

**Business and Functional Requirements**  
**for the**  
**Licensing, Tracking and Sale of Adult-Use Marijuana in Massachusetts**  
**as regulated by the Cannabis Control Commission**  
**("CNB BFR")**

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Document Change History

Date	Version	Summary of Changes
11/15/2017	1	Includes edits from Shawn Collins only. Distributed to Commissioners for review in open meeting

## Sources:

- 1) Massachusetts Session Laws:
  - a. Ch. 55 of the Acts of 2017: AN ACT TO ENSURE SAFE ACCESS TO MARIJUANA
  - b. Ch. 334 of the Acts of 2016: AN ACT (FOR) THE REGULATION AND TAXATION OF MARIJUANA ACT
  - c. Ch. 369 of the Acts of 2012: AN ACT FOR THE HUMANITARIAN MEDICAL USE OF MARIJUANA
- 2) Department of Public Health 105 CMR 725.000 (Regulations for Medical Marijuana)
- 3) Interviews with Cannabis Control Commission Leadership Team:
  - a. Commissioner Kay Doyle
  - b. Commissioner Jennifer Flanagan
  - c. Commissioner and Chairman Steve Hoffman
  - d. Commissioner Britte McBride
  - e. Commissioner Shaleen Title
  - f. Executive Director Shawn Collins
- 4) Observation of advisory board subcommittee sessions
- 5) RFQ prepared by the Treasurer's Office (fall 2016)
- 6) Vendor questions submitted as part of the RFQ process (fall 2016)
- 7) Interviews of State Employees in Colorado and Washington State
- 8) Interviews / working sessions with State employees including representatives from:
  - a. Treasury
  - b. DPH (Public Health)
  - c. MGC (Gaming Commission)
  - d. DOR (Revenue)
  - e. Comptroller's Office
  - f. EOTSS (Technology)

## Background

On November 8, 2016, almost 54% of Massachusetts voted “yes” on Question 4, legalizing recreational marijuana with a high-level plan to regulate it in ways similar to alcoholic beverages. On July 28, 2017, the Governor signed bill H3818 which rewrote parts of Question 4 and is now “An Act to Ensure Safe Access to Marijuana.” The full text of the act can be found here:

<https://malegislature.gov/Laws/SessionLaws/Acts/2017/Chapter55> and will hereafter be referred to as “Ch. 55” in this document. To facilitate collaboration, the full text of Ch. 55 was converted to a 33-page word document, then printed to a PDF. The page and line numbers referenced in this document correspond to that PDF.

Ch. 55 created the Massachusetts Cannabis Control Commission (CNB) which consists of five commissioners: Kay Doyle, Jennifer Flanagan, Steve Hoffman (chairman), Britte McBride, and Shaleen Title. (Ch. 55, p.1, lines 10, 19) Each Commissioner was appointed by either the Governor, the Treasurer, or the Attorney General and they each serve for a three- to five-year term which began September 1, 2017. (Ch. 55, p.1, lines 15-16, 28) Shawn Collins was recently appointed as the Executive Director of CNB and he serves at the pleasure of the Commission. (Ch. 55, p.1, 33-4)

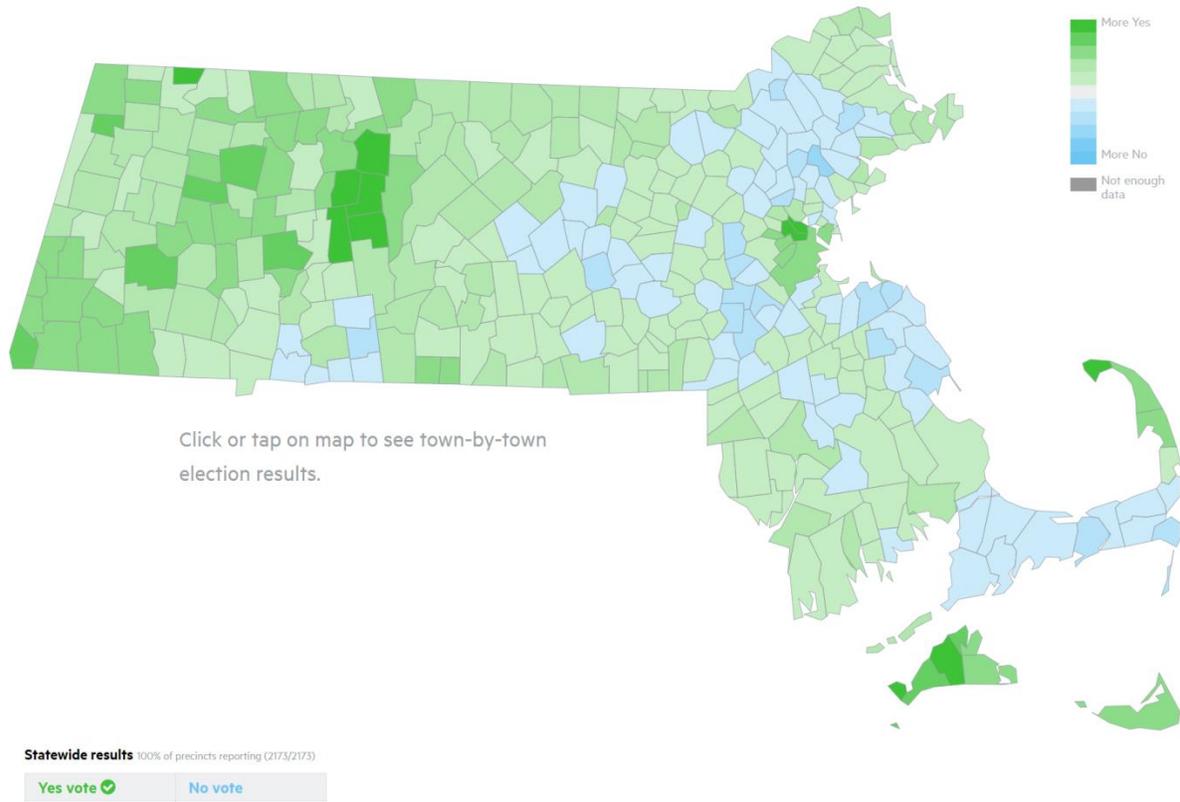
Ch. 55 also created the Massachusetts Cannabis Advisory Board which studies and makes recommendations to CNB on the regulation and taxation of marijuana (Ch. 55, p.3, line 33). The Board is chaired by CNB Executive Director and has a total of 25 board members representing multiple organizations across the state including a broad selection of agencies, interest groups, advocacy groups, and more (Ch. 55, p.3, lines 33-44 and p. 4, lines 1-11). Members of the board are not state employees (Ch. 55, p.4, line 14). The board includes four subcommittees (Ch. 55, p.4, lines 23-31):

- 1) Public Health
- 2) Public Safety
- 3) Industry (Transportation, Distribution, Seed-to-Sale Tracking and Market Stability)
- 4) Market Participation

One important stipulation in Ch. 55 is that the Cannabis Control Commission is charged with “Establishing procedures and policies to promote and encourage full participation in the regulated marijuana industry by people that have previously been disproportionately harmed by marijuana prohibition and enforcement and to positively impact those communities.” (Ch. 55, p.12, lines 5-6). The fourth subcommittee, Market Participation, is charged with developing recommendations that will help accomplish this important goal.

Not all cities and towns across Massachusetts will allow marijuana establishments (reference map below). In municipalities that voted “yes” on Question 4, a referendum is required to ban establishments. In municipalities that voted “no” on Question 4, the governing body (ex. city council) may ban marijuana establishments. The municipal tax maximum for participating cities and towns is 3%. The excise tax at the state level will be 10.75%, and the sales tax of 6.25% is imposed, so total tax on all marijuana sales in Massachusetts may be as much as 20% depending on the tax each municipality stipulates (Ch. 55, p.5, lines 28-34).

**Figure 1: Question 4 Results (Whether to Legalize Recreational Marijuana)**



Source: <http://www.wbur.org/news/2017/07/28/baker-signs-marijuana-law>, crediting: Secretary of the Commonwealth of Massachusetts, Graphic by Daigo Fujiwara, William Smith and David Moore. Inclusion here is for communication/education purposes only. Graphic and associated copy rights remain property of WBUR and/or creators.

Data for this map appears in [Appendix A](#)

Additional background information is available in the CNB Frequently Asked Questions (FAQs) posted here: <https://www.mass.gov/files/documents/2017/11/07/DRAFTFAQ1117.pdf>

## Mission of the Cannabis Control Commission

The mission of the Cannabis Control Commission is to honor the will of the voters of Massachusetts by safely, equitably and effectively implementing and administering the laws enabling access to medical and adult use marijuana in the Commonwealth.

The Commission will foster the creation of a safely regulated industry that will create entrepreneurial and employment opportunities and incremental tax revenues in and to communities across the state and which will be a best practice model for other states. The industry will be characterized by participation by a cross-section of small and larger participants and by full and robust participation by minorities, women and veterans. We will develop policies and procedures to encourage and enable full participation in the marijuana industry by people from communities that have previously been disproportionately harmed by marijuana prohibition and enforcement and positively impact those communities.

Our operating principles:

- Conduct all of our processes openly and transparently
- Engage in regular two – way communication with citizens, patients, health care providers and caregivers, elected officials, industry participants and all other concerned constituencies
- Build a world-class state agency
  - Commit to the highest level of constituent services using state of the art technology and multiple media
  - Define and publicly measure our performance versus metrics regarding timely execution, accessibility, impact on public health and safety, impact on disproportionately harmed communities and incremental tax revenue generation
  - Become self-funding and generate a revenue surplus
  - Create a great place to work
- Enhance and ensure public health and safety by
  - Developing and enforcing effective regulations
  - Developing and executing a program of continuing public education
  - Conducting and contributing to research on marijuana related topics
  - Using surplus funds to help address issues in these areas

The key technology systems necessary to support the Commission’s mission include:

- Seed-to-Sale Tracking
- Licensing
- Revenue Collection for fees and fines

This document identifies the business and functional requirements for those systems. Requirements have been phased with the expectation that only MVP (minimum viable product) requirements will be met in the first half of 2017. If a requirement is common to two or more of the technology systems, it is repeated and cross-referenced. That is, the requirements for each system are intended as stand-alone to facilitate the most flexible procurement and implementation, including an interim system if necessary (Ch. 55, p. 12, line 25).

Medical marijuana has been available for sale since 2013. In 2018, the program which currently resides in the Department of Public Health (DPH) will be dissolved and migrated under the Cannabis Control Commission. (Ch. 55, p.29, line 9). This transfer must occur without a disruption to the medical marijuana industry or patient access to medical marijuana or must occur no later than December 31, 2018, whichever occurs first (Ch. 55, p.29, line 24). This transfer is not in scope for the MVP requirements, but is an important consideration to ensure that transfer is accomplished efficiently and effectively, plus we have a strong preference for meeting the “smooth transition” requirement before the date deadline kicks in.

An alphabetized list of key words with definitions from Ch. 55 (recreational marijuana) are presented in [Appendix B](#). Some of those key word definitions are provided in an edited form in Table 1 below to ensure readers of this document have a common understanding of terms that are especially important:

**Table 1: Selection of Key Word Definitions (Ch. 55, pages 6-8; see Appendices A, B, C, and D for more)**

<b>Term</b>	<b>Definition</b>
<i>Licensee</i>	A person or entity licensed by the commission to operate a marijuana establishment...
<i>Marijuana Establishment</i>	A marijuana cultivator, independent testing laboratory, marijuana product manufacturer, marijuana retailer or any other type of licensed marijuana-related business.
<i>Marijuana Cultivator</i>	An entity licensed to cultivate, process, and package marijuana, to deliver marijuana to marijuana establishments, but NOT to consumers.
<i>Independent Testing Lab</i>	A laboratory that is licensed by the commission and is: (i) accredited..., (ii) independent financially from any medical marijuana treatment center or any licensee or marijuana establishment for which it conducts a test; and (iii) qualified to test marijuana in compliance with regulations promulgated by the commission pursuant to this chapter.
<i>Marijuana Product Manufacturer</i>	An entity licensed to obtain, manufacture, process and package marijuana and marijuana products, to deliver marijuana and marijuana products to marijuana establishments and to transfer marijuana and marijuana products to other marijuana establishments, but not to consumers.
<i>Marijuana Retailer</i>	An entity licensed to purchase and deliver marijuana and marijuana products from marijuana establishments and to deliver, sell or otherwise transfer marijuana and marijuana products to marijuana establishments and to consumers.
<i>Craft Marijuana Cultivator Cooperative</i>	A marijuana cultivator comprised of residents of the commonwealth organized as a limited liability company (LLC) or limited liability partnership (LLP) ... and that is licensed to cultivate, obtain, manufacture, process, package and brand marijuana and marijuana products to deliver marijuana to marijuana establishments but not to consumers.
<i>Cultivation Batch</i>	A collection of marijuana plants from the same seed or plant stock that are cultivated and harvested together, and receive an identical propagation and cultivation treatment... (Cultivation batches have a unique ID)... for the purposes of production tracking, product labeling, and product recalls.
<i>Production Batch</i>	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...(Production batches have a unique ID)... All production batches shall be traceable to 1 or more marijuana cultivation batches.
<i>Manufacture</i>	To compound, blend, extract, infuse or otherwise make or prepare a marijuana product
<i>Host Community</i>	A municipality in which a marijuana establishment or a medical marijuana treatment center is located or in which an applicant has proposed locating a marijuana establishment or a medical marijuana treatment center.
<i>Medical Marijuana Treatment Center</i>	A not-for-profit entity, as defined by Massachusetts law only, registered under (Ch. 369 of the Acts of 2012), that acquires, cultivates, possesses, processes...transfers, transports, sells, distributes, dispenses, or administers marijuana, products containing marijuana, related supplies, or educational materials to qualifying patients or their personal caregivers. (Ch. 369, section 2) In Ch. 55, simply defined as: The premises approved under a medical use marijuana license. (Ch. 55, p.21, line 32)
<i>Experienced Marijuana Establishment Operator</i>	A medical marijuana treatment center ... with a registration in good standing, or (ii) a reorganized marijuana business established by a vote of at least 2/3 of the board of directors of an entity that submitted an application for a registration to operate a medical marijuana treatment center to the department of public health before October 1, 2015 and was issued a provisional registration to operate a medical marijuana treatment center by the department of public health before the effective date of this chapter.
<i>Dispensary Agent</i>	An employee, staff volunteer, officer, or board member of a non-profit medical marijuana treatment center, who shall be at least twenty-one (21) years of age.
<i>Unreasonably impracticable</i>	(If and when) the measures necessary to comply with the regulations, ordinances or by-laws adopted pursuant to this chapter subject licensees to unreasonable risk or require such a high investment of risk, money, time or any other resource or asset that a reasonably prudent businessperson would not operate a marijuana establishment.

