

UNITED STATES DISTRICT COURT
DISTRICT OF MASSACHUSETTS

LEONARD BRIGGS, GEORGE SKINDER, LOUIS
MARKHAM, FRANCIS MCGOWAN, ERIC
ROLDAN, ROLANDO S. JIMENEZ, AND
JENNIFER WARD, on behalf of themselves and all
others similarly situated,

Plaintiffs,

vs.

MASSACHUSETTS DEPARTMENT OF
CORRECTION; CAROL A. MICI,
COMMISSIONER OF THE MASSACHUSETTS
DEPARTMENT OF CORRECTION; JENNIFER
A. GAFFNEY, DEPUTY COMMISSIONER OF
CLASSIFICATION, PROGRAMS, AND REENTRY
DIVISION; COLETTE M. GOGUEN,
SUPERINTENDENT OF MCI-SHIRLEY;
STEVEN SILVA, SUPERINTENDENT OF MCI-
NORFOLK; LISA MITCHELL, SUPERINTENDENT
OF THE MASSACHUSETTS TREATMENT
CENTER; ALLISON HALLET, SUPERINTENDENT
OF MCI-FRAMINGHAM; AND
MASSACHUSETTS PARTNERSHIP FOR
CORRECTIONAL HEALTHCARE,

Defendants.

Case No. 1:15-cv-40162-GAO

EXPERT REPORT OF GINA G. HILBERRY, AIA LEED-AP CCS

August 2, 2019

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I. Introduction

I have been retained by Wilmer Cutler Pickering Hale and Dorr LLP (“WilmerHale”) to provide expert opinions related to the above-captioned litigation. In particular, I have been retained to evaluate requirements and recommendations concerning emergency notifications for people who are deaf or hard-of-hearing within the context of Title II of the Americans with Disabilities Act (“ADA”).

Title II of the ADA requires state agencies like the Massachusetts Department of Correction (“DOC”) to provide access to programs and services to inmates with disabilities. This requirement includes effective communication of all notifications, policies, and informational content that is available to non-disabled inmates. Plaintiffs in this litigation have requested installation of visual emergency alarms (“visual alarms”) in their cells and other living areas as means of effective communication and a reasonable accommodation under the requirements of Title II of the ADA.

To date, the methods used by DOC to provide access to emergency notifications have proven unreliable. In the case of life safety/emergency notifications such as fire alarms, visual alarms in cells and other living areas will address the most critical gap in DOC’s current policies and procedures. These alarms are affordable and reasonable, particularly if inmate clustering within institutions is utilized and/or if systems and equipment are specifically selected institution by institution. Due to the varying ages and conditions at various DOC facilities, there is not a “one size fits all” solution for installing them system-wide. In addition, I recommend that DOC consider redundant systems wherever possible in order to add a layer of reliability and confidence to a system that has repeatedly failed DOC inmates in the past.

DOC is understandably focused on compliance with the requirements of the Massachusetts State Building Code (“MASBC”) and the Massachusetts Architectural Access Board (“MAAB”). Unfortunately, this focus has become a barrier to providing necessary life safety notifications within the context of requested reasonable accommodations. The MASBC and all other building codes are minimum standards that recognize and allow designs and construction that exceed minimum requirements. The necessary notifications can be installed without creating non-compliant conditions within the context of state building and accessibility requirements. Superseding Title II ADA requirements can, and do, result in retrofits that exceed local code. Indeed, Title II requires that DOC, as a state agency, make its programs, services, and activities accessible even if DOC is already in compliance with the minimum standards in the MASBC, MAAB, and ADA Accessibility Guidelines (“ADAAG”).

At the same time, DOC is focused on the cost of installing necessary notifications for deaf and hard-of-hearing inmates, presenting it as a massive DOC-wide undertaking that will result in an undue financial burden. However, DOC has failed to substantiate the burden or make an effort to reduce this purported burden. DOC’s broad internal cost estimates have been devised for entire units or facilities, and generally require that the visual alarms be installed at cells with mobility-related features. None of these requirements pertain to the accommodations

sought by plaintiffs, some are counter to recommended and required practices, and all result in a scope of work and cost that far exceeds the features required to respond to these reasonable accommodations requests.

Moreover, DOC has not obtained cost estimates or requested funding for installation of visual alarms as reasonable accommodations. Given the regular role of the Division of Capital Asset Management and Maintenance (“DCAMM”) in funding DOC facility improvements, accommodation requests (especially those involving life safety) that incur significant costs must be submitted to DCAMM for inclusion in funding considerations as quickly as possible. Nevertheless, DOC has chosen not to prioritize installation of necessary notifications for deaf and hard-of-hearing inmates and has not submitted a request for project funding for these retrofits to DCAMM.

