Woman-Owned) (51% ownership—Lourdharry Pauyo—SE304880)

- 8. The applicant and municipality executed a Host Community Agreement on December 22, 2020.
- 9. The applicant conducted a community outreach meeting on December 30, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 10. The Commission received a municipal response from the municipality on February 11, 2021 stating the applicant was in compliance with all local ordinances or bylaws.
- 11. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Increase financial literacy levels among young adults (21+) in Commission-
	designated disproportionately impacted areas such as the City of Brockton by
	hosting a financial literacy course once per year.
2	Pay for a monthly corporate sponsorship from the Massachusetts Cannabis
	Association for Delivery & Social Consumption once operating profit has
	been reached.
3	Recruit 30% of its workforce from areas that were disproportionately
	impacted, specifically, Brockton.

SUITABILITY REVIEW

- 12. There were no disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions.
- 13. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

- 14. The applicant states that it can be operational within three (3) months of receiving the provisional license(s).
- 15. The applicant's proposed hours of operation are the following:

Monday – Sunday: 8:00 a.m. – 9:00 p.m.



- 16. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 17. The applicant proposed the following goals for its Diversity Plan:

#	Goal
1	Executive Leadership and Board will be made up of minorities (40%) and
	women (40%).
2	Recruit minorities (50%), women (25%), individuals who identify as LGBTQ+
	(10%), people with disabilities (10%) and veterans (15%) for its hiring
	initiatives.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. The applicant shall cooperate with and provide information to Commission staff; and
- 4. Provisional licensure is subject to the payment of the appropriate license fee.

The applicant has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the applicant is recommended for provisional licensure.





GTE MILLIS, LLC

MPN281965

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

GTE Millis, LLC 1480 Main Street, Millis, MA 02054

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Product Manufacturing

The application was reopened once (1) for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Туре	Status	Location
Cultivation, Tier 6/Indoor (40,001 to	Provisional License	Millis
50,000 sq. ft.)		

Individuals and entities associated with this application are also associated with a retail application under the names of GTE Taunton, LLC and GTE Franklin, LLC.

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Chirag Patel	Manager, CEO, Manager of the Parent Company
Hardik Patel	Manager of Parent Company
Jack Patel	Manager of Parent Company
Indravadan Patel	Manager of Parent Company
Mahendra Patel	Manager of Parent Company

5. List of all required entities and their roles in the Marijuana Establishment:



Entity	Role
Green Tech Enterprises, Inc.	Parent Company of GTE Millis LLC
GTE Partners LLC	Parent Company of Green Tech Enterprises, Inc.
GTE Realty LLC	Capital Contributor

6. Applicant's priority status:

Expedited Applicant (Minority-Owned)

- 7. The applicant and municipality executed a Host Community Agreement on September 14, 2020.
- 8. The applicant conducted a community outreach meeting on July 30, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission received a municipal response from the municipality on February 24, 2021 stating the applicant was in compliance with all local ordinances or bylaws.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Make a minimum annual financial contribution of at least \$5,000 to Safe
	Coalition.
2	Provide all employees with a minimum of 8 hours paid time to participate in a
	neighborhood clean-up initiative that serves identified areas of
	disproportionate impact, specifically Taunton and Mansfield.

SUITABILITY REVIEW

- 11. There were no disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within a year and seven (7) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Monday – Sunday: 8:00 a.m. – 9:00 p.m.



- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:

#	Goal
1	Hire a workforce that is at least 50% women and 20% minorities, 10 %
	LGBTQ+ and persons with non-normative sexual identities, and 5% veterans
	and persons with disabilities.
2	Work with at least 25% of businesses who identify as one of the target groups
	throughout its supply chain and ancillary services.

17. Summary of products to be produced and/or sold (if applicable):

#	Product
1	Flower, packaged (1 gram and 3.5 grams)
2	Flower, pre-roll (0.75 grams and 1 gram)
3	Distillate, vape cartridge (0.5 gram and 1 gram)
4	Distillate, syringe (1 gram)
5	Distillate, oral tincture (0.5 gram, 1 gram)
6	Distillate, transdermal patch (35 milligram/patch)
7	MIP, topical stick (20 milligram, 500 milligram)
8	MIP, topical lotion (20 milligrams, 150 milligrams, 500 milligrams)
9	MIP, gummies (5 milligrams each), Round, Cherry, apple, lemon, citrus
10	MIP, lozenges (5 mg each) Round, Lemon
11	MIP, chocolate pearls (5 mg*) Round, Milk and Dark Chocolate

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. Final licensure is subject to the applicant providing Commission staff, upon inspection, with a detailed list of all proposed products to be produced with specific information as to types, forms, shapes, colors, and flavors;
- 4. The applicant shall cooperate with and provide information to Commission staff; and
- 5. Provisional licensure is subject to the payment of the appropriate license fee.



The applicant has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the applicant is recommended for provisional licensure.
Provisional License Executive Summary 4



LOVEWELL PROVISIONS, LLC

MRN283413

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

Lovewell Provisions, LLC d/b/a Paper Crane Cannabis 56 Gardner Rd., Suite A, Hubbardston, MA 01452

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Retail

The application was reopened three (3) times for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The applicant is not an applicant or licensee for any other license type. However, the individual associated with application is also associated with applications under "Paper Crane Provisions, LLC".

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Boey Bertold	Owner / Partner

5. List of all required entities and their roles in the Marijuana Establishment:

No other entity appears to have ownership or control over this proposed Marijuana Establishment.

6. Applicant's priority status:

Expedited Applicant (Social Equity Participant)



(75% ownership—Boey Bertold—SE303555)

- 7. The applicant and municipality executed a Host Community Agreement on May 7, 2020.
- 8. The applicant conducted a community outreach meeting on December 20, 2019 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission sent the municipal notice to the City/Town of Hubbardston on December 17, 2020. To date, the Commission has not received a response.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal	
1	Provide record sealing/expungement services for one (1) Economic	
	Empowerment or Social Equity applicant per year.	
2	Lovewell Provisions will hire 20% of its staff that are MA residents from	
	areas of disproportionate impact, specifically Fitchburg, Worcester, Lowell,	
	prioritizing those with past non-violent drug convictions.	
3	Quarterly community workshops and outreach to reduce barriers to entry to	
	Adult-Use cannabis industry in MA.	

SUITABILITY REVIEW

- 11. There were disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions. None of the disclosures raised suitability issues.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within four (4) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Monday – Sunday: 10:00 a.m. – 8:00 p.m.

- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:



#	Goal	
1	Recruit 25% women, 15% minorities, 10% people who identify as LGBTQ+ for	
	its hiring initiatives.	
2	Promote two (2) individuals per year who are women, minorities, and people	
	who identify as LGBTQ+ to positions of management.	

17. Plan for obtaining marijuana or marijuana products (if applicable):

Lovewell Provisions, LLC will obtain marijuana or marijuana products by contracting with other licensed establishments.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. The applicant shall cooperate with and provide information to Commission staff; and
- 4. Provisional licensure is subject to the payment of the appropriate license fee.

The applicant has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the applicant is recommended for provisional licensure.





NOBLE MANNA, INC.

MRN282984

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

Noble Manna, Inc. 47 Milford Street, Mendon, MA 01756

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Retail

The application was reopened one (1) time for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The applicant is not an applicant or licensee for any other license type.

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Bruce Spinney	Owner / Partner

5. List of all required entities and their roles in the Marijuana Establishment:

Entity	Role
Cannapreneur Partners, LLC	Capital Contributor

6. Applicant's priority status:

Expedited Applicant (Veteran-Owned Business)

7. The applicant and municipality executed a Host Community Agreement on December 11, 2019.



- 8. The applicant conducted a community outreach meeting on October19, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission sent the municipal notice to the City/Town of Mendon on December 10, 2020. To date, the Commission has not received a response.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Donate a total of \$5,000, annually, to New England Veterans Alliance.
2	Provide \$2,500, annually, to its Cannabis Expungement Program that will
	provide financial assistance for legal/filing fees for up to five (5) individuals
	from areas of disproportionate impact attempting to expunge cannabis
	criminal charges from their record. Noble Manna will identify an attorney to
	volunteer their time to help individuals with completing the necessary
	expungement paperwork.

SUITABILITY REVIEW

- 11. There were disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions. None of the disclosures raised suitability issues.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within eight (8) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Monday – Thursday: 10:00 a.m. – 10:00 p.m. Friday – Saturday: 10:00 a.m. – 11:00 p.m.

Sunday: 10:00 a.m. − 8:00 p.m.

- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:



7	#	Goal
	1	Achieve at least 35% of its staffing needs from minorities.

17. Plan for obtaining marijuana or marijuana products (if applicable):

Noble Manna, Inc. will obtain marijuana or marijuana products by contracting with other licensed establishments.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. The applicant shall cooperate with and provide information to Commission staff; and
- 4. Provisional licensure is subject to the payment of the appropriate license fee.

The applicant has demonstrated compliance with the laws and regulations of the Commonwealth and suitability for licensure. Therefore, the applicant is recommended for provisional licensure.





NUESTRA, LLC MRN281469

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

Nuestra, LLC d/b/a The Boston Garden 200 Monsignor O'Brien Highway, Cambridge, MA 02141

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Retail

The application was reopened two (2) times for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Туре	Status	Location
Retail	Application Submitted	Newton

Individuals and entities associated with this application are also associated with a retail application under the name The Blue Jay Botanicals, Inc d/b/a The Boston Garden Dispensary and a cultivation and product manufacturing application under the name Commonwealth Farm 1761, Inc.

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Renata Caines	Executive / Officer
Ivelise Rivera	Owner / Partner
Shaquille Anderson	Manager
Jonathan Tucker	Executive / Officer
Tara Tucker	Manager
Arthur White	Person with Direct or Indirect Authority



5. List of all required entities and their roles in the Marijuana Establishment:

Entity	Role
Herban Legends of Boston, LLC	Entity with Direct or Indirect Authority
Mikaz, LLC	Entity with Direct or Indirect Authority
Commonwealth Farm 1761, Inc.	Capital Contributor

6. Applicant's priority status:

Economic Empowerment Applicant (Ivelise Rivera/Renata Caines—51% ownership—EE202121)

- 7. The applicant and municipality executed a Host Community Agreement on January 21, 2021
- 8. The applicant conducted a community outreach meeting on July 14, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission received a municipal response from the municipality on February 16, 2021 stating the applicant was in compliance with all local ordinances or bylaws.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Host a four (4) hour CORI sealing clinic, annually, in geographic areas of
	disproportionate impact, specifically Quincy and Chelsea.

SUITABILITY REVIEW

- 11. There were no disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within seven (7) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:



Monday – Saturday: 10:00 a.m. – 9:00 p.m.

Sunday: 12:00 p.m. − 8:00 p.m.

15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.

16. The applicant proposed the following goals for its Diversity Plan:

#	Goal
1	Host at least one (1) job fair annually with at least 25% of all open positions
	filled with applicants hired from the fair, subject to the suitability of the
	applicants, and will specifically make best efforts to hire at least 50% employees
	that are women, 20% candidates that are minorities and 10% employees that
	identify as veterans, LGBTQ, and with a disability
2	Nuestra will offer promotions, career counseling, and training to provide all
	(100%) employees with equal opportunity for growth and to decrease turnover.

17. Plan for obtaining marijuana or marijuana products (if applicable):

Nuestra, LLC will obtain marijuana or marijuana products by contracting with other licensed establishments.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. The applicant shall cooperate with and provide information to Commission staff; and
- 4. Provisional licensure is subject to the payment of the appropriate license fee.





PAPER CRANE PROVISIONS, LLC

MCN282687 MPN281904

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

Paper Crane Provisions, LLC 56 Gardner Rd, Suite B, Hubbardston, MA 01452

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Cultivation, Tier 3/Indoor (10,001 – 20,000 sq. ft.) Product Manufacturing

The application was reopened three (3) times for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Individuals associated with this application are also associated with a retail application under the name Lovewell Provisions, LLC.

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Boey Bertold	Owner / Partner

5. List of all required entities and their roles in the Marijuana Establishment:

No other entity appears to have ownership or control over this proposed Marijuana Establishment.

6. Applicant's priority status:

Expedited Applicant (Social Equity Participant)



(SEP majority-owned—Boey Bertold—SE303555)

- 7. The applicant and municipality executed a Host Community Agreement on May 7, 2020.
- 8. The applicant conducted a community outreach meeting on January 6, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission sent the municipal notice to the City/Town of Hubbardston on December 17, 2020. To date, the Commission has not received a response.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Provide record sealing or expungement services for one (1) Economic
	Empowerment or Social Equity applicant from Fitchburg, Worcester, or
	Lowell.
2	Prioritizing hiring of 20% of residents from Fitchburg, Worcester, or Lowell.
3	Host free, quarterly industry-specific workshops and seminars.

SUITABILITY REVIEW

- 11. There were disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions. None of the disclosures raised suitability issues.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within seven (7) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Cultivation Operations

Monday − Saturday: 7:00 a.m. − 6:00 p.m.

Sunday: 8:00 a.m. -4:00 p.m.

Product Manufacturing Operations

Monday – Friday: 9:00 a.m. – 5:00 p.m.

Saturday: 10:00 a.m. − 5:00 p.m.

Sunday: Closed



- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:

#	Goal
1	Recruit 25% women, 15% minorities, and 10% individuals who identify as
	LGBTQ+ for its hiring initiatives.
2	Promote two (2) individuals, annually, who are women, minorities, and
	individuals who identify as LGBTQ+.

17. Summary of cultivation plan (if applicable):

The applicant submitted a cultivation plan that demonstrates the ability to comply with the Commission's regulations.

18. Summary of products to be produced and/or sold (if applicable):

#	Product
1	Ice-Water Extract (Bubble Hash)
2	Solvent-less Hash Oil (Rosin)

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. Final licensure is subject to the applicant providing Commission staff, upon inspection, with a detailed list of all proposed products to be produced with specific information as to types, forms, shapes, colors, and flavors;
- 4. The applicant shall cooperate with and provide information to Commission staff; and
- 5. Provisional licensure is subject to the payment of the appropriate license fee.





PHARMACANNIS MASSACHUSETTS, INC.

MRN283436

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

Pharmacannis Massachusetts, Inc. d/b/a Verilife 164 Grove Street, Franklin, MA 02038

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Retail

The application was reopened two (2) times for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Туре	Status	Location
Cultivation, Tier 7/Indoor (50,001 – 60,000 sq. ft.)	Provisional License	Holliston
Retail	Commence Operations	Wareham
Commence Operations	Commence Operations	Shrewsbury
MTC	Commence Operations	Wareham – Holliston
MTC	Provisional License	Franklin – Holliston
MTC	Application Submitted	Shrewsbury – Holliston

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Brett Novey	Executive / Officer
Mehul Patel	Executive / Officer
Daniel Roth	Executive / Officer



John McCarthy	Board Member
Michelle Stormo	Executive / Officer
Gregory Cappelli	Board Member
James Barry	Board Member
Stephen Schuler	Board Member
Norah Scott	Investor
Daniel Tierney	Investor
Brett Novey	Close Associate

5. List of all required entities and their roles in the Marijuana Establishment:

Entity	Role
PharmaCann, Inc.	Parent Company

6. Applicant's priority status:

MTC Priority

- 7. The applicant and municipality executed a Host Community Agreement on May 17, 2018.
- 8. The applicant conducted a community outreach meeting on August 6, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission received a municipal response from the municipality on February 2, 2021 stating the applicant was in compliance with all local ordinances or bylaws.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Contribute volunteer time and annual contribution of \$2,000 to Turning Point.
2	Provide \$5,000 donation to Shrewsbury Youth and Family Services in 2021.
3	Recruit 20% or more individuals that are from Commission-designated
	geographic areas of disproportionate impact, including Worcester, Wareham,
	Mansfield and/or Walpole; Massachusetts residents who have had past drug
	convictions; and/or Massachusetts residents with parents or spouses who have
	drug convictions
4	Participate in neighborhood clean-up initiatives, specifically in Wareham on a
	annual basis.
5	Contribute at least \$10,000 to the CultivatED program, or a similar program,
	to help promote participation in the cannabis industry by those who were
	disproportionately harmed by marijuana prohibition.

SUITABILITY REVIEW



- 11. There were disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions. None of the disclosures raised suitability issues.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within four (4) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Monday – Sunday: 9:00 a.m. – 9:00 p.m.

- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:

#	Goal	
1	Recruit minorities (22%), women (52%), individuals with disabilities (6%) and	
	veterans (3%) for its hiring initiatives.	
2	Provide cultural sensitivity training for all employees including specific training	
	for employees in management positions on an annual basis.	
3	Prioritize working with businesses in its supply chain and required ancillary	
	services that are owned and/or managed by minority groups: women, veterans,	
	LGBTQ+, and people with disabilities.	

17. Plan for obtaining marijuana or marijuana products (if applicable):

Pharmacannis Massachusetts, Inc. will obtain marijuana or marijuana products by contracting with other licensed establishments.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;



- 3. Final licensure is subject to the applicant ensuring that all remaining required individuals be fingerprinted pursuant to previous Commission notifications;
- 4. The applicant shall cooperate with and provide information to Commission staff; and
- 5. Provisional licensure is subject to the payment of the appropriate license fee.





RC RETAIL WESTFIELD, LLC

MRN283816

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

RC Retail Westfield, LLC d/b/a Red Cardinal 265 Union Street, Westfield, MA 01085

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Retail

The application was reopened one (1) time for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Individuals and entities associated with this application are also associated with a retail application under the name "RC Retail Amherst, LLC" and "RC Retail Princeton, LLC".

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Salvatore Carabetta	Capital Contributor

5. List of all required entities and their roles in the Marijuana Establishment:

Entity	Role
Red Cardinal MA, LLC	Parent Company

6. Applicant's priority status:

General Applicant



- 7. The applicant and municipality executed a Host Community Agreement on November 9, 2020.
- 8. The applicant conducted a community outreach meeting on October 20, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission received a municipal response from the municipality on January 7, 2021 stating the applicant was in compliance with all local ordinances or bylaws.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Contribute \$5,000 annually to Samaritan Inn.
2	Conduct two (2) annual CORI sealing seminars for individuals with past drug
	convictions.

SUITABILITY REVIEW

- 11. There were disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions. None of the disclosures raised suitability issues.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within six (6) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Monday – Sunday: 8:00 a.m. – 9:00 p.m.

- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:

#	#	Goal
1	1	Recruit minorities (10%), women (40%), veterans (6%), individuals with
		disabilities (6%), individuals who identify as LGBTQ+ (6%)



17. Plan for obtaining marijuana or marijuana products (if applicable):

RC Retail Westfield, LLC plans to obtain marijuana from its affiliated licenses. If the need arises, RC Retail Westfield, LLC will obtain marijuana or marijuana products by contracting with other licensed establishment.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. The applicant shall cooperate with and provide information to Commission staff; and
- 4. Provisional licensure is subject to the payment of the appropriate license fee.





REVOLUTIONARY CLINICS II, INC.

MRN282412

ESTABLISHMENT OVERVIEW

1. Name and address of the Marijuana Establishment:

Revolutionary Clinics II, Inc. 67 Broadway, Somerville, MA 01245

2. Type of final license sought (if cultivation, its tier level and outside/inside operation):

Retail

The application was reopened one (1) time for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Cultivation, Tier 8/Indoor (60,001 –	Commence Operations	Fitchburg
70,000 sq. ft.)		
_		
Product Manufacturing	Commence Operations	Fitchburg
MTC	Commence Operations	Cambridge-Fitchburg
MTC	Commence Operations	Cambridge-Fitchburg
MTC	Commence Operations	Somerville-Fitchburg

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Keith Cooper	Board Member
Gregory Ansin	Board Member
Lillian Montalto	Board Member
Robert Bohlen	Board Member
Tyler Richards	Board Member
Jayne Vining	Board Member



5. List of all required entities and their roles in the Marijuana Establishment:

Entity	Role
CD Services of America, LLC	Parent Company

6. Applicant's priority status:

MTC Priority

- 7. The applicant and municipality executed a Host Community Agreement on November 20, 2021.
- 8. The applicant conducted a community outreach meeting on November 17, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission received a municipal response from the municipality on February 4, 2021 stating the applicant was in compliance with all local ordinances or bylaws.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal	
1	Recruit at least 25% of individuals from disproportionately impacted	
populations, specifically Fitchburg and Boston; Commission-designated		
	Social Equity Program participants; Massachusetts residents who have past	
	drug convictions; or Massachusetts residents with parents or spouses who	
	have drug convictions	
2	2 Contribute a minimum of \$10,000 to the CultivatEd program to help promot	
	participation in the cannabis industry by those who were disproportionately	
	harmed by marijuana prohibition.	
3	Provide employees with paid time to participate in a neighborhood clean-up	
	initiative two (2) days annually.	

SUITABILITY REVIEW

- 11. There were disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions. None of the disclosures raised suitability issues.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW



- 13. The applicant states that it can be operational within nine (9) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Monday – Saturday: 9:00 a.m. – 9:00 p.m.

Sunday: 10:00 a.m. − 5:00 p.m.

- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:

#	Goal
1	Recruit and hire a diverse workforce that is made up of at least 50% women,
	25% minorities, and 15% veterans, individuals that identify as LGBTQ+ and
	people with disabilities.
2	Support cannabis businesses that are minority-owned companies, women-owned
	companies, social equity program entrepreneurs and certified economic
	empowerment candidates with a goal of having at least 10% of its wholesale
	contracts go to these identified businesses.
3	Create a safe, accepting and respectful work environment for all employees.

17. Plan for obtaining marijuana or marijuana products (if applicable):

Revolutionary Clinics II, Inc. plans to obtain marijuana from its affiliated licenses.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. Final licensure is subject to the applicant ensuring that all remaining required individuals be fingerprinted pursuant to previous Commission notifications;
- 4. The applicant shall cooperate with and provide information to Commission staff; and
- 5. Provisional licensure is subject to the payment of the appropriate license fee.





ROYAL SUN FARM, LLC

MCN282001

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

Royal Sun Farm, LLC 69 Gardner Rd, Hubbardston, MA 01452

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Cultivation, Tier 6/Outdoor (40,001 - 50,000 sq. ft.)

The application was reopened two (2) times for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

An individual associated with this application is also associated with a cultivation and product manufacturing application under the name Royalston Farms, LLC.

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Damon Schmidt	Owner / Partner

5. List of all required entities and their roles in the Marijuana Establishment:

No other entity appears to have ownership or control over this proposed Marijuana Establishment.

6. Applicant's priority status:

Expedited Applicant (Social Equity Participant and License Type) (70% ownership—Damon Schmidt—SE303857)



- 7. The applicant and municipality executed a Host Community Agreement on May 7, 2020.
- 8. The applicant conducted a community outreach meeting on January 6, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission received a municipal response from the municipality on December 18, 2020 stating the applicant was in compliance with all local ordinances or bylaws.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	In year one, Royal Sun Farm will successfully train, mentor, and help launch
	a new marijuana business for a minimum of one (1) Social Equity participant.

SUITABILITY REVIEW

- 11. There were disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions. None of the disclosures raised suitability issues.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

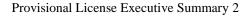
MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within two (2) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Monday – Sunday: 7:00 a.m. – 8:00 p.m.

- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:

#	Goal
1	Recruit women (25%), minorities (10%), veterans (5%), people with disabilities
	(5%), people who identify as LGBTQ+ for its hiring initiatives.





17. Summary of cultivation plan (if applicable):

The applicant submitted a cultivation plan that demonstrates the ability to comply with the Commission's regulations.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. Final licensure is subject to the applicant ensuring that all remaining required individuals be fingerprinted pursuant to previous Commission notifications;
- 4. The applicant shall cooperate with and provide information to Commission staff; and
- 5. Provisional licensure is subject to the payment of the appropriate license fee.





SOLAR RETAIL NORTON, LLC

MRN283896

BACKGROUND & APPLICATION OF INTENT REVIEW

1.	Name an	nd address	of the	proposed	Mariiuana	Establishment

Solar Retail Norton, LLC 242 Mansfield Avenue, Norton, MA 02766

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Retail

The application was reopened two (2) times for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The applicant is not an applicant or licensee for any other license type.

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Andre Arzumanyan	Executive / Officer
Andreas Nicolos	Executive / Officer

5. List of all required entities and their roles in the Marijuana Establishment:

No other entity appears to have ownership or control over this proposed Marijuana Establishment.

6. Applicant's priority status:

General Applicant



- 7. The applicant and municipality executed a Host Community Agreement on November 12, 2020.
- 8. The applicant conducted a community outreach meeting on December 12, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission received a municipal response from the municipality on February 8, 2021 stating the applicant was in compliance with all local ordinances or bylaws.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal	
1	Prioritize hiring of individuals from identified areas of disproportionate	
	impact, specifically Mansfield and Taunton.	
2	Conduct at least four (4) one-hour industry specific educational seminars	
	annually.	
3	Hold at least one (1) annual informational session regarding the process for	
	sealing and expunging criminal records.	

SUITABILITY REVIEW

- 11. There were no disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

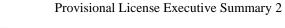
MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within five (5) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Monday – Sunday: 9:00 a.m. – 10:00 p.m.

- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:

	#	Goal
--	---	------





- Recruit women (50%), minorities (30%), veterans (15%), persons with disabilities (15%) and individuals that identify as LGBTQ+ (15%) for its hiring initiatives.
- 17. Plan for obtaining marijuana or marijuana products (if applicable):

Solar Retail Norton, LLC will obtain marijuana or marijuana products by contracting with other licensed establishments.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. The applicant shall cooperate with and provide information to Commission staff; and
- 4. Provisional licensure is subject to the payment of the appropriate license fee.





SUNHOUSE MASS, LLC MCN283027

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

Sunhouse Mass, LLC 428 Merrill Rd, Pittsfield, MA 01201

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Cultivation, Tier 6/Indoor (40,001 – 50,000 sq. ft.)

The application was reopened two (2) times for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The applicant is not an applicant or licensee for any other license type.

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Phillip Roberts	Owner / Partner
Lily Roberts	Close Associate

5. List of all required entities and their roles in the Marijuana Establishment:

No other entity appears to have ownership or control over this proposed Marijuana Establishment.

6. Applicant's priority status:

General Applicant



- 7. The applicant and municipality executed a Host Community Agreement on August 5, 2020.
- 8. The applicant conducted a community outreach meeting on September 4, 2019 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission received a municipal response from the municipality on January 14, 2021 stating the applicant was in compliance with all local ordinances or bylaws.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Recruit 60% of employees from areas disproportionate impact, specifically
	the City of Pittsfield.

SUITABILITY REVIEW

- 11. There were disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions. None of the disclosures raised suitability issues.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within six (6) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Monday – Sunday: 6:00 a.m. – 8:00 p.m.

- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:

i	#	Goal
	1	Comprise both a management team and a staff of at least 30% of individuals that
		are women, 10% veterans, 20% minorities, 10% people with disabilities, and
		10% from the LGBTQ+ community.



17. Summary of cultivation plan (if applicable):

The applicant submitted a cultivation plan that demonstrates the ability to comply with the Commission's regulations.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. Final licensure is subject to the applicant ensuring that all remaining required individuals be fingerprinted pursuant to previous Commission notifications;
- 4. The applicant shall cooperate with and provide information to Commission staff; and
- 5. Provisional licensure is subject to the payment of the appropriate license fee.





THRIVE CULTIVATION & DISPENSARY, LLC

MCN282968 MPN281928 MRN283714

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

Thrive Cultivation & Dispensary, LLC 114 Lancaster Road, Shirley, MA 01464

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Cultivation, Tier 3/Indoor (10,001 – 20,000 sq. ft.) Product Manufacturing Retail

The application was reopened one (1) time for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The applicant is not an applicant or licensee for any other license type.

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Anthony Cardillo III	Manager
Kristin Bowles	Owner / Partner
Michael Cardillo	Owner / Partner
Anthony Cardillo Jr.	Owner / Partner
Deborah Cardillo	Capital Contributor

5. List of all required entities and their roles in the Marijuana Establishment:

Entity	Role



Cardillo Development Corporation	Capital Contributor
----------------------------------	---------------------

6. Applicant's priority status:

General Applicant

- 7. The applicant and municipality executed a Host Community Agreement on September 8, 2020.
- 8. The applicant conducted a community outreach meeting on June 10, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission sent the municipal notice to the City/Town of Shirley on December 17, 2020. To date, the Commission has not received a response.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Provide at least two (2) industry-specific workshops, annually, to residents
	who are past or present residents of the geographic "areas of disproportionate
	impact," which have been defined by the Commission and identified in its
	Guidance for Identifying Areas of Disproportionate Impact; Commission-
	designated Economic Empowerment Priority applicants; Commission-
	designated Social Equity Program participants; Massachusetts residents who
	have past drug convictions; and Massachusetts residents with parents or
	spouses who have drug convictions.
2	Provide a monetary donation of \$5,000 at least once annually to the Old
	Colony YMCA-Taunton.

SUITABILITY REVIEW

- 11. There were no disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

- 13. The applicant states that it can be operational within one (1) year of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:



Monday – Sunday: 8:00 a.m. – 8:00 p.m.

- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:

#	Goal
1	Recruit minorities (10%), women (50%), veterans (10%), individuals with
	disabilities (10%), individuals who identify as LGBTQ+ (10%)

17. Summary of cultivation plan (if applicable):

The applicant submitted a cultivation plan that demonstrates the ability to comply with the Commission's regulations.

18. Summary of products to be produced and/or sold (if applicable):

#	Product
1	Dissolving tablets and strips
2	Tinctures
3	Nasal/Oral sprays
4	Suppositories
5	Ready-to-use extracted cannabis and hash
	distillates
6	Oils
7	Waxes
8	Shatters
9	Budders
10	Live resins
11	Saps
12	Taffies
13	Crumbles
14	Moon rocks
15	Creams
16	Salves
17	Lotions
18	Body butters
19	Topicals
20	Dermal patches

19. Plan for obtaining marijuana or marijuana products (if applicable):

Thrive Cultivation & Dispensary, LLC plans to obtain marijuana from its affiliated licenses. If the need arises, Thrive Cultivation & Dispensary, LLC will obtain marijuana or marijuana products by contracting with other licensed establishments.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. Final licensure is subject to the applicant providing Commission staff, upon inspection, with a detailed list of all proposed products to be produced with specific information as to types, forms, shapes, colors, and flavors;
- 4. Final licensure is subject to the applicant ensuring that all remaining required individuals be fingerprinted pursuant to previous Commission notifications;
- 5. The applicant shall cooperate with and provide information to Commission staff; and
- 6. Provisional licensure is subject to the payment of the appropriate license fee.





ZGC, LLC MCN283045

BACKGROUND & APPLICATION OF INTENT REVIEW

1. Name and address of the proposed Marijuana Establishment:

ZGC, LLC 699-799 Polikoff Rd, Sheffield, MA 01222

2. Type of license sought (if cultivation, its tier level and outside/inside operation) and information regarding the application submission:

Cultivation, Tier 11/Outdoor (90,001 – 100,000 sq. ft.)

The application was reopened three (3) times for additional information.

3. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

The applicant is not an applicant or licensee for any other license type.

4. List of all required individuals and their business roles in the Marijuana Establishment:

Individual	Role
Zachary Ahrens	Owner / Partner
Gregory Cohen	Owner / Partner
Chris Regan	Owner / Partner

5. List of all required entities and their roles in the Marijuana Establishment:

No other entity appears to have ownership or control over this proposed Marijuana Establishment.

6. Applicant's priority status:

Expedited Applicant (License Type)



- 7. The applicant and municipality executed a Host Community Agreement on December 8, 2020.
- 8. The applicant conducted a community outreach meeting on November 30, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 9. The Commission received a municipal response from the municipality on February 12, 2021 stating the applicant was in compliance with all local ordinances or bylaws.
- 10. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Donate two (2) days per year per employee to assist Boston Area Gleaners
	collect and distribute food to their recipients.
2	Donate \$10,000 to Boston Area Gleaners through their corporate sponship
	program on an annual basis.

SUITABILITY REVIEW

- 11. There were no disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions.
- 12. There were no concerns arising from background checks on the individuals or entities associated with the application.

MANAGEMENT AND OPERATIONS REVIEW

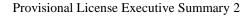
- 13. The applicant states that it can be operational within five (5) months of receiving the provisional license(s).
- 14. The applicant's proposed hours of operation are the following:

Monday − Friday: 7:00 a.m. − 7:00 p.m.

Saturday – Sunday: Closed

- 15. The applicant submitted all applicable and required summaries of plans, policies, and procedures for the operation of the proposed establishment. The summaries were determined to be substantially compliant with the Commission's regulations.
- 16. The applicant proposed the following goals for its Diversity Plan:

Goal





1	Contract with 15% of service providers who are minorities, women, veterans,
	people with disabilities, and people who identify as LBGTQ+.
2	Contract with 20% of wholesale partners (including brands) who are minorities,
	women, veterans, people with disabilities, and people who identify as LGBTQ+.
3	Recruit women (20%), individuals who identify as LGBTQ+ (10%), veterans
	(10%), minorities (10%), and persons with disabilities (5%) for its hiring
	initiatives.

17. Summary of cultivation plan (if applicable):

The applicant submitted a cultivation plan that demonstrates the ability to comply with the Commission's regulations.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. The applicant shall cooperate with and provide information to Commission staff; and
- 4. Provisional licensure is subject to the payment of the appropriate license fee.





PHARMACANNIS MA, INC. RMDA3045

BACKGROUND & APPLICATION REVIEW

1. Name and location of the proposed Medical Marijuana Treatment Center:

Pharmacannis MA, Inc.

Cultivation: 465 Hoppingbrook Rd, Holliston, MA 01746*

Product Manufacturing: 465 Hoppingbrook Rd, Holliston, MA 01746*

Dispensary: 939 Boston Turnpike, Shrewsbury, MA 01545

2. The applicant is a licensee or applicant for other Marijuana Establishment and/or Medical Marijuana Treatment Center license(s):

Туре	Status	Location
MTC	Commence Operations	Wareham-Holliston
MTC	Provisional License	Franklin-Holliston
Cultivation, Tier 7/Indoor (50,001 – 60,000 sq. ft.)	Provisional License	Holliston
Retail	Application Submitted	Franklin
Retail	Commence Operations	Shrewsbury
Retail	Commence Operations	Wareham

3. List of all required individuals and their business roles in the Medical Marijuana Treatment Center:

Role
Executive
Executive
Executive
Board Director
Executive
Board Director
Board Director



^{*}This facility is operational currently under a separate MTC license.

Stephen Schuler	Board Director
Norah Scott	Close Associate
Daniel Tierney	Close Associate

4. List of all required entities and their roles in the Medical Marijuana Treatment Center:

Entity	Role
PharmaCann, Inc.	Parent Company

- 5. The applicant executed a Host Community Agreement with the City/Town of Shrewsbury on December 12, 2018. Additionally, the applicant executed a Host Community Agreement with the City/Town of Hollison on December 10, 2018.
- 6. The applicant conducted a community outreach meeting on October 28, 2020 and provided documentation demonstrating compliance with Commission regulations.
- 7. The Commission received a municipal response from Shrewsbury on January 29, 2021 stating the applicant was in compliance with all local ordinances and bylaws.
- 8. The applicant proposed the following goals for its Positive Impact Plan:

#	Goal
1	Identify charitable organizations within the Wareham, Worcester, Mansfield
	and Walpole areas to assist those people and causes that require and will
	benefit from the resources the most, specifically Turning Point and
	Shrewsbury Youth and Family Services.
2	Recruit 20% of its workforce that comprise of Commission-designated
	geographic areas of disproportionate impact, including Worcester, Wareham,
	Mansfield and/or Walpole; Massachusetts residents who have had past drug
	convictions; and/or Massachusetts residents with parents or spouses who have
	drug convictions
3	Provide employees with paid time to participate in a neighborhood clean-up
	initiative that serves identified areas of disproportionate impact, specifically
	Wareham.

SUITABILITY REVIEW

- 9. There were disclosures of any past civil or criminal actions, occupational license issues, or marijuana-related business interests in other jurisdictions. None of the disclosures raised suitability issues.
- 10. There were no concerns arising from background checks on the individuals or entities associated with the application.



MANAGEMENT AND OPERATIONS REVIEW

- 11. The applicant states that it can be operational upon receiving the provisional license(s).
- 12. The applicant's proposed hours of operation are the following:

Cultivation and Product Manufacturing Monday – Sunday: 7:00 a.m. – 6:00 p.m.

Dispensing

Monday – Sunday: 9:00 a.m. – 9:00 a.m.

- 13. The applicant submitted all applicable and required summaries of procedures for the operation of the proposed Medical Marijuana Treatment Center. The summaries were determined to be substantially compliant with the Commission's regulations.
- 14. The applicant disclosed that it plans to perform home deliveries to registered patients. The summary of the applicant's plan is consistent with the Commission regulations and guidance documents.
- 15. The applicant proposed the following goals for its Diversity Plan:

#	Goal	
1	Recruit minorities (24%), women (62%), individuals with disabilities (12%),	
	veterans (3%) for its hiring initiatives.	
2	Provide annual cultural sensitivity training for all employees including specific	
	training for employees in management positions.	
3	Prioritize working with businesses in its supply chain and required ancillary	
	services that are owned and/or managed by minority groups, women, veterans,	
	LGBTQ+ and people with disabilities.	

16. Summary of cultivation plan:

The applicant submitted a summary of a cultivation plan that demonstrated the ability to comply with the regulations of the Commission.

17. Summary of products to be produced and/or sold (if applicable):

#	Product
1	Packaged cannabis flower
2	Pre-rolled cannabis flower
3	Vape cartridges and disposable vapes
4	Concentrates (shatter and waxes)



5	Tinctures (Tangerine and Raspberry)
6	Oils
7	Gummies (Apple, Watermelon, Raspberry, Acai
	Pomegranate, Mango, and Wild Berry)
8	Hard Candies
9	Effervescent tablets and/or powders to dissolve in
	water.

RECOMMENDATION

Commission staff recommend provisional licensure with the following conditions:

- 1. Final license is subject to inspection to ascertain compliance with Commission regulations;
- 2. Final license is subject to inspection to ascertain compliance with applicable state laws and local codes, ordinances, and bylaws;
- 3. Final licensure is subject to the applicant providing Commission staff, upon inspection, with a detailed list of all proposed products to be produced with specific information as to types, forms, shapes, colors, and flavors;
- 4. The applicant shall cooperate with and provide information to Commission staff; and
- 5. Provisional licensure is subject to the payment of the appropriate license fee.





Protocol for the Sampling and Analysis of Finished Marijuana Products and Marijuana Products for Marijuana Establishments, Medical Marijuana Treatment Centers and Colocated Marijuana Operations

Revised by the Commission: February 2021

Purpose

The purpose of this revised *Protocol for Sampling and Analysis of Finished Marijuana Products and Marijuana Products for Marijuana Establishments, Medical Marijuana Treatment Centers and Colocated Marijuana Operations* (Protocol) is to provide Commission licensees with guidance on general procedures for laboratory operations including, an overview of Marijuana production practices, sample analysis, testing requirements and result reporting. Guidance is provided for product retesting, remediation and sample representative. The Protocol also describes acceptable approaches for meeting the product testing requirements within compliance.

Overview

The Protocol is meant to provide practices for laboratory operations referenced in the regulations 935 CMR 500.000 and 935 CMR 501.000. The Protocol ensures that patients and consumers have access to only tested and regulated medical and adult-use Marijuana and Marijuana Products.

Finished and unfinished Marijuana and Marijuana Products require different tests and contaminant screenings conducted at varying times in the testing process as outlined in Protocol Exhibit 1: *Overview of Marijuana Production of the Protocol*. Per 935 CMR 500.002: *Definitions* and 935 CMR 501.002: *Definitions*, Finished Marijuana means "usable Marijuana, Cannabis resin or Cannabis concentrate" and Finished Marijuana Product means "a Marijuana Product that is completely manufactured and ready for retail sale and shall include Finished Marijuana that has been separated into individual packages or containers for sale." Unfinished Marijuana and Marijuana Products are those that will be further refined or processed in order to create the final product.

Finished Marijuana and Marijuana Products will be dispensed or sold and consumed as is and will not be further refined or processed. All Finished Marijuana and Marijuana Products must be





tested for: cannabinoid profile; pesticides, heavy metals, microbials, mycotoxins, solvents (if applicable) and vitamin e acetate and a second heavy metal screen (vape products).

Changes applied to the Protocol

- Protocol acknowledges the testing challenges and unknown factors and variables regarding the long-term use of vape products and the need for stability studies.
- Section 7.2.1 notes the concerns of heavy metal leaching, additional heavy metal screening requirements for vape products, information insert requirement for vape products and additive disclosures. The Protocol also acknowledges that continued studies are needed to address unknown variables regarding the use of vape products.
- Section 7.3 provides additional language and satisfactory conditions for Independent Testing Laboratories (ITL) reporting obligations regarding pesticide detection limits to ensure compliance.
- Section 7.6 requires that all ready-to-sell vape products will be screened for Vitamin E Acetate and a second heavy metal screening.
- Section 8.0 provides steps for remediation, reanalysis, and destruction of Marijuana Products.

By way of background

The petition submitted by Suehiko Ono and other interested parties on June 19, 2020, seeks a targeted approach where the Commission would only require that Marijuana and Marijuana Products originating from outdoor cultivations are tested for specific pathogens that are known to be harmful.

<u>Microbials</u>: Marijuana may be exposed to microbial contaminants in an outside growing environment that may not typically be found indoors. Outdoor cultivations are exposed to more microbial contaminants than indoor cultivations. This distinction between outdoor and indoor cultivations ultimately leads to a higher rate of failure for total yeast and mold for Marijuana originating from outdoor cultivations. Additionally, incorporating specific microbial screening requirements for outdoor cultivations attempts to balance the disparity between microbial screenings for indoor and outdoor cultivations, while maintaining product safety and testing standards.



The addition of species specific pathogens for indoor versus outdoor microbial screenings will be considered when addressing the petition from Suehiko Ono and others. Below is the process and/or considerations to incorporate microbial testing requirements for outdoor cultivation into the Testing Protocol:

- 1. Create a working group that would include Commission staff and outdoor cultivators to develop the specifications for modified microbial testing. These specifications would be developed in support of additional testing practices for outdoor cultivation processes where applicable in the existing Protocols. Allowing feedback from stakeholders would:
 - demonstrate the Commission's desire to collaborate with outdoor cultivators; and
 - help the Commission gain insight into the immediate challenges from the cultivators that would be adhering to the proposed alternative testing scheme.

The Commission would seek this feedback in order to: (i) appropriately inform a recommendation applicable to the Protocol addressing outdoor cultivators and provide a suitable testing alternative, and (ii) provide guidance on the conditions yielding microbial species directly impacting their cultivation processes. A Protocol change is suitable due to the evolving nature of the information available that affects testing processes and guidance in general. Furthermore, the implementation of an alternative Testing Protocol could range from 6-8 months.

The Commission may wish to consider approving this Protocol and consider appropriate and efficient framework to allow licensees to meet the requirements under the Commission's authority to lawfully fully tested and compliant Marijuana and Marijuana Products.





Protocol for the Sampling and Analysis of Finished Marijuana Products and Marijuana Products for Marijuana Establishments, Medical Marijuana Treatment Centers and Colocated Marijuana Operations

Revised - February 26, 2021

This document is issued by the Cannabis Control Commission. The applicable Marijuana laws, which include M.G.L. c. 94I, 94G, 935 CMR 500.000 and 935 CMR 501.000, should be reviewed as they may provide or clarify the legal requirements related to this document. This protocol document should be checked periodically for revisions. Questions with regards to this document may be directed to CCCMass.com.



Table of Contents

Contents

1.0	Purpose and Applicability	3
1.1	Purpose	3
1.2	Applicability	3
2.0	Definitions and Acronyms	3
3.0	Applicable Regulations	7
4.0	Sampling and Analysis Requirements	8
4.1	Overview of Marijuana Products and their Production	8
Exhi	bit 1. Overview of Marijuana Production	8
4.2	2.1 Contaminant Testing	10
4.2	2.2 Cannabinoid Profile Testing	13
4.2	2.3 Usable Marijuana Content	13
5.0	Sampling Program Design	
5.1	Representative Sampling	15
5.2	Representative Sampling by Physical Form and Quantity	
5.3	Sampling Guidance by Matrix	
5.4	Quality Control (QC) Samples	
6.0	Sample Collection Procedures	18
7.0	Sample Analysis	20
7.1	Cannabinoid Profile	
7.2	Metals	21
7.2	2.1 Metals and Marijuana Vape Products	21
7.3	Pesticides Residues and Plant Growth Regulators	22
7.4	Microbiological Contaminants and Mycotoxins	
7.5	Residual Solvents	24
7.6	Vitamin E Acetate	24
8.0	Data Evaluation	25
Rean	nalysis	25
	ediation	
Dest	ruction	26
9.0	References	28



1.0 Purpose and Applicability

1.1 Purpose

The purpose of this protocol is to provide Massachusetts Marijuana Establishments, Medical Marijuana Treatment Centers and Colocated Marijuana Operations (herein referred to collectively as "Licensees") with required and recommended best practices for the collection and analysis of plant material and other finished adult-use and medical Marijuana products and Marijuana-infused products (MIPs) to comply with Massachusetts Cannabis Control Commission's ("Commission") regulations: 935 CMR 500.000: *Adult Use of Marijuana* and 935 CMR 501.000: *Medical Use of Marijuana*.

This protocol is subject to revision based on evolving best practices, updated scientific information or standards/guidelines, or other information relevant to the contents of the protocol.

1.2 *Applicability*

This protocol applies only to Massachusetts Licensee operations, and not hardship cultivation operations. Testing requirements in this protocol apply only to adult and medical-use Marijuana and Marijuana products cultivated, manufactured, or otherwise intended to be dispensed or sold by Massachusetts Licensees, including finished Marijuana and Marijuana products (i.e., plant material, resin, concentrates and MIPs) made with finished Marijuana ingredients. This protocol only addresses sampling and analysis to characterize cannabinoid identity and content profiles, and biological (microbial and fungal) and chemical (e.g., solvents, pesticides, growth enhancers, metals) contaminants introduced through cultivation of Marijuana plants and post-harvest processing and handling of Marijuana products and ingredients.

This protocol does not apply to nutritional product testing, allergen testing, or characterization of non-Marijuana ingredients in MIPs except as noted for vaporizer products. It does not address sampling and analysis to verify compliance with state regulations or best practices for production and handling of food products, pharmaceuticals, or dietary supplements, except for criteria for biological and chemical contaminants that may be introduced through inclusion of Marijuana as an ingredient.

Sampling and analysis of environmental media used for cultivation are addressed in a companion protocol, Protocol for Sampling and Analysis of Environmental Media for Massachusetts Registered Medical Marijuana Dispensaries.

2.0 Definitions and Acronyms

Terms listed in italic typeface are those defined in 935 CMR 500.002: *Definitions* and 935 CMR 501.002: *Definitions*. Additional terms defined for this protocol are underlined and not in italic typeface. Capitalized terms not defined here are defined in 935 CMR 500.002 or 935 CMR 501.002.



Cannabinoid means any of several compounds produced by Marijuana plants that have medical and psychotropic effects.

Cannabinoid Profile means amounts, expressed as the dry-weight percentages, of delta-nine-tetrahydrocannabinol, cannabidiol, tetrahydrocannabinolic acid, and cannabidiolic acid in a Marijuana Product. Amounts of other cannabinoids may be reported but are not required.

Certificate of Registration means a certificate formerly and validly issued by the Department of Public Health (DPH) or currently and validly issued by the Commission, that confirms an MTC, ITL, individual or entity has met all applicable requirements pursuant to and 935 CMR 501.000: Medical Use of Marijuana and is licensed by the Commission. An MTC or ITL may have been issued a provisional or final Certificate of Registration. After November 1, 2019, new or renewal Licenses, as applicable, may be issued to MTCs and Independent Testing Labs.

Colocated Marijuana Operations (CMO) means an MTC operating under a License pursuant to 935 CMR 501.000: Medical Use of Marijuana and a Marijuana Establishment operating under at least one License pursuant to 935 CMR 500.000 on the same Premises. Colocated Marijuana Operations pertain to cultivation, product manufacturing, and retail licenses, but not any other adult-use License.

Commission means the Massachusetts Cannabis Control Commission as established by M.G.L. c. 10, § 76, or its representatives. The Commission has authority to implement the state Marijuana laws which include, but are not limited to, St. 2016, c. 334, The Regulation and Taxation of Marijuana Act, as amended by St. 2017, c. 55, An Act to Ensure Safe Access to Marijuana; M.G.L. 10, § 76, M.G.L. c. 94G; M.G.L. c. 94I; 935 CMR 500.000: *Adult Use of Marijuana*, and 935 CMR 501.000: *Medical Use of Marijuana*.

Consumer means a person who is 21 years of age or older.

Cultivation Batch means a collection of Cannabis or Marijuana plants from the same seed or plant stock and that are cultivated and harvested together and receive an identical propagation and cultivation treatment. including, but not limited to growing media, ambient conditions, watering, and light regimes, agricultural or hydroponic inputs. Clones that come from the same plant are one batch. The Licensee shall assign and record a unique, sequential alphanumeric identifier to each Cultivation Batch for the purposes of production tracking, product labeling, and product recalls.

Department of Public Health (DPH) means the Massachusetts Department of Public Health, unless otherwise specified. DPH is the agency that administered the Medical Use of Marijuana Program prior to 2019.

Duplicate Samples means two samples taken from and representative of the same material that are carried through all steps of the sampling and analytical procedures in an identical manner. Duplicate samples may be used to evaluate variance in the assessment method, including sampling and analysis.

Edibles means a Marijuana Product that is to be consumed by humans by eating or drinking. These



products, when created or sold by a Marijuana Establishment or an MTC, shall not be considered a food or a drug as defined in M.G.L. c. 94, § 1.

First Amended Quarantine Order means the First Amended Quarantine Order Applying To Vaporizer Products With Conditions M.G.L. c.94I, M.G.L., c. 94G, § 4(a)(xix) and (a^{1/2})(xxxi), 935 CMR 500.340: Quarantine Order, and 935 CMR 501.340: Quarantine Order issued by the Massachusetts Cannabis Control Commission on December 12, 2019."

Finished Marijuana means Usable Marijuana, Cannabis resin, or Cannabis concentrate.

Finished Plant Material means usable Marijuana that has been trimmed and dried. Trimming includes removing the leaves immediately subtending the buds as well as any dead leaves or stems.

Flowering means the gametophytic or reproductive state of Cannabis or Marijuana in which the plant produces flowers, trichomes, and Cannabinoids characteristic of Marijuana.

Hardship Cultivation Registration means a registration issued to a Registered Qualifying Patient under the requirements of 935 CMR 501.027.

Independent Testing Laboratory (ITL) means a laboratory that is licensed or registered by the Commission and is:

- a) Currently and validly licensed by the Commission;
- b) Accredited to ISO 17025:2017 or the *International Organization for Standardization* 17025 by a third-party accrediting body that is a signatory to the International Laboratory Accreditation Accrediting Cooperation mutual recognition arrangement or that is otherwise approved by the Commission;
- c) Independent financially from any MTC Marijuana Establishment or Licensee; and
- d) Qualified to test Marijuana and Marijuana Products, including MIPs, in compliance with M.G.L. c. 94C, § 34; M.G.L c. 94G, § 15; 935 CMR 500.000: *Adult Use of Marijuana*; and 935 CMR 501.000: *Medical Use of Marijuana*; and Commission protocol(s).

Licensee means a person or entity on the application and licensed by the Commission to operate a Marijuana Establishment, Marijuana Treatment Center or ITL under St. 2016, c. 334, as amended by St. 2017, c. 55, M.G.L. c. 94G, 935 CMR 500.000: Adult Use of Marijuana and 935 CMR 501.000: Medical Use of Marijuana. Any person or entity that solely provides initial capital to establish or operate the establishment and to whom, in return for the initial capital, requires only repayment of the loan and does not have any ownership or direct or indirect authority to control the Marijuana Establishment or ITL, will not be a Licensee. For the purposes of this Guidance Document, Licensee will be referred to as Marijuana Establishments, Marijuana Treatment Centers and Colocated Marijuana Operations collectively.

Marijuana (or Cannabis) means all parts of any plant of the *genus* Cannabis, not excepted in 935 CMR 500.002: Marijuana (a) through (c) and whether growing or not; the seeds thereof; and resin extracted from any part of the plant; Clones of the plant; and every compound, manufacture, salt, derivative, mixture or preparation of the plant, its seeds or resin including tetrahydrocannabinol as defined in M.G.L. c. 94G, § 1; provided that Cannabis shall not include:



- a) the mature stalks of the plant, fiber produced from the stalks, oil, or cake made from the seeds of the plant, any other compound, manufacture, salt, derivative, mixture or preparation of the mature stalks, fiber, oil, or cake made from the seeds of the plant or the sterilized seed of the plant that is incapable of germination;
- b) Hemp; or
- c) the weight of any other ingredient combined with Cannabis or Marijuana to prepare topical or oral administrations, food, drink, or other products.

Marijuana Establishment (ME) means a Marijuana Cultivator (Indoor or Outdoor), Craft Marijuana Cooperative, Marijuana Product Manufacturer, Marijuana Microbusiness, ITL, Marijuana Retailer, Marijuana Transporter, Delivery Licensee, Marijuana Research Facility, Social Consumption Establishment or any other type of licensed Marijuana-related business, except a Medical Marijuana Treatment Center (MTC).

Marijuana-Infused Product (MIP) means a Marijuana Product infused with Marijuana that is intended for use or consumption, including but not limited to Edibles, ointments, aerosols, oils, and tinctures. A MIP when created or sold by a Marijuana Establishment or MTC, shall not be considered a food or a drug as defined in M.G.L. c. 94, s. 1. MIPs are a type of Marijuana Product.

Medical Marijuana Treatment Center (MTC), (Formerly Known as a Registered Marijuana Dispensary (RMD)), means an entity licensed under 935 CMR 501.101 that acquires, cultivates, possesses, Processes (including development of related products such as Edibles, MIPs, Tinctures, aerosols, oils, or ointments), Repackages, transports, sells, distributes, delivers, dispenses, or administers Marijuana, products containing Marijuana, related supplies, or educational materials to Registered Qualifying Patients or their Personal Caregivers for medical use. Unless otherwise specified, MTC refers to the site(s) of dispensing, cultivation, and preparation of Marijuana for medical use.

Mycotoxin means a secondary metabolite of a micro-fungus that is capable of causing death or illness in humans and other animals. For the purposes of 935 CMR 500.000: Adult Use of Marijuana and 935 CMR 501.000: Medical Use of Marijuana, Mycotoxins shall include aflatoxin B1, aflatoxin B2, aflatoxin G1, aflatoxin G2, and ochratoxin A.

Pesticide means a substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest, and any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant; provided that Pesticide shall not include any article that is a "new animal drug" within the meaning of § 201(v) of the Federal Food, Drug and Cosmetic Act (21 U.S.C. § 321(v)), or that has been determined by the Secretary of the United States Department of Health and Human Services not to be a new animal drug by a regulation establishing conditions of use for the article, or that is an animal feed within the meaning of § 201(w) of such act (21 U.S.C. § 321(w)).

Production Batch means a batch of finished plant material, Cannabis resin, Cannabis concentrate, or Marijuana-infused Product made at the same time, using the same methods, equipment, and ingredients. The Licensee shall assign and record a unique, sequential alphanumeric identifier to



each Production Batch for the purposes of production tracking, product labeling, and product recalls. All Production Batches shall be traceable to one or more Cannabis or Marijuana Cultivation Batches.

Propagation means the reproduction of Cannabis or Marijuana plants by seeds, cuttings, or grafting.

Residual Solvent means a volatile organic chemical used in the manufacture of a Marijuana Product that is not completely removed by practical manufacturing techniques.

Seed-to-sale System of Record means the electronic tracking system designated and required by the Commission to perform a process (Metrc).

Tincture means a Cannabis-infused alcohol or oil concentrate administered orally in small amounts using a dropper or measuring spoon. Tinctures are not considered an Edible under 935 CMR 500.000: *Adult use of Marijuana* and 935 CMR 501.000: *Medical Use of Marijuana* and are not subject to the dosing limitations applicable to Edibles under 935 CMR 500.150(4).

<u>Trichome</u> means a cannabinoid-producing glandular structure that grows on the plant surface of Marijuana plants, particularly on the buds of the female plant.

Usable Marijuana means the fresh or dried leaves and flowers of the female Marijuana plant and any mixture or preparation thereof, including Marijuana, Marijuana Products or MIPs, but does not include the seedlings, seeds, stalks, roots of the plant, or Marijuana rendered unusable in accordance with 935 CMR 500.105(12)(c) and 935 CMR 501.105(12)(c).

Vegetation means the sporophytic state of the Cannabis or Marijuana plant, which is a form of asexual reproduction in plants during which plants do not produce resin or flowers and are bulking up to a desired production size for Flowering.

3.0 Applicable Regulations

This protocol was developed to provide Licensees with guidance on complying with 935 CMR 500.000: Adult Use of Marijuana and 935 CMR 501.000: Medical Use of Marijuana. In particular, the detailed steps outlined in this protocol address requirements of the following sections of the regulations. Licensees should be familiar with the applicable regulations to ensure full compliance.

- 935 CMR 500.105(1)(h), 935 CMR 501.105(1)(h): Plans for quality control, including Marijuana product testing for contaminants.
- 935 CMR 500.105(3), 935 CMR 501.105(3): Handling of Marijuana.
- 935 CMR 500.105(5), 935 CMR 501.105(5): Labeling of Marijuana and Marijuana Products.



- 935 CMR 500.120(6), 935 CMR 500.130(4), 935 CMR 501.120(6) and 935 CMR 501.130(4): Selling and Transferring of Marijuana and Marijuana Products between Licensees.
- 935 CMR 500.160, 935 CMR 501.160 Testing of Marijuana and Marijuana Products.

4.0 Sampling and Analysis Requirements

Sampling and analysis requirements apply to all Marijuana-containing products dispensed or sold by Massachusetts Licensees, which may include finished plant material, Cannabis resin, Cannabis concentrates (including vaporizer products), and MIPs. Because the nature and concentrations of contaminants and cannabinoid compounds may change throughout the production process, from cultivation through packaging, this section identifies the types of sampling and analysis that are required for each type of product. The results of the sampling and analysis are required for both quality control and labeling requirements (e.g., cannabinoid profile, testing certification).

Licensees must ensure and be able to demonstrate to the Commission, that product label information complies with all applicable sections of 935 CMR 500.105(5): *Labeling of Marijuana and Marijuana Products* and 935 CMR 501.105(5): *Labeling of Marijuana and Marijuana Products*.

4.1 Overview of Marijuana Products and their Production

Marijuana products that may be dispensed by Licensees in Massachusetts include finished plant material, Cannabis resin, Cannabis concentrates, and a variety of MIPs. Marijuana for all of these product categories must originate with plants cultivated by a Licensee and all product labeling must include a batch number to identify the batch associated with manufacturing and processing (935 CMR 500.105(5) and 935 CMR 501.105(5)). Therefore, Licensees are responsible for carefully tracking Marijuana throughout the production cycle, from cultivation through dispensing to consumers and patients. Marijuana and Marijuana Products procured by a Licensee from another Licensee pursuant to 935 CMR 500.120(6), 935 CMR 500.130(4), 935 CMR 501.120(6) and 935 CMR 501.130(4) must be tested by the supplying Licensee and documentation of testing consistent with this protocol must be provided to the receiving Licensee by the supplying Licensee, along with chain-of-custody documentation.

Exhibit 1. Overview of Marijuana Production

Exhibit 1 provides an overview of the adult and medical-use Marijuana production process as regulated in Massachusetts by the Commission. During cultivation, plants are typically grown from seed, cuttings, or through a tissue culture method called micropropagation (AHP 2013). Under 935 CMR 500.002: *Definitions* and 935 CMR 501.002: *Definitions*, an MIP is defined as a Marijuana Product infused with Marijuana that is intended for use or consumption including, but not limited to Edibles, ointments, aerosols, oils, and Tinctures. A Marijuana-infused Product (MIP) when created or sold by a Marijuana Establishment or MTC, shall not be considered a food or a drug as defined in M.G.L. c. 94, § 1.



Plants may be grown in soil, other solid growth media, or in hydroponic systems. All cultivation methods place the plants in contact with environmental media and other inputs, such as soil or agricultural products, which have the potential to introduce chemical or biological contaminants. Because active compounds are at their highest concentration on the inflorescences of the female plant, Marijuana plants are harvested when the plants reach peak maturity. Post-harvest handling steps include drying and trimming, which should be managed carefully to avoid mold and bacterial growth and to preserve active compounds. For further details on medical Marijuana cultivation and post-harvest handling methods, refer to AHP (2013).

Harvested and dried Marijuana plants can be used directly to produce any of the three finished Marijuana types:

- 1. Dried and trimmed usable Marijuana, the inflorescences (i.e., "buds"), may be used directly (e.g., smoked) without further processing. It also may be used as a source material for other finished Marijuana products or as an ingredient in MIPs.
- 2. Cannabis resin, commonly referred to as "hashish" or "hash," is formed by collecting and compressing cannabinoid-containing resin glands (i.e., trichomes). Cannabis resin also includes "bubble hash," which is made by extracting the resin glands using cold water and physical separation.
- 3. Concentrates, which include various oils, waxes, and solids, are produced with solvent extraction methods. Vape products that heat Cannabis oils fall under this classification. Concentrates have higher cannabinoid concentrations than other finished Marijuana products, but also may contain residuals of potentially harmful solvents if not manufactured properly. In addition, any contaminants present in the source plant material may be concentrated in a resin or concentrate product.

4.2 *Commission Marijuana Testing Requirements*

Testing for finished Marijuana and Marijuana products includes screening for chemical and biological contaminants (Section 4.2.1) and cannabinoid profile testing (Section 4.2.2). Section 4.2.3 discusses methods for determining the amount of usable Marijuana contained within a dispensed or sold product, as required for product labeling. Sections 5.0 through 7.0 further describe the detailed sampling frequency, sample collection procedures, and analyses required for contaminant and cannabinoid profile testing.