An alphabetized list of key words with definitions from Ch. 369 is presented in [Appendix C](#). Similar lists from Ch. 55 (pages 20-22) is presented in [Appendix D](#) and from Ch. 334 in [Appendix E](#).

## Key Dates (Imposed by Law)

Thursday, March 15, 2018	Statutory deadline for Cannabis Control Commission to promulgate regulations
Sunday, April 1, 2018	First day to accept prioritized license applications
Sunday, April 15, 2018	First day to accept all license applications
Tuesday, May 1, 2018	Statutory deadline for Cannabis Control Commission to promulgate regulations pertaining to independent testing of marijuana
Friday, June 1, 2018	Earliest date by which Cannabis Control Commission may issue licenses
Sunday, July 15, 2018	Progress report due regarding the transfer of Medical Marijuana program from DPH to Cannabis Control Commission
Monday, Dec. 31, 2018	Statutory deadline to transfer Medical Marijuana program from DPH to CNB

## Aspirational Key Dates (Self-Imposed)

*To be finalized with input from Commissioners, Executive Director, and Vendors (when selected)*

Tuesday, Nov. 21, 2017	Sign-off on Requirements for Licensing
Tuesday, Nov. 21, 2017	Sign-off on Requirements for Tracking
Tuesday, Nov. 21, 2017	Sign-off on Requirements for Revenue Collection (fees and fines)
Tuesday, Mar. 20, 2018	Go / No Go Decision for Licensing System
Tuesday, Mar. 20, 2018	Go / No Go Decision for Revenue Collection System for Fees & Fines
Tuesday, May 22, 2018	Go / No Go Decision for Tracking System

It is important to note that because the requirements may change until the regulations are finalized in March 2018, sign-off in November is intended to signal that the requirements represent what we know today and our best guess for the future. Sign-off does not mean that the requirements are final.

## Governing Laws and Regulations

- 1) Ch. 55 of the Acts of 2017: “An Act to Ensure Safe Access to Marijuana.”  
<https://malegislature.gov/Laws/SessionLaws/Acts/2017/Chapter55>  
Note: Used v. 1.0 of exported file with page numbers and line numbers for ease of reference
- 2) Cannabis Control Commission Regulations – Not available yet (promulgation required by March 15, 2018)
- 3) Ch. 334 of the Acts of 2016: “An act (for) the Regulation and Taxation of Marijuana Act”  
<https://malegislature.gov/Laws/SessionLaws/Acts/2016/Chapter334>
- 4) Ch. 369 of the Acts of 2012: “An Act for the Humanitarian Medical Use of Marijuana.”  
<https://malegislature.gov/Laws/SessionLaws/Acts/2012/Chapter369>
- 5) Department of Public Health 105 CMR 725.000 (Regulations for Medical Marijuana)  
<http://www.mass.gov/eohhs/docs/dph/regs/105cmr725.pdf>  
Note: Revision in progress <http://www.mass.gov/eohhs/gov/laws-regs/dph/proposed-regulations/medical-use-of-marijuana.html>
- 6) Department of Revenue Regulations
  - a. Sales Tax Administration (multiple regulations)  
<http://www.mass.gov/dor/businesses/help-and-resources/legal-library/regulations/62c-00-state-tax-administration/>
  - b. Manufacturing Corporations  
<http://www.mass.gov/dor/businesses/help-and-resources/legal-library/regulations/58-00-59-00-local-taxes-local-assessment/830-cmr-5821-manufacturing-corporations.html>
  - c. Confidentiality of Tax Information  
<http://www.mass.gov/dor/businesses/help-and-resources/legal-library/regulations/62c-00-state-tax-administration/830-cmr-62c211-confidentiality-of-tax.html>
- 7) Accessibility
  - a. Accessibility Guidance  
<http://www.mass.gov/anf/research-and-tech/policies-legal-and-technical-guidance/tech-guidance/accessibility-guidance/>
  - b. Enterprise IT Accessibility Standards  
<http://www.mass.gov/anf/research-and-tech/policies-legal-and-technical-guidance/it-policies-standards-and-procedures/ent-pols-and-stnds/accessibility-standards/enterprise-it-accessibility-standards.html>
  - c. Web Accessibility Standards  
<http://www.mass.gov/anf/research-and-tech/policies-legal-and-technical-guidance/tech-guidance/accessibility-guidance/web-accessibility-standards.html>
- 8) Data Security
  - a. Standards for the protection of personal information of Residents of the Commonwealth  
<http://www.mass.gov/ocabr/docs/idtheft/201cmr1700reg.pdf>
  - b. FAQs regarding 201 CMR 17.00  
<http://www.mass.gov/ocabr/docs/idtheft/201cmr17faqs.pdf>

- c. 201 CMR 17.00 Compliance Checklist  
<http://www.mass.gov/ocabr/docs/idtheft/compliance-checklist.pdf>
- d. Cyber Security > Security for State Employees > Security Policies & Standards  
<http://www.mass.gov/anf/research-and-tech/cyber-security/security-for-state-employees/security-policies-and-standards/>
  - i. Enterprise Information Security Standards: Data Classification  
<http://www.mass.gov/anf/research-and-tech/cyber-security/security-for-state-employees/security-policies-and-standards/enterprise-information-security-standards.html>
  - ii. Information Security Policy  
<http://www.mass.gov/anf/research-and-tech/cyber-security/security-for-state-employees/security-policies-and-standards/information-security-policy.html>
  - iii. Requirements for Data Breach Notifications  
<https://www.mass.gov/service-details/requirements-for-data-breach-notifications>
  - iv. Data Breach Notification Submission Form  
<https://www.mass.gov/forms/data-breach-notification-submission>

## 9) Technology

- a. Glossary of Commonwealth (Technology) Terms  
<http://www.mass.gov/anf/research-and-tech/policies-legal-and-technical-guidance/glossary-of-commonwealth.html>
- b. Acceptable use Policy  
<http://www.mass.gov/anf/research-and-tech/policies-legal-and-technical-guidance/it-policies-standards-and-procedures/other-policies/acceptable-use-policy.html>
- c. Information Security Risk Assessment Guidelines  
<http://www.mass.gov/anf/research-and-tech/cyber-security/security-for-state-employees/risk-assessment/risk-assessment-guideline.html>

## Licensing System Overview

To facilitate discussion and easy reference, all background paragraphs and all requirements are numbered. Some requirements are described in paragraphs, others are in a table. The format was chosen based on topic to make the requirements easier to read.

### Purpose and Functionality Overview

- L-100 The licensing system encompasses people, organizations, and to some extent, products. Each has multiple states and information about those states is passed to and from other systems. Specifically, the licensing system will enable individuals and organizations to apply for a license by submitting all necessary information (including attachments) and make a payment.
- L-110 It is not clear at this time if the payment for licenses will be made within the licensing system or in a separate revenue collection system. It is very likely that some applicants will prefer to pay fees and fines offline.
- L-120 Within the licensing system, users can leave the application (or renewal) process midway through and return to their saved application. CNB users can view the application in progress.

### Day 1 Limitations

- L-130 The Day 1 system may not have work-flow functionality. That is, when a license is processed and moved through the steps, that may be accomplished manually with notifications sent out via email and text (and possibly phone calls and U.S. mail) to inform applicants when it's their turn to do the next step.
- L-135 The level of public-facing functionality and content is TBD for Day 1. Possibilities include one or more of the following:
  - a) Offline form
  - b) Online form
  - c) Applicant web-based system with workflows
  - d) CNB-user web-based system with workflows
  - e) Municipality web-based system with or without workflows

The pros and cons of each approach will be discussed prior to a decision

- L-140 In a full-featured public-facing online system (option c in L-135), a license applicant can work on multiple steps at the same time within the same section, but cannot go to the next section until the prior section is both completed and approved by CNB.
- L-145 The system will provide a check-list for each section so CNB can document the approval process.

L-150 Application Process – Sections and Steps (Draft for Discussion – NOT FINAL)

**Section 1: Pre-Application**

- Provide company demographic information
- Select license type
- Pay pre-application fee

**Section 2: Municipality-required information**

- Land-use permit if required
- Health Dept. approval if required
- Public Safety approval if required
- Other TBD

**Section 3: System Integration and Reporting**

- Provide seed-to-sale tracking specification
- Provide seed-to-sale tracking system data layout for inventory updates
- Provide seed-to-sale tracking system examples of required reports

**Section 4: Employee Information**

- Provide employee demographics (when required).  
Sometimes employees will do this for self, not provided by company
- Provide CORI results (when required) from third-party.  
Sometimes employees will do this for self, not provided by company
- Provide fingerprints (when required) from third-party.  
Sometimes employees will do this for self, not provided by company

**Section 5: Inspection and Payment**

- Pass pre-opening on-site inspection
- Pay application fee
- Pay license fee

**Later**

- Apply for renewal
- Obtain approval from Cannabis Control Commission
- Pay renewal fee

Reference L-350 below

L-160 INSERT FLOW CHARTS HERE

TBD

## System Users

L-170 The licensing system will have at least five user groups

- 1) Cannabis Control Commission Basic Users (Estimated 20 people)
- 2) Cannabis Control Commission Admin Users (Estimated 4 people)
- 3) Other Commonwealth Agency Users (Estimated 10 people)
- 4) Marijuana Establishment Employee (Number TBD, providing information for **self**).  
Includes Laboratory Agents and Dispensary Agents among others)
- 5) Marijuana Establishment Representative (Number TBD, Acting on behalf of ME)

Notes:

- L-190 A Marijuana Establishment Employee (MEE) may be affiliated with more than one Marijuana Establishment and a Marijuana Establishment can have more than one MEE (many to many)
- L-200 A Marijuana Establishment Representative (MER) cannot see information provided by MEEs, but can see information about employees that the MER provided.
- L-210 A Marijuana Establishment License is associated with only one type of business (e.g., cultivator, manufacturer, retailer, etc). A Marijuana Establishment may obtain multiple licenses.
- L-220 An MER may be affiliated with more than one Marijuana Establishment, but will need to create a separate account for each one on Day 1 (for example, if company A is both a cultivator and a retailer, the MER will need to create two accounts).

L-230 Possible states for a **System User** (Applicant, Licensee, CNB User, Agency User, etc.):

**Pending** means that a user has a username and password, but view-only privileges. They have a login and a username.

**Active** means that a user has the full access necessary for the functionality listed in Table 3 below

**Inactive** means that a user's access has been turned off. Inactive users cannot login and they cannot view anything in the system. Inactive user accounts can be flipped back to active. This state is the public-facing state for both Inactive and Rescinded.

**Rescinded** means that a user is not only inactive, they are omitted from reports and searches except by admin users. Rescinded accounts cannot be flipped back to another state. To become active, a new user account must be created. Only admin users can change a user's status to be rescinded; no accounts are deleted. This status is only visible to CNB users. The public facing status is "Inactive".

Need to confirm – in the event of a system user's death, including a pending applicant, the system user account is Rescinded.

L-240 There is no such thing as "**transferred**" and no functionality to pass user credentials to another person.

L-240 Possible states for a **Company License or Individual License** (such as a license for a Laboratory Agent):

**Pending** means that the application process has been started, but the license has not yet been approved (or denied).

**Active** means that the application has been approved and the ME or Individual has an active license (Ch. 55, p. 10, lines 36-37)

**Inactive** means that a formerly active license is no longer active (this state is the public-facing state for inactive, expired, suspended, revoked, deactivated or denied). This condition is used when the situation is expected to be temporary.

**Expired** means that formerly approved application is no longer active because process steps were not followed in a timely manner. User accounts associated with the expired license remain Active by default. Note, this state is not visible to the public such as public-facing reports (displayed as “inactive”).

**Suspended** means that a company or individual license has been temporarily revoked for cause other than expiration. User accounts associated with the suspended license remain Active by default, but may be flipped to inactive if access to the system should be turned off. Note, this state is not visible to the public such as public-facing reports (displayed as “inactive”).

**Revoked** means that a license is not only inactive, it is omitted from reports and searches except by admin users. Revoked licenses cannot be flipped back to another state. To become active, a new license must be created. Only admin users can change a license status to revoked; no licenses are deleted. This state has a strong negative connotation. This state is not visible to the public such as public-facing reports (displayed as “inactive”).