II. Expert Qualifications

I have more than 30 years of experience as a practicing architect and more than 15 years of experience as an expert consultant to the Department of Justice on ADA and Fair Housing litigation. My firm provides architectural services for historic preservation, residential and commercial properties, schools, and institutional projects. My firm also provides ADA and Fair Housing consulting to the National Park Service, the Missouri Commission on Human Rights, the Alabama Department of Corrections, the City of St. Louis, the Missouri Botanical Garden, and many private legal and architectural firms. I have served on the Access Board on the Public Rights-of-Way Advisory Committee and worked on the Technical Assistance Manual for PROW. I am the Vice-Chair and UCP representative on the ANSI A117.1 Standards Development Committee, Chair of the Scoping Task Group, and Co-Chair of the Wheeled Mobility Task Group. My experience includes more than 15 years as adjunct faculty at Washington University in St. Louis, School Architecture. I am also a staff consultant and architect for the Institute for Human Centered Design in Boston, MA and the past President of the St. Louis Chapter of the AIA.

For additional information, please see **Appendix A** for my complete curriculum vitae.

In addition to being based on my knowledge and experience, my report is based on my review and consideration of the materials listed in **Appendix B**.

III. ADA Requirements

Title II of the ADA requires that “no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity.” 42 U.S.C. § 12132. This applies to all services, programs, or activities irrespective of the initial construction date of the facility. 28 C.F.R. § 35.151(c)(5).

To ensure that qualified individuals are not discriminated against, Title II requires public entities to “operate each service, program, or activity so that the service, program, or activity, when viewed in its entirety, is readily accessible to and usable by individuals with disabilities.”

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Id. § 35.150(a). In the detention facility context, this requires prisons to “implement reasonable policies, including physical modifications to additional cells in accordance with the 2010 Standards, so as to ensure that each inmate with a disability is housed in a cell with the accessible elements necessary to afford the inmate access to safe, appropriate housing.” *Id.* § 35.152(b)(3).

To comply with Title II, a public entity is not required to “take any action that it can demonstrate would result in...undue financial and administrative burdens.” *Id.* § 35.150(a)(3). However, the public entity bears the burden of proving that compliance with program accessibility requirements would result in such burdens “after considering all resources available for use in the funding and operation of the service, program, or activity.” *Id.* In addition, the existence of an undue financial and/or administrative burden does not excuse a public entity from making its services, programs, or activities accessible to qualified individuals with disabilities. Indeed, Title II requires that where an action would result in an undue financial and/or administrative burden, “a public entity shall take any other action that would not result in...such burdens but would nevertheless ensure that individuals with disabilities receive the benefits or services provided by the public entity.” *Id.*

IV. DOC’s Current Emergency Notification System

One service that DOC provides to the general prison population is access to an emergency notification system, which is designed to alert inmates of the existence of emergency situations and instruct them on how to respond. However, DOC offers no such equivalent or effective access for deaf and hard-of-hearing inmates in most facilities, placing them at risk of serious harm.

A. Relevant DOC Policies

There are three DOC policies relevant to the issue of visual alarms that all support the notion of providing inmates effective communication of emergency notifications: Fire Prevention and Safety (103 DOC 730), Reasonable Accommodations for Inmates (103 DOC 408), and Booking and Admissions (103 DOC 401).

DOC’s Fire Prevention and Safety policy notes that, “[e]ach Superintendent shall develop a written fire and emergency evacuation plan that . . . include[s] a process to assist inmates in evacuating who may have medical restrictions, including, but not limited to, deaf and hearing impaired....” 103 DOC 730.04(A).

DOC’s Reasonable Accommodations for Inmates policy explicitly lists visual alarms as an assistive device available to inmates who are deaf and hard-of-hearing:

The following assistive devices *shall* be provided, when medically necessary, to assist an inmate who is disabled to ensure access with a reasonable accommodation to existing programs, services, activities and/or benefits within the Department.

1. Deaf, Hard of Hearing and Late Deafened: ...

- e. *sound signals and flashing alarms;*
- f. *visual and sound smoke alarms; ...or*
- h. any other item that might be reasonably required due to medical necessity.

103 DOC 408.12(1) (emphasis added).

DOC's Booking and Admissions Policy permits and encourages grouping inmates who have language barriers: "[i]nmates who report language barriers shall be assessed and, when possible, matched with cellmates who understand their native language or a similar dialect." 103 DOC 401.05(2)(h).

Inmates who use American Sign Language ("ASL") do not speak or understand English as a primary language and are considered to have a language barrier. Being housed in a unit with other ASL speakers would clearly be in keeping with DOC policies when the inmates are in the same classification and already at the same facility. *See* Deposition of Carol Mici ("Mici Tr.") at 183-85. Despite this, DOC does not cluster or group deaf and hard-of-hearing inmates in particular units and/or facilities in order to eliminate their communication access barrier. *See* Deposition Transcript of Jeffrey Quick (rough) ("Quick Tr.") at 95-97; Deposition Transcript of Stephanie Collins at 125.

B. General Population Housing Units and Evacuation Procedures

In General Population housing units, standard procedure for evacuation during a fire drill or a fire event calls for correctional officers ("COs") to perform very straightforward steps:

1. The alarm sounds. This is typically audible by alarm system, battery-operated smoke detectors, or CO announcement, depending on the age of the facility and the operating status of the system or systems.
2. The CO remotely releases the cell door locks, if not already open, allowing inmates to gather as instructed for egress.
3. The CO either remotely (if compliant with current building code) or manually unlocks the exit door.
4. The inmates move through the exit door to a prearranged location for a count. This location may be an area of refuge, an area of assisted rescue, or (more typically) a large open area in either a secure recreation yard or building area that is in a separate fire or smoke area (a safe dispersal area). The inmates proceed under general supervision, but are not monitored or assisted on an individual basis.