This protocol defines the minimum testing required to conform with 935 CMR 500.000: *Adult Use of Marijuana* and 935 CMR 501.000: *Medical Use of Marijuana*. Licensees have discretion to perform analysis beyond these requirements.

¹ Testing for media used in Marijuana cultivation is discussed in the companion *Protocol for Sampling and Analysis* of Environmental Media for Marijuana Establishments, Medical Marijuana Treatment Centers and Colocated Marijuana Operations.



Product problems should be reported to the Commission when there is a concern about the quality, authenticity, performance, or safety of any finished Marijuana or Marijuana product. Problems with product quality may occur during manufacturing, shipping, or storage. These may include:

- suspected counterfeit product;
- product contamination;
- defective components;
- poor packaging or product mix-up;
- questionable stability;
- labeling concerns; and
- unknown fillers and cutting agents

Testing laboratories and Licensees are often the first to recognize a product quality problem. Individuals shall report any concerns to the Commission by phone: (774) 415-0200; email: Commission@CCCMass.com; or via Mail to:

Cannabis Control Commission
ATTN: DIRECTOR OF INVESTIGATIONS
2 Washington Square Union Station 2nd Floor Worcester, MA 01604

4.2.1 *Contaminant Testing*

Contaminant testing requirements are based on the contaminants potentially introduced at each stage of production. Exhibit 2 identifies the potential contaminants of concern during each stage of Marijuana production and the testing requirements for each product type.

Cultivation

Cultivation is not in the scope of testing of this protocol but is included in Exhibit 2 to identify the contaminants of concern potentially introduced during cultivation. These include non-organic pesticides, metals, and other synthetic organic compounds in environmental media or other cultivation inputs (e.g., soil amendments, hydroponic products), as well as fungal and bacterial growth on the plants. Environmental media must be tested, as described in the Protocol for Sampling and Analysis of Environmental Media for Marijuana Establishments, Medical Marijuana Treatment Centers and Colocated Marijuana Operations, to reduce the introduction of chemical contaminants during cultivation. However, this testing will not necessarily ensure that the Marijuana plants are free of chemical contaminants and does not address fungal/bacterial infestation. Therefore, Marijuana products must be tested for chemical contamination before they can be distributed, dispensed, or sold and consumed.

Marijuana should be cultivated and harvested in traceable "cultivation batches," such that all



Marijuana within a cultivation batch has been produced with the same seed or plant stock, soil or other solid growing media, water, other agricultural/hydroponic inputs, and growing conditions. Cultivation batches should be sequentially numbered and traced throughout post-harvest production steps, and manufacturing/processing batch numbers must be included on the labels of all products to facilitate product recalls.

Finished Plant Material

Finished plant material dispensed or sold to patients or consumer consists of usable Marijuana that has been trimmed and dried. Trimming includes removing the leaves immediately subtending the buds as well as any dead leaves or stems. A "production batch" of finished plant material must be traceable to one or more cultivation batch(es). All production batches of finished plant material must be tested for pesticides and metals, which may be introduced during cultivation. Production batches intended for dispensing and direct use as adult use or medical product must also be tested for biological contaminants (bacteria, fungi, and mycotoxins), as shown in Exhibit 2.

Finished plant material is tested instead of living or freshly harvested plants because drying and trimming may affect the concentrations of contaminants and because fungal/bacterial growth may occur during finishing.

Finished plant material that exceeds a limit (see Section 7.0) for any contaminant included in the required testing cannot be distributed as finished Marijuana without first being reanalyzed and/or remediated pursuant to 935 CMR 500.160(13) and 935 CMR 501.160(12). The Commission may require additional contaminant screenings to ensure compliance.

Cannabis Resins and Concentrates

Cannabis resins and concentrates may be produced from the finished plant material of one or more cultivation batches. If the finished plant material fails to meet a required testing requirement, but the finished plant material is not dispensed or sold to a patient or consumer, then it may be used to derive resins and concentrates. The resins and concentrates may be dispensed or sold as long as they meet the respective concentration limit identified in Section 7.0. Each production batch of Cannabis resin or concentrate must be given a sequential identifier for product tracking and labeling. The Licensee must keep records of the Marijuana cultivation batch(es) used for each production batch and include the manufacturing/processing batch number on product labels.

Testing requirements for Cannabis resins and concentrates are summarized in Exhibit 2. Because these products may be made only from plant material that has already tested below limits for pesticides, testing for these contaminants is not required again. However, Cannabis concentrates must be tested for metals, as well as residual solvents if solvents were used in their production. If Cannabis concentrates are produced or extracted with solvent free processes, a solvent screening is not required. Specifically, testing is required for any solvent used to make a Cannabis concentrate production batch.



All Cannabis resin or concentrate production batches intended for distribution to patients and consumers as finished Marijuana products must be tested for bacteria, fungi, and mycotoxins. Testing for these biological contaminants is not required for Cannabis resin or concentrate production batches that will be used only to manufacture MIPs.

If required testing finds that a production batch of Cannabis resin or concentrate exceeds any applicable contaminant limit (see Section 7.0), the production batch cannot be dispensed or sold as a finished Marijuana product without first being reanalyzed and/or remediated followed by additional required contaminant screening to ensure compliance.

Marijuana Vaporizer Products

The provisions set forth in this protocol, in conjunction with 935 CMR 500.105(5)(c)(7), 935 CMR 500.140(13), 935 CMR 500.160(2), 935 CMR 501.105(5)(c)(7), 935 CMR 501.160(2) and 935 CMR 501.140(11), aim to mitigate the known risks associated with Marijuana vaporizer products that utilize concentrated marijuana oils (vape products). At the time of adoption of this protocol there remain many unknown factors and variables regarding the long-term use and overall effects of using vape products. This section of the guidance protocol addresses several issues and challenges faced when regulating legal vape products in the Commonwealth.

The Commission will continue to facilitate the availability of regulated, legal vape products while also taking steps toward mitigating potential health risks associated with vape products. The Commission understands the need to continue to develop and implement regulations and guidance informed by scientific research that will reflect additional studies into the health effects of utilizing vape products. This Guidance Protocol document shall be updated as new information becomes available to the Commission through its ongoing investigations and findings, as well as through industry research and scientific studies.

Marijuana-Infused Products

The Commission assumes that all MIP production batches will be destined to be either dispensed or sold for patient or consumer use. Therefore, all MIP production batches must be tested for biological contaminants (bacteria, fungi, and mycotoxins). Production batches must be discarded and not dispensed or sold to patients or consumers if any biological contaminant limit is exceeded.

MIPs may be made only with finished Marijuana products that have passed applicable metals, pesticide, and solvent testing requirements. For this reason, testing MIPs for metals, pesticide, and solvent contaminants is not required. However, Licensees have discretion to perform this testing of MIPs voluntarily.

Each MIP production batch must be given a sequential identifier (ID) for product tracking and labeling. Records must be kept that identify the cultivation batch(es) and finished Marijuana production batches associated with each MIP production batch. The manufacturing/processing batch number must be included on product labels to aid in product tracking and recalls.



4.2.2 Cannabinoid Profile Testing

All Marijuana products, shown in Exhibit 1, including any finished Marijuana or MIP, must bear a label that identifies the list of ingredients, including the cannabinoid profile of the Marijuana contained within the product, including the THC level (935 CMR 500.105(5), 935 CMR 501.105(5)). Therefore, for the purposes of labeling Marijuana products in Massachusetts, the cannabinoid profile must include, at a minimum, the percentage by dry weight (i.e., the weight of the material remaining after it has been thoroughly dried) of D9- tetrahydrocannabinol (D9-THC), cannabidiol (CBD), tetrahydrocannabinolic acid (THCa), and cannabidiolic Acid (CBDa). Medicinal benefits have been attributed to other cannabinoids, and these compounds may be included in the cannabinoid profile at the discretion of the Licensee

It is important to note that heat (including combustion) can cause chemical reactions that convert cannabinoids to more or less potent forms. For example, combustion (e.g., during smoking) causes non-psychotropic cannabinoid acids, abundant in the plant material, to be converted to psychotropic forms.

Because production of finished Marijuana products and MIPs may affect cannabinoid chemistry, as well as the concentration or dilution of active ingredients, each product type must be tested to characterize the cannabinoid content and profile.

4.2.3 Usable Marijuana Content

935 CMR 500.105(5)(a)(4), (b)(4),(c)(4),(d)(5) and 935 CMR 501.105(5)(a)(4), (b)(4), (c)(4), (d)(5) require labels of Marijuana products to identify the net weight or volume of usable Marijuana contained within the product expressed in U.S. customary units and metric units. Massachusetts has determined that 10 (ten) ounces of finished plant material is the maximum 60-day supply allowed for medical marijuana patients. While the 60-day supply defaults to 10 (ten) ounces of finished plant material, the 60-day supply may be modified by a Certifying Healthcare Provider.

When finished plant material is used to derive Cannabis resin or concentrates, processing alters the physical form and quantity (i.e., weight and volume) of the usable Marijuana. To enable the comparison of usable Marijuana in the various product types, DPH originally developed assumptions that should be used to express the quantity of usable Marijuana in Cannabis resins or concentrates in terms of the equivalent ounces of plant material. Based on Colorado Department of Revenue (2015) sources previously reviewed by DPH, it can be assumed that the yield of a Cannabis resin or concentrate is 19 percent of the starting weight of plant material.

This is based on the assumption that a typical butane extraction from 28.4 g (1 oz.) of flower will yield 5.5 g of oil.

When the weight of Cannabis resin or concentrate in a dispensed product is known, the quantity of usable Marijuana, expressed in equivalent plant material weight, should be calculated by multiplying the resin or concentrate weight by 5.3 (i.e., $1 \div 0.19$). For example, the quantity of



usable Marijuana in 1.9 ounces of Cannabis oil is 10 ounces (1.9 ounces of Cannabis oil x 5.3 = 10 ounces of usable Marijuana). Therefore, 1.9 ounces of Cannabis oil is equivalent to the maximum 60-day supply of useable plant material, unless otherwise modified by a Certifying Healthcare Provider.

The amount of usable Marijuana in a MIP is equal to the amount of usable Marijuana included in the product ingredients, measured before mixing, baking, or other processing or manufacturing steps. If more than one type of finished Marijuana ingredient is used to prepare a MIP, the amount of usable Marijuana in the MIP is the sum of the usable Marijuana in the ingredients.

5.0 Sampling Program Design

Under 935 CMR 500.160(2) and 935 CMR 501.160(2), Marijuana and Marijuana products must be tested for the cannabinoid profile and contaminants. The Marijuana products to be tested include: finished plant material (i.e., inflorescences or "buds"), Cannabis resin, Cannabis concentrates, and various types of MIPs. The purpose of testing is to ensure product quality and safety, and to provide information needed for product labeling requirements.

Because it is not possible to test all Marijuana, Licensees must collect representative samples to provide to one of the Commission's licensed Independent Testing Laboratories. Specifically, each Marijuana production batch must be sampled and analyzed, and the samples collected for a production batch must be representative of all of the Marijuana in the batch. The protocol provides the following definition of production batch:

Per 935 CMR 500.002 and 935 CMR 501.002, Production Batch means a batch of finished plant material, Cannabis resin, Cannabis concentrate, or Marijuana-infused Product made at the same time, using the same methods, equipment, and ingredients. The Licensee shall assign and record a unique, sequential alphanumeric identifier to each Production Batch for the purposes of production tracking, product labeling, and product recalls. All Production Batches shall be traceable to one or more Cannabis or Marijuana Cultivation Batches.

Samples from each Production Batch must be collected in a ready-to-use condition. For Production Batches that will be dispensed or sold to patients or consumers, ready-to-use means ready for packaging or post-packaging. For other Production Batches, ready-to use means ready for use as an intermediate or ingredient in making other products. After samples are collected, the entire Production Batch must be stored in a secure, cool, and dry location until analytical results are returned by the laboratory.

Sampling frequency is dictated by the production schedules, which may vary among Licensees due to scale, product types dispensed and sold, and patient and consumer demand. The Licensee is responsible for implementing a Production Batch tracking approach that meets the regulatory needs and definitions as well as ensuring representative sample collection and analysis of those batches. The Licensees must be able to demonstrate to the Commission that the production tracking, sampling, and analysis procedures are capable of obtaining representative samples. The

guidelines below are provided to aid Licensees in developing an approach that meets Commission requirements for representativeness.

To perform required testing, Licensees will collect samples to be analyzed by licensed and appropriately certified ITL, as noted in Section 7 of this protocol. The amounts of sample required for cannabinoid or contaminant testing may vary by analytical method and laboratory- specific procedures, therefore the Licensee should confer with the ITL to determine the minimum sample size required for evaluation. In all cases, the amount of sample supplied to the laboratory should be large enough and sufficiently homogenized to provide a representative sample of the Production Batch but not in excess to raise issues with possible diversion or waste disposal.

5.1 Representative Sampling

Specific procedures for collecting representative samples of Marijuana Production Batches are likely to vary depending on several attributes of the products and production methods:

Homogeneity – A sample is more likely to accurately represent the Production Batch if the material is homogenous (i.e., well mixed). Mixing or other homogenization steps help to homogenize the product before sample collection.

Physical Form – Production Batches will vary in physical form (e.g., liquids, solids), density, and viscosity. Physical form can affect homogeneity, homogenization steps, and sample collection methods. For example, liquid products can be homogenized by stirring. Grinding and other methods described further below can be used to homogenize solid products.

Quantity – Because Production Batches may vary in scale (i.e., volume or weight), varying numbers or sizes of samples may be required to promote representativeness.

In addition, sample representativeness can be affected by the timing and frequency of sample collection. Because of variation among production schedules (e.g., due to product type, production scale, patient, and consumer demand), sampling frequencies will vary among Licensees and Production Batches. However, representativeness will be ensured by the requirement that all Production Batches are tested.

5.2 Representative Sampling by Physical Form and Quantity

Exhibit 3 provides instructions for representative sampling of Marijuana Production Batches, including finished Marijuana products and MIPs. These instructions were developed based on sampling guidance for food products and herbal medicines developed by the United States Pharmacopeia Chapter 561 (USP, Undated-b), and account for differences in the physical forms of the Production Batches as they relate to homogeneity and quantity. If application of these guidelines is impractical for specific products, it is the responsibility of the Licensee to develop and document a scientifically defensible sampling approach.



Homogeneity plays an important role in methods for representative sampling. While liquid products such as Cannabis oil and liquid MIPs can be stirred or mixed to homogenize the product before sampling, other products such as Cannabis resin, baked goods, or hard candies cannot. Homogenization of some solid products, such as ground plant material or semi-solid resin is possible. Because of its importance, further guidance on homogenization methods is provided in Section 5.3.

5.3 Sampling Guidance by Matrix

Finished Marijuana products and MIPs can be in varied physical states or matrix (e.g., liquids to hard solids). To better understand the specific requirements the following guidance is provided based on the matrix of the material to be characterized.

<u>Liquids (Cannabis Oil and Some MIPs)</u>

Liquid products such as Cannabis oil or liquid MIPs should be thoroughly stirred or mixed before sampling to ensure homogenization of the sample. Cannabis oil or other liquid Cannabis from each Production Batch should be sampled using units of volume. Samples of concentrates or oils should be collected following each Production Batch if they are to be dispensed or sold, and before any further processing into MIPs.

Finished Plant Material or Friable MIPs

Sampling shall be performed such that the dried and trimmed inflorescences, or buds, of the Marijuana plant that are collected are representative in maturity and composition of the entire production Batch of finished plant material. The sampling timeframe for Marijuana buds should be after the completion of the finishing (i.e., drying and trimming) of the plant material Production Batch.

Homogenization of the finished plant material may be difficult to accomplish prior to sampling due to the heterogeneous nature of the finished plant material. Recommendations from ISO 1839-1980 guidelines for sampling loose leaf tea (i.e., a material similar in nature to Cannabis plant material) state that in most cases it is "impracticable and purposeless" to re-blend the contents of a large container of tea in order to obtain a representative sample. USP guidance for sampling articles of botanical origin (USP Chapter <561>) recommends that, for items with component parts larger than 1 cm in any dimension, samples should be withdrawn by hand, then combined and mixed prior to analysis. ISO 1839-1980 also states that if the primary samples consist of loose material, they should be combined to constitute the bulk sample for evaluation.

Quartering is a method to promote the representativeness of a homogenized Marijuana sample. Quartering involves heaping the adequately mixed and homogenized ground product into a square



shape, dividing the heap into four equal quarters, and selecting samples from two of the opposite quarters, which are mixed and sampled (Sexton and Ziskind, 2013; USP Chapter <561>; WHO, 2007). The remaining quarters may then be combined and mixed, then used for microbiological and contaminant testing (Sexton and Ziskind, 2013; USP Chapter <561>; WHO, 2007). The quartering process may be repeated until the required quantity is obtained, and the remaining material may be returned to the batch if possible (USP Chapter <561>; WHO, 2007).

Solids and semi-solids (Cannabis Resin and Some MIPs)

Solid and semi-solid products such as resin should be ground and thoroughly mixed, if possible, to be homogenized (USP Chapter <561>; WHO, 2007). A grinding device that minimizes loss (e.g., leaching of resins from finished plant material) should be used, and the grinding device should be cleaned thoroughly after each use. Once ground, quartering, as described above, can be used to collect the sample.

If grinding is impracticable, subsamples of the product should be taken from different areas of the product mass. For example, it might be possible to slice the product mass in sections prior to collection of subsamples or take the subsamples directly from different locations on the product surface (e.g., lower, middle, and upper).

Resin and other solids should not be melted as a means of homogenization. Heating the product may alter the cannabinoid profile or contaminant levels (WHO, 2005) thereby rendering the sample unrepresentative of the source product.

When subsamples are required, subsamples should be composited (combined), if possible, and mixed to obtain a quantity sufficient for evaluation. The quantity sufficient for evaluation may vary by analytical method and laboratory-specific procedures, therefore the Licensee should confer with the ITL to determine the minimum sample quantity required for evaluation.

Compositing subsamples may be impractical for some product types (e.g., hard candies or other products in discrete solid units). In these cases, individual product units can be provided to the ITL as samples for analysis. In some cases, the ITL may combine extracts or digestates prepared from the solid subsamples and analyze the volumetrically combined extract/digestate as a composite.

5.4 Quality Control (QC) Samples

Duplicate samples shall be collected to provide verification of sampling and laboratory procedures. Specifically, a duplicate should be collected for 5 percent (1 per 20) of the samples collected for each Marijuana product type. Duplicate samples shall not be identified to the ITL (this is considered blind quality control). Duplicate samples are used to evaluate any variance in the sampling and analysis procedures. To ensure authenticity, it should be noted that QC samples should be taken on the same day and be derived from the same batch.



6.0 Sample Collection Procedures

This section describes sample collection procedures that are generally applicable to any Marijuana product that Licensees may dispense or sell, including, but not limited to, finished plant material; liquid concentrates or MIPs; resins, waxes, creams, or other semi-solid products; or solid concentrates or MIPs; or vape products. Because of the wide range of Marijuana products that Licensees may offer, particularly MIPs, these sample collection procedures may require adaptation in some cases.

In all cases, sample collection must be conducted in a manner that provides analytically sound and representative samples so that all Marijuana products dispensed or sold are safe, effective, and accurately labeled. The Licensee must document every sampling event and provide this documentation to the Commission upon request.

Prior to Sample Collection, the Licensee should assemble all equipment and information needed before beginning. Items to assemble before sampling include, but are not limited to, the following:

- Sample collection plan for each product type;
- Logbook or sample collection forms;
- Chain-of-custody forms (COCs);
- Disposable gloves;
- Decontaminated tool(s), such as a spatula, knife, sampling spear, or pipette;
- Stainless steel bowl and implement to homogenize the product (e.g., by stirring, chopping, or grinding);
- Clean decontaminated surface for sample processing;
- Sample containers appropriate for the analyses required;
- Container labels and pen with indelible ink;
- Supplies to thoroughly clean, decontaminated, and dry sampling equipment between samples; and
- A cooler with ice to keep samples cool until refrigeration or shipment to the laboratory.

Sample collection personnel should create a new entry for each sampling event in a sample collection logbook or prepare sample collection forms for documentation of sample collection. Sample collection documentation should identify the sample collection date and start time, participating personnel, a general description of the product type and batch number sampled, a description of the sampling procedures used, and a record of batches that would potentially be impacted should analysis results indicate unacceptable contamination levels.

Sample collection personnel shall identify or determine the Cultivation Batch number, Production Batch, and number of samples to be collected based on the guidance provided in Section 5, as well as further guidance obtained in consultation with the ITLs. The number of samples taken from each Cultivation and/or Production Batch must be recorded in the sample collection logbook or forms. Record the sample Cultivation and/or Production batch identifiers (ID) for each sample.



The batch IDs will be included on sample labels. In addition to the batch ID, create a unique sample ID for each sample. Sample identifiers should be unique for a given sample event. Record the batch and sample IDs in the sample collection logbook.

Any tools that contact the samples should be made of stainless steel or other inert material to avoid potential contamination of the sample. Appropriate sample containers should be made of suitable materials.

Preparing sample labels and affixing them to sample containers immediately before sampling is recommended. Information to include on the label includes at a minimum the batch and sample IDs and date/time of collection and by whom. Additional information that must be recorded in documentation, if not on the label, includes sample collector's name, product type, collection method, and other details about the product, such as MIP type or production method.

<u>Sample Collection</u>. Collect the planned samples from each cultivation or production batch one at a time. Follow these basic steps for each sample:

- 1. Wear disposable gloves to mitigate potential for contamination of samples.
- 2. Ensure that the sampling area is clean and decontaminated and lay out any tools and equipment needed.
- 3. Collect the sample using an appropriate tool. Do not touch the sample with your hands or allow the sample to touch anything that might cause cross contamination.
- 4. If necessary, place the sample in the stainless-steel bowl or on a decontaminated cutting surface for homogenizing the sample using either the sample collection tool or separate clean, decontaminated implement.
- 5. Record the time each sample was collected and record any difficulties, inconsistencies with the sampling plan, or other remarks (e.g., environmental conditions) that might be relevant to data analysis or quality assurance.
- 6. To avoid cross contamination of samples, any tools or equipment that comes in contact with the finished plant material or other Marijuana products should be cleaned before collecting the next sample.
- 7. All samples should be placed in clean, airtight sample containers that are large enough to hold the prescribed sample quantity with minimal headspace. Sample containers must be firmly closed and appropriately labeled.
- 8. To preserve the chemical and biological composition of the samples, they should be refrigerated or maintained on ice until shipped to the analytical laboratory.
- 9. Chain-of-custody paperwork should be completed immediately prior to shipment to the analytical laboratory.

Marijuana products and MIPs, especially solids or semi-solids such as finished plant material, may be heterogeneous with respect to distribution of cannabinoids or contaminants. To obtain a representative sample, liquid products should be thoroughly stirred or mixed before sampling. Solid and semi-solid products must be ground and thoroughly mixed. A grinding device that



minimizes loss (e.g., leaching of resins) should be used, and the grinding device should be cleaned thoroughly after each use.

Another method to promote the representativeness of a ground Marijuana product is quartering. Quartering involves heaping the ground product, dividing the heap into four equal quarters, and selecting samples from two of the quarters, which are combined and mixed (Sexton and Ziskind, 2013). The remaining quarters may then be combined and mixed, then used for microbiological and contaminant testing (Sexton and Ziskind, 2013).

Resin and other solids should not be melted as a means of homogenization. Heating the product may alter the cannabinoid profile or contamination levels (WHO, 2005) thereby rendering the sample unrepresentative of the source product.

Edible products tend to be relatively homogeneous (Sexton and Ziskind, 2013), so a selection of packaged or ready-to-dispense MIPs may be provided to the analytical laboratory to represent a given production batch (Sexton and Ziskind, 2013). MIPs may be either liquid or solid, and the solid MIPs may be of varying density (e.g., baked goods and candies). Laboratory samples of MIPs shall be homogenized prior to testing such that the sample is representative of the whole product. Homogenized samples should be mixed and quartered similar to the procedure described above. If production batches of individually packaged MIPs are sampled, multiple packaged products should be sampled such that they are representative of the production batch size.

7.0 Sample Analysis

All sample analyses described in this protocol shall be conducted by an Independent Testing Laboratory (ITL) that is either:

- 1. Accredited to International Organization for Standardization (ISO) 17025 by a third-party accrediting body such as A2LA or ACLASS, or
- 2. Certified, registered, or accredited by an organization approved by the Massachusetts Department of Public Health.
- 3. Licensed with the Commission pursuant to 935 CMR 500.050(7) and 935 CMR 501.052.

Further requirements concerning the eligibility and responsibilities of analytical laboratories are provided in 935 CMR 500.029 and 935 CMR 501.029.

In addition to the regulatory qualifications and requirements referenced above, the ITL should have a demonstrated ability to perform the specific analytical methods required and to provide defensible documentation and quality assurance.

The sections below identify the analytical methods and analyses required for characterizing the cannabinoid profile of Marijuana products, as well as the presence and levels of potential contaminants, including metals, pesticides and plant growth regulators, microbiological contaminants and mycotoxins, and residual solvents.



7.1 Cannabinoid Profile

Although many cannabinoids and related compounds are present in the Cannabis plant, characterization of the cannabinoid profile should include, at a minimum, the dry-weight percentage of delta-nine-tetrahydrocannabinol (D9-THC) and cannabidiol (CBD).

Because target cannabinoid contents and ratios may vary depending on the desired dosage and other use considerations, minimum profile standards are not mandated. However, the cannabinoid profile must be included in product labeling under 935 CMR 500.105(5) and 935 CMR 501.105(5). Analytical procedures for determining cannabinoid profiles are available in AHP (2013).

7.2 *Metals*

Finished Marijuana products must be tested for the four metals listed in Exhibit 4. Quantification of metals must be performed with a validated method such as those provided by USP (Chapter <233>) or FDA (2011). A production batch of finished Marijuana products (e.g., finished plant material, Cannabis resin, or Cannabis concentrate) may only be dispensed or sold to patients or consumer if all four of the metals are below the upper limits for the respective product and intended use specified in Exhibit 4 (e.g., ingestion only or all other uses). These limits are in micrograms (µg) of contaminant per kilogram (kg) of product.

Once a production batch of finished Marijuana has been determined to meet the limits in Exhibit 4, it must bear the following label:

This product has been evaluated for environmental contamination (impurities) assuming that no more than 10 grams (0.35 ounces) of finished plant material (or the equivalent amount of concentrate) will be consumed per day.

In addition to the above labeling requirement for all production batches of finished Marijuana, if the quantification of metals is below the upper limits specified for "Ingestion Use Only", as described in Exhibit 4 (b), the production batch of finished Marijuana must bear the additional label:

"THIS PRODUCT HAS BEEN EVALUATED FOR IMPURITIES BASED ON ORAL CONSUMPTION ONLY. DO NOT INHALE THIS PRODUCT."

7.2.1 *Metals and Marijuana Vape Products*

Heavy metal accumulations are an issue of particular concern when analyzing and assessing the potential health impacts associated with the use of vape products. Instances of elevated levels of heavy metals have been identified in vape products tested by the Commission that have been subject to quarantine in accordance with the *First Amended Quarantine Order Applying to Vaporizer Products with Conditions* ("First Amended Quarantine Order"), issued on December 12, 2019. In some cases, the sampled vape product(s) failed testing due to heavy metal



concentrations in excess of allowable limits. The upper allowable limit for heavy metals in Marijuana and Marijuana products is 500 parts per billion (ppb) for all uses and 1,000 ppb for ingestion only as stated in Exhibit 4.

The leaching of heavy metals into vape products may be due to a number of factors including time, device composition, temperature, and usage. The factor of time is particularly concerning because it is not known how long leaching occurs after vape devices are filled with cannabis oil. In the absence of sufficient information developed over the course of long-term studies regarding vape devices that all potential contributing factors that impact the leaching of metals into vape products will continue to be monitored and investigated by the Commission. Accordingly, Licensees shall continue to conduct a second heavy metal screening requirement on all finished vape products subject to the First Amended Quarantine Order.

Every vape product sold must be accompanied with a written insert at the point of sale which identifies the manufacturer of the device and its known components, including the battery, and discloses materials used in the device's atomizer coil (e.g. titanium, titanium alloy, quartz, copper, nichrome, Kanthal, or other specified materials). Specific additives used in the production of the vape product, including thickening agents, thinning agents, and terpenes, shall also be disclosed along with their Certificates of Analysis. The Commission will continue to gather information regarding the manufacturing and design specifications of the vape cartridge and devices and will update this Guidance Protocol regarding heavy metal accumulations in vape products accordingly.

7.3 Pesticides Residues and Plant Growth Regulators

Non-organic pesticides may not be used to cultivate Marijuana in Massachusetts (935 CMR 500.120(5) and 935 CMR 501.120(5). As discussed in Section 5, all production batches of finished plant material must be tested for residues of prohibited pesticides. At a minimum, samples of finished plant material must be tested for the pesticides, including plant growth regulators, listed in Exhibit 5. Exhibit 5 identifies appropriate analytical methods for each of the listed pesticides.

A production batch of finished plant material may be dispensed to consumers, patients or be used to make other Marijuana products if no individual pesticide or plant growth regulator is detected above 10 ppb. A laboratory that is unable to perform the required testing of pesticide residues at or below the 10 parts per billion (ppb) criteria may determine compliance by ensuring that any pesticide residues are present at a level less than or equal to 5 percent of the US EPA tolerance for the specific residue. EPA pesticide tolerances are available from Title 40 of the Code of Federal Regulations (CFR). In such circumstances, DPH should be notified regarding the specific pesticides to which this method is being applied.

Marijuana and Marijuana products shall be tested for contaminants specified by the Commission but not limited to any plant growth regulators and the presence of pesticide. State law prohibits use of pesticides on marijuana cultivation. The Commission applies a 10 parts per billion (10 ppb) threshold to determine detection of pesticides for purposes of compliance with pre-market testing requirements. Any product that obtains a true value at the limit of detection (LOD) concentration



means there is at least a 99% probability of reporting a detection. Pesticide detection above the LOD but below the quantification limit (BQL) is also considered out of compliance.

The ITL's shall report the pesticide levels in Marijuana products that are detected in the certificate of analysis. If a sample is found to contain pesticides or is above the permissible limits in the pesticides table (exhibit 5), it is considered out of compliance and or a failure. Under 935 CMR 500.120(5) and 935 CMR 501.120(5) licensees are required to immediately report to the Commission any test result indicating pesticide noncompliance. The associated product batch may not be released for retail sale and may not be remediated.

Exhibit 5 requires Marijuana and Marijuana products to be tested for the following pesticides:

- 1. Bifenazate (Miticide)
- 2. Bifenthrin (Insecticide)
- 3. Cyfluthrin (Insecticide)
- 4. Extoxazole (Insecticide/Insect Growth Regulator)
- 5. Imazalil (Fungicide)
- 6. Imidacloprid (Insecticide)
- 7. Myclobutanil (Fungicide)
- 8. Spiromesifen (Insecticide)
- 9. Trifloxystrobin (Fungicide)

Acknowledging that no method currently exists that analyzes all registered pesticides efficiently (USDA, 2012a), USDA developed a "target" analyte list of 195 prohibited pesticides (USDA, 2011). Under USDA procedures for pesticide residue testing in organic food (USDA, 2013; USDA, 2014), Specifically, pesticide testing should be performed consistent with the following sections of National Organic Program Handbook: Guidance and Instructions for Accredited Certifying Agents and Certified Operations (USDA, 2014):

NOP 2611: Laboratory Selection Criteria for Pesticide Residue Testing NOP 2611-1: Prohibited Pesticides for NOP Residue Testing

NOP 2613: Responding to Results from Pesticide Residue Testing

A further discussion of the application of this testing approach is available in USDA's 2010 - 2011 Pilot Study Pesticide Residue Testing of Organic Produce (USDA, 2012b).

7.4 Microbiological Contaminants and Mycotoxins

Analytical requirements for microbiological contaminants and mycotoxins are listed in Exhibit 6. Requirements for total viable aerobic bacteria, total yeast and mold, total coliforms, and biletolerant gram-negative bacteria are given in colony forming unit (CFU) counts per mass of product sample. The requirement for pathogenic E. coli and Salmonella spp. is based on detection in a one-gram sample, and the requirement for mycotoxins is based on the concentration per kilogram of sample. Analytical methods for enumerating and identifying specific microbiological

contaminants must be consistent with the following United States Pharmacopeia (USP) chapters:

- USP Chapter <61>: Microbiological Examination of Nonsterile Products: Microbial Enumeration Tests. USP 36, Chapter <61>
- USP Chapter <62>: Microbiological Examination of Nonsterile Products: Tests for specified Microorganisms. USP 36, Chapter <62>

Analytical methods for mycotoxins must be consistent with USP chapter:

• USP Chapter <561>: Articles of Botanical Origin. USP 36, Chapter <561>

7.5 Residual Solvents

As discussed in Section 4.2.1, residual solvents testing is required only for Cannabis resins and concentrates where solvents have been used in the production process. In particular, a production batch of Cannabis oil may be dispensed or sold as a finished Marijuana product or used to make another Marijuana product only if:

- Laboratory analysis verifies that all solvents used at any stage of Cannabis oil production, except in cleaning equipment, are below the limits provided in Exhibit 6; and
- The production batch passes all other applicable testing requirements.

Only solvents listed in Exhibit 7 may be used in the production of Cannabis oil. A Licensee is required to test only for those solvents used, and it is not required to test for any residual solvents if it can document that no solvents were used in the Cannabis oil production process.

The upper limits for residual solvents in Exhibit 7 are given as milligrams of residual solvent per kilogram of Cannabis oil. The upper limits are based on residual solvent standards provided by the United States Pharmacopeia (USP Chapter <467>), the International Conference on Harmonization (ICH, 2011), and AHP (2013). Consistent with the standards provided by these sources, "Class 1" solvents including benzene, carbon tetrachloride, 1,2- dichloroethane, 1,1-dichloroethene, and 1,1,1-trichloroethane may not be used in the production of any Marijuana product.

Analyses to determine residual solvent concentrations in Marijuana products must be performed in accordance with the methods identified in USP Chapter <467>.

7.6 *Vitamin E Acetate*

Vitamin E Acetate (VEA) is a contaminant of concern that has been linked to unregulated vape products acquired on the illicit market. The Center for Disease Control and Prevention has previously identified VEA as a potential contributor to the 2019 EVALI (e-cigarette or vaping product use associated lung injury) outbreak. While results from tests ordered by the Commission show that no licensed vape product tested positive for VEA, the Commission will continue to require mandatory VEA testing on final, ready-to-sell vape products until a final determination



between VEA and EVALI has been reached by the CDC or until the Commission amends its First Amended Quarantine Order and issues any further administrative order apply to vaporizer products.

The Marijuana vape product guidance protocol recommends that for a final, ready-to-sell vape product, a test sample of the finished product containing at least one (1) gram of marijuana oil must be sent to one of the Commission's licensed ITLs for heavy metal and VEA testing. A one (1) gram test sample will provide the ITLs with enough source material to run the required tests in addition to any duplicative screenings if needed. The one (1) gram sample size amount takes into consideration the inherent challenges and difficulties with extracting marijuana oil from final, ready-to-sell vape products.

Marijuana vape products will continue to receive all required contaminant testing for concentrates as required under 935 CMR 500.160 and 935 CMR 501.160. Additionally, per the Commission's First Amended Vape Order and 935 CMR 500.160 and 501.160, final ready-to- sell vape products must also pass a second heavy metal screen in addition to a Vitamin E Acetate (VEA) screen.

To date, a standardized method for opening Marijuana vape products and extracting the oil contents has not been developed by any of the Commission's licensed ITLs. The Marijuana oil from the pre-filled vape products must first be carefully extracted from the device or cartridge before conducting the heavy metal and VEA tests to prevent introducing contaminants. Many of the vaporizer product devices are not constructed in a manner that easily allows them to be reopened after being sealed. These vaporizer products are not easily opened once sealed partly due to concerns with tampering of finished devices. Care must be taken during the extraction process such as not to introduce metal fragments that may inadvertently become lose from tools or instruments. The Commission will continue to work with the ITLs and vape product device manufacturers in efforts to eventually create standardized instructions for extracting marijuana oils from final, ready-to-sell vape products.

8.0 Data Evaluation

Licensees are required to reanalyze or remediate failed Marijuana and Marijuana products pursuant to 935 CMR 500.160(13)(a),(b), and (c) and 935 CMR 501.160(12)(a),(b) and (c). Upon receiving notification that Marijuana or Marijuana product has failed any test for contaminants, the Licensee shall either reanalyze the Marijuana or Marijuana product, shall take steps to remediate the Marijuana or Marijuana product or destroy the Marijuana and Marijuana product. Licensees must ensure that any failed Marijuana and Marijuana product are properly remediated through the Commission's Seed-to-sale System of Record (Metrc).

Reanalysis

If the Licensee chooses to reanalyze the sample, the same sample shall be submitted for reanalysis at the ITL that provided the initial failed result. If the sample passes all previously failed tests at the original ITL, an additional sample representing the same sample set previously tested shall be



submitted to an ITL other than the original ITL for a Second Confirmatory Test. To be considered passing and therefore safe for sale, the sample shall have passed the Second Confirmatory Test at an ITL other than the ITL that provided the initial failed result. Any Marijuana and Marijuana product that fails the Second Confirmatory Test shall not be sold, transferred, or otherwise dispensed to consumers, patients, or Licensees. Any such product is subject to an Order of Destruction to be issued by the Commission at its discretion.

Remediation

If the Licensee chooses to remediate, a new test sample shall be submitted to any licensed ITL, which may include the ITL that provided the initial failed result, for a full-panel test. Any failing Marijuana or Marijuana product may be remediated a maximum of two times. Any Marijuana or Marijuana product that fails any test after the second remediation attempt shall not be sold, transferred, or otherwise dispensed to consumers, patients, or Licensees. Any such product is subject to an Order of Destruction to be issued by the Commission at its discretion.

Destruction

If the Licensee chooses to destroy the failed Marijuana and Marijuana product it shall do so in accordance with 935 CMR 500.105(12) and 935 CMR 501.105(12). Licensees are required under 935 CMR 500.160(4) and 935 CMR 501.160(4) to "have a written policy for responding to laboratory results that indicate contaminant levels are above acceptable limits established in the protocols." The analytical results provided by the ITLs, including those for finished Marijuana and Marijuana products discussed in this protocol, will be a primary means for Licensees to ensure compliance with this requirement.

- The ITL results must include, at a minimum, the following in the laboratory data package:
- Case Narrative:
 - The narrative, written on laboratory letterhead, shall describe any sample receipt, preparation, or analytical issues encountered as well as any method nonconformances or exceedance of QA/QC criteria used by the laboratory.
 - The narrative shall identify the preparation and analytical methods utilized by the laboratory.
 - The narrative shall include a signed statement by an authorized laboratory representative as to the accuracy, completeness, and compliance with the methods of the results presented.
- Chains-of-custody (COC) information or other paperwork indicating requested analyses and documentation of sample collection and receipt.
- Summary of analytical results including sample identifier, methods performed, target analytes analyzed for, result or reporting limit, proper qualifier according to laboratory standard procedures, units of measure, preparation date(s), where applicable, and analysis date(s).



It is highly recommended that the laboratory data package also includes sufficient data to evaluate the laboratory results, including a summary of laboratory QA/QC results. The type of applicable QA/QC results differ by analysis method, but can include surrogates or deuterated monitoring compounds, laboratory QC samples such as spikes, blanks, and duplicates, and calibration summaries. It is the responsibility of the Licensee to provide information sufficient to demonstrate that the results are accurate and precise, and in line with method capabilities and project data quality objectives (DQOs).

Depending on the outcome of the analysis, the Licensee may need to take action to address unacceptable levels of contamination or to perform follow-up investigation. Exhibit 8 is a flowchart Licensees should use to determine the correct course of action in response to each laboratory analytical data package. As discussed above, if any analysis fails to meet all applicable DQOs, then the finished Marijuana product or MIP cannot be dispensed. In this case, the production batch may be resampled for follow-up testing. A production batch may be retested once and records of the original analysis must be retained. If applicable DQOs are not met, the production batch cannot be dispensed or sold to consumers or patients or used in the production of MIPs.

If a batch of finished plant material fails to meet a metal or a bacteria/fungi/mycotoxin standard described in Exhibits 4 and 6, the finished plant material cannot be dispensed or sold to a patient or consumer as finished Marijuana without first being reanalyzed and/or remediated pursuant to 935 CMR 500.160(13) or 935 CMR 501.160(12). Finished plant material that fails to meet a metal, or a bacteria/fungi/mycotoxin standard may be used to derive other finished Marijuana products (e.g., resins, concentrates). While the finished plant material or finished Marijuana product may be treated in a manner to reduce the concentration of metals or bacteria/fungi/mycotoxin contaminants, the finished plant material or finished Marijuana product may not be treated to bind or restrict the availability of the metals or bacteria/fungi/mycotoxin in an analysis without reducing the total contaminant content.

If a batch of finished plant material fails to meet a pesticide residue and plant growth regulator limit described in Exhibit 5 and Section 7.3, it cannot be dispensed to consumers or patients, or used to derive other products. Marijuana and Marijuana products that fail for pesticides or plant growth regulators may not be remediated and the associated batch will be subject to an Order of Destruction issued by the Commission at its discretion.

If a concentrate or resin exceeds the residual solvent requirements described in Exhibit 7 and Section 7.5 it cannot be dispensed to consumers or patients without first being reanalyzed and/or remediated pursuant to 935 CMR 500.160(12) and/or 935 CMR 501.160(11). If upon reanalysis and/or remediation the concentrate/resin meets the residual solvent standard, the ultimate finished Marijuana product may be dispensed to consumers and patients as long as all applicable limits are met.

As required by 935 CMR 500.160(5) and 935 CMR 501.160(5), the Licensee must maintain the results of all testing for no less than one year. These records must be available for inspection by



the Commission upon request.

9.0 References

AHP. 2013. Cannabis Inflorescence, Cannabis spp., Standards of Identity, Analysis, and Quality Control. American Herbal Pharmacopoeia. 2013. Available at: https://herbal-ahp.org/online-ordering-cannabis-inflorescence-qc-monograph/

Colorado Pot Guide. 2014. "Different types of Marijuana concentrates available in Colorado," Website: Colorado Pot Guide, February 6, 2014. Available at: https://potguide.com/blog/2014/february/06/different-types-of-marijuana-concentrates-available-in-colorado/

Colorado Department of Revenue. 2015. "Marijuana Equivalency in Portion and Dosage". August 10, 2015. Available at:

 $https://www.colorado.gov/pacific/sites/default/files/MED\% 20 Equivalency_Final\% 2008 1020 15.\\pdf$

FDA. 2011. Analysis of Foods for As, Cd, Cr, Hg and Pb by Inductively Coupled Plasma-Mass Spectrometry (ICP-MS). United States Food and Drug Administration, Center for Food Safety and Applied Nutrition, Current Method CFSAN/ORS/DBC/CHCB April 25, 2011.

Mechtler, K., Bailer, J., and de Hueber, K. 2004. Variations of $\Delta 9$ -THC Content in Single Plants of Hemp Varieties. Industrial Crops and Products. 19 (1): 19-24.

Sexton, M. and Ziskind, J. 2013. Sampling Cannabis for Analytical Purposes. BOTEC Analysis Corp. I-502 Project #430-1e.

USDA. 2014. National Organic Program Handbook: Guidance and Instructions for Accredited Certifying Agents and Certified Operations, U.S. Department of Agriculture, National Organic Program. Available at: https://www.ams.usda.gov/rules-regulations/organic/handbook

USDA. 2013. "Periodic Residue Testing of Organic Products," memorandum form Miles McElvoy, Deputy Administrator, U.S. Department of Agriculture, National Organic Program, to National Organic Program Accredited Certifying Agents, February 28, 2013. Available at: https://www.ams.usda.gov/sites/default/files/media/NOP-Notice-ResidueTesting.pdf

USDA. 2012a. "Laboratory Selection Criteria for Pesticide Residue Testing," Document NOP 2611 of "National Organic Program Handbook: Guidance and Instructions for Accredited Certifying Agents and Certified Operations." U.S. Department of Agriculture, National Organic Program, Effective November 8, 2012. Available at: https://www.ams.usda.gov/sites/default/files/media/2611.pdf



USDA. 2012b. 2010—2011 Pilot Study Pesticide Residue Testing of Organic Produce. U.S. Department of Agriculture, National Organic Program and National Science and Technology Programs. November 2012. Available at: https://www.ams.usda.gov/reports/2010-2011-pilot-study-pesticide-residue-testing-organic-produce

USDA. 2011. "Prohibited Pesticides for NOP Residue Testing," Document NOP 2611-1 of "National Organic Program Handbook: Guidance and Instructions for Accredited Certifying Agents and Certified Operations." U.S. Department of Agriculture, National Organic Program, Effective July 22, 2011. Available at:

http://www.ams.usda.gov/AMSv1.0/getfile?dDocName=STELPRDC5088987

U.S. FDA. 1999. Pesticide Analytical Manual, Volume I: Multiresidue Methods (3rd ed., updated October 1999). Center for Food Safety and Applied Nutrition, Office of Plant, Dairy Foods, and Beverages. Available at: http://www.fda.gov/Food/Food/ScienceResearch/LaboratoryMethods/ucm2006955.htm

United States Pharmacopeia. 2008. "Microbiological Examination of Nonsterile Products: Microbial Enumeration Tests." USP 31, Chapter <61>.

United States Pharmacopeia. 2008. "Microbiological Examination of Nonsterile Products: Tests for specified Microorganisms." USP 31, Chapter <62>.

Available at: https://www.usp.org/frequently-asked-questions/microbial-enumeration-nonsterile-products-tests-specified-microorganisms

United States Pharmacopeia. 2015. General Chapter <232> Elemental Impurities – Limits: To be Published in 2nd Supplement of USP 38-NF 33. April 17, 2015. Available at: https://www.usp.org/sites/default/files/usp/document/our-work/chemical-medicines/keyissues/232-40-35-1s.pdf

United States Pharmacopeia. General Chapter <2232> Elemental Contamination in Dietary Supplements. Available at: https://www.usp.org/sites/default/files/usp/document/our-work/chemical-medicines/key-issues/ei-implementation-faq-2015-03-27.pdf

United States Pharmacopeia. 2015. "Elemental Impurities -- Procedures." USP 36, Chapter <233>. April 17, 2015.

 $A vailable\ at:\ https://www.usp.org/sites/default/files/usp/document/our-work/chemical-medicines/key-issues/c233.pdf$

United States Pharmacopeia. Undated-a. "Residual Solvents." First Supplement to USP 36–NF 31, Chapter <467>.

Available at:https://www.usp.org/frequently-asked-questions/residual-solvents

United States Pharmacopeia. 2008. "Microbial Examination of Nonsterile Products: Acceptance Criteria for Pharmaceutical Use." USP 31, Chapter <1111>.



Available at:

https://www.drugfuture.com/Pharmacopoeia/USP32/pub/data/v32270/usp32nf27s0_c1111h.html #:~:text=1111 microbiological examination of nonsterile products: acceptance criteria, to adversely affect the health of the patient.

United States Pharmacopeia. Undated-b. "Articles of Botanical Origin." USP 36, chapter <561>. Available at: https://www.usp.org/sites/default/files/usp/document/our-work/DS/2015-dsc-chapters-561-616-1010-1092.pdf

WHO. 2005. Annex 4: WHO Guidelines for sampling of pharmaceutical products and related materials. WHO Technical Report Series, No. 929. World Health Organization, Geneva, Switzerland.

WHO. 2007. WHO Guidelines for Assessing Quality of Herbal Medicines with Reference to Contaminants and Residues. World Health Organization, Geneva, Switzerland. Available at: https://apps.who.int/iris/bitstream/handle/10665/43510/9789241594448_eng.pdf?sequence=1&is Allowed=y





Protocol for Sampling and Analysis of Environmental Media for Marijuana Establishments, Medical Marijuana Treatment Centers and Colocated Marijuana Operations

Revised - February 26, 2021

This document is issued by the Cannabis Control Commission. The applicable Marijuana laws, which include M.G.L. c. 94I, 94G, 935 CMR 500.000 and 935 CMR 501.000, should be reviewed as they may provide or clarify the legal requirements related to this document. This protocol document should be checked periodically for revisions. Questions with regards to this document may be directed to Commission@CCCMass.com.



Contents

1.0	Purpose and Applicability	2
1.1	Purpose	2
1.2	Applicability	3
2.0	Definitions and Acronyms	3
3.0	Applicable Regulations	6
4.0	Sampling and Analysis Requirements	7
4.1	Solid Growing Media	7
4.2	Water	8
5.0	Sampling Program Design	9
5.1	Solid Growing Media	9
5.2	Water1	2
6.0	Sample Collection Procedures	4
6.1	Collecting Samples of Soil or Solid Growing Media1	4
6.2	Collecting Water Samples1	7
6.3	Sample Handling19	9
7.0	Sample Analysis	1
8.0	Data Evaluation	2
9.0	References 2	3

1.0 Purpose and Applicability

1.1 *Purpose*

The purpose of this protocol is to provide Massachusetts Marijuana Establishments (ME), Medical Marijuana Treatment Centers (MTC) and Colocated Marijuana Operations (CMO) (herein referred to collectively as Licensees) with requirements and best practices for the collection, handling, analysis, documentation, review, and reporting of environmental media samples to comply with Massachusetts Cannabis Control Commission regulations 935 CMR 500.000: *Adult Use of Marijuana* and 935 CMR 501.000: *Medical Use of Marijuana*.

This protocol is subject to revision based on evolving best practices, updated scientific information or standards/guidelines, or other information relevant to the contents of the protocol.



1.2 Applicability

This protocol applies only to independent laboratory testing of environmental media (e.g., soils, solid growing media, and water) used in the cultivation of Marijuana for contaminants by Massachusetts MEs, MTCs and CMOs. The protocol only addresses potential contaminants to protect the public health, in particular those contaminants from the environmental media which can accumulate in plant materials. All sampling and analyses described are intended to demonstrate compliance with regulations, requirements, and guidance of the Massachusetts Cannabis Control Commission (Commission) for certification and ongoing operation of Massachusetts MEs, MTCs and CMOs.

Testing described in this protocol is not intended to apply to:

- Hardship Cultivation Registrations
- Measurement of nutrients, pH, or other contributors or detriments to healthy plant growth for cultivation purposes.
- Analysis of materials for disposal as may be required in agricultural or manufacturing practices.
- Testing of Marijuana plant materials, concentrates/resins, finished Marijuana Products, or Marijuana-infused Products (MIPs) for contaminants or active ingredients for labeling, determination of product quality, or protection of public health.
- Real-time testing or monitoring devices, such as temperature or humidity meters that would be inspected by a Commission investigator or compliance officer.
- Any internal ME, MTC or CMO laboratory testing.
- Testing to evaluate or maintain product quality or verify system control.

Additional testing for optimizing cultivation, waste disposal compliance, product labeling, or quality assurance is at the discretion of the ME, MTC or CMO. Additional testing performed including that not covered by this protocol is subject to routine inspection.

2.0 Definitions and Acronyms

Italicized terms are those defined in 105 CMR 725.004, 935 CMR 500.002: *Definitions* and 935 CMR 501.002: *Definitions*.



3



Aeroponics means a process of cultivation in an air or mist environment without the use of soil or an aggregate medium and without liquid nutrient solution as a growing medium (i.e., hydroponics).

Certificate of Registration means a certificate issued by the Commission, that confirms an individual or entity has met all applicable requirements pursuant to M.G.L. c. 94I, 935 CMR 500.000 and 935 CMR 501.000 and is registered by the Commission.

Cultivation Unit means soil plots, beds, individual plant containers, hydroponic chambers or other physical locations or equipment where Marijuana plants are grown.

Cultivation Soils means soils in place in beds or containers at a Marijuana Establishment, Medical Marijuana Treatment Center or Colocated Marijuana Operations having passed initial source soil tests and actively used in Marijuana cultivation. This definition excludes piles of soil which have passed initial source soil tests but are stored for future use in cultivation.

Environmental Media Evaluation Guides (EMEGs) are estimated contaminant concentrations based on Agency for Toxic Substances and Disease Registry (ATSDR) evaluation that are not expected to result in adverse health effects. EMEGs are based on ATSDR minimum risk levels (MRLs) and conservative assumptions about exposure, such as exposure frequency and duration, intake rate, and body weight.

Field Duplicates means two independent samples taken from and representative of the same material, stored in separate containers, but processed in parallel through all steps of the sampling and analytical procedures. Duplicate samples evaluate variance of the material sampled as well as introduced through the sampling and analysis procedure.

Flowering means the gametophytic or reproductive state of Cannabis or Marijuana in which the plant produces flowers, trichomes, and Cannabinoids characteristic of Marijuana.

Hydroponics means the cultivation of plants in liquid nutrient solutions rather than in soil.

Hardship Cultivation Registration means a registration issued to a Registered Qualifying Patient under the requirements of 935 CMR 501.027.

Independent Testing Laboratory (ITL) means a laboratory that is licensed or registered by the Commission and is: (a) Currently and validly licensed under 935 CMR 500.101: Application Requirements, or formerly and validly registered by the Commission; (b) Accredited to ISO 17025:2017 or the International Organization for Standardization 17025 by a third-party accrediting body that is a signatory to the International Laboratory Accreditation Accrediting Cooperation mutual recognition arrangement or that is otherwise approved by the Commission; (c) Independent financially from any Medical Marijuana Treatment Center, Marijuana Establishment or Licensee; and (d) Qualified to test Marijuana and Marijuana Products, including MIPs, in compliance with M.G.L. c. 94C, § 34; M.G.L c. 94G, § 15; 935 CMR 500.000: Adult Use of Marijuana; 935 CMR 501.000; and Commission protocol(s).



Marijuana means all parts of any plant of the *genus* Cannabis, not excepted in 935 CMR 500.002(a) through (c) and whether growing or not; the seeds thereof; and resin extracted from any part of the plant; Clones of the plant; and every compound, manufacture, salt, derivative, mixture or preparation of the plant, its seeds or resin, including tetrahydrocannabinol as defined in M.G.L. c. 94G, § 1; provided that Cannabis shall not include:

- (a) The mature stalks of the plant, fiber produced from the stalks, oil, or cake made from the seeds of the plant, any other compound, manufacture, salt, derivative, mixture or preparation of the mature stalks, fiber, oil, or cake made from the seeds of the plant or the sterilized seed of the plant that is incapable of germination;
- (b) Hemp; or
- (c) The weight of any other ingredient combined with Cannabis or Marijuana to prepare topical or oral administrations, food, drink, or other products.

Marijuana Establishment (ME) means a Marijuana Cultivator (Indoor or Outdoor), Craft Marijuana Cooperative, Marijuana Product Manufacturer, Marijuana Microbusiness, Independent Testing Laboratory, Marijuana Retailer, Marijuana Transporter, Delivery Licensee, Marijuana Research Facility Licensee (as defined in 935 CMR 500.002): Marijuana Research Facility Licensee Social Consumption Establishment (as defined in 935 CMR 500.002): Social Consumption Establishment or any other type of licensed Marijuana-related business, except a Medical Marijuana Treatment Center (MTC).

Marijuana-Infused Product (MIP) means a Marijuana Product infused with Marijuana that is intended for use or consumption, including, but not limited to, edibles, ointments, aerosols, oils, and tinctures. A Marijuana-infused Product (MIP), when created or sold by a Marijuana Establishment or an MTC, shall not be considered a food or a drug as defined in M.G.L. c. 94, § 1. MIPs are a type of Marijuana Product.

Massachusetts Maximum Contaminant Levels (MMCLs) means those limits of contaminants included under the drinking water regulations (310 CMR 22.00) promulgated by the Massachusetts Department of Environmental Protection. Under the Drinking Water Program (DWP), Massachusetts may adopt more stringent standards than the US EPA based on an independent review of primary or secondary data.

Medical Marijuana Treatment Center (MTC), (formerly known as a Registered Marijuana Dispensary (RMD)), means an entity licensed under 935 CMR 501.101: Application Requirements that acquires, cultivates, possesses, processes (including development of related products such as edibles, MIPs, tinctures, aerosols, oils, or ointments), repackages, transports, sells, distributes, delivers, dispenses, or administers Marijuana, products containing Marijuana, related supplies, or educational materials to Registered Qualifying Patients or their Personal Caregivers for medical use. Unless otherwise specified, MTC refers to the site(s) of dispensing, cultivation, and preparation of Marijuana for medical use.

Organic Fertilizer means soil additives derived from natural sources that increase the available plant nutrient content of soil and guarantee a minimum percentage of nitrogen, phosphate, and potash.

Production Area means a Limited Access Area within the Marijuana Establishment or MTC where Cannabis or Marijuana is handled or produced in preparation for dispensing or sale.

Propagation means the reproduction of Cannabis or Marijuana plants by seeds, cuttings, or grafting.

Public Water System (PWS) means a system for the provision to the public of water for human consumption through pipes or other constructed conveyances that is regulated by EPA or delegated states or tribes under the Safe Drinking Water Act.

Soil Amendment means any material added to a soil to improve its physical properties, such as water retention, permeability, water infiltration, drainage, aeration and structure. Soil amendments do not include materials added to improve nutrients such as organic fertilizers. Soil amendments may include, for example coir, sphagnum peat moss, compost, or manure.

Solid Growing Media means any soil or solid substrate used for the cultivation of rooted Marijuana plants. Soil growing media may contain soil and other solid materials amended to or used in replacement of soil including, but not limited to soil, sand, clay, compost, sphagnum peat moss, coir, newspaper, sawdust, perlite, or vermiculite.

Source Soil or Solids means any solid environmental media that originate outside of the ME, MTC or CMO and are brought in for the purpose of cultivating Marijuana.

3.0 Applicable Regulations

This protocol was developed to provide MEs, MTCs and CMOs with guidance on complying with 935 CMR 500.000: *Adult Use of Marijuana* and 935 CMR 501.000: *Medical Use of Marijuana*. In particular, the detailed steps outlined in this protocol address requirements of the following sections of the regulations. Although the regulations are mandatory, this protocol includes recommendations to comply with the regulations that are not, themselves, necessarily mandatory. MEs, MTCs and CMOs should be familiar with all applicable regulations to ensure full compliance.

- 935 CMR 500.105(1)(h) and 935 CMR 501.105(1)(h): Requirement of plans for quality control, including product testing for contaminants
- 935 CMR 500.120(4-11) and 935 CMR 501.120(4-11): Cultivation, Acquisition, and Distribution Requirements
- 935 CMR 500.160 and 935 CMR 501.160: Testing of Marijuana and Marijuana Products



- 935 CMR 500.105(5)(a) and 935 CMR 501.105(5)(a): Labeling of Marijuana Not Sold as a Marijuana Product
- 935 CMR 500.105(5)(b) and 935 CMR 501.105(5)(b): Labeling of Edibles
- 935 CMR 500.105(5)(c) and 935 CMR 501.105(5)(c): Labeling of Marijuana Concentrates and Extracts
- 935 CMR 500.105(5)(d) and 935 CMR 501.105(5)(d): Labeling of Marijuana-infused Tinctures, Topicals or Other Non-edible Marijuana-infused Products
- 935 CMR 500.105(11) and 935 CMR 501.105(11): Storage Requirements
- 935 CMR 500.105(12) and 935 CMR 501.105(12): Waste Disposal
- 935 CMR 500.301(5) and 935 CMR 501.301(5): Inspections and Compliance
- 935 CMR 500.320 and 935 CMR 501.320: Plans of Correction

4.0 Sampling and Analysis Requirements

Sampling and analysis requirements apply to growing media to be used in the Marijuana cultivation process, including soil, solid but non-soil growing media and water from public water supply (PWS) or non-PWS sources, such as private wells. This section identifies the types of environmental media sampling and analysis that are required for compliance with 935 CMR 500.000 and 935 CMR 501.000. MEs, MTCs and CMOs must ensure and be able to demonstrate to the Commission that samples accurately represent cultivation conditions and analysis results accurately determine potential contaminants in all media used. All sampling and analysis is subject to inspection, review, and independent confirmation by inspectors according to the inspection guidelines and regulations.

The environmental media (soil, solids, and water) that must be sampled and analyzed depend on the materials used, previous testing performed on the media, and how the Marijuana is cultivated. The sampling and analysis frequencies described below are considered the minimum requirements to comply with requirements under 935 CMR 500.000 and 935 CMR 501.000. Although cultivation generally is anticipated to involve traditional cultivation methods in soils, cultivation can involve solid growing media other than soil or hydroponics. Exhibit 1 illustrates the sampling and analysis requirements by media and cultivation approaches, including solids-based cultivation and hydroponics.

4.1 *Solid Growing Media*

Solid growing media include all soils including soil amendments or other solid materials used as a substrate for cultivation. Regulation 935 CMR 500.120(8,9) and 935 CMR 501.120(8,9) states that soil for cultivation shall meet the ATSDR Environmental Media Evaluation Guidelines (EMEG) for residential soil levels and limits any pesticide residues. EMEG values have been determined for a number of contaminants of concern. Pesticides not permitted for use in organic

agriculture are also prohibited for use in the cultivation of Marijuana according to the regulations at 935 CMR 500.120(5) and 935 CMR 501.120(5).

All soils and solid growing media must be sampled and analyzed 1) initially prior to use for cultivation of Marijuana, and 2) at least annually, and within the quarter if amended. Specifically:

- All source soils or solids must be sampled and analyzed prior to use in cultivation and whenever new soils or solids are received from a different source.
- Solid materials used in alternative, non-soil cultivation approaches such as hydroponics including but not limited to clay, rock wool, and vermiculite or other non-soil enhancements must be sampled and analyzed prior to being used for cultivation of Marijuana and whenever received from a different source.
- All cultivation soils used in beds or containers to actively cultivate Marijuana must be sampled and analyzed annually.
- In cases where cultivation soils (or other solid growing media) are amended with additional solid materials (excluding water and nutrient fertilizers), sampling and analysis in the quarter during which the soil was amended is required.