**Deactivated** means that a formerly active license is no longer active and will never be active again, but the reason for that deactivation does not have a negative connotation. For example, a ME decided to leave the business, but is in good standing. Deactivated licenses cannot be flipped back to another state. To become active, a new license must be created. Only admin users can change a license status to revoked; no licenses are deleted. This state is not visible to the public such as public-facing reports (displayed as “inactive”).

**Denied** means that an application will not be approved even if the applicant addresses some of the deficiencies in the license application. This state is not visible to the public such as public-facing reports (displayed as “inactive”).

L-250 **Transferred** is not a License state on Day 1. If a license is transferred, the “transfer from” license will be deactivated and the “transfer to” will be made Active.

L-260 Marijuana is tracked seed-to-sale in the tracking system. The **status of a marijuana product** at a marijuana establishment may have an impact on the status of system users or licensees, however, on Day 1, these effects are implemented manually. For example, if a regulatory violation leads Cannabis Control Commission inspectors to recommend a suspension the license of a cultivator, that suspension does not happen automatically in the system. A CNB user must go into the licensing system and make that change. Table 3 summarizes the application functionality for the five types of system users.

**L-270 Table 3: Summary of the Functions of the Licensing System by User Type**

#	Application Functions (x = day 1, 0 = later phase, MVP = minimally viable product or “must have” for Day 1 If full-featured public-facing online system)	CNB		Other Agencies	ME Employee	ME Rep	Priority
		Basic	Admin				
A	View Disclaimer				x	x	MVP
B	Accept Disclaimer				x	x	MVP
C	Login	x	x	x	x	x	MVP
D	Select preferred language						Low
E	Use JAWS or other accessible reader	x	x	x	x	x	MVP
--	Administration of User Account:						
F	Create Account for Self	x	x	x	x	x	High
G	Create Account for Another User	x	x				MVP

#	Application Functions (x = day 1, 0 = later phase, MVP = minimally viable product or "must have" for Day 1 If full-featured public-facing online system)	CNB		Other Agencies	ME Employee	ME Rep	Priority
		Basic	Admin				
H	Create Admin Account						N/A
I	View username of Another User	x	x				High
J	View password of Another User						N/A
K	Change username for Self		x				Low
L	Change username for Another User		x				Low
M	Change password for Self	x	x	x	x	x	High
N	Change password for Another User						N/A
O	Reset password for Another User	x	x				MVP
P	Unlock account for Self						N/A
Q	Unlock Basic account for Another User	x	x				MVP
R	Unlock Admin account for Another User		x				Med
S	Change a user's status from active or pending to inactive	x	x				MVP
T	Change a user's status from pending or inactive to active	x	x				MVP
U	Change a user's status to from pending, active, or inactive to rescinded		x				MVP
V	Change a user's status from rescinded to another state						N/A
W	Delete Account						N/A
X	Act as proxy for an ME Employee (with permission)	x	x				MVP
Y	Act as proxy for an ME Representative (with permission)	x	x				MVP
Z	Search for users that are pending, active, or inactive	x	x				High
AA	Search for users that are rescinded		x				High
AB	Search for an organization (ME)	x	x				High
AC	Add information about own Organization (ME)					x	MVP
AD	Add information about any Organization (ME)	x	x	x			MVP
AE	Read ME Employee information (view full application)	x	x	x	x		MVP
AF	Read ME Organization information (view full application)	x	x	x		x	MVP
AG	Update Application or License information	x	x	x	x	x	MVP
AH	Renew Application – process TBD	x	x		x	x	MVP
AI	Upload documentation	x	x	x	x	x	MVP
AJ	Save Application in progress	x	x	x	x	x	High
AK	Make Payment in the Licensing System				0	0	High
AL	Submit Application	x	x		x	x	MVP
AM	Print Application	x	x	x	x	x	High
AN	Print confirmation (when submit application)	x	x	x	x	x	High
AO	Change status of ME Employee user account	x	x				MVP
AP	Change status of ME Representative user account	x	x				MVP
AQ	Change status of License Application	x	x				MVP
AR	To/From Pending	x	x				MVP

#	Application Functions (x = day 1, 0 = later phase, MVP = minimally viable product or “must have” for Day 1 If full-featured public-facing online system)	CNB		Other Agencies	ME Employee	ME Rep	Priority
		Basic	Admin				
AS	To/From Active	x	x				MVP
AT	To/From Inactive	x	x				MVP
AU	To/From Expired	x	x				MVP
AV	To/From Suspended		x				MVP
AW	To Revoked		x				MVP
AX	From Revoked to another Status						N/A
AX	To/From Deactivated	x	x				MVP
AY	To Denied	x	x				MVP
AZ	From Denied to another status						N/A
BA	To/From Transferred	0	0				Low
BB	Add a Condition to a New License	0	0				High
BC	Add a Restriction to a New License	0	0				High
BD	Change timestamp of application		x				High
BE	View an Existing License	x	x	x	x	x	MVP
BF	Add a Limit to an Existing License						High
BG	Add a Condition to an Existing License						High
BH	Add a Restriction to an Existing License						High
BI	View history (audit log for actions)	x	x				High
BJ	Print history (audit log)	x	x				High
BK	View FAQs (mass.gov for phase 1)	x	x	x	x	x	Med
BL	View related content on mass.gov	x	x	x	x	x	N/A
BN	View contextual help for public users	0	0	0	0	0	High
BO	View contextual help for CNB users	0	0				Med
BP	Associate ME User with ME Organization	x	x			x	MVP
BQ	Process application section-by-section (Ch. 55, p. 10, line 36)	0	0				High
BR	Deny application section by section (Ch. 55, p. 10, line 37)	0	0				High
BS	Use a checklist to track progress against to-do items within the application approval process ( <b>L-145</b> )	0	0				High
BT	Add a canned note from dropdown	0	0	0			High
BU	Add a custom note	0	0	0	0	0	High
BV	View dashboard	x	x				Med
BW	Print dashboard	TBD	TBD				Med
BX	View report	x	x	0	0	0	MVP
BY	Download report	x	x	0	0	0	MVP
BZ	Print report	x	x	0	0	0	Med
CA	Search for organizations that meet filter criteria (in system)	0	0				High
CB	Display filtered list of organizations (in system)	0	0				High
CC	Upload data via attachment	x	x	x	x	x	MVP
CD	Upload data via interchange (more secure if external)			x	x	x	MVP
CE	Validate address with system	0	0	0	0	0	High
CF	Communicate via online chat with CNB user	0	0				Med

#	Application Functions (x = day 1, 0 = later phase, MVP = minimally viable product or “must have” for Day 1 If full-featured public-facing online system)	CNB		Other Agencies	ME Employee	ME Rep	Priority
		Basic	Admin				
CG	Send text message to multiple users via batch process (SMS Messaging)	0	0				High
CH	Send customized text message to single user	0	0				Med
CI	Send email to multiple users via batch process triggered by system event or elapsed time	0	0				Med
CJ	Send email to multiple users using a custom list	0	0				Med
CK	Send email to a single user	0	0				High
CL	Track all communication with public users (CMS log)	0	0				High

**L-280** License Types

1. Marijuana Cultivator
2. Craft Marijuana Cultivator Cooperative
3. Independent Testing Laboratory
4. Laboratory Agent
5. Marijuana Product Manufacturer
6. Retailer

## Licensing System Requirements

Licensing System Requirements								
#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
L-010	Medical Marijuana	DPH will transfer the Medical Marijuana program to CNB no later than 12/31/18. All requirements stated below will expand to include that program in the future, but probably not by 7/1/18. These licensees are known as "Experienced Marijuana Establishment Operators"	Ch. 55 Ch. 55	29 30 6	21-24 38-40 7	<ul style="list-style-type: none"> <li>• Transition can occur sooner if no "disruption to the medical marijuana industry or patient access to medical marijuana"</li> <li>• A report is due on July 15, 2018 detailing the progress of the transfer of the program</li> <li>• Cross reference Tracking T-010</li> </ul>		High
L-280	License Types	<p>Support at least six license types for Marijuana Establishments and individuals, but will have the capacity to add many more as needed.</p> <p>Note: Licensee is defined as "a person or entity licensed by the commission to operate a marijuana establishment under this chapter"</p> <p>(repeated from overview, same number)</p>	Ch. 55	6 7 8 13	40-44 22, 31-2 4-6, 9-12, 17-19 39	<p>Day 1 license types include:</p> <ul style="list-style-type: none"> <li>• Marijuana Cultivator</li> <li>• Craft Marijuana Cultivator Cooperative</li> <li>• Independent Testing Laboratory</li> <li>• Laboratory Agent</li> <li>• Marijuana Product Manufacturer</li> <li>• Retailer</li> </ul>		MVP

Licensing System Requirements

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
L-290	License Sub-Types	<p>Potentially support designations within license types such as size-specific (small, medium, large), Product Type (smokable, edible, etc.), Duration-specific (one-year, one-day, etc.)</p> <p>(discussed in overview, same number)</p>				<ul style="list-style-type: none"> <li>• This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> <li>• If subgroups are implemented for licenses, there are likely more requirements that will be identified for both Licensing and Revenue Collection – Fees and Fines.</li> <li>• Need to determine how many tiers are allowed. That will have an impact on database design and/or SaaS product selection.</li> <li>• Also need to provide universal definitions for each type. For example, if “small” in one town is “medium” in another that will be a problem so square footage or bench surface area or another quantitative classification is best.</li> </ul>		High
L-300	Proximity limits – Static Reference Points	<p>Day 1: Recognize the fact that some restrictions on licenses will be based on distance to a fixed address e.g., proximity to a public or private school (preschool – 12 grade), etc.</p> <p>Future state: Inform applicant and approver if an application meets fixed proximity limits.</p>	Ch. 55	8	41-44	<ul style="list-style-type: none"> <li>• Some limitations will be state-wide.</li> <li>• Some limitations will be imposed by municipalities.</li> <li>• These restrictions will be enforced manually on Day 1 and may or may not be enforced by the system in a subsequent phase.</li> </ul>		High
			Ch. 55	9	12			

Licensing System Requirements

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
L-310	Proximity limits – Changing Reference Points	Day 1: Recognize the fact that some restrictions on licenses may be based on distance to another marijuana establishment, e.g., no Retail establishment within X miles of another Retail establishment.  Future state: Inform applicant and approver if an application meets changing proximity limits.	N/A			<ul style="list-style-type: none"> <li>• This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> <li>• If these restrictions are imposed, they will be enforced manually on Day 1 and may or may not be enforced by the system in a subsequent phase.</li> </ul>		Med
L-320	Total number limits	Day 1: Recognize the fact that some restrictions on licenses will be based on the existing number of establishments already present in the city or town.  Some towns that allow marijuana may not allow some types of marijuana establishments (that is, sometimes the number of license types will be zero).  Future state: Inform applicant and approver if an application meets “total number” limits.	Ch. 55	9	12 18-23	<ul style="list-style-type: none"> <li>• These restrictions will all be municipality-specific.</li> <li>• These restrictions will be enforced manually on Day 1 and may or may not be enforced by the system in a subsequent phase.</li> <li>• If licenses are tiered, rules engine must accommodate that complexity.</li> <li>• Need to consider grandfather conditions. For example, if original limit was 10, then 20% was 2 in previous example. Assume this will be handled with manual overrides on Day 1 as necessary.</li> </ul>		High
L-330	Fees and fines	Fees and fines may be imposed by CNB. Those fees and fines may be payable within the licensing system (including the fee for a license) or they may be payable in another system.	Ch. 55	9	37-41	<ul style="list-style-type: none"> <li>• Requirements related to payment for fees and fines have been separated out in “Revenue Collection – Fees and Fines”</li> <li>• Cross reference Tracking T-010</li> <li>• Cross reference Revenue Collection - Fees and Fines F-230</li> </ul>		

Licensing System Requirements

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
L-340	Staggered Renewal Dates	Enable CNB admin user to change the renewal date on an ad hoc basis (default will be one year).	N/A			<ul style="list-style-type: none"> <li>• This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> <li>• Intended as mitigation if application volumes spike dramatically and if renewal process is resource-intensive (including inspections)</li> <li>• As a way to spread out renewal dates so the majority does not occur each July, regulations may provide for a partial year license or a license that lasts longer than one year for the first year only. For example some licenses may be extended to 13 months, some 14 months, some 15 months, etc. to spread out renewal dates.</li> <li>• There may be other reasons to extend a renewal date beyond the fixed one-year</li> <li>• Longer licenses would have a higher price than the one-year license. Cross-reference Revenue Collection – Fees and Fines F-340</li> <li>• Consider skipping November and December</li> </ul>		High
L-350	Key Steps to Apply	<p>Enable applicant to apply for a license via a multi-section, multi-step application process for Applicants:</p> <ol style="list-style-type: none"> <li>1) Pre-Application</li> <li>2) Municipality-required information</li> <li>3) System Integration and Reporting</li> <li>4) Employee Information</li> <li>5) Inspection and Payment</li> </ol>	Ch. 55	10	36	<ul style="list-style-type: none"> <li>• Level of public-facing functionality and content is TBD for Day 1. Possibilities include one or more of the following:                             <ul style="list-style-type: none"> <li>○ Offline form (no public-facing functionality)</li> <li>○ Online form (limited public-facing functionality)</li> <li>○ Applicant web-based system with workflows (full-featured public-facing solution)</li> </ul> </li> <li>• Pros and cons of each approach will be discussed prior to a decision</li> <li>• Cross-reference L-150 in the overview section</li> </ul>		MVP