5. The CO(s) do a count. They may have additional duties such as, if the fire is small enough, putting out the fire using an extinguisher. As an added complication, inmates have been known to create a fire alarm/event as a diversion and the CO(s) may be involved with an intervention of some kind. If there are multiple inmates who need assistance, this would be done sequentially.

The door release method listed above is specifically referenced in DOC's Fire Prevention and Safety Policy: "[w]hen exit doors are locked for security reasons, keys shall be immediately available and recognizable to personnel on duty." 103 DOC 730.04(B)(2). The policy further states "[e]ach Superintendent shall develop written, specific instructions for the immediate release of inmates from locked areas in the case of an emergency. These instructions shall provide for a manual backup system if the power locks fail, and shall be contained in a non-publicly accessed policy/procedure." *Id.* at 730.04(B)(3).

C. Evacuation Procedures Specific to Deaf and Hard-of-Hearing Inmates

The only reference to the need for COs to be made aware of which inmates have disabilities, including deaf and hard-of-hearing inmates, and may require additional assistance in the event of an emergency, is the "red-dot" policy. This policy is described in DOC's Fire Prevention and Safety Policy as well as its Booking and Admissions Policy. The red-dot policy states "[i]f an inmate has been identified as deaf, blind, hearing and/or visually impaired in the Medical Restrictions Screen in IMS, a red dot shall be placed on the lower right corner of his bed book card for use by the housing unit officer. This will alert staff that the inmate has a hearing impairment, and may need additional assistance during an evacuation." 103 DOC 730.04(A); 103 DOC 401.01(2)(B).

As an example of a facility-specific emergency evacuation plan, at MCI-Norfolk, the fire response procedures include: "Any inmate needing additional assistance shall have a red dot with a medical alert icon placed on their bed book card for identification purposes." DOC_BRIGGS_020283; DOC_BRIGGS_020291.

DOC's entire system for ensuring that deaf and hard-of-hearing inmates receive access to emergency notifications depends on COs reviewing the bed books for each housing unit, noticing which inmates have a red dot, and remembering those red-dot inmates at the time of evacuation. *See* Deposition Transcript of James O'Gara ("O'Gara Tr.") at 321-28.

V. **DOC's Position on Installation of Visual Alarms**

Based on the materials I have reviewed, it is my understanding that DOC has taken the position that the ADA does not require the installation of visual alarms as a reasonable accommodation for deaf and hard-of-hearing inmates. *See* Quick Tr. at 86. DOC makes three arguments in support of this position: (i) DOC's current emergency notification policies and procedures adequately provide deaf and hard-of-hearing inmates with effective access to emergency notifications; (ii) the ADAAG, MASBC, and MAAB do not require installation of

visual alarms as an accommodation; and (iii) even if the regulations did require installing visual alarms, doing so would constitute an undue financial burden.

For the reasons discussed below, it is my expert opinion that DOC is incorrect on all such points.

A. The Inadequacies of DOC's Current Policies and Procedures

It is my understanding that DOC has taken the position that DOC's current policies and procedures adequately accommodate deaf and hard-of-hearing inmates. *See O'Gara Tr.* at 326. It is my expert opinion that DOC is incorrect on this point. Based on the materials I reviewed, DOC's current policies and procedures do not adequately accommodate deaf and hard-of-hearing inmates in an ADA-compliant manner.

Deaf and hard-of-hearing inmates have experienced multiple instances of evacuation delays and failures as a result of DOC's existing emergency notification systems in multiple facilities. These delays have resulted in inmates exiting either late in an evacuation or not at all. To date, these experiences have occurred during fire drills when conditions are relatively calm and controlled and COs are best positioned to comply with DOC's policies and procedures. However, reports from plaintiffs reflect that under the current system they have been: locked inside housing units when other inmates have been evacuated, admonished by COs for not evacuating in a timely manner based on audio notifications, and, due to COs' failure to follow DOC's evacuation procedures, forced to rely on their observations of and cues from other inmates to understand the need to evacuate. For example:

- Leonard Briggs was left behind in his cell at MCI-Shirley while the rest of his unit evacuated and COs locked him inside. Mr. Briggs could not hear the audible alarm sound, as he is profoundly deaf, or see the visual component of the alarm in the common area from his cell. When notified of alarms in a timely way, it was always by other inmates; though he spent well over a decade at MCI-Shirley, no CO ever came to his cell to instruct him to evacuate during a fire drill. Based on his experience, he testified that "in a real fire, I would be the first person to die because there's nothing warning me that there's a fire." *See Deposition Transcript of Leonard Briggs ("Briggs Tr.")* at 147-50 and 198-202; Leonard Briggs' Objections and Responses to DOC's First Set of Interrogatories ("Briggs Interrogatories") at 19.
- Rolando S. Jimenez has been left behind in his cell during fire drills at both Bay State Correctional Center and MCI-Norfolk because he could not hear the audio notification, COs did not notify him to evacuate in a timely manner, and there were no visual notifications visible from his cell. In each of those incidents, Mr. Jimenez had taken out his hearing aids to let them dry, as his aids commonly collect moisture and malfunction as a result. *See Deposition Transcript of Rolando S. Jimenez ("Jimenez Tr.")* at 18-22; Rolando Jimenez's Objections and Responses to DOC's First Set of Interrogatories ("Jimenez Interrogatories") at 4.