Section 5.1 below describes sample program design considerations for soil/solids. Exhibit 2 below summarizes the sampling frequency and required analyses for solid growing media with specific analytes and levels detailed in Section 7.

4.2 *Water*

Water used in Marijuana cultivation generally requires analysis, however the frequency and sampling and analysis requirements are determined based on whether the water source is from a PWS already subjected to testing requirements and whether the cultivation approach relies on hydroponics. The term water is intended to include aqueous nutrient mixtures such as that used in hydroponic or aeroponic cultivation. Specifically:

- Water derived from a PWS and used in soil or solid growing media cultivation of Marijuana
 is exempted from sampling and analysis requirements. If the water is derived from a PWS,
 the public records of the analysis must be maintained by the ME, MTC or CMO and
 available to inspectors to demonstrate adequate analysis of the water and exemption from
 analysis.
- Water derived from non-PWS sources must be sampled and analyzed prior to use for cultivation of Marijuana and quarterly thereafter.
- All water, regardless of source, used in hydroponic cultivation approaches must be sampled and analyzed prior to use for cultivation for Marijuana and quarterly thereafter, at a minimum.

While hydroponic systems in particular are likely to require clean-out and analysis more frequently for optimizing cultivation, the quarterly analysis required in this protocol is designed to ensure and document protection of public health. Hydroponic growing systems use re-circulated water, so any additions of fertilizers, other nutrients, or pesticides will build up over time if the water is not somehow cleaned, filtered, or changed. For this reason, water in hydroponic systems must be tested more frequently than water used in soil production. In particular MEs, MTCs and CMOs relying on hydroponic cultivation likely will require more frequent bacteriological sampling and analysis to maintain control of the systems and prevent failure of required testing. However, for that more frequent sampling and analysis, MEs, MTCs and CMOs may utilize internal laboratory analysis. The MEs, MTCs and CMOs are responsible for any and all sampling and analysis required to protect the public health given their expertise and specific knowledge of their cultivation approach and systems.

Section 5.2 below describes sample program design considerations for water sampling and analysis. Exhibit 3 below summarizes the sampling frequency and required analyses for solid growing media with specific analytes and levels detailed in Section 7.

5.0 Sampling Program Design

Sampling and analysis programs implemented by the ME, MTC or CMO must meet the requirements of 935 CMR 500:000: *Adult Use of Marijuana* and 935 CMR 501.000: *Medical Use of Marijuana* as described in Section 4 as well as represent the best industry practices for protection of public health. The specific sample program design for environmental media at an ME, MTC or CMO will depend on the agricultural approach, scale of the cultivation systems, ME, MTC or CMO specific procedures, and physical set up of the ME, MTC or CMO. In all cases, sample collection, design, and analytical analyses must be capable of demonstrating compliance with applicable regulations. Among these requirements are that the ME, MTC or CMO is responsible for ensuring that samples collected and analyzed for compliance are representative (i.e., accurately represent the population of materials actually used). For example, collection of samples from selected containers or source soil piles repeatedly rather than collecting samples representing the actual range of containers or soil sources would be inadequate to comply with the requirements. Collection of water samples from sampling locations that do not represent water applied in cultivation would also be inadequate to comply with the requirements.

This section provides requirements and best practices for sampling program design for solids and water.

5.1 *Solid Growing Media*

Sources of solid growing media including soils must be sampled and analyzed prior to use in cultivation and, upon any change in the source of solids. Once cleared for use in cultivation, cultivation soils must be sampled and analyzed at least annually and within the quarter that soils are amended. The spatial distribution of samples must be considered to ensure representativeness



across the entire cultivation operation. Sampling and analysis frequency, sample locations, and quality control (QC) samples are detailed below.

Minimum Sampling and Analysis Frequency.

Source Soils and Solids

- All source soils and solids shall be sampled and analyzed prior to use in cultivation.
- All source soils and solids shall be sampled and analyzed whenever a new source material is utilized (e.g., different source soil location or different source solid manufacturer).
- All source soils and solids for initial use must be sampled at the rate of one (1) sample per cubic yard of solid media/soil.
- Source soils and solids passing initial testing requirements may be stockpiled for later use
 without requiring re-analysis unless the stockpile has been contaminated or altered while
 stored. Situations for re-analysis may include but are not limited to soils that have been
 amended, mixed with other source soils/solids, subject to pesticide application, used for
 other purposes, or inundated by flood waters.

Cultivation Soils or Solids

- All cultivation soils and solid materials shall be analyzed at least annually during the
 calendar year of use. Solids tested initially as source soils or solids prior to use in
 cultivation do not require retesting until the following year (or quarter if amended as
 described below).
- If amended, the solid growing media/soil used in cultivation shall be sampled and analyzed during the quarter in which it was amended. Note that soil amendment includes any material added to a soil, including other soils, to improve its physical properties, such as water retention, permeability, water infiltration, drainage, aeration and structure. Note that soil amendment does not include addition of water or fertilizers added solely for nutrients. Materials such as compost or manure that is added for both nutrients and to change the character of the soil and that are added in bulk are considered soil amendments for the purpose of this protocol. Application of soil amendments must be consistent with all requirements of 935 CMR 500.000 and 935 CMR 501.000.
- For cultivation that utilizes beds or other broad area cultivation, solid growing media/soil samples shall be collected at the rate of 1 sample per discrete cultivation unit or at least 1 sample per 100 square feet of soil area for larger discrete cultivation units.
- For cultivation that utilizes individual plant containers (as opposed to beds or in-ground cultivation), solid growing media/soil samples shall be collected from a minimum of 5-percent of the total number of growing containers.



Sample Locations.

- Solid growing media samples shall be collected to be representative of the horizontal and vertical conditions of the growing configuration.
- When collected prior to distribution among beds or containers, source soil or solids samples shall be taken to best represent the overall source soils (e.g., collected from different areas and depths of a stockpile).
- Cultivation soil and solid samples shall be collected to represent the broad range of cultivation units, growth stages, and soil and solid types whether from beds or containers.
- Samples shall be analyzed individually as grab samples unless the analysis methods used allow analytical reporting limits to be achieved on composite sample analyses that would demonstrate that any single sample in the composite would not exceed the contaminant limits described later in this protocol. In no case may more than five (5) primary samples be composited into a single sample for analysis. When analyzed as a composite, the laboratory results of the composite must demonstrate that each composite subsample is below the relevant contaminant limits, not just the composite itself. For example if the results of a five sample composite are reported as 1.0 mg/kg, any one subsample (20% of the total composite) could contain up to 5 mg/kg when accounting for the effective dilution of the other four subsamples (i.e., 1 sample at 5 mg/kg + 4 samples at 0 mg/kg = average of 1 mg/kg).
- Composite samples are not recommended but are allowable for MEs, MTCs and CMOs to scale sampling and analysis to fit the cultivation scale and approach. However, use of composite samples to demonstrate compliance would require corrective actions on all individual samples should the composite sample fail to achieve acceptable limits on any target analyte (see Section 8.0).

A diagram of the cultivation area, the sampling design, and the horizontal and vertical location of each sample shall be created for each sampling event and maintained on file for review by inspection authorities.

Quality Control (QC) Samples.

Field duplicate samples shall be collected at least annually and one (1) for every twenty (20) field samples of the solid samples collected to provide verification of field and laboratory procedures. Field duplicate samples shall be collected and analyzed for each analytical method performed on the samples. Field duplicate samples will not be identified to the laboratory (blind QC). Blank samples are required to provide important information on potential positive bias on any positive results in field samples.

Equipment rinsate blanks are required whenever non-disposable sampling equipment is used to collection samples at multiple locations such as in source soil testing or testing of hydroponic nutrient solutions. Equipment rinsate blanks must be collected at the rate of one per sampling event



per sampling equipment type with at least 1 equipment rinsate blank for every 20 field samples of the same matrix. Where equipment rinsate blanks are not appropriate (i.e., use of disposable sampling equipment, collection of just one sample location, or direct collection into the sampling container), field blanks may be used to evaluate potential for contamination and potential positive bias at the same frequency of 1 per sampling event per sampling equipment type with at least 1 for every 20 field samples of the same matrix.

5.2 *Water*

Water that is used in both solid-based and hydroponic cultivation techniques shall be sampled and analyzed, although water derived from a PWS source and used in solids-based cultivation only is exempted from all sampling and analysis requirements. Sample locations must take into account both source water and, if utilized, on-site water treatment systems. Sampling and analysis described below is not intended to provide sufficient data for MEs, MTCs and CMOs to manage optimum cultivation operations but rather to protect public health. Additional sampling and analysis may be required to monitor nutrient levels, determine replacement of hydroponic solutions or water treatment filters, assess compliance with runoff/discharge requirements, or verify purity of waters used in MIPs.

Minimum Sampling and Analysis Frequency.

- Non-PWS water that is used in soil or solid-based cultivation methods shall be sampled
 and analyzed prior to use for cultivation of Marijuana and on a quarterly schedule
 thereafter.
- Water recycled from previous uses or otherwise not directly received from a PWS is considered non-PWS water for the purposes of this protocol.
- Water from a PWS source used in solid-based cultivation is exempt from sampling and analysis provided the ME, MTC or CMO maintains publicly available records of the PWS analysis (i.e., the Consumer Confidence Report) and makes these records available to inspectors to demonstrate adequate analysis of the water. The ME, MTC or CMO may choose to independently test their PWS water source and maintain the record of these analyses.
- All water used in non-solid cultivation systems including hydroponics requires quarterly sampling and analysis, regardless of whether it is a non-PWS or PWS system. The source water that is used in the hydroponic system shall be sampled and analyzed prior to use for cultivation of Marijuana and on a quarterly schedule thereafter.

Sample Locations.

For traditional watering and irrigation of soil or solid based cultivation, water source samples shall be collected from the location as close as possible to the water use.



In cases where a water treatment system is used, water samples must be collected both before entering and after leaving the water treatment system, as close as possible to the point of use. The sample collected and analyzed after the water leaves the treatment system reflects the water applied to the plants, while the sample collected and analyzed before entering the treatment system characterizes the water source. In cases where several individual water treatment systems are utilized rather than a central system located on a main water line, one sample representing the water source may be collected prior to entering the treatment systems, but separate samples must be collected after the water leaves each different water treatment system used in cultivation. Where multiple water treatment systems require multiple samples, there is no requirement to collect water samples from different systems during the same sampling event: samples may be staggered throughout the quarter as long as all systems are tested within each quarter of the year.

For all hydroponic cultivation systems (both closed and open loop systems) and any non-solid based cultivation technique, water samples shall be collected to represent each system independently. There is no requirement to collect all water samples from different systems during the same sampling event: samples may be staggered throughout the quarter as long as all systems are tested within each quarter of the year.

The sampling design and layout of tanks sampled shall be retained and presented to the inspection authorities. A diagram of all water sampling locations shall be created for each sampling event and maintained on file for review by inspection authorities. Any major changes to the water system since the last sampling event must be noted in sampling design.

Water samples shall be analyzed individually as grab samples unless the analysis methods used allow analytical reporting limits to be achieved on composite sample analyses that are protective of public health and in line with acceptance requirements. Under no circumstances shall samples collected prior to the water entering a treatment system be composited with samples collected after the water leaves a water treatment system. In no case may more than five (5) primary samples be composited into a single sample for analysis. When analyzed as a composite, the laboratory results of the composite must demonstrate that each composite subsample is below the relevant acceptance limits, not just the composite itself. For example if the results of a five sample composite are reported as 1.0 mg/L, any one subsample (20% of the total composite) could contain up to 5 mg/L when accounting for the effective dilution of the other four subsamples (i.e., 1 sample at 5 mg/L + 4 samples at 0 mg/L = average of 1 mg/L).

Composite samples are not recommended but are allowable for MEs, MTCs or CMOs to scale sampling and analysis to fit the cultivation scale and approach. However, use of composite samples to demonstrate compliance would require corrective actions on all individual samples should the composite sample fail to achieve acceptable limits on any target analyte (see Section 8.0).

Quality Control Samples.

Field duplicate samples shall be collected at least annually and one (1) for every twenty (20) field samples of the water samples collected to provide verification of field and laboratory procedures.



Field duplicate samples shall be collected and analyzed for each analytical method performed on the samples. Field duplicate samples will not be identified to the laboratory (blind QC). Blank samples are required to provide important information on potential positive bias on any positive results in field samples.

Equipment rinsate blanks are required whenever non-disposable sampling equipment is used to collection samples at multiple locations such as in source soil testing or testing of hydroponic nutrient solutions. Equipment rinsate blanks must be collected at the rate of one per sampling event per sampling equipment type with at least 1 equipment rinsate blank for every 20 field samples of the same matrix. Where equipment rinsate blanks are not appropriate (i.e., use of disposable sampling equipment, collection of just one sample location, or direct collection into the sampling container) field blanks may be used to evaluate potential for contamination and potential positive bias at the same frequency of 1 per sampling event per sampling equipment type with at least 1 for every 20 field samples of the same matrix.

6.0 Sample Collection Procedures

The ME, MTC or CMO is responsible for performing sample collection and analysis that is compliant with regulations and capable of representative sample collection and accurate analysis. The following section provides guidance to support MEs, MTCs and CMOs engaged in Marijuana cultivation to collect environmental media samples for analysis and to package and send the samples to the laboratory. Section 6.1 provides procedures for collecting solid growing media/soil samples, Section 6.2 provides procedures for collecting water samples, and Section 6.3 provides instructions for handling, storing, packaging, and sending the samples to the analytical laboratory. All staff responsible for sample collection and sample handling must be trained in environmental sample collection. MEs, MTCs and CMOs are responsible for maintenance of all training records and provision of the records to the Commission as required. Sampling and analysis staff must understand the sample collection plan, operation of sampling equipment, importance of ensuring representativeness and integrity of the samples, documentation, and chain-of-custody requirements.

6.1 Collecting Samples of Soil or Solid Growing Media

The sampling methods described are generally applicable to collection of soil and solid samples for cultivation methods anticipated to be used by MEs, MTCs or CMOs. Characteristics of certain solid matrices such as cohesionless sands or non-uniformly distributed soil amendments may require adaptation for the specific situation encountered. Generally, samples may be collected from stockpiles or other sources prior to use in cultivation or from cultivation units such as beds or individual containers during ongoing cultivation. Solid growing media samples shall be collected that are representative of the horizontal and vertical conditions of the configuration.



Prior to Sample Collection. The ME, MTC or CMO should assemble all equipment and information needed before beginning. Items to assemble before sampling include, but are not limited to, the following:

- Sample collection plan or diagram of locations to ensure representative sample collection
- Logbook or sample collection forms
- Chain-of-custody forms (COCs)
- Disposable gloves
- Decontaminated soil collection tool(s), such as a corer, spatula, or trowel
- Stainless-steel bowl and implement to homogenize soil samples
- Clean, decontaminated plastic sheeting or other clean, non-porous surface for sample processing;
- Sample containers appropriate for the analyses required;
- Container labels and pen with indelible ink;
- Supplies to thoroughly clean, decontaminate and dry sampling equipment between samples; and
- A cooler with ice to keep samples cool until refrigeration or shipment to the laboratory.

Sample collection personnel should create a new entry for each sampling event in the sample collection logbook or prepare sample collection forms for documentation of sample collection. Sample collection documentation should identify the sample collection date and start time, participating personnel, a general description of the media and locations sampled, relevant environmental conditions, a description of the sampling procedures and equipment decontamination/cleaning used, and a record of plants or batches that would potentially be impacted should analysis results indicate unacceptable contamination.

Sample collection personnel shall identify or determine the number and location of soil or other solid growing media grab samples to be collected based on the requirements described in Section 5.1. Sample locations from containers, beds, or other cultivation units must be recorded in the sample collection logbook or forms. Record the sample location identifier (location ID) for each sample so that it can be utilized to identify the physical location of the cultivation unit.

Location identifiers should be consistent across sampling events to allow tracking of repeated sample locations. The location IDs will be included on sample labels (unless the grab samples are used in a composite sample). In addition to the location ID, create a unique sample ID for each sample. Sample identifiers should be unique for a given sample event. Record the location and sample IDs in the sample collection logbook.

In some cases, an ME, MTC or CMO might sample new solid growing media before placing it in cultivation units. In these circumstances, it is not necessary to record the locations within piles where the grab samples are collected. However, it is important to distribute the sample locations spatially so that they are representative of the whole volume of the media.



Any tools that contact the samples should be made of stainless steel or other inert material to avoid potential contamination of the sample. Sample containers should be made of suitable materials for the methods and analytes being analyzed. The sampler should avoid using insect repellents that may interfere with sample integrity.

Preparing sample labels and affixing them to sample containers immediately before sampling is recommended. Information to include on the label includes at a minimum the location and sample ID and date/time of collection. Additional information that must be recorded in documentation if not on the label includes sample collector's name, media type, collection method, whether the sample is a grab or composite sample, and soil or core depth (if applicable).

<u>Sample Collection</u>. Collect the planned samples from each sample location one at a time. Follow these basic steps for each sample:

- 1. Don gloves to mitigate potential for contamination of samples.
- 2. Spread clean, decontaminated plastic sheeting or other nonporous surface near the sample location and lay out any tools and equipment needed.
- 3. Clear the surface of the location if necessary, excluding detritus, dead leaves, stones, pebbles, or other debris from the soil or other solid growing media with a clean trowel or similar tool.
- 4. Collect the sample using an appropriate tool. Do not touch the sample with your hands or allow the sample to touch anything that might cause contamination.
- 5. Place the sample in the stainless-steel bowl for homogenizing the sample using either the sample collection tool or separate clean, decontaminated implement.
- 6. Record the time each sample was collected and record any difficulties, inconsistencies with the sampling plan, or other remarks (e.g., environmental conditions) that might be relevant to data analysis or quality assurance.
- 7. To avoid cross contamination of samples, any tools or equipment that come in contact with the soil or growing media must be cleaned before moving to the next sampling location.
- 8. All samples should be placed in clean, airtight sample containers that are large enough to hold the prescribed sample quantity with minimal headspace. Sample containers must be firmly closed and appropriately labeled.
- 9. If grab samples are planned, place the homogenized sample into the appropriate container(s).
- 10. If the sample is to be composited with other locations, repeat the above steps to collect the other individual samples to be placed into the stainless-steel bowl. Once the planned primary samples are collected, thoroughly homogenize the samples contained in the stainless-steel bowl and place the homogenized composite sample into the appropriate container(s).
- 11. Excess soil collected but not shipped to the laboratory for testing should be returned to the cultivation area(s) where it was collected from (composite soils may be spread



- among the primary sample locations). It is not necessary to send the entire volume of the combined primary samples to the laboratory.
- 12. Samples should be refrigerated or maintained on ice until shipped to the analytical laboratory.
- 13. Chain-of-custody paperwork should be completed immediately prior to shipment.

6.2 *Collecting Water Samples*

The following sampling methods are generally applicable to collection of water samples for cultivation methods anticipated to be used by MEs, MTCs and CMOs. Some MEs, MTCs and CMOs may need to adapt the procedures described below to account for facility-specific design and operating details. It is the responsibility of the ME, MTC or CMO to ensure, and be able to demonstrate to inspectors, that samples are fully and accurately representative of the presence of contaminants in the water or other aqueous media used. Generally, samples may be collected from taps, spigots, hoses, or other connectors from water lines where the water is used for crop cultivation. In cases where MEs, MTCs and CMOs operate purification or treatment systems, it is important to characterize both the untreated and treated water to document both expected contaminants that might be introduced into cultivation as well as the maximum or untreated levels. Water samples shall be collected to be representative of the process and water quality throughout the time period of sampling, although composite samples are not required. To achieve representativeness, samples should not be collected during any periods of unusual activity such as draining of water lines, immediately after changing treatment cartridges or replenishing of hydroponic nutrient solutions.

Prior to Sample Collection. The ME, MTC or CMO should assemble all equipment and information needed before beginning. Items to assemble before sampling include, but are not limited to, the following:

- Sample collection plan or diagram of locations to ensure representative sample collection
- Logbook or sample collection forms
- Chain-of-custody forms (COCs)
- Disposable gloves
- Clean, decontaminated plastic sheeting or other clean, non-porous surface for sample processing
- Sample containers appropriate for the analyses required
- Preservatives as required for the analyses or pre-preserved containers
- Supplies (such as pH paper or meter) to verify adequate preservation
- Container labels and pen with indelible ink
- Supplies to thoroughly clean, decontaminate and dry sampling equipment between samples; and
- A cooler with ice to keep samples cool until refrigeration or shipment to the laboratory.



Sample collection personnel should create a new entry for each sampling event in the sample collection logbook or prepare sample collection forms for documentation of sample collection. Sample collection documentation should identify the sample collection date and start time, participating personnel, a general description of the media and locations sampled, relevant environmental conditions, a description of the sampling procedures and equipment decontamination/cleaning used, and a record of plants or batches that would potentially be impacted should analysis results indicate unacceptable contamination.

Sample collection personnel shall identify or determine the number and location of water samples to be collected based on the requirements described in Section 5.1. Sample locations must be recorded in the sample collection logbook or forms. Record the sample location identifier (location ID) for each sample so that it can be utilized to identify the physical location of the sample location within the ME, MTC or CMO. Location identifiers should be consistent across sampling events to allow tracking of repeated sample locations. The location IDs will be included on sample labels (unless the grab samples are used in a composite sample). In addition to the location ID, create a unique sample ID for each sample. Sample identifiers should be unique for a given sample event. Record the location and sample IDs in the sample collection logbook or forms as well as the volume of the sample, preservation, and associated sample containers.

Any tools that contact the samples should be made of stainless steel or other inert material to avoid potential contamination of the sample. In addition, all tools that come in contact with the sample media should be rinsed with deionized water between samples to reduce potential cross contamination. Sample containers should be clean and dry, and made of suitable materials appropriate for the methods and analytes being analyzed.

Preparing sample labels and affixing them to sample containers immediately before sampling is recommended. Information to include on the label includes at a minimum the location and sample ID and date/time of collection. Additional information that must be recorded in documentation if not on the label includes sample collector's name, media type, collection method, whether the sample is a grab or composite sample, and preservation (if applicable).

Sample Collection. Collect the planned samples from each sample location one at a time. Follow these basic steps for each sample:

- 1. Don gloves to mitigate potential for contamination of samples.
- 2. Spread clean, decontaminated plastic sheeting or other nonporous surface near the sample location and lay out any tools and equipment needed.
- 3. Prepare the sample location by removing faucet aerators if connected. Note the location of any water treatment systems and remove if required to represent pre-treatment location.
- 4. For sample collection of water lines, purge the lines of standing water and note purge time in sample collection documentation. Generally, for frequently used water 15 minutes run time is considered sufficient but actual time for purge depends on pipe volume and frequency of use. Note that pressurized lines may require additional system



- specific procedures. Sample collection personnel may monitor parameters including but not limited to temperature, pH, or turbidity for stability to assess sufficiency of purge.
- 5. For collection of water samples from tanks or other holding bins without valves or taps such as in some hydroponic systems, dip sampling may be used. However, sample collection staff should be aware of potential for vertical distribution of additives and strive to take a sample representative of the overall tank or trough. In cases where contaminants of concern may be stratified and not distributed uniformly throughout a container, a discrete depth sampler such as a Kemmerer or van Dorn sampler may be recommended.
- 6. Open the pre-labeled sample containers appropriate for the analyses taking care to not allow errant drips or splashes off other surfaces to enter the caps or containers.
- 7. Samples for all analyses may be collected directly into sample containers or into a larger, inert vessel then poured into containers. During sample collection, make sure that the tap or spigot does not contact the sample container.
- 8. If water samples are to be composited to represent multiple hydroponic systems, repeat the steps above to collect the primary samples. The individual, primary samples should all be collected as unpreserved samples then combined volumetrically into a single composite sample.
- 9. Record the time each sample was collected and record any difficulties, inconsistencies with the sampling plan, or other remarks (e.g., environmental conditions) that might be relevant to data analysis or quality assurance.
- 10. Add preservatives according to the analytical methods as required.
- 11. Fill an extra sample container to verify adequate preservation and/or residual chlorine as required by analytical methods.
- 12. If a non-disposable sample collection tool other than the sample container (larger inert vessel, ladle, Kemmerer sampler, van Dorn sampler) is used, rinse the tool with deionized water between samples.
- 13. Excess sample collected but not shipped to the laboratory for testing should be disposed of properly recognizing that preserved samples may require disposal as hazardous materials. It is not necessary to send the entire volume of the combined primary samples to the laboratory.
- 14. Samples should be refrigerated or maintained on ice until shipped to the analytical laboratory.
- 15. Chain-of-custody paperwork should be completed immediately prior to shipment.

6.3 *Sample Handling*

After samples are properly collected and labeled, they should be delivered for analysis as soon as possible. This section describes how to handle, securely store, package, and ship the samples to the laboratory.



- Sample containers both empty and once containing samples should be stored in a contaminant-free environment to the degree possible. Sample containers should not be stored for more than one (1) year.
- Preservatives and pre-preserved sample containers may degrade after several months. Contact the laboratory to verify limits on sample container use.
- All samples should be collected and stored in containers of the appropriate materials based on the analysis method being performed.
- Until the samples are analyzed, they should be preserved to minimize chemical or physical changes according to the analytical method references.

Sample Storage.

- Samples should be refrigerated or maintained on ice (4 °C +/-2°C) until they are shipped to the analytical laboratory.
- Placing the samples in airtight containers with minimal headspace preserves samples by minimizing moisture loss and chemical exchange between the sample medium and air.
- In addition, protect the samples from excessive light exposure to minimize photochemical degradation. Samples can be protected from light by using an amber sample container, storing the samples in a closed box or other amber container, or in a dark storage location.
- To be considered valid, all samples must be analyzed prior to expiration of the technical holding time as defined in each analytical method. Note that the holding time for some biological components is very short; 24 to 48 hours from the time of collection.
- Note that all collected samples are considered under the custody of sample collection staff
 following collection and prior to shipment. Samples should be maintained either under the
 supervision of someone responsible for the integrity of the samples or locked to prevent
 mishandling.
- Chain of custody seals may be used by sample collection staff to ensure that samples are not tampered with following sample collection.

Packing and Shipping Samples.

Many laboratories provide specific shipping or courier instructions to follow. In the absence of specific instructions from the laboratory, the following instructions may be used:

- Package the samples for shipping in a clean area free of contamination.
- Make sure that sample containers are clean, lids are tight and will not leak and that all samples are properly labeled as described above. Covering labels with clear tape is recommended for protection in the event of a leak or damage to the package.
- Conduct an inventory of sample IDs against the chain-of-custody documentation form to make sure that all samples and containers are present.



- Seal sample containers in clear plastic bags with labels visible.
- If the samples need to be kept cold during transport, pack the samples in a clean waterproof metal or hard plastic ice chest or cooler with double-bagged ice or ice packs. Samples should be maintained at 4 °C +/-2°C at all times. Be sure that the samples are already cool when packaged for shipping.
- When samples are shipped in a cooler, line the cooler with plastic (e.g., large heavy-duty garbage bag) before packing. If the cooler has an external drain, make sure it is plugged.
- Include noncombustible absorbent packing materials to protect the samples from damage.
- Enclose chain-of-custody forms and any other necessary documentation in a sealed waterproof plastic bag. If applicable, include instructions or a shipping label for return of the cooler.
- Remove the old shipping labels, if any, and seal the cooler, or other container, with strapping tape.
- Use package tracking, if available from the shipper.

7.0 Sample Analysis

All sample analyses described in this protocol shall be conducted by an Independent Testing Laboratory (ITL) that is either:

- 1. Accredited to International Organization for Standardization (ISO) 17025 by a third-party accrediting body such as A2LA or ACLASS, or
- 2. Certified, registered, or accredited by an organization approved by the Commission.

For non-potable or potable water, any laboratory certified by the Massachusetts Department of Environmental Protection for analysis of the appropriate analytes and methods outlined in this protocol is acceptable to MDPH.

http://www.mass.gov/eea/agencies/massdep/water/drinking/certified-laboratories.html

For soils/solids, any laboratory certified by a National Environmental Laboratory Accreditation Program (NELAP) accrediting authority (e.g., currently, there are 13 individual states that are accrediting authorities, including New Hampshire and New York to conduct soils/solids testing for the appropriate analytes and methods outlined in this protocol is acceptable to MDPH. http://www.nelac-institute.org/

Further requirements concerning the eligibility and responsibilities of analytical laboratories are provided in 935 CMR 500.050(7), 935 CMR 500.160, 935 CMR 501.052; 935 CMR 501.160

In addition to the regulatory qualifications and requirements referenced above, the laboratory should have a demonstrated ability to perform the specific analytical methods required and to provide defensible documentation and quality assurance.



Exhibits 4 and 5 identify the analytical methods and analyses required for solid growing media and aqueous samples. For soils/solids, available ATSDR Environmental Media Evaluation Guidelines (EMEGs) are shown. EMEGs are required for concentration limits for soils/solids when they are available (935 CMR 500.120(8) and 935 CMR 501.120(8). Not all analytes listed in Exhibit 4 had available EMEGs. If neither EMEGs nor CREGs were available, DPH chose to use US EPA Residential Soil Level (RSL) guidelines. Note that frequency of sample collection and conditions under which the analyses are required is covered in previous sections of this protocol.

Reporting limits are recommended based on the capabilities of appropriate methods.

All waters must demonstrate that waters used for cultivation meet the acceptable limits of the most recently promulgated Massachusetts Maximum Contaminant Levels (MMCLs) for metals, bacteriological, and pesticide residues.

8.0 Data Evaluation

MEs, MTCs and CMOs are required under 935 CMR 500.160(4) and 935 CMR 501.160(4) to "have and follow a policy and procedure for responding to results indicating contamination, which shall include destruction of contaminated product and assessment of the source of contamination." The analytical results provided by the laboratory, including those for environmental media samples discussed in this protocol, will be the primary means for MEs, MTCs and CMOs to ensure compliance with this requirement.

The Independent Testing Laboratory (ITL) results shall include the following in the laboratory data package at a minimum.

• Case Narrative:

- The narrative, written on laboratory letterhead, shall describe any sample receipt, preparation, or analytical issues encountered as well as any method nonconformances or exceeded QA/QC criteria.
- The narrative shall identify the preparation and analytical methods utilized by the laboratory.
- The narrative shall include a signed statement by an authorized laboratory representative as to the accuracy, completeness, and compliance with the methods of the results presented.
- Chain of Custody information or other paperwork indicating requested analyses and documentation of sample collection and receipt.
- Summary of analytical results of samples including sample identifier, methods performed, target analytes analyzed for, result or reporting limit, proper qualifier according to laboratory standard procedures, units of measure, preparation date(s), where applicable, and analysis date(s).
- Complete final method verification and validation report with the data.



It is highly recommended that the laboratory data package also includes sufficient data to evaluate the laboratory results including a summary of laboratory QA/QC results. The type of QA/QC results applicable differ by analysis method but can include surrogates or deuterated monitoring compounds, laboratory QC samples such as spikes, blanks, and duplicates, and calibration summaries. It is the responsibility of the ME, MTC or CMO to maintain and provide upon request information sufficient to demonstrate that results are accurate and precise in accordance with method capabilities and program requirements.

Depending on the outcome of the analysis, the ME, MTC or CMO may need to take action to address unacceptable levels of contamination or to perform follow-up investigation. Exhibits 6 and 7 describe the decision course of action the ME, MTC or CMO should use in response analysis results. As discussed above, if any analysis fails to meet acceptable limits or data quality review demonstrates that the results are unreliable, then the suitability of the media for use in Marijuana production cannot be confirmed. Media that are confirmed by a valid analysis to exceed acceptable levels of any contaminant shown in Exhibits 4 and 5 prior to use in cultivation of Marijuana cannot be used in such cultivation until acceptable levels are demonstrated to be achieved (see Exhibit 6). If quality review demonstrates that results are not reliable then the media cannot be used until reliable results are obtained. Media that are confirmed by a valid analysis to meet all concentration limits can be used in the cultivation of Marijuana.

As shown in Exhibit 7 the ME, MTC or CMO is not necessarily required to discard Marijuana plants or Products derived from routine testing or testing after soil amendments solely due to media levels above acceptable levels. If finished Marijuana Products and MIPs are tested directly before they are to be dispensed and demonstrate levels of contaminants within the acceptance limits for those products, discarding or destruction of products or plants may not be required. Where environmental media fail ongoing monitoring acceptance limits, resulting products from those cultivation batches may only be used where analysis results of representative finished materials, intermediate products, and/or MIPs are tested and confirmed to be below acceptance limits for that product as defined in the companion protocol.

As required by 935 CMR 500.160(5) and 935 CMR 501.160(5), the ME, MTC or CMO must maintain the results of all testing for no less than one year. These records must be available for inspection by the Commission, upon request (935 CMR 500.105(9) and 935 CMR 501.105(9)) and maintained at the ME's, MTC's or CMO's expense in a form and location acceptable to the Commission for at least two years after closure (935 CMR 500.105(9)(g) and 935 CMR 501.105(9)(g)).

9.0 References

American Herbal Pharmacopoeia, Cannabis Inflorescence. Cannabis spp. Standards of Identity, Analysis, and Quality Control.



Franzluebers, A.J. and Richard L. Haney, 2006. Assessing Soil Quality in Organic Agriculture. The Organic Center, Agricultural Research Service, U.S. Department of Agriculture. Available at: https://www.organic-center.org/assessing-soil-quality-organic-agriculture

Geisseler, D. and Horwath, W. R., 2013. "Soil Sampling in Orchards." Fertilizer Research and Education Program, Department of Land, Air, and Water Resources, University of California, Davis. Available at: http://apps.cdfa.ca.gov/frep/docs/Soil_Sampling_Orchards.pdf

Kuepper, G. and K. Everett, 2010. Potting Mixes for Certified Organic Production, Horticulture Technical Note. National Center for Appropriate Technology (NCAT). September 2004, Updated October 2010. Available at: https://attra.ncat.org/product/potting-mixes-for-certified-organic-production/

Massachusetts Department of Environmental Protection (MassDEP). 2014. Standards and Guidelines for Contaminants in Massachusetts Drinking Waters. Available at: https://www.mass.gov/guides/drinking-water-standards-and-guidelines

Turner, A.H., 2009. "Urban Agriculture and Soil Contamination: An Introduction to Urban Gardening, Practice Guide #25," University of Louisville, Department of Sociology, Center for Environmental Policy and Management, Environmental Finance Center: Serving EPA Region 4. Winter 2009. Available at: https://louisville.edu/cepm/pdf-files/pg-25-1

TVA, 2010. "Standard Operating Procedures For: Sample Labeling, Packing, and Shipping," Prepared by

Environmental Standards, Inc. for Tennessee Valley Authority, Environment and Technology, Environmental Science and Resources, July 2010, TVA-KIF-SOP-07, Revision 2

- U.S. Agency for Toxic Substances and Disease Registry (ATSDR). 2013. Soil Comparison Values from ATSDR's Sequoia Database. March 2013
- U.S. Agency for Toxic Substances and Disease Registry (ATSDR). 2013. Drinking Water Comparison Values from ATSDR's Sequoia Database. March 2013
- U.S. Environmental Protection Agency (EPA). 2014. EPA Region 9 Regional Screening Levels Table. Updated May 2014. Available at http://www.epa.gov/region9/superfund/prg/index.html; https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables.

USDA, 2010. "Soil and Container Mix Protocol, Protocol for Detecting Phytophthora ramorum in Soil and Container mix." Animal and Plant Health Inspection Service, U.S. Department of Agriculture. Available at:

https://www.aphis.usda.gov/import_export/plants/manuals/domestic/downloads/p-ramorum.pdf



USEPA, 2002. "RCRA Waste Sampling Draft Technical Guidance, Planning, Implementation, and Assessment," U.S. Environmental Protection Agency, Office of Solid Waste and Emergency Response. August 2002. EPA530-D-02-002.

USEPA, 2007. "Contract Laboratory Program, Guidance for Field Samplers," U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation, Final July 2007. OSWER 9240.0-44; EPA 540-R-07-06. Available at: https://www.epa.gov/sites/production/files/2015-03/documents/samplers_guide.pdf

USEPA, 1991. "Description and Sampling of Contaminated Soils: A Field Pocket Guide." U.S. Environmental Protection Agency, Center for Environmental Research Information. Cincinnati, OH. EPA/625/12-91/002. Available at:

https://nepis.epa.gov/Exe/ZyNET.exe/300043U0.TXT?ZyActionD=ZyDocument&Client=EPA &Index=1991+Thru+1994&Docs=&Query=&Time=&EndTime=&SearchMethod=1&TocRestri ct=n&Toc=&TocEntry=&QField=&QFieldYear=&QFieldMonth=&QFieldDay=&IntQFieldOp =0&ExtQFieldOp=0&XmlQuery=&File=D%3A%5Czyfiles%5CIndex%20Data%5C91thru94%5CTxt%5C00000002%5C300043U0.txt&User=ANONYMOUS&Password=anonymous&SortMethod=h%7C-

&MaximumDocuments=1&FuzzyDegree=0&ImageQuality=r75g8/r75g8/x150y150g16/i425&D isplay=hpfr&DefSeekPage=x&SearchBack=ZyActionL&Back=ZyActionS&BackDesc=Results %20page&MaximumPages=1&ZyEntry=1&SeekPage=x&ZyPURL

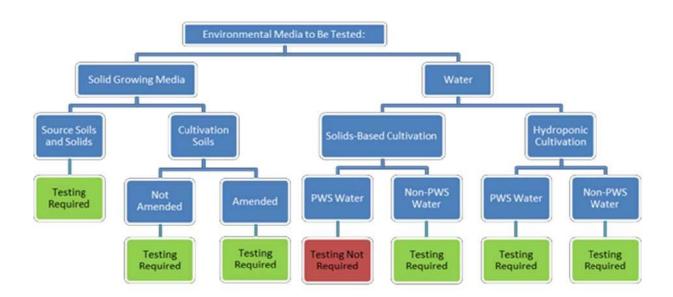


Exhibit 1.

Sampling and Analysis Requirement Flow Chart - Overview

Revised – February 26, 2021

This document is issued by the Cannabis Control Commission. The applicable Marijuana laws, which include M.G.L. c. 94I, 94G, 935 CMR 500.000 and 935 CMR 501.000, should be reviewed as they may provide or clarify the legal requirements related to this document. This protocol document should be checked periodically for revisions. Questions with regards to this document may be directed to Commission@CCCMass.com.



Please note that these Protocols are continually evaluated and revised based upon new scientific and industry information.

1





Exhibit 2. Soils/Solids Sampling Frequency and Analyses

Revised – February 26, 2021

This document is issued by the Cannabis Control Commission. The applicable Marijuana laws, which include M.G.L. c. 94I, 94G, 935 CMR 500.000 and 935 CMR 501.000, should be reviewed as they may provide or clarify the legal requirements related to this document. This protocol document should be checked periodically for revisions. Questions with regards to this document may be directed to Commission@CCCMass.com.

Matrix	Sampling Frequency	Number of Samples	Analyses
Solid growing media – stock soils	Initial prior to use and each time new source is used	1 sample per cubic yard	MetalsPesticidesPolychlorinated biphenyls (PCBs)
Cultivation soil/solids – in place soils (i.e., ground, beds, containers)	Annual	1 sample per 100 square feet of beds, or 5% of individual plant containers	Metals Pesticides
Cultivation soil/solids – amended soils	During quarter, when soil amended, and annually thereafter	1 sample per 100 square feet of beds, or 5% of individual plant containers	MetalsPesticides

Please note that these Protocols are continually evaluated and revised based upon new scientific and industry information.





Exhibit 3.Water Sampling Frequency and Analyses

Revised – February 26, 2021

This document is issued by the Cannabis Control Commission. The applicable Marijuana laws, which include M.G.L. c. 94I, 94G, 935 CMR 500.000 and 935 CMR 501.000, should be reviewed as they may provide or clarify the legal requirements related to this document. This protocol document should be checked periodically for revisions. Questions with regards to this document may be directed to Commission@CCCMass.com.

Matrix	Sampling	Number of Samples	Analyses
	Frequency		
Solid cultivation – Non- PWS Water source	Prior to use for cultivation of medical marijuana and quarterly thereafter.	At location closest to cultivation area prior to any water treatment and immediately following any treatment systems	
Hydroponic – PWS and Non-PWS water source	Prior to use for cultivation of medical marijuana and quarterly thereafter.	Each independent system	MetalsPesticidesBacteriological

Please note that these Protocols are continually evaluated and revised based upon new scientific and industry information.





Exhibit 4. Analysis Details – Soil and Solid Growing Media

Revised – February 26, 2021

This document is issued by the Cannabis Control Commission. The applicable Marijuana laws, which include M.G.L. c. 94I, 94G, 935 CMR 500.000 and 935 CMR 501.000, should be reviewed as they may provide or clarify the legal requirements related to this document. This protocol document should be checked periodically for revisions. Questions with regards to this document may be directed to CCCMass.com.

Method Acceptable **Analytical Method** Analyte CAS Reporting Limits (mg/kg) Limit (mg/kg) Inductively Coupled 31* 7440-36-0 Antimony 6.0 Plasma Atomic Emission 7440-38-2 1.0 15 Arsenic Spectrometry (ICP-AFS) 7440-43-9 comparable to SW-846 Cadmium 0.50 5 6010C or Chromium 7440-47-3 45 1.0 ICP-Mass Spectrometry (Hexavalent) (ICP-MS) comparable to 7440-50-8 2.5 Copper 3,100* Metals SW-846 6020B or other Lead 7439-92-1 1.0 400* suitable validated method and Nickel 7440-02-0 4.0 1,500* Cold Vapor Atomic Zinc 7440-66-6 6.0 15,000 Absorption (CVAA) for Hg comparable to SW-846 7471B or other suitable Mercury (CVAA) 7439-97-6 0.2 9.4* validated method alpha-BHC 319-84-6 0.0017 400 0.39** beta-BHC 319-85-7 0.0017 delta-BHC 319-86-8 0.0017 0.39** gamma-BHC 58-89-9 0.0017 0.56* Heptachlor 0.16** 76-44-8 0.0017 Gas chromatography Aldrin 309-00-2 0.0017 1.5 Electron Capture Detector Pesticides (GC-FCD) comparable to Heptachlor 1024-57-3 0.077** 0.0017 SW-846 8081B or other epoxide suitable validated method Endosulfan I 959-98-8 0.0017 100 Dieldrin 60-57-1 0.0033 2.5 4,4'-DDE 72-55-9 0.0033 2.1** 72-20-8 0.0033 Endrin 15 33213-65-9 0.0033 100 Endosulfan II



Method	Analytical Method	Analyte	CAS	Reporting Limit (mg/kg)	Acceptable Limits (mg/kg)
		4,4'-DDD	72-54-8	0.0033	2.9**
		Endosulfan sulfate	1031-07-8	0.0033	100
		4,4'-DDT	50-29-3	0.0033	2.1**
		Methoxychlor	72-43-5	0.017	310*
		Endrin ketone	53494-70-5	0.0033	15
		Endrin aldehyde	7421-93-4	0.0033	15
		alpha-Chlordane	5103-71-9	0.0017	30
		gamma- Chlordane	5103-74-2	0.0017	30
PCBs	GC-ECD comparable to SW-846 8082A or other suitable validated method	Total PCBs (measured as Aroclors)	1336-36-3	0.1	1

Reporting limits are recommended based on the capabilities of appropriate methods. All soils/solids for cultivation must demonstrate that they meet the acceptable limits shown in Exhibit 4 on a dry weight basis.

Please note that these Protocols are continually evaluated and revised based upon new scientific and industry information.



^{*}US EPA Regional Screening Level (US EPA 2014)

^{**}Cancer Risk Evaluation Guidelines (ATSDR 2014)



Exhibit 5. Analysis Details – Water

Revised – February 26, 2021

This document is issued by the Cannabis Control Commission. The applicable Marijuana laws, which include M.G.L. c. 94I, 94G, 935 CMR 500.000 and 935 CMR 501.000, should be reviewed as they may provide or clarify the legal requirements related to this document. This protocol document should be checked periodically for revisions. Questions with regards to this document may be directed to Commission@CCCMass.com.

Method	Analytical Method	Analyte	CAS	Reporting Limit (mg/L)	Acceptable Limits (mg/L)
	Inductively Coupled Plasma Atomic	Antimony	7440-36-0	0.060	6
		Arsenic	7440-38-2	0.010	10
		Cadmium	7440-43-9	0.005	5
		Chromium (Hexavalent)	7440-47-3	0.010	100
	(ICP-AES) Comparable	Copper	7440-50-8	0.025	1,300
	to SW-846 6010C or other suitable validated	Lead	7439-92-1	0.010	15
	method	Nickel	7440-02-0	0.040	100*
	or ICP-Mass Spectrometry	Mercury (CVAA)	7439-97-6	0.0002	2
Metals	(ICP-MS) comparable	gamma-BHC	58-89-9	0.00005	0.2
ot m	to SW-846 6020B or other suitable validated method and	Heptachlor	76-44-8	0.00005	0.4
		Heptachlor epoxide	1024-57-3	0.00005	0.2
	Cold Vapor Atomic	Endrin	72-20-8	0.0001	2
Absorption (CVAA) Mercury comparable	Absorption (CVAA) for Mercury comparable to	Methoxychlor	72-43-5	0.0005	40
	SW-846 7470A or other	Endrin ketone	53494-70-5	0.0001	2
		Endrin aldehyde	7421-93-4	0.0001	2
		alpha- Chlordane	5103-71-9	0.00005	2
		gamma- Chlordane	5103-74-2	0.00005	2



Method	Analytical Method	Analyte	CAS	Reporting Limit (mg/L)	Acceptable Limits (mg/L)
	Pour Plate Method comparable to SM 9215B or other suitable validated method	Heterotrophic Plate Count	NA	1.0	MMCL
Microbiological	Membrane Filter comparable to SM 9222D or other suitable validated method	Fecal Coliform	NA	1.0	MMCL
	Multi-tube comparable to SM 9221F or other suitable validated method	e. Coli	NA	1.0	MMCL

^{*}For contaminant limits in water requiring testing, as described earlier in this protocol, DPH used Massachusetts Maximum Contaminant Levels (MMCLs) as acceptable limits. For one metal (nickel) no MMCL exists, thus the MassDEP Office of Research and Sundards Goal (ORSG) for nickel in drinking water of 100 mg/L was used as an acceptable limit.

Please note that these Protocols are continually evaluated and revised based upon new scientific and industry information.





Exhibit 6.

Actions for Environmental Media Analysis Prior to Cultivation

Revised – February 26, 2021

This document is issued by the Cannabis Control Commission. The applicable Marijuana laws, which include M.G.L. c. 94I, 94G, 935 CMR 500.000 and 935 CMR 501.000, should be reviewed as they may provide or clarify the legal requirements related to this document. This protocol document should be checked periodically for revisions. Questions with regards to this document may be directed to Commission@CCCMass.com.

Test source solids and waters as required in protocol Results exceed Yes Do not use media in acceptable cultivation limits? Results are Yes Environmental media reliable and may be used in documented? cultivation No Identify issue. corrective action. and potential impact Environmental

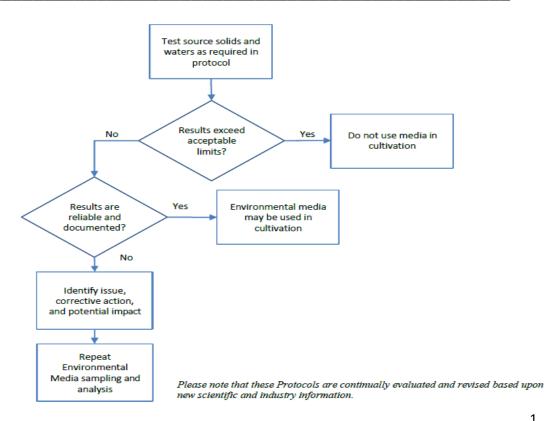
Please note that these Protocols are continually evaluated and revised based upon new scientific and industry information.





Exhibit 7. **Actions for Ongoing Monitoring of Environmental Media** Revised – February 26, 2021

This document is issued by the Cannabis Control Commission. The applicable Marijuana laws, which include M.G.L. c. 94I, 94G, 935 CMR 500.000 and 935 CMR 501.000, should be reviewed as they may provide or clarify the legal requirements related to this document. This protocol document should be checked periodically for revisions. Questions with regards to this document may be directed to Commission@CCCMass.com.





Identifying Disproportionately Impacted Areas by Cannabis Prohibition in Massachusetts

March 2021

Massachusetts Cannabis Control Commission

Steven J. Hoffman, Chairman Jennifer Flanagan, Commissioner Nurys Z. Camargo, Commissioner Bruce Stebbins, Commissioner Ava C. Concepcion, Commissioner

Shawn Collins, Executive Director

Principal Investigators

Jennifer M. Whitehill, PhD, University of Massachusetts Amherst Mark Melnik, PhD, University of Massachusetts Donahue Institute

Project Team

April Pattavina, PhD, University of Massachusetts Lowell Renee M. Johnson, PhD, MPH, Johns Hopkins Bloomberg School of Public Health Rebecca Loveland, MA, University of Massachusetts Donahue Institute Carrie Bernstein, MPPA, University of Massachusetts Donahue Institute Faith English, MPH, University of Massachusetts Amherst Abigail Raisz, BA, University of Massachusetts Donahue Institute Michael McNally, BA, University of Massachusetts Donahue Institute Samantha M. Doonan, BA, Research Analyst, Massachusetts Cannabis Control Commission Julie K. Johnson, PhD, Director of Research, Massachusetts Cannabis Control Commission

Acknowledgments

External Collaborators

University of Massachusetts Amherst Jasmine Inim. BA

University of Massachusetts Donahue Institute Andrew Hall, MPA, MA

Cannabis Control Commission

Commission Leadership
Alisa Stack, Chief Operating Officer

Research Department
Olivia Laramie, Research Project Coordinator

Government Affairs

Matthew Giancola, Director of Governmental Affairs and Policy

Suggested bibliographic reference format:

Whitehill JM., Melnik M., Pattavina A., Johnson RM., Loveland R., Bernstein C., English F., Raisz A., McNally, M., Doonan SM., & Johnson JK. (2021, February). *Identifying Massachusetts Communities Disproportionately Impacted by Cannabis Prohibition*. Worcester, MA: *Massachusetts Cannabis Control Commission*.



Table of Contents

I.Executive Summary	4
Table I-1. Municipalities in Tiers 1 and 2 (Top 20 Percent) of Disproportionate Impact Score	
II.Introduction	9
Purpose	9
History of Drug Enforcement	
Massachusetts Policy	
III.Methods	11
Overview	11
Data Sources and Time Frame	12
Municipalities and Census Tracts	13
Variables	13
Data Exclusions	14
Special Considerations	14
Scoring	15
IV.Results	16
Figure IV-1. Massachusetts Municipalities by Disproportionate Impact Tier	16
Table IV-1. Municipalities in Tiers 1 and 2 (Top 20 percent) of Disproportionate Impact Score, Ranking w	ith
Scores	
Census Tract Rankings	
Figure IV-2. Boston Census Tracts (within Neighborhoods) by Disproportionate Impact Tier	
Figure IV-3. Cambridge Census Tracts by Disproportionate Impact Tier	
Figure IV-4. Lower Census Tracts by Disproportionate Impact Tier	
Figure IV-6. Worcester Census Tracts by Disproportionate Impact Tier	
Table IV-2. Census Tracts in Tier 1 and 2 (Top 20 percent) of Disproportionate Impact Score	
V.Conclusion.	
Limitations	26
Directions for Future Research	27
Policy Considerations	27
VI.References	29
	30
Appendix I. Detailed Study Design and Methods	30
Table VI-1. Time spans and Corresponding Population Data Source(s)	
Appendix II. Data	32
Figure VI-1. Number of Municipalities Reporting to NIBRS, 1990-2017	
Table VI-2. Municipalities Excluded from Analysis	
Table VI-3. Census Tracts Excluded from Analysis	35
Table VI-4. Point Locations Excluded from Analysis	
Table VI-5. Characteristics of Adults Arrested for Drug-Related Offenses in Massachusetts, 2000-2017	
Table VI-6. Municipalities in Tiers 1 and 2 (Top 20%) of Disproportionate Impact Score, by County	
Table VI-7. Disproportionate Impact Scores and score components in Massachusetts by Municipality, 2000	0- 39



I. Executive Summary

Introduction

The Massachusetts Cannabis Control Commission (hereafter referred to as "the Commission") is legislatively required to develop "procedures and policies to promote and encourage full participation in the regulated cannabis industry by people from communities that have previously been disproportionately harmed by cannabis prohibition and enforcement and to positively impact those communities" (G. L. c. 94G, § 4 (a ½) (iv)). Accordingly, the purpose of this project was to: (1) develop a method to empirically assess the extent to which Massachusetts communities have been impacted historically by cannabis prohibition and the "War on Drugs;" (2) apply the method to generate a "disproportionate impact score" ("DI" score) that reflects those impacts for different areas of Massachusetts; and (3) provide a ranking of areas in Massachusetts according to the disproportionate impact score [See Section III. Methods].

Approach

Overview. To quantify the impact of cannabis prohibition and the "War on Drugsa," it was necessary to first conceptualize how this could be measured using available data. Prior research demonstrates that enforcement of drug prohibition has resulted in disproportionately high numbers of arrests and incarceration for Black and Latino^b individuals. These disparities persist despite cannabis decriminalization in Massachusetts in 2008, medical legalization in 2012, and adult-use legalization in 2016. There are strong correlations between poverty and involvement in drug selling and/or drug use; and after incarceration, many individuals face steep challenges to gaining legal employment, which can set up cycles of poverty that last generations. The disproportionate impact (DI) score, therefore, included four primary factors at a geographic-level: Drug arrests, including: (1) average annual number of drug arrests; and (2) average annual rate of drug arrests per 100,000 population; (3) percent of people living in poverty ("economic deprivation"); and (4) the percent of residents who report Black and/or Latino race/ethnicity ("racial and ethnic composition"). These factors were examined for 295 municipalities across Massachusetts, as well as for 305 census tracts in the state's five largest cities (Boston, Cambridge, Lowell, Springfield, and Worcester).

Data Sources. Arrest data for all incidents involving a drug crime were obtained from the National Incident-Based Reporting System (NIBRS) and the Boston Police Department (BPD) from January 1, 2000 through December 31, 2017 [See *Section II. Introduction—Massachusetts*

^bRace and ethnicity data analyzed in this report come from the U.S. Census Bureau. The Census asks individuals if they are "Hispanic or Latino." Hispanic or Latino individuals may be of any race. The term Latino is used in this report to refer to people who identify as Hispanic or Latino/a/x. The term Black is used to refer to individuals who identify as either "Black or African American" on the census and who do not identify as Hispanic or Latino.



^aThe "War on Drugs" refers to punitive criminal sanctions for drug offenses and use of a harsh criminal justice approach in managing societal problems with drugs in the United States [See Section II. Introduction. *History of Drug Enforcement* for additional discussion and references].

Policy for additional information on NIBRS vs. the previously used Uniform Crime Reporting (UCR) data]. Arrests were assigned to the census tract in which they occurred. The year 2000 was selected as the starting point for this analysis as this was the first year that most Massachusetts municipalities reported to NIBRS [See Figure VI-1]. The ending year was selected so that the study assessed the time before Massachusetts implemented legal sales of cannabis for adult use. Municipalities (n=56) that did not have drug arrest data available in NIBRS or from BPD could not be included in the analysis [See: *Section III. Methods. Data Sources and Time Frame* for more detail].

Score Development. Four key indicators were used in an equation^c that assigned a disproportionate impact (DI) score to each area. Municipalities and/or census tracts were scored separately. These indicators were calculated at the area level and included: (1) average annual number of drug arrests; (2) average annual rate of drug arrests per 100,000 population; (3) percent of people living in poverty; and (4) the percent of residents who report Black and/or Latino race/ethnicity.

To account for the fact that some areas have consistently high levels of arrests, poverty, and Black and/or Latino residents over time while other areas have experienced more changes in these indicators, the study period was divided into four time spans.^d The scoring equation was applied to generate a DI^e score and a ranking for each place in each time span. The average of the four rankings^e was calculated to create a final DI score. The final DI scores range from zero to 99.52, with higher scores representing higher impacts. This final DI score was again ranked to identify the most disproportionately impacted areas in Massachusetts according to the score. Municipalities with a high concentration of college students (n=5) or of seasonal housing (n=7) were excluded from the final ranking because the population and arrest data for such areas is unlikely to represent year-round residents. [See *Table VI-2*]. The five largest cities were excluded from the municipality rankings because they are analyzed separately at the census tract level.

Results

There were 279 municipalities included in the municipal-level ranking. Table I-1 below splits the areas with the highest DI scores into two tiers. Tier 1 includes the 28 cities and towns in the top 10 percent of DI scores (range: 78.7 to 99.5). The three highest scoring communities were Holyoke, New Bedford, and Brockton. Tier 2 includes the next 28 municipalities which fell into the top 11-20 percent of DI scores (range: 69.6-78.6). Tier 2 includes places such as Weymouth, Dennis, and Methuen. Each tier after that contains approximately 56 areas that represent 20

^eDI scores and ranking for each time period were based on the number of municipalities or census tracts reporting arrest data, which varied over time, from n=246 in 2000-2004 to n=295 in 2015-2017. These ranking were converted to percentages before being averaged across the time spans in which an area reported drug arrests.



^cThe DI scores in this analysis were calculated using rankings for the following measures and in the following equation: (0.5)* Average Annual Number of Drug Arrests + Average Annual Rate of Drug Arrests per 100,000 population + (0.5)* Percent of people living in poverty + (0.5) * Percent of Black and/or Latino residents.

^dThe time spans used for the analysis were: 2000-2004, 2005-2009, 2010-2014, and 2015-2017.

percent of ranked municipalities. Tier 6 can be thought of as those communities least negatively impacted by drug enforcement and the bottom 20 percent of DI scores (range: 6.2-30.1).

The median traits in 2015-2017 for a municipality in Tier 1 (the top 10 percent) include: 88 average (mean) annual arrests, 308 average annual arrests per 100,000 population, 15 percent living below the federal poverty line, and 23 percent Black and/or Latino residents. The median municipality in Tier 2 (with a score in the 11th to 20th percentile) had: 50 average annual arrests, 226 average annual arrests per 100,000 population, eight percent living below the federal poverty line, and six percent Black and/or Latino residents. By comparison, municipalities in the bottom tier had two average annual arrests, 32 average annual arrests per 100,000 population, four percent living below the federal poverty line, and two percent Black and/or Latino residents.

The DI score tiers for 305 census tracts within the five largest cities are presented in Figure I-1. Boston, Springfield, and Worcester had census tracts that fall within the Tier 1 on the DI score.

Conclusion

This analysis identifies Massachusetts municipalities and specific census tracts within the five largest cities, that have experienced high levels of drug arrests, compounded by poverty and racial segregation, and thus disproportionately experienced negative impacts from drug prohibition and enforcement. The areas in the top tiers on both the municipality and census tract rankings are the most disproportionately impacted areas. Because the DI score for each area is calculated using rankings that are relative to other areas in Massachusetts, places further down on the list may have been impacted, but to a lesser degree.

It is notable, if not surprising, that a majority of towns in Tiers 1 and 2 based on the DI score created in this analysis, are on the current list of Disproportionately Impacted Areas^f maintained by the Commission.⁴ Further, most are legislatively recognized on the state level as "Gateway Cities." Gateway Cities are midsized urban centers that serve as regional economic anchors around the state and face a variety of significant social and economic challenges.⁵

Given the nature of the DI scores (*i.e.*, communities with higher scores are "more impacted" than communities with lower scores), it may be appropriate for the Commission to consider using different strategies to attempt to address and ameliorate the impacts of drug enforcement on areas in different tiers (or other groupings of areas) on this list. Such an approach would reflect the reality that in Tier 1, residents are more likely to have experienced negative impacts from drug enforcement; whereas in lower tiers, it is most likely to be a subset of people who have such experiences. Eligibility for priority license status and other benefits could be based on a combination of requirements such as residence in a Tier 2 Disproportionately Impacted Area (DIA) and membership in an additional priority group (*e.g.*, personal or family history of drug arrest or incarceration; Black race and/or Latino ethnicity).

^f The Commission has previously referred to areas disproportionately impacted by drug prohibition as "Areas of Disproportionate Impact" or "ADIs." Since the abbreviation ADI is also used in several fields to refer to a measure of economic deprivation called the Area Deprivation Index (ADI), this report utilizes the term Disproportionately Impacted Areas and the abbreviation DIA. See Section II: Introduction, *Massachusetts Policy* for more detail.



It should be noted that disproportionate impacts of drug enforcement occur alongside and interact with other economic and social problems (*e.g.*, *slow job growth and poor-quality schools*). With that, thoughtful and strategic utilization of the DI score for policymaking can help improve social equity within the cannabis industry, and hopefully, in communities that have long-faced social and economic challenges in the Commonwealth.