## Licensing System Requirements

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
L-360	Critical Steps to Process Applications	Enable critical licensure processes including apply, approve application and disapprove application	Ch. 55	10	36, 40	<ul style="list-style-type: none"> <li>Day 1, these steps may occur external to the system, but they need to be recorded in the system</li> </ul>		MVP
L-370	Limit	Enable CNB user to put a limit on a license	Ch. 55	10	40	<ul style="list-style-type: none"> <li>New and Existing licenses may have an imposed limit. Details pending regulations.</li> </ul>		High
L-380	Condition	Enable CNB user to put a condition on a license	Ch. 55	10	40	<ul style="list-style-type: none"> <li>New and Existing licenses may have an imposed condition. Details pending regulations.</li> </ul>		High
L-390	Restriction	Enable CNB user to put a restriction on a license	Ch. 55	10	40	<ul style="list-style-type: none"> <li>New and Existing licenses may have an imposed restriction. Details pending regulations.</li> </ul>		High
L-400	Revoke	Enable CNB user to revoke a license	Ch. 55	10 11	40 1	<ul style="list-style-type: none"> <li>Process may be external to system on Day 1, but recorded in system.</li> </ul>		High
L-410	Suspend	Enable CNB user to suspend a license	Ch. 55	10	40, 44	<ul style="list-style-type: none"> <li>Process may be external to system on Day 1, but recorded in system.</li> </ul>		High
L-420	Issue a License	Enable CNB user to issue a license	Ch. 55	10	44	<ul style="list-style-type: none"> <li>Process may be external to system on Day 1, but recorded in system.</li> </ul>		High
L-430	Inspection Support now and Integration Later	<p>Support the Inspection Process</p> <p>Day 1: Inspectors can view or download information from the licensing system and make changes within the system as a CNB user or CNB admin</p> <p>Long-term: Integrate Licensing System with Inspection System</p>	Ch. 55	11	5-6	<ul style="list-style-type: none"> <li>Integration is not an existing requirement</li> <li>API such that systems could pass data is MVP requirements (minimally viable product)</li> </ul>		High
L-440	Status	Display status of license application	Ch. 55	11	29	<ul style="list-style-type: none"> <li>Users must be able to quickly know the status of an application. Changes in status are tracked by date so we can trace history and perform funnel analysis (How quickly do applications move through the process? what are the bottlenecks?). Changes also tracked in audit log so know user that implemented change.</li> </ul>		High

Licensing System Requirements								
#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
L-450	Update Existing	Update an existing license	Ch. 55	12		<ul style="list-style-type: none"> <li>• Allow user to make some changes including contact information for principals. Specific fields that can be edited are TBD.</li> <li>• Track all changes in an audit log</li> </ul>		High
L-460	Registered User	Specify required data a marijuana establishment applicant must provide about its employees for them to be “REGISTERED”	Ch. 55	12	17, 21-22	<ul style="list-style-type: none"> <li>• Is this status relevant only to medical marijuana? Are employees of independent laboratories registered?</li> <li>• Need definition and rules for this status</li> <li>• Is “Certified” a status (Independent testing laboratory get a Certificate of Registration). It’s desirable to track this.</li> </ul>		
L-470	Back-up Plan	Establish procedures for an interim licensing solution if necessary	Ch. 55	12	33	<ul style="list-style-type: none"> <li>• Refer to one-page summary comparing options ranging from offline forms to online multi-tier system with workflow functionality (users include CNB, other state agencies, municipalities, companies, individuals)</li> </ul>		MVP
L-480	Compliance gaps	<p>Enable user to self-report when in/out of compliance:</p> <ul style="list-style-type: none"> <li>• Minimum security requirements</li> <li>• Liability insurance coverage</li> <li>• Virtual separation of medical marijuana from adult-use marijuana for dual-licensee</li> <li>• Procedures to prevent underage sales</li> <li>• Standards for manufacturing or extracting</li> <li>• Energy and Environmental</li> <li>• Emergency Response Plan</li> </ul>	Ch. 55	13	31-32,34,36,41-42,44	<ul style="list-style-type: none"> <li>• This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> <li>• Inspections and other processes will verify compliance, but self-certification helps to ensure marijuana establishments are fully aware of the rules</li> <li>• When marijuana establishments self-report out of compliance, a mitigation plan may be part of remediation. For example if liability insurance coverage has lapsed, establishment could proactively cease the aspect of operations that is affected until the insurance is reinstated and made whole such that there is effectively no lapse in coverage.</li> </ul>		High

### Licensing System Requirements

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
L-500	License Schedule	Maintain the cultivator license schedule produced by CNB in the system.	Ch. 55	13	39	<ul style="list-style-type: none"> <li>• View rights for all</li> <li>• Edits rights only for Admin</li> <li>• Maintain audit log of all changes</li> </ul>		High
L-510	Transfer License	Enable marijuana establishments to transfer a license	Ch. 55	14	31	<ul style="list-style-type: none"> <li>• Not a day-1 requirement. Work-around is to stop one license and begin a new one.</li> </ul>		Med
L-520	Reports	Provide canned and ad hoc reports to support CNBs efforts to produce the required annual financial plan.	Ch. 55	15	13	<ul style="list-style-type: none"> <li>• Report format and frequency TBD</li> <li>• Must export as XLS (multi-tab) and PDF</li> </ul>		High
L-530	Reports	Provide canned and ad hoc reports to support CNBs efforts to produce the annual detail of activities report.	Ch. 55	15	22-4	<ul style="list-style-type: none"> <li>• Report format and frequency TBD</li> <li>• Must export as XLS (multi-tab) as PDF</li> </ul>		High
L-540	Reports	Provide canned and ad hoc reports to support CNBs Research Agenda and related goals				<ul style="list-style-type: none"> <li>• Issue is likely an offline process on Day 1</li> <li>• Track in system is Day 1</li> </ul>		High
L-550	Content version control	Facilitate communication by linking to page where CNB promulgates advisory guidelines. If any of those guidelines are repeated in the licensing system, employ effective version control to ensure accuracy at all times.	Ch. 55	14	4	<ul style="list-style-type: none"> <li>• Does not require content management system, but does require tracking process/mechanism to ensure latest version</li> </ul>		Med
L-560	Database Relationship	Associate multiple roles with a single marijuana establishment	Ch. 55	16	6	<ul style="list-style-type: none"> <li>• For example, main contact, agent, employee</li> </ul>		MVP
L-570	Certificates of Operation	Facilitate issuing certificates of operation and track effective dates	Ch. 55	16 17	22-3 41-2	<ul style="list-style-type: none"> <li>• Issue is likely an offline process on Day 1</li> <li>• Track in system is Day 1</li> </ul>		High
L-580	Registration Cards	Facilitate issuing and revoking registration cards and track effective dates	Ch. 55	17 18	43-4 1-3, 5-6	<ul style="list-style-type: none"> <li>• Issue and revoke are likely an offline process on Day 1</li> <li>• Track in system is Day 1</li> </ul>		High

### Licensing System Requirements

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
L-590	Offline Process Steps	Track results and or completion of offline steps in process including criminal background checks and fingerprinting	Ch. 55	18	7-9, 10-11 19 33, 42-3 20 18	<ul style="list-style-type: none"> <li>This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> </ul>		High
L-600	Audit Status	Flag Audit in process within the system				<ul style="list-style-type: none"> <li>This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> </ul>		Med
L-610	Hearing Status	Flag Hearing Pending within the system				<ul style="list-style-type: none"> <li>This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> </ul>		Med
L-620	Communication	Communicate process to applicant in a way that is both transparent and easy to understand. Include steps like FBI background check where relevant	Ch. 55	20	1-5	<ul style="list-style-type: none"> <li>This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> </ul>		MVP
L-270	Hemp License	Hemp-only license may be a future-state license type	Ch. 55	24	34-8 42-4	<ul style="list-style-type: none"> <li>DAR Requirement: Industrial hemp is used for research purposes and commercial purposes considered responsible by the commissioner</li> </ul>		High
L-280	Hemp License Data	Minimum requirements for hemp may be fewer than license requirement for medical establishments	Ch. 55	25	3-11	<ul style="list-style-type: none"> <li>Details TBD including fee</li> </ul>		Med
L-290	Medical Marijuana	Plan for integration with medical marijuana registration including data migration and heightened data security standards (patient/caregiver/physician users)	Ch. 55	31	30-35	<ul style="list-style-type: none"> <li>In the future, the licensing system for Medical Marijuana Dispensaries and Medical Establishments (Adult Use) may be the same system.</li> </ul>		High
L-300	Dispensary Data	Migrate data for dispensaries that apply as medical marijuana establishments, including approval status, dates and other salient data	Ch. 55	31	30-35	<ul style="list-style-type: none"> <li>Dispensaries that have passed the review process by DPH will not need to be re-assessed by CNB</li> </ul>		High
L-310	Inclusive	Enable farmers and businesses of all sizes to participate as marijuana establishments	Ch. 55	27	43-4	<ul style="list-style-type: none"> <li>Need to define how size is determined</li> </ul>		High

### Licensing System Requirements

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
L-700	Inspection System Integration	Enable effective data exchange TO and FROM Licensing System and Inspection system as a batch process or as an ad hoc process.	N/A			<ul style="list-style-type: none"> <li>• This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> <li>• Macro events like suspending or revoking a license must be reflected in both systems, but those will be relatively rare and could be managed by manual data entry if necessary</li> <li>• The interconnection across marijuana establishments may not be reflected in the inspection system. For example, if one person works at two different laboratories and their registration is suspended for actions at one ME, an inspector needs to have visibility to that connection.</li> <li>•</li> </ul>		High
L-800	Interfaces	Pass data to/from other systems via API. Timing, scale, TBD.	N/A			<ul style="list-style-type: none"> <li>• Known potential interfaces include DOR system, DPH system(s), Licensing System, Seed-to-Sale Tracking System, and EOTSS depending on hosting solution</li> </ul>		High
L-810	Accessibility	Adhere to the Massachusetts accessibility standards (reference links provided in the government standards section above)	N/A			<ul style="list-style-type: none"> <li>• Accessibility strategy pending testing outcomes. Will coordinate with EOTSS.</li> </ul>		High
L-820	Cyber Security	Provide sufficient security to abide by Massachusetts Cyber Security guidelines for Application, Network, Data protection, and Transfer of Funds	N/A			<ul style="list-style-type: none"> <li>• Cyber security testing will be accomplished by EOTSS or their agent</li> <li>• Review content in the government standards section above</li> </ul>		High
L-830	Hosting	Host system at hardened site. Cyber security as well as physical security standards are provided in government standards section above	N/A			<ul style="list-style-type: none"> <li>• Cloud hosting and on premise (at MITC) are under consideration</li> <li>• Need to consider Production environment as well as Development, QA, and Staging environments.</li> <li>• Employ best practices for three-tier architecture with distinct layers</li> </ul>		High

### Licensing System Requirements

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
L-840	Training	Provide sufficient training and job aides for CNB staff to use system effectively. Create videos or other materials to support new staff that start after the system goes live.	N/A			<ul style="list-style-type: none"> <li>Estimate 50 users for Training on Day 1</li> </ul>		High
L-850	Documentation	All applications, configuration, and APIs must be documented. Prepare two versions – one with full information and one redacted such that release to the general public would not introduce security risk.	N/A			<ul style="list-style-type: none"> <li>In general, all staff that built/implemented the system are unavailable and maintenance/upgrade teams must rely solely on documentation.</li> </ul>		High
L-860	Performance	Functions performed by the system while the user waits should ideally be accomplished in sub-second time so user does not notice delay	N/A			<ul style="list-style-type: none"> <li>If longest delay will exceed 15 seconds, develop and communicate alternatives to consider</li> </ul>		High
L-870	DR/BC	Acceptable downtime will vary by event. In general no downtime is expected during business hours (assume 8AM – 10PM, 7 days per week)	N/A			<ul style="list-style-type: none"> <li>DR/BC is a key consideration for vendor selection. Plan details will not be shared in open forum.</li> <li>Scheduled downtime is a topic for discussion</li> </ul>		High
L-880	Mobile	All system functionality must be available via mobile devices with the possible exception of viewing reports				<ul style="list-style-type: none"> <li>This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> <li>Assume Andriod and iPhone at minimum</li> </ul>		MVP

## Tracking System Overview

Chapter 55 stipulates that adult-use marijuana will be tracked in Massachusetts from seed-to-sale:

- T-100 Licensed marijuana establishments are required to assign and record a unique, sequential alphanumeric identifier to each cultivation batch for the purposes of production tracking, product labeling, and product recalls. (Ch. 55, p. 7, lines 4-6). Repeated on page 8,
- T-110 A cultivation batch is a collection of marijuana plants from the same seed or plant stock that are cultivated and harvested together, and receive an identical propagation and cultivation treatment. (Ch. 55, p. 7, lines 1-2)
- T-120 All production batches shall be traceable to one or more marijuana cultivation batches. (Ch. 55, p. 8, lines 28-9)
- T-130 The minimum standard is that all licensed marijuana establishments must possess and operate an interoperable publicly available application programming interface seed-to-sale tracking system. (Ch. 55, page 12, lines 26-27)
- T-135 As noted each marijuana establishment will have a tracking system for their inventory in all forms. The Cannabis Control Commission will maintain a centralized system that includes all of that inventory data. Some updates will occur as a change happens, for example when a retail sale is processed. Other updates will be provided in batch updates on a schedule (for example, nightly).