- Louis Markham has been left behind during fire drills twice at MCI-Norfolk and three times at the Massachusetts Treatment Center (“MTC”). At MCI-Norfolk and during the most recent occurrence at MTC in November 2017, Mr. Markham was in his cell. The other two times at MTC, Mr. Markham was taking a shower. On each occasion, he was unable to hear the audio notification, was not timely informed to evacuate by COs, and could not see any visual notifications. *See* Deposition Transcript of Louis Markham (“Markham Tr.”) at 90, 92-93, and 95, 242, 251; Plaintiff Louis Markham’s Objections and Responses to DOC’s First Set of Interrogatories (“Markham Interrogatories”) at 20 (“Even with his hearing aid in, whether he can hear an alarm depends on how close he is to it.”). Notably, during one incident at MCI-Norfolk, Mr. Markham was found in his cell and escorted outside by a firefighter doing a sweep of the building. Markham Tr. at 94. During another incident, Mr. Markham was frightened when he ultimately got out of his unit because he was unsure of whether there was a real emergency and the COs laughed at him. *Id.* at 95-96.
- Francis McGowan was left behind by COs “several times” at MTC. He was forced to observe others in order to find out that he needed to evacuate his unit. *See* Deposition of Francis McGowan (“McGowan Tr.”) at 85-87.
- Eric Roldan was left behind while he was in the shower and all other inmates in his unit had evacuated at both Bridgewater State Hospital (“Bridgewater”) and MTC. Mr. Roldan was also left behind while at NCCI-Gardner in 2014. At NCCI Gardner, Mr. Roldan was cleaning his room, where no visual alarms were located or visible, and could not hear the “loud bell alarm” signaling a fire drill. He ultimately determined that he needed to evacuate because he sensed something was wrong, went to the door of his cell, and saw others evacuating. *See* Deposition of Eric Roldan (“Roldan Tr.”) at 146-149; Eric Roldan’s Objections and Responses to DOC’s First Set of Interrogatories (“Roldan Interrogatories”) at 7.
- George Skinder was left behind at MCI-Shirley while he was sleeping in his cell without his hearing aid on; COs realized that he was not there only after performing a health count of all of the evacuated inmates. *See* Deposition of George Skinder (“Skinder Tr.”) at 65-67; George Skinder’s Objections and Response to DOC’s First Set of Interrogatories (“Skinder Interrogatories”) at 14-15.
- Jennifer Ward has been left behind during multiple fire drills at MCI-Framingham when she has not been wearing her hearing aids. *See* Deposition of Jennifer Ward (“Ward Tr.”) at 117; Plaintiff Jennifer Ward’s Supplemental Objections and Responses to DOC’s Interrogatories (“Ward Supplemental Interrogatories”) at 2. Ms. Ward testified that “[t]hey have had fire drills where everybody is outside and I’m still in the unit.” Ward Tr. at 112-13, 117.

Reliance on COs alone to individually notify and assist multiple inmates during a fire drill or fire event puts deaf and hard-of-hearing inmates at a disadvantage in terms of life safety and is not equivalent to notification by the alarm system. This is particularly so where the evidence reflects that COs have repeatedly failed to notify and evacuate deaf and hard-of-hearing inmates during fire drills. Notably, though DOC and its expert asserts that its system is adequate, DOC has not produced evidence to counter plaintiffs' accounts regarding specific incidents or their general experience of COs not adhering to policy and procedure.

Based on the above, it is my opinion that DOC's current policies and procedures do not adequately accommodate deaf and hard-of-hearing inmates in an ADA-compliant manner.

B. ADAAG, MASBC, and MAAB Requirements

The MASBC and the MAAB legitimately affect reasonable accommodations only where they are more restrictive than Title II ADA requirements and where they create a legitimate cost impact that affects DOC's ability to address retrofits and accommodations. However, other than the difference in scoping for new construction, the MASBC is in harmony with the ADA and recognizes standard International Building Code ("IBC") exiting requirements.

The ADA scoping requirements for new construction and MASBC require at least two percent, but no fewer than one, of the total number of general holding cells and general housing cells equipped with audible emergency alarm systems within the cell to have communication features that comply with 807.3.

Specifically, the ADA technical requirements (ADA 2010 232.2.2) state:

807.3.1 Alarms. Where audible emergency alarm systems are provided to serve the occupants of cells, visible alarms complying with 702 shall be provided.

Exception: Visible alarms shall not be required where inmates or detainees are not allowed independent means of egress.

MASBC differs only in the quantity of alarms required:

ACCESSIBLE CELLS OR ROOMS FOR PERSONS WHO ARE DEAF OR HARD OF HEARING

In addition to the requirements of 521 CMR 15.6, Inmate Areas at least 3% but not less than one, of general housing or holding cells or rooms equipped with audible emergency warning systems or permanently installed telephones shall comply with 521 CMR.