Table I-1. Municipalities in Tiers 1 and 2 (Top 20 Percent) of Disproportionate Impact Score

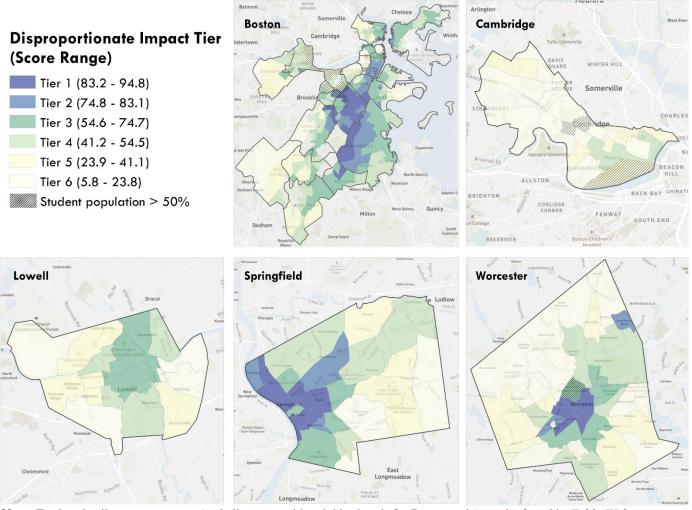
	Tier 1	Tier 2		
Rank	Municipality	Rank	Municipality	
1	Holyoke*	29	Weymouth	
2	New Bedford*	30	Dennis	
3	Brockton*	31	Methuen	
4	Lynn*	32	Spencer*	
5	Fall River*	33	Stoughton	
6	Salem	34	Peabody	
7	Chelsea*	35	Wareham*	
8	Fitchburg*	36	Yarmouth	
9	Southbridge*	37	Palmer	
10	Haverhill*	38	Somerville	
11	Pittsfield*	39	Plymouth	
12	West Springfield*	40	Braintree*	
13	Greenfield*	41	Middleborough	
14	Taunton*	42	Mashpee	
15	Revere*	43	Medford	
16	Barnstable	44	Salisbury	
17	Everett	45	Woburn	
18	Webster	46	Beverly	
19	Northampton	47	Marlborough	
20	Chicopee	48	Westfield	
21	Quincy*	49	Oak Bluffs	
22	Gardner	50	Norwood	
23	Leominster	51	Montague	
24	Randolph*	52	Sturbridge	
25	Malden	53	Andover	
26	Attleboro	54	Raynham	
27	North Adams*	55	Agawam	
28	Falmouth	56	Truro	

Note: See Table VI-7 for full list of rankings and scores. Disproportionate impact scores ranged from 78.67-99.52 in Tier 1 (top 10%) and 69.56-78.66 (top 11% to 20%) in Tier 2. Tiers were created for 279 cities and towns, after excluding the five largest cities and 9 other municipalities with high student enrollment or seasonality [See Table VI-2 for exclusions].

Municipalities with an asterisk (*) denote those that were included on the Commission's 2017 list of Disproportionately Impacted Areas (DIAs).⁴



Figure I-1. Disproportionate Impact Tiers for Census Tract in Massachusetts' Five Largest Cities



Note: Further detail on census tracts (and alignment with neighborhoods for Boston only) can be found in *Table IV-2* and *Figures IV-2* through *IV-6*.

See Appendix II. Data. Table VI-7 for DI scores and components for all Massachusetts Municipalities, 2000-2017.



II. Introduction

Purpose

The Commission is legislatively required to develop "procedures and policies to promote and encourage full participation in the regulated cannabis industry by people from communities that have previously been disproportionately harmed by cannabis prohibition and enforcement and to positively impact those communities" (G. L. c. 94G, § 4 (a ½) (iv)). Accordingly, the purpose of this project was to: (1) Develop a method to empirically assess the extent to which Massachusetts communities have been impacted historically by cannabis prohibition and the "War on Drugs;" (2) apply the method to generate a "disproportionate impact score" ("DI" score) that reflects those different impacts for different areas of Massachusetts; and (3) provide a ranking of areas in Massachusetts according to the disproportionate impact (DI) score. [See Section III. Methods].

History of Drug Enforcement

In the 1960s, there was growing public recognition that alcohol and drug use had become a substantial problem in the United States (U.S.). As part of the 91st U.S. Congress' Title II of the Comprehensive Drug Abuse Prevention and Control Act of 1970, Congress passed the Controlled Substances Act and President Nixon signed it into law. This statute ushered in a new approach to regulating substances and setting a framework for drug offenses. It created five drug schedules with the designations designed to be made after scientific review of the abuse liability and potential for medical use.^{6,7} While Schedule 5 drugs have low addictive potential and established medical uses, Schedule 1 drugs are those considered to have no accepted medical uses and high potential for dependency. Cannabis was designated to Schedule 1, hence "among the most dangerous drugs, with no medical use and high potential for abuse." Although this Federal Schedule 1 designation was controversial at the time and continues to be contested, it remains in place.^{8,9}

In June of 1971, Nixon officially declared a "War on Drugs". This campaign aimed to stop illegal drug use and distribution but had adverse effects on communities of color ("disproportionate impact"). The campaign increased funding for drug-control agencies and created a mandatory prison sentencing for drug crimes. This prison reform led to a disproportionate incarceration rate of people of color for drugs crimes. Many believe this was the intended effect of the "War on Drugs".

In the 1980s, President Reagan leaned into the Nixon era drug policies and took on a "Law and Order" approach to the nation's perceived drug problem. The Anti-Drug Abuse Acts of 1986 and 1988 established punitive criminal sanctions for drug charges including new mandatory minimum sentences for offenses related to most drugs, including cannabis. During the Reagan Administration, drug users were targeted by law enforcement via drug possession charges. Drug



control practices targeted Black men in low-income, urban areas leading to a dramatic increase ("disproportionate impact") in the proportion of Black people under correctional control. While some "War on Drugs" and "Law and Order" policies have been discontinued, they have affected many systems and social structures in the U.S., leaving a legacy of impacts that persist through the present day.¹

Massachusetts Policy

Massachusetts instituted cannabis decriminalization in January 2009. Although the number of arrests for cannabis possession dropped precipitously in subsequent years, racial disparities in cannabis possession arrests persisted.² The Massachusetts legislature legalized cannabis for medical use in 2012 and dispensaries first opened in 2015. Further, Massachusetts legalized cannabis for adult use in late 2016 and the regulated retail market became operational in Fall 2018. Despite these policy changes, data shows that law enforcement patrol urban minority neighborhoods more aggressively than suburban areas, where fewer people of color reside.¹⁰ People of color, and Black males in particular, experience disproportionate law enforcement contact, arrests, and incarcerations related to drug offenses.¹¹

As part of its mandate to address the harms from cannabis prohibition, the Commission provides certain benefits to geographic communities ("areas") designated as disproportionately impacted (DIAs). For example, under current regulations, individuals who have resided for five of the past 10 years within a DIA are eligible for certain benefits, such as participation in the skill-based Social Equity Program from the Commission. Additionally, Positive Impact Plans developed by cannabis businesses can seek to invest resources in areas on the DIA list.

A prior study for the Commission led by Dr. Gettman analyzed arrest rates in relation to population size, percent of families below the poverty line, and employment rates, and used these indicators to establish a ranking for 160 municipalities in Massachusetts and census tracts in Boston, Worcester, Springfield, and Lowell using Uniform Crime Reporting (UCR) data. This study informed the Commission's original DIA list. The current study sought to expand the analysis of DIAs to include most of the 351 cities and towns in Massachusetts, and a census tract analysis for all of the cities with over 100,000 residents in the state, and to use additional drug arrest and sociodemographic data. The present study further extends the previous analysis through its use of a more comprehensive law enforcement dataset (*i.e. National Incident-Based Reporting system vs. Uniform Crime Reporting*) and creates a new, empirical approach to identifying communities most impacted by drug enforcement.



III. Methods

Overview

Drawing on prior research, the study team developed a method to quantify the impact of the "War on Drugs" on geographic areas in Massachusetts using arrest, socioeconomic, and demographic data. Critical to this analysis was identifying data that was available at a fine-enough geographic scale to allow analysis at the municipal (*i.e.*, *city or town*) level and at the census tract level for the largest cities.

The methodological approach was based on well-established data attesting that arrest and incarceration have negative impacts on individual health, social, and financial well-being, as well as adverse effects for families and communities.³ Additionally, enforcement of drug prohibition has resulted in disproportionately high numbers of arrest and incarceration for Black and Latino individuals. These disparities persist despite the Commonwealth's changing cannabis policies, including cannabis decriminalization, followed by medicinal and adult-use legalization.² Because of this situation, it was important to account for the fact that Black and Latino persons experience race-based disparities in drug-related stops, searches, and arrests in the methodology. Further, regardless of race, there are strong correlations between poverty and involvement in drug selling and/or drug use, and after incarceration, many individuals face steep challenges to gain legal employment which can establish cycles of poverty that last generations.³ Taking these factors into account, the disproportionate impact (DI) score was based on a four-pronged approach that measured: (1) average annual number of drug arrests; (2) average annual rate of drug arrests per 100,000 population; (3) percent of people living in poverty; and (4) the percent of residents who report Black and/or Latino race/ethnicity. These three abovementioned factors were examined for 295 municipalities across Massachusetts as well as for the 305 census tracts in the state's five largest cities (Boston, Cambridge, Lowell, Springfield, and Worcester).

The locations with the highest DI scores are the most disproportionately impacted by drug policy enforcement. These represent areas where the average annual number of drug arrests and rate of drug arrests per 100,000 persons are the highest, and the impact of these arrests likely compounded by high levels of poverty and larger proportions of Black and Latino residents. Conversely, the lowest scoring areas were places with low levels of arrests, low poverty, and a smaller proportion of Black and Latino residents. These can be thought of as areas that have experienced fewer negative impacts from drug enforcement.^g



^gIt is important to reinforce that the DI scores in this study are relative to other areas in Massachusetts. A low DI score does not indicate that the area or the people residing in that area have experienced no impact from drug enforcement and the other measures that went into the DI score measure.

Data Sources and Time Frame

Drug arrest data from the NIBRS¹² were obtained from the Massachusetts Executive Office of Public Safety and Security (EOPSS). Starting in the 1980s, the Federal Bureau of Investigation (FBI) began implementing the NIBRS program in law enforcement agencies across the U.S. This program requires participating law enforcement agencies to collect incident-level data on offenses reported to the police. In Massachusetts, law enforcement agencies serving municipalities submit these data points to a state repository and the state repository submits the data to the FBI. It is a voluntary reporting program and adoption among law enforcement agencies has been slow.

The overall study period was 2000-2017. By the end of 2000, over half of Massachusetts municipalities (n=183) reported to NIBRS, making 2000 an adequate starting point for the study. The ending year of 2017 was selected to have a "baseline" DI score before Massachusetts implemented legal sales of cannabis for adult use. As of 2017, there were 55 Massachusetts towns that did not contribute to NIBRS¹² and thus could not be included in this analysis [See *Table VI-2*]. In general, these are small municipalities with a population size under 8,000 residents, but there is one notable exception: the city of Lawrence (pop. 80,028). Lawrence is a large Gateway City⁵ with significant economic challenges (11 percent unemployed and 24 percent under the poverty line in 2017), with over 80 percent of the population of Latino ethnicity. One municipality had zero recorded drug arrests during the study period and was also not included. The city of Boston did not report to NIBRS during the study period, thus, data for Boston were procured separately from the Boston Police Department (BPD).

To identify areas that consistently had high DI scores according to our measure, acknowledge variation in arrests, demographic, and socioeconomic patterns over time, and reduce the influence of outliers, the 18-year period was broken into smaller time spans. Three five-year spans (2000-2004, 2005-2009, and 2010-2014) were used and the last time span covered three years (2015-2017).

For demographic and socioeconomic data, the current research leveraged the U.S. Census Bureau's Decennial Census and American Community Survey (ACS), specifically the 2000 Census, and two ACS five-year databases. The ACS is an annual, sample-based survey of American households. The five-year version of the ACS pools together responses from five years of these surveys to create estimates. The five-year version of the ACS is preferable to the one-year version for this study because the pooled sample size allows for data to be released for all cities and towns in the Commonwealth. One-year ACS data are only released for cities and towns with populations of 65,000 or more, which would have severely limited the number of communities that could be analyzed for this study. Appendix Table VI-1 shows the study time spans for arrest data and the year(s) of the corresponding Census and/or ACS data used for analysis.



Municipalities and Census Tracts

All municipalities in Massachusetts with available drug arrest data were included in our analysis. Municipalities were defined according to the U.S. Census Bureau's city/town areas (CTA) designations. Larger cities can often be very complex, with wide variability in racial and socioeconomic composition and in law enforcement activity from neighborhood-to-neighborhood. This analysis, therefore, assessed trends at a census tract level for the five cities in the state with over 100,000 residents (Boston, Cambridge, Lowell, Springfield, and Worcester). Thus, the geographic areas in our analysis include both municipalities and census tracts within the five largest municipalities. Law enforcement agency data and population data was linked to the geographic area, either at the municipality or census tract level.

Variables

- Number of drug-related arrests: Average (mean) annual counts of drug-related arrests were computed using NIRBS and BPD data. This included all incidents when a drug offense was involved. This was calculated for each distinct geographic unit (i.e., city/town or census tract) based on the number of months that the area reported to NIBRS in each analytical period and then multiplied to represent an annual count. For example, if a town began reporting to NIBRS in January of 2001, the total number of arrests for that area in the period 2000 to 2004 would be divided by 48 months rather than 60 months (i.e., five years) and multiplied by 12. This approach allowed comparability across areas that started reporting to NIBRS at different times.
- Rate of drug-related arrests per 100,000 residents: The average annual count of drug arrests within an area was divided by the number of adult residents in that area to create a rate per 100,000 population.
- Percent of Black^h and/or Latinoⁱ residents: The U.S. Census and ACS data provide estimates of the population demographic composition with the following racial categories: Black or African American, white, American Indian or Alaska Native (AI/AN), Asian, Native Hawaiian or Other Pacific Islander. Ethnicity categories are Hispanic or Latino or non-Hispanic or Latino. The study assessed the proportion of residents in each area that fall into these categories and calculated the share of adults over age 18 who are Black and/or Latino.
- *Poverty status:* Poverty was measured by the percent of persons below the federal poverty level within a geographic unit (e.g., city/town, census tract, etc.).

ⁱThe term Latino is used in this report to refer to people who identify as Hispanic or Latino/a/x. Ethnicity data analyzed in this report comes from the U.S. Census Bureau which asks individuals if they are "Hispanic or Latino." Hispanic or Latino individuals may be of any race.



^hThe term Black is used to report non-Hispanic or Latino persons who identify as either "Black or African American."

Data Exclusions

This analysis sought to draw conclusions about the people who reside in a certain place being disproportionately impacted by drug policy enforcement. The arrest data obtained from NIBRS and BPD contained addresses for arrests and, due to privacy reasons, did not contain information about the residential address for arrested individuals. It is therefore necessary to assume that the arrest data reflects arrests of residents of a particular area, rather than people moving through a place. To improve the validity of this assumption, arrests (n=5,042) that occurred at certain locations that were unlikely to represent residents were excluded. [See *Table VI-4*] Arrests that met one of the following geographic criteria were excluded:

- 1) Arrest occurred in a census tract that does not reflect a residential area: parks (e.g., Boston Common), water (e.g., Boston Harbor), other tracts with fewer than 1,000 residents (e.g., Suffolk Downs and Irving Oil industrial area);
- 2) Arrest occurred at a geographic point (*i.e.*, *addresses*) within the five largest cities that likely does not reflect a residential location. Specifically, arrests recorded at: the address of police headquarters (HQ) or substations, major transit hubs (*e.g.*, *at the exact address of South Station*), five specific "suspected drug use/trafficking hubs" without residents (*e.g.*, *Xfinity Center in Mansfield, South Shore Plaza Mall in Braintree*) that accounted for more than 20% of a municipality's total arrest count;
- 3) Arrests from the five largest cities for which the address could not be mapped to a unique point (e.g., due to a street name that does not exist); and
- 4) Arrests that from the five largest cities for which the address, when mapped, was outside of the agency's jurisdiction (e.g., an arrest made by the Springfield Police Department in Chicopee).

Special Considerations

Places with high numbers of undergraduate and graduate students

In communities with large student populations, typically college and university towns, the poverty rate can be inflated, thus, not be an accurate measure of economic deprivation in an area. For example, between 2015 and 2017, the town of Amherst had the highest poverty rate in Massachusetts at 33 percent. Comparatively, the poverty rates of cities such as Springfield and Holyoke were just below 30 percent in that same period. While the poverty rate is similar between these communities, the economic realities of these places are quite different. To account for this, the study examined the percentage of residents for each geographic area that were enrolled in college (undergraduate or graduate), with the aim of separating permanent resident poverty from student-driven poverty. Similarly, places with a high concentration of students may also be subject to higher levels of non-resident arrests. A place was defined as having a high number of students if enrolled students made up 20 percent of the population in a municipality or 50 percent of the population of a census tract, based on data for the latest time span. Areas that fit the criteria (five municipalities and 15 census tracts) were identified and omitted from the



final rankings [See *Table VI-2* for list of excluded municipalities and *Table VI-3* for a list of excluded census tracts].

Seasonal housing

Areas with high concentrations of seasonal housing and high levels of seasonal arrests were also identified and removed from the final rankings (n=7) [See *Table VI-2*]. This was done to account for communities that may have seasonal spikes in non-resident arrests. Places with high levels of seasonal housing were defined as those with 25 percent or more of the housing stock as seasonal (based on the percentage of vacant housing units used for seasonal, recreational, or occasional use) and where 40 percent or more of arrests were in one specific season (winter; spring; summer or fall) across the study period. As an example, two towns excluded from rankings via this method were Nantucket and Provincetown.

Scoring

The four variables listed above were calculated for all areas with arrest data within a specific time span, treating municipalities and census tracts separately. Next, the areas were ranked according to each measure, separately, with high scores reflecting more impacted areas. The rankings were then combined using the following equation in order to generate a DI score for each time period:

(0.5)*average annual number of drug arrests + average annual rate of drug arrests per 100,000 population + (0.5)*percent of people living in poverty + (0.5)*percent of residents who are Black and/or Latino.

The DI scores for each time span were converted to a percentile and averaged together across the time spans with arrest data to compile the final score.



IV. Results

Municipality Rankings

This analysis shows that there are communities that have been heavily impacted by drug policing all around the Commonwealth [See Figure IV-1]. Table IV-1 shows a list of the municipalities that fell within the top 20 percent of highest scores on the disproportionate impact score measure. Tier 1 represents the 28 communities in the top 10 percent and Tier 2 represents the areas that comprised the upper 11 to 20 percent. Excluding the five largest cities in Massachusetts, the municipalities that ranked the highest on the DI score were Holyoke, New Bedford, and Brockton. The cities of Boston, Cambridge, Lowell, Springfield, and Worcester all have DI scores that would fall within the upper 20 percent, but they have been removed from this list since they were analyzed separately at the census tract level.

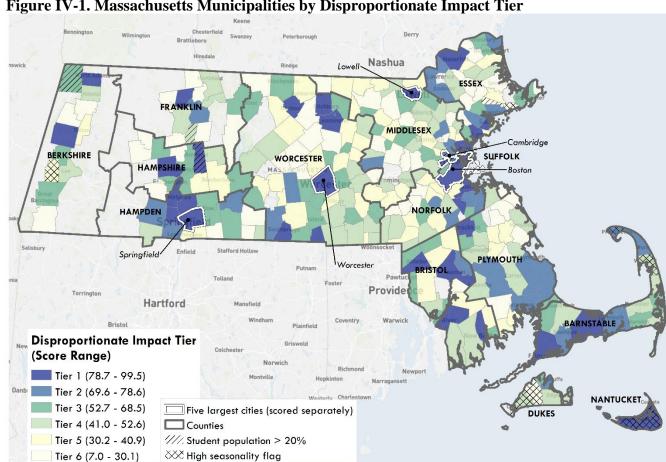


Figure IV-1. Massachusetts Municipalities by Disproportionate Impact Tier



Table IV-1. Municipalities in Tiers 1 and 2 (Top 20 percent) of Disproportionate Impact Score, Ranking with Scores

OI Rank	Municipality	County	DI Score	DI Score Tier	On prior DIA list?
1	Holyoke*	Hampden	99.52	Tier 1	Yes
N/A	Springfield*	Hampden	98.62	Not ranked	Yes
N/A	Boston	Suffolk	98.39	Not ranked	Yes
2	New Bedford*	Bristol	98.02	Tier 1	Yes
N/A	Worcester*	Worcester	97.87	Not ranked	Yes
3	Brockton*	Plymouth	96.55	Tier 1	Yes
4	Lynn*	Essex	95.53	Tier 1	No
5	Fall River*	Bristol	94.78	Tier 1	Yes
6	Salem*	Essex	93.23	Tier 1	No
7	Chelsea*	Suffolk	92.76	Tier 1	Yes
N/A	Lowell*	Middlesex	92.66	Not ranked	No
8	Fitchburg*	Worcester	92.33	Tier 1	Yes
N/A	Amherst	Hampshire	90.82	Not ranked	Yes
9	Southbridge	Worcester	90.13	Tier 1	Yes
10	Haverhill*	Essex	88.80	Tier 1	Yes
11	Pittsfield*	Berkshire	88.58	Tier 1	Yes
12	West Springfield	Hampden	88.56	Tier 1	Yes
13	Greenfield	Franklin	88.42	Tier 1	Yes
14	Taunton*	Bristol	87.62	Tier 1	Yes
15	Revere*	Suffolk	87.30	Tier 1	Yes
16	Barnstable*	Barnstable	87.01	Tier 1	No
17	Everett*	Middlesex	86.66	Tier 1	No
18	Webster	Worcester	85.66	Tier 1	No
19	Northampton	Hampshire	85.00	Tier 1	No
20	Chicopee*	Hampden	84.22	Tier 1	No
21	Quincy*	Norfolk	83.36	Tier 1	Yes
22	Gardner	Worcester	83.14	Tier 1	No
23	Leominster*	Worcester	82.70	Tier 1	No
N/A	Nantucket	Nantucket	81.69	Not ranked	No
24	Randolph	Norfolk	81.03	Tier 1	Yes
25	Malden*	Middlesex	80.42	Tier 1	No
26	Attleboro*	Bristol	80.33	Tier 1	No
27	North Adams	Berkshire	79.71	Tier 1	Yes
28	Falmouth	Barnstable	78.67	Tier 1	No
29	Weymouth	Norfolk	78.64	Tier 2	No
30	Dennis	Barnstable	78.24	Tier 2	No
31	Methuen*	Essex	78.01	Tier 2	No
32	Spencer	Worcester	77.53	Tier 2	Yes
33	Stoughton	Norfolk	77.14	Tier 2	No
34	-		77.07		
35	Peabody* Wareham	Essex Plymouth	77.07	Tier 2	No No
N/A	Provincetown	Barnstable	76.25	Not ranked	No No
36				Tier 2	
	Yarmouth	Barnstable	76.16		No No
37	Palmer	Hampden	75.91	Tier 2	No
38	Somerville	Middlesex	74.19	Tier 2	No
39	Plymouth	Plymouth	74.10	Tier 2	No
40	Braintree	Norfolk	73.78	Tier 2	Yes
41	Middleborough	Plymouth	73.61	Tier 2	No



DI Rank	Municipality	County	DI Score	DI Score Tier	On prior DIA list?
43	Medford	Middlesex	73.26	Tier 2	No
44	Salisbury	Essex	73.06	Tier 2	No
45	Woburn	Middlesex	72.61	Tier 2	No
46	Beverly	Essex	72.37	Tier 2	No
47	Marlborough	Middlesex	71.85	Tier 2	No
48	Westfield*	Hampden	71.63	Tier 2	No
49	Oak Bluffs	Dukes	71.60	Tier 2	No
50	Norwood	Norfolk	71.44	Tier 2	No
51	Montague	Franklin	71.43	Tier 2	No
N/A	Cambridge	Middlesex	70.99	Not ranked	No
52	Sturbridge	Worcester	70.88	Tier 2	No
53	Andover	Essex	70.76	Tier 2	No
54	Raynham	Bristol	70.15	Tier 2	No
55	Agawam	Hampden	69.81	Tier 2	No
56	Truro	Barnstable	69.57	Tier 2	No

Note: DI=Disproportionate impact. *Indicates Massachusetts legislature-defined Gateway City. Ten places with significant seasonal housing/arrests or 20% or more residents in undergraduate or graduate degree programs have been grayed out and italicized, as have the state's five largest cities. Tiers were created with these places excluded, and therefore reflect percentiles of 279 total cities and towns.

See *Appendix II. Data. Table VI-7* for DI scores and components for all Massachusetts Municipalities, 2000-2017 and *Appendix II. Data. Table VI-8* for DI scores and components for all Census Tracts of large Massachusetts cities, 2000-20017.

The median traits in 2015-2017 for a municipality in Tier 1 (the top 10 percent) include: 88 average (mean) annual arrests, 308 average annual arrests per 100,000 population, 15 percent living below the federal poverty line, and 23 percent Black and/or Latino residents. The median municipality in Tier 2 (with a score in the 11th to 20th percentile) had: 50 average annual arrests, 226 average annual arrests per 100,000 population, eight percent living below the federal poverty line, and six percent Black and/or Latino residents. By comparison, municipalities in the bottom Tier had two average annual arrests, 32 average annual arrests per 100,000 population, four percent living below the federal poverty line, and two percent Black and/or Latino residents.

Census Tract Rankings

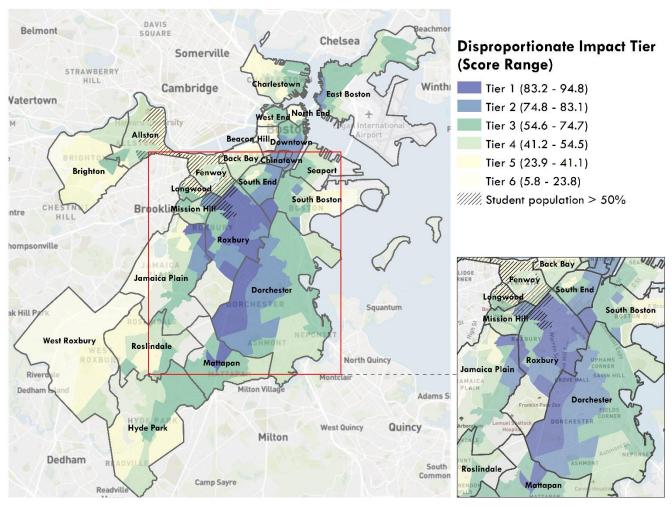
Six tiers that reflect the top 10 percent (Tier 1), top 11 to 20 percent (Tier 2), and 20 percent subsequent groupings were constructed based on the DI score distribution of all 305 census tracts across the state's five largest cities. The areas flagged for having high student enrollment were excluded from the final ranking, resulting in 297 total ranked census tracts.

All of Tier 1 and Tier 2 census tracts in the largest cities in Massachusetts are in Boston, Springfield, and Worcester. In Boston, the tracts with the highest DI scores include the neighborhoods of Roxbury and Dorchester. In Springfield, tracts with the highest DI scores were largely in and around the Metro Center, as well as the South End, Memorial Square, Old Hill, and Six Corners. In Worcester, high scoring tracts were also in and around Downtown, including: Lincoln and Federal Square, Piedmont, Green Island, as well as Great Brook Valley on the East Side. Both Lowell and Cambridge had areas with elevated DI scores, but overall,



none of the tracts in these two cities rank among the most disproportionately impacted among the tracts in the largest cities of the state.

Figure IV-2. Boston Census Tracts (within Neighborhoods) by Disproportionate Impact Tier





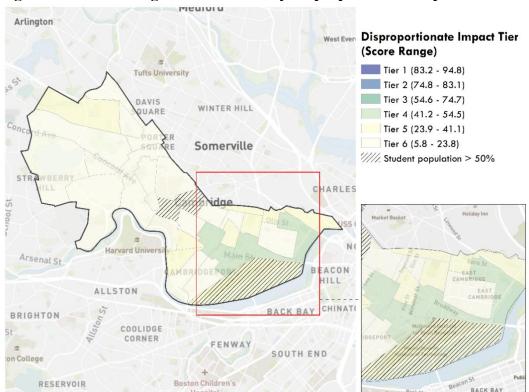


Figure IV-3. Cambridge Census Tracts by Disproportionate Impact Tier



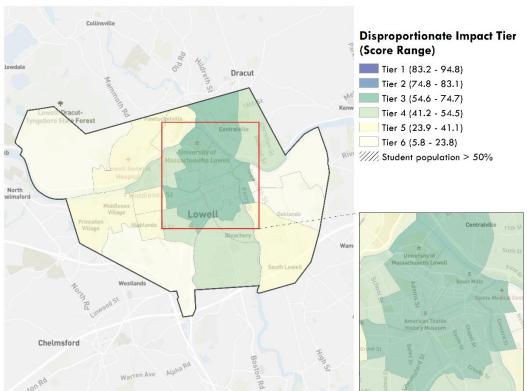


Figure IV-4. Lowell Census Tracts by Disproportionate Impact Tier



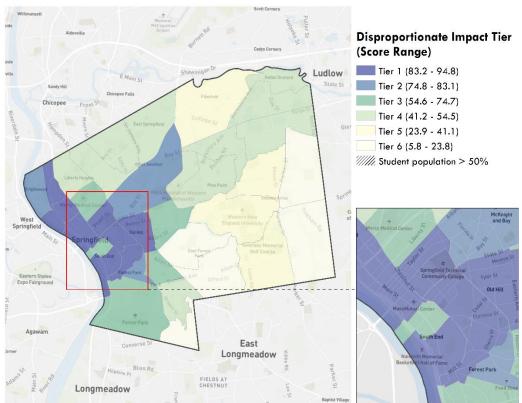


Figure IV-5. Springfield Census Tracts by Disproportionate Impact Tier



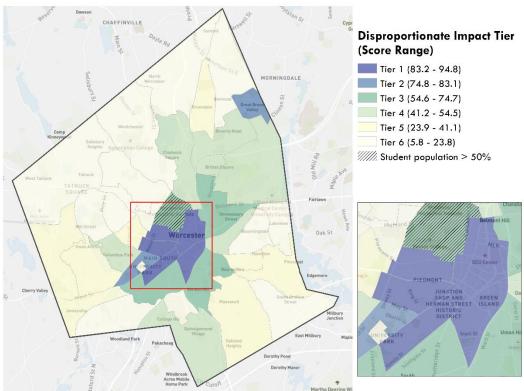


Figure IV-6. Worcester Census Tracts by Disproportionate Impact Tier



Table IV-2. Census Tracts in Tier 1 and 2 (Top 20 percent) of Disproportionate Impact Score

Rank	Tract Name	Municipality	Neighborhood (Boston only)	County	DI Score	DI Score Tier	On prior DIA list?	
1	Census Tract 8020	Springfield		Hampden	94.81	Tier 1	Yes	
2	Census Tract 804.01	Boston	Roxbury	Suffolk	94.15	Tier 1	Yes	
3	Census Tract 8012	Springfield		Hampden	93.05	Tier 1	No	
4	Census Tract 8006	Springfield		Hampden	92.53	Tier 1	Yes	
5	Census Tract 805	Boston	Roxbury	Suffolk	92.38	Tier 1	Yes	
6	Census Tract 7314	Worcester		Worcester	91.80	Tier 1	Yes	
7	Census Tract 902	Boston	Dorchester	Suffolk	91.09	Tier 1	Yes	
8	Census Tract 801	Boston	Roxbury & South Boston	Suffolk	90.99	Tier 1	No	
9	Census Tract 7313	Worcester		Worcester	90.63	Tier 1	Yes	
10	Census Tract 924	Boston	Dorchester	Suffolk	90.18	Tier 1	Yes	
11	Census Tract 813	Boston	Roxbury & Jamaica Plain	Suffolk	89.91	Tier 1	No	
12	Census Tract 803	Boston	Roxbury	Suffolk	89.80	Tier 1	Yes	
13	Census Tract 7317	Worcester		Worcester	89.60	Tier 1	Yes	
14	Census Tract 812	Boston	Jamaica Plain	Suffolk	89.50	Tier 1	No	
15	Census Tract 903	Boston	Dorchester	Suffolk	88.90	Tier 1	Yes	
16	Census Tract 8011.01	Springfield		Hampden	88.62	Tier 1	Yes	
17	Census Tract 8018	Springfield		Hampden	87.99	Tier 1	Yes	
18	Census Tract 817	Boston	Roxbury	Suffolk	87.71	Tier 1	Yes	
19	Census Tract 1001	Boston	Dorchester	Suffolk	87.63	Tier 1	Yes	
20	Census Tract 818	Boston	Roxbury	Suffolk	87.34	Tier 1	Yes	
21	Census Tract 8019.01	Springfield		Hampden	87.30	Tier 1	No	
22	Census Tract 901	Boston	Dorchester	Suffolk	87.24	Tier 1	Yes	
23	Census Tract 7315	Worcester		Worcester	86.50	Tier 1	Yes	
N/A	Census Tract 806.01	Boston	Roxbury	Suffolk	86.49	Not ranked	Yes	
24	Census Tract 821	Boston	Roxbury	Suffolk	84.99	Tier 1	Yes	
25	Census Tract 8019.02	Springfield		Hampden	84.88	Tier 1	Yes	
26	Census Tract 904	Boston	Roxbury	Suffolk	84.61	Tier 1	Yes	
27	Census Tract 8008	Springfield		Hampden	84.37	Tier 1	Yes	
28	Census Tract 7325	Worcester		Worcester	83.82	Tier 1	No	
29	Census Tract 1011.02	Boston	Mattapan	Suffolk	83.68	Tier 1	Yes	
30	Census Tract 611.01	Boston	South Boston	Suffolk	82.81	Tier 2	Yes	
31	Census Tract 920	Boston	Dorchester	Suffolk	82.78	Tier 2	Yes	
32	Census Tract 913	Boston	Dorchester	Suffolk	82.37	Tier 2	No	
33	Census Tract 923	Boston	Dorchester	Suffolk	82.14	Tier 2	Yes	
34	Census Tract 503	Boston	East Boston	Suffolk	82.07	Tier 2	No	
35	Census Tract 1002	Boston	Dorchester	Suffolk	81.81	Tier 2	Yes	
36	Census Tract 711.01	Boston	Roxbury & South End	Suffolk	80.86	Tier 2	No	
37	Census Tract 607	Boston	South Boston	Suffolk	80.50	Tier 2	Yes	
38	Census Tract 712.01	Boston	South End	Suffolk	80.47	Tier 2	Yes	
39	Census Tract 820	Boston	Roxbury	Suffolk	80.45	Tier 2	Yes	



Rank	Tract Name	Municipality	Neighborhood (Boston only)	County	DI Score	DI Score Tier	On prior DIA list?
40	Census Tract 914	Boston	Dorchester	Suffolk	79.71	Tier 2	Yes
41	Census Tract 1005	Boston	Dorchester	Suffolk	79.67	Tier 2	No
42	Census Tract 916	Boston	Dorchester	Suffolk	79.65	Tier 2	No
43	Census Tract 819	Boston	Roxbury	Suffolk	79.58	Tier 2	Yes
44	Census Tract 8007	Springfield		Hampden	78.75	Tier 2	Yes
45	Census Tract 906	Boston	Roxbury	Suffolk	78.34	Tier 2	Yes
46	Census Tract 701.01	Boston	Downtown & Chinatown	Suffolk	77.84	Tier 2	No
47	Census Tract 8013	Springfield		Hampden	77.77	Tier 2	No
48	Census Tract 919	Boston	Dorchester	Suffolk	77.60	Tier 2	Yes
49	Census Tract 1203.01	Boston	Jamaica Plain	Suffolk	77.09	Tier 2	No
50	Census Tract 918	Boston	Dorchester	Suffolk	76.90	Tier 2	Yes
51	Census Tract 915	Boston	Dorchester	Suffolk	76.54	Tier 2	No
52	Census Tract 7320.01	Worcester		Worcester	76.39	Tier 2	No
53	Census Tract 917	Boston	Dorchester	Suffolk	76.39	Tier 2	Yes
N/A	Census Tract 808.01	Boston	Mission Hill	Suffolk	76.32	Not ranked	Yes
54	Census Tract 8022	Springfield		Hampden	76.23	Tier 2	Yes
55	Census Tract 8014.01	Springfield		Hampden	76.14	Tier 2	Yes
56	Census Tract 7312.03	Worcester		Worcester	76.00	Tier 2	Yes
57	Census Tract 704.02	Boston	South End	Suffolk	75.97	Tier 2	No
58	Census Tract 702	Boston	Downtown & Chinatown	Suffolk	75.16	Tier 2	Yes
59	Census Tract 1003	Boston	Dorchester	Suffolk	74.81	Tier 2	No

Note: 15 tracts grayed out and italicized had rates of high student enrollment (more than 50% of residents enrolled in undergraduate or graduate degree programs). Tiers were created with these places included. Boston neighborhoods are based on neighborhood definitions from the Boston Planning and Development Authority (BPDA).



V. Conclusion

This study used 18 years of drug arrest data as well as area-level socioeconomic and demographic data to generate a successive method for assessing the historical impact of cannabis prohibition and the "War on Drugs" to rank Massachusetts municipalities and census tracts according to this disproportionate impact (DI) score. This score identifies the DIAs in Massachusetts. The methodology extends prior efforts to rank Massachusetts areas by incorporating incident-level drug arrest data for most Massachusetts municipalities, and directly including race and ethnicity information in the scoring model.

It is notable that a majority of towns in Tiers 1 and 2 based on the DI score created in this analysis are on the current list of DIAs⁴ maintained by the Commission. Further, most are state legislatively recognized "Gateway Cities". Gateway Cities are midsized urban centers that serve as regional economic anchors around the state and face a variety of significant social and economic challenges.⁵

Limitations

There are several limitations to this study summarized below and additional detail can be found in the Appendix. First, the arrest data utilized in this study contained information on the address of an arrest and the law enforcement agency making the arrest (*i.e.*, *Boston Police Department*, *Amherst Police Department*). This study used the addresses of where the arrest took place to assign arrests to a geographic area; information on the residential address of the people who were arrested was not available. Thus, if individuals passing through or visiting an area were arrested in large numbers, it would inflate the count of arrests and the rate of arrests assigned to that area and would be utilized in the DI score. This was addressed by excluding certain locations (*e.g.*, *the Xfinity Center in Mansfield*), but that approach cannot fully account for non-residents being arrested in an area. Relatedly, some communities with elevated scores (*e.g.*, *Peabody*, *Marlborough*, *and Waltham*) are on major transit routes which could have resulted in a higher-than-expected number of arrests. There may be other towns with seasonal fluctuations in population (*e.g.*, *Falmouth and Truro*) that could have influenced how the town ranked with regard to arrests and poverty, but that did not meet the conservative criteria established for seasonality-based exclusions in this study [See *Section III. Methods*, *Other Considerations*].

Arrest data about juveniles under age 18 were not provided by the BPD. To maintain comparability across the state, juveniles were excluded from the NIBRS-based analyses as well (n=18,522). The impacts, however, of juvenile arrests are particularly difficult for varying areas, making this an important limitation of the DI score and a natural place for further assessment and inclusion in the future.

The federal poverty line does not capture regional variations in the cost of living. As a result, the relative economic deprivation for households is likely higher in high-cost areas, such as Greater Boston, than more low-cost areas.



Not all municipalities reported data to NIBRS during our study period. Boston is one such example, but data were obtained directly from BPD to address this limitation. The next largest example is Lawrence, a city of more than 80,000 people which only started reporting to NIBRS in 2020. Because of this gap in the data, Lawrence could not be included in the rankings of municipalities. Based on the demographics and economics of Lawrence, though, it is highly likely the city would rank high on the DI score if all data were available, indicating another natural place for further assessment and inclusion in the future.

Directions for Future Research

Juvenile populations

The impact of arrest and involvement with the criminal justice system during adolescence may result in different negative outcomes related to future employment, income, and family formation.¹³ The Commission should consider follow-up research to examine impacts of the "War on Drugs" on juveniles. Such an analysis would likely need to incorporate data that captures arrests as well as other markers of juveniles' interactions with law enforcement and the criminal justice system.

Incarcerated populations

This study focused on drug-related arrests and was unable to consider impacts of other criminal justice system contact such as drug-related incarcerations and other forms of correctional control. Because incarceration has such negative impacts on individuals and areas, future research on this cohort should include measures of incarceration and related consequences (*i.e.*, *parole*, *probation*) in addition to drug arrests.

Policy Considerations

This study highlights the top tiers of municipalities and census tracts on a measure of the impact of drug policy enforcement, with the top tiers of areas on the DI score indicating the most negatively impacted. The study can be used by the Commission to inform equitable policy and to help rectify and ameliorate the harms done by drug policy enforcement, particularly among low-income populations and communities of color.

This study involved careful construction of a quantitative measure for assessing disproportionate impact of drug enforcement across the Commonwealth. Throughout the report, special attention is paid to communities and census tracts that rank in the top two tiers on the DI score because they have been the most negatively impacted according to the measure. There is a full list of 295 municipalities and 305 census tracts ranked by DI score in the Appendix [See *Table VI-6*]; the precise cutoff point for an updated DIA list is a decision for the Commission.

Based on the relative nature of the calculated DI score (*i.e.*, areas with higher scores are "more impacted" than areas with lower scores), it may be appropriate for the Commission to consider a graduated scheme that uses different strategies to attempt to address the impacts of drug policy



enforcement on areas in different tiers (or other groupings of areas). Such an approach would reflect the reality that in Tier 1 of the DI score, most residents may have experienced negative impacts from drug policy enforcement. In contrast, lower tiers are likely to be a subset of people who have such experiences. Eligibility for priority license status and other benefits could be based on a combination of requirements such as residence in a Tier 2 DIA and membership in an additional priority group (e.g., personal or family history of drug arrest or incarceration; Black race and/or Latino ethnicity).

To develop a final DIA list, it should be noted that disproportionate impact of drug policy enforcement occurs alongside and interacts with other economic and social problems (*e.g.*, *slow job growth*, *low quality schools*, *etc.*). Thoughtful and strategic utilization of the DI score for policymaking can help improve social equity within the cannabis industry and in areas that have long faced social and economic challenges in the Commonwealth.

VI. References

- **1.** Provine DM. Race and Inequality in the War on Drugs. *Annual Review of Law and Social Science*. 2011:41.
- **2.** American Civil Liberties Union. A Tale of Two Countries: Racially Targeted Arrests in the Era of Marijuana Reform 2020.
- **3.** Pettit B, Gutierrez C. Mass Incarceration and Racial Inequality. *American Journal of Economics and Sociology*. 2018;77(3-4):1153-1182.
- **4.** Gettman JB. *The Impact of Drug and Marijuana Arrests on Local Communities in Massachusetts*: Massachusetts Cannabis Control Commission; 2017.
- 5. Massachusetts Institute for a New Commonwealth. About the Gateway Cities. Available at: https://massinc.org/our-work/policy-center/gateway-cities/about-the-gateway-cities/. Accessed January 28, 2021.
- 6. Courtwright DT. The Controlled Substances Act: how a "big tent" reform became a punitive drug law. *Drug and Alcohol Dependence*. 2004/10/05/ 2004;76(1):9-15.
- 7. United States Drug Enforcement Administration. Drug Scheduling. Available at: https://www.dea.gov/drug-scheduling. Accessed February 9, 2021.
- **8.** Spillane J, McAllister WB. Keeping the lid on: a century of drug regulation and control. *Drug and Alcohol Dependence*. 2003/06/05/ 2003;70(3, Supplement):S5-S12.
- **9.** Spillane JF. Debating the Controlled Substances Act. *Drug and Alcohol Dependence*. 2004;76(1):17-29.
- **10.** Gaston S. Enforcing Race: A Neighborhood-Level Explanation of Black—White Differences in Drug Arrests. *Crime & Delinquency*. 2019;65(4):499-526.
- **11.** Petersilia J. *When prisoners come home : parole and prisoner reentry*: Oxford University Press; 2003.
- 12. National Archive of Criminal Justice D. National Incident-Based Reporting System, 2016: Extract Files: Inter-university Consortium for Political and Social Research [distributor]; 2018.
- **13.** Barnert ES, Abrams LS, Dudovitz R, et al. What Is the Relationship Between Incarceration of Children and Adult Health Outcomes? *Academic Pediatrics*. 2019(3).
- 14. *U.S. Census Bureau Geocoder* [computer program]. Census.gov. Updated: 27 November 2018. Available at: https://geocoding.geo.census.gov. Accessed: 24 August 2020.
- **15.** *Geocodio* [computer program]. Updated: 13 May 2020. Available at: https://www.geocod.io. Accessed: 25 August 2020..
- **16.** *Batchgeo* [computer program]. Available at: https://batchgeo.com. Accessed: 4 November 2020.
- **17.** ArcGIS. *ArcMap 10.7.1* [computer program]. Updated: 27 Jun 2019. Available at: https://desktop.arcgis.com/en. Accessed: 24 August 2020.



VII. Appendices

Appendix I. Detailed Study Design and Methods

Additional methodological details to supplement information in previous sections are provided here. As described previously, data were analyzed for four time spans within the 18-year study period. For each time span, the source of population data is described in Table VI-1.

Table VII-1. Time spans and Corresponding Population Data Source(s)

Arrests between years	Population data source(s)
2000-2004	2000 Decennial Census
2005-2009	2000 Decennial Census
2010-2014	2010-2014 ACS 5-year set 2010 Decennial Census (for non-Latino racial shares only)
2015-2017	2013-2017 ACS 5-year set 2010 Decennial Census (for non-Latino racial shares only)

Geocoding

For the municipal-level analysis, the NIBRS data included information on where the arrest occurred used to assign each arrest to an area. To conduct geography-based analysis at the census tract level for the five largest cities in Massachusetts (Boston, Cambridge, Lowell, Springfield, and Worcester), each arrest from these areas were assigned to a specific census tract.

Data obtained from NIBRS and BPD include address-level information for the place an arrest occurred, which enabled the analyses to be geocoded (*i.e.*, assign a latitude and longitude to each arrest) and aggregate arrests at the census tract level. To do this, unique identifiers were created for each arrest in the five largest cities associated with a drug offense incident. If the same individual was involved in and arrested for more than one incident, it was counted as multiple arrests.

The geocoding process was completed using three geocoding services: the address batch geocoder from the U.S. Census Bureau, ¹⁴ and two private batch geocoding services – Geocodio ¹⁵ and Batchgeo. ¹⁶ Zip codes were lacking in most arrest records obtained for this study, but that information is required for the Census geocoder. Therefore, Geocodio and Batchgeo were used to geocode records without zip codes, intersections, and non-matches from the Census geocoder. Addresses not readable by geocoders, such as highways and place names, were geocoded by hand using ArcGIS software. ¹⁷

There were 60,722 unique arrests in the NIBRS data for five largest cities (before exclusions) and 99.9 percent were successfully assigned a geocode. Fifty-six percent of those were geocoded by Geocodio or Batchgeo, with an average accuracy score of 98 percent. Ultimately, only 60 arrests were unable to be geocoded, all from the Springfield Police Department, due to



incomplete or missing street addresses. For BPD records, there were only 26 records out of 71,094 unable to be geocoded.

After geocoding, arrests were mapped to the appropriate census tract. Counts of arrests within each of the study time spans (2000-2004, 2005-2009, 2010-2014, 2015-2017) were then created at a tract and municipal level. Arrest data was then merged with population socioeconomic and demographic data for the key indicators in the same time spans and geographic areas.

Limitations

In addition to limitations mentioned above, there are a few additional considerations.

Poverty:

Some populations are excluded from data on poverty, including:

- Institutional group quarters (such as prisons or nursing homes);
- College dormitories (off-campus housing is still included, which can lead to high rates in college towns like Amherst or Williamstown);
- Military barracks; and
- Individuals without conventional housing (and who are not in shelters).

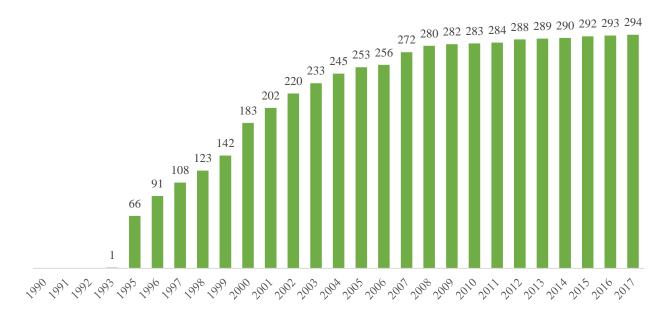
Latino ethnicity

This analysis included an indicator of the percent of adults that were Black and/or Latino in each geographic area. This crosstabulation of age by non-Latino race for the final two time spans do not exist in ACS 5-year data, so weights from the 2010 Decennial Census were applied to racial data from the ACS. For example, in Boston from 2015-2017, the white adult population from the ACS was 314,152. In 2010, the share of white adults who were non-Latino in Boston was 89 percent, resulting in an estimate of 280,781 white non-Latino adults from 2015-2017.



Appendix II. Data

Figure VII-1. Number of Municipalities Reporting to NIBRS, 1990-2017



Note: Boston did not begin reporting to NIBRs until 2019. Data obtained directly from the Boston Police Department was therefore used instead for the entire study period.



Table VII-2. Municipalities Excluded from Analysis

Municipality	County	2017 Population	Share Black/Latino	Reason for exclusion
Alford	Berkshire	411	4%	Did not report to NIBRS
Amherst	Hampshire	39,880	12%	High student enrollment
Aquinnah	Dukes	640	0%	Reports to NIBRS but had no drug arrests during the study period
Ashfield	Franklin	1,598	2%	Did not report to NIBRS
Avon	Norfolk	4,468	17%	Did not report to NIBRS
Becket	Berkshire	1,852	6%	Did not report to NIBRS
Blandford	Hampden	1,259	0%	Did not report to NIBRS
Brookfield	Worcester	3,406	1%	Did not report to NIBRS
Buckland	Franklin	1,927	0%	Did not report to NIBRS
Charlemont	Franklin	1,110	2%	Did not report to NIBRS
Chester	Hampden	1,529	3%	Did not report to NIBRS
Chilmark	Dukes	1,117	5%	Seasonal location
Clarksburg	Berkshire	1,722	1%	Did not report to NIBRS
Colrain	Franklin	1,631	1%	Did not report to NIBRS
Conway	Franklin	1,800	2%	Did not report to NIBRS
Cummington	Hampshire	860	7%	Did not report to NIBRS
Dighton	Bristol	7,438	4%	Did not report to NIBRS
Egremont	Berkshire	1,255	8%	Did not report to NIBRS
Essex	Essex	3,687	1%	Did not report to NIBRS
Florida	Berkshire	816	2%	Did not report to NIBRS
Gosnold	Dukes	34	0%	Did not report to NIBRS
Granville	Hampden	1,660	2%	Did not report to NIBRS
Hancock	Berkshire	639	2%	Did not report to NIBRS
Hawley	Franklin	425	6%	Did not report to NIBRS
Heath	Franklin	770	2%	Did not report to NIBRS
Hinsdale	Berkshire	1,970	0%	Did not report to NIBRS
Huntington	Hampshire	1,977	3%	Did not report to NIBRS
Lawrence	Essex	79,497	82%	Did not report to NIBRS
Leyden	Franklin	676	0%	Did not report to NIBRS
Manchester-by-the-Sea	Essex	5,327	2%	Seasonal location
Middlefield	Hampshire	464	0%	Did not report to NIBRS
Monroe	Franklin	86	0%	Did not report to NIBRS
Monterey	Berkshire	729	1%	Did not report to NIBRS
Montgomery	Hampden	802	2%	Did not report to NIBRS
Mount Washington	Berkshire	140	0%	Did not report to NIBRS
Nantucket	Nantucket	10,912	17%	Seasonal location
New Ashford	Berkshire	334	7%	Did not report to NIBRS
New Braintree	Worcester	1,247	2%	Did not report to NIBRS
New Marlborough	Berkshire	1,370	4%	Did not report to NIBRS
Otis	Berkshire	1,577	1%	Did not report to NIBRS
Peru	Berkshire	811	2%	Did not report to NIBRS
Petersham	Worcester	1,218	2%	Did not report to NIBRS
Phillipston	Worcester	1,640	2%	Did not report to NIBRS
Plainfield	Hampshire	668	4%	Did not report to NIBRS



Municipality	County	2017 Population	Share Black/Latino	Reason for exclusion
Provincetown	Barnstable	2,952	7%	Seasonal location
Richmond	Berkshire	1,521	1%	Did not report to NIBRS
Rockland	Plymouth	17,849	5%	Did not report to NIBRS
Rowe	Franklin	400	2%	Did not report to NIBRS
Russell	Hampden	1,330	3%	Did not report to NIBRS
Sandisfield	Berkshire	859	2%	Did not report to NIBRS
Savoy	Berkshire	764	7%	Did not report to NIBRS
Shutesbury	Franklin	1,752	6%	Did not report to NIBRS
Stockbridge	Berkshire	1,980	5%	Seasonal location
Sunderland	Franklin	3,662	10%	High student enrollment
Tolland	Hampden	666	1%	Did not report to NIBRS
Tyringham	Berkshire	439	4%	Did not report to NIBRS
Warwick	Franklin	750	2%	Did not report to NIBRS
Washington	Berkshire	499	1%	Did not report to NIBRS
Wellfleet	Barnstable	3,171	3%	Seasonal location
Wendell	Franklin	864	3%	Did not report to NIBRS
Wenham	Essex	5,179	7%	High student enrollment
West Stockbridge	Berkshire	1,095	8%	Did not report to NIBRS
West Tisbury	Dukes	2,417	2%	Seasonal location
Westhampton	Hampshire	1,819	1%	Did not report to NIBRS
Williamstown	Berkshire	7,623	12%	High student enrollment
Windsor	Berkshire	909	1%	Did not report to NIBRS
Worthington	Hampshire	1,253	1%	Did not report to NIBRS

Note: "High student enrollment" indicates undergraduate or graduate student enrollment rates of 20% of the area's population or higher. "Seasonal location" indicates that more than 40% of arrests occurred in a single season and 25% or more of total housing units in an area are vacant for seasonal use (*i.e.*, vacation homes).

For student enrollment percentage see Table VI-6.



Table VII-3. Census Tracts Excluded from Analysis

Tract	City	2017 Population	Share Black/Latino	Reason for exclusion
Census Tract 9801.01	Boston	322	32%	<1,000 residents. Natural areas/parks (Harbor Islands)
Census Tract 9803	Boston	365	53%	<1,000 residents. Natural areas/parks (Franklin Park)
Census Tract 9807	Boston	8	0%	<1,000 residents. Natural areas/parks (Stony Brook Reservation)
Census Tract 9810	Boston	0	0%	<1,000 residents. Natural areas/parks (Arnold Arboretum)
Census Tract 9811	Boston	409	72%	<1,000 residents. Natural areas/parks (Forest Hills Cemetery, Mount Hope Cemetery, Calvary Cemetery)
Census Tract 9812.01	Boston	0	0%	<1,000 residents. Natural areas/parks (Harbor Islands)
Census Tract 9812.02	Boston	224	16%	<1,000 residents. Natural areas/parks (Massport)
Census Tract 9813	Boston	426	35%	<1,000 residents. Major commercial/industrial areas (Boston Logan Airport)
Census Tract 9815.01	Boston	0	0%	<1,000 residents. Natural areas/parks (Charles River)
Census Tract 9815.02	Boston	12	100%	<1,000 residents. Major commercial/industrial area (Suffolk Downs & Irving Oil)
Census Tract 9816	Boston	0	0%	<1,000 residents. Natural areas/parks (Belle Island Reservation)
Census Tract 9817	Boston	0	0%	<1,000 residents. Natural areas/parks (Boston Common)
Census Tract 9818	Boston	22	0%	<1,000 residents. Natural areas/parks (Jamaica Pond & Emerald Necklace)
Census Tract 5.02	Boston	5,641	13%	High student enrollment
Census Tract 7.03	Boston	6,592	17%	High student enrollment
Census Tract 8.03	Boston	3,714	16%	High student enrollment
Census Tract 101.03	Boston	3,354	11%	High student enrollment
Census Tract 102.04	Boston	5,134	14%	High student enrollment
Census Tract 103	Boston	4,859	14%	High student enrollment
Census Tract 104.04	Boston	5,389	16%	High student enrollment
Census Tract 104.05	Boston	6,257	19%	High student enrollment
Census Tract 806.01	Boston	4,493	58%	High student enrollment
Census Tract 808.01	Boston	1,926	17%	High student enrollment
Census Tract 3531.02	Cambridge	5,881	12%	High student enrollment
Census Tract 3537	Cambridge	1,513	18%	High student enrollment
Census Tract 7312.02	Worcester	4,493	58%	High student enrollment
Census Tract 7316	Worcester	6,081	20%	High student enrollment
Note: "High student en	rollment" indic	cates undergrad	luate or graduate	student enrollment rates of 50% or higher

Note: "High student enrollment" indicates undergraduate or graduate student enrollment rates of 50% or higher within a census tract.



Table VII-4. Point Locations Excluded from Analysis

Municipality	County	2017 City Population	Share Black/Latino	Reason for exclusion
Andover	Essex	35,375	6%	Andover La Quinta 93N (suspected drug trafficking hub: in top 25 statewide and >10% of city total)
Andover	Essex	35,375	6%	Andover Mobil 93N (suspected drug trafficking hub: in top 25 statewide and >10% of city total)
Boston	Suffolk	669,158	42%	Police District building A-1, A-15 Downtown & Charlestown
Boston	Suffolk	669,158	42%	Police District building C-6 South Boston
Boston	Suffolk	669,158	42%	Police District building A-7 East Boston
Boston	Suffolk	669,158	42%	Police District building B-3 Mattapan/North Dorchester
Boston	Suffolk	669,158	42%	Police District building C-11 Dorchester
Boston	Suffolk	669,158	42%	Police District building D-4 South End
Boston	Suffolk	669,158	42%	Police District building B-2 Roxbury
Boston	Suffolk	669,158	42%	Boston Police Headquarters
Boston	Suffolk	669,158	42%	Police District building E-13 Jamaica Plain
Boston	Suffolk	669,158	42%	Police District building E-18 Hyde Park
Boston	Suffolk	669,158	42%	Police District building E-5 West Roxbury
Boston	Suffolk	669,158	42%	Police District building D-14 Brighton
Braintree	Norfolk	37,082	5%	South Shore Plaza Mall (suspected drug trafficking hub: in top 25 statewide and >10% of city total)
Cambridge	Middlesex	110,893	19%	Cambridge Police Headquarters
Lowell	Middlesex	110,964	27%	Lowell Police Headquarters
Lowell	Middlesex	110,964	27%	Lowell Regional Transit Authority (transit hub)
Mansfield	Bristol	23,678	5%	Xfinity Center (suspected drug trafficking hub: in top 25 statewide and >10% of city total)
Springfield	Hampden	154,613	63%	Springfield Police Headquarters
Springfield	Hampden	154,613	63%	Springfield Bus Terminal (transit hub)
Worcester	Worcester	184,743	33%	Worcester Police Headquarters
Worcester	Worcester	184,743	33%	Worcester City Motel (suspected drug trafficking hub: in top 25 statewide and >10% of city total)

Note: "Suspected drug trafficking hub" indicates point locations (based on geocoded latitudes and longitudes) that appeared in top 25 statewide arrest locations and comprised >15% of city's total arrests.



Table VII-5. Characteristics of Adults Arrested for Drug-Related Offenses in Massachusetts, 2000-2017

	2000-	2004	2005-	2009	2010-	2014	2015-	2017	Tota	al
	n	%	n	%	n	%	n	%	n	%
Drug Offense Type Based on l	Highest Ch	arge								
Class D, Possession	14,532	26.9	18,687	25.7	3,992	6.5	1,484	3.9	38,695	17.1
Class D, Distribution	3,358	6.2	5,201	7.1	5,080	8.2	1,704	4.5	15,343	6.8
Class D, Other	1,476	2.7	1,928	2.6	1,008	1.6	312	0.8	4,724	2.1
Not Class D, Possession	17,017	31.5	24,929	34.2	29,344	47.6	21,733	57.0	93,023	41.1
Not Class D, Distribution	12,831	23.8	16,777	23.0	16,911	27.4	9,512	25.0	56,031	24.7
Not Class D, Other	4,734	8.8	5,294	7.3	5,281	8.6	3,366	8.8	18,675	8.2
Race (Regardless of Ethnicity))									
white	34,408	63.8	48,104	66.1	45,399	73.7	28,889	75.8	156,800	69.2
Black	17,815	33.0	22,391	30.8	14,599	23.7	8,140	21.4	62,945	27.8
American Indian/Alaska Native	8	0.0	12	0.0	3	0.0	4	0.0	27	0.0
Asian	481	0.9	684	0.9	597	1.0	361	0.9	2,123	0.9
Native Hawaiian or Other Pacific Islander	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0
Unknown	1,236	2.3	1,625	2.2	1,018	1.7	717	1.9	4,596	2.0
Ethnicity (Regardless of Race))									
Hispanic/Latino	12,887	23.9	15,210	20.9	13,037	21.2	8,864	23.3	49,998	22.1
Non-Hispanic/Latino	34,642	64.2	50,589	69.5	44,499	72.2	26,694	70.0	156,424	69.1
Unknown	6,419	11.9	7,017	9.6	4,080	6.6	2,553	6.7	20,069	8.9
Age										
18-29	30,339	56.2	43,016	59.1	33,111	53.7	17,451	45.8	123,917	54.7
30-39	13,598	25.2	15,405	21.2	15,507	25.2	11,785	30.9	56,295	24.9
40-49	7,868	14.6	10,621	14.6	8,744	14.2	5,530	14.5	32,763	14.5
50-59	1,843	3.4	3,268	4.5	3,655	5.9	2,813	7.4	11,579	5.1
60+	300	0.6	506	0.7	599	1.0	532	1.4	1,937	0.9
Dataset										
Boston Police Department (BPD)	23,350	43.3	24,301	33.4	15,908	25.8	7,535	19.8	71,094	31.4
National Incident-Based Reporting System (NIBRS)	30,598	56.7	48,515	66.6	45,708	74.2	30,576	80.2	155,397	68.6

Note: Class D offenses includes marijuana and hashish. Possession denotes charges where the highest charge was possession. Distribution denotes charges where the highest charge was distribution. Ethnicity is reported in these sources as "Hispanic or non-Hispanic." Race and ethnicity were reported in NIBRS as combined concepts (*e.g.*, *Black Hispanic*) whereas they were provided as separate variables in the BPD data set. Categorizing race and ethnicity required aggregating separate categories across both data sets; it was not possible to determine how many individuals from the NIBRS data set had an unknown ethnicity. Therefore, the totals are slightly lower than the subtotals for the year bin. The table above corrects for this by defining the "Unknown" category as the difference between the sum of Hispanic and Non-Hispanic and the total for the year bin.