## Tracking System Requirements

Tracking System Requirements								
#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
T-010	Medical Marijuana	DPH will transfer the Medical Marijuana program to CNB no later than 12/31/18. All requirements stated below will expand to include that program in the future.	Ch. 55 Ch. 55	29 30	21-24 38-40	<ul style="list-style-type: none"> <li>• Transition can occur sooner if no “disruption to the medical marijuana industry or patient access to medical marijuana”</li> <li>• A report is due on July 15, 2018 detailing the progress of the transfer of the program</li> <li>• Cross reference Licensing L-010</li> </ul>		High
T-140	Unique ID for Production Batch	Implement a tracking protocol that guarantees that a production batch can be traced back to one or more cultivation batches	Ch. 55	8	28-9	<ul style="list-style-type: none"> <li>• This protocol requires a unique ID to enable a many-to-many relationships in the database</li> </ul>		MVP

### Tracking System Requirements

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
T-150	Unique ID for Cultivation Batch	Data tracked in the system by cultivation batch or production batch includes a unique ID number				<ul style="list-style-type: none"> <li>• Include testing results (if any) associated with a given unique ID</li> <li>• Include the “use by” date when data is transferred</li> </ul>		MVP
T-180	Impounded	Track marijuana that has been impounded	Ch. 55	11	15	<ul style="list-style-type: none"> <li>• Actions associated will be offline processes on Day 1</li> </ul>		MVP
T-190	API for ME Tracking systems to CNB Tracking system	Enable MEs to upload data from their tracking system such that no double entry is necessary				<ul style="list-style-type: none"> <li>• Not stated explicitly in Ch. 55</li> <li>• Expected solution is via API (application protocol interface)</li> </ul>		MVP
T-200	API for ME POS to CNB Database	Enable MEs to upload data from their retail POS (point of sale) system such that no double entry is necessary				<ul style="list-style-type: none"> <li>• Not stated explicitly in Ch. 55</li> <li>• Expected solution is via API (application protocol interface)</li> </ul>		MVP
T-200	Product Status or State	Product statuses or states include: <ul style="list-style-type: none"> <li>• Sold</li> <li>• Stored</li> <li>• On Display</li> <li>• Contaminated</li> <li>• Flagged for Disposal</li> <li>• Sent out for Testing (Pending Testing)</li> <li>• Sent out for Review (Pending Review)</li> <li>• Tested and Approved</li> <li>• Tested and Not Approved</li> <li>• Disposed</li> <li>• Destroyed</li> <li>• Impounded</li> <li>• Unaccounted (lost)</li> <li>• more</li> </ul>	Ch. 55	14	1, 37-38	<ul style="list-style-type: none"> <li>• <u>Some</u> of these product statuses are not stated explicitly in Ch. 55 and may never be a requirement</li> <li>• Ch. 55 states that the systems must be interoperable, but does not give details beyond that so how and how often the product status is updated between marijuana establishments and the CNB Tracking system is TBD. We anticipate a range between real-time and nightly batches via an API. Standards for the API(s) are TBD as well.</li> </ul>		MVP
T-800	Interfaces	Pass data to/from other systems via API. Timing, scale, TBD.	N/A			<ul style="list-style-type: none"> <li>• Known potential interfaces include DOR system, DPH system(s), Licensing System, Seed-to-Sale Tracking System, and EOTSS depending on hosting solution</li> </ul>		High

### Tracking System Requirements

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
T-810	Accessibility	Adhere to the Massachusetts accessibility standards (reference links provided in the government standards section above)	N/A			<ul style="list-style-type: none"> <li>Accessibility strategy pending testing outcomes. Will coordinate with EOTSS.</li> </ul>		High
T-820	Cyber Security	Provide sufficient security to abide by Massachusetts Cyber Security guidelines for Application, Network, Data protection, and Transfer of Funds	N/A			<ul style="list-style-type: none"> <li>Cyber security testing will be accomplished by EOTSS or their agent</li> <li>Review content in the government standards section above</li> </ul>		MVP
T-830	Hosting	Host system at hardened site. Cyber security as well as physical security standards are provided in government standards section above	N/A			<ul style="list-style-type: none"> <li>Cloud hosting and on premise (at MITC) are under consideration</li> <li>Need to consider Production environment as well as Development, QA, and Staging environments.</li> <li>Employ best practices for three-tier architecture with distinct layers</li> </ul>		MVP
T-840	Training	Provide sufficient training and job aides for CNB staff to use system effectively. Create videos or other materials to support new staff that start after the system goes live.	N/A			<ul style="list-style-type: none"> <li>Estimate 50 users for Training on Day 1</li> </ul>		High
T-850	Documentation	All applications, configuration, and APIs must be documented. Prepare two versions – one with full information and one redacted such that release to the general public would not introduce security risk.	N/A			<ul style="list-style-type: none"> <li>In general, all staff that built/implemented the system are unavailable and maintenance/upgrade teams must rely solely on documentation.</li> </ul>		High
T-860	Performance	Functions performed by the system while the user waits should ideally be accomplished in sub-second time so user does not notice delay	N/A			<ul style="list-style-type: none"> <li>If longest delay will exceed 15 seconds, develop and communicate alternatives to consider</li> </ul>		High

### Tracking System Requirements

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
T-870	DR/BC	Acceptable downtime will vary by event. In general no downtime is expected during business hours (assume 8AM – 10PM, 7 days per week)	N/A			<ul style="list-style-type: none"> <li>DR/BC is a key consideration for vendor selection. Plan details will not be shared in open forum.</li> <li>Scheduled downtime is a topic for discussion</li> </ul>		High
T-880	Mobile	All system functionality must be available via mobile devices with the possible exception of viewing reports				<ul style="list-style-type: none"> <li>This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> <li>Assume Andriod and iPhone at minimum</li> </ul>		MVP

## Revenue Collection of Fees and Fines - System Requirements

- F-100 The Cannabis Control Commission (CNB) will be the collection point for all fees and fines and in some rare instances paid out, such as refunds and reimbursements. Transactions will be accomplished with an ePay process managed by the Comptroller's office. In general terms, payees will be directed to a web page to make a payment and then directed back to the CNB licensing system.
- F-110 If users are logged into the licensing system and then leave the system to make a payment, it is very likely they will need to login again when they return to the licensing system. Users will be given the opportunity to save their application prior to leaving the licensing system
- F-120 The timing of the payments is not known at this time. Ideally users will at least know that a payment is pending.

Revenue Collection – Fees and Fines System Requirements

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
F-210	Community Impact Fee	A host community may include a community impact fee for the host community... shall not amount to more than 3 per cent of the gross sales of the marijuana establishment....				<ul style="list-style-type: none"> <li>• Timing and calculation of fee is TBD</li> <li>• More info to follow</li> </ul>		High
F-220	Impose Fees	<p>Enable CNB user to add fee types and their corresponding amounts, plus effective day and time (to/from). When we launch, the following events will have fees:</p> <ol style="list-style-type: none"> <li>1) Apply for license</li> <li>2) Obtain license (awarded by CNB)</li> <li>3) Renew license</li> <li>4) Late fee for renewal license</li> </ol> <p>Events for each type of marijuana establishment will have all four fees and will be tracked separately.</p>	Ch. 55	11	24	<ul style="list-style-type: none"> <li>• Additional fee types may be added in the future</li> <li>• Fee prices may change over time so need to include to/from effective dates</li> <li>• Fee prices may vary by type of marijuana establishment. For example, the fee imposed when a cultivator license is awarded may be different than the fee imposed when a retail license is awarded.</li> <li>• Fee for fingerprinting and CORI checks expected to paid directly to third parties and not imposed by CNB</li> <li>• Cross reference: licensing</li> </ul>		High

**Revenue Collection – Fees and Fines System Requirements**

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
F-230	Collect Fee Payments	<p>Fee payment transactions will be processed using an ePay solution managed by the Comptroller’s office. Payment options include:</p> <ul style="list-style-type: none"> <li>• Cashier’s check</li> <li>• Credit card (with associated fee)</li> <li>• Debit card</li> <li>• EFT</li> </ul> <p>Note: Form of payment may require user to enter additional information not formerly collected as part of application process. Specifics TBD</p>	Ch. 55	11	26	<ul style="list-style-type: none"> <li>• Requirements stated here anticipate regulations. Session law simply states “collect fees”</li> <li>• Fee payments will be a necessary step to proceed with event process. For example, license application will probably not be processed until the application fee is collected.</li> <li>• Some payments will be made via offline process (e.g., mailing a check) or payment outside of the CNB system (e.g., credit card payment). Need to determine what triggers next step in the process (receipt of payment or when payment clears)</li> <li>• Integration with Comptroller’s payment solution will be via API so payments can be acknowledged in the CNB system(s)</li> <li>• Registration process will capture TIN, address, phone, etc. so no need to collect during payment</li> <li>• Cross-reference Licensing</li> </ul>		High
F-240	Calculate Partial Fee Payments	<p>Day 1: Manual Calculation and ability for user to override price for a license issued to a specific marijuana establishment</p> <p>Future State: Calculate suggested license price based on duration. For example, a license that lasts for 15 month instead of 12 months would be 125% of the base price</p>				<ul style="list-style-type: none"> <li>• This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> <li>• As a way to spread out renewal dates so the majority does not occur each July, regulations may provide for a partial year license or a license that lasts longer than one year for the first year only.</li> <li>• Cross- Reference Licensing L-</li> </ul>		High

**Revenue Collection – Fees and Fines System Requirements**

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
F-250	Track Fee Payments made to CNB or DOR	<p>Record payment of fees to CNB (or DOR on behalf of CNB) associated with each transaction. Values to record include:</p> <ul style="list-style-type: none"> <li>• Name of Marijuana Establishment</li> <li>• Name of ME Representative that authorized payment</li> <li>• Title of ME Representative that authorized payment</li> <li>• Type of Marijuana Establishment</li> <li>• Type of Fee Event</li> <li>• Fee Event date range</li> <li>• Payment amount</li> <li>• Partial payment or Full payment</li> <li>• Form of payment</li> <li>• Payment date and time</li> <li>• Municipality</li> </ul>	Ch. 55	11	26	<ul style="list-style-type: none"> <li>• Requirement stated here anticipates regulation(s). Session law simply states “collect fees”</li> <li>• Fee payments to CNB or DOR must be tracked by unique transaction. That is amount collected from marijuana establishment vendor, on a specific date, for a specific type of marijuana establishment, for a specific type of event, for a specific location (city or town), for a specific date range (to/from)</li> <li>• Some data may come from DOR, some may come from CNB. File formats will be finalized during the Design phase.</li> <li>• Cross reference Licensing</li> </ul>		High
F-260	Partial Payments	<p>Record multiple payments for the same Fee or Fine, that is, system shall support partial payments.</p> <p>Day 1: Track partial payments manually (likely outside of system)</p> <p>Long-term: Decide priority for this requirement based on volume.</p>				<ul style="list-style-type: none"> <li>• Requirement stated here anticipates regulation(s).</li> <li>• This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> </ul>		High

**Revenue Collection – Fees and Fines System Requirements**

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
F-270	Track Fee Payments made to Third Parties	Record payment of fees paid to third parties associated with each transaction. Values to record include: <ul style="list-style-type: none"> <li>• Third party vendor name</li> <li>• Third party vendor ID#</li> <li>• Third party vendor service provided</li> <li>• Name of Marijuana Establishment</li> <li>• Name of ME Representative that authorized payment</li> <li>• Title of ME Representative that authorized payment</li> <li>• Type of Marijuana Establishment</li> <li>• Type of Fee Event</li> <li>• Payment amount</li> <li>• Form of payment</li> <li>• Payment date and time</li> <li>• Municipality</li> </ul>	Ch. 55 Ch. 55	11 20	26 22-24	<ul style="list-style-type: none"> <li>• Requirements stated here anticipate regulations. Session law simply states “collect fees”</li> <li>• Third-party fee payments must be tracked by unique transaction. That is amount collected from marijuana establishment vendor, on a specific date, for a specific type of marijuana establishment, for a specific type of event, for a specific location (city or town), for a specific date range (to/from)</li> <li>• Tracking of non-CNB fees such as Fingerprinting and CORI checks is required because CNB may reimburse applicants on the grounds of financial hardship</li> <li>• Cross reference: licensing</li> <li>• Open question: Will a Company that has more than one ME (for example cultivator and retailer) have one Vendor ID#? What if TIN is same for both?</li> </ul>		High
F-280	Reimburse fees	Inform DOR and CTR when reimbursements are appropriate (CNB)  Display negative transactions when fees are reimbursed.	Ch. 55	20	22-24	<ul style="list-style-type: none"> <li>• This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> <li>• CNB may reimburse applicants for some fees based on the grounds of financial hardship</li> </ul>		High
F-290	Refund fees	CNB to Inform DOR and CTR when refunds are appropriate  Make payments as necessary (DOR/CTR)  Display negative transactions when fees are reimbursed.	Ch. 55	25	9-10	<ul style="list-style-type: none"> <li>• The application fee is called out in Ch. 55 as non-refundable which implies that other fees may be refundable.</li> <li>• Assume all refunds would be accomplished via an offline process, but need to track those transactions in the system</li> </ul>		High