Exception: Visible alarms are not required where inmates or detainees are not allowed independent *means of egress*.

521 CMR 15.9 (emphasis in original).

The current MASBC is based on the IBC, 2015 edition. IBC 308.5 pertains to the Use and Occupancy Classification of Detention Facilities, Institutional Group I-3, which “include[s] buildings and structures that are inhabited by more than five persons who are under restraint or security. A Group I-3 facility is occupied by persons who are generally incapable of self-preservation due to security measures not under the occupants’ control.” Section 308 breaks the occupancies into 5 different conditions ranging from minimal security (occupants are free to come and go at all hours) to maximum security (occupants cannot leave their cell without staff-controlled manual release and individual supervision). IBC 308.5.

IBC 1010.1.9 addresses locking arrangements in correctional facilities. Secured and locked exit doors are permitted “where equipped with egress control devices that shall unlock manually and by not less than one of the following means: 1. Activation of an automatic sprinkler system installed in accordance with Section 903.3.1.1; 2. Activation of an approved manual fire alarm box; 3. A signal from a constantly attended location.” *Id.*

Detention facility exits must connect to an area of refuge, an exterior area for assisted rescue, or a safe dispersal area. An area of refuge is defined as, “[a]n area where persons unable to use stairways can remain temporarily to await instructions or assistance during emergency evacuation.” IBC Chapter 2, Definitions. Areas of refuge are typically interior spaces and are required to have direct access to a stairway or elevator. *Id.* at 1009.6.2. They are sized by number of wheelchair spaces served, *id.* at 1009.6.3, and are required to be separated from the rest of the story served by a smoke barrier. *Id.* at 1009.6.4.

An exterior area for assisted rescue is also intended for use by people using wheelchairs. The separation from interior spaces is defined in terms of 10 feet of fire-resistive construction rather than distance from the building. *Id.* at 1009.7.1,7.2.

Both areas of refuge and exterior areas for assisted rescue require two-way communication systems from the location to a fire command center. IBC 1009.8.

A safe dispersal area, per IBC 1028.5 requires:

1. Area not less than 5 square feet per person;
2. Not less than 50 feet from the building;
3. Permanently maintained and identified as a safe dispersal area; and
4. Provided with a safe and unobstructed path of travel from the building.

Whether an exit is discharging to a public way or to a safe dispersal area, the exits are equally effective and code compliant.

None of these requirements are changed or affected by visual alarms or the reasonable accommodations requested by plaintiffs. The MASBC and MAAB do not in any way preclude installation of devices intended to provide effective communication of alarms to inmates who are

deaf or hard-of-hearing. Reliance on MASBC, MAAB, or ADA technical requirements discussed above to deny the accommodations requested by plaintiffs is inapposite.

1. *Independent Means of Egress*

Based on the materials I have reviewed, it is my understanding that DOC has taken the position that the installation of visual alarms is not required under the ADAAG, MASBC, or the MAAB. *See* Quick Tr. at 86. According to DOC, although the ADA and the MAAB contain provisions requiring the installation of visual alarms, both bodies of law have an exception for buildings in which the inhabitants do not have an “independent means of egress.” *See* Quick Tr. at 30. DOC’s stance is that none of its medium or maximum facilities allow inmates an independent means of egress during an emergency situation, leading DOC to conclude that neither the ADAAG, MASBC, or MAAB require installation of visual alarms in such facilities. It is my expert opinion that DOC is incorrect on this point.

It is my understanding that DOC relies on MASBC (780 CMR) for its interpretation of the meaning of “independent means of egress,” specifically to the “Means of Egress section,” 780 CMR 10, and the section regarding “Use and Occupancy,” 780 CMR 3. *See* Quick Tr. at 42. To be clear, the term “independent means of egress” is not defined in the IBC, MASBC, ADA or MAAB. The definitions concerning means of egress that are included in the MASBC and MAAB essentially pertain to the path of travel to an area of refuge, horizontal exit, or public way and accessibility thereof. *See* 780 CMR 10; 521 CMR 5. These definitions do not address or resolve the meaning of *independent* means of egress. Detention facilities fall under 780 CMR 308.0 Institutional Group I-3; I-3 is divided into use Conditions 1 through 5. 780 CMR 308.4; *see* Quick Tr. at 32-33. It is DOC’s position that its minimum security and prerelease facilities fall under Groups 1, 2 or 3, medium and maximum facilities fit within Groups 4, and segregation units are in Group 5. *See* Quick Tr. at 33-37. DOC asserts that only minimum and prerelease facilities have independent means of egress based on the nature of the exit doors, which allow inmates to exit the facility freely or with a brief delay. *See id.* However, the hardware on the door is not the determining factor for assessing independent means of egress. The term specifically relates to the separation of required exits and path of egress travel.