Table VII-6. Municipalities in Tiers 1 and 2 (Top 20%) of Disproportionate Impact Score, by County

Rank	Municipality	DI Score	Tier (Score Range)	On prior DIA list?
Barnst	able County			
16	Barnstable	87.01	Tier 1 (78.7 - 99.5)	No
28	Falmouth	78.67	Tier 1 (78.7 - 99.5)	No
30	Dennis	78.24	Tier 2 (69.6 - 78.6)	No
N/A	Provincetown	76.25	Not ranked	No
36	Yarmouth	76.16	Tier 2 (69.6 - 78.6)	No
42	Mashpee	73.55	Tier 2 (69.6 - 78.6)	No
56	Truro	69.57	Tier 2 (69.6 - 78.6)	No
57	Bourne	69.04	Tier 3 (52.7 - 69.5)	No
Berksł	nire County			
11	Pittsfield	88.58	Tier 1 (78.7 - 99.5)	Yes
27	North Adams	79.71	Tier 1 (78.7 - 99.5)	Yes
Bristol	County			
2	New Bedford	98.02	Tier 1 (78.7 - 99.5)	Yes
5	Fall River	94.78	Tier 1 (78.7 - 99.5)	Yes
14	Taunton	87.62	Tier 1 (78.7 - 99.5)	Yes
26	Attleboro	80.33	Tier 1 (78.7 - 99.5)	No
Dukes	County			
49	Oak Bluffs	71.60	Tier 2 (69.6 - 78.6)	No
Essex	County		· ·	
4	Lynn	95.53	Tier 1 (78.7 - 99.5)	Yes
6	Salem	93.23	Tier 1 (78.7 - 99.5)	No
10	Haverhill	88.80	Tier 1 (78.7 - 99.5)	Yes
31	Methuen	78.01	Tier 2 (69.6 - 78.6)	No
34	Peabody	77.07	Tier 2 (69.6 - 78.6)	No
44	Salisbury	73.06	Tier 2 (69.6 - 78.6)	No
46	Beverly	72.37	Tier 2 (69.6 - 78.6)	No
53	Andover	70.76	Tier 2 (69.6 - 78.6)	No
Frankl	in County		· ·	
13	Greenfield	88.42	Tier 1 (78.7 - 99.5)	Yes
51	Montague	71.43	Tier 2 (69.6 - 78.6)	No
	den County			
1	Holyoke	99.52	Tier 1 (78.7 - 99.5)	Yes
N/A	Springfield	98.62	Not ranked	Yes
12	West Springfield	88.56	Tier 1 (78.7 - 99.5)	Yes
20	Chicopee	84.22	Tier 1 (78.7 - 99.5)	No
37	Palmer	75.91	Tier 2 (69.6 - 78.6)	No
48	Westfield	71.63	Tier 2 (69.6 - 78.6)	No
55	Agawam	69.81	Tier 2 (69.6 - 78.6)	No
Hamps	shire County		<u> </u>	
N/A	Amherst	90.82	Not ranked	Yes
19	Northampton	85.00	Tier 1 (78.7 - 99.5)	No
	esex County			
N/A	Lowell	92.66	Not ranked	No
17	Everett	86.66	Tier 1 (78.7 - 99.5)	No
25	Malden	80.42	Tier 1 (78.7 - 99.5)	No
38	Somerville	74.19	Tier 2 (69.6 - 78.6)	No
43	Medford	73.26	Tier 2 (69.6 - 78.6)	No
45	Woburn	72.61	Tier 2 (69.6 - 78.6)	No



Rank	Municipality	DI Score	Tier (Score Range)	On prior DIA list?
47	Marlborough	71.85	Tier 2 (69.6 - 78.6)	No
N/A	Cambridge	70.99	Not ranked	No
59	Waltham	68.81	Tier 3 (52.7 - 69.5)	No
Nantuo	cket County			
N/A	Nantucket	81.69	Not ranked	No
Norfol	k County			
21	Quincy	83.36	Tier 1 (78.7 - 99.5)	Yes
24	Randolph	81.03	Tier 1 (78.7 - 99.5)	Yes
29	Weymouth	78.64	Tier 2 (69.6 - 78.6)	No
33	Stoughton	77.14	Tier 2 (69.6 - 78.6)	No
40	Braintree	73.78	Tier 2 (69.6 - 78.6)	Yes
50	Norwood	71.44	Tier 2 (69.6 - 78.6)	No
Plymo	uth County			
3	Brockton	96.55	Tier 1 (78.7 - 99.5)	Yes
35	Wareham	77.04	Tier 2 (69.6 - 78.6)	Yes
39	Plymouth	74.10	Tier 2 (69.6 - 78.6)	No
41	Middleborough	73.61	Tier 2 (69.6 - 78.6)	No
Suffoll	k County			
N/A	Boston	98.39	Not ranked	Yes
7	Chelsea	92.76	Tier 1 (78.7 - 99.5)	Yes
15	Revere	87.30	Tier 1 (78.7 - 99.5)	Yes
Worce	ster County			
N/A	Worcester	97.87	Not ranked	Yes
8	Fitchburg	92.33	Tier 1 (78.7 - 99.5)	Yes
9	Southbridge	90.13	Tier 1 (78.7 - 99.5)	Yes
18	Webster	85.66	Tier 1 (78.7 - 99.5)	No
22	Gardner	83.14	Tier 1 (78.7 - 99.5)	No
23	Leominster	82.70	Tier 1 (78.7 - 99.5)	No
32	Spencer	77.53	Tier 2 (69.6 - 78.6)	Yes
52	Sturbridge	70.88	Tier 2 (69.6 - 78.6)	No
58	Clinton	68.83	Tier 3 (52.7 - 69.5)	No

Note: Cities and towns with high student enrollment (>20%) or high rates of seasonal housing/arrests have been grayed out and italicized. The states five largest cities are also grey as they have been ranked separately by tract (see *Table IV-2* for a ranking by tract).



Table VII-7. Disproportionate Impact Scores and score components in Massachusetts by Municipality, 2000-2017

Table VII-7. Disproportionate impact S							1	2000-				2005-2009								
Rank	Municipality	County	DI score	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
1	Holyoke	Hampden	99.52	6.0	486	242	1,731	246	26.4	246	43.3	244	385	279	1,371	284	26.4	284	43.3	282
N/A	Springfield†	Hampden	98.62	9.0	584	244	540	241	23.1	244	46.7	245	587	281	543	274	23.1	282	46.7	283
N/A	Boston†	Suffolk	98.39	16.0	4,546	246	962	244	19.5	241	38.6	243	4,749	284	1,005	283	19.5	279	38.6	281
2	New Bedford	Bristol	98.02	5.0	493	243	700	243	20.2	242	13.8	235	611	282	867	281	20.2	280	13.8	268
N/A	Worcester†	Worcester	97.87	14.0	885	245	671	242	17.9	239	20.9	240	956	283	725	279	17.9	277	20.9	277
3	Brockton	Plymouth	96.55	7.0	327	241	481	239	14.5	233	26.2	242	341	278	501	273	14.5	269	26.2	279
4	Lynn	Essex	95.53	7.0	-	-	-	-	-	-	-	-	228	276	351	254	-	274	-	280
5	Fall River	Bristol	94.78	6.0	314	240	450	237	17.1	238	5.4	206	472	280	677	278	17.1	276	5.4	236
6	Salem	Essex	93.23	10.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7	Chelsea	Suffolk	92.76	4.0	67	219	261	200	23.3	245	53.2	246	75	252	293	240	23.3	283	53.2	284
N/A	Lowell†	Middlesex	92.66	12.0	-	-	-	-	-	-	-	-	175	274	227	218	-	275	-	273
8	Fitchburg	Worcester	92.33	9.0	128	234	440	236	15.0	235	17.5	238	104	265	359	256	15.0	271	17.5	274
N/A	Amherst‡	Hampshire	90.82	60.0	142	239	466	238	20.2	243	10.6	228	189	275	623	275	20.2	281	10.6	261
9	Southbridge	Worcester	90.13	5.0	39	202	302	216	15.4	236	20.3	239	38	228	294	241	15.4	272	20.3	276
10	Haverhill	Essex	88.80	6.0	66	218	151	168	9.1	212	10.2	225	141	271	322	245	9.1	243	10.2	258
11	Pittsfield	Berkshire	88.58	5.0	-	-	-	-	-	-	-	-	145	273	411	266	-	259	-	235
12	West Springfield	Hampden	88.56	8.0	77	225	362	229	11.9	228	7.3	215	83	258	389	263	11.9	261	7.3	248
13	Greenfield	Franklin	88.42	8.0	43	203	300	215	14.0	231	4.3	197	60	245	423	267	14.0	267	4.3	226
14	Taunton	Bristol	87.62	5.0	110	232	262	201	10.0	220	6.2	210	144	272	343	253	10.0	252	6.2	243
15	Revere	Suffolk	87.30	7.0	140	237	374	231	14.6	234	11.9	229	140	269	374	257	14.6	270	11.9	262
16	Barnstable	Barnstable	87.01	5.0	90	227	241	196	8.8	208	4.3	196	140	270	376	259	8.8	238	4.3	225
17	Everett	Middlesex	86.66	7.0	51	214	171	174	11.8	227	15.3	236	96	263	323	246	11.8	260	15.3	271
18	Webster	Worcester	85.66	5.0	38	200	298	214	11.0	223	4.6	202	31	220	243	225	11.0	255	4.6	231
19	Northampton	Hampshire	85.00	15.0	50	213	208	187	9.8	217	6.8	212	75	253	312	243	9.8	249	6.8	245
20	Chicopee	Hampden	84.22	7.0	131	235	310	221	12.3	229	10.3	226	99	264	235	223	12.3	263	10.3	259
21	Quincy	Norfolk	83.36	9.0	138	236	190	184	7.3	195	4.1	188	236	277	325	247	7.3	220	4.1	216
22	Gardner	Worcester	83.14	5.0	34	198	212	191	9.6	216	5.8	209	41	234	260	228	9.6	248	5.8	241
23	Leominster	Worcester	82.70	6.0	95	229	309	220	9.5	215	13.7	234	50	240	163	174	9.5	247	13.7	267
N/A	Nantucket*	Nantucket	81.69	6.0	30	193	390	232	7.5	199	10.4	227	21	197	276	236	7.5	225	10.4	260
24	Randolph	Norfolk	81.03	9.0	58	217	242	197	4.1	108	24.2	241	63	246	264	229	4.1	120	24.2	278



					2000-2004									2005-2009									
Rank	Municipality	County	DI score	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank			
25	Malden	Middlesex	80.42	11.0	141	238	312	222	9.2	213	12.6	231	66	247	147	166	9.2	244	12.6	264			
26	Attleboro	Bristol	80.33	5.0	44	207	140	159	6.2	176	5.7	208	73	251	232	221	6.2	198	5.7	240			
27	North Adams	Berkshire	79.71	13.0	21	180	182	178	18.2	240	3.4	178	25	207	218	211	18.2	278	3.4	205			
28	Falmouth	Barnstable	78.67	3.0	55	216	211	190	6.9	188	3.0	170	85	261	328	249	6.9	211	3.0	195			
29	Weymouth	Norfolk	78.64	6.0	-	-	-	-	-	-	-	-	89	262	212	206	-	189	-	185			
30	Dennis	Barnstable	78.24	5.0	27	190	202	186	7.0	191	3.5	180	27	210	200	200	7.0	214	3.5	207			
31	Methuen	Essex	78.01	8.0	11	141	34	43	7.4	196	9.9	223	56	244	171	183	7.4	221	9.9	256			
32	Spencer	Worcester	77.53	4.0	91	228	1,027	245	8.6	206	1.8	113	72	250	821	280	8.6	235	1.8	133			
33	Stoughton	Norfolk	77.14	6.0	29	192	140	156	4.6	130	7.3	214	50	239	237	224	4.6	146	7.3	247			
34	Peabody	Essex	77.07	6.0	99	230	265	204	5.3	150	4.1	189	78	255	210	203	5.3	167	4.1	218			
35	Wareham	Plymouth	77.04	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
N/A	Provincetown *	Barnstable	76.25	3.0	8	115	237	195	16.3	237	9.7	221	11	143	342	252	16.3	273	9.7	254			
36	Yarmouth	Barnstable	76.16	5.0	43	204	209	189	7.5	198	2.6	161	45	237	221	214	7.5	224	2.6	184			
37	Palmer	Hampden	75.91	7.0	18	172	195	185	7.9	203	1.8	115	20	191	214	208	7.9	230	1.8	135			
38	Somerville	Middlesex	74.19	15.0	-	-	-	-	-	-	-	-	76	254	115	138	-	264	-	270			
39	Plymouth	Plymouth	74.10	5.0	100	231	260	198	5.4	152	3.3	175	126	268	328	250	5.4	169	3.3	202			
40	Braintree	Norfolk	73.78	5.0	69	221	262	203	3.8	92	2.2	141	121	267	461	271	3.8	104	2.2	162			
41	Middleboroug h	Plymouth	73.61	5.0	44	209	305	219	5.5	157	2.0	129	56	243	387	262	5.5	175	2.0	150			
42	Mashpee	Barnstable	73.55	5.0	18	171	183	179	5.5	155	4.3	195	43	235	441	269	5.5	173	4.3	224			
43	Medford	Middlesex	73.26	13.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
44	Salisbury	Essex	73.06	7.0	21	181	348	228	6.8	184	1.4	80	19	189	311	242	6.8	207	1.4	95			
45	Woburn	Middlesex	72.61	5.0	67	220	227	192	6.1	175	4.7	203	38	229	130	155	6.1	197	4.7	232			
46	Beverly	Essex	72.37	12.0	85	226	272	207	5.7	166	2.7	163	84	259	269	232	5.7	187	2.7	187			
47	Marlborough	Middlesex	71.85	6.0	117	233	419	235	6.8	186	7.4	216	38	227	135	157	6.8	209	7.4	249			
48	Westfield	Hampden	71.63	13.0	37	199	122	144	11.3	226	5.6	207	31	221	100	121	11.3	258	5.6	239			
49	Oak Bluffs	Dukes	71.60	1.0	-	-	-	-	-	-	-	-	8	117	269	233	-	233	-	238			
50	Norwood	Norfolk	71.44	7.0	23	186	102	132	4.4	119	3.8	187	39	232	171	184	4.4	135	3.8	214			
51	Montague	Franklin	71.43	4.0	15	155	232	193	13.1	230	2.9	168	13	156	196	198	13.1	266	2.9	193			
N/A	Cambridge‡†	Middlesex	70.99	27.0	-	-	-	-	-	-	-	-	83	257	94	112	-	265	-	275			
52	Sturbridge	Worcester	70.88	3.0	15	156	260	199	6.1	172	1.5	93	27	211	455	270	6.1	194	1.5	109			



					2000-2004									2005-2009									
Rank	Municipality	County	DI score	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank			
53	Andover	Essex	70.76	8.0	77	224	347	226	3.9	98	2.5	153	85	260	381	261	3.9	110	2.5	176			
54	Raynham	Bristol	70.15	5.0	-	-	-	-	-	-	-	-	23	200	259	227	-	126	-	132			
55	Agawam	Hampden	69.81	6.0	32	195	148	165	5.6	164	2.6	160	40	233	182	192	5.6	183	2.6	183			
56	Truro	Barnstable	69.57	1.0	9	128	522	240	11.2	225	3.0	171	3	63	174	185	11.2	257	3.0	196			
57	Bourne	Barnstable	69.04	7.0	13	148	87	122	7.1	192	2.7	162	17	184	119	141	7.1	215	2.7	186			
58	Clinton	Worcester	68.83	8.0	31	194	304	217	7.1	194	12.9	232	28	213	271	234	7.1	217	12.9	265			
59	Waltham	Middlesex	68.81	18.0	44	206	87	120	7.0	190	12.3	230	34	224	67	81	7.0	213	12.3	263			
60	West Bridgewater	Plymouth	68.72	6.0	-	-	-	-	-	-	-	-	34	225	669	276	-	92	-	146			
61	Dudley	Worcester	68.64	15.0	-	-	-	-	-	-	-	-	35	226	461	272	-	181	-	166			
62	Maynard	Middlesex	68.49	6.0	13	150	165	173	5.6	162	3.5	182	14	168	178	187	5.6	180	3.5	209			
63	Milford	Worcester	68.06	5.0	-	-	-	-	-	-	-	-	22	198	108	133	-	218	-	237			
64	Ware	Hampshire	67.84	6.0	8	121	109	138	11.2	224	2.3	143	9	127	123	145	11.2	256	2.3	164			
65	Framingham	Middlesex	67.51	8.0	-	-	-	-	-	-	-	-	0	8	0	8	-	231	-	269			
66	Monson	Hampden	67.29	5.0	17	168	278	209	5.6	161	1.6	98	23	205	374	258	5.6	179	1.6	114			
67^	Auburn	Worcester	67.28	7.0	51	215	418	234	3.3	65	1.5	92	44	236	355	255	3.3	74	1.5	108			
67^	Leicester	Worcester	67.28	10.0	15	152	188	182	4.3	116	2.9	166	52	241	676	277	4.3	132	2.9	191			
68	Abington	Plymouth	65.98	6.0	45	210	412	233	3.6	81	1.4	74	108	266	994	282	3.6	91	1.4	88			
69	Hadley	Hampshire	65.82	7.0	5	90	124	146	6.9	187	2.4	146	17	182	433	268	6.9	210	2.4	168			
70	Athol	Worcester	65.80	4.0	6	106	71	98	9.4	214	2.4	151	13	155	152	170	9.4	246	2.4	173			
71	Great Barrington	Berkshire	65.71	11.0	-	-	-	-	-	-	-	-	10	134	164	176	-	219	-	217			
72	Wilbraham	Hampden	65.55	5.0	29	191	296	212	5.1	146	2.4	147	15	177	156	171	5.1	163	2.4	169			
73	Ludlow	Hampden	65.53	5.0	11	135	66	91	6.4	180	8.5	218	16	180	97	115	6.4	202	8.5	251			
74	Fairhaven	Bristol	65.24	6.0	19	176	149	166	9.0	210	1.4	72	29	216	229	219	9.0	241	1.4	85			
75	Easthampton	Hampshire	64.69	10.0	19	175	149	167	8.9	209	2.5	154	26	209	209	202	8.9	239	2.5	177			
76	Winchendon	Worcester	64.58	6.0	10	132	155	171	10.0	219	2.6	159	13	158	197	199	10.0	251	2.6	182			
77	Tewksbury	Middlesex	62.98	6.0	33	197	154	169	3.8	91	1.8	118	28	212	129	154	3.8	103	1.8	138			
78	Watertown	Middlesex	62.70	8.0	21	183	75	105	6.3	178	4.2	193	25	208	88	104	6.3	200	4.2	222			
79	Holbrook	Norfolk	62.58	9.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
80	Amesbury	Essex	62.05	4.0	38	201	316	224	5.9	171	1.4	78	22	199	179	189	5.9	193	1.4	93			
81	Hull	Plymouth	61.38	4.0	11	143	132	152	8.3	204	1.4	71	19	188	216	210	8.3	232	1.4	84			



								2000-2	2004							2005-	2009			
Rank	Municipality	County	DI score	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
82	Danvers	Essex	60.49	6.0	46	212	236	194	2.9	51	1.1	34	80	256	411	265	2.9	58	1.1	40
83	Lunenburg	Worcester	59.99	6.0	2	51	32	38	4.1	110	1.7	110	15	175	218	212	4.1	122	1.7	127
84	Walpole	Norfolk	59.26	5.0	22	184	129	149	2.2	19	3.5	181	54	242	319	244	2.2	21	3.5	208
85	Concord	Middlesex	58.82	3.0	44	208	346	225	3.9	100	4.9	204	23	204	184	193	3.9	112	4.9	233
86	Northbridge	Worcester	58.75	4.0	15	154	155	170	5.3	148	2.1	135	12	150	126	151	5.3	165	2.1	156
87	Whitman	Plymouth	58.66	5.0	-	-	-	-	-	-	-	-	17	183	167	181	-	78	-	91
88	Newburyport	Essex	58.51	4.0	11	136	81	112	5.2	147	1.2	58	29	218	216	209	5.2	164	1.2	67
89	North Attleborough	Bristol	58.23	6.0	69	222	348	227	3.8	96	2.1	136	66	248	334	251	3.8	108	2.1	157
90	Orleans	Barnstable	57.34	1.0	6	105	107	134	6.5	182	1.3	62	21	196	380	260	6.5	204	1.3	75
91	Brookline	Norfolk	57.15	13.0	-	-	-	-	-	-	-	-	32	222	67	82	-	245	-	242
92	Lenox	Berkshire	56.87	6.0	-	-	-	-	-	-	-	-	7	111	167	179	-	240	-	200
93	Somerset	Bristol	56.38	5.0	26	188	176	176	4.0	104	0.6	3	39	230	266	231	4.0	116	0.6	4
94	Saugus	Essex	55.77	5.0	26	189	126	147	4.2	114	1.3	66	29	217	141	160	4.2	129	1.3	79
95	Oxford	Worcester	55.68	9.0	12	145	124	145	7.8	200	2.6	158	10	136	97	117	7.8	227	2.6	181
96	Seekonk	Bristol	55.51	5.0	21	182	209	188	2.4	25	1.2	49	23	202	227	217	2.4	30	1.2	57
97	Hopedale	Worcester	55.13	3.0	3	68	73	102	4.0	106	1.7	106	9	130	211	205	4.0	118	1.7	123
98	West Boylston	Worcester	54.95	4.0	8	117	129	150	3.2	63	9.1	219	23	203	398	264	3.2	72	9.1	252
99	Winthrop	Suffolk	54.49	7.0	12	144	79	109	5.5	159	4.2	192	13	159	90	108	5.5	177	4.2	221
100	Mansfield	Bristol	54.32	7.0	17	163	108	135	4.5	126	3.5	183	14	164	92	110	4.5	142	3.5	210
101	Shrewsbury	Worcester	54.21	6.0	43	205	183	180	4.8	137	2.9	167	30	219	128	152	4.8	153	2.9	192
102	Boxborough	Middlesex	53.86	8.0	9	130	276	208	2.8	45	1.4	85	10	139	290	239	2.8	52	1.4	100
103	Gloucester	Essex	53.82	4.0	10	131	44	62	8.8	207	1.9	122	10	137	41	47	8.8	237	1.9	142
104	Chelmsford	Middlesex	53.77	6.0	76	223	298	213	2.8	44	1.9	126	49	238	192	197	2.8	51	1.9	147
105	Orange	Franklin	53.76	5.0	2	56	44	61	7.8	201	2.6	157	9	129	163	175	7.8	228	2.6	180
106	Tisbury	Dukes	53.67	1.0	-	-	-	-	-	-	-	-	2	57	84	99	-	262	-	215
107	South Hadley	Hampshire	53.37	19.0	6	104	42	57	5.9	169	3.3	176	12	151	87	103	5.9	191	3.3	203
N/A	Williamstown ‡	Berkshire	53.32	35.0	3	62	40	53	5.5	158	5.2	205	7	108	93	111	5.5	176	5.2	234
108	Warren	Worcester	53.13	4.0	4	82	114	142	6.1	173	1.2	42	4	72	103	126	6.1	195	1.2	49
109	Ayer	Middlesex	52.95	10.0	3	69	58	80	10.8	222	10.1	224	6	96	101	123	10.8	254	10.1	257
110	Harwich	Barnstable	52.72	4.0	3	57	25	30	5.5	160	1.6	96	23	201	223	216	5.5	178	1.6	112



								2000-2	2004							2005-	2009			
Rank	Municipality	County	DI score	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
111	Williamsburg	Hampshire	52.68	3.0	3	60	140	157	5.5	156	0.8	7	2	50	105	129	5.5	174	0.8	9
112	Edgartown	Dukes	52.50	3.0	-	-	-	-	-	-	-	-	2	52	68	83	-	130	-	188
113	Hudson	Middlesex	51.95	6.0	20	179	145	163	4.5	127	3.7	185	20	190	144	164	4.5	143	3.7	212
114	Sutton	Worcester	51.77	4.0	11	139	189	183	4.4	121	0.9	16	16	181	282	237	4.4	137	0.9	20
115	Pelham	Hampshire	51.43	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
116	Ashland	Middlesex	51.35	5.0	15	158	140	160	2.0	15	4.5	199	18	186	168	182	2.0	17	4.5	228
117	Bellingham	Norfolk	51.31	6.0	15	157	136	154	2.5	29	2.0	132	12	152	107	132	2.5	35	2.0	153
118	Douglas	Worcester	51.04	4.0	3	64	60	83	4.6	133	1.2	53	14	163	282	238	4.6	149	1.2	62
119	Chatham	Barnstable	50.99	4.0	18	169	305	218	4.8	139	2.8	164	6	100	104	128	4.8	156	2.8	189
120	Canton	Norfolk	50.91	5.0	11	142	72	99	3.4	71	4.1	191	14	160	86	102	3.4	81	4.1	220
121	Dartmouth	Bristol	50.78	18.0	16	160	66	92	4.5	129	2.4	148	15	176	63	74	4.5	145	2.4	170
122	Bridgewater	Plymouth	50.62	20.0	8	118	40	54	3.5	78	6.5	211	14	170	74	88	3.5	88	6.5	244
123	Natick	Middlesex	50.58	6.0	25	187	101	131	2.8	40	3.4	179	39	231	157	172	2.8	47	3.4	206
124	East Bridgewater	Plymouth	50.26	6.0	5	95	56	77	4.1	111	1.6	102	21	194	220	213	4.1	124	1.6	119
125	Sandwich	Barnstable	50.11	7.0	16	159	108	136	3.1	56	1.1	35	18	185	123	147	3.1	64	1.1	41
N/A	Sunderland‡	Franklin	50.08	24.0	1	26	32	39	14.0	232	4.5	200	7	112	233	222	14.0	268	4.5	229
126	Franklin	Norfolk	49.09	8.0	22	185	106	133	2.8	46	2.0	130	67	249	326	248	2.8	53	2.0	151
127	Wakefield	Middlesex	48.76	5.0	12	146	64	89	3.1	59	1.2	40	29	214	149	168	3.1	67	1.2	47
128	Swansea	Bristol	48.38	4.0	17	167	136	155	4.9	141	0.9	14	29	215	231	220	4.9	158	0.9	18
129	Erving	Franklin	48.23	4.0	1	24	71	97	6.7	183	0.8	9	1	31	88	105	6.7	206	0.8	13
130	Billerica	Middlesex	48.03	6.0	11	137	38	51	3.8	89	2.4	152	24	206	82	95	3.8	101	2.4	174
131	North Andover	Essex	48.02	9.0	17	166	82	115	2.9	48	2.6	156	15	173	73	87	2.9	55	2.6	179
132	Northborough	Worcester	47.82	6.0	18	173	184	181	2.8	41	1.9	121	9	132	95	113	2.8	48	1.9	141
133	Georgetown	Essex	47.10	4.0	-	-	-	-	-	-	-	-	9	131	175	186	-	128	-	6
134	Uxbridge	Worcester	47.09	6.0	9	126	111	140	4.7	135	1.0	26	5	90	66	77	4.7	151	1.0	31
135	Wellesley	Norfolk	46.86	18.0	19	177	96	126	3.8	95	3.7	186	12	149	59	69	3.8	107	3.7	213
136	Adams	Berkshire	46.81	3.0	5	87	67	94	10.3	221	1.1	30	7	107	97	116	10.3	253	1.1	36
137	Burlington	Middlesex	46.78	6.0	11	138	63	87	1.9	13	2.5	155	20	192	114	137	1.9	13	2.5	178
138	Plainville	Norfolk	46.61	5.0	1	27	17	25	4.0	107	1.6	101	15	174	266	230	4.0	119	1.6	117
139	Deerfield	Franklin	46.16	6.0	1	35	33	40	4.5	128	2.0	131	4	73	98	118	4.5	144	2.0	152



								2000-	2004							2005-	2009			
Rank	Municipality	County	DI score	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
140	Lee	Berkshire	46.00	6.0	-	-	-	-	-	-	-	-	6	97	124	148	-	205	-	197
141	Mendon	Worcester	45.93	4.0	3	65	82	114	4.0	105	1.2	41	5	94	145	165	4.0	117	1.2	48
142	Newton	Middlesex	45.87	12.0	33	196	50	71	4.3	117	4.3	194	20	193	31	37	4.3	133	4.3	223
143	Wilmington	Middlesex	45.54	6.0	-	-	-	-	-	-	-	-	33	223	210	204	-	15	-	72
144	Brewster	Barnstable	45.39	3.0	4	80	50	72	3.7	88	1.8	114	13	154	158	173	3.7	100	1.8	134
145	Westport	Bristol	45.37	6.0	16	161	147	164	4.9	140	0.8	8	14	161	124	149	4.9	157	0.8	11
146	Lakeville	Plymouth	45.21	6.0	-	-	-	-	-	-	-	-	9	125	121	142	-	60	-	59
147	Hardwick	Worcester	45.20	4.0	1	30	64	90	7.5	197	1.4	76	0	14	11	20	7.5	223	1.4	90
148	Carver	Plymouth	45.10	5.0	6	107	76	107	5.0	143	2.0	128	5	88	62	70	5.0	160	2.0	149
149	North Reading	Middlesex	44.93	5.0	18	170	176	175	1.5	5	1.1	28	14	167	142	162	1.5	5	1.1	33
N/A	Chilmark*	Dukes	44.86	5.0	-	-	-	-	-	-	-	-	1	33	150	169	-	226	-	34
150	Eastham	Barnstable	44.79	2.0	4	86	98	129	7.0	189	2.3	144	1	38	31	38	7.0	212	2.3	165
151	Marshfield	Plymouth	44.39	6.0	8	123	48	67	5.4	153	1.2	38	15	172	83	96	5.4	171	1.2	45
152	Northfield	Franklin	44.25	6.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
153	Kingston	Plymouth	44.10	6.0	2	49	26	32	5.8	167	1.6	104	14	166	166	177	5.8	188	1.6	121
154	Grafton	Worcester	44.07	6.0	4	84	38	50	5.6	165	3.0	169	10	141	90	109	5.6	184	3.0	194
155	Rowley	Essex	43.62	4.0	3	67	81	113	4.1	112	1.0	25	7	113	182	191	4.1	125	1.0	29
156	Southwick	Hampden	43.57	5.0	5	98	83	116	6.1	174	2.1	133	7	106	102	125	6.1	196	2.1	154
157	Westborough	Worcester	43.45	4.0	5	91	37	48	4.7	134	4.5	201	10	135	75	90	4.7	150	4.5	230
158	Hingham	Plymouth	43.25	4.0	45	211	313	223	3.5	75	1.1	32	14	165	99	119	3.5	85	1.1	38
N/A	Wellfleet*	Barnstable	43.14	4.0	-	-	-	-	-	-	-	-	2	40	66	78	-	222	-	118
159	Arlington	Middlesex	42.86	5.0	17	165	48	69	4.1	109	3.4	177	14	169	42	50	4.1	121	3.4	204
160	Blackstone	Worcester	42.34	5.0	3	63	47	66	3.7	87	1.3	67	9	128	141	161	3.7	99	1.3	80
161	Harvard	Worcester	42.10	4.0	6	110	142	161	2.0	16	9.8	222	2	46	41	48	2.0	18	9.8	255
162	Marblehead	Essex	42.00	4.0	20	178	128	148	4.3	115	1.2	55	18	187	119	140	4.3	131	1.2	64
163	Barre	Worcester	41.73	6.0	1	33	33	41	3.4	74	1.2	47	5	93	148	167	3.4	84	1.2	55
164	Holland	Hampden	41.56	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
165	Foxborough	Norfolk	41.54	4.0	-	-	-	-	-	-	-	-	1	25	5	12	-	71	-	129
166	Lincoln	Middlesex	41.42	7.0	5	88	84	118	0.8	1	7.5	217	11	142	190	195	0.8	1	7.5	250
167	Tyngsborough	Middlesex	41.04	6.0	6	109	80	111	4.7	136	1.5	95	3	69	44	54	4.7	152	1.5	111
168	Marion	Plymouth	40.86	3.0	3	61	73	100	4.6	132	2.1	134	5	95	141	159	4.6	148	2.1	155



								2000-2	2004							2005-	2009			
Rank	Municipality	County	DI score	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
169	Sherborn	Middlesex	40.85	2.0	8	114	262	202	2.3	23	1.5	90	5	92	189	194	2.3	26	1.5	106
170	Belchertown	Hampshire	40.83	8.0	8	119	84	117	5.9	170	2.1	138	8	120	85	100	5.9	192	2.1	159
171	Pembroke	Plymouth	40.68	6.0	5	99	45	63	4.8	138	1.0	20	11	144	89	106	4.8	155	1.0	24
172	Easton	Bristol	40.22	12.0	7	111	40	55	2.0	14	3.1	172	12	148	69	84	2.0	16	3.1	198
173	Granby	Hampshire	39.99	5.0	3	58	57	79	2.2	20	1.4	82	8	116	166	178	2.2	22	1.4	97
174	Charlton	Worcester	39.83	7.0	9	129	114	141	5.6	163	1.1	33	8	122	104	127	5.6	182	1.1	39
175	Acushnet	Bristol	39.68	8.0	7	112	87	121	3.8	93	1.0	24	13	157	167	180	3.8	105	1.0	28
176	Acton	Middlesex	39.24	5.0	19	174	130	151	2.9	49	2.3	145	14	171	100	122	2.9	56	2.3	167
177	Swampscott	Essex	39.04	6.0	4	85	38	52	3.7	82	1.9	124	8	123	75	91	3.7	93	1.9	144
178	Melrose	Middlesex	38.98	8.0	14	151	68	95	3.3	69	1.9	123	16	178	76	92	3.3	79	1.9	143
N/A	Stockbridge*	Berkshire	38.94	3.0	0	3	0	4	8.5	205	4.1	190	0	13	10	19	8.5	234	4.1	219
179	Holliston	Middlesex	38.80	5.0	13	149	135	153	3.4	72	2.1	137	10	140	101	124	3.4	82	2.1	158
180	Hubbardston	Worcester	38.62	7.0	8	116	282	210	3.7	83	1.2	51	5	86	178	188	3.7	94	1.2	60
181	East Longmeadow	Hampden	38.61	7.0	2	55	23	29	3.4	73	1.6	100	5	87	47	56	3.4	83	1.6	116
182	Dedham	Norfolk	38.47	7.0	8	125	46	65	4.6	131	3.7	184	10	138	53	63	4.6	147	3.7	211
183	Dracut	Middlesex	38.45	7.0	11	133	50	73	3.7	85	2.2	142	11	145	52	62	3.7	96	2.2	163
184	Millbury	Worcester	38.45	7.0	7	113	73	101	6.3	177	1.5	87	6	103	63	73	6.3	199	1.5	102
185	Shirley	Middlesex	38.35	3.0	2	43	36	47	3.3	64	13.4	233	2	44	32	42	3.3	73	13.4	266
186	East Brookfield	Worcester	37.96	6.0	4	83	269	205	3.9	101	1.2	50	2	51	128	153	3.9	113	1.2	58
187	Freetown	Bristol	37.93	5.0	4	74	56	78	5.0	142	1.4	81	5	89	81	94	5.0	159	1.4	96
188	Millville	Worcester	37.71	4.0	2	47	98	128	5.8	168	1.3	68	2	49	96	114	5.8	190	1.3	81
189	Ashburnham	Worcester	37.53	9.0	2	44	46	64	6.4	181	1.7	112	5	85	122	143	6.4	203	1.7	130
190	Littleton	Middlesex	37.41	6.0	11	134	181	177	3.6	80	1.2	39	12	153	201	201	3.6	90	1.2	46
191	Pepperell	Middlesex	37.36	6.0	11	140	145	162	3.7	84	1.4	75	9	124	111	136	3.7	95	1.4	89
192	Boylston	Worcester	36.65	5.0	8	122	270	206	2.8	39	1.2	46	7	115	244	226	2.8	46	1.2	54
193	Dalton	Berkshire	36.44	6.0	3	72	66	93	2.7	38	1.4	84	6	101	117	139	2.7	45	1.4	99
194	West Brookfield	Worcester	36.35	7.0	2	42	55	75	6.8	185	1.2	48	4	74	123	144	6.8	208	1.2	56
195	Lancaster	Worcester	36.21	6.0	1	17	10	14	4.1	113	16.4	237	0	19	7	13	4.1	127	16.4	272
196	Belmont	Middlesex	36.11	6.0	5	94	27	33	4.4	124	2.8	165	4	79	22	28	4.4	140	2.8	190
197	Hanson	Plymouth	35.91	7.0	5	100	79	110	3.8	94	1.7	107	6	99	85	101	3.8	106	1.7	124



								2000-	2004							2005-	2009			
Rank	Municipality	County	DI score	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
198	Hamilton	Essex	35.42	9.0	3	71	55	76	5.3	151	1.4	79	7	109	109	134	5.3	168	1.4	94
199	Hopkinton	Middlesex	35.25	5.0	4	77	43	60	1.7	7	1.9	125	16	179	181	190	1.7	7	1.9	145
200	Upton	Worcester	34.67	5.0	6	102	140	158	3.5	77	1.0	23	4	71	90	107	3.5	87	1.0	27
201	Groveland	Essex	34.65	6.0	4	75	85	119	4.5	125	0.8	6	12	147	273	235	4.5	141	0.8	8
202	Wrentham	Norfolk	34.54	7.0	3	66	42	58	3.9	99	1.3	65	3	67	42	51	3.9	111	1.3	78
203	Westwood	Norfolk	33.41	4.0	9	127	88	123	2.5	31	1.3	60	7	110	65	75	2.5	37	1.3	70
204	Berlin	Worcester	32.92	6.0	5	96	291	211	3.9	97	0.6	2	4	76	213	207	3.9	109	0.6	3
205	Lexington	Middlesex	32.91	6.0	17	164	74	103	3.4	70	2.4	150	11	146	51	60	3.4	80	2.4	172
206	Norton	Bristol	32.77	15.0	15	153	111	139	4.0	103	2.2	140	5	84	36	43	4.0	115	2.2	161
207	North Brookfield	Worcester	32.61	8.0	4	79	117	143	5.5	154	1.3	63	3	60	76	93	5.5	172	1.3	76
208	Holden	Worcester	32.60	6.0	4	81	35	45	3.1	61	1.3	61	7	114	65	76	3.1	69	1.3	74
209	Stoneham	Middlesex	32.36	6.0	-	-	-	-	-	-	-	-	1	37	8	15	-	123	-	175
210	Milton	Norfolk	32.26	11.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
211	Longmeadow	Hampden	32.24	7.0	8	120	70	96	2.1	17	1.7	109	8	121	70	85	2.1	19	1.7	126
212	Norfolk	Norfolk	31.92	4.0	1	36	16	21	1.1	2	9.4	220	3	65	42	52	1.1	2	9.4	253
213	Bolton	Worcester	31.86	5.0	2	46	62	86	1.8	10	0.9	13	4	78	139	158	1.8	10	0.9	17
214	Sharon	Norfolk	31.76	5.0	6	103	48	68	3.0	55	4.4	198	3	70	28	33	3.0	63	4.4	227
215	Bedford	Middlesex	31.50	5.0	1	34	12	18	2.5	26	3.2	174	6	105	67	79	2.5	32	3.2	201
216	Templeton	Worcester	31.40	5.0	1	23	16	22	9.1	211	1.7	108	2	42	32	41	9.1	242	1.7	125
217	Needham	Norfolk	31.06	5.0	13	147	59	81	2.5	30	1.8	116	8	119	37	46	2.5	36	1.8	136
218	Rehoboth	Bristol	30.98	8.0	5	89	63	88	3.1	57	0.8	11	9	133	125	150	3.1	65	0.8	15
219	Dunstable	Middlesex	30.76	7.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
220	Newbury	Essex	30.76	9.0	2	54	49	70	3.1	62	1.2	52	2	45	37	44	3.1	70	1.2	61
221	Mattapoisett	Plymouth	30.52	7.0	5	92	101	130	3.6	79	1.2	43	3	66	67	80	3.6	89	1.2	50
222	Townsend	Middlesex	30.43	5.0	2	53	38	49	5.1	144	1.7	111	4	77	63	72	5.1	161	1.7	128
223	Halifax	Plymouth	30.20	5.0	2	41	29	36	3.3	68	0.8	10	6	104	111	135	3.3	77	0.8	14
224	Ipswich	Essex	30.01	6.0	1	37	12	19	7.1	193	1.3	64	1	28	8	16	7.1	216	1.3	77
225	Groton	Middlesex	29.72	5.0	6	108	96	127	4.0	102	1.5	86	0	15	3	11	4.0	114	1.5	101
226	Stow	Middlesex	29.71	5.0	1	32	28	34	2.7	36	1.5	94	6	102	142	163	2.7	43	1.5	110
227	Nahant	Essex	29.61	4.0	2	45	61	84	2.6	33	1.2	59	2	55	74	89	2.6	40	1.2	69



								2000-2	2004							2005-	2009			
Rank	Municipality	County	DI score	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
228	West Newbury	Essex	29.55	5.0	2	50	76	106	3.8	90	0.8	5	2	43	55	66	3.8	102	0.8	7
229	Sterling	Worcester	29.22	5.0	5	93	93	124	2.9	50	1.2	54	4	81	84	98	2.9	57	1.2	63
230	Sudbury	Middlesex	29.09	4.0	4	78	35	46	2.8	43	2.0	127	14	162	123	146	2.8	50	2.0	148
231	Princeton	Worcester	28.88	6.0	1	21	25	31	4.4	123	1.5	91	1	21	25	30	4.4	139	1.5	107
232	Scituate	Plymouth	28.38	4.0	3	59	20	28	2.6	32	1.2	57	8	118	59	68	2.6	39	1.2	66
233	Whately	Franklin	28.36	8.0	1	38	108	137	3.0	53	1.5	88	2	41	130	156	3.0	61	1.5	103
234	Weston	Middlesex	28.27	9.0	0	8	2	8	2.9	47	3.1	173	3	61	31	39	2.9	54	3.1	199
235	Topsfield	Essex	28.13	5.0	16	162	372	230	1.7	9	1.2	44	3	64	73	86	1.7	9	1.2	51
236	Berkley	Bristol	27.92	5.0	-	-	-	-	-	-	-	-	3	68	83	97	-	38	-	104
237	Merrimac	Essex	27.84	6.0	2	52	54	74	2.7	37	1.1	36	5	83	106	130	2.7	44	1.1	43
238	Plympton	Plymouth	27.60	7.0	0	5	0	3	2.1	18	1.4	73	4	75	191	196	2.1	20	1.4	86
239	Wayland	Middlesex	27.57	4.0	3	70	34	42	2.5	27	1.8	117	6	98	62	71	2.5	33	1.8	137
240	Middleton	Essex	27.50	5.0	1	29	17	24	3.7	86	7.3	213	1	23	10	18	3.7	97	7.3	246
N/A	Manchester- by-the-Sea*	Essex	27.45	5.0	-	-	-	-	-	-	-	-	1	29	20	26	-	154	-	12
241	Rutland	Worcester	26.43	5.0	0	2	0	6	3.3	67	2.2	139	1	39	32	40	3.3	76	2.2	160
242	Shelburne	Franklin	26.33	6.0	0	16	29	37	9.9	218	1.1	29	0	6	0	10	9.9	250	1.1	35
243	Cohasset	Norfolk	26.26	4.0	8	124	160	172	2.8	42	0.9	12	5	91	99	120	2.8	49	0.9	16
244	Reading	Middlesex	26.09	6.0	3	73	19	26	2.6	35	1.2	37	9	126	51	61	2.6	42	1.2	44
245	Gill	Franklin	25.86	5.0	1	25	77	108	4.4	122	1.0	18	1	24	58	67	4.4	138	1.0	22
246	Westford	Middlesex	25.49	6.0	1	19	4	9	1.7	8	1.3	70	3	62	20	25	1.7	8	1.3	83
247	Hanover	Plymouth	25.16	5.0	-	-	-	-	-	-	-	-	21	195	223	215	-	27	-	42
248	Leverett	Franklin	25.06	5.0	-	-	-	-	-	-	-	-	0	9	0	2	-	170	-	131
249	Oakham	Worcester	24.70	8.0	-	-	-	-	-	-	-	-	0	16	17	23	-	14	-	87
250	Winchester	Middlesex	23.89	4.0	5	101	35	44	2.6	34	1.6	99	4	82	28	34	2.6	41	1.6	115
251	Bernardston	Franklin	23.87	4.0	1	28	60	82	4.4	118	0.5	1	0	1	0	5	4.4	134	0.5	2
252	Southampton	Hampshire	23.67	3.0	-	-	-	-	-	-	-	-	4	80	106	131	-	29	-	30
253	Rockport	Essex	22.56	2.0	-	-	-	-	-	-	-	-	3	58	41	49	-	98	-	73
N/A	West Tisbury*	Dukes	22.48	4.0	-	-	-	-	-	-	-	-	1	27	42	53	-	31	-	68
254	Royalston	Worcester	22.46	3.0	-	-	-	-	-	-	-	-	0	17	45	55	-	236	-	10
255	Westminster	Worcester	22.19	7.0	1	18	12	17	3.1	60	1.4	83	2	56	47	58	3.1	68	1.4	98



								2000-2	2004							2005	-2009			
Rank	Municipality	County	DI score	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
256	Paxton	Worcester	22.01	16.0	0	1	0	2	1.8	11	1.9	120	0	20	12	21	1.8	11	1.9	140
257	Rochester	Plymouth	21.93	6.0	1	40	42	59	3.1	58	1.0	21	2	47	54	65	3.1	66	1.0	25
258	Sheffield	Berkshire	21.59	4.0	0	7	8	11	5.3	149	2.4	149	0	10	0	3	5.3	166	2.4	171
259	Ashby	Middlesex	21.08	5.0	0	15	20	27	5.1	145	1.0	17	1	22	29	36	5.1	162	1.0	21
260	New Salem	Franklin	20.77	2.0	0	10	28	35	6.3	179	1.7	105	0	5	0	7	6.3	201	1.7	122
261	Hatfield	Hampshire	20.60	3.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
262	Hampden	Hampden	20.37	6.0	4	76	94	125	2.2	21	0.7	4	2	48	47	57	2.2	23	0.7	5
263	Brimfield	Hampden	20.27	5.0	0	11	8	12	4.4	120	1.6	103	1	36	49	59	4.4	136	1.6	120
264	Dover	Norfolk	18.34	5.0	0	4	0	1	3.0	54	1.5	89	1	30	21	27	3.0	62	1.5	105
265	Millis	Norfolk	18.29	5.0	1	20	10	15	2.9	52	1.6	97	0	18	7	14	2.9	59	1.6	113
266	Southborough	Worcester	17.84	4.0	0	14	7	10	1.6	6	1.8	119	0	2	0	4	1.6	6	1.8	139
267	Chesterfield	Hampshire	16.91	5.0	-	-	-	-	-	-	-	-	0	7	0	6	-	185	-	1
268	Goshen	Hampshire	16.85	6.0	0	12	41	56	7.9	202	1.1	31	0	12	28	32	7.9	229	1.1	37
269	Lanesborough	Berkshire	16.57	6.0	-	-	-	-	-	-	-	-	1	35	53	64	-	186	-	52
270	Medway	Norfolk	16.44	8.0	1	39	17	23	2.3	22	1.4	77	0	3	0	9	2.3	24	1.4	92
271	Norwell	Plymouth	16.18	4.0	5	97	75	104	1.9	12	0.9	15	3	59	37	45	1.9	12	0.9	19
272	Medfield	Norfolk	15.88	5.0	1	31	15	20	1.4	4	1.3	69	2	53	25	29	1.4	4	1.3	82
273	Duxbury	Plymouth	15.51	6.0	-	-	-	-	-	-	-	-	1	34	10	17	-	25	-	71
274	Carlisle	Middlesex	15.27	6.0	2	48	61	85	2.4	24	1.2	56	1	26	18	24	2.4	28	1.2	65
275	Lynnfield	Essex	14.79	5.0	0	9	2	7	2.5	28	1.1	27	2	54	25	31	2.5	34	1.1	32
N/A	Wenham‡	Essex	14.49	34.0	0	13	10	13	3.3	66	1.0	22	1	32	29	35	3.3	75	1.0	26
276	Wales	Hampden	14.17	4.0	0	6	0	5	3.5	76	1.0	19	0	11	15	22	3.5	86	1.0	23
277	Cheshire	Berkshire	10.10	4.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
278	Boxford	Essex	6.18	5.0	1	22	11	16	1.4	3	1.2	45	0	4	0	1	1.4	3	1.2	53

Note: Ten places with significant seasonal housing/arrests (*) or 20% or more residents in undergraduate or graduate degree programs (‡) have been grayed out and italicized, as have the state's 5 largest cities (†). Auburn and Leicester were tied in the score ranking (^), "-" indicates town did not have data in that time period.



								2010-	2014							2015-	2017			
Rank	Municipality	County	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
1	Holyoke	Hampden	99.52	6.0	569	290	1,880	292	30.1	291	51.0	290	565	292	1,828	294	28.6	293	54.0	293
N/A	Springfield†	Hampden	98.62	9.0	490	288	434	283	30.1	290	60.7	291	893	294	777	291	28.7	294	62.7	294
N/A	Boston†	Suffolk	98.39	16.0	3,119	292	585	290	21.9	285	41.1	286	2,421	295	432	275	20.5	289	42.1	288
2	New Bedford	Bristol	98.02	5.0	506	289	690	291	24.0	289	24.2	279	464	291	627	287	23.1	292	25.4	280
N/A	Worcester†	Worcester	97.87	14.0	741	291	520	288	22.0	286	31.6	283	710	293	478	279	21.8	290	32.7	285
3	Brockton	Plymouth	96.55	7.0	314	286	452	285	17.9	277	47.3	288	292	287	414	272	16.8	282	49.9	291
4	Lynn	Essex	95.53	7.0	239	284	350	273	20.9	283	45.5	287	334	290	476	278	18.2	285	50.5	292
5	Fall River	Bristol	94.78	6.0	324	287	462	286	23.3	288	12.0	253	310	289	436	276	20.2	288	14.8	260
6	Salem	Essex	93.23	10.0	166	281	479	287	14.4	260	20.9	275	110	280	310	256	15.3	278	22.4	276
7	Chelsea	Suffolk	92.76	4.0	106	275	390	279	22.6	287	68.1	292	89	274	307	255	19.5	287	71.7	295
N/A	Lowell†	Middlesex	92.66	12.0	286	285	340	271	19.1	281	24.9	280	307	288	358	265	22.4	291	27.0	282
8	Fitchburg	Worcester	92.33	9.0	62	261	198	230	19.8	282	27.4	281	98	279	312	258	17.9	284	29.9	284
N/A	Amherst‡	Hampshire	90.82	60.0	119	276	335	270	33.8	292	11.9	252	47	243	129	178	33.2	295	11.7	248
9	Southbridge	Worcester	90.13	5.0	28	226	216	238	18.1	278	34.6	284	70	265	531	283	18.5	286	35.8	287
10	Haverhill	Essex	88.80	6.0	166	280	348	272	12.2	246	19.4	270	241	286	498	280	12.6	262	23.4	278
11	Pittsfield	Berkshire	88.58	5.0	90	273	254	251	16.4	271	10.8	245	87	273	248	239	15.1	276	10.4	239
12	West Springfield	Hampden	88.56	8.0	61	259	274	255	11.0	233	12.6	259	58	253	256	244	12.1	258	14.2	259
13	Greenfield	Franklin	88.42	8.0	51	250	359	276	14.9	264	7.5	222	72	266	503	281	13.2	265	9.3	229
14	Taunton	Bristol	87.62	5.0	130	277	294	257	13.1	253	11.9	250	97	277	217	231	13.8	269	13.4	256
15	Revere	Suffolk	87.30	7.0	61	257	141	198	15.5	268	30.4	282	60	257	138	185	13.0	263	35.5	286
16	Barnstable	Barnstable	87.01	5.0	202	282	547	289	13.0	252	6.9	214	142	282	388	271	9.1	220	8.6	224
17	Everett	Middlesex	86.66	7.0	66	266	200	231	13.8	257	36.8	285	66	260	192	223	13.9	270	42.2	289
18	Webster	Worcester	85.66	5.0	41	244	301	260	15.1	267	12.4	258	45	242	336	263	12.0	257	15.8	263
19	Northampton	Hampshire	85.00	15.0	56	254	236	245	14.6	262	10.3	239	60	256	254	241	15.0	275	11.1	245
20	Chicopee	Hampden	84.22	7.0	61	258	139	197	12.9	250	19.5	271	52	251	116	172	14.4	273	23.6	279
21	Quincy	Norfolk	83.36	9.0	207	283	267	254	10.0	223	8.5	230	202	284	254	242	10.5	239	8.2	217
22	Gardner	Worcester	83.14	5.0	32	232	197	229	17.6	276	10.0	238	45	241	278	251	16.7	281	10.0	235
23	Leominster	Worcester	82.70	6.0	52	251	159	211	11.7	241	19.9	273	51	249	160	201	13.4	267	22.7	277
N/A	Nantucket*	Nantucket	81.69	6.0	13	178	155	210	9.2	213	15.4	266	25	213	291	253	11.2	248	16.6	267
24	Randolph	Norfolk	81.03	9.0	55	253	211	236	11.4	239	48.1	289	49	244	180	217	11.3	251	46.3	290
25	Malden	Middlesex	80.42	11.0	63	263	130	187	16.8	272	24.0	278	43	238	87	134	15.9	279	25.7	281



								2010-2	2014							2015-	-2017			
Rank	Municipality	County	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
26	Attleboro	Bristol	80.33	5.0	87	271	259	253	9.2	214	10.3	241	93	276	272	249	9.2	222	10.0	234
27	North Adams	Berkshire	79.71	13.0	22	211	193	226	18.9	280	5.3	177	61	258	547	284	17.8	283	5.3	163
28	Falmouth	Barnstable	78.67	3.0	55	252	212	237	8.3	196	5.9	192	98	278	369	268	6.4	173	5.5	175
29	Weymouth	Norfolk	78.64	6.0	156	279	358	275	6.6	163	5.9	190	149	283	331	260	6.6	179	8.1	215
30	Dennis	Barnstable	78.24	5.0	40	243	327	266	15.5	269	5.3	176	41	236	335	262	10.9	243	6.4	191
31	Methuen	Essex	78.01	8.0	143	278	388	278	9.1	211	23.3	276	224	285	581	286	9.4	224	29.6	283
32	Spencer	Worcester	77.53	4.0	28	225	300	259	11.4	237	5.5	181	14	179	140	186	12.2	259	4.1	124
33	Stoughton	Norfolk	77.14	6.0	45	248	202	233	7.1	173	13.6	262	69	263	300	254	8.3	211	18.5	270
34	Peabody	Essex	77.07	6.0	65	264	155	207	7.7	186	9.7	236	76	270	175	214	9.8	231	12.0	249
35	Wareham	Plymouth	77.04	4.0	60	256	329	268	9.8	222	3.6	128	43	237	234	234	11.7	255	5.2	159
N/A	Provincetown *	Barnstable	76.25	3.0	7	131	240	248	13.5	256	8.1	226	5	106	195	225	10.7	241	7.2	207
36	Yarmouth	Barnstable	76.16	5.0	62	260	306	263	8.3	195	4.0	147	75	269	375	270	6.9	187	3.7	115
37	Palmer	Hampden	75.91	7.0	37	241	387	277	10.3	226	3.0	100	83	272	828	293	14.1	271	5.5	176
38	Somerville	Middlesex	74.19	15.0	69	268	103	162	15.5	270	16.0	267	58	254	82	129	12.4	261	16.0	264
39	Plymouth	Plymouth	74.10	5.0	89	272	195	227	6.8	171	4.3	152	77	271	163	202	6.4	174	4.5	136
40	Braintree	Norfolk	73.78	5.0	91	274	322	264	5.3	127	7.4	219	73	268	255	243	5.0	119	5.4	172
41	Middleboroug h	Plymouth	73.61	5.0	43	246	234	244	8.1	190	3.7	135	39	235	203	227	7.9	199	4.3	132
42	Mashpee	Barnstable	73.55	5.0	29	229	254	252	8.1	191	4.3	155	26	215	217	232	6.1	164	4.5	137
43	Medford	Middlesex	73.26	13.0	57	255	117	173	10.5	228	13.3	261	51	248	104	160	10.3	235	13.8	257
44	Salisbury	Essex	73.06	7.0	30	230	425	281	8.3	197	1.6	41	59	255	783	292	9.7	229	3.6	109
45	Woburn	Middlesex	72.61	5.0	36	240	115	172	6.8	170	8.9	232	66	261	208	228	6.0	160	9.2	228
46	Beverly	Essex	72.37	12.0	62	262	189	223	8.6	205	5.2	172	32	230	92	142	8.3	207	5.0	151
47	Marlborough	Middlesex	71.85	6.0	35	239	113	170	7.4	183	14.6	265	20	204	63	99	6.5	176	15.6	261
48	Westfield	Hampden	71.63	13.0	35	237	106	164	10.9	231	10.5	243	49	245	146	192	8.5	215	9.9	232
49	Oak Bluffs	Dukes	71.60	1.0	11	163	303	261	11.4	236	2.6	88	9	146	270	248	12.2	260	5.0	152
50	Norwood	Norfolk	71.44	7.0	67	267	295	258	8.2	193	8.8	231	38	234	163	204	8.3	208	12.4	253
51	Montague	Franklin	71.43	4.0	9	150	141	199	17.6	275	5.4	178	11	161	164	205	15.2	277	5.7	179
N/A	Cambridge‡†	Middlesex	70.99	27.0	66	265	70	114	15.0	265	18.0	269	72	267	74	118	13.5	268	18.8	272
52	Sturbridge	Worcester	70.88	3.0	30	231	440	284	6.7	167	3.6	126	52	250	734	290	4.0	65	3.4	107
53	Andover	Essex	70.76	8.0	38	242	151	205	4.4	84	6.0	195	64	259	244	237	4.4	93	6.2	187



								2010-2	2014							2015-	2017			
Rank	Municipality	County	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
54	Raynham	Bristol	70.15	5.0	20	205	193	225	7.2	177	6.8	213	30	228	284	252	6.4	172	6.7	197
55	Agawam	Hampden	69.81	6.0	43	247	189	222	9.3	216	6.7	211	23	209	100	151	9.4	223	8.1	216
56	Truro	Barnstable	69.57	1.0	7	133	423	280	13.1	254	1.6	42	8	128	579	285	11.2	247	1.8	36
57	Bourne	Barnstable	69.04	7.0	29	228	178	219	11.6	240	5.7	183	67	262	417	273	6.9	185	6.0	185
58	Clinton	Worcester	68.83	8.0	12	174	109	166	8.8	206	11.9	251	4	85	33	53	6.0	157	17.7	268
59	Waltham	Middlesex	68.81	18.0	47	249	89	148	10.4	227	19.8	272	56	252	103	158	9.8	230	19.9	273
60	West Bridgewater	Plymouth	68.72	6.0	18	198	332	269	4.1	66	9.9	237	17	195	311	257	3.6	44	6.0	184
61	Dudley	Worcester	68.64	15.0	15	182	164	213	9.1	212	3.8	139	14	184	157	198	7.8	197	4.3	131
62	Maynard	Middlesex	68.49	6.0	19	202	237	247	9.4	217	6.4	203	12	164	140	187	8.1	202	6.9	199
63	Milford	Worcester	68.06	5.0	26	221	122	181	10.9	232	11.3	247	23	208	103	159	7.9	200	14.1	258
64	Ware	Hampshire	67.84	6.0	16	187	201	232	14.9	263	2.3	71	27	221	347	264	14.3	272	7.0	201
65	Framingham	Middlesex	67.51	8.0	74	270	134	192	11.3	235	20.8	274	119	281	209	229	11.5	254	21.8	275
66	Monson	Hampden	67.29	5.0	16	192	236	246	8.2	192	2.0	57	26	214	362	266	5.6	141	2.6	74
67^	Auburn	Worcester	67.28	7.0	33	235	250	250	4.4	87	5.8	186	32	231	237	235	4.6	102	5.6	177
67^	Leicester	Worcester	67.28	10.0	32	234	351	274	5.1	119	6.4	205	9	145	95	146	5.6	143	5.1	154
68	Abington	Plymouth	65.98	6.0	26	220	209	234	2.9	29	3.1	103	69	264	528	282	3.6	42	5.0	150
69	Hadley	Hampshire	65.82	7.0	6	122	135	194	7.5	185	7.3	218	8	137	187	220	5.4	134	12.4	254
70	Athol	Worcester	65.80	4.0	12	175	132	190	17.4	274	7.5	220	16	190	170	210	14.7	274	6.3	189
71	Great Barrington	Berkshire	65.71	11.0	7	137	124	183	8.5	203	14.2	264	10	151	179	215	5.2	127	15.6	262
72	Wilbraham	Hampden	65.55	5.0	21	208	186	221	4.8	106	4.6	167	28	224	243	236	4.0	66	7.0	200
73	Ludlow	Hampden	65.53	5.0	26	219	148	204	5.9	148	6.9	215	45	240	260	246	5.8	153	9.1	227
74	Fairhaven	Bristol	65.24	6.0	28	224	210	235	10.8	230	1.2	25	23	210	180	216	9.1	221	2.3	62
75	Easthampton	Hampshire	64.69	10.0	11	158	78	132	8.3	198	5.2	171	12	168	88	137	10.7	240	8.4	221
76	Winchendon	Worcester	64.58	6.0	10	152	122	179	12.1	244	3.7	137	9	138	105	162	11.2	246	5.1	153
77	Tewksbury	Middlesex	62.98	6.0	72	269	303	262	4.0	64	3.6	124	91	275	371	269	5.4	133	3.1	96
78	Watertown	Middlesex	62.70	8.0	24	215	88	145	7.3	182	11.6	249	27	220	93	143	8.4	214	11.4	247
79	Holbrook	Norfolk	62.58	9.0	-	-	-	-	-	-	-	-	10	150	105	161	6.7	182	18.2	269
80	Amesbury	Essex	62.05	4.0	19	203	145	202	4.3	78	2.5	83	29	227	214	230	4.9	117	3.5	108
81	Hull	Plymouth	61.38	4.0	17	194	195	228	5.9	146	3.8	140	15	189	169	209	4.9	116	4.1	127
82	Danvers	Essex	60.49	6.0	33	236	155	208	4.9	113	3.9	145	28	223	126	175	6.3	171	5.4	166