**Revenue Collection – Fees and Fines System Requirements**

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
F-300	Fee Reporting	<p>Enable user to generate a report of fee payments with the following optional filters:</p> <ul style="list-style-type: none"> <li>• Payment amount range (may simply be positive and negative)</li> <li>• Marijuana Establishment Name</li> <li>• Marijuana Establishment ID#</li> <li>• Marijuana Establishment Type(s)</li> <li>• Business Flag (MWV-owned)</li> <li>• Fee Event type(s)</li> <li>• Fee Event date or date range</li> <li>• Payment status (paid / unpaid)</li> <li>• Payment date or date range</li> <li>• Form of payment</li> <li>• Municipality (or municipalities)</li> <li>• Zip code(s)</li> <li>• Fee collected by CNB or non-CNB</li> </ul>	Ch. 55	11	26	<ul style="list-style-type: none"> <li>• Requirements stated here anticipate reporting needs. Session law does not give details at this level. Simply states “collect fees” and “report on payments”</li> <li>• Need input from DOR/CTR</li> <li>• If non-CNB fees such as Fingerprinting and CORI checks are tracked in the system, they should also be reported (see last filter listed in the requirement)</li> <li>• Excel output of all available fields from DOR may be sufficient for Day 1. Report would be generated from CNB system by marrying imported data to existing data in the system. Need to mock up with dummy data to make sure this will work.</li> <li>• Cross reference: licensing</li> </ul>		High
			Ch. 55	12	10			
F-310	Impose Fines	<p>Enable CNB user to record the details of the unique fine event including:</p> <ul style="list-style-type: none"> <li>• Fine offense type (from drop-down). Fine types are TBD</li> <li>• Fine offense number (1<sup>st</sup>, 2<sup>nd</sup>, etc).</li> <li>• Fine amount</li> <li>• Fine date and time</li> <li>• Offense date and time if known</li> <li>• Offense noted by (usually CNB)</li> <li>• Fine imposed by (CNB Commission or specific agent)</li> <li>• Name of Marijuana Establishment</li> <li>• Name of ME Representative to whom fine was issued</li> <li>• Title of ME Representative to whom fine was issued</li> <li>• Type of Marijuana Establishment</li> <li>• Municipality</li> </ul>	Ch. 55	11	24	<ul style="list-style-type: none"> <li>• “The department may establish civil administrative fines for violations...”</li> <li>• Additional fine types will be added after the system goes live</li> <li>• Need input from Medical Marijuana Enforcement</li> <li>• Cross reference: licensing</li> </ul>		High
			Ch. 55	25	37			

**Revenue Collection – Fees and Fines System Requirements**

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
F-320	Collect Fine Payments	<p>Collect fines associated with each unique fine event transaction. Payment options include:</p> <ul style="list-style-type: none"> <li>• NEED DOR/CTR INPUT HERE</li> <li>•</li> <li>• Cashier’s check</li> <li>• Credit card (with associated fee)</li> <li>• Debit card</li> <li>• EFT</li> <li>• More?</li> </ul> <p>Note: Form of payment may require user to enter additional information not formerly collected as part of application process. Specifics TBD</p>	Ch. 55	11	26	<ul style="list-style-type: none"> <li>• Requirements stated here anticipate regulations. Session law simply states “collect fees” but not “collect fines”</li> <li>• Registration process will capture TIN, address, phone, etc. so no need to collect during payment</li> <li>• Cross-reference Licensing L-330</li> </ul>		High
F-330	Track Fine Payments	<p>Record payment of fees to CNB (or CTR or DOR on behalf of CNB) associated with each transaction. Values to record include:</p> <ul style="list-style-type: none"> <li>• Name of Marijuana Establishment</li> <li>• Name of ME Representative that authorized payment</li> <li>• Title of ME Representative that authorized payment</li> <li>• Type of Marijuana Establishment</li> <li>• Type of Fine Event</li> <li>• Payment amount</li> <li>• Form of payment</li> <li>• Payment date and time</li> <li>• Municipality</li> </ul>	Ch. 55	11	26	<ul style="list-style-type: none"> <li>• Requirements stated here anticipate regulations. Session law simply states “collect fees”</li> <li>• Payment data expected from DOR includes</li> <li>• Fine payments must be tracked by unique transaction. That is amount collected from marijuana establishment vendor, on a specific date, for a specific type of marijuana establishment, for a specific type of event, for a specific location (city or town), for a specific date range (to/from)</li> <li>• Cross-reference L330</li> </ul>		High
			Ch. 55	12	33			
			Ch. 55	20	22-24			

**Revenue Collection – Fees and Fines System Requirements**

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
F-340	Fine Reporting	<p>Enable user to generate a report of fine payments with the following optional filters:</p> <ul style="list-style-type: none"> <li>• Marijuana Establishment Name</li> <li>• Marijuana Establishment ID#</li> <li>• Marijuana Establishment Type(s)</li> <li>• Business Flag (MWV-owned)</li> <li>• Fine Event type(s)</li> <li>• Fine Amount range</li> <li>• Fine Event date or date range</li> <li>• Offense date or date range</li> <li>• Offense noted by (usually CNB)</li> <li>• Fine imposed by (CNB agent name and job title)</li> <li>• Payment status (paid / unpaid)</li> <li>• Payment date or date range</li> <li>• Form of payment</li> <li>• Municipality (or municipalities)</li> <li>• Zip code(s)</li> </ul>	Ch. 55	11	26	<ul style="list-style-type: none"> <li>• Requirements stated here anticipate reporting needs. Session Law references “standards for the reporting or payment of licensure fees and taxes” but does not mention reporting on fines</li> <li>• Receipts and expenditures for CNB must be reported every 6 months</li> <li>• Need input from DOR/CTR</li> <li>• Excel output of all fields may be sufficient for Day 1. Need to mock up with dummy data to make sure this will work.</li> <li>• Cross reference: licensing</li> </ul>		High
			Ch. 55	12	10			
			Ch. 55	28	36-38			
F-350	Flag when fees are not paid	<p>Allow CNB user to set expected window of time when each fee will be paid. If time exceeds that window, flag payment as “late”</p> <p>May require reconciliation with DOR before significant action is taken</p>	Ch. 55	11	26	<ul style="list-style-type: none"> <li>• May have implication for Licensing</li> </ul>		High
F-360	Flag when fines are not paid	<p>Allow CNB user to set expected window of time when each fine will be paid. If time exceeds that window, flag payment as “late”</p> <p>May require reconciliation with DOR/CTR before significant action is taken</p>	Ch. 55	11	26	<ul style="list-style-type: none"> <li>• Collect fees noted in Ch. 55, but collect fines is anticipated in the regulations</li> <li>• May have implication for Licensing</li> </ul>		High

**Revenue Collection – Fees and Fines System Requirements**

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
F-370	Summary Report of Fees and Fines	Provided canned report(s) that aggregate fee and fine data, including payments to third parties. Format TBD.	Ch. 55	15	22-23	<ul style="list-style-type: none"> <li>Annually submit a complete and detailed report of the commission's</li> </ul>		High
F-450	Debt and Liens	Track non-payment and elapsed time. Rules TBD for what constitutes "debt" and additional rules for what would trigger a lien are the responsibility of DOR.	Ch. 55	19	28-30	<ul style="list-style-type: none"> <li>"Any liability to the commonwealth under this chapter shall constitute a debt to the commonwealth.... Lien on all commercial property..."</li> </ul>		High
F-500	Staggered Renewal Dates	Enable CNB admin user to change the renewal date on an ad hoc basis (default will be one year).	N/A			<ul style="list-style-type: none"> <li>This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> <li>As a way to spread out renewal dates so the majority does not occur each July, regulations may provide for a partial year license or a license that lasts longer than one year for the first year only. For example some licenses may be extended to 13 months, some 14 months, some 15 months, etc. to spread out renewal dates.</li> <li>There may be other reasons to extend a renewal date beyond the fixed one-year</li> <li>Longer licenses would have a higher price than the one-year license. Cross-reference Revenue Collection – Fees and Fines F-340</li> <li>Consider skipping November and December</li> <li>Cross-reference L-340</li> </ul>		High
F-800	Interfaces	Pass data to/from other systems via API. Timing, scale, TBD.	N/A			<ul style="list-style-type: none"> <li>Known potential interfaces include DOR system, DPH system(s), Licensing System, Seed-to-Sale Tracking System, and EOTSS depending on hosting solution</li> </ul>		High
F-810	Accessibility	Adhere to the Massachusetts accessibility standards (reference links provided in the government standards section above)	N/A			<ul style="list-style-type: none"> <li>Accessibility strategy pending testing outcomes. Will coordinate with EOTSS.</li> </ul>		High

**Revenue Collection – Fees and Fines System Requirements**

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
F-820	Cyber Security	Provide sufficient security to abide by Massachusetts Cyber Security guidelines for Application, Network, Data protection, and Transfer of Funds	High			<ul style="list-style-type: none"> <li>• Cyber security testing will be accomplished by EOTSS or their agent</li> <li>• Review content in the government standards section above</li> </ul>		High
F-830	Hosting	Host system at hardened site. Cyber security as well as physical security standards are provided in government standards section above	N/A			<ul style="list-style-type: none"> <li>• Cloud hosting and on premise (at MITC) are under consideration</li> <li>• Need to consider Production environment as well as Development, QA, and Staging environments.</li> <li>• Employ best practices for three-tier architecture with distinct layers</li> </ul>		High
F-840	Training	Provide sufficient training and job aides for CNB staff to use system effectively. Create videos or other materials to support new staff that start after the system goes live.	N/A			<ul style="list-style-type: none"> <li>• Estimate 50 users for Training on Day 1</li> </ul>		High
F-850	Documentation	All applications, configuration, and APIs must be documented. Prepare two versions – one with full information and one redacted such that release to the general public would not introduce security risk.	N/A			<ul style="list-style-type: none"> <li>• In general, all staff that built/implemented the system are unavailable and maintenance/upgrade teams must rely solely on documentation.</li> </ul>		High
F-860	Performance	Functions performed by the system while the user waits should ideally be accomplished in sub-second time so user does not notice delay	N/A			<ul style="list-style-type: none"> <li>• If longest delay will exceed 15 seconds, develop and communicate alternatives to consider</li> </ul>		High

**Revenue Collection – Fees and Fines System Requirements**

#	Short Description	Full Text of Requirement	Source	page	lines	Reference / Notes	Difficulty	Value
F-870	DR/BC	Acceptable downtime will vary by event. In general no downtime is expected during business hours (assume 8AM – 10PM, 7 days per week)	N/A			<ul style="list-style-type: none"> <li>• DR/BC is a key consideration for vendor selection. Plan details will not be shared in open forum.</li> <li>• Scheduled downtime is a topic for discussion</li> </ul>		High
F-880	Mobile	All system functionality must be available via mobile devices with the possible exception of viewing reports				<ul style="list-style-type: none"> <li>• This requirement is NOT based on Session Law or Known Regulation. It may never be a requirement.</li> <li>• Assume Andriod and iPhone at minimum</li> </ul>		MVP

Appendix A: Question 4 Votes by each Municipality (260 “yes” and 91 “no”)