The ADAAG and MAAB exceptions to visual alarm requirements apply only to Group 5, which covers segregation and restrictive housing units where inmates must be removed from cells individually under the control of a CO, and self-evacuation and unassisted exiting are impossible. In these areas, an alarm is not required. Group 4 general population units in medium and maximum security facilities are not excepted because they do self-evacuate. While it is true the inmates may not have the ability to unlock their cell and exit doors during secured hours (e.g., at night and during count), the inmates remain responsible for getting to the prescribed area of safety on their own. Indeed, the ability of inmates to self-evacuate once the door is unlocked is critical to successful evacuation of large housing units.

2. *Requisite Corollary Upgrades*

Based on my review of available information, it appears that DOC mistakenly believes that installing visual alarms in certain cells will require additional upgrades in order to comply with the ADAAG, MASBC, and MAAB.

Cells with visual alarms are not required to also have mobility related features. Inmates who are deaf or hard-of-hearing do not necessarily have any need for such features and cells with visual notification features should not be the same as the cells with mobility features. These features may overlap at single units in a facility and classification in order to address the rare occurrence of hearing and mobility related disabilities, but in general, the accessible cells should be separately retrofitted. Cells may be located anywhere in a housing unit including upstairs, by the COs' station, or immediately adjacent to an existing strobe. There are no new construction or alterations standards that preclude these practices.

Responding to a request for reasonable accommodation does not trigger a requirement to retrofit the entire unit or facility to new construction standards. The requirement to accommodate an individual's request for accessible features under Title II is separate from any affirmative obligation to provide program access and to have an inventory of accessible cells available for inmates with disabilities. The accommodation can be made to individual cells and the individual can be so assigned. DOC has the mechanisms in place in classification to assign inmates who use wheelchairs to cells and beds that have accessible toilet facilities and that are on an accessible route. Once retrofits are performed, DOC should likewise be able to assign inmates who are deaf or hard-of-hearing to cells and units that have visual alarms.

C Undue Financial Burden

Based on the materials I have reviewed, it is my understanding that DOC has taken the position that the installation of visual alarms would be so costly as to constitute an undue financial burden under the ADA. *See Quick Tr. at 86.* It is my expert opinion that DOC is incorrect on this point. The cost estimate DOC relied upon when making its undue burden assertion is fundamentally flawed in that it significantly overstates the likely cost of installation of visual alarms at DOC facilities.

DOC claims that it will cost roughly \$22,148,045 to install visual alarms across all DOC facilities. DOC_BRIGGS_21201. To arrive at this number, DOC created an estimate for the cost to install visual alarms at MCI-Shirley. DOC_BRIGGS_21245. It then divided the total cost of installation by the square footage of all buildings at MCI-Shirley to arrive at a cost-per-square-foot. *See Quick Tr. at 100.* To arrive at an estimate for each facility, DOC multiplied the square footage of each facility by the cost-per-square-foot derived from MCI-Shirley. *Id.*

Although DOC has admitted that its estimate is likely overinclusive, *see Quick Tr. at 73,* it is worth further exploring the inadequacies of DOC's estimate. First, DOC's cost estimates are based on the assumption that a complete, code compliant visual alarm system is required in all housing units at the facilities. *See Quick Tr. at 69.* This is not required.

DOC's cost estimate also does not appear to take advantage of any savings which may result from locating the retrofitted cells as close as possible to existing wiring runs (e.g., at upper levels or by existing chases). The data is also largely comprised of system and facility-wide rough "pre-study" assessments considering few details. *See* Quick Tr. at 99-101.

Indeed, DOC has only sought one actual quote of three types of units at MCI-Shirley to try to validate its internal estimate. *See* Quick Tr. at 67. This quote is a proposal from JC Lentine Electric Service, Inc ("Lentine"). Lentine's quote for general population units includes upgrading the notification appliances at "8 cells on the north side and 8 cells on the south side of each housing unit." DOC_BRIGGS_21234. For this amount of work, Lentine's cost is \$99,750.00 per housing unit, or \$598,500.00 for 7 housing units. DOC_BRIGGS_21235. However, there is no detailed breakdown that allows for further understanding of this proposal or information about what the total cost would be if a total of just 2 alarms were installed in 1 dorm. It seems only logical that 2 notification devices would cost significantly less than 16.

Lentine's estimate is less than DOC's estimate for MCI-Shirley, which indicated that performing necessary upgrades to install visual alarms in only 4 cells in the same general population unit would cost at total of \$150,255.00 – \$130,005.00 for the "fire detection system upgrade and additions" and \$20,250 in "toilet fixture upgrades." DOC_BRIGGS_21245-21247. The additional expense for toilet fixtures is based on DOC's assumption that, per 521 CMR 3.3.1(b), work that costs more than \$100,000.00 triggers an MAAB requirement for an accessible route and for a toilet or toilets in the unit. *See* Quick Tr. at 105-06. This assumption is incorrect. In addition, MASBC exempts from the \$100,000 threshold, "[a]lteration work which is limited solely to electrical, mechanical, or plumbing systems...or retrofit of automatic sprinklers and does not involve the alteration of any elements or spaces required to be accessible under 521 CMR. Where electrical outlets and controls are altered, they must comply with 521 CMR." 780 CMR 3.3.1.b. Alarm retrofits clearly fall into the category of electrical work.