								2010-2	2014							2015-	-2017			
Rank	Municipality	County	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
83	Lunenburg	Worcester	59.99	6.0	19	199	225	242	9.8	221	6.0	198	22	205	256	245	8.3	212	8.5	222
84	Walpole	Norfolk	59.26	5.0	25	217	135	193	3.4	46	4.6	165	31	229	165	206	2.8	27	6.5	192
85	Concord	Middlesex	58.82	3.0	7	129	45	76	5.0	115	7.6	223	9	139	58	91	6.3	169	9.7	230
86	Northbridge	Worcester	58.75	4.0	16	188	130	186	6.0	149	2.8	97	14	183	114	169	8.4	213	5.9	183
87	Whitman	Plymouth	58.66	5.0	32	233	281	256	6.1	153	2.7	92	17	194	148	193	6.9	186	2.9	88
88	Newburyport	Essex	58.51	4.0	27	222	191	224	7.4	184	3.4	117	22	207	156	197	7.0	189	3.3	103
89	North Attleborough	Bristol	58.23	6.0	10	154	47	81	4.2	73	3.7	134	14	181	62	96	7.3	195	6.7	196
90	Orleans	Barnstable	57.34	1.0	8	142	153	206	4.8	104	2.4	76	7	126	145	190	7.2	193	5.4	169
91	Brookline	Norfolk	57.15	13.0	42	245	86	144	11.8	242	8.1	225	5	98	10	18	11.4	252	8.9	226
92	Lenox	Berkshire	56.87	6.0	4	90	98	157	13.3	255	3.6	131	8	132	195	224	3.8	54	4.6	140
93	Somerset	Bristol	56.38	5.0	19	200	127	185	7.9	188	1.5	38	37	232	245	238	6.7	184	0.9	11
94	Saugus	Essex	55.77	5.0	28	227	126	184	6.0	151	5.9	191	14	180	59	92	8.1	203	7.5	208
95	Oxford	Worcester	55.68	9.0	5	110	51	89	5.0	114	5.1	170	12	169	114	170	10.9	244	6.6	195
96	Seekonk	Bristol	55.51	5.0	15	184	133	191	5.1	120	2.6	89	50	246	420	274	5.5	138	2.2	51
97	Hopedale	Worcester	55.13	3.0	19	201	432	282	2.4	14	5.8	187	12	173	273	250	4.2	78	4.4	134
98	West Boylston	Worcester	54.95	4.0	4	94	66	110	5.4	132	10.7	244	2	53	29	43	8.3	206	16.6	266
99	Winthrop	Suffolk	54.49	7.0	12	171	80	135	8.5	204	9.5	235	5	103	34	54	8.2	205	12.2	252
100	Mansfield	Bristol	54.32	7.0	22	210	130	188	4.1	67	5.4	179	18	199	103	157	2.7	24	5.5	173
101	Shrewsbury	Worcester	54.21	6.0	11	167	41	70	5.0	116	6.1	199	12	166	43	71	4.6	99	8.3	219
102	Boxborough	Middlesex	53.86	8.0	9	148	233	243	4.4	83	0.9	18	8	134	190	221	5.3	131	3.8	119
103	Gloucester	Essex	53.82	4.0	20	206	84	140	9.7	220	3.5	123	51	247	203	226	8.5	216	3.0	89
104	Chelmsford	Middlesex	53.77	6.0	24	216	90	149	3.5	48	3.2	108	24	211	85	131	3.6	43	4.5	135
105	Orange	Franklin	53.76	5.0	6	124	99	159	12.5	248	2.3	73	10	155	167	207	10.3	234	1.8	34
106	Tisbury	Dukes	53.67	1.0	2	65	73	121	18.2	279	2.3	69	6	108	168	208	6.9	188	10.7	241
107	South Hadley	Hampshire	53.37	19.0	10	153	65	109	9.2	215	8.4	229	12	167	78	123	10.4	237	8.3	220
N/A	Williamstown ‡	Berkshire	53.32	35.0	5	105	74	123	6.7	169	6.5	206	9	141	134	181	11.5	253	12.2	251
108	Warren	Worcester	53.13	4.0	5	103	123	182	15.0	266	0.8	17	27	222	665	289	11.3	249	1.9	41
109	Ayer	Middlesex	52.95	10.0	3	75	52	91	12.8	249	8.3	228	2	57	36	61	13.4	266	10.9	242
110	Harwich	Barnstable	52.72	4.0	12	169	112	169	7.3	178	3.8	138	15	188	148	194	6.7	183	3.7	114
111	Williamsburg	Hampshire	52.68	3.0	5	104	222	241	10.2	224	4.5	161	9	147	454	277	10.8	242	1.7	30



								2010-2	2014							2015-	-2017			
Rank	Municipality	County	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
112	Edgartown	Dukes	52.50	3.0	12	172	328	267	5.7	142	1.9	55	9	148	254	240	5.1	125	3.3	101
113	Hudson	Middlesex	51.95	6.0	9	146	56	95	6.4	158	4.6	164	4	82	23	31	5.9	156	8.0	214
114	Sutton	Worcester	51.77	4.0	12	170	170	214	3.7	53	0.6	13	16	191	229	233	2.1	13	3.3	100
115	Pelham	Hampshire	51.43	4.0	1	39	122	180	5.7	141	12.2	257	2	47	191	222	4.0	64	5.2	157
116	Ashland	Middlesex	51.35	5.0	11	162	83	138	4.0	65	6.0	193	11	163	84	130	3.2	36	7.9	212
117	Bellingham	Norfolk	51.31	6.0	18	197	135	195	3.0	31	2.1	65	44	239	333	261	4.2	75	4.0	123
118	Douglas	Worcester	51.04	4.0	11	165	177	217	4.2	74	4.2	151	9	143	138	184	4.1	73	8.0	213
119	Chatham	Barnstable	50.99	4.0	3	73	57	98	8.9	207	7.3	217	1	29	19	27	9.5	228	5.8	180
120	Canton	Norfolk	50.91	5.0	16	191	95	153	6.2	155	10.3	240	8	135	47	78	6.0	161	10.3	238
121	Dartmouth	Bristol	50.78	18.0	23	213	79	134	6.5	162	5.0	169	18	198	62	97	8.2	204	5.4	171
122	Bridgewater	Plymouth	50.62	20.0	7	130	31	45	7.3	180	10.9	246	24	212	106	164	9.5	226	11.4	246
123	Natick	Middlesex	50.58	6.0	20	207	78	131	4.0	62	4.7	168	17	196	64	101	3.6	41	5.6	178
124	East Bridgewater	Plymouth	50.26	6.0	16	190	147	203	3.3	43	1.9	56	11	159	103	156	6.6	181	5.2	161
125	Sandwich	Barnstable	50.11	7.0	27	223	171	216	5.6	138	2.2	68	27	218	163	203	5.7	147	2.8	83
N/A	Sunderland‡	Franklin	50.08	24.0	0	14	6	13	21.5	284	6.0	197	1	36	43	70	16.4	280	10.1	236
126	Franklin	Norfolk	49.09	8.0	17	196	73	120	3.8	55	3.9	143	13	174	52	83	4.3	85	3.1	93
127	Wakefield	Middlesex	48.76	5.0	35	238	171	215	4.6	96	3.1	102	26	217	121	174	4.4	91	5.0	149
128	Swansea	Bristol	48.38	4.0	12	173	92	151	5.2	125	1.5	37	12	165	91	140	5.5	137	0.8	8
129	Erving	Franklin	48.23	4.0	2	45	114	171	8.5	201	5.5	180	26	216	1,834	295	8.9	219	2.6	75
130	Billerica	Middlesex	48.03	6.0	26	218	78	133	5.6	139	4.5	160	28	225	81	127	4.3	82	7.5	209
131	North Andover	Essex	48.02	9.0	7	132	31	44	4.6	95	6.7	210	37	233	160	200	5.1	124	8.6	223
132	Northborough	Worcester	47.82	6.0	12	176	112	167	2.9	25	5.2	173	13	175	110	167	3.7	49	4.8	144
133	Georgetown	Essex	47.10	4.0	15	185	245	249	2.6	16	1.5	35	9	144	138	183	3.4	38	4.4	133
134	Uxbridge	Worcester	47.09	6.0	11	166	105	163	5.4	135	1.8	50	19	203	181	219	8.3	209	3.9	122
135	Wellesley	Norfolk	46.86	18.0	15	183	69	112	3.5	47	6.9	216	10	154	47	77	4.4	88	7.6	210
136	Adams	Berkshire	46.81	3.0	8	141	122	178	11.4	238	1.6	40	7	118	100	152	11.1	245	1.7	29
137	Burlington	Middlesex	46.78	6.0	24	214	120	175	4.7	100	5.7	184	13	177	63	100	4.0	63	7.2	205
138	Plainville	Norfolk	46.61	5.0	11	161	160	212	5.3	129	0.6	10	12	170	174	213	6.2	167	0.9	10
139	Deerfield	Franklin	46.16	6.0	3	78	84	139	6.2	154	3.1	104	11	158	266	247	8.3	210	5.3	164
140	Lee	Berkshire	46.00	6.0	4	84	74	122	9.5	218	3.2	106	3	67	57	89	8.0	201	3.4	105



								2010-2	2014							2015-	2017			
Rank	Municipality	County	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
141	Mendon	Worcester	45.93	4.0	9	149	216	239	1.9	6	5.7	185	17	193	367	267	0.5	1	1.3	17
142	Newton	Middlesex	45.87	12.0	22	212	33	51	5.6	140	8.9	233	19	201	27	40	4.3	81	8.6	225
143	Wilmington	Middlesex	45.54	6.0	17	195	100	160	2.2	10	2.5	85	18	197	98	149	2.9	30	4.1	128
144	Brewster	Barnstable	45.39	3.0	10	155	118	174	7.0	172	2.1	59	9	149	113	168	4.8	113	2.4	65
145	Westport	Bristol	45.37	6.0	17	193	131	189	3.4	45	0.4	5	15	186	118	173	4.5	96	0.7	6
146	Lakeville	Plymouth	45.21	6.0	7	134	81	137	4.5	92	2.7	96	28	226	320	259	3.2	35	2.6	71
147	Hardwick	Worcester	45.20	4.0	1	34	41	68	14.5	261	4.6	163	15	187	645	288	12.0	256	2.9	87
148	Carver	Plymouth	45.10	5.0	12	177	136	196	5.4	134	2.5	80	8	136	91	139	4.6	97	3.0	91
149	North Reading	Middlesex	44.93	5.0	13	179	109	165	4.5	90	2.5	84	22	206	180	218	3.4	37	2.5	69
N/A	Chilmark*	Dukes	44.86	5.0	1	41	184	220	13.9	258	0.7	15	0	17	36	60	13.1	264	5.4	167
150	Eastham	Barnstable	44.79	2.0	4	89	85	142	5.1	121	2.1	62	6	109	128	177	6.6	180	3.7	116
151	Marshfield	Plymouth	44.39	6.0	22	209	112	168	5.4	133	1.1	24	27	219	135	182	6.2	166	1.5	21
152	Northfield	Franklin	44.25	6.0	5	108	218	240	3.9	59	2.5	82	3	78	142	188	4.0	59	2.3	56
153	Kingston	Plymouth	44.10	6.0	15	181	145	200	4.3	80	4.1	150	4	92	39	64	6.6	178	2.3	63
154	Grafton	Worcester	44.07	6.0	6	114	41	71	7.2	176	6.1	200	4	94	31	47	5.7	150	10.2	237
155	Rowley	Essex	43.62	4.0	5	100	102	161	9.0	208	1.7	45	8	131	171	211	5.5	136	1.1	13
156	Southwick	Hampden	43.57	5.0	4	96	57	99	2.9	28	0.6	8	11	162	145	191	7.2	194	0.3	2
157	Westborough	Worcester	43.45	4.0	8	144	60	103	4.4	89	9.5	234	5	100	34	55	5.1	122	7.1	204
158	Hingham	Plymouth	43.25	4.0	9	147	52	90	3.9	61	1.4	31	16	192	96	147	5.7	148	1.8	32
N/A	Wellfleet*	Barnstable	43.14	4.0	2	59	81	136	14.0	259	1.4	32	3	76	106	165	11.3	250	2.5	68
159	Arlington	Middlesex	42.86	5.0	15	186	44	72	4.4	88	5.6	182	12	171	35	58	5.2	126	6.2	186
160	Blackstone	Worcester	42.34	5.0	5	111	77	128	5.1	122	6.0	196	10	156	143	189	4.0	61	4.6	139
161	Harvard	Worcester	42.10	4.0	2	52	40	63	9.0	210	13.3	260	3	63	52	82	5.2	128	10.4	240
162	Marblehead	Essex	42.00	4.0	11	159	70	115	4.9	110	3.2	110	4	87	24	34	4.6	101	4.8	147
163	Barre	Worcester	41.73	6.0	13	180	326	265	4.2	72	1.5	34	6	114	149	196	5.7	149	3.6	112
164	Holland	Hampden	41.56	4.0	-	-	-	-	-	-	-	-	3	65	134	180	4.1	71	3.7	117
165	Foxborough	Norfolk	41.54	4.0	16	189	120	176	4.2	76	3.7	132	14	182	102	154	4.9	115	8.2	218
166	Lincoln	Middlesex	41.42	7.0	2	49	37	56	3.9	60	10.3	242	3	66	56	86	2.7	25	12.1	250
167	Tyngsborough	Middlesex	41.04	6.0	6	118	63	106	7.1	174	3.3	116	7	124	76	119	7.1	191	3.6	111
168	Marion	Plymouth	40.86	3.0	3	79	88	146	4.6	97	2.7	95	2	60	61	94	5.6	140	2.7	78
169	Sherborn	Middlesex	40.85	2.0	4	86	121	177	2.0	8	1.0	20	3	69	99	150	4.2	74	3.3	102



								2010-2	2014							2015-	2017			
Rank	Municipality	County	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
170	Belchertown	Hampshire	40.83	8.0	4	85	32	48	7.8	187	3.5	122	5	101	43	73	5.8	152	1.7	25
171	Pembroke	Plymouth	40.68	6.0	20	204	145	201	4.1	70	2.8	98	13	178	95	145	4.2	76	2.3	59
172	Easton	Bristol	40.22	12.0	10	157	56	96	3.5	49	8.2	227	13	176	69	112	4.7	109	6.6	194
173	Granby	Hampshire	39.99	5.0	4	95	89	147	5.8	145	5.9	189	4	83	71	114	5.5	135	6.2	188
174	Charlton	Worcester	39.83	7.0	6	121	60	102	4.9	111	1.5	36	7	122	67	109	4.7	106	2.7	79
175	Acushnet	Bristol	39.68	8.0	7	135	86	143	4.1	69	2.7	94	7	125	85	132	4.1	70	2.2	52
176	Acton	Middlesex	39.24	5.0	6	128	39	59	3.0	35	2.7	90	8	133	47	79	3.8	53	4.2	130
177	Swampscott	Essex	39.04	6.0	8	145	78	129	4.7	102	5.3	174	6	113	57	87	6.1	165	4.1	129
178	Melrose	Middlesex	38.98	8.0	11	160	49	85	3.9	57	6.5	207	6	117	28	41	3.9	57	6.8	198
N/A	Stockbridge*	Berkshire	38.94	3.0	0	18	22	34	12.0	243	4.6	166	2	50	116	171	9.4	225	5.4	170
179	Holliston	Middlesex	38.80	5.0	5	112	53	92	4.0	63	3.3	114	4	89	37	62	1.4	5	4.8	145
180	Hubbardston	Worcester	38.62	7.0	3	74	91	150	6.5	160	2.6	87	0	5	0	12	2.4	21	5.2	158
181	East Longmeadow	Hampden	38.61	7.0	6	123	48	84	5.1	123	6.5	208	19	202	148	195	4.5	95	7.2	206
182	Dedham	Norfolk	38.47	7.0	4	87	19	28	4.4	86	11.6	248	2	41	8	16	5.0	120	16.1	265
183	Dracut	Middlesex	38.45	7.0	2	54	9	15	5.0	118	8.0	224	9	140	36	59	7.2	192	9.9	233
184	Millbury	Worcester	38.45	7.0	5	106	45	75	6.1	152	3.8	141	5	99	43	72	6.0	159	2.2	46
185	Shirley	Middlesex	38.35	3.0	1	30	13	21	12.1	245	23.3	277	2	52	32	49	10.3	233	20.0	274
186	East Brookfield	Worcester	37.96	6.0	1	25	33	49	4.9	107	1.8	52	3	68	157	199	4.8	110	2.3	58
187	Freetown	Bristol	37.93	5.0	5	109	75	124	4.8	105	1.0	23	8	127	106	163	5.9	154	2.1	45
188	Millville	Worcester	37.71	4.0	2	64	93	152	9.0	209	4.0	148	1	30	41	67	4.4	89	1.6	24
189	Ashburnham	Worcester	37.53	9.0	3	70	59	101	8.4	200	2.2	66	2	49	44	75	4.8	111	2.6	72
190	Littleton	Middlesex	37.41	6.0	5	113	77	127	3.9	58	1.3	30	3	79	44	74	3.8	55	1.4	20
191	Pepperell	Middlesex	37.36	6.0	3	80	39	58	4.9	112	3.6	130	3	64	29	44	5.6	142	3.8	118
192	Boylston	Worcester	36.65	5.0	1	35	30	42	3.1	36	2.5	78	3	71	86	133	4.1	69	2.9	86
193	Dalton	Berkshire	36.44	6.0	1	29	15	25	17.1	273	4.0	149	4	95	79	125	10.3	236	2.4	64
194	West Brookfield	Worcester	36.35	7.0	3	69	84	141	7.2	175	4.3	156	1	23	22	29	6.5	175	1.9	40
195	Lancaster	Worcester	36.21	6.0	1	22	9	17	12.3	247	12.1	255	4	84	57	90	5.3	130	11.1	244
196	Belmont	Middlesex	36.11	6.0	6	120	30	43	5.8	143	7.5	221	6	112	31	46	5.5	139	6.3	190
197	Hanson	Plymouth	35.91	7.0	5	99	59	100	3.8	56	3.9	144	7	120	78	124	3.4	39	1.8	31
198	Hamilton	Essex	35.42	9.0	1	32	13	22	3.2	42	5.3	175	4	91	69	111	10.2	232	2.1	42



								2010-2	2014							2015-	2017			
Rank	Municipality	County	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
199	Hopkinton	Middlesex	35.25	5.0	8	139	70	116	2.2	9	2.4	74	8	129	67	106	1.5	6	4.7	141
200	Upton	Worcester	34.67	5.0	2	63	40	66	6.5	161	1.5	39	5	102	87	135	4.8	114	4.1	125
201	Groveland	Essex	34.65	6.0	4	83	69	111	2.7	18	3.2	112	1	35	25	37	2.4	22	4.8	146
202	Wrentham	Norfolk	34.54	7.0	8	143	99	158	5.2	126	1.2	26	7	121	77	122	5.1	121	4.9	148
203	Westwood	Norfolk	33.41	4.0	8	140	75	125	2.8	23	3.1	101	11	160	96	148	1.9	11	2.2	47
204	Berlin	Worcester	32.92	6.0	0	11	9	16	2.7	19	3.3	113	2	61	93	144	2.9	29	1.5	22
205	Lexington	Middlesex	32.91	6.0	11	164	46	78	4.4	82	3.0	99	1	34	5	13	3.6	46	2.8	84
206	Norton	Bristol	32.77	15.0	1	28	5	12	6.0	150	2.4	75	2	38	10	20	5.6	144	5.2	160
207	North Brookfield	Worcester	32.61	8.0	2	51	50	87	6.6	165	2.3	72	0	8	0	10	6.3	170	2.2	48
208	Holden	Worcester	32.60	6.0	10	151	71	117	2.6	15	3.3	115	9	142	64	102	4.7	107	5.5	174
209	Stoneham	Middlesex	32.36	6.0	6	119	33	50	4.5	93	4.3	154	10	157	57	88	4.3	84	5.4	165
210	Milton	Norfolk	32.26	11.0	2	66	12	18	4.4	85	17.9	268	4	93	19	28	4.1	72	18.7	271
211	Longmeadow	Hampden	32.24	7.0	6	116	47	82	5.3	130	4.4	157	3	74	25	35	3.6	45	5.2	162
212	Norfolk	Norfolk	31.92	4.0	2	68	27	37	4.6	94	12.1	256	6	107	62	98	2.8	28	13.2	255
213	Bolton	Worcester	31.86	5.0	6	115	155	209	2.7	20	3.9	142	3	70	81	126	1.4	3	4.1	126
214	Sharon	Norfolk	31.76	5.0	5	107	39	60	2.7	17	6.2	201	4	88	30	45	2.0	12	7.1	202
215	Bedford	Middlesex	31.50	5.0	5	98	45	73	4.2	71	6.0	194	6	111	53	84	2.5	23	7.1	203
216	Templeton	Worcester	31.40	5.0	5	97	72	119	10.6	229	0.4	6	3	62	40	65	4.4	94	1.3	18
217	Needham	Norfolk	31.06	5.0	6	125	29	40	3.2	38	4.5	162	10	153	45	76	3.0	32	4.7	143
218	Rehoboth	Bristol	30.98	8.0	7	136	78	130	3.2	39	0.6	12	6	116	67	108	2.3	17	3.1	95
219	Dunstable	Middlesex	30.76	7.0	4	93	178	218	1.3	2	0.3	3	2	58	92	141	2.1	14	1.1	14
220	Newbury	Essex	30.76	9.0	3	77	63	105	4.9	109	1.0	21	10	152	173	212	4.2	80	3.1	94
221	Mattapoisett	Plymouth	30.52	7.0	3	72	64	107	4.8	103	0.7	14	4	86	72	115	4.6	103	1.7	27
222	Townsend	Middlesex	30.43	5.0	2	56	29	41	4.5	91	1.8	51	5	104	74	117	4.0	68	3.0	90
223	Halifax	Plymouth	30.20	5.0	6	117	98	156	1.9	7	3.7	133	3	73	49	81	4.6	104	5.2	156
224	Ipswich	Essex	30.01	6.0	3	76	31	46	5.8	144	1.7	43	7	123	67	107	7.1	190	3.9	120
225	Groton	Middlesex	29.72	5.0	4	88	46	79	3.7	51	2.7	93	6	110	66	105	4.3	83	1.8	35
226	Stow	Middlesex	29.71	5.0	5	102	96	155	3.0	34	3.4	118	2	42	32	50	4.4	92	2.5	70
227	Nahant	Essex	29.61	4.0	2	50	62	104	5.0	117	6.4	204	2	55	66	104	4.8	112	2.4	66
228	West Newbury	Essex	29.55	5.0	1	40	45	74	8.5	202	3.5	120	3	72	88	138	5.7	145	1.0	12



								2010-2	2014							2015-	2017			
Rank	Municipality	County	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
229	Sterling	Worcester	29.22	5.0	2	61	37	57	4.7	101	3.4	119	1	24	11	21	6.0	158	5.2	155
230	Sudbury	Middlesex	29.09	4.0	4	91	32	47	1.9	5	2.1	63	6	115	48	80	3.1	34	2.4	67
231	Princeton	Worcester	28.88	6.0	1	26	23	35	6.7	168	6.8	212	2	43	60	93	6.5	177	3.9	121
232	Scituate	Plymouth	28.38	4.0	10	156	75	126	3.0	30	1.9	54	12	172	88	136	4.2	79	1.8	37
233	Whately	Franklin	28.36	8.0	0	16	18	26	3.2	40	2.4	77	0	13	29	42	7.6	196	3.7	113
234	Weston	Middlesex	28.27	9.0	5	101	55	93	2.9	26	6.7	209	2	59	27	39	5.1	123	5.8	181
235	Topsfield	Essex	28.13	5.0	0	17	8	14	5.3	128	0.1	2	4	90	82	128	1.4	4	1.3	16
236	Berkley	Bristol	27.92	5.0	2	57	46	77	5.9	147	3.2	109	3	77	66	103	3.9	58	0.4	3
237	Merrimac	Essex	27.84	6.0	2	55	40	65	4.7	98	2.2	67	4	81	68	110	5.4	132	2.8	82
238	Plympton	Plymouth	27.60	7.0	2	58	95	154	3.8	54	1.8	53	2	39	71	113	4.4	87	2.8	81
239	Wayland	Middlesex	27.57	4.0	6	127	64	108	4.3	79	3.6	125	2	56	23	32	3.0	33	4.5	138
240	Middleton	Essex	27.50	5.0	0	13	3	9	4.7	99	12.0	254	1	28	13	24	3.6	47	11.0	243
N/A	Manchester- by-the-Sea*	Essex	27.45	5.0	2	60	55	94	6.6	164	2.1	64	4	96	102	155	3.7	48	1.6	23
241	Rutland	Worcester	26.43	5.0	3	71	49	86	2.3	12	3.5	121	8	130	128	176	2.3	16	2.2	49
242	Shelburne	Franklin	26.33	6.0	0	9	12	19	8.3	199	0.3	4	2	44	102	153	8.5	217	0.8	7
243	Cohasset	Norfolk	26.26	4.0	2	46	27	38	4.1	68	0.6	9	3	80	54	85	3.8	52	0.9	9
244	Reading	Middlesex	26.09	6.0	7	138	39	61	2.4	13	3.9	146	15	185	76	120	2.9	31	2.7	77
245	Gill	Franklin	25.86	5.0	0	12	15	23	7.3	179	5.8	188	0	2	0	7	5.8	151	4.7	142
246	Westford	Middlesex	25.49	6.0	11	168	70	113	2.7	21	3.2	111	19	200	107	166	2.3	19	2.6	73
247	Hanover	Plymouth	25.16	5.0	2	62	21	33	4.3	81	1.2	27	1	37	13	23	3.9	56	1.1	15
248	Leverett	Franklin	25.06	5.0	0	2	0	5	9.6	219	3.6	127	1	31	61	95	6.0	162	1.9	38
249	Oakham	Worcester	24.70	8.0	1	31	57	97	5.1	124	0.6	11	2	54	132	179	3.8	51	3.2	97
250	Winchester	Middlesex	23.89	4.0	6	126	41	69	3.0	32	2.3	70	7	119	41	69	2.3	18	2.3	61
251	Bernardston	Franklin	23.87	4.0	1	21	34	52	6.2	156	4.5	159	1	25	38	63	9.5	227	2.3	60
252	Southampton	Hampshire	23.67	3.0	2	67	51	88	4.9	108	0.9	19	2	46	34	56	4.6	98	0.1	1
253	Rockport	Essex	22.56	2.0	1	37	20	30	5.4	136	3.7	136	1	21	11	22	6.2	168	2.2	53
N/A	West Tisbury*	Dukes	22.48	4.0	1	24	29	39	8.1	189	2.5	79	2	45	76	121	3.7	50	2.1	43
254	Royalston	Worcester	22.46	3.0	0	8	0	4	13.0	251	1.8	49	0	1	0	11	10.5	238	1.7	26
255	Westminster	Worcester	22.19	7.0	4	92	72	118	2.9	27	2.5	86	2	48	34	57	1.6	7	3.6	110
256	Paxton	Worcester	22.01	16.0	2	48	47	80	3.6	50	13.9	263	0	18	8	17	4.6	105	9.8	231
257	Rochester	Plymouth	21.93	6.0	1	42	35	54	6.7	166	2.5	81	2	40	40	66	4.7	108	2.2	50



								2010-	2014							2015-	2017			
Rank	Municipality	County	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
258	Sheffield	Berkshire	21.59	4.0	0	4	0	8	10.2	225	1.0	22	0	6	0	8	8.7	218	0.5	5
259	Ashby	Middlesex	21.08	5.0	1	36	40	64	6.4	159	2.1	61	0	9	0	2	7.9	198	2.8	80
260	New Salem	Franklin	20.77	2.0	0	3	0	1	8.3	194	1.7	47	0	10	0	4	6.1	163	0.4	4
261	Hatfield	Hampshire	20.60	3.0	1	20	18	27	11.1	234	2.1	60	1	27	23	33	4.4	86	2.3	57
262	Hampden	Hampden	20.37	6.0	2	53	48	83	4.2	77	1.4	33	1	26	16	26	4.0	67	3.4	106
263	Brimfield	Hampden	20.27	5.0	1	23	21	31	3.0	33	1.2	28	1	33	33	52	4.2	77	3.2	99
264	Dover	Norfolk	18.34	5.0	2	47	40	67	0.3	1	6.4	202	0	14	8	14	0.8	2	7.8	211
265	Millis	Norfolk	18.29	5.0	0	1	0	3	6.3	157	3.6	129	1	22	10	19	4.4	90	5.4	168
266	Southborough	Worcester	17.84	4.0	0	15	3	10	3.3	44	2.7	91	5	105	73	116	4.6	100	3.0	92
267	Chesterfield	Hampshire	16.91	5.0	0	7	0	6	7.3	181	0.8	16	0	16	32	51	5.9	155	2.1	44
268	Goshen	Hampshire	16.85	6.0	0	5	0	2	2.8	22	1.7	46	0	3	0	6	2.4	20	3.2	98
269	Lanesborough	Berkshire	16.57	6.0	1	33	34	53	1.5	4	0.0	1	0	4	0	5	4.9	118	1.9	39
270	Medway	Norfolk	16.44	8.0	1	38	12	20	3.1	37	4.3	153	0	7	0	9	5.3	129	5.9	182
271	Norwell	Plymouth	16.18	4.0	2	43	21	32	2.3	11	1.3	29	2	51	26	38	3.6	40	2.3	54
272	Medfield	Norfolk	15.88	5.0	3	81	39	62	4.2	75	4.4	158	0	11	0	3	2.2	15	2.8	85
273	Duxbury	Plymouth	15.51	6.0	2	44	15	24	3.2	41	2.0	58	5	97	41	68	4.0	62	1.7	28
274	Carlisle	Middlesex	15.27	6.0	0	6	0	7	5.5	137	1.7	44	1	32	25	36	1.6	8	2.3	55
275	Lynnfield	Essex	14.79	5.0	3	82	36	55	1.4	3	3.2	107	3	75	31	48	1.8	10	3.4	104
N/A	Wenham‡	Essex	14.49	34.0	1	27	19	29	3.7	52	3.2	105	0	15	8	15	1.7	9	6.5	193
276	Wales	Hampden	14.17	4.0	0	19	26	36	5.3	131	0.5	7	0	19	22	30	5.7	146	2.6	76
277	Cheshire	Berkshire	10.10	4.0	-	-	-	-	-	-	-	-	0	20	14	25	4.0	60	1.4	19
278	Boxford	Essex	6.18	5.0	0	10	3	11	2.8	24	1.8	48	0	12	0	1	2.8	26	1.8	33

Note: 10 places with significant seasonal housing/arrests (*) or 20% or more residents in undergraduate or graduate degree programs (‡) have been grayed out and italicized, as have the state's 5 largest cities (†). Auburn and Leicester were tied in the score ranking (^), "-" indicates town did not have data in that time period.



Table VII-8. Disproportionate Impact Scores and Score Components for Census Tracts, Large Massachusetts Cities, 2000-2017

Tubi	e v 11-o. Dispropo	or tronute 1	прис	beores			ompone	2000-		S IIu	205, 1141	ige ivi		Betts	Cities, 2	2005				
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
1	Census Tract 8020	Springfield	94.81	5.0	103	242	5,037	243	49.7	242	74.6	208	76	295	3,692	293	49.7	299	74.6	265
2	Census Tract 804.01	Boston	94.15	6.0	118	244	8,387	247	36.5	214	92.6	225	102	300	7,277	303	36.5	270	92.6	282
3	Census Tract 8012	Springfield	93.05	2.0	51	213	2,693	224	40.6	228	75.4	209	70	291	3,725	294	40.6	284	75.4	266
4	Census Tract 8006	Springfield	92.53	4.0	43	206	2,600	221	63.3	248	94.6	230	49	270	2,989	284	63.3	305	94.6	287
5	Census Tract 805	Boston	92.38	14.0	57	222	3,611	234	39.8	226	95.0	233	61	280	3,850	296	39.8	282	95.0	290
6	Census Tract 7314	Worcester	91.80	7.0	101	241	3,370	233	38.1	220	62.6	193	114	301	3,795	295	38.1	276	62.6	250
7	Census Tract 902	Boston	91.09	2.0	53	217	4,469	242	33.7	204	97.0	245	62	281	5,251	301	33.7	259	97.0	302
8	Census Tract 801	Boston	90.99	6.0	122	245	4,312	240	29.8	190	72.2	202	117	302	4,129	298	29.8	242	72.2	259
9	Census Tract 7313	Worcester	90.63	11.0	99	240	3,963	238	40.5	227	54.9	185	88	298	3,493	292	40.5	283	54.9	241
10	Census Tract 924	Boston	90.18	8.0	115	243	2,882	226	37.8	218	96.9	244	99	299	2,476	276	37.8	274	96.9	301
11	Census Tract 813	Boston	89.91	16.0	62	226	2,123	216	30.5	193	93.4	227	73	294	2,491	277	30.5	245	93.4	284
12	Census Tract 803	Boston	89.80	8.0	77	235	6,957	246	29.8	189	93.7	228	67	288	6,049	302	29.8	241	93.7	285
13	Census Tract 7317	Worcester	89.60	15.0	188	247	8,829	248	28.9	184	45.2	165	169	303	7,945	304	28.9	235	45.2	221
14	Census Tract 812	Boston	89.50	12.0	52	216	2,731	225	42.3	231	87.6	221	54	276	2,868	283	42.3	287	87.6	278
15	Census Tract 903	Boston	88.90	6.0	70	232	3,703	235	35.3	210	96.5	240	48	268	2,542	278	35.3	266	96.5	297
16	Census Tract 8011.01	Springfield	88.62	5.0	41	203	2,649	223	44.2	234	71.4	201	19	198	1,228	237	44.2	290	71.4	258
17	Census Tract 8018	Springfield	87.99	14.0	55	221	1,994	210	39.3	224	91.8	224	36	244	1,301	239	39.3	280	91.8	281
18	Census Tract 817	Boston	87.71	14.0	81	237	3,204	231	26.0	171	96.1	238	65	285	2,573	279	26.0	221	96.1	295
19	Census Tract 1001	Boston	87.63	7.0	68	229	1,966	208	32.3	199	96.0	237	84	297	2,436	275	32.3	252	96.0	294
20	Census Tract 818	Boston	87.34	7.0	76	234	3,783	237	26.8	173	95.7	235	60	278	2,997	286	26.8	224	95.7	292
21	Census Tract 8019.01	Springfield	87.30	9.0	29	174	1,063	170	45.6	235	74.2	207	45	266	1,665	258	45.6	291	74.2	264
22	Census Tract 901	Boston	87.24	8.0	78	236	2,601	222	19.6	142	97.6	247	79	296	2,621	280	19.6	184	97.6	304
23	Census Tract 7315	Worcester	86.50	5.0	64	228	1,863	206	33.7	203	54.1	182	54	274	1,578	255	33.7	258	54.1	238
n/a	Census Tract 806.01‡	Boston	86.49	64.0	54	219	3,145	230	38.6	222	76.2	210	51	271	2,992	285	38.6	278	76.2	267
24	Census Tract 821	Boston	84.99	7.0	55	220	1,947	207	32.7	200	96.8	242	49	269	1,748	264	32.7	253	96.8	299
25	Census Tract 8019.02	Springfield	84.88	4.0	34	185	1,381	191	45.6	236	74.2	206	18	193	727	200	45.6	292	74.2	263
26	Census Tract 904	Boston	84.61	6.0	60	225	2,892	227	30.3	191	86.6	220	62	282	3,007	287	30.3	243	86.6	277
27	Census Tract 8008	Springfield	84.37	9.0	17	140	1,276	185	51.1	244	83.3	217	13	168	938	218	51.1	301	83.3	274
28	Census Tract 7325	Worcester	83.82	11.0	45	210	3,755	236	35.8	212	22.1	106	38	248	3,143	289	35.8	268	22.1	146
29	Census Tract 1011.02	Boston	83.68	7.0	68	231	2,062	213	21.4	155	97.3	246	72	293	2,159	274	21.4	198	97.3	303



								2000-2	2004							2005-	-2009			
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
30	Census Tract 611.01	Boston	82.81	6.0	17	134	1,195	181	46.7	239	42.2	155	25	216	1,807	266	46.7	295	42.2	209
31	Census Tract 920	Boston	82.78	9.0	60	224	1,663	201	19.9	145	79.9	213	71	292	1,981	272	19.9	187	79.9	270
32	Census Tract 913	Boston	82.37	13.0	51	214	3,258	232	25.3	169	63.5	194	43	261	2,769	282	25.3	217	63.5	251
33	Census Tract 923	Boston	82.14	5.0	40	201	1,999	211	19.5	141	95.4	234	67	289	3,385	291	19.5	181	95.4	291
34	Census Tract 503	Boston	82.07	10.0	24	165	1,610	200	46.0	237	60.0	189	25	214	1,678	260	46.0	293	60.0	246
35	Census Tract 1002	Boston	81.81	8.0	43	205	2,468	220	19.1	138	96.4	239	54	275	3,140	288	19.1	178	96.4	296
36	Census Tract 711.01	Boston	80.86	14.0	68	230	2,393	219	27.1	179	39.4	152	44	263	1,562	252	27.1	230	39.4	204
37	Census Tract 607	Boston	80.50	8.0	19	149	2,291	218	46.7	238	45.9	166	16	184	1,885	270	46.7	294	45.9	222
38	Census Tract 712.01	Boston	80.47	6.0	35	188	3,051	228	41.3	229	45.2	164	54	272	4,690	299	41.3	285	45.2	220
39	Census Tract 820	Boston	80.45	2.0	29	177	1,463	197	30.7	194	96.7	241	38	247	1,897	271	30.7	246	96.7	298
40	Census Tract 914	Boston	79.71	7.0	35	190	2,066	214	35.5	211	84.4	219	29	230	1,690	261	35.5	267	84.4	276
41	Census Tract 1005	Boston	79.67	7.0	50	212	1,086	172	28.3	183	73.1	204	63	283	1,375	244	28.3	234	73.1	261
42	Census Tract 916	Boston	79.65	7.0	35	187	1,495	198	21.5	156	53.3	180	42	257	1,803	265	21.5	199	53.3	236
43	Census Tract 819	Boston	79.58	7.0	37	197	1,701	203	12.2	81	96.9	243	35	241	1,600	256	12.2	106	96.9	300
44	Census Tract 8007	Springfield	78.75	6.0	9	102	382	115	37.9	219	93.3	226	17	185	705	196	37.9	275	93.3	283
45	Census Tract 906	Boston	78.34	8.0	45	207	3,131	229	15.8	110	60.4	191	38	249	2,655	281	15.8	144	60.4	248
46	Census Tract 701.01	Boston	77.84	29.0	175	246	5,859	244	34.4	206	11.1	70	259	305	8,662	305	34.4	261	11.1	89
47	Census Tract 8013	Springfield	77.77	8.0	29	176	896	161	35.0	207	81.1	215	26	217	797	204	35.0	263	81.1	272
48	Census Tract 919	Boston	77.60	5.0	33	183	1,400	192	29.0	187	94.7	231	44	262	1,855	268	29.0	238	94.7	288
49	Census Tract 1203.01	Boston	77.09	12.0	45	209	1,267	183	22.7	162	69.5	200	66	286	1,837	267	22.7	207	69.5	257
50	Census Tract 918	Boston	76.90	7.0	45	208	2,003	212	22.3	160	78.1	211	35	243	1,575	254	22.3	204	78.1	268
51	Census Tract 915	Boston	76.54	5.0	48	211	1,514	199	22.5	161	66.2	196	54	273	1,704	262	22.5	205	66.2	253
52	Census Tract 7320.01	Worcester	76.39	7.0	83	238	4,421	241	54.3	245	81.3	216	23	210	1,204	235	54.3	302	81.3	273
53	Census Tract 917	Boston	76.39	8.0	37	196	1,679	202	16.7	121	68.9	198	46	267	2,099	273	16.7	158	68.9	255
n/a	Census Tract 808.01‡	Boston	76.32	52.0	39	200	1,748	204	43.1	233	39.8	153	30	232	1,377	246	43.1	289	39.8	205
54	Census Tract 8022	Springfield	76.23	4.0	13	127	622	139	36.1	213	51.4	177	24	212	1,095	228	36.1	269	51.4	233
55	Census Tract 8014.01	Springfield	76.14	18.0	17	137	613	137	37.6	217	88.7	222	17	188	605	184	37.6	273	88.7	279
56	Census Tract 7312.03	Worcester	76.00	28.0	37	198	931	164	29.0	185	32.9	140	45	265	1,121	230	29.0	236	32.9	190
57	Census Tract 704.02	Boston	75.97	13.0	28	171	2,067	215	41.5	230	29.9	133	42	258	3,152	290	41.5	286	29.9	179
58	Census Tract 702	Boston	75.16	41.0	227	248	6,208	245	35.1	209	3.9	23	177	304	4,844	300	35.1	265	3.9	23
59	Census Tract 1003	Boston	74.81	9.0	32	181	1,303	187	20.0	147	96.0	236	35	242	1,443	249	20.0	189	96.0	293



					2000-2004											2005-	2009			
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
60	Census Tract 7330	Worcester	74.64	5.0	33	184	1,427	194	31.0	195	25.5	116	32	235	1,384	247	31.0	247	25.5	160
61	Census Tract 610	Boston	74.26	7.0	28	173	1,347	189	47.6	240	33.9	144	28	226	1,319	240	47.6	296	33.9	193
62	Census Tract 709	Boston	73.98	13.0	35	186	1,448	196	26.9	175	50.9	176	32	237	1,348	243	26.9	226	50.9	232
63	Census Tract 7324	Worcester	73.85	6.0	19	147	404	118	28.1	182	27.6	124	45	264	964	219	28.1	233	27.6	168
64	Census Tract 907	Boston	73.75	8.0	83	239	2,276	217	16.9	125	15.2	89	63	284	1,718	263	16.9	163	15.2	116
65	Census Tract 7312.04	Worcester	73.75	8.0	10	109	554	132	29.0	186	32.9	141	22	204	1,222	236	29.0	237	32.9	189
66	Census Tract 8023	Springfield	73.73	6.0	24	166	570	133	27.2	180	48.4	173	31	233	729	201	27.2	231	48.4	229
67	Census Tract 1010.01	Boston	73.23	4.0	35	191	802	156	14.3	98	94.9	232	60	279	1,376	245	14.3	127	94.9	289
68	Census Tract 815	Boston	72.92	9.0	17	139	1,420	193	14.4	99	90.6	223	23	209	1,866	269	14.4	128	90.6	280
69	Census Tract 3119	Lowell	72.68	8.0	-	-	-	-	-	-	-	-	13	170	650	191	-	262	-	169
70	Census Tract 921.01	Boston	72.14	8.0	59	223	1,186	179	16.8	123	28.5	127	66	287	1,322	242	16.8	160	28.5	172
71	Census Tract 8009	Springfield	71.95	5.0	6	83	241	82	50.5	243	73.1	203	13	171	496	167	50.5	300	73.1	260
72	Census Tract 912	Boston	71.48	7.0	26	170	1,049	168	20.3	149	47.4	170	31	234	1,286	238	20.3	191	47.4	226
73	Census Tract 1004	Boston	71.39	7.0	42	204	1,102	173	14.9	103	78.2	212	34	240	898	214	14.9	133	78.2	269
74	Census Tract 3883	Lowell	70.73	44.0	-	-	-	-	-	-	-	-	18	195	480	164	-	298	-	202
75	Census Tract 7319	Worcester	70.53	10.0	22	161	594	136	30.3	192	44.1	163	37	245	1,004	221	30.3	244	44.1	218
76	Census Tract 1205	Boston	70.51	12.0	35	192	1,983	209	17.4	129	73.6	205	26	224	1,479	250	17.4	169	73.6	262
77	Census Tract 509.01	Boston	70.45	3.0	38	199	1,343	188	19.8	144	43.2	159	34	239	1,187	233	19.8	186	43.2	214
78	Census Tract 3104	Lowell	70.45	6.0	-	-	-	-	-	-	-	-	14	172	583	180	-	218	-	176
79	Census Tract 3101	Lowell	70.30	20.0	-	-	-	-	-	-	-	-	12	163	405	149	-	256	-	206
80	Census Tract 922	Boston	70.08	7.0	30	178	1,128	174	10.0	66	60.3	190	43	260	1,602	257	10.0	83	60.3	247
81	Census Tract 502	Boston	69.10	5.0	36	193	977	166	20.2	148	54.2	183	40	251	1,098	229	20.2	190	54.2	239
82	Census Tract 1010.02	Boston	68.93	6.0	31	180	806	157	16.1	113	93.8	229	40	252	1,058	225	16.1	148	93.8	286
83	Census Tract 814	Boston	68.78	21.0	21	160	1,145	177	17.5	132	80.8	214	26	222	1,405	248	17.5	172	80.8	271
84	Census Tract 1401.06	Boston	68.38	13.0	10	107	683	148	22.9	164	52.1	179	14	177	1,011	222	22.9	210	52.1	235
85	Census Tract 1011.01	Boston	67.87	8.0	15	131	678	147	20.0	146	98.4	248	25	213	1,152	231	20.0	188	98.4	305
86	Census Tract 7318	Worcester	67.46	7.0	17	142	382	114	39.7	225	38.8	151	41	254	901	216	39.7	281	38.8	203
87	Census Tract 506	Boston	67.46	7.0	18	144	1,051	169	17.1	127	60.8	192	20	201	1,183	232	17.1	167	60.8	249
88	Census Tract 1403	Boston	67.12	9.0	36	195	784	154	11.7	76	65.6	195	42	256	925	217	11.7	97	65.6	252
89	Census Tract 501.01	Boston	66.92	6.0	20	151	582	135	20.8	154	42.4	156	26	221	764	203	20.8	197	42.4	210
90	Census Tract 3111	Lowell	66.82	5.0	-	-	-	-	-	-	-	-	9	137	631	189	-	255	-	196



								2000-	2004							2005	-2009			
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
91	Census Tract 8011.02	Springfield	66.40	8.0	9	103	703	149	29.4	188	42.6	157	6	106	437	157	29.4	240	42.6	212
92	Census Tract 3112	Lowell	66.27	6.0	-	-	-	-	-	-	-	-	14	174	640	190	-	239	-	135
93	Census Tract 1101.03	Boston	64.81	4.0	41	202	866	159	19.7	143	47.3	168	42	259	900	215	19.7	185	47.3	224
94	Census Tract 1202.01	Boston	64.42	10.0	35	189	1,216	182	15.4	107	47.1	167	38	250	1,319	241	15.4	141	47.1	223
95	Census Tract 8021	Springfield	64.18	8.0	11	118	238	80	25.8	170	32.2	139	29	228	618	185	25.8	219	32.2	187
96	Census Tract 507	Boston	63.47	4.0	20	153	643	143	18.2	134	49.7	174	22	208	713	198	18.2	174	49.7	230
97	Census Tract 612	Boston	63.28	6.0	71	233	4,254	239	17.1	126	3.6	18	68	290	4,086	297	17.1	166	3.6	18
98	Census Tract 402	Boston	62.98	5.0	13	126	1,188	180	27.6	181	40.7	154	12	157	1,064	226	27.6	232	40.7	208
99	Census Tract 504	Boston	62.62	6.0	21	157	1,046	167	14.3	97	49.8	175	17	187	827	206	14.3	126	49.8	231
100	Census Tract 7326	Worcester	62.21	7.0	11	120	360	108	16.5	118	18.0	100	22	206	706	197	16.5	155	18.0	132
101	Census Tract 408.01	Boston	61.69	8.0	20	154	728	150	33.3	202	24.0	112	23	211	814	205	33.3	257	24.0	154
102	Census Tract 910.01	Boston	60.32	4.0	28	172	1,271	184	13.9	95	14.5	84	33	238	1,491	251	13.9	122	14.5	111
103	Census Tract 3120	Lowell	60.11	6.0	-	-	-	-	-	-	-	-	6	112	314	137	-	249	-	158
104	Census Tract 511.01	Boston	60.06	6.0	24	163	551	131	15.5	109	25.4	115	38	246	878	212	15.5	143	25.4	159
105	Census Tract 7327	Worcester	60.01	4.0	9	104	316	101	17.5	130	18.9	102	12	155	390	146	17.5	170	18.9	134
106	Census Tract 8017	Springfield	59.30	37.0	14	130	273	94	18.8	137	69.4	199	10	143	188	92	18.8	177	69.4	256
107	Census Tract 6.02	Boston	59.29	21.0	11	115	268	92	43.0	232	29.9	134	20	202	511	168	43.0	288	29.9	180
108	Census Tract 303	Boston	59.26	14.0	30	179	795	155	14.0	96	8.5	51	41	253	1,075	227	14.0	123	8.5	60
109	Census Tract 3124	Lowell	59.15	5.0	-	-	-	-	-	-	-	-	3	59	199	95	-	206	-	199
110	Census Tract 705	Boston	58.45	9.0	53	218	1,147	178	21.9	159	34.0	145	26	218	552	176	21.9	203	34.0	194
111	Census Tract 3118	Lowell	58.05	5.0	-	-	-	-	-	-	-	-	13	166	577	179	-	165	-	143
112	Census Tract 1006.03	Boston	56.99	8.0	22	162	1,366	190	16.1	114	11.1	68	26	219	1,575	253	16.1	149	11.1	87
n/a	Census Tract 7.03‡	Boston	56.69	55.0	8	88	327	103	32.2	197	16.2	91	12	165	533	174	32.2	251	16.2	124
113	Census Tract 810.01	Boston	55.94	30.0	17	143	425	122	33.8	205	37.3	149	18	191	435	156	33.8	260	37.3	200
114	Census Tract 911	Boston	55.85	14.0	25	168	648	144	16.1	115	16.6	93	27	225	705	195	16.1	150	16.6	125
115	Census Tract 1404	Boston	55.69	10.0	18	146	309	97	12.5	84	84.1	218	28	227	481	165	12.5	109	84.1	275
116	Census Tract 1102.01	Boston	55.30	6.0	11	116	742	152	10.6	68	59.4	188	11	149	756	202	10.6	88	59.4	245
117	Census Tract 3103	Lowell	55.04	9.0	-	-	-	-	-	-	-	-	7	123	162	81	-	152	-	140
118	Census Tract 203.03	Boston	54.91	8.0	24	164	916	163	11.1	71	15.1	88	15	182	593	182	11.1	91	15.1	115
119	Census Tract 708	Boston	54.60	17.0	29	175	869	160	18.0	133	34.1	146	17	189	525	172	18.0	173	34.1	195
n/a	Census Tract 7316‡	Worcester	54.57	63.0	16	133	259	87	35.0	208	17.9	99	26	220	425	153	35.0	264	17.9	131



					2000-2004											2005	-2009			
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
120	Census Tract 1401.07	Boston	54.07	9.0	10	112	633	141	22.9	163	52.1	178	10	144	620	188	22.9	209	52.1	234
121	Census Tract 1009	Boston	53.65	7.0	21	155	656	145	9.8	64	66.6	197	19	199	618	186	9.8	81	66.6	254
122	Census Tract 7322.03	Worcester	53.58	7.0	8	90	367	110	10.5	67	15.9	90	15	179	714	199	10.5	87	15.9	121
123	Census Tract 1104.01	Boston	53.58	4.0	12	121	453	126	19.2	140	55.2	186	14	175	529	173	19.2	180	55.2	242
124	Census Tract 8.02	Boston	53.11	40.0	17	135	235	79	32.8	201	22.0	105	30	231	416	152	32.8	254	22.0	145
125	Census Tract 703	Boston	52.92	8.0	63	227	1,858	205	13.3	90	8.9	61	57	277	1,675	259	13.3	116	8.9	72
126	Census Tract 7305	Worcester	52.64	14.0	5	66	171	61	16.8	124	20.3	103	25	215	854	211	16.8	161	20.3	141
127	Census Tract 510	Boston	52.52	7.0	20	150	626	140	18.6	135	15.0	85	19	200	619	187	18.6	175	15.0	112
128	Census Tract 809	Boston	52.31	45.0	17	138	532	130	38.5	221	23.5	111	17	186	513	169	38.5	277	23.5	152
129	Census Tract 1006.01	Boston	52.30	6.0	17	141	414	119	15.3	106	29.9	131	22	205	514	170	15.3	139	29.9	177
130	Census Tract 8004	Springfield	52.23	6.0	4	47	85	31	15.9	112	38.0	150	12	156	263	132	15.9	147	38.0	201
131	Census Tract 3121	Lowell	52.00	5.0	-	-	-	-	-	-	-	-	3	46	121	64	-	164	-	122
132	Census Tract 8005	Springfield	51.82	5.0	5	74	221	76	12.5	85	53.6	181	9	139	391	147	12.5	110	53.6	237
133	Census Tract 7320.02	Worcester	51.78	9.0	33	182	1,297	186	16.2	116	13.8	78	18	190	700	193	16.2	151	13.8	105
134	Census Tract 7304.02	Worcester	51.38	7.0	4	51	330	104	16.6	119	25.5	117	10	145	842	209	16.6	156	25.5	161
135	Census Tract 1007	Boston	50.13	6.0	51	215	1,444	195	5.7	26	3.8	20	42	255	1,189	234	5.7	32	3.8	20
n/a	Census Tract 104.05‡	Boston	49.93	82.0	10	108	267	91	39.1	223	21.6	104	15	180	412	150	39.1	279	21.6	144
136	Census Tract 3102	Lowell	49.92	12.0	-	-	-	-	-	-	-	-	11	147	239	116	-	95	-	98
137	Census Tract 102.03	Boston	49.54	36.0	21	159	529	129	27.0	178	13.9	80	13	169	319	139	27.0	229	13.9	107
138	Census Tract 1103.01	Boston	49.52	5.0	8	92	433	124	11.9	78	43.7	161	15	181	832	207	11.9	101	43.7	216
139	Census Tract 8015.03	Springfield	49.51	8.0	10	110	368	111	13.7	93	33.0	142	7	114	248	123	13.7	120	33.0	191
140	Census Tract 3530	Cambridge	49.07	16.0	-	-	-	-	-	-	-	-	4	81	136	69	-	125	-	153
141	Census Tract 1008	Boston	48.93	5.0	25	169	572	134	8.9	57	23.2	109	22	207	496	166	8.9	72	23.2	150
142	Census Tract 3107	Lowell	48.77	23.0	-	-	-	-	-	-	-	-	8	126	221	108	-	201	-	137
143	Census Tract 8002.01	Springfield	48.54	3.0	8	95	176	63	15.1	104	28.3	126	11	152	240	119	15.1	136	28.3	171
144	Census Tract 1304.06	Boston	48.40	14.0	5	69	142	56	14.5	102	28.7	128	11	150	312	136	14.5	131	28.7	173
145	Census Tract 106	Boston	48.38	9.0	25	167	1,072	171	9.6	61	9.3	63	16	183	674	192	9.6	77	9.3	75
146	Census Tract 8001.02	Springfield	48.35	6.0	3	43	116	48	20.5	152	32.2	138	5	87	167	86	20.5	194	32.2	186
147	Census Tract 3531.01	Cambridge	48.22	32.0	-	-	-	-	-	-	-	-	4	68	152	77	-	213	-	139
148	Census Tract 7311.01	Worcester	48.18	7.0	9	101	315	100	16.4	117	22.9	108	11	148	378	143	16.4	154	22.9	149
149	Census Tract 403	Boston	48.08	3.0	21	158	657	146	10.8	69	13.9	81	29	229	895	213	10.8	89	13.9	108



								2004						2005-	2000					
								2000-	2004							2005-	2009			
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
150	Census Tract 1105.02	Boston	47.96	8.0	13	123	402	117	9.7	63	31.0	136	14	176	447	158	9.7	80	31.0	183
151	Census Tract 3524	Cambridge	47.91	17.0	-	-	-	-	-	-	-	-	6	110	448	159	-	222	-	243
152	Census Tract 8015.02	Springfield	47.81	5.0	6	79	263	89	21.6	157	57.9	187	5	88	209	102	21.6	200	57.9	244
153	Census Tract 505	Boston	47.61	7.0	9	105	635	142	15.4	108	47.3	169	7	118	459	162	15.4	142	47.3	225
154	Census Tract 512	Boston	47.50	5.0	10	111	472	127	14.5	100	29.9	132	9	140	434	154	14.5	129	29.9	178
155	Census Tract 1401.05	Boston	47.39	12.0	9	106	357	107	10.0	65	43.8	162	14	173	524	171	10.0	82	43.8	217
156	Census Tract 608	Boston	47.21	4.0	36	194	1,142	176	13.2	89	1.4	6	32	236	1,040	223	13.2	115	1.4	6
157	Census Tract 8026.01	Springfield	47.20	7.0	5	77	112	45	13.6	92	25.8	118	8	130	166	85	13.6	119	25.8	162
158	Census Tract 811	Boston	46.78	27.0	15	132	452	125	20.4	150	43.5	160	8	133	241	120	20.4	192	43.5	215
159	Census Tract 104.03	Boston	46.72	34.0	11	117	378	113	37.6	216	14.0	82	7	125	259	130	37.6	272	14.0	109
160	Census Tract 7329.01	Worcester	46.51	7.0	5	62	97	37	19.1	139	17.6	98	12	158	252	128	19.1	179	17.6	130
161	Census Tract 8014.02	Springfield	46.27	6.0	3	37	193	68	16.6	120	54.3	184	2	43	165	84	16.6	157	54.3	240
162	Census Tract 404.01	Boston	46.09	8.0	13	124	728	151	16.7	122	1.6	7	15	178	844	210	16.7	159	1.6	7
163	Census Tract 909.01	Boston	45.83	45.0	4	60	181	65	31.7	196	47.5	171	6	105	230	112	31.7	248	47.5	227
164	Census Tract 8001.01	Springfield	45.52	8.0	3	39	111	44	20.5	153	32.2	137	4	78	156	78	20.5	195	32.2	185
165	Census Tract 1204	Boston	45.49	6.0	19	148	396	116	9.6	62	18.8	101	26	223	540	175	9.6	78	18.8	133
166	Census Tract 105	Boston	44.87	39.0	11	119	372	112	26.3	172	17.2	96	6	108	196	94	26.3	223	17.2	128
167	Census Tract 7304.01	Worcester	44.82	9.0	10	114	264	90	12.1	79	28.8	130	11	153	289	133	12.1	103	28.8	175
168	Census Tract 3117	Lowell	44.81	7.0	-	-	-	-	-	-	-	-	5	94	144	73	-	134	-	90
169	Census Tract 7.04	Boston	44.47	30.0	9	100	189	67	32.2	198	16.2	92	12	161	256	129	32.2	250	16.2	123
170	Census Tract 8003	Springfield	44.24	9.0	7	87	228	77	8.8	53	25.3	113	7	117	203	100	8.8	68	25.3	156
171	Census Tract 1201.04	Boston	44.06	4.0	7	84	365	109	13.7	94	27.2	123	7	121	387	144	13.7	121	27.2	167
172	Census Tract 606	Boston	42.93	6.0	13	125	1,129	175	6.9	34	3.9	21	12	159	1,044	224	6.9	46	3.9	21
173	Census Tract 8015.01	Springfield	42.64	6.0	5	78	155	58	15.1	105	48.3	172	4	74	115	59	15.1	137	48.3	228
174	Census Tract 1	Boston	42.20	11.0	6	81	181	66	13.5	91	12.2	73	19	197	555	177	13.5	117	12.2	96
175	Census Tract 3122	Lowell	41.97	9.0	-	-	-	-	-	-	-	-	3	60	102	54	-	153	-	136
176	Census Tract 1402.01	Boston	41.82	6.0	5	75	335	105	8.4	49	22.3	107	7	122	435	155	8.4	63	22.3	147
177	Census Tract 3521.02	Cambridge	41.55	13.0	-	-	-	-	-	-	-	-	5	102	240	118	-	182	-	94
178	Census Tract 707	Boston	41.53	7.0	14	129	747	153	11.6	75	42.8	158	5	89	249	125	11.6	96	42.8	213
179	Census Tract 1401.02	Boston	41.03	9.0	8	89	270	93	7.4	38	34.5	147	13	167	455	161	7.4	50	34.5	197
180	Census Tract 107.02	Boston	40.91	16.0	21	156	826	158	6.8	33	4.6	27	21	203	842	208	6.8	43	4.6	28