1 Abington	yes	51 Canton	no	101 Framingham	yes	151 Leicester	yes	201 New Bedford	yes	251 Rockland	yes	301 Tyngsborough	yes
2 Acton	yes	52 Carlisle	yes	102 Franklin	yes	152 Lenox	yes	202 New Braintree	yes	252 Rockport	yes	302 Tyringham	yes
3 Acushnet	yes	53 Carver	yes	103 Freetown	yes	153 Leominster	yes	203 New Marlborough	yes	253 Rowe	yes	303 Upton	yes
4 Adams	yes	54 Charlemont	yes	104 Gardner	yes	154 Leverett	yes	204 New Salem	yes	254 Rowley	yes	304 Uxbridge	yes
5 Agawam	no	55 Charlton	yes	105 Georgetown	yes	155 Lexington	no	205 Newbury	yes	255 Royalston	yes	305 Wakefield	No
6 Alford	yes	56 Chatham	no	106 Gill	yes	156 Leyden	yes	206 Newburyport	yes	256 Russell	yes	306 Wales	Yes
7 Amesbury	yes	57 Chelmsford	no	107 Gloucester	yes	157 Lincoln	yes	207 Newton	yes	257 Rutland	no	307 Walpole	No
8 Amherst	yes	58 Chelsea	yes	108 Goshen	yes	158 Littleton	yes	208 Norfolk	no	258 Salem	yes	308 Waltham	yes
9 Andover	no	59 Cheshire	yes	109 Gosnold	yes	159 Longmeadow	no	209 North Adams	yes	259 Salisbury	yes	309 Ware	yes
10 Aquinnah	yes	60 Chester	yes	110 Grafton	yes	160 Lowell	yes	210 North Andover	no	260 Sandisfield	yes	310 Wareham	yes
11 Arlington	yes	61 Chesterfield	yes	111 Granby	yes	161 Ludlow	no	211 N. Attleborough	yes	261 Sandwich	no	311 Warren	yes
12 Ashburnham	yes	62 Chicopee	yes	112 Granville	yes	162 Lunenburg	yes	212 North Brookfield	yes	262 Saugus	no	312 Warwick	yes
13 Ashby	yes	63 Chilmark	yes	113 Great Barrington	yes	163 Lynn	yes	213 North Reading	no	263 Savoy	yes	313 Washington	yes
14 Ashfield	yes	64 Clarksburg	yes	114 Greenfield	yes	164 Lynnfield	no	214 Northampton	yes	264 Scituate	no	314 Watertown	yes
15 Ashland	yes	65 Clinton	yes	115 Groton	yes	165 Malden	yes	215 Northborough	no	265 Seekonk	yes	315 Wayland	yes
16 Athol	yes	66 Cohasset	no	116 Groveland	yes	166 Manchester	yes	216 Northbridge	yes	266 Sharon	yes	316 Webster	yes
17 Attleboro	yes	67 Colrain	yes	117 Hadley	yes	167 Mansfield	yes	217 Northfield	yes	267 Sheffield	yes	317 Wellesley	no
18 Auburn	yes	68 Concord	yes	118 Halifax	yes	168 Marblehead	yes	218 Norton	yes	268 Shelburne	yes	318 Wellfleet	yes
19 Avon	yes	69 Conway	yes	119 Hamilton	no	169 Marion	yes	219 Norwell	no	269 Sherborn	no	319 Wendell	yes
20 Ayer	yes	70 Cummington	yes	120 Hampden	no	170 Marlborough	yes	220 Norwood	no	270 Shirley	yes	320 Wenham	no
21 Barnstable	no	71 Dalton	yes	121 Hancock	yes	171 Marshfield	no	221 Oak Bluffs	yes	271 Shrewsbury	no	321 West Boylston	no
22 Barre	yes	72 Danvers	no	122 Hanover	no	172 Mashpee	no	222 Oakham	yes	272 Shutesbury	yes	322 W. Bridgewater	no
23 Becket	yes	73 Dartmouth	yes	123 Hanson	yes	173 Mattapoisett	no	223 Orange	yes	273 Somerset	yes	323 West Brookfield	yes
24 Bedford	no	74 Dedham	yes	124 Hardwick	yes	174 Maynard	yes	224 Orleans	no	274 Somerville	yes	324 West Newbury	yes
25 Belchertown	yes	75 Deerfield	yes	125 Harvard	yes	175 Medfield	no	225 Otis	yes	275 South Hadley	yes	325 W. Springfield	no
26 Bellingham	yes	76 Dennis	no	126 Haverhill	no	176 Medford	yes	226 Oxford	yes	276 Southampton	yes	326 W. Stockbridge	yes
27 Belmont	yes	77 Dighton	yes	127 Hatfield	yes	177 Medway	yes	227 Palmer	yes	277 Southborough	no	327 West Tisbury	yes
28 Berkley	yes	78 Douglas	yes	128 Haverhill	yes	178 Melrose	yes	228 Paxton	no	278 Southbridge	yes	328 Westborough	no
29 Berlin	yes	79 Dover	no	129 Hawley	yes	179 Mendon	yes	229 Peabody	no	279 Southwick	yes	329 Westfield	yes
30 Bernardston	yes	80 Dracut	yes	130 Heath	yes	180 Merrimac	yes	230 Pelham	yes	280 Spencer	yes	330 Westford	no
31 Beverly	yes	81 Dudley	yes	131 Hingham	no	181 Methuen	no	231 Pembroke	no	281 Springfield	yes	331 Westhampton	yes
32 Billerica	yes	82 Dunstable	yes	132 Hinsdale	yes	182 Middleborough	yes	232 Pepperell	yes	282 Sterling	no	332 Westminster	yes
33 Blackstone	yes	83 Duxbury	no	133 Holbrook	yes	183 Middlefield	yes	233 Peru	yes	283 Stockbridge	yes	333 Weston	no
34 Blandford	yes	84 E. Bridgewater	yes	134 Holden	no	184 Middleton	no	234 Petersham	yes	284 Stoneham	no	334 Westport	yes
35 Bolton	yes	85 East Brookfield	yes	135 Holland	yes	185 Milford	yes	235 Phillipston	yes	285 Stoughton	yes	335 Westwood	no
36 Boston	yes	86 E. Longmeadow	no	136 Holliston	yes	186 Millbury	yes	236 Pittsfield	yes	286 Stow	yes	336 Weymouth	no
37 Bourne	no	87 Eastham	yes	137 Holyoke	yes	187 Millis	yes	237 Plainfield	yes	287 Sturbridge	yes	337 Whately	yes
38 Boxborough	yes	88 Easthampton	yes	138 Hopedale	yes	188 Millville	yes	238 Plainville	yes	288 Sudbury	no	338 Whitman	yes
39 Boxford	no	89 Easton	no	139 Hopkinton	no	189 Milton	no	239 Plymouth	yes	289 Sunderland	yes	339 Wilbraham	no
40 Boylston	no	90 Edgartown	yes	140 Hubbardston	yes	190 Monroe	yes	240 Plympton	yes	290 Sutton	no	340 Williamsburg	yes
41 Braintree	no	91 Egremont	yes	141 Hudson	yes	191 Monson	yes	241 Princeton	yes	291 Swampscott	yes	341 Williamstown	yes
42 Brewster	no	92 Erving	yes	142 Hull	yes	192 Montague	yes	242 Provincetown	yes	292 Swansea	yes	342 Wilmington	no
43 Bridgewater	no	93 Essex	yes	143 Huntington	yes	193 Monterey	yes	243 Quincy	yes	293 Taunton	yes	343 Winchendon	yes
44 Brimfield	yes	94 Everett	no	144 Ipswich	yes	194 Montgomery	yes	244 Randolph	yes	294 Templeton	yes	344 Winchester	no
45 Brockton	yes	95 Fairhaven	yes	145 Kingston	no	195 Mt. Washington	yes	245 Raynham	no	295 Tewksbury	no	345 Windsor	yes
46 Brookfield	yes	96 Fall River	yes	146 Lakeville	no	196 Nahant	yes	246 Reading	no	296 Tisbury	yes	346 Winthrop	yes
47 Brookline	yes	97 Falmouth	no	147 Lancaster	no	197 Nantucket	yes	247 Rehoboth	yes	297 Tolland	yes	347 Woburn	no
48 Buckland	yes	98 Fitchburg	yes	148 Lanesborough	yes	198 Natick	yes	248 Revere	no	298 Topsfield	no	348 Worcester	yes
49 Burlington	no	99 Florida	yes	149 Lawrence	no	199 Needham	no	249 Richmond	yes	299 Townsend	yes	349 Worthington	yes
50 Cambridge	yes	100 Foxborough	no	150 Lee	yes	200 New Ashford	yes	250 Rochester	yes	300 Truro	yes	350 Wrentham	no

Source: <http://www.wbur.org/news/2017/07/28/baker-signs-marijuana-law>, crediting: Secretary of the Commonwealth of Massachusetts

351 Yarmouth	no
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## Appendix B: Chapter 55 Definitions

*Source: pages 6-8 of Ch. 55 of Acts of 2017*

SECTION 20, Section 1. As used in this chapter, the following words shall, unless the context clearly requires otherwise, have the following meanings:

“Cannabinoid”, any of several compounds produced by marijuana plants that have medical and psychotropic effects.

“Cannabinoid profile”, 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 required by the commission.

“Close associate”, a person who holds a relevant financial interest in, or is entitled to exercise power in, the business of an applicant or licensee and, by virtue of that interest or power, is able to exercise a significant influence over the management or operation of a marijuana establishment licensed under this chapter.

“Consumer”, a person who is at least 21 years of age.

“Controlling person”, an officer, board member or other individual who has a financial or voting interest of 10 per cent or greater in a marijuana establishment.

“Commission”, the Massachusetts cannabis control commission established by section 76 of chapter 10.

“Craft marijuana cultivator cooperative”, a marijuana cultivator comprised of residents of the commonwealth organized as a limited liability company or limited liability partnership under the laws of the commonwealth, or an appropriate business structure as determined by the commission, and that is licensed to cultivate, obtain, manufacture, process, package and brand marijuana and marijuana products to deliver marijuana to marijuana establishments but not to consumers.

“Cultivation batch”, a collection of marijuana plants from the same seed or plant stock 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 and agricultural or hydroponic inputs. The marijuana 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.

“Experienced marijuana establishment operator”, (i) a medical marijuana treatment center as defined in chapter 369 of the acts of 2012 with a registration in good standing, or (ii) a reorganized marijuana business established by a vote of at least 2/3 of the board of directors of an entity that submitted an application for a registration to operate a medical marijuana treatment center to the department of public health before October 1, 2015 and was issued a provisional registration to operate a medical marijuana treatment center by the department of public health before the effective date of this chapter.

“Finished marijuana”, usable marijuana, cannabis resin or cannabis concentrate.

“Hemp”, the plant of the genus *Cannabis* or any part of the plant, whether growing or not, with a delta-9-tetrahydrocannabinol concentration that does not exceed 0.3 per cent on a dry weight basis of any part of the plant of the genus *Cannabis*, or per volume or weight of marijuana product, or the combined per cent of delta-9-tetrahydrocannabinol and tetrahydrocannabinolic acid in any part of the plant of the genus *Cannabis* regardless of moisture content.

“Host community”, a municipality in which a marijuana establishment or a medical marijuana treatment center is located or in which an applicant has proposed locating a marijuana establishment or

a medical marijuana treatment center.

“Independent testing laboratory”, a laboratory that is licensed by the commission and is: (i) accredited to the most current International Organization for Standardization 17025 by a third-party accrediting body that is a signatory to the International Laboratory Accreditation Cooperation mutual recognition arrangement or that is otherwise approved by the commission; (ii) independent financially from any medical marijuana treatment center or any licensee or marijuana establishment for which it conducts a test; and (iii) qualified to test marijuana in compliance with regulations promulgated by the commission pursuant to this chapter.

“Laboratory agent”, an employee of an independent testing laboratory who transports, possesses or tests marijuana.

“Licensee”, a person or entity licensed by the commission to operate a marijuana establishment under this chapter.

“Manufacture”, to compound, blend, extract, infuse or otherwise make or prepare a marijuana product.

“Marijuana” or “Marihuana”, all parts of any plant of the genus Cannabis, not excepted below and whether growing or not; the seeds thereof; and resin extracted from any part of the plant; and every compound, manufacture, salt, derivative, mixture or preparation of the plant, its seeds or resin including tetrahydrocannabinol as defined in section 1 of chapter 94C; provided, however, that “marijuana” shall not include: (i) 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; (ii) hemp; or (iii) the weight of any other ingredient combined with marijuana to prepare topical or oral administrations, food, drink or other products.

“Marijuana accessories”, equipment, products, devices or materials of any kind that are intended or designed for use in planting, propagating, cultivating, growing, harvesting, manufacturing, compounding, converting, producing, processing, preparing, testing, analyzing, packaging, repackaging, storing, containing, ingesting, inhaling or otherwise introducing marijuana into the human body.

“Marijuana cultivator”, an entity licensed to cultivate, process and package marijuana, to deliver marijuana to marijuana establishments and to transfer marijuana to other marijuana establishments, but not to consumers.

“Marijuana establishment”, a marijuana cultivator, independent testing laboratory, marijuana product manufacturer, marijuana retailer or any other type of licensed marijuana-related business.

“Marijuana product manufacturer”, an entity licensed to obtain, manufacture, process and package marijuana and marijuana products, to deliver marijuana and marijuana products to marijuana establishments and to transfer marijuana and marijuana products to other marijuana establishments, but not to consumers.

“Marijuana products”, products that have been manufactured and contain marijuana or an extract from marijuana, including concentrated forms of marijuana and products composed of marijuana and other ingredients that are intended for use or consumption, including edible products, beverages, topical products, ointments, oils and tinctures.

“Marijuana retailer”, an entity licensed to purchase and deliver marijuana and marijuana products from marijuana establishments and to deliver, sell or otherwise transfer marijuana and marijuana products to marijuana establishments and to consumers.

“Mycotoxin”, a secondary metabolite of a microfungus that is capable of causing death or illness in

humans and other animals. For the purposes of this chapter, mycotoxin shall include alfatoxin B1, alfatoxin B2, alfatoxin G1, alfatoxin G2 and ochratoxin A.

“Process” or “processing”, to harvest, dry, cure, trim and separate parts of the marijuana plant by manual or mechanical means, except it shall not include manufacture as defined in this section.

“Production batch”, 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 1 or more marijuana cultivation batches.

“Residual solvent”, a volatile organic chemical used in the manufacture of a marijuana product and that is not completely removed by practical manufacturing techniques.

“Terpenoid”, an isoprene that are the aromatic compounds found in cannabis, including, but not limited to: limonene, myrcene, pinene, linalool, eucalyptol,  $\delta$ -terpinene,  $\beta$ -caryophyllene, caryophyllene oxide, nerolidol and phytol.

“Unreasonably impracticable”, that the measures necessary to comply with the regulations, ordinances or by-laws adopted pursuant to this chapter subject licensees to unreasonable risk or require such a high investment of risk, money, time or any other resource or asset that a reasonably prudent businessperson would not operate a marijuana establishment.

## Appendix C: Chapter 369 Definitions

*Source: Section 2 of Ch. 369 of Acts of 2012: "An Act for the Humanitarian Medical Use of Marijuana."*

The full text of the medical marijuana act can be found online here:

<https://malegislature.gov/Laws/SessionLaws/Acts/2012/Chapter369>.

Section 2. As used in this Law, the following words shall, unless the context clearly requires otherwise, have the following meanings:

(A) "Card holder" shall mean a qualifying patient, a personal caregiver, or a dispensary agent of a medical marijuana treatment center who has been issued and possesses a valid registration card.

(B) "Cultivation registration" shall mean a registration issued to a medical marijuana treatment center for growing marijuana for medical use under the terms of this Act, or to a qualified patient or personal caregiver under the terms of Section 11.

(C) "Debilitating medical condition" shall mean:

Cancer, glaucoma, positive status for human immunodeficiency virus, acquired immune deficiency syndrome (AIDS), hepatitis C, amyotrophic lateral sclerosis (ALS), Crohn's disease, Parkinson's disease, multiple sclerosis and other conditions as determined in writing by a qualifying patient's physician.

(D) "Department" shall mean the Department of Public Health of the Commonwealth of Massachusetts.

(E) "Dispensary agent" shall mean an employee, staff volunteer, officer, or board member of a non-profit medical marijuana treatment center, who shall be at least twenty-one (21) years of age.