Lentine's estimate is significantly less than DOC's estimate for MCI-Shirley, which indicates that performing necessary upgrades to install visual alarms in only 4 cells in the same general population unit would cost a total of \$150,255.00 – \$130,005.00 for the "fire detection system upgrade and additions" and \$20,250 in "toilet fixture upgrades." DOC_BRIGGS_21245-21247. The additional expense for toilet fixtures is based on DOC's assumption that, per 521 CMR 3.3.1.b, work that costs more than \$100,000.00 triggers an MAAB requirement for an accessible route and for a toilet or toilets in the unit. *See* Quick Tr. at 105-06. This assumption is incorrect. The MAAB includes exceptions to the \$100,000 threshold on which DOC relies. The second states:

Exception: Whether performed alone or in combination with each other, the following types of alterations are not subject to 521 CMR 3.3.1, unless the cost of the work exceeds \$500,000 or unless work is being performed on the entrance or toilet...

b. Alteration work which is limited solely to electrical mechanical, or plumbing systems; to abatement of hazardous materials; or retrofit of automatic sprinklers and does not involve the alteration of any elements or

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spaces required to be accessible under 521 CMR. Where electrical outlets and controls are altered, they must comply with 521 CMR.

521 CMR 3.3.1.b.b. Alarm retrofits clearly fall into the category of electrical work. In addition, with the cost reduced to reflect fewer devices and reduced device installation costs, it seems probable that the total cost to install necessary visual alarms would be less than \$100,000.00.

Finally, due to the type of fire alarm panel currently installed at MCI-Shirley, DOC believes that a new fire alarm panel would need to be installed in order for visual alarms to operate throughout the facility. DOC_BRIGGS_21245. However, DOC has offered no evidence to suggest that it would need to install new fire alarm panels at all DOC facilities. Assuming that this cost would not need to be incurred at all other facilities, DOC's cost-per-square-foot estimate, which currently includes the significant cost of replacing the fire alarm panel, very likely significantly overstates the cost to install visual alarms at other facilities.

For these reasons, DOC's cost estimate, which it relied upon when making its undue burden argument, is inaccurate and cannot provide DOC with a reasonable basis for claiming that the cost to install visual alarms across all DOC facilities exceeds \$22 million.

VI. Reasonable Accommodations and Issues Concerning Implementation

As this report has demonstrated, it is my expert opinion that DOC's current emergency notification system does not satisfy DOC's obligation to provide deaf and hard-of-hearing inmates access to emergency notifications. However, there are several avenues available to DOC to bring their emergency notification system into compliance with the ADA.

A. Alarm & Notification Device Installations

Despite inmate requests for visual alarms that span back a decade and DOC's ADA Committee recognizing a "system wide" need for such alarms prior to August 2016, as of 2019, DOC does not consider the visual alarms request under Title II of the ADA to be a priority. *See* Quick Tr. at 61; DOC-BR0015166. Funding for capital improvements and deferred maintenance that is beyond the capabilities of maintenance staff at DOC facilities is managed by DCAMM. Because of its operating budget, DOC relies on DCAMM funding to complete most significant construction and retrofitting projects, including updates to emergency notification systems. *See* Quick Tr. at 18-19. Though it could choose to do so, DOC has not even submitted a request for funding to DCAMM for in-cell visual alarms in any facilities, as it is DOC's position that there is no need to submit Title II ADA emergency alarm retrofits to DCAMM unless the work is also a building code requirement. *See* Quick Tr. at 47, 60, 61, 68.

DOC has also not considered the cost to provide in-cell visual alarms only in the cells of plaintiffs who have submitted requests for this reasonable accommodation. Instead, DOC has exclusively considered system-wide and facility-wide systems upgrades. *See* Quick Tr. at 80-81. As described in Section V, *supra*, because of this approach, DOC's cost estimate is significantly

inflated, thereby leading DOC to the erroneous conclusion that the costs to install visual alarms are necessarily excessive. *See* Quick Tr. at 81.

It is my opinion that DOC should seek funds to fulfill the reasonable accommodations required to address plaintiffs' requests on an institution basis and should consult with DCAMM concerning the availability of funds for the installation of permanent solutions that are not battery-dependent. Where the costs are reasonable (e.g., MCI-Shirley), requests for funding should be submitted to DCAMM. Where costs are excessive due to DOC's plans for total replacement, accommodations may have to remain limited to personal devices and pagers, as discussed in sub-section C, below.

B. Clustering

DOC seems to reject the concept of clustering to reduce the cost of installing visual alarms based on: (i) programmatic needs, (ii) geographic proximity to family members, and (iii) other factors that affect the placement of inmates within the system. *See* Quick Tr. at 77-79; Mici Tr. at 184-85. All of this is pertinent and should be considered when working on accessibility upgrades. DOC has also rejected the concept of clustering due to the assumption that multiple units and facilities in all classification levels would require visual alarm installation. However, there is another scale of clustering that is possible, which is important to consider for cost reasons. There are (or were) deaf and hard-of-hearing inmates at MCI-Norfolk, NCCI-Gardner, MCI-Framingham, MTC, MCI-Shirley, MCI-Cedar Junction, and Bridgewater. Cost estimates for each site are based on installation of notification systems in all dorms rather than in selected dorms only. DOC_BRIGGS_21201. However, as it relates to this case, clustering the accommodations within a facility will reduce the need for installation of visual alarms to one or two cells in a single dorm. This will reduce the costs considerably in locations where visual alarm installation is the selected retrofit method.