								2000-	2004							2005.	-2009			
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
181	Census Tract 1402.02	Boston	40.10	7.0	8	97	203	71	9.1	59	31.0	135	10	142	236	114	9.1	74	31.0	182
182	Census Tract 706	Boston	40.08	7.0	20	152	970	165	9.1	60	13.0	76	12	160	597	183	9.1	75	13.0	100
183	Census Tract 1304.04	Boston	39.86	8.0	4	52	198	69	14.5	101	28.7	129	5	97	248	122	14.5	130	28.7	174
184	Census Tract 3113	Lowell	39.83	12.0	-	-	-	-	-	-	-	-	3	61	120	62	-	100	-	101
185	Census Tract 406	Boston	39.41	8.0	17	136	907	162	5.5	24	2.8	13	19	196	1,003	220	5.5	30	2.8	13
186	Census Tract 1207	Boston	38.86	15.0	7	86	420	121	17.2	128	33.4	143	8	134	454	160	17.2	168	33.4	192
187	Census Tract 1104.03	Boston	38.70	6.0	8	94	242	83	7.9	46	35.0	148	7	119	200	97	7.9	59	35.0	198
188	Census Tract 2.02	Boston	38.16	11.0	2	31	69	26	12.2	80	17.2	97	8	132	252	127	12.2	105	17.2	129
189	Census Tract 7331.02	Worcester	38.11	6.0	5	67	311	98	6.1	29	8.5	47	9	141	584	181	6.1	38	8.5	56
n/a	Census Tract 8.03‡	Boston	38.11	92.0	1	16	36	15	26.9	176	13.8	79	8	135	249	126	26.9	227	13.8	106
190	Census Tract 6.01	Boston	37.95	16.0	4	55	136	53	15.9	111	10.8	67	8	129	260	131	15.9	146	10.8	86
191	Census Tract 101.04‡	Boston	37.20	54.0	12	122	251	86	23.1	165	9.1	62	10	146	211	104	23.1	211	9.1	74
192	Census Tract 203.02	Boston	37.16	16.0	5	68	429	123	11.1	73	15.1	87	4	76	360	141	11.1	93	15.1	114
193	Census Tract 7311.02	Worcester	36.29	10.0	5	65	260	88	7.6	40	11.9	72	5	86	239	117	7.6	53	11.9	93
n/a	Census Tract 101.03‡	Boston	36.13	93.0	1	14	26	9	57.1	246	8.8	58	7	115	168	88	57.1	303	8.8	69
n/a	Census Tract 102.04‡	Boston	36.12	74.0	2	32	85	32	47.7	241	9.5	64	5	99	200	98	47.7	297	9.5	76
194	Census Tract 7310.02	Worcester	36.00	8.0	5	73	114	47	12.6	87	16.9	95	7	120	149	75	12.6	112	16.9	127
195	Census Tract 3114	Lowell	35.17	13.0	-	-	-	-	-	-	-	-	5	96	108	57	-	79	-	102
196	Census Tract 604	Boston	34.65	10.0	14	128	319	102	7.6	39	1.9	8	18	192	416	151	7.6	52	1.9	8
197	Census Tract 7.01	Boston	34.32	33.0	4	59	99	39	26.8	174	11.1	69	11	151	248	124	26.8	225	11.1	88
n/a	Census Tract 104.04‡	Boston	34.15	80.0	9	98	137	54	37.6	215	14.0	83	4	72	64	33	37.6	271	14.0	110
199	Census Tract 5.04	Boston	33.73	23.0	4	56	92	34	23.9	168	8.5	49	8	136	183	91	23.9	216	8.5	58
200	Census Tract 7323.01	Worcester	33.27	9.0	6	82	212	75	8.5	50	8.9	60	9	138	315	138	8.5	64	8.9	71
201	Census Tract 3106.02	Lowell	33.22	7.0	-	-	-	-	-	-	-	-	6	111	145	74	-	18	-	44
202	Census Tract 1206	Boston	33.07	12.0	9	99	418	120	17.5	131	26.4	121	5	91	224	110	17.5	171	26.4	165
203	Census Tract 3105	Lowell	32.37	40.0	-	-	-	-	-	-	-	-	3	54	114	58	-	124	-	82
204	Census Tract 7323.02	Worcester	32.16	9.0	5	64	161	59	8.5	51	8.9	59	6	113	215	107	8.5	65	8.9	70
205	Census Tract 107.01	Boston	32.15	25.0	10	113	477	128	6.8	32	4.6	28	12	164	569	178	6.8	42	4.6	29
206	Census Tract 7328.02	Worcester	31.97	6.0	5	63	148	57	8.9	54	8.8	57	5	101	167	87	8.9	69	8.8	68
207	Census Tract 3525	Cambridge	31.93	14.0	-	-	-	-	-	-	-	-	4	79	165	82	-	196	-	219
208	Census Tract 3115	Lowell	31.63	9.0	-	-	-	-	-	-	-	-	5	95	229	111	-	44	-	34



								2000-	2004							2005-	2000			
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
209	Census Tract 8016.05	Springfield	31.58	5.0	2	24	54	19	12.9	88	26.8	122	1	19	30	13	12.9	113	26.8	166
n/a	Census Tract 103‡	Boston	31.49	93.0	4	48	108	41	57.4	247	26.1	120	4	64	102	55	57.4	304	26.1	164
211	Census Tract 1105.01	Boston	31.16	3.0	3	34	98	38	10.9	70	12.3	74	5	103	204	101	10.9	90	12.3	97
212	Census Tract 8002.02	Springfield	30.24	1.0	2	26	206	73	6.1	30	25.3	114	1	17	103	56	6.1	39	25.3	157
213	Census Tract 3534	Cambridge	30.16	16.0	-	-	-	-	-	-	-	-	2	35	98	51	-	114	-	211
214	Census Tract 302	Boston	30.02	14.0	4	44	243	84	8.9	56	3.1	16	4	82	297	135	8.9	71	3.1	16
215	Census Tract 605.01	Boston	29.85	5.0	18	145	620	138	7.1	36	0.9	4	11	154	401	148	7.1	48	0.9	4
216	Census Tract 8016.02	Springfield	29.47	8.0	1	12	30	10	12.3	83	27.7	125	2	44	71	37	12.3	108	27.7	170
217	Census Tract 3527	Cambridge	29.29	13.0	-	-	-	-	-	-	-	-	4	67	200	96	-	208	-	181
218	Census Tract 4.01	Boston	28.72	19.0	5	70	93	35	21.7	158	6.5	37	7	116	123	65	21.7	202	6.5	41
219	Census Tract 3549	Cambridge	28.72	9.0	-	-	-	-	-	-	-	-	2	42	60	31	-	86	-	207
220	Census Tract 3123	Lowell	28.13	4.0	-	-	-	-	-	-	-	-	6	109	156	79	-	51	-	51
221	Census Tract 1303	Boston	27.76	7.0	8	96	246	85	3.4	7	4.2	25	12	162	357	140	3.4	7	4.2	25
222	Census Tract 8016.01	Springfield	27.65	25.0	3	38	68	24	7.6	41	25.9	119	2	40	50	22	7.6	54	25.9	163
223	Census Tract 3521.01	Cambridge	27.58	30.0	-	-	-	-	-	-	-	-	0	6	56	27	-	183	-	95
224	Census Tract 3526	Cambridge	27.26	13.0	-	-	-	-	-	-	-	-	3	49	126	67	-	104	-	142
225	Census Tract 1106.07	Boston	26.59	6.0	7	85	162	60	3.2	6	8.7	54	8	128	175	90	3.2	6	8.7	64
226	Census Tract 3535	Cambridge	26.49	15.0	-	-	-	-	-	-	-	-	2	33	92	47	-	138	-	188
227	Census Tract 203.01	Boston	26.35	13.0	3	40	179	64	11.1	72	15.1	86	4	73	238	115	11.1	92	15.1	113
228	Census Tract 2.01	Boston	26.03	16.0	2	19	47	17	8.7	52	9.9	65	8	131	233	113	8.7	67	9.9	78
n/a	Census Tract 3531.02‡	Cambridge	25.75	92.0	-	-	-	-	-	-	-	-	3	48	52	23	-	214	-	138
230	Census Tract 104.08	Boston	25.45	26.0	2	22	136	52	26.9	177	13.8	77	3	50	211	105	26.9	228	13.8	104
231	Census Tract 401	Boston	25.26	3.0	6	80	348	106	5.9	28	2.1	9	8	127	467	163	5.9	36	2.1	9
232	Census Tract 4.02	Boston	25.20	25.0	2	23	55	20	20.4	151	7.5	43	4	70	116	60	20.4	193	7.5	50
233	Census Tract 7303	Worcester	24.64	6.0	3	35	74	28	5.3	21	5.7	31	5	92	127	68	5.3	26	5.7	35
n/a	Census Tract 5.02‡	Boston	24.58	63.0	4	45	118	49	23.6	166	8.4	46	3	53	98	50	23.6	212	8.4	55
235	Census Tract 304	Boston	23.99	13.0	4	57	205	72	11.1	74	2.3	10	5	93	224	109	11.1	94	2.3	10
236	Census Tract 3522	Cambridge	23.89	9.0	-	-	-	-	-	-	-	-	1	14	56	28	-	162	-	118
237	Census Tract 7310.01	Worcester	23.88	10.0	1	10	68	23	12.6	86	16.9	94	5	90	389	145	12.6	111	16.9	126
238	Census Tract 3542	Cambridge	23.61	6.0	-	-	-	-	-	-	-	-	18	194	701	194	-	10	-	31
239	Census Tract 3532	Cambridge	22.71	37.0	-	-	-	-	-	-	-	-	3	47	100	52	-	132	-	148



								2000-	2004							2005-	2009			
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
240	Census Tract 3546	Cambridge	22.03	9.0	-	-	-	-	-	-	-	-	2	36	57	29	-	99	-	184
241	Census Tract 8016.03	Springfield	21.99	5.0	1	7	19	5	4.2	13	23.4	110	1	22	44	19	4.2	15	23.4	151
242	Census Tract 1304.02	Boston	21.84	3.0	5	61	121	51	3.4	8	3.9	22	7	124	189	93	3.4	8	3.9	22
243	Census Tract 3533	Cambridge	21.84	15.0	-	-	-	-	-	-	-	-	4	80	143	71	-	84	-	120
244	Census Tract 7328.01	Worcester	21.80	10.0	4	54	120	50	8.9	55	8.8	56	4	84	126	66	8.9	70	8.8	67
245	Census Tract 8026.02	Springfield	21.69	4.0	5	72	307	96	8.0	47	4.1	24	3	51	165	83	8.0	60	4.1	24
246	Census Tract 3116	Lowell	21.60	7.0	-	-	-	-	-	-	-	-	1	12	20	9	-	118	-	79
247	Census Tract 3125.01	Lowell	21.46	4.0	-	-	-	-	-	-	-	-	2	26	45	20	-	45	-	66
248	Census Tract 7322.02	Worcester	21.16	6.0	3	42	140	55	5.8	27	7.9	44	3	62	149	76	5.8	33	7.9	52
249	Census Tract 7331.01	Worcester	21.01	8.0	1	8	53	18	7.7	44	7.3	41	3	56	212	106	7.7	57	7.3	48
250	Census Tract 3539	Cambridge	21.01	75.0	-	-	-	-	-	-	-	-	1	18	18	7	-	220	-	119
251	Census Tract 3106.01	Lowell	20.52	8.0	-	-	-	-	-	-	-	-	4	75	100	53	-	34	-	77
252	Census Tract 1201.03	Boston	20.50	9.0	3	36	230	78	5.2	19	8.6	53	4	83	361	142	5.2	24	8.6	62
n/a	Census Tract 3537‡	Cambridge	20.42	62.0	-	-	-	-	-	-	-	-	2	30	34	15	-	145	-	84
254	Census Tract 3.01	Boston	20.35	10.0	2	30	78	29	9.0	58	8.2	45	5	100	202	99	9.0	73	8.2	54
255	Census Tract 3528	Cambridge	20.31	17.0	-	-	-	-	-	-	-	-	2	41	118	61	-	85	-	155
256	Census Tract 603.01	Boston	20.14	6.0	8	91	284	95	7.1	37	0.8	2	6	107	209	103	7.1	49	0.8	2
257	Census Tract 202	Boston	20.11	15.0	4	46	110	43	11.7	77	7.4	42	3	55	87	45	11.7	98	7.4	49
258	Census Tract 602	Boston	20.00	5.0	5	76	312	99	6.7	31	0.5	1	5	98	289	134	6.7	41	0.5	1
259	Census Tract 7308.02	Worcester	19.87	11.0	1	17	89	33	5.3	22	5.8	35	4	71	242	121	5.3	28	5.8	39
260	Census Tract 3523	Cambridge	19.69	16.0	-	-	-	-	-	-	-	-	1	21	70	35	-	135	-	103
261	Census Tract 8024	Springfield	19.66	7.0	2	20	55	21	3.9	11	8.5	48	2	45	83	44	3.9	13	8.5	57
262	Census Tract 7322.01	Worcester	19.59	12.0	1	6	25	8	12.3	82	8.7	55	1	23	58	30	12.3	107	8.7	65
263	Census Tract 301	Boston	18.86	13.0	4	50	201	70	7.8	45	1.3	5	1	25	74	39	7.8	58	1.3	5
264	Census Tract 3538	Cambridge	18.60	20.0	-	-	-	-	-	-	-	-	0	8	8	5	-	140	-	63
265	Census Tract 3540	Cambridge	18.58	45.0	-	-	-	-	-	-	-	-	1	15	24	10	-	61	-	73
266	Census Tract 7329.02	Worcester	18.57	98.0	0	1	9	2	18.8	136	4.6	26	0	4	0	1	18.8	176	4.6	27
267	Census Tract 3543	Cambridge	18.49	6.0	-	-	-	-	-	-	-	-	1	16	38	17	-	40	-	117
268	Census Tract 601.01	Boston	18.08	8.0	4	58	171	62	4.2	14	0.9	3	4	85	171	89	4.2	16	0.9	3
269	Census Tract 201.01	Boston	17.44	5.0	8	93	211	74	4.2	12	2.7	12	5	104	143	72	4.2	14	2.7	12
270	Census Tract 7301	Worcester	17.09	9.0	2	21	42	16	3.7	9	6.7	38	4	63	95	48	3.7	9	6.7	42



271 Cens 272 Cens 273 Cens 274 Cens 275 Cens 276 Cens 277 Cens 278 Cens 279 Censu 280 Cens 281 Cens 282 Cens n/a Census	ensus Tract 5.03 ensus Tract 3.02 ensus Tract 305 ensus Tract 8025 ensus Tract 7302	City Boston Boston Boston	DIA 16.91 16.90	Student enroll (%) 30.0	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino	Rank	Avg arrests	Rank	Avg arrests/	Rank	Poverty Rate	Rank	Black/ Latino	
272 Cens 273 Cens 274 Cens 275 Cens 276 Cens 277 Cens 278 Cens 279 Censu 280 Cens 281 Cens 282 Cens n/a Census	ensus Tract 3.02 ensus Tract 305 ensus Tract 8025 ensus Tract 7302	Boston Boston			0	2			(70)		(%)		/year		100k		(%)		(%)	Rank
273 Cens 274 Cens 275 Cens 276 Cens 276 Cens 277 Cens 278 Cens 279 Censu 280 Cens 281 Cens 282 Cens n/a Census	ensus Tract 305 ensus Tract 8025 ensus Tract 7302	Boston	16.90			2	8	1	23.9	167	8.5	50	1	10	24	11	23.9	215	8.5	59
274 Cens 275 Cens 276 Cens 277 Cens 278 Cens 279 Censu 280 Cens 281 Cens 282 Cens n/a Census	ensus Tract 8025 ensus Tract 7302			14.0	2	25	68	25	5.6	25	4.8	30	2	37	76	41	5.6	31	4.8	32
275 Cens 276 Cens 277 Cens 278 Cens 279 Censu 280 Cens 281 Cens 282 Cens n/a Census	ensus Tract 7302	~ . ~	16.45	13.0	5	71	238	81	5.2	20	2.7	11	3	52	137	70	5.2	25	2.7	11
276 Cens 277 Cens 278 Cens 279 Censu 280 Cens 281 Cens 282 Cens n/a Census		Springfield	16.31	7.0	2	18	30	11	5.5	23	10.6	66	2	38	38	18	5.5	29	10.6	83
277 Cens 278 Cens 279 Censu 280 Cens 281 Cens 282 Cens n/a Census	m . 2550	Worcester	15.26	6.0	4	53	95	36	7.0	35	11.2	71	4	69	90	46	7.0	47	11.2	91
278 Cens 279 Censu 280 Cens 281 Cens 282 Cens n/a Census	ensus Tract 3550	Cambridge	15.15	7.0	-	-	-	-	-	-	-	-	0	3	0	2	-	37	-	80
279 Censu 280 Cens 281 Cens 282 Cens n/a Census	ensus Tract 3547	Cambridge	14.36	13.0	-	-	-	-	-	-	-	-	3	58	158	80	-	20	-	81
280 Cens 281 Cens 282 Cens n/a Census	ensus Tract 1302	Boston	13.79	6.0	4	49	101	40	3.0	5	3.1	17	4	65	96	49	3.0	5	3.1	17
281 Cens 282 Cens n/a Census	sus Tract 7309.02	Worcester	13.55	37.0	0	5	19	6	8.3	48	6.0	36	2	27	76	42	8.3	62	6.0	40
282 Census	ensus Tract 7307	Worcester	13.12	10.0	1	15	24	7	2.2	2	6.8	39	4	66	73	38	2.2	2	6.8	43
n/a Census	ensus Tract 3541	Cambridge	12.74	23.0	-	-	-	-	-	-	-	-	2	31	62	32	-	66	-	45
	ensus Tract 1301	Boston	12.74	6.0	3	41	70	27	4.8	16	4.6	29	3	57	74	40	4.8	19	4.6	30
284 Cens	us Tract 7312.02‡	Worcester	12.49	100.0	1	9	81	30	0.0	1	7.3	40	1	13	81	43	0.0	1	7.3	47
204 CCIIS	ensus Tract 3545	Cambridge	12.31	13.0	-	-	-	-	-	-	-	-	1	11	32	14	-	76	-	33
285 Censu	sus Tract 1201.05	Boston	12.08	17.0	2	28	109	42	5.2	18	8.5	52	2	39	120	63	5.2	23	8.5	61
286 Censu	sus Tract 3125.02	Lowell	12.00	5.0	-	-	-	-	-	-	-	-	1	20	35	16	-	21	-	26
287 Censu	sus Tract 108.01	Boston	11.68	15.0	1	11	33	13	7.7	42	5.8	34	2	28	53	24	7.7	55	5.8	38
288 Censu	sus Tract 8016.04	Springfield	11.66	6.0	0	4	13	4	5.1	17	12.7	75	1	24	45	21	5.1	22	12.7	99
289 Cens	ensus Tract 3536	Cambridge	11.65	47.0	-	-	-	-	-	-	-	-	0	2	0	4	-	102	-	85
290 Censu	nsus Tract 108.02	Boston	11.12	16.0	2	27	67	22	7.7	43	5.8	33	2	29	54	25	7.7	56	5.8	37
291 Cens	ensus Tract 7306	Worcester	11.00	26.0	2	29	31	12	2.8	4	3.0	14	4	77	65	34	2.8	4	3.0	14
292 Censu	sus Tract 7309.01	Worcester	10.85	12.0	0	3	12	3	3.8	10	5.7	32	2	32	55	26	3.8	12	5.7	36
293 Censu	sus Tract 7308.01	Worcester	8.87	7.0	1	13	35	14	4.2	15	3.0	15	2	34	70	36	4.2	17	3.0	15
294 Cens	ensus Tract 3529	Cambridge	8.44	8.0	-	-	-	-	-	-	-	-	0	5	14	6	-	35	-	46
295 Censu		Boston	8.37	4.0	2	33	113	46	2.4	3	3.7	19	1	9	28	12	2.4	3	3.7	19
296 Cens	sus Tract 1106.01																			92
297 Cens	sus Tract 1106.01 ensus Tract 3544	Cambridge	7.45	10.0	-	-	-	-	-	-	-	-	0	1	0	3	-	11	-	92

Note: 15 census tracts grayed out and italicized had more than 50% of residents in undergraduate or graduate degree programs (‡), "-" indicates tract did not have data in that time period.



								2010-	2014							2015-	-2017			
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
1	Census Tract 8020	Springfield	94.81	5.0	54	296	2,766	298	54.1	296	82.0	271	47	288	1,929	292	56.3	298	85.2	278
2	Census Tract 804.01	Boston	94.15	6.0	64	300	3,123	301	36.6	254	88.3	282	44	287	1,945	293	37.8	263	87.0	281
3	Census Tract 8012	Springfield	93.05	2.0	35	274	1,827	291	58.4	300	85.4	278	63	298	3,499	299	62.9	304	85.3	279
4	Census Tract 8006	Springfield	92.53	4.0	22	233	1,167	269	66.5	305	95.7	299	34	277	1,953	294	60.7	302	97.3	304
5	Census Tract 805	Boston	92.38	14.0	45	285	2,089	296	39.6	266	92.4	292	24	257	1,046	275	42.4	281	82.1	272
6	Census Tract 7314	Worcester	91.80	7.0	100	303	2,963	300	49.1	287	64.6	241	104	302	3,214	298	41.1	275	57.7	218
7	Census Tract 902	Boston	91.09	2.0	31	269	1,839	292	31.6	227	83.9	275	22	252	1,232	283	35.9	253	91.3	289
8	Census Tract 801	Boston	90.99	6.0	94	302	3,813	303	38.3	260	70.1	248	123	304	5,399	305	24.8	201	77.3	263
9	Census Tract 7313	Worcester	90.63	11.0	48	289	1,714	290	40.8	268	61.0	233	49	290	1,767	291	41.9	277	62.5	233
10	Census Tract 924	Boston	90.18	8.0	49	291	1,201	271	28.6	209	96.5	300	27	262	635	241	42.3	280	96.8	303
11	Census Tract 813	Boston	89.91	16.0	55	298	1,255	276	38.4	261	82.2	272	53	293	1,159	280	45.1	288	83.8	274
12	Census Tract 803	Boston	89.80	8.0	35	275	2,234	297	33.7	241	87.8	280	24	255	1,391	288	20.6	164	88.0	285
13	Census Tract 7317	Worcester	89.60	15.0	101	304	5,177	305	46.2	283	45.0	200	120	303	4,953	303	44.1	283	41.9	183
14	Census Tract 812	Boston	89.50	12.0	30	268	1,253	275	42.7	271	82.9	273	29	267	1,162	281	36.7	257	70.0	246
15	Census Tract 903	Boston	88.90	6.0	24	248	946	255	36.9	256	89.1	284	20	247	934	266	37.0	259	95.3	300
16	Census Tract 8011.01	Springfield	88.62	5.0	23	247	1,443	282	63.9	303	81.6	269	63	297	4,147	302	64.5	305	86.3	280
17	Census Tract 8018	Springfield	87.99	14.0	29	264	991	261	54.3	297	84.5	277	39	284	1,357	287	39.7	268	84.8	275
18	Census Tract 817	Boston	87.71	14.0	49	290	2,002	295	41.8	270	89.8	286	18	237	594	236	29.4	234	79.7	266
19	Census Tract 1001	Boston	87.63	7.0	44	284	1,021	263	33.7	240	91.1	290	32	272	672	246	30.3	239	94.4	296
20	Census Tract 818	Boston	87.34	7.0	35	276	1,572	287	37.6	258	95.4	298	16	222	656	244	24.8	200	92.6	290
21	Census Tract 8019.01	Springfield	87.30	9.0	37	277	1,362	280	43.3	277	83.1	274	53	294	2,010	295	45.8	290	79.1	265
22	Census Tract 901	Boston	87.24	8.0	46	287	1,226	273	30.2	217	89.9	288	30	269	825	262	33.8	250	94.7	298
23	Census Tract 7315	Worcester	86.50	5.0	51	294	1,479	283	42.9	274	68.4	247	62	296	1,664	289	40.9	274	58.8	222
n/a	Census Tract 806.01‡	Boston	86.49	64.0	41	281	1,108	267	48.4	286	41.3	188	29	268	762	255	45.0	286	42.7	187
24	Census Tract 821	Boston	84.99	7.0	30	266	883	251	45.6	281	95.2	297	17	224	426	202	40.0	270	87.9	284
25	Census Tract 8019.02	Springfield	84.88	4.0	25	253	1,080	265	60.1	301	77.3	265	102	301	4,064	301	54.7	296	74.2	256
26	Census Tract 904	Boston	84.61	6.0	29	265	1,213	272	31.7	229	87.8	281	16	215	491	216	25.9	207	90.5	288
27	Census Tract 8008	Springfield	84.37	9.0	17	201	1,151	268	50.5	289	89.8	287	54	295	3,910	300	55.9	297	87.4	283
28	Census Tract 7325	Worcester	83.82	11.0	39	279	2,896	299	32.2	231	49.0	206	34	278	2,329	296	39.6	266	51.4	208
29	Census Tract 1011.02	Boston	83.68	7.0	29	262	788	235	33.6	239	93.4	295	20	246	556	230	26.7	214	93.3	291
30	Census Tract 611.01	Boston	82.81	6.0	28	259	1,885	293	60.7	302	65.0	242	17	229	1,178	282	60.5	301	63.6	235



								2010-	2014							2015-	2017			
								<i>2</i> 010								2015·				
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
31	Census Tract 920	Boston	82.78	9.0	32	271	797	239	27.9	207	80.1	268	42	286	1,060	276	28.8	232	80.4	267
32	Census Tract 913	Boston	82.37	13.0	29	263	1,484	284	23.5	183	63.0	235	19	242	946	268	21.8	179	76.2	261
33	Census Tract 923	Boston	82.14	5.0	22	237	896	252	25.8	194	93.0	294	21	249	783	257	20.9	168	94.1	295
34	Census Tract 503	Boston	82.07	10.0	22	234	1,247	274	39.5	264	58.0	226	18	235	968	272	37.2	261	57.6	217
35	Census Tract 1002	Boston	81.81	8.0	20	226	949	256	23.0	178	91.0	289	16	216	726	252	26.4	212	89.6	287
36	Census Tract 711.01	Boston	80.86	14.0	60	299	1,642	288	33.2	234	34.2	167	67	299	1,746	290	29.9	236	22.4	127
37	Census Tract 607	Boston	80.50	8.0	19	222	1,276	277	39.9	267	64.3	240	10	177	561	232	49.1	294	72.2	251
38	Census Tract 712.01	Boston	80.47	6.0	51	293	1,953	294	33.5	236	44.8	198	9	171	322	175	32.1	246	43.8	192
39	Census Tract 820	Boston	80.45	2.0	22	232	963	258	36.1	249	98.0	304	8	156	365	186	27.9	224	95.1	299
40	Census Tract 914	Boston	79.71	7.0	21	228	1,052	264	30.8	221	76.9	264	10	180	434	204	23.8	192	83.7	273
41	Census Tract 1005	Boston	79.67	7.0	38	278	809	242	31.2	224	76.4	263	28	265	493	219	30.9	241	73.7	255
42	Census Tract 916	Boston	79.65	7.0	33	273	1,298	278	25.4	192	63.3	237	32	270	1,336	286	24.4	196	59.6	224
43	Census Tract 819	Boston	79.58	7.0	21	231	877	250	36.7	255	99.0	305	16	221	630	239	41.9	278	96.3	301
44	Census Tract 8007	Springfield	78.75	6.0	18	213	630	219	50.5	290	96.5	301	78	300	2,605	297	44.5	284	97.8	305
45	Census Tract 906	Boston	78.34	8.0	23	242	1,437	281	25.1	188	75.4	258	12	203	658	245	23.6	191	81.0	268
46	Census Tract 701.01	Boston	77.84	29.0	214	305	4,184	304	22.0	169	8.9	42	319	305	5,353	304	21.1	169	11.4	50
47	Census Tract 8013	Springfield	77.77	8.0	17	204	505	192	39.3	262	81.9	270	33	276	889	265	40.1	271	81.4	269
48	Census Tract 919	Boston	77.60	5.0	19	214	607	213	18.9	142	89.4	285	18	232	585	233	19.7	151	94.4	297
49	Census Tract 1203.01	Boston	77.09	12.0	43	282	980	260	15.0	110	46.4	203	47	289	1,037	274	15.8	123	49.4	205
50	Census Tract 918	Boston	76.90	7.0	16	200	576	206	36.5	253	75.1	257	15	211	526	224	26.1	209	74.9	259
51	Census Tract 915	Boston	76.54	5.0	22	239	618	215	22.9	177	49.1	207	32	271	787	258	20.1	158	66.4	242
52	Census Tract 7320.01	Worcester	76.39	7.0	10	159	519	197	57.2	298	78.2	267	3	79	122	102	58.3	299	82.0	270
53	Census Tract 917	Boston	76.39	8.0	21	230	823	244	26.1	195	74.2	256	16	219	681	247	21.6	178	74.4	257
n/a	Census Tract 808.01‡	Boston	76.32	52.0	26	254	795	238	44.2	279	58.9	228	10	183	263	161	40.0	269	57.8	219
54	Census Tract 8022	Springfield	76.23	4.0	18	210	771	229	45.8	282	74.1	255	23	253	961	270	36.8	258	74.7	258
55	Census Tract 8014.01	Springfield	76.14	18.0	18	211	632	221	39.6	265	86.1	279	19	241	752	254	43.1	282	84.9	276
56	Census Tract 7312.03	Worcester	76.00	28.0	39	280	774	230	49.4	288	44.7	197	39	285	743	253	36.6	254	41.1	181
57	Census Tract 704.02	Boston	75.97	13.0	48	288	3,419	302	53.8	295	12.0	66	7	146	371	188	39.6	265	20.8	120
58	Census Tract 702	Boston	75.16	41.0	77	301	1,486	285	36.3	252	5.2	22	49	291	973	273	27.4	219	5.1	13
59	Census Tract 1003	Boston	74.81	9.0	16	198	643	223	18.9	143	93.8	296	14	209	443	208	24.8	202	93.4	292
60	Census Tract 7330	Worcester	74.64	5.0	27	257	936	253	25.2	189	41.0	187	25	260	865	263	28.0	226	44.0	193



					2010-2014											2015	-2017			
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
61	Census Tract 610	Boston	74.26	7.0	19	217	795	237	44.1	278	40.1	185	10	178	415	199	36.6	255	55.4	214
62	Census Tract 709	Boston	73.98	13.0	21	229	793	236	20.8	160	39.3	182	32	273	1,319	285	17.6	137	40.7	180
63	Census Tract 7324	Worcester	73.85	6.0	44	283	1,002	262	41.8	269	51.4	210	38	283	818	261	30.2	238	64.4	236
64	Census Tract 907	Boston	73.75	8.0	45	286	1,196	270	26.9	201	25.6	140	35	280	963	271	25.7	205	25.4	138
65	Census Tract 7312.04	Worcester	73.75	8.0	25	250	1,513	286	34.9	244	56.6	224	18	234	1,066	277	39.0	264	49.4	204
66	Census Tract 8023	Springfield	73.73	6.0	23	244	496	190	36.2	250	61.4	234	38	282	814	259	45.0	287	73.5	254
67	Census Tract 1010.01	Boston	73.23	4.0	28	258	581	209	20.8	162	96.7	302	18	236	386	191	27.2	218	93.9	294
68	Census Tract 815	Boston	72.92	9.0	13	177	717	226	33.5	237	84.2	276	9	163	492	217	32.7	248	85.1	277
69	Census Tract 3119	Lowell	72.68	8.0	15	189	853	246	42.7	272	34.3	168	16	218	815	260	48.3	293	43.5	190
70	Census Tract 921.01	Boston	72.14	8.0	52	295	967	259	23.3	181	30.6	153	52	292	875	264	20.5	163	32.7	158
71	Census Tract 8009	Springfield	71.95	5.0	17	205	575	205	58.2	299	91.9	291	19	240	637	242	39.7	267	88.9	286
72	Census Tract 912	Boston	71.48	7.0	22	236	873	249	25.5	193	45.5	202	17	225	703	250	22.3	182	46.1	195
73	Census Tract 1004	Boston	71.39	7.0	32	270	812	243	19.4	148	75.7	260	18	231	402	196	22.3	183	77.4	264
74	Census Tract 3883	Lowell	70.73	44.0	23	246	459	188	52.0	292	38.4	180	21	250	401	195	61.5	303	39.4	176
75	Census Tract 7319	Worcester	70.53	10.0	23	245	632	222	30.7	219	48.7	205	17	226	456	213	29.1	233	47.3	198
76	Census Tract 1205	Boston	70.51	12.0	15	192	783	234	21.9	166	51.8	212	10	174	435	205	20.6	165	54.0	212
77	Census Tract 509.01	Boston	70.45	3.0	20	227	500	191	21.5	163	72.9	253	20	244	556	229	19.7	152	70.1	247
78	Census Tract 3104	Lowell	70.45	6.0	19	220	761	227	32.8	233	36.6	176	28	264	1,104	278	28.0	227	36.1	167
79	Census Tract 3101	Lowell	70.30	20.0	33	272	778	232	29.4	214	33.6	166	35	281	707	251	30.6	240	31.2	154
80	Census Tract 922	Boston	70.08	7.0	28	260	1,087	266	11.4	85	56.5	223	33	274	1,252	284	9.9	70	51.9	209
81	Census Tract 502	Boston	69.10	5.0	23	243	520	198	12.7	96	71.3	250	21	251	441	207	17.0	134	73.2	253
82	Census Tract 1010.02	Boston	68.93	6.0	15	191	411	177	22.9	176	92.9	293	17	228	377	190	17.6	138	93.7	293
83	Census Tract 814	Boston	68.78	21.0	14	185	574	203	28.3	208	58.4	227	8	160	332	177	27.5	223	59.9	227
84	Census Tract 1401.06	Boston	68.38	13.0	18	212	1,342	279	27.1	202	75.7	259	7	139	413	198	20.5	162	82.1	271
85	Census Tract 1011.01	Boston	67.87	8.0	14	182	442	185	16.1	123	96.9	303	11	191	369	187	16.9	132	96.5	302
86	Census Tract 7318	Worcester	67.46	7.0	19	218	389	174	32.8	232	44.0	195	17	227	312	173	37.4	262	53.5	211
87	Census Tract 506	Boston	67.46	7.0	16	194	839	245	15.7	118	78.0	266	11	188	540	225	13.5	103	72.6	252
88	Census Tract 1403	Boston	67.12	9.0	25	252	512	194	15.7	117	75.9	261	25	258	450	212	20.0	155	76.1	260
89	Census Tract 501.01	Boston	66.92	6.0	22	238	527	199	23.0	179	65.6	244	18	230	434	203	28.1	228	64.5	237
90	Census Tract 3111	Lowell	66.82	5.0	11	166	574	204	31.7	228	34.4	170	19	239	950	269	24.7	199	27.8	143
91	Census Tract 8011.02	Springfield	66.40	8.0	9	146	803	241	37.0	257	54.8	219	12	201	1,108	279	22.0	181	60.5	228



					2010-2014											2015	-2017			
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
92	Census Tract 3112	Lowell	66.27	6.0	19	215	778	231	27.2	203	33.1	165	16	220	692	249	24.0	193	29.5	148
93	Census Tract 1101.03	Boston	64.81	4.0	27	256	542	200	19.2	147	41.7	190	16	217	316	174	14.0	110	40.5	178
94	Census Tract 1202.01	Boston	64.42	10.0	18	208	508	193	24.7	187	41.9	192	11	193	340	183	14.8	115	41.5	182
95	Census Tract 8021	Springfield	64.18	8.0	20	224	441	184	24.3	184	53.9	217	34	279	765	256	25.9	208	49.4	206
96	Census Tract 507	Boston	63.47	4.0	15	188	386	173	24.7	186	72.3	252	11	196	272	164	26.2	210	71.3	250
97	Census Tract 612	Boston	63.28	6.0	55	297	1,652	289	9.5	63	7.3	34	24	256	588	234	7.5	47	4.9	10
98	Census Tract 402	Boston	62.98	5.0	8	139	611	214	33.6	238	44.2	196	4	94	274	166	24.3	195	37.7	173
99	Census Tract 504	Boston	62.62	6.0	20	225	944	254	9.9	72	60.8	232	11	190	494	220	8.4	55	57.5	215
100	Census Tract 7326	Worcester	62.21	7.0	29	261	860	247	28.9	211	49.1	208	19	238	620	237	19.7	153	46.4	196
101	Census Tract 408.01	Boston	61.69	8.0	16	195	464	189	33.4	235	35.2	174	7	137	184	129	32.5	247	39.1	174
102	Census Tract 910.01	Boston	60.32	4.0	22	240	872	248	9.9	74	15.0	85	23	254	934	267	10.4	74	14.8	76
103	Census Tract 3120	Lowell	60.11	6.0	13	178	626	217	29.0	212	31.4	155	9	166	446	210	25.7	206	42.7	186
104	Census Tract 511.01	Boston	60.06	6.0	30	267	579	208	22.4	174	42.8	193	12	204	203	138	21.1	170	48.9	203
105	Census Tract 7327	Worcester	60.01	4.0	17	202	590	211	36.3	251	45.1	201	20	245	683	248	30.0	237	48.2	202
106	Census Tract 8017	Springfield	59.30	37.0	13	175	204	121	36.0	248	67.2	245	27	263	422	201	31.8	245	68.3	243
107	Census Tract 6.02	Boston	59.29	21.0	12	170	389	175	31.5	225	24.6	135	10	185	308	170	34.4	251	29.2	147
108	Census Tract 303	Boston	59.26	14.0	50	292	959	257	17.9	134	12.9	73	33	275	634	240	16.9	131	11.6	53
109	Census Tract 3124	Lowell	59.15	5.0	11	165	618	216	26.8	200	53.3	216	10	175	542	226	26.8	215	47.2	197
110	Census Tract 705	Boston	58.45	9.0	22	235	424	178	14.7	107	18.0	112	9	165	185	130	21.2	172	22.3	125
111	Census Tract 3118	Lowell	58.05	5.0	15	190	596	212	20.0	154	17.3	106	13	207	505	221	22.0	180	21.5	121
112	Census Tract 1006.03	Boston	56.99	8.0	14	181	783	233	7.9	42	18.9	118	11	198	640	243	6.9	42	18.4	103
n/a	Census Tract 7.03‡	Boston	56.69	55.0	10	156	454	187	53.7	294	16.6	98	8	161	437	206	40.6	272	17.5	96
113	Census Tract 810.01	Boston	55.94	30.0	7	129	179	107	43.0	276	32.7	163	5	115	110	94	45.8	289	39.1	175
114	Census Tract 911	Boston	55.85	14.0	23	241	571	202	21.6	164	11.3	60	20	243	468	214	15.0	116	11.7	54
115	Census Tract 1404	Boston	55.69	10.0	19	223	293	149	11.3	83	88.8	283	10	179	145	115	13.0	98	87.4	282
116	Census Tract 1102.01	Boston	55.30	6.0	9	150	515	196	14.7	106	71.8	251	4	105	213	143	14.7	114	76.6	262
117	Census Tract 3103	Lowell	55.04	9.0	13	174	278	146	20.7	157	32.3	158	25	259	548	227	36.6	256	43.7	191
118	Census Tract 203.03	Boston	54.91	8.0	24	249	799	240	18.5	137	23.0	127	11	186	309	172	19.6	150	24.9	136
119	Census Tract 708	Boston	54.60	17.0	8	142	241	135	20.1	155	21.9	125	10	176	297	167	18.5	145	26.9	142
n/a	Census Tract 7316‡	Worcester	54.57	63.0	17	206	281	147	42.9	275	13.9	79	11	187	166	124	42.2	279	17.2	94
120	Census Tract 1401.07	Boston	54.07	9.0	10	153	440	183	9.5	62	67.8	246	3	92	152	119	9.3	65	58.0	220



								2010-	2014							2015-	2017			
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
121	Census Tract 1009	Boston	53.65	7.0	9	151	273	142	14.4	105	63.6	238	7	140	205	140	11.2	82	60.6	229
122	Census Tract 7322.03	Worcester	53.58	7.0	14	186	650	224	20.8	161	26.8	144	12	202	407	197	24.4	197	41.9	184
123	Census Tract 1104.01	Boston	53.58	4.0	7	130	227	129	11.3	81	65.1	243	7	138	218	147	14.4	111	58.3	221
124	Census Tract 8.02	Boston	53.11	40.0	17	203	254	137	34.0	242	28.2	148	7	145	113	96	31.7	243	23.1	131
125	Census Tract 703	Boston	52.92	8.0	15	187	369	171	12.4	95	9.5	47	14	210	335	179	6.1	30	5.9	19
126	Census Tract 7305	Worcester	52.64	14.0	16	197	578	207	28.8	210	31.8	157	5	128	192	133	28.6	230	35.8	166
127	Census Tract 510	Boston	52.52	7.0	16	199	439	182	15.1	112	45.0	199	5	113	132	110	20.0	157	43.4	189
128	Census Tract 809	Boston	52.31	45.0	10	152	272	141	37.9	259	13.8	77	3	88	93	79	40.9	273	12.8	62
129	Census Tract 1006.01	Boston	52.30	6.0	14	184	316	157	15.6	116	32.8	164	11	189	218	146	15.7	122	47.8	200
130	Census Tract 8004	Springfield	52.23	6.0	12	171	274	143	25.2	190	63.2	236	18	233	395	193	28.7	231	62.9	234
131	Census Tract 3121	Lowell	52.00	5.0	11	163	512	195	22.0	168	32.5	160	11	194	506	222	31.7	244	31.3	156
132	Census Tract 8005	Springfield	51.82	5.0	8	135	311	153	24.3	185	70.5	249	6	131	228	153	27.5	222	71.1	249
133	Census Tract 7320.02	Worcester	51.78	9.0	9	149	226	128	13.0	97	24.7	137	16	214	421	200	7.6	49	20.4	116
134	Census Tract 7304.02	Worcester	51.38	7.0	7	126	586	210	7.3	37	38.2	179	8	162	555	228	13.6	104	36.2	169
135	Census Tract 1007	Boston	50.13	6.0	25	251	713	225	4.3	9	4.2	14	20	248	590	235	6.4	34	5.5	16
n/a	Census Tract 104.05‡	Boston	49.93	82.0	5	108	91	65	50.8	291	16.4	95	8	155	129	107	44.9	285	20.3	115
136	Census Tract 3102	Lowell	49.92	12.0	19	221	363	169	7.0	33	24.3	132	28	266	558	231	13.0	97	33.8	163
137	Census Tract 102.03	Boston	49.54	36.0	5	107	113	83	44.9	280	17.4	107	7	142	146	116	49.6	295	16.7	90
138	Census Tract 1103.01	Boston	49.52	5.0	9	147	438	181	6.1	28	56.5	222	4	102	186	131	9.5	66	57.5	216
139	Census Tract 8015.03	Springfield	49.51	8.0	6	110	188	111	20.8	159	55.6	221	11	192	336	181	20.0	156	64.8	238
140	Census Tract 3530	Cambridge	49.07	16.0	14	183	435	180	21.9	167	18.7	117	17	223	515	223	17.1	135	20.4	117
141	Census Tract 1008	Boston	48.93	5.0	18	209	343	165	6.6	31	29.8	152	15	212	262	160	10.2	72	35.4	165
142	Census Tract 3107	Lowell	48.77	23.0	12	172	327	160	21.6	165	26.5	142	8	158	211	141	23.1	188	22.1	124
143	Census Tract 8002.01	Springfield	48.54	3.0	12	173	244	136	19.5	150	50.3	209	11	197	205	139	26.3	211	59.7	226
144	Census Tract 1304.06	Boston	48.40	14.0	13	176	343	166	15.5	115	60.6	230	9	168	221	151	21.2	174	61.4	230
145	Census Tract 106	Boston	48.38	9.0	10	158	381	172	15.1	111	10.7	56	13	208	450	211	12.8	96	13.4	68
146	Census Tract 8001.02	Springfield	48.35	6.0	7	128	237	134	34.9	246	60.8	231	8	153	258	159	25.3	204	66.4	241
147	Census Tract 3531.01	Cambridge	48.22	32.0	6	114	265	139	26.2	196	21.1	124	12	199	492	218	17.8	140	28.1	145
148	Census Tract 7311.01	Worcester	48.18	7.0	8	136	278	144	26.3	197	35.5	175	5	122	165	123	29.8	235	34.2	164
149	Census Tract 403	Boston	48.08	3.0	11	164	325	159	16.1	124	10.2	54	10	181	308	171	18.0	142	7.3	27
150	Census Tract 1105.02	Boston	47.96	8.0	14	180	398	176	5.4	23	34.8	173	13	206	342	184	5.0	14	40.6	179



					2010-2014											2015-	2017			
								2010-	2014							2015	-2017			
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
151	Census Tract 3524	Cambridge	47.91	17.0	2	49	131	92	29.3	213	43.5	194	2	64	128	106	21.2	173	52.8	210
152	Census Tract 8015.02	Springfield	47.81	5.0	3	69	107	79	27.4	205	73.4	254	4	99	168	125	21.1	171	69.0	244
153	Census Tract 505	Boston	47.61	7.0	4	86	207	122	19.2	146	60.1	229	2	70	119	101	10.9	77	62.1	232
154	Census Tract 512	Boston	47.50	5.0	4	91	199	116	23.3	182	39.7	183	6	132	263	162	13.6	105	36.1	168
155	Census Tract 1401.05	Boston	47.39	12.0	10	154	330	161	4.5	14	64.2	239	7	141	215	145	5.0	13	64.9	239
156	Census Tract 608	Boston	47.21	4.0	26	255	632	220	8.4	53	0.4	1	10	182	252	158	6.4	33	5.9	18
157	Census Tract 8026.01	Springfield	47.20	7.0	11	167	228	130	18.4	136	51.5	211	26	261	472	215	18.4	144	61.4	231
158	Census Tract 811	Boston	46.78	27.0	6	116	146	98	32.0	230	23.9	130	2	61	53	51	33.0	249	29.7	149
159	Census Tract 104.03	Boston	46.72	34.0	3	84	122	89	46.3	284	16.0	90	3	90	118	99	34.5	252	22.6	129
160	Census Tract 7329.01	Worcester	46.51	7.0	19	219	334	162	18.8	139	32.4	159	16	213	265	163	15.5	119	33.7	162
161	Census Tract 8014.02	Springfield	46.27	6.0	3	83	210	123	11.3	82	53.0	215	9	170	623	238	15.5	118	69.5	245
162	Census Tract 404.01	Boston	46.09	8.0	12	169	563	201	18.8	140	8.4	38	5	120	220	150	21.3	175	7.9	29
163	Census Tract 909.01	Boston	45.83	45.0	2	62	76	57	52.2	293	39.8	184	2	69	71	62	48.1	292	40.2	177
164	Census Tract 8001.01	Springfield	45.52	8.0	6	111	198	115	35.9	247	52.8	214	9	164	306	168	19.2	147	50.1	207
165	Census Tract 1204	Boston	45.49	6.0	17	207	312	154	16.0	121	24.5	134	8	159	144	114	11.0	79	17.4	95
166	Census Tract 105	Boston	44.87	39.0	4	93	130	91	34.9	245	19.9	120	5	121	161	122	27.4	220	22.0	123
167	Census Tract 7304.01	Worcester	44.82	9.0	8	133	189	112	18.7	138	41.4	189	7	148	181	128	20.9	167	36.3	171
168	Census Tract 3117	Lowell	44.81	7.0	13	179	368	170	17.0	128	16.6	97	13	205	337	182	24.1	194	15.3	79
169	Census Tract 7.04	Boston	44.47	30.0	8	137	199	117	27.2	204	16.6	99	5	114	109	92	26.6	213	17.7	99
170	Census Tract 8003	Springfield	44.24	9.0	7	125	211	124	19.0	145	57.1	225	12	200	398	194	13.8	107	59.7	225
171	Census Tract 1201.04	Boston	44.06	4.0	3	81	178	106	20.2	156	27.6	147	6	135	332	178	17.4	136	25.3	137
172	Census Tract 606	Boston	42.93	6.0	19	216	771	228	4.9	18	1.5	6	11	195	374	189	5.5	21	5.0	11
173	Census Tract 8015.01	Springfield	42.64	6.0	6	112	134	93	16.5	125	76.1	262	10	184	247	157	6.8	41	71.0	248
174	Census Tract 1	Boston	42.20	11.0	7	120	216	127	17.1	129	26.8	146	9	172	243	156	13.4	101	20.6	118
175	Census Tract 3122	Lowell	41.97	9.0	10	157	301	150	11.5	86	28.3	149	8	152	220	149	20.2	160	33.4	161
176	Census Tract 1402.01	Boston	41.82	6.0	7	123	344	167	8.6	54	48.1	204	4	110	227	152	6.3	31	54.3	213
177	Census Tract 3521.02	Cambridge	41.55	13.0	8	143	341	164	12.4	92	10.6	55	6	129	274	165	13.3	100	19.5	110
178	Census Tract 707	Boston	41.53	7.0	5	109	213	125	8.9	56	40.2	186	3	73	110	93	8.7	62	30.4	152
179	Census Tract 1401.02	Boston	41.03	9.0	7	121	187	110	9.4	58	55.4	220	5	118	114	98	6.4	35	66.3	240
180	Census Tract 107.02	Boston	40.91	16.0	10	160	449	186	7.9	43	7.3	33	7	150	306	169	6.7	39	6.8	24
181	Census Tract 1402.02	Boston	40.10	7.0	11	162	228	131	9.4	61	52.4	213	5	124	105	89	10.1	71	59.1	223



								2010-	2014						2015	-2017				
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
182	Census Tract 706	Boston	40.08	7.0	6	115	313	155	2.7	4	4.5	16	7	144	336	180	5.1	16	7.7	28
183	Census Tract 1304.04	Boston	39.86	8.0	12	168	427	179	4.5	13	25.0	138	6	130	218	148	5.4	20	30.9	153
184	Census Tract 3113	Lowell	39.83	12.0	11	161	344	168	15.8	119	17.7	109	10	173	326	176	13.9	109	15.0	77
185	Census Tract 406	Boston	39.41	8.0	16	196	628	218	7.5	39	6.9	28	5	123	196	135	2.5	4	6.8	25
186	Census Tract 1207	Boston	38.86	15.0	2	48	112	81	11.9	90	16.0	92	1	45	67	59	16.5	128	28.1	146
187	Census Tract 1104.03	Boston	38.70	6.0	5	106	138	94	14.2	102	54.0	218	5	117	129	108	12.2	91	47.9	201
188	Census Tract 2.02	Boston	38.16	11.0	7	124	234	132	22.7	175	23.9	129	6	134	197	136	18.2	143	29.9	151
189	Census Tract 7331.02	Worcester	38.11	6.0	5	103	278	145	7.6	40	25.5	139	7	149	392	192	11.0	78	23.3	133
n/a	Census Tract 8.03‡	Boston	38.11	92.0	10	155	171	104	34.7	243	17.2	105	3	86	49	46	31.1	242	19.1	108
190	Census Tract 6.01	Boston	37.95	16.0	8	138	287	148	22.0	170	9.3	44	8	157	234	155	13.4	102	13.1	63
191	Census Tract 101.04‡	Boston	37.20	54.0	5	101	106	78	26.6	198	14.3	82	3	85	63	58	23.5	190	13.4	69
192	Census Tract 203.02	Boston	37.16	16.0	3	82	317	158	13.1	98	3.7	10	4	109	443	209	12.0	90	2.7	3
193	Census Tract 7311.02	Worcester	36.29	10.0	6	118	308	152	9.5	64	24.5	133	7	136	342	185	10.4	75	20.7	119
n/a	Census Tract 101.03‡	Boston	36.13	93.0	7	131	200	118	42.8	273	12.1	67	1	27	27	27	37.1	260	15.9	85
n/a	Census Tract 102.04‡	Boston	36.12	74.0	4	88	117	87	39.3	263	7.0	29	2	60	60	56	41.2	276	11.2	46
194	Census Tract 7310.02	Worcester	36.00	8.0	8	145	167	103	19.8	153	30.6	154	5	119	102	85	21.6	177	25.9	139
195	Census Tract 3114	Lowell	35.17	13.0	7	127	139	95	18.0	135	26.3	141	5	125	112	95	20.7	166	27.9	144
196	Census Tract 604	Boston	34.65	10.0	15	193	315	156	9.4	59	4.5	17	9	169	172	126	11.5	88	4.5	9
197	Census Tract 7.01	Boston	34.32	33.0	3	72	85	60	30.8	220	16.2	94	1	46	32	32	27.0	217	16.3	87
n/a	Census Tract 104.04‡	Boston	34.15	80.0	3	78	53	37	64.9	304	14.2	81	1	18	13	11	59.0	300	14.1	75
199	Census Tract 5.04	Boston	33.73	23.0	4	96	101	75	30.9	222	11.4	62	4	108	100	83	25.2	203	10.7	44
200	Census Tract 7323.01	Worcester	33.27	9.0	8	141	269	140	4.3	8	13.2	74	7	147	193	134	5.2	17	22.7	130
201	Census Tract 3106.02	Lowell	33.22	7.0	5	99	104	77	15.0	109	19.0	119	9	167	213	144	19.9	154	19.1	109
202	Census Tract 1206	Boston	33.07	12.0	2	41	68	54	10.8	79	17.0	102	2	56	80	68	8.6	57	13.9	73
203	Census Tract 3105	Lowell	32.37	40.0	3	76	111	80	19.4	149	16.9	101	4	104	132	111	28.4	229	13.1	64
204	Census Tract 7323.02	Worcester	32.16	9.0	6	117	197	114	12.4	93	29.4	151	3	82	93	78	19.2	148	36.3	170
205	Census Tract 107.01	Boston	32.15	25.0	5	105	176	105	8.2	50	7.0	31	4	101	159	121	9.9	69	10.3	41
206	Census Tract 7328.02	Worcester	31.97	6.0	5	102	139	96	8.8	55	24.2	131	8	154	232	154	11.8	89	31.7	157
207	Census Tract 3525	Cambridge	31.93	14.0	2	37	65	51	15.2	113	17.8	110	2	72	92	77	14.6	113	18.3	102
208	Census Tract 3115	Lowell	31.63	9.0	4	90	152	100	19.8	152	18.6	116	1	32	44	39	27.9	225	32.8	159
209	Census Tract 8016.05	Springfield	31.58	5.0	3	79	94	67	22.1	171	39.2	181	4	103	130	109	24.6	198	43.0	188



								2010-	2014						2015-	.2017				
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
n/a	Census Tract 103‡	Boston	31.49	93.0	1	24	20	15	27.5	206	14.1	80	1	31	19	17	23.1	187	15.7	83
211	Census Tract 1105.01	Boston	31.16	3.0	8	144	304	151	11.7	87	28.9	150	3	87	106	90	11.2	80	13.6	70
212	Census Tract 8002.02	Springfield	30.24	1.0	2	44	182	109	7.9	41	37.3	177	2	62	201	137	16.3	126	45.9	194
213	Census Tract 3534	Cambridge	30.16	16.0	1	28	49	33	9.6	66	34.6	172	4	98	148	117	12.7	94	33.3	160
214	Census Tract 302	Boston	30.02	14.0	4	94	234	133	14.8	108	9.9	49	3	93	211	142	11.5	87	13.2	66
215	Census Tract 605.01	Boston	29.85	5.0	9	148	260	138	8.1	45	4.8	18	4	95	98	81	4.5	11	2.8	4
216	Census Tract 8016.02	Springfield	29.47	8.0	1	29	38	25	14.4	104	41.7	191	5	127	152	120	22.4	184	42.7	185
217	Census Tract 3527	Cambridge	29.29	13.0	2	50	98	73	15.3	114	32.6	161	0	15	18	16	11.5	86	16.5	88
218	Census Tract 4.01	Boston	28.72	19.0	4	98	94	68	25.3	191	12.6	72	2	49	35	33	27.4	221	6.6	23
219	Census Tract 3549	Cambridge	28.72	9.0	3	64	57	45	18.9	141	37.8	178	1	29	17	15	23.0	186	47.7	199
220	Census Tract 3123	Lowell	28.13	4.0	8	140	191	113	8.2	49	10.0	51	6	133	151	118	2.9	5	15.0	78
221	Census Tract 1303	Boston	27.76	7.0	8	134	215	126	0.2	2	6.8	27	7	143	191	132	0.9	2	9.0	33
222	Census Tract 8016.01	Springfield	27.65	25.0	2	51	50	36	19.0	144	34.3	169	5	126	133	112	16.6	129	37.1	172
223	Census Tract 3521.01	Cambridge	27.58	30.0	1	20	45	28	26.6	199	23.2	128	2	54	91	76	23.4	189	22.3	126
224	Census Tract 3526	Cambridge	27.26	13.0	1	17	34	23	29.6	216	18.0	111	1	34	45	42	21.3	176	23.7	134
225	Census Tract 1106.07	Boston	26.59	6.0	7	132	164	102	14.2	101	16.8	100	5	116	103	88	5.3	19	14.1	74
226	Census Tract 3535	Cambridge	26.49	15.0	1	35	58	46	30.6	218	31.8	156	1	26	45	43	6.8	40	18.8	106
227	Census Tract 203.01	Boston	26.35	13.0	4	87	143	97	11.9	89	2.3	8	2	52	74	65	12.8	95	11.2	48
228	Census Tract 2.01	Boston	26.03	16.0	3	70	97	72	13.2	99	14.5	84	4	111	124	105	14.5	112	11.3	49
n/a	Census Tract 3531.02‡	Cambridge	25.75	92.0	1	21	22	16	31.5	226	13.3	75	2	53	35	34	22.5	185	13.9	72
230	Census Tract 104.08	Boston	25.45	26.0	0	7	14	10	22.4	173	9.5	46	0	14	25	24	19.5	149	10.4	42
231	Census Tract 401	Boston	25.26	3.0	6	119	336	163	2.1	3	6.4	25	1	39	61	57	2.3	3	5.2	14
232	Census Tract 4.02	Boston	25.20	25.0	3	75	112	82	23.2	180	9.4	45	2	48	55	52	17.8	139	9.5	37
233	Census Tract 7303	Worcester	24.64	6.0	7	122	180	108	12.2	91	8.5	39	7	151	178	127	8.7	60	18.9	107
n/a	Census Tract 5.02‡	Boston	24.58	63.0	3	67	47	31	31.2	223	11.1	59	0	10	6	8	20.1	159	11.5	52
235	Census Tract 304	Boston	23.99	13.0	4	89	153	101	9.7	69	3.1	9	3	76	101	84	9.7	68	6.0	21
236	Census Tract 3522	Cambridge	23.89	9.0	1	15	35	24	17.1	131	18.2	113	1	42	82	71	15.6	120	23.1	132
237	Census Tract 7310.01	Worcester	23.88	10.0	2	39	91	64	8.2	51	18.3	115	1	22	37	35	5.1	15	20.0	113
238	Census Tract 3542	Cambridge	23.61	6.0	1	30	55	41	5.7	24	4.8	19	3	84	114	97	4.7	12	5.1	12
239	Census Tract 3532	Cambridge	22.71	37.0	1	22	22	17	14.3	103	15.9	89	2	63	43	38	16.8	130	16.9	91
240	Census Tract 3546	Cambridge	22.03	9.0	3	77	70	55	10.2	75	26.8	145	1	24	22	18	7.9	50	20.1	114



								2010-	2014						2015	-2017				
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
241	Census Tract 8016.03	Springfield	21.99	5.0	2	38	48	32	17.3	132	34.5	171	4	107	139	113	8.2	52	31.2	155
242	Census Tract 1304.02	Boston	21.84	3.0	5	104	119	88	5.9	25	10.9	57	4	112	107	91	6.9	43	12.4	59
243	Census Tract 3533	Cambridge	21.84	15.0	2	47	63	50	6.9	32	12.3	68	3	81	86	74	7.5	46	11.5	51
244	Census Tract 7328.01	Worcester	21.80	10.0	2	56	55	39	8.0	44	21.0	123	2	59	44	41	11.3	85	22.4	128
245	Census Tract 8026.02	Springfield	21.69	4.0	1	26	75	56	7.1	36	4.3	15	2	65	118	100	13.6	106	11.8	55
246	Census Tract 3116	Lowell	21.60	7.0	4	85	88	62	9.9	73	17.4	108	3	91	79	66	12.4	92	11.8	56
247	Census Tract 3125.01	Lowell	21.46	4.0	4	92	128	90	10.4	77	12.4	70	2	68	68	60	12.7	93	18.7	105
248	Census Tract 7322.02	Worcester	21.16	6.0	1	18	33	22	16.8	127	12.5	71	3	78	102	86	16.2	125	16.3	86
249	Census Tract 7331.01	Worcester	21.01	8.0	3	66	152	99	5.2	20	15.7	87	1	36	80	67	13.1	99	19.8	112
250	Census Tract 3539	Cambridge	21.01	75.0	0	8	3	5	20.7	158	16.0	91	0	5	0	1	26.9	216	17.7	100
251	Census Tract 3106.01	Lowell	20.52	8.0	2	55	39	26	6.0	27	20.4	121	4	97	73	64	6.0	26	26.8	141
252	Census Tract 1201.03	Boston	20.50	9.0	2	60	203	120	5.9	26	10.2	53	0	8	25	25	3.9	8	8.7	32
n/a	Census Tract 3537‡	Cambridge	20.42	62.0	2	58	42	27	19.6	151	13.3	76	2	58	31	30	16.4	127	12.8	61
254	Census Tract 3.01	Boston	20.35	10.0	2	54	92	66	14.1	100	9.6	48	1	25	41	36	8.5	56	17.5	97
255	Census Tract 3528	Cambridge	20.31	17.0	0	11	19	14	10.4	76	12.3	69	1	41	68	61	11.2	81	17.6	98
256	Census Tract 603.01	Boston	20.14	6.0	6	113	201	119	7.1	34	1.0	3	0	12	10	10	8.4	54	2.5	2
257	Census Tract 202	Boston	20.11	15.0	3	80	86	61	16.6	126	9.2	43	1	28	28	28	13.9	108	13.3	67
258	Census Tract 602	Boston	20.00	5.0	2	42	95	70	7.4	38	0.6	2	2	50	81	69	6.1	29	1.0	1
259	Census Tract 7308.02	Worcester	19.87	11.0	2	43	117	86	6.3	30	3.7	11	2	47	100	82	15.9	124	13.9	71
260	Census Tract 3523	Cambridge	19.69	16.0	2	40	54	38	17.1	130	15.4	86	0	6	0	3	15.1	117	19.6	111
261	Census Tract 8024	Springfield	19.66	7.0	3	65	89	63	6.3	29	32.6	162	3	89	102	87	8.9	64	26.4	140
262	Census Tract 7322.01	Worcester	19.59	12.0	1	31	56	43	11.1	80	20.7	122	2	67	81	70	18.0	141	15.4	80
263	Census Tract 301	Boston	18.86	13.0	2	59	103	76	17.4	133	1.3	5	3	80	123	104	7.6	48	4.2	8
264	Census Tract 3538	Cambridge	18.60	20.0	0	12	9	6	16.0	122	11.3	61	4	96	84	73	15.7	121	12.5	60
265	Census Tract 3540	Cambridge	18.58	45.0	4	97	116	85	11.4	84	11.0	58	1	33	25	23	19.1	146	11.2	47
266	Census Tract 7329.02	Worcester	18.57	98.0	0	4	0	4	47.4	285	7.8	35	0	2	0	6	47.7	291	15.8	84
267	Census Tract 3543	Cambridge	18.49	6.0	2	36	57	44	15.9	120	17.0	103	1	38	52	50	8.3	53	18.0	101
268	Census Tract 601.01	Boston	18.08	8.0	2	57	67	53	10.8	78	3.9	12	4	106	123	103	4.0	9	3.3	5
269	Census Tract 201.01	Boston	17.44	5.0	4	95	115	84	4.4	11	2.1	7	2	66	47	44	5.2	18	5.5	15
270	Census Tract 7301	Worcester	17.09	9.0	3	74	66	52	9.2	57	26.5	143	3	74	57	53	8.7	61	17.0	92
271	Census Tract 5.03	Boston	16.91	30.0	0	5	11	7	29.6	215	7.1	32	0	3	0	5	20.3	161	5.8	17



						2010-2014					2015-2017									
Rank	Census Tract Name	City	DIA	Student enroll (%)	Avg arrests / year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Avg arrests /year	Rank	Avg arrests/ 100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank
272	Census Tract 3.02	Boston	16.90	14.0	2	53	82	58	22.3	172	6.3	24	2	51	59	55	11.3	84	15.5	81
273	Census Tract 305	Boston	16.45	13.0	1	27	47	29	8.2	48	1.3	4	2	71	96	80	9.5	67	5.9	20
274	Census Tract 8025	Springfield	16.31	7.0	3	68	47	30	4.2	7	21.9	126	3	75	48	45	10.5	76	29.7	150
275	Census Tract 7302	Worcester	15.26	6.0	1	34	33	21	8.3	52	16.4	96	0	7	0	2	8.6	59	11.8	57
276	Census Tract 3550	Cambridge	15.15	7.0	1	19	32	20	9.9	71	24.7	136	1	43	50	47	10.2	73	17.1	93
277	Census Tract 3547	Cambridge	14.36	13.0	1	25	55	40	4.8	17	13.9	78	0	13	14	12	8.8	63	9.8	38
278	Census Tract 1302	Boston	13.79	6.0	2	52	49	34	4.4	10	10.0	50	3	83	72	63	8.6	58	7.2	26
279	Census Tract 7309.02	Worcester	13.55	37.0	1	23	30	19	11.8	88	16.1	93	0	9	9	9	17.0	133	16.6	89
280	Census Tract 7307	Worcester	13.12	10.0	3	71	49	35	7.1	35	18.3	114	1	40	23	20	6.4	36	21.6	122
281	Census Tract 3541	Cambridge	12.74	23.0	2	63	96	71	4.6	15	8.7	40	1	20	26	26	4.3	10	9.3	35
282	Census Tract 1301	Boston	12.74	6.0	5	100	99	74	3.4	5	4.1	13	2	57	31	31	3.0	6	8.1	30
n/a	Census Tract 7312.02‡	Worcester	12.49	100.0	1	16	55	42	0.0	1	15.7	88	1	37	90	75	0.0	1	18.4	104
284	Census Tract 3545	Cambridge	12.31	13.0	0	1	0	2	12.4	94	11.9	65	1	30	51	49	11.2	83	10.3	40
285	Census Tract 1201.05	Boston	12.08	17.0	1	14	29	18	9.5	65	10.1	52	0	16	15	13	5.9	24	9.0	34
286	Census Tract 3125.02	Lowell	12.00	5.0	2	46	59	47	4.9	19	6.5	26	3	77	82	72	5.5	22	6.5	22
287	Census Tract 108.01	Boston	11.68	15.0	2	45	62	49	5.2	21	4.9	20	2	55	58	54	6.1	28	8.3	31
288	Census Tract 8016.04	Springfield	11.66	6.0	0	9	13	9	4.6	16	17.2	104	1	35	42	37	3.8	7	24.6	135
289	Census Tract 3536	Cambridge	11.65	47.0	0	3	0	1	9.7	70	14.4	83	1	23	15	14	7.3	45	15.7	82
290	Census Tract 108.02	Boston	11.12	16.0	0	10	14	11	9.4	60	7.0	30	1	44	44	40	6.5	37	11.0	45
291	Census Tract 7306	Worcester	11.00	26.0	1	32	17	13	4.4	12	11.8	64	4	100	51	48	6.0	27	13.1	65
292	Census Tract 7309.01	Worcester	10.85	12.0	3	73	95	69	9.6	67	11.5	63	1	19	23	21	5.8	23	10.6	43
293	Census Tract 7308.01	Worcester	8.87	7.0	2	61	82	59	3.5	6	5.8	23	1	21	23	22	6.6	38	3.3	6
294	Census Tract 3529	Cambridge	8.44	8.0	1	33	59	48	9.7	68	5.1	21	0	4	0	4	8.0	51	4.2	7
295	Census Tract 1106.01	Boston	8.37	4.0	0	13	17	12	8.1	46	8.2	36	1	17	28	29	7.2	44	10.2	39
296	Census Tract 3544	Cambridge	7.45	10.0	0	2	0	3	8.1	47	8.2	37	0	11	23	19	6.3	32	12.2	58
297	Census Tract 3548	Cambridge	5.77	10.0	0	6	11	8	5.2	22	8.8	41	0	1	0	7	6.0	25	9.3	36

Note: 15 Tracts grayed out and italicized had more than 50% of residents in undergraduate or graduate degree programs (‡), "-" indicates tract did not have data in that time period.