(F) "Enclosed, locked facility" shall mean a closet, room, greenhouse, or other area equipped with locks or other security devices, accessible only to dispensary agents, patients, or personal caregivers.

(G) "Marijuana," has the meaning given "marihuana" in Chapter 94C of the General Laws.

(H) "Medical marijuana treatment center" shall mean a not-for-profit entity, as defined by Massachusetts law only, registered under this law, that acquires, cultivates, possesses, processes (including development of related products such as food, tinctures, aerosols, oils, or ointments), transfers, transports, sells, distributes, dispenses, or administers marijuana, products containing marijuana, related supplies, or educational materials to qualifying patients or their personal caregivers.

(I) "Medical use of marijuana" shall mean the acquisition, cultivation, possession, processing, (including development of related products such as food, tinctures, aerosols, oils, or ointments), transfer, transportation, sale, distribution, dispensing, or administration of marijuana, for the benefit of qualifying patients in the treatment of debilitating medical conditions, or the symptoms thereof.

(J) "Personal caregiver" shall mean a person who is at least twenty-one (21) years old who has agreed to assist with a qualifying patient's medical use of marijuana. Personal caregivers are prohibited from consuming marijuana obtained for the personal, medical use of the qualifying patient.

An employee of a hospice provider, nursing, or medical facility providing care to a qualifying patient may also serve as a personal caregiver.

(K) "Qualifying patient" shall mean a person who has been diagnosed by a licensed physician as having a debilitating medical condition.

(L) "Registration card" shall mean a personal identification card issued by the Department to a qualifying patient, personal caregiver, or dispensary agent. The registration card shall verify that a physician has provided a written certification to the qualifying patient, that the patient has designated the individual as a personal caregiver, or that a medical treatment center has met the terms of Section 9 and Section 10 of this law. The registration card shall identify for the Department and law enforcement those individuals who are exempt from Massachusetts criminal and civil penalties for conduct pursuant to the medical use of marijuana.

(M) "Sixty-day supply" means that amount of marijuana that a qualifying patient would reasonably be expected to need over a period of sixty days for their personal medical use.

(N) "Written certification" means a document signed by a licensed physician, stating that in the physician's professional opinion, the potential benefits of the medical use of marijuana would likely outweigh the health risks for the qualifying patient. Such certification shall be made only in the course of a bona fide physician-patient relationship and shall specify the qualifying patient's debilitating medical condition(s).

## Appendix D: Chapter 55 Definitions (pages 20 – 22)

*Source: pages 20-22 of Ch. 55 of Acts of 2017*

SECTION 44. The General Laws are hereby amended by inserting after chapter 94H the following chapter: CHAPTER 94I.

### MEDICAL USE OF MARIJUANA.

Section 1. As used in this chapter the following words shall, unless the context clearly requires otherwise, have the following meanings:-

“Bona fide healthcare professional-patient relationship”, a relationship between a registered healthcare professional, acting in the usual course of his or her professional practice, and a patient in which the healthcare professional has conducted a clinical visit, completed and documented a full assessment of the patient’s medical history and current medical condition, has explained the potential benefits and risks of medical use of marijuana, and has a role in the ongoing care and treatment of the patient.

“Card holder”, a registered qualifying patient, personal caregiver or agent of a medical marijuana treatment center who has been issued and possesses a valid registration card.

“Commission”, the Massachusetts cannabis control commission established pursuant to section 76 of chapter 10.

“Cultivation registration”, a registration issued to a medical marijuana treatment center to grow medical use marijuana under the terms of this chapter, or to a qualified patient or personal caregiver.

“Debilitating medical condition”, cancer, glaucoma, positive status for human immunodeficiency virus, acquired immune deficiency syndrome, hepatitis C, amyotrophic lateral sclerosis, Crohn's disease, Parkinson's disease, multiple sclerosis and other conditions as determined in writing by a registered qualifying patient's registered healthcare professional.

“Electronic certification”, a document signed or executed electronically by a registered healthcare professional, stating that in the healthcare professional's professional opinion, the potential benefits of the medical use of marijuana would likely outweigh the health risks for the qualifying patient. Such certification shall be made only in the course of a bona fide healthcare professional-patient relationship and shall specify the qualifying patient's debilitating medical condition. Electronic certifications, upon submission by a healthcare professional to the commission, shall automatically generate a temporary registration.

“Healthcare professional”, a duly Massachusetts licensed physician, physician assistant or certified nurse practitioner authorized by the commission to issue written certifications.

“Locked area”, a closet, room, greenhouse or other indoor or outdoor area equipped with locks or other security devices, accessible only to registered and authorized medical marijuana treatment center employees, registered qualifying patients or registered personal caregivers.

“Marijuana”, all parts of any plant of the genus cannabis, not excepted below and whether growing or not; the seeds thereof; and resin extracted from any part of the plant; and every marijuana product, compound, manufacture, salt, derivative, mixture or preparation of the plant, its seeds or resin including tetrahydrocannabinol as defined in section 1 of chapter 94C; provided, however, that “marijuana” shall not include: (i) 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; (ii) hemp; or (iii) the weight of any other ingredient combined with

marijuana to prepare topical or oral administrations, food, drink or other products.

“Medical marijuana treatment center”, the premises approved under a medical use marijuana license.

“Medical use marijuana”, marijuana or marijuana accessories sold by a medical marijuana treatment center to a card holder for medical use or marijuana or marijuana accessories possessed by a qualifying patient under a cultivation registration.

“Medical use marijuana license”, a license issued by the commission that permits the licensee to operate a medical marijuana treatment center.

“Medical use marijuana licensee”, a person or entity who holds a medical use marijuana license under this chapter.

“Medical use of marijuana”, the acquisition, cultivation, possession, processing, including development of related products such as food, tinctures, aerosols, oils or ointments, transfer, transportation, sale, distribution, dispensing or administration of marijuana for the benefit of registered qualifying patients in the treatment of debilitating medical conditions or the symptoms thereof.

“Personal caregiver”, a person who is at least 21 years old who has registered with the commission and agreed to assist with a qualifying patient's medical use of marijuana, and is not the registered qualifying patient's certifying healthcare provider. Personal caregivers are prohibited from consuming medical use marijuana obtained for the personal, medical use of the registered qualifying patient. An employee of a hospice provider, nursing or medical facility providing care to a qualifying patient may also serve as a personal caregiver.

“Qualifying patient”, a person who has been diagnosed by a registered healthcare professional as having a debilitating medical condition.

“Registration card”, a personal identification card issued by the commission to a registered qualifying patient, personal caregiver, laboratory agent or agent of a medical marijuana treatment center. The registration card facilitates verification of an individual registrant's status, including, but not limited to, verification that a registered healthcare professional has provided a written certification to the qualifying patient; that the patient has designated the individual as a personal caregiver; that a laboratory agent has been registered with the commission and is authorized to possess and test marijuana; or that an agent has been registered with the commission and is authorized to work at a medical marijuana treatment center. A temporary registration issued to a qualifying patient shall be deemed a registration card.

The registration card shall facilitate identification for the commission and law enforcement of those individuals who are exempt from criminal and civil penalties for conduct pursuant to the medical use of marijuana.

“Sixty-day supply”, that amount of medical use marijuana that a registered qualifying patient would reasonably be expected to need over a period of 60 calendar days for the qualifying patient's personal medical use, up to 10 ounces of marijuana or as otherwise defined by the commission.

“Temporary Registration”, an interim registration document for patients and their personal caregivers generated automatically upon the commission's receipt of a healthcare professional's electronic certification. The temporary registration document shall constitute a registration card for patients and their personal caregivers to access medical marijuana treatment center. Temporary registration shall expire 14 days after the commission issues the registration card.

“Written certification”, a document signed by a registered healthcare professional, stating that in the professional opinion of the healthcare professional, the potential benefits of the medical use of

marijuana would likely outweigh the health risks for the qualifying patient. Such certification shall be made only in the course of a bona fide healthcare professional-patient relationship and shall specify the qualifying patient's debilitating medical condition.

## Appendix E: Chapter 334 Definitions

*Source: Section 1 of Ch. 334 of Acts of 2016: "An Act (for) the Regulation and Taxation of Marijuana-Act."*

The full text of the act can be found online here:

<https://malegislature.gov/Laws/SessionLaws/Acts/2016/Chapter334>

Section 1. Definitions. As used in this chapter, the following words shall, unless the context clearly requires otherwise, have the following meanings:

(a) "Commissioner", the commissioner of revenue.

(b) "Marijuana," "Marijuana establishment," "Marijuana product" and "Marijuana retailer", as defined in chapter 94G of the General Laws.

SECTION 5. The General Laws are hereby amended by inserting after chapter 94F the following chapter:

CHAPTER 94G

REGULATION OF THE USE AND DISTRIBUTION OF MARIJUANA

NOT MEDICALLY PRESCRIBED

Section 1. Definitions

As used in this chapter, the following words shall, unless the context clearly requires otherwise, have the following meanings:

(a) "Consumer", a person who is at least 21 years of age.

(b) "Controlling person", an officer, board member or other individual who has a financial or voting interest of 10 per cent or greater in a marijuana establishment.

(c) "Commission", the cannabis control commission established by section 76 of chapter 10 of the General Laws.

(d) "Experienced marijuana establishment operator", (i) a medical marijuana treatment center as defined in chapter 369 of the acts of 2012 with a registration in good standing, or (ii) a reorganized marijuana business established by a vote of at least 2/3 of the board of directors of an entity that submitted an application for a registration to operate a medical marijuana treatment center to the department of public health before October 1, 2015 and was issued a provisional registration to operate a medical marijuana treatment center by the department of public health before the effective date of this chapter.

(e) "Hemp", the plant of the genus *Cannabis* or any part of the plant, whether growing or not, with a delta-9-tetrahydrocannabinol concentration that does not exceed 0.3 per cent on a dry weight basis of any part of the plant of the genus *Cannabis*, or per volume or weight of marijuana product, or the combined per cent of delta-9-tetrahydrocannabinol and tetrahydrocannabinolic acid in any part of the plant of the genus *Cannabis* regardless of moisture content.

(f) "Manufacture", to compound, blend, extract, infuse or otherwise make or prepare a marijuana product.

(g) "Marijuana" or "Marihuana", all parts of any plant of the genus *Cannabis*, not excepted below and whether growing or not; the seeds thereof; and resin extracted from any part of the plant; and every compound, manufacture, salt, derivative, mixture or preparation of the plant, its seeds or resin including tetrahydrocannabinol as defined in section 1 of chapter 94C of the General Laws; provided that "Marijuana" shall not include:

(1) 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;

(2) Hemp; or

(3) The weight of any other ingredient combined with marijuana to prepare topical or oral administrations, food, drink or other products.

(h) "Marijuana accessories", equipment, products, devices or materials of any kind that are intended or designed for use in planting, propagating, cultivating, growing, harvesting, manufacturing, compounding, converting, producing, processing, preparing, testing, analyzing, packaging, repackaging, storing, containing, ingesting, inhaling or otherwise introducing marijuana into the human body.

(i) "Marijuana cultivator", an entity licensed to cultivate, process and package marijuana, to deliver marijuana to marijuana establishments and to transfer marijuana to other marijuana establishments, but not to consumers.

(j) "Marijuana establishment", a marijuana cultivator, marijuana testing facility, marijuana product manufacturer, marijuana retailer or any other type of licensed marijuana-related business.

(k) "Marijuana product manufacturer", an entity licensed to obtain, manufacture, process and package marijuana and marijuana products, to deliver marijuana and marijuana products to marijuana establishments and to transfer marijuana and marijuana products to other marijuana establishments, but not to consumers.

(l) "Marijuana products", products that have been manufactured and contain marijuana or an extract from marijuana, including concentrated forms of marijuana and products composed of marijuana and other ingredients that are intended for use or consumption, including edible products, beverages, topical products, ointments, oils and tinctures.

(m) "Marijuana testing facility", an entity licensed to test marijuana and marijuana products, including certification for potency and the presence of contaminants.

(n) "Marijuana retailer", an entity licensed to purchase and deliver marijuana and marijuana products from marijuana establishments and to deliver, sell or otherwise transfer marijuana and marijuana products to marijuana establishments and to consumers.

(o) "Process" or "processing", to harvest, dry, cure, trim and separate parts of the marijuana plant by manual or mechanical means, except it shall not include manufacture as defined in subsection (f) of this section.

(p) "Unreasonably impracticable", that the measures necessary to comply with the regulations, ordinances or by-laws adopted pursuant to this chapter subject licensees to unreasonable risk or require such a high investment of risk, money, time or any other resource or asset that a reasonably prudent businessperson would not operate a marijuana establishment.

## Appendix F: Data Security Notes

Important Document: Enterprise Data Classification Security Standards

<http://www.mass.gov/anf/research-and-tech/cyber-security/security-for-state-employees/security-policies-and-standards/enterprise-information-security-standards.html>

- **Data Owner:** The Data Owner has policy-level responsibility for establishing rules and use of data based on applied classification. The head of the agency is ultimately the Data Owner and is responsible for assigning the classification, ensuring the protection and establishing appropriate use of agency's data. Individuals within the agency may be delegated some portion of this responsibility on behalf of the agency head. The Data Owner is also responsible for assigning individuals to the following roles.
- **Data Manager:** The Data Manager develops general procedures and guidelines for the management, security and access to data, as appropriate.
- **Data Steward:** The Data Steward has custodial responsibilities for managing the data for the day-to-day, operational-level functions on behalf of the Data Owner as established by the Data Manager.
- **Data User:** A Data User is any individual who is eligible and authorized to access and use the data.