It is my recommendation that DOC consider clustering as a way to reduce the cost of installing visual alarms across all DOC facilities. Moreover, by refusing to consider clustering or any more limited installment of in-cell visual alarms to accommodate deaf and hard-of-hearing inmates, DOC is not meeting its burden under 28 CFR § 35.150(a)(3).

C. Beta Testing

As part of the process surrounding this case, DOC has performed limited beta testing on four emergency notification systems for deaf and hard-of-hearing inmates that perform on a personal basis. The units tested are intended to provide notification to individual inmates equipped with the device. One advantage to these types of systems is that they are portable from facility to facility and provide some flexibility in terms of the locations where they can be applied. Another significant advantage is the cost savings involved in providing them as an accommodation to allow people with hearing loss effective access to emergency notifications. However, all of these devices were deemed by DOC to be unreliable. *See* DOC_BRIGGS_21337; Quick Tr., 110-11; DOC_BRIGGS_21343; DOC_BRIGGS_21352; DOC_BRIGGS_21353.

DOC relied exclusively on internet searches and plaintiffs' counsel for recommendations of devices to beta test. *See* Quick Tr. at 112; 132. DOC did not even test the devices recommended by its own expert, Eileen D. Baker ("Baker"). Baker stated that the Safe Awake Bed Shaker from HarrisComm, "if it is able to detect the sound of the fire alarm in DOC facilities, is otherwise compatible with DOC's fire alarm system, and is determined to not pose any significant security or control risks to DOC, would be a reasonable accommodation to offer deaf and hard-of-hearing inmates under the ADA for use in their individual cells." Baker Expert Report, at 29.

In addition, when determining devices to beta test, DOC did not reach out to other correctional agencies or local or national experts in notification devices designed for people who are deaf or hard-of-hearing, including representatives of the Massachusetts Commission for the Deaf and Hard of Hearing, the Association of Late-Deafened Adults, the National Association of the Deaf, or Hearing Loss of America.

Finally, DOC has not beta tested or installed battery-powered visual smoke detectors. Standard battery-powered smoke detectors are currently employed as the only means of emergency notification in several units at MCI-Norfolk and, according to DOC, adding visual notification systems to individual cells will have no impact on the Underwriters Laboratories ratings of any existing detection or alarm system in the facilities. *See* Quick Tr. at 107.

While DOC explores more permanent provisions which require upgrading existing systems, it is my recommendation that DOC conduct further research, enlisting the expertise of other agencies and experts, to find devices that operate on an individual basis that are reliable at each DOC facility and that can be offered to deaf and hard-of-hearing inmates as an accommodation. In the meantime, relocating inmates to cells adjacent to existing audible alarms would allow DOC to provide certain personal devices to inmates depending on the existing alarm systems in their various facilities.

VII. Conclusion

Based on the materials I reviewed, it is my expert opinion that DOC's current emergency notification system does not satisfy DOC's obligations under the ADA. The ADA requires that deaf and hard-of-hearing inmates have equal and effective access to emergency notifications. However, DOC's current fire alarm and evacuation policies and procedures have consistently failed to alert deaf and hard-of-hearing inmates of emergency situations, resulting in either the failed or delayed evacuation of these individuals.

It is also my opinion that DOC's position on why it is not required to install visual alarms is flawed. DOC's position that the ADAAG, MASBC, and MAAB do not require installation of visual alarms has no bearing on whether such alarms are required under the ADA. These regulations are in harmony with the relevant provisions of the ADA. Additionally, the MASBC and MAAB in no way preclude the installation of visual alarms. Additionally, DOC's position on undue burden is both incorrect and unsubstantiated. DOC is relying on cost estimates that are significantly overinclusive, and riddled with incorrect assumptions and unnecessary renovation

costs. Moreover, DOC has yet to either submit a request for visual alarm funding to DCAMM, or seek quotes from external vendors with the exception of one that only considered the cost to install visual alarms at one facility and in far more cells than are required or requested.

To fulfill its obligations under the ADA, it is my opinion that DOC must install visible electronic notice of alarms to deaf and hard-of-hearing inmates in all areas including their cells. DOC's current evacuation policies and procedures rely on COs and are, therefore, subject to an unacceptable amount of human error. In fact, the evidence reflects the repeated ineffectiveness of these policies to safely and timely evacuate deaf and hard-of-hearing inmates even in mock emergencies. It is also my opinion that DOC should consider clustering deaf and hard-of-hearing inmates into specific units or facilities to more efficiently meet the needs of the population and as a method of reducing installation costs. Last, it is my opinion that DOC should also conduct additional and robust beta testing of emergency notification devices that operate on an individual basis.

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CERTIFICATE OF SERVICE

I hereby certify that on this 2nd day of August, 2019, a copy of the foregoing was sent via the means set forth below, to the following persons:

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/s/ Alexandra B. Lavin

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