Cannabis Control Commission

Monthly Public Meeting

March 11, 2021 at 10:00 a.m. via Microsoft Teams Live





Agenda

- 1. Call to Order
- 2. Chairman's Comments and Updates
- 3. Minutes for Approval
- 4. Executive Director's Report
- 5. Staff Recommendations on Changes of Ownership
- 6. Staff Recommendations on Renewals
- 7. Staff Recommendations on Final Licenses
- 8. Staff Recommendations on Provisional Licenses
- **9.** Commission Discussion and Votes
- 10. New Business that the Chair did not Anticipate at the Time of Posting
- 11. Next Meeting Date
- 12. Adjournment





Commission Update

March 11, 2021





Highlights from Licensing Data*

- 15 applications awaiting first review
- 20 applications for Commission consideration
- 30 applications awaiting 3rd party responses
- 95,184 certified active patients
- 270 expedited applications



^{*}Additional data available at the end of slide presentation



The totals below are all license applications received to date.

Type	#
Pending	211
Withdrawn	795
Incomplete (Less than 4 packets submitted)	6,368
Denied	4
Approved: Delivery-Only Pre-Certification	59
Approved: Licenses	774
Total	8,211

^{*}Additional data available at the end of slide presentation



The totals below are number of licenses approved by category.

Type	#
Craft Marijuana Cooperative	1
Delivery-Only Provisional License	6
Independent Testing Laboratory	11
Marijuana Cultivator	236
Marijuana Microbusiness	17
Marijuana Product Manufacturer	181
Marijuana Research Facility	0
Marijuana Retailer	313
Marijuana Third Party Transporter	4
Marijuana Transporter with Other Existing ME License	5
Total	774

^{*}Additional data available at the end of slide presentation



The totals below are number of licenses approved by stage.

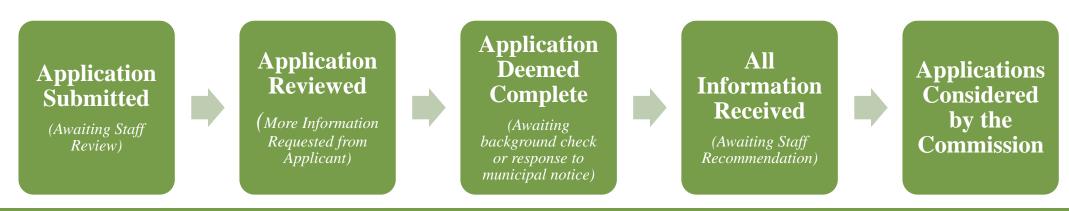
Туре	#
Pre-Certified/Delivery Endorsement Microbusiness	59
Provisionally Approved	110
Provisional License	415
Final License	39
Commence Operations	210
Total	833

Provisionally approved means approved by the Commission but has not submitted license fee payment yet – provisional license has not started

^{*}Additional data available at the end of slide presentation



Status	#
Application Submitted: Awaiting Review	15
Application Reviewed: More Information Requested	142
Application Deemed Complete: Awaiting 3 rd Party Responses	30
All Information Received: Awaiting Commission Consideration	20
Applications Considered by Commission (includes Delivery Pre-Cert)	837
Total	1,044



^{*}Additional data available at the end of slide presentation



The totals below are distinct license numbers that have submitted all required packets.

The 1,048 applications represent 592 separate entities

Type	#
MTC Priority	252
Economic Empowerment Priority	60
Expedited Review	270
General Applicant	466
Total	1,048

Expedited Applications				
Expedited: License Type	41			
Expedited: Social Equity Participant	91			
Expedited: Disadvantaged Business Enterprise	113			
Expedited: Two or More Categories	25			
Total	270			

^{*}Additional data available at the end of slide presentation



Of 833 applications approved by the Commission, the following applications have Economic Empowerment Priority Review, Social Equity Program Participant, and/or Disadvantaged Business Enterprise status. Please note, applicants may hold one or more statuses.

Туре	Economic Empowerment	Social Equity Program	Disadvantaged Business Enterprise
Pre-Certified/Delivery Endorsed Microbusiness	18	45	7
Provisionally Approved	8	13	32
Provisional License	11	20	59
Final License	Ο	1	4
Commence Operations	3	4	15
Total	40	83	117

^{*}Additional data available at the end of slide presentation



MMJ Licensing Data | March 11, 2021

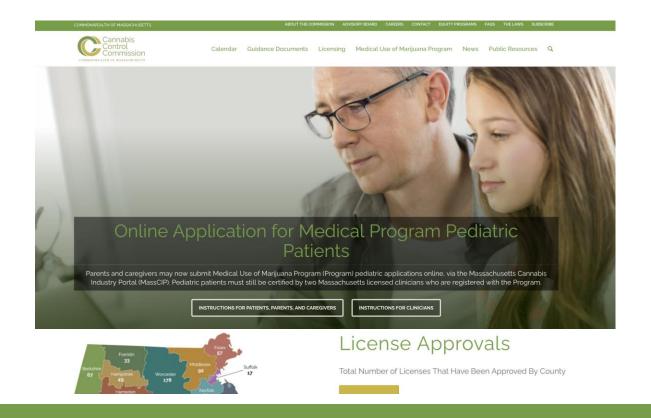
MTC License Applications	#
Pending-Application of Intent Stage	0
Pending-Management and Operations Profile Stage	0
Pending-Siting Profile Stage	3
Application Expired	150
Application Withdrawn	3
Total	156

MTC Licenses	#
Provisional	53
Final	9
Commence Operations	77
License Expired	37
Total	176

^{*}Additional data available at the end of slide presentation



MassCannabisControl.com Redesign

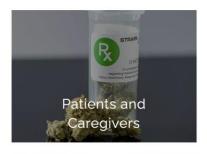




Constituent-based Architecture



ic Resources Calendar Find a Retailer Contact Q













- Organizes web journey for prioritized constituent needs
 - Patients and Caregivers
 - Applicants and Licensees
 - Adult Consumers
 - Parents, etc.



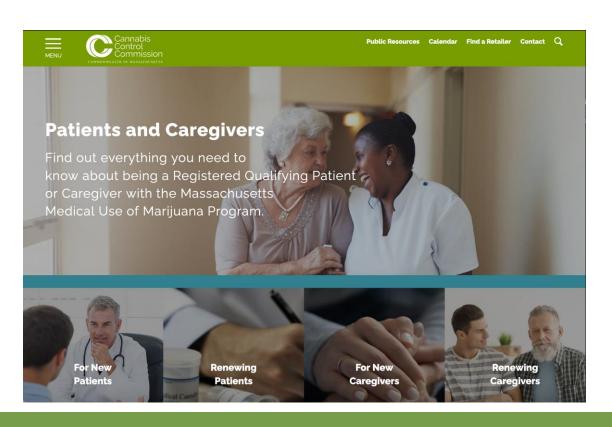
Website Redesign Goals

- Consolidate medical-use and adult-use websites
- Optimize user-experience (UX) for key stakeholders
- Enhance document and keyword searchability
- Increase site accessibility





Medical Integration



- Unified web presence
- Patient, Caregiver, and Provider content
- Directs traffic to Medical Use of Marijuana
 Program Online System for registration and certification



Find a Retailer



You must be 21 years old or older to purchase cannabis and cannabis-infused products. There may be exclusions for the Medical Use of Marijuana Program. Learn more about

All MTCs and MEs must be licensed by the Cannabis Control Commission.

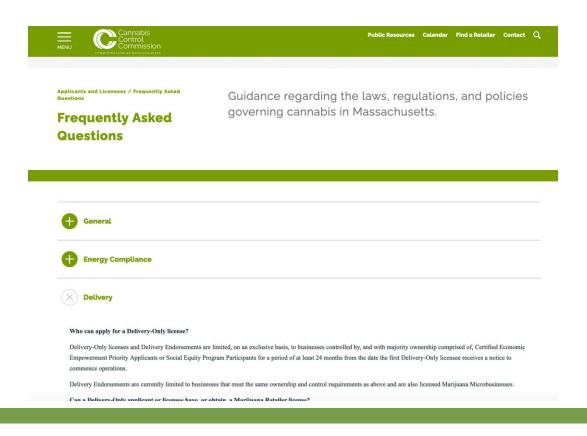
Massachusetts adult-use marijuana laws.



- Locate MTCs and MEs
- Sort by prioritized status
 - EEA, SEP, MBE, etc.



Frequently Asked Questions



- Expedites timely updates
- Centralized location
- Discoverable by Google and other search engines



Search Engine Indexing



New Search

Can't find what you're looking for? Please try a different search term or review our Popular Documents.

Shawn Collins

256 search results for: Shawn Collins

SCOUI-Legislative-Report-01.01.18-Final

January 2, 2019

...recent and scientifically accurate information out to the commission. S. Collins agreed, the best way to manage that give all of the material available on this topic, to make sure...

Commission and Leadership Team

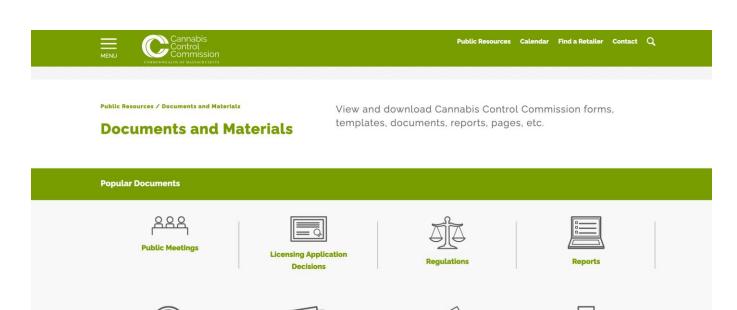
July 13, 202

...Commissioner Stebbins holds a Bachelor of Arts in Political Science from The George Washington University. Leadership Team **Shawn Collins** Executive Director **Shawn.Collins**@CCCMass.com The Cannabis Control Commission unanimously appointed **Shawn Collins**...

- Enhances transparency and accessibility
- Discoverable by Google and other search engines



Public Documents



Forms and

Templates

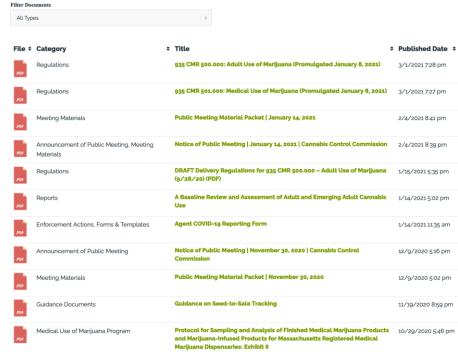
Documents

Enforcement

Actions

Medical Use of Marijuana

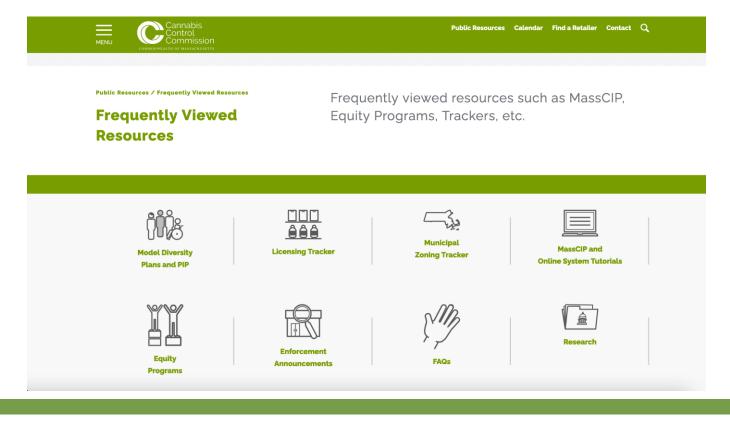
Program documents



Document Title



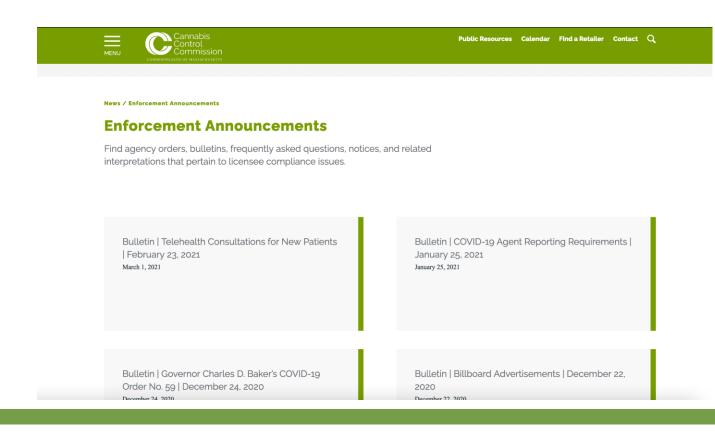
Frequently Viewed Resources



- Aggregates key resources
 - Model Diversity Plans & PIPs
 - Equity Programs page
 - Trackers
 - Tutorials, etc.



Enforcement Actions



- Enhances compliance
- Ensures equal access to regulatory interpretations
- Dedicated resource for bulletins, FAQs, etc.



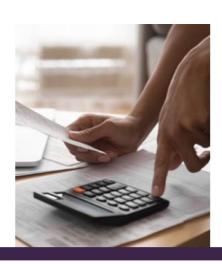
Next Steps

- Additional QA testing with stakeholders
- Site migration and launch
- Regulatory implementation revisions

Applicants & Licensees / License Fees

License Fees

The Commission issues various types of licenses for Adult Use Marijuana Establishments and Medical Marijuana Treatment Centers. Learn more about the application fees and annual license fees for all license types.



Fees

Overview

General Fees

Application and Annual Fees Applicants and licensees must comply with the Cannabis Control Commission regulations promulgated on January 8, 2021. While the agency continues to implement updates to those regulations, information contained on these webpages may require updates and verification by applicants and licensees. Thank you for your understanding.

Overview



Questions?



Cannabis Advisory Board Update

March 11, 2021





Hiring Update

Positions Closed & In Process:

- HR/Operations Coordinator
- Press Secretary
- Chief Technology & Innovation Officer
- Director of Equity Programming and Community Outreach





Hiring Update

Current Postings

- Investigator
- Licensing Specialist





Budget Update

- Governor's FY22 H1 Budget
 - 1070-0840 | Cannabis Control Commission | \$12,400,000
 - 1070-0841 | Public Awareness Campaign | \$0
 - 1070-0842 | Medical Use of Marijuana Program | \$2,796,869
- Represents level funding at present FY21 levels, and Operations and Medical Use of Marijuana Program line items are consistent with the Commission's FY22 request. The Commission continues to advocate for \$1M for the Public Awareness Campaign line item.







Staff Recommendations: Changes of Ownership

- a. Apical, Inc.
- b. Community Growth Partners Great Barrington Operations, LLC
- c. Community Growth Partners Northampton Operations, LLC
- d. Curaleaf Massachusetts, Inc.
- e. Curaleaf North Shore, Inc.
- f. I.N.S.A., Inc.
- g. Lynn Organics, LLC
- h. NS AJO Holdings, Inc.
- i. TDMA Orange, LLC
- j. The Heirloom Collective, Inc.





Staff Recommendations: Renewals

- a. 1620 Labs, LLC (#MCR139966)
- b. 27 Broom Street, LLC (#MCR139964)
- c. 27 Broom Street, LLC (#MCR139973)
- d. 27 Broom Street, LLC (#MPR243589)
- e. Bask, Inc. (#MCR139958)
- f. Bask, Inc. (#MPR243579)
- g. BWell Holdings, Inc. (#MRR205689)
- h. Canna Provisions Inc (#MRR205685)
- i. Canna Provisions Inc (#MRR205686)
- j. Cannavanna, Inc. (#MRR205693)
- k. CNA Stores, Inc. (#MRR205691)
- I. CNA Stores, Inc. (#MRR205692)
- m. Commcan, Inc. (#MCR139957)
- n. Commcan, Inc. (#MPR243581)
- o. Cultivate Holdings LLC (#MCR139953)
- p. Cultivate Holdings LLC (#MPR243575)

- q. Elev8 Cannabis Inc (#MRR205677)
- r. Evergreen Strategies, LLC (#MRR205688)
- s. Evergreen Strategies, LLC (#MRR205697)
- t. Frozen 4 Corporation (#MPR243580)
- u. Green Biz LLC (#MRR205687)
- v. Green Line Boston, Inc. (#MCR139955)
- w. Green Line Boston, Inc. (#MPR243578)
- x. Green Railroad Group, Inc. (#MRR205679)
- y. Greener Leaf, Inc. (#MRR205700)
- z. Healthy Pharms, Inc. (#MCR139962)
- aa. Healthy Pharms, Inc. (#MPR243582)
- bb. Healthy Pharms, Inc. (#MRR205690)
- cc. Holistic Industries, Inc. (#MCR139968)
- dd. Holistic Industries, Inc. (#MPR243583)
- ee. Jolly Green Inc (#MCR139967)



Staff Recommendations: Renewals

- ff. Lazy River Products, LLC (#MCR139976)
- gg. Lazy River Products, LLC (#MPR243591)
- hh. Lazy River Products, LLC (#MRR205704)
- ii. Nature's Remedy of Massachusetts, Inc. (#MPR139963)
- jj. Nature's Remedy of Massachusetts, Inc. (#MPR243590)
- kk. Nature's Remedy of Massachusetts, Inc. (#MRR205698)
- II. Nature's Remedy of Massachusetts, Inc. (#MRR205701)
- mm. Nova Farms, LLC (#MCR139969)
- nn. Platinum Hydrolab, Inc. (#MCR139942)
- oo. Platinum Hydrolab, Inc. (#MPR243568)
- pp. Resinate, Inc. (#MCR139971)
- qq. Resinate, Inc. (#MPR243586)
- rr. Resinate, Inc. (#MRR205694)
- ss. Resinate, Inc. (#MRR205696)
- tt. Theory Wellness Inc (#MCR139972)

- uu. Tower Three, LLC (#MCR139961
- vv. TYCA Green (#MCR139970)
- ww. TYCA Green (#MPR243585)
- xx. TYCA Green (#MRR205695)
- yy. Greencare Therapeutics Inc., Medical Marijuana Treatment Center
- zz. Green Meadows Farm, LLC, Medical Marijuana Treatment Center
- aaa. Heal, Inc., Medical Marijuana Treatment Center
- bbb. Just Healthy, LLC, Medical Marijuana Treatment Center
- ccc. Liberty Compassion, Inc. (#RMD1465), Medical Marijuana Treatment Center
- ddd. Mass Alternative Care, Inc. (#RMD1527), Medical Marijuana Treatment Center



Staff Recommendations: Final Licenses

- a. Ascend Mass, LLC (#MR282077), Retail
- b. CCC Wellfleet NV, LLC (#MR282685), Retail
- c. Cloud Creamery, LLC (#MP281412), Product Manufacturer
- d. Elevated Roots, LLC (#MR283092), Retail
- e. Emerald Grove, Inc. (#MR282808), Retail
- f. GreenStar Herbals, Inc. (#MR282207), Retail
- g. Hennep, Inc. (#MR281450), Retail
- h. HyeCorp, LLC (#MR282460), Retail
- i. Legal Greens, LLC (#MR282937), Retail
- j. Mass Wellspring (#MR281363), Retail
- k. Nature's Embrace, Inc. (#MR282669), Retail
- I. Supercritical Mass Laboratories, Inc. (#MP281321), Product Manufacturer
- m. ACK Natural, Inc. (#MTC1627), Medical Marijuana Treatment Center







Staff Recommendations: Provisional Licenses

- a. 311 Page Blvd, LLC (#MRN282714), Product Manufacturer
- b. Charlemont Farmworks, LLC (#MCN283116), Cultivation, Tier 11 / Outdoor
- c. Elevation, Inc. (#MRN281472), Retail
- d. Faded, LLC (#DOA100108), Delivery-Only
- e. GTE Millis, LLC (#MPN281965), Product Manufacturer
- f. Lovewell Provisions, LLC (#MRN283413), Retail
- g. Noble Manna, Inc. (#MRN282984), Retail
- h. Nuestra, LLC (#MRN281469), Retail
- i. Paper Crane Provisions, LLC (#MCN282687), Cultivation, Tier 3 / Indoor
- j. Paper Crane Provisions, LLC (#MPN281904), Product Manufacturer
- k. Pharmacannis Massachusetts, Inc. (#MRN283436), Retail
- I. RC Retail Westfield, LLC (#MRN283816), Retail

- m. Revolutionary Clinics II, Inc. (#MRN282412), Retail
- n. Royal Sun Farm, LLC (#MCN282001), Cultivation, Tier 6 / Outdoor
- o. Solar Retail Norton, LLC (#MRN283896), Retail
- p. Sunhouse Mass, LLC (#MCN283027), Cultivation, Tier 6 / Indoor
- q. Thrive Cultivation & Dispensary, LLC (#MCN282968), Cultivation, Tier 3 / Indoor
- r. Thrive Cultivation & Dispensary, LLC (#MPN281928), Product Manufacturer
- s. Thrive Cultivation & Dispensary, LLC (#MRN283714), Retail
- t. ZGC, LLC (#MCN283045), Cultivation, Tier 11 / Outdoor
- u. Pharmacannis MA, Inc. (#RMDA3045), Medical Marijuana Treatment Center





Commission Discussion & Votes

- Testing Protocols
- Commissioner Liaison to CAB Subcommittees
- Disproportionate Impact Study





Testing Protocols

- Geneive Hall-Frison, Laboratory and Testing Analyst
- Armond Enos, Investigator

March 11, 2021





Commissioner Liaison to CAB Subcommittees

Subcommittees

- Market Participation Commissioner Stebbins
- Industry Commissioner Camargo
- Public Health Commissioner Concepcion
- Public Safety Commissioner Flanagan
- Research Chairman Hoffman





Identifying Disproportionately Impacted Areas by Drug Prohibition in Massachusetts

Public Meeting of the Cannabis Control Commission: March 2021

Mark Melnik, PhD Jennifer M. Whitehill, PhD



Study Purpose

- Develop a method to empirically assess historical impact of cannabis prohibition and the "War on Drugs" on Massachusetts communities
 - Expand upon a prior study by including more areas
- Apply the method to generate a "disproportionate impact (DI) score" for different places in Massachusetts
- Rank all* areas in Massachusetts according to the score

*only areas with available drug arrest data could be included.

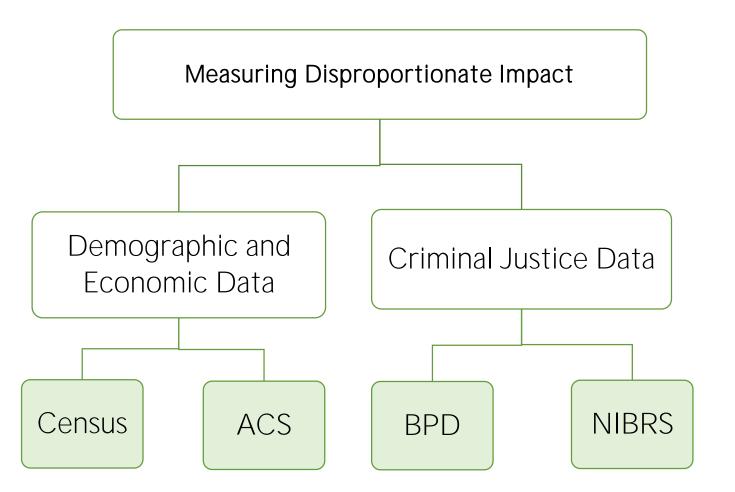


Conceptualization of Disproportionate Impacts (DI) from Drug Prohibition

- The DI Score is based on 3 interrelated community-level concepts:
 - Criminal justice system contact (i.e., arrest count; arrest rate)
 - Relative economic deprivation (i.e., poverty)
 - Concentration of Black and/or Latino residents
- Needed to capture the concept of DI using data available for as much of Massachusetts as possible
- Developed a four-part equation to generate the DI Score for each area.



Data sources and study period



Arrests between years	No. of Municipalities reporting	Population data source(s)			
2000-2004	246	2000 Decennial Census			
2005-2009	284	2000 Decennial Census			
2010-2014	292	2010-2014 ACS 5-year set and 2010 Decennial Census			
2015-2017	295	2013-2017 ACS 5-year set and 2010 Decennial Census			



Areas included in analysis

- Municipalities (n= 279 of 351)
 - Areas that do not report to NIBRS could not be included (i.e. Lawrence)
- Census tracts in five largest MA cities (n=290 of 305)
- Several exclusions helped remove non-resident arrests

Arrests excluded from analysis	Areas excluded from final ranking
Non-residential census tracts (water, parks, <1,000 residents)	Places with a high concentration of college or graduate students (i.e. Amherst, Williamstown)
Arrests at non-residential outlier locations (i.e., Xfinity Center)	Places with high rates of seasonal arrests and housing units (i.e. Provincetown)



DI Score Components

- Number of drug-related arrests: Average annual counts of all drug-related arrests were computed using NIRBS and BPD data.
- Rate of drug-related arrests per 100,000 residents: The average annual count of drug arrests within an area, divided by the number of adult residents per 100,000 in that area.
- Percent of Black and/or Latino residents: Residents identifying as Black or African American (of any ethnicity) or Hispanic/Latino (of any race). Includes juveniles.
- *Poverty status*: Percent of persons below the federal poverty level within a geographic unit (e.g., city/town, census tract, etc.).

Calculating the "DI Score"

DI Score was calculated using ranks in this equation:

```
(0.5)* average annual drug arrests + average annual arrest rate per 100,000 adults + <math display="block">(0.5)*\% in poverty + \\ (0.5)*\% of residents who are Black and/or Latino
```

- Scores for each time span were calculated and then averaged* to compile the final score.
- Municipalities and census tracts were scored separately.

^{*}A different number of areas reported to NIBRS in each different time span, meaning that each time span's ranking had a different highest possible score. Scores for each time span were, therefore, converted to a percentage before being averaged together. Only time spans with reported arrests were included.



Calculating the "DI Score" Example

- 2000 246 municipalities reporting
- 2015 295 municipalities reporting

	Time span	Avg arrests /year	Rank	Avg arrests /100k	Rank	Poverty Rate (%)	Rank	Black/ Latino (%)	Rank	Time Span DI score	Time Span DI percentile	Final DI score	Final DI rank (inverse)
Holyoke	2000	486	242	1731	246	26.4	246	43.3	244	245	99.512	00.53	4
Holyoke	2015	565	292	1828	294	28.6	293	54.0	293	293	99.389	99.52	1

```
2000 DI score = (0.5*\text{Avg arrest rank} + \text{avg arrest per 100k rank} + 0.5* \text{ poverty rank} + 0.5* \text{ Black/Latino rank}) / 2.5
2000 DI score = (0.5*242 + 246 + 0.5*244 + 0.5*244 ) / 2.5 = 244.8 (rounded to 245)
```

2000 DI score percentile = (244.8/246)*100 = 99.512

DI score = (2000 DI percentile + 2004 DI percentile + 2010 DI percentile + 2015 DI percentile)/ # time bins reporting

DI score = 99.512 + 99.507 + 99.657 + 99.389 / 4 = 99.516 (rounded to 99.52)

Note: For time span DI scores, higher values reflect more impacted places and the highest possible value is the number of municipalities reporting. The final DI rank is the inverse, with the most impacted place taking a value of 1.



Constructing the ranking

- Municipalities and census tracts were ranked based on their final DI score (O = lowest impact;
 100 = highest impact). Areas were placed into six tiers based on percentiles:
- The five largest cities were excluded from the municipal level ranking and ranked separately (i.e., census tract).
- Areas with high student population*, and high seasonality^ were also excluded.

Tier	Percentile
Tier 1	Top 10 percent
Tier 2	Top 11 to 20 percent
Tier 3	Top 21 to 40 percent
Tier 4	Top 41 to 60 percent
Tier 5	Top 61 to 80 percent
Tier 6	Top 81 to 100 percent

^{*}municipalities with 20% or more and census tracts with 50% or more undergraduate/graduate student enrollment ^ municipalities where more than 40% of arrests occurred in a single season and 25% or more of total housing units in an area are vacant for seasonal use (i.e., vacation homes)



Results

- A large share of the current DIAs are represented in Tier 1 and Tier 2.
- The areas with highest DI scores show a significant concentration of "Gateway Cities," particularly in Tier 1.

	Tier 1		Tier 2
Rank	Municipality	Rank	Municipality
1	Holyoke*	29	Weymouth
2	New Bedford*	30	Dennis
3	Brockton*	31	Methuen
4	Lynn	32	Spencer*
5	Fall River*	33	Stoughton
6	Salem	34	Peabody
7	Chelsea*	35	Wareham
8	Fitchburg*	36	Yarmouth
9	Southbridge*	37	Palmer
10	Haverhill*	38	Somerville
11	Pittsfield*	39	Plymouth
12	West Springfield*	40	Braintree*
13	Greenfield*	41	Middleborough
14	Taunton*	42	Mashpee
15	Revere*	43	Medford
16	Barnstable	44	Salisbury
17	Everett	45	Woburn
18	Webster	46	Beverly
19	Northampton	47	Marlborough
20	Chicopee	48	Westfield
21	Quincy*	49	Oak Bluffs
22	Gardner	50	Norwood
23	Leominster	51	Montague
24	Randolph*	52	Sturbridge
25	Malden	53	Andover
26	Attleboro	54	Raynham
27	North Adams*	55	Agawam
s 28	Falmouth	56	Truro

Municipalities with an asterisk (*) denote those that were included on the Commission's 2017 list of Disproportionately Impacted Areas (DIAs).



DI Score components by tier

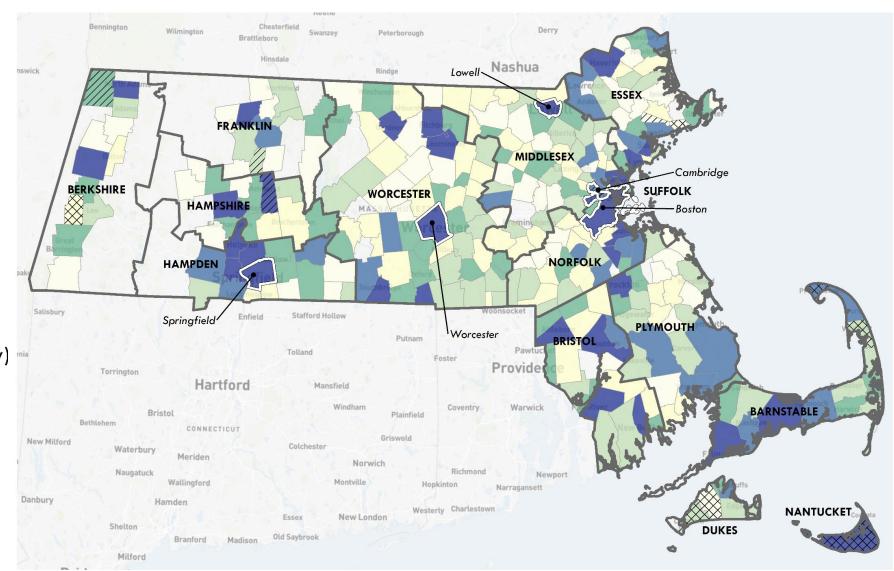
Median traits – municipal ranking					Median traits – census tract ranking			
Tier	Average drug annual arrests	Average annual drug arrests per 100k adults	Poverty rate	Black/ Latino share	Average annual drug arrests	Average annual drug arrests per 100k adults	Poverty rate	Black/ Latino share
Tier 1	89	310	15%	23%	34	1,391	40%	85%
Tier 2	55	213	9%	6%	19	748	28%	75%
Tier 3	17	168	7%	6%	17	480	23%	47%
Tier 4	11	116	5%	4%	8	228	18%	35%
Tier 5	4	57	4%	4%	4	119	12%	19%
Tier 6	2	32	4%	2%	1	48	8%	12%



Municipalities by DI Score Tier

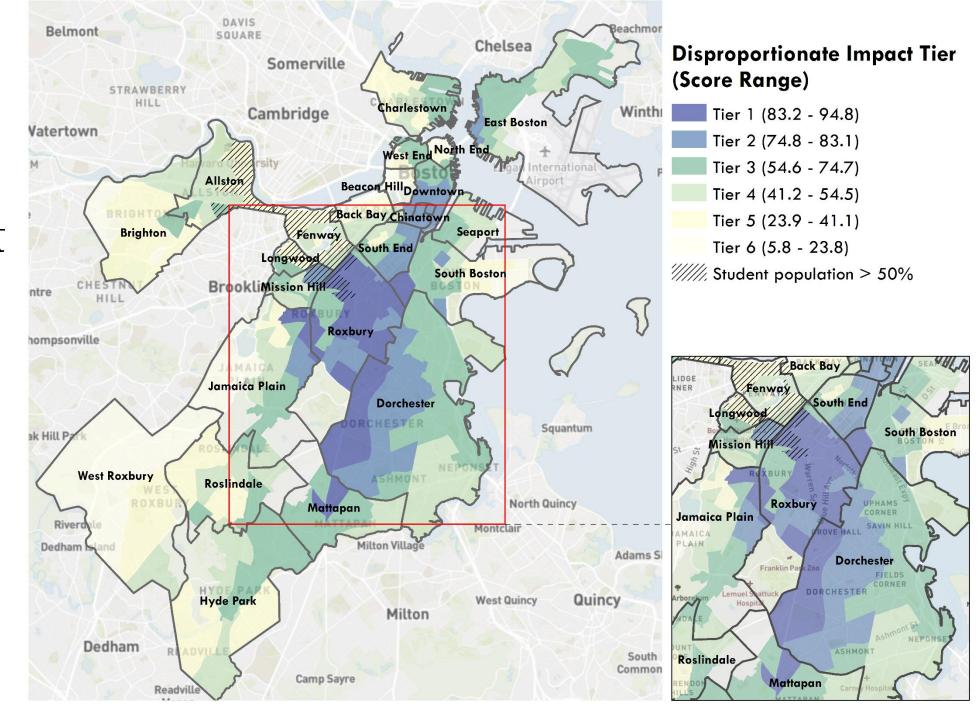
Disproportionate Impact Tier (Score Range)

- Tier 1 (78.7 99.5)
- Tier 2 (69.6 78.6)
- Tier 3 (52.7 68.5)
- Tier 4 (41.0 52.6)
- Tier 5 (30.2 40.9)
- Tier 6 (7.0 30.1)
- Five largest cities (scored separately) 🔤
- Counties
- /// Student population > 20%
- High seasonality flag



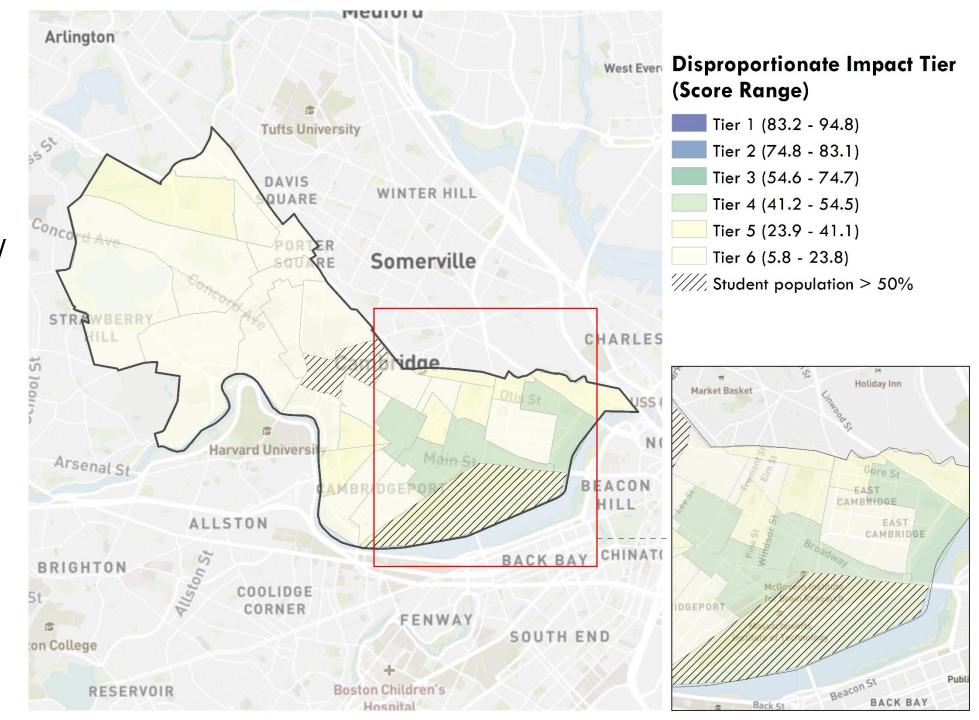


Boston census tracts by impact tier



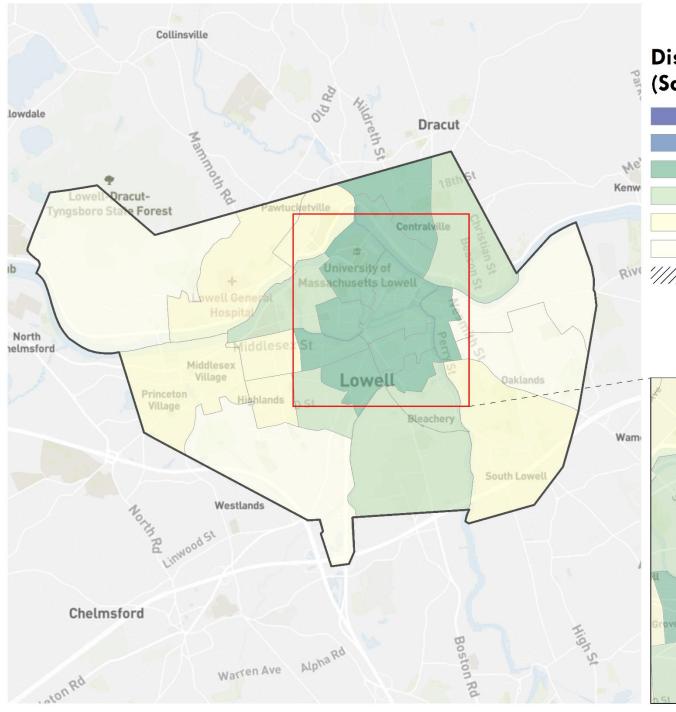


Cambridge census tracts by impact tier

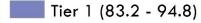


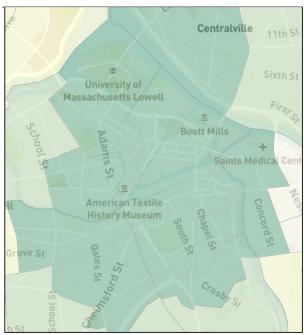


Lowell census tracts by impact tier



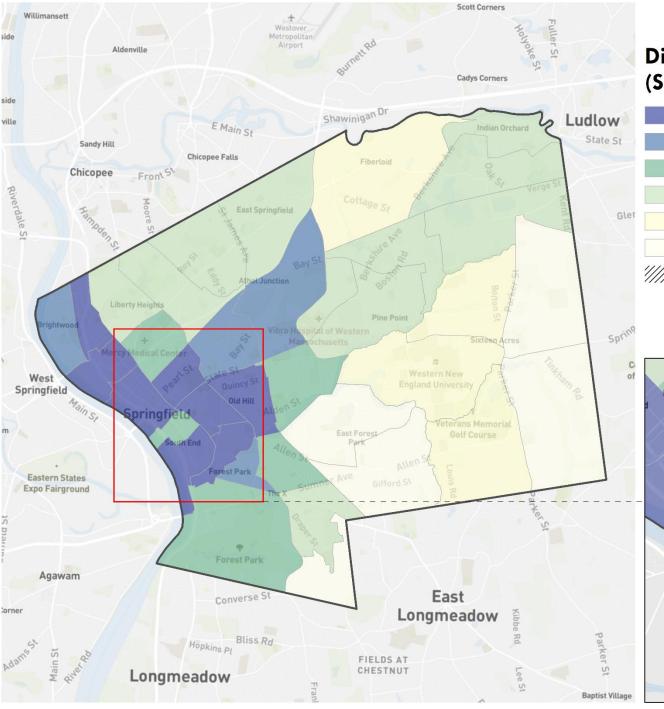
Disproportionate Impact Tier (Score Range)



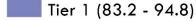


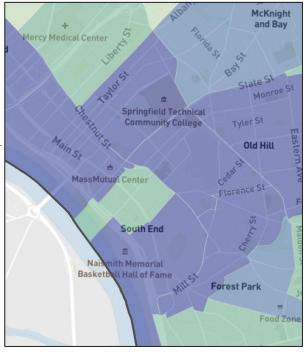


Springfield census tracts by impact tier



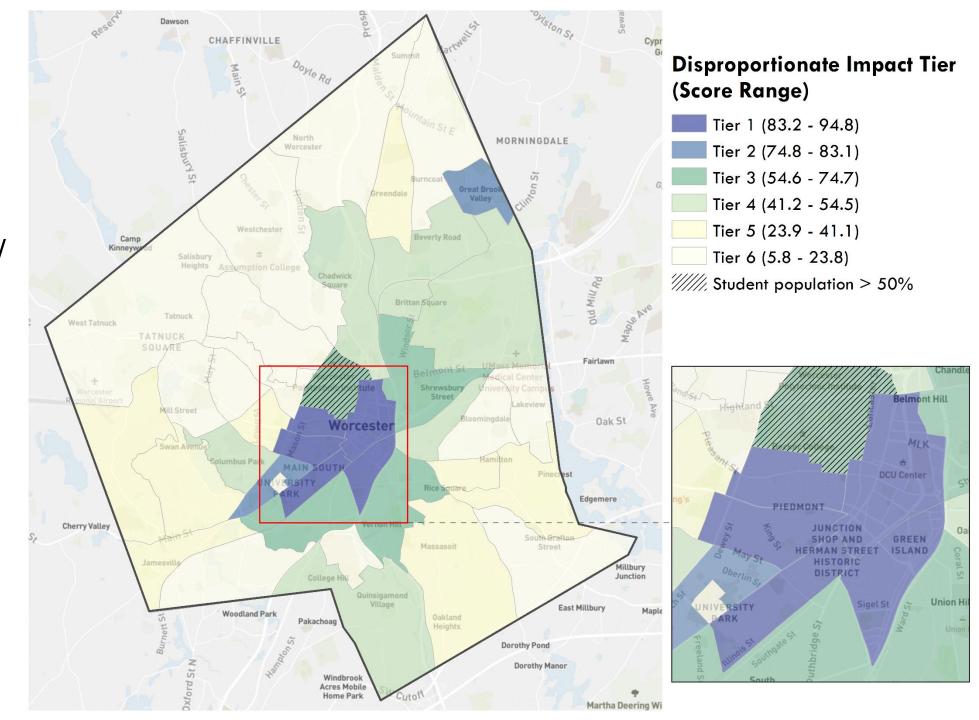
Disproportionate Impact Tier (Score Range)







Worcester census tracts by impact tier





Considerations

- Drug prohibition and enforcement has impacted communities in many ways
 - This study defined disproportionately impacted areas as those with high levels of drug arrests, compounded by poverty and racial segregation
- DI scores are relative. Areas in Tier 1 are more impacted than those in lower tiers
 - The Commission may wish to consider applying different strategies to improve social equity in different tiers.
- Disproportionate impact of drug policy enforcement occurs alongside other economic and social problems
- Future research should consider impacts on juvenile and incarcerated populations



Acknowledgements



Mark Melnik, PhD Rebecca Loveland, MRP Carrie Bernstein, MPPA Abigail Raisz, BA Michael McNally, BA Andrew Hall, MA

Project Team



Julie K. Johnson, PhD Samantha Doonan, BA

UMass Amherst

Jennifer Whitehill, PhD Faith English, MPH Jasmine Inim, BS



April Pattavina, PhD



Renee Johnson, PhD, MPH



Questions?

Whitehill JM., Melnik M., Pattavina A., Johnson RM., Loveland R., Bernstein C., English F., Raisz A., McNally, M., Doonan SM., & Johnson JK. (2021, February). *Identifying Massachusetts Communities Disproportionately Impacted by Cannabis Prohibition*. Worcester, MA: Massachusetts Cannabis Control Commission.





Upcoming Meetings and Important Dates

Next Meeting Date: Friday, April 16

- Monthly Public Meeting
 - Remote via Teams



2021 Public Meeting Schedule

Public Meeting dates are tentative and subject to change

May 13

September 9

June 17

October 14

July 15

November 18

August 12

December 16





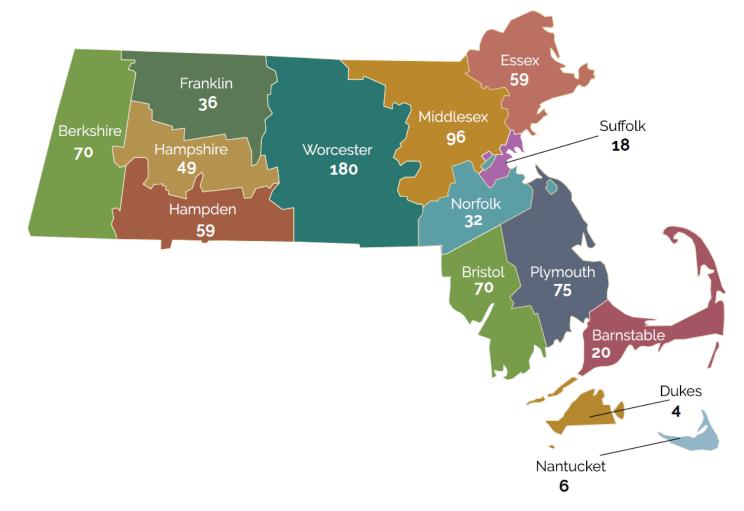
The totals below are applications that have submitted all four packets and are pending review.

Type	#
Craft Marijuana Cooperative	4
Delivery-Only Provisional Licensure (Part 2)	4
Delivery-Only Pre-Certification (Part 1)	17
Independent Testing Laboratory	5
Marijuana Cultivator	54
Marijuana Microbusiness	6
Marijuana Product Manufacturer	39
Marijuana Research Facility	7
Marijuana Retailer	67
Marijuana Third Party Transporter	2
Microbusiness Delivery Endorsement	2
Marijuana Transporter with Other Existing ME License	4
Total	211



The totals below are the total number of licenses by county.

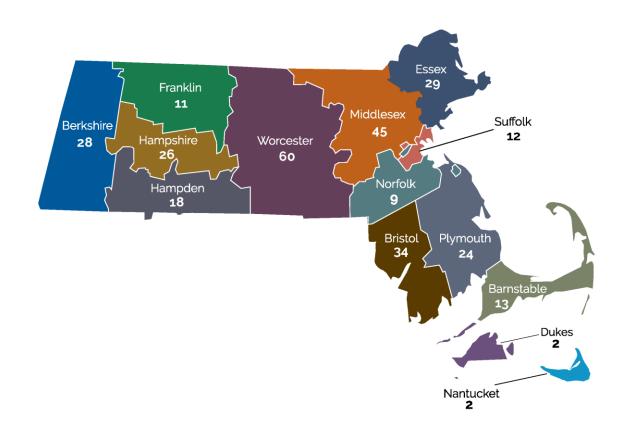
COUNTY	#	+/-
BARNSTABLE	20	
BERKSHIRE	70	+3
BRISTOL	70	+1
DUKES	4	
ESSEX	59	+2
FRANKLIN	36	+3
HAMPDEN	59	
HAMPSHIRE	49	
MIDDLESEX	96	+4
NANTUCKET	6	
NORFOLK	32	+1
PLYMOUTH	75	+5
SUFFOLK	18	+1
WORCESTER	180	+2
TOTAL	774	+22





The totals below are the total number of retail licenses by county.

COUNTY	#	+/-
BARNSTABLE	13	
BERKSHIRE	28	
BRISTOL	34	
DUKES	2	
ESSEX	29	
FRANKLIN	11	+1
HAMPDEN	18	
HAMPSHIRE	26	
MIDDLESEX	45	+2
NANTUCKET	2	
NORFOLK	9	
PLYMOUTH	24	+1
SUFFOLK	12	+1
WORCESTER	60	+1
TOTAL	313	+6





TYPE	PENDING APPLICATION	PRE- CERTIFIED/ ENDORSEMEN T	INITIAL LICENSE DENIED	PROVISIONALL Y APPROVED	PROVISIONAL LICENSE	FINAL LICENSE	COMMENCE	T O T A
Craft Marijuana Cooperative	4	-	0	0	1	0	0	5
Delivery-Only Provisional License (Part 2)	4	-	0	4	2	О	0	10
Delivery Pre-Certification (Part 1)	17	58	0	0	0	0	0	75
Independent Testing Laboratory	5	-	0	2	5	0	4	16
Marijuana Cultivator	54	-	2	32	140	19	45	292
Marijuana Microbusiness	6	-	0	4	9	1	3	23
Marijuana Product Manufacturer	39	-	1	31	99	10	41	221
Marijuana Research Facility	7	-	0	0	0	0	0	7
Marijuana Retailer	67	-	1	35	156	9	113	381
Marijuana Transporter with Other Existing ME License	2	-	0	2	1	0	2	7
Microbusiness Delivery	2	1	0	0	0	0	0	3
Third Party Transporter	4	-	0	0	2	0	2	8
Total	211	59	4	110	415	39	210	1,048



Adult Use Agent Applications | March 11, 2021



215 Pending Establishment Agents

226 Total Pending

11 Pending Laboratory Agents

- 1,069 Withdrawn
- 1,756 Incomplete
- 661 Expired
- 6,628 Surrendered
- 2 Denied
- 12,480 Active

Of 226 Total Pending:

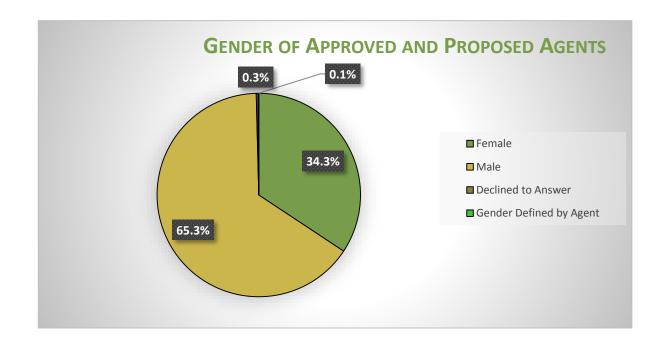
- 100 not yet reviewed
- 120 CCC requested more information
- 6 awaiting third party response
- O Review complete; awaiting approval



Agent Applications | March 11, 2021

Demographics of Approved and Pending Marijuana Establishment Agents

Gender	#	%
Female	4,359	34.3%
Male	8,296	65.3%
Declined to Answer	34	0.3%
Gender Defined by Applicant	17	0.1%
Total	12,706	100%



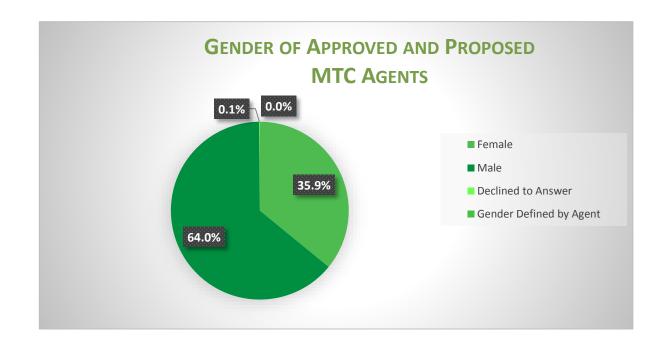
^{*}Additional data available at the end of slide presentation



Agent Applications | March 11, 2021

Demographics of Approved and Pending Medical Marijuana Treatment Center Agents

Gender	#	%
Female	2,491	35.9%
Male	4,439	64%
Declined to Answer	7	0.1%
Gender Defined by Applicant	0	0%
Total	6,937	100%

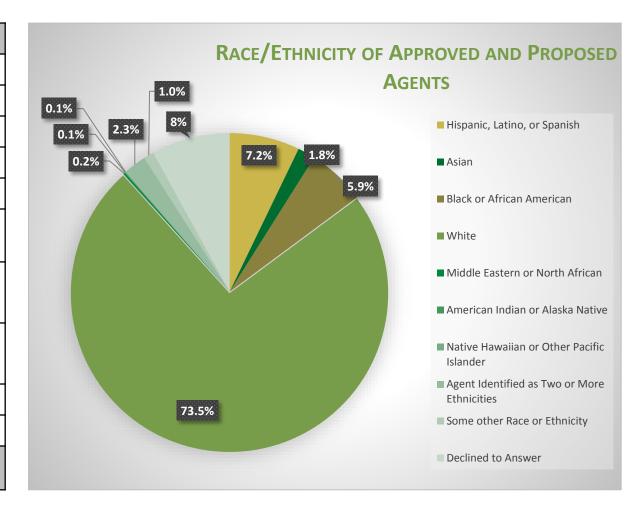


^{*}Additional data available at the end of slide presentation



Agent Applications | March 11, 2021 Demographics of Approved and Pending Agents

Race/Ethnicity	#	%
Hispanic; Latino; Spanish	910	7.2%
Asian	227	1.8%
Black; African American	750	5.9%
White	9,334	73.5%
Middle Eastern; North African	24	0.2%
American Indian; Alaska Native	9	0.1%
Native Hawaiian; Other Pacific Islander	9	0.1%
Identified as Two or More Ethnicities	295	2.3%
Other Race or Ethnicity	131	1%
Declined to Answer	1,017	8%
Total	12,706	100%

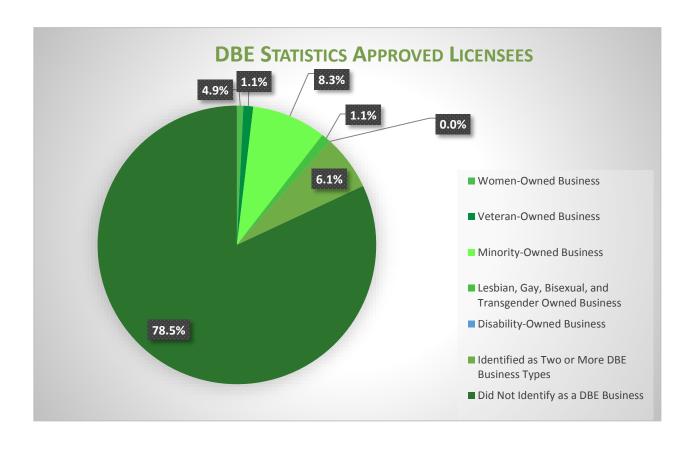


^{*}Additional data available at the end of slide presentation



Disadvantaged Business Enterprise Statistics for Approved Licensees

		% of
Type	#	Group
Women-Owned Business	41	4.9%
Veteran-Owned Business	9	1.1%
Minority-Owned Business	69	8.3%
Lesbian, Gay, Bisexual, and		
Transgender Owned Business	9	1.1%
Disability-Owned Business	0	0%
Identified as Two or More DBE		
Business Types	51	6.1%
Did Not Identify as a DBE Business	654	78.5%
Total	833	100%

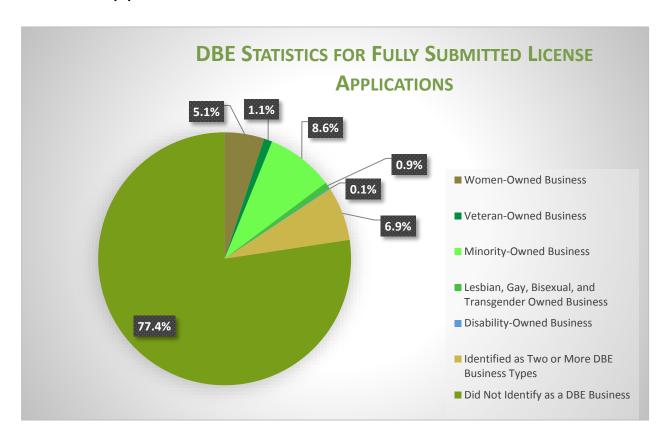


^{*}Additional data available at the end of slide presentation



Disadvantaged Business Enterprise (DBE) Statistics for Fully Submitted License Applications

		% of
Type	#	Group
Women-Owned Business	53	5.1%
Veteran-Owned Business	11	1.1%
Minority-Owned Business	90	8.6%
Lesbian, Gay, Bisexual, and		
Transgender Owned Business	9	0.9%
Disability-Owned Business	1	O.1%
Identified as Two or More DBE		
Business Types	72	6.9%
Did Not Identify as a DBE Business	808	77.4%
Total	1,044	100%



^{*}Additional data available at the end of slide presentation



Medical Use Agent Application and Registrations | March 11, 2021

The numbers below are a snapshot of the program for the month of December.

MTC Agent Applications	#
Pending MTC Agent	61
Applications	O1
Pending Laboratory Agent	\cap
Applications	O
Incomplete	43
Revoked	4
Denied	31
Surrendered	5,547
Expired	880
Active	6,876
Total Agent Applications	13,442

MMJ Program	#
Certified Patients	101,027
Certified Active Patients	95,184
Active Caregivers	8,491
Registered Certifying Physicians	278
Registered Certifying Nurse Practitioners	92
Ounces Sold	66,967