

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF KENTUCKY
At FRANKFORT**

OSCAR ADAMS and MICHAEL KNIGHTS, et al.,

Plaintiffs,

v.

THE COMMONWEALTH OF KENTUCKY, et al.,

Defendants.

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) **Case No. 3:14-cv-001 (E.D.Ky)**
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EXPERT REPORT OF RICHARD LORENZO RAY

September 16, 2014

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. QUALIFICATIONS, COMPENSATION, AND PREVIOUS TESTIMONY	2
A. Qualifications	2
B. Previous Testimony	4
C. Compensation	4
III. MATERIALS CONSIDERED	4
IV. SUMMARY OF OPINIONS	5
V. RELEVANT LEGAL PRINCIPLES AND GUIDELINES	5
A. Americans with Disabilities Act of 1990	6
B. Rehabilitation Act of 1973	8
C. Religious Land Use and Institutionalized Persons Act of 2000	9
D. Kentucky Civil Rights Act Provision of Interpreters, KRS 344.500	10
E. Kentucky Civil Rights Act, KRS 344.120	10
F. Free Speech Rights under the First and Fourteenth Amendments of the United States Constitution	10
G. Free Exercise of Religion under the First and Fourteenth Amendments of the United States Constitution	11
H. Freedom from Cruel and Unusual Punishment under the Eighth and Fourteenth Amendments	11
VI. SUMMARY INFORMATION ON DEAF AND HARD-OF-HEARING INDIVIDUALS	11
VII. SUMMARY OF THE DEFENDANTS' TREATMENT OF THE DEAF AND HARD-OF-HEARING INMATES IN ITS CUSTODY	12
VIII. OPINIONS REGARDING THE DENIAL OF EQUAL ACCESS AND EFFECTIVE COMMUNICATION AND TECHNOLOGIES THAT CAN BE IMPLEMENTED AS A REMEDY	18
A. Overview	18
B. Access to Video-Based Services for Telecommunications	19
1. Defendants' Denial of Effective Communication	19
2. Background and Methods of Improving Voice Communications for Deaf and Hard-of-Hearing Inmates to Ensure Effective Communications	20
a. Voice Communications	20
b. Teletypewriter for the Deaf ("TTY")	20
c. Traditional and Internet-based Telecommunications Relay Services	22
d. Video-Based Services	23
(a) Videophone	23
(b) Video Relay Services	24
e. Implementation of Technological Solutions	25
(a) Videoconference v. Videophone	25
(b) Broadband	26
(c) Bandwidth vs. Speed	26

TABLE OF CONTENTS
225
(continued)

	Page
(d) Broadband Speed Guide	27
(e) Internet Connection.....	27
f. Implementation of Video-Based Services	27
(a) Security	28
(b) Setting Up Video-Based Services	28
(c) Monitoring and Recording Video-Based Service	29
(i) Contract Vendors	29
(ii) Computer with ZVRS Z-4 and Z-5 Applications	30
(iii) Stand-alone Videophone equipped with Video/Audio Line Output.....	30
(iv) TV equipped with an HDMI input jack for Videophone.....	30
(v) Purple Videophone Kiosk.....	30
g. The Status of Implementing Video-Based Services Within the Government	31
(a) Federal Government.....	31
(b) Video-Based Services in State Prison Systems	31
(c) VRS and the Federal Communications Commission.....	32
h. Captioned Telephone	32
C. Access to Notification of Events and Announcements.....	33
1. Defendants' Discrimination and Denial of Equal Access.....	33
2. Background and Implementation of Auxiliary Aids and Notifications Systems to Remedy Discrimination and Denial of Equal Access	34
a. In-Cell Visual Alarms	34
b. Wireless Notification Systems with Shakers	34
c. Visual Paging Systems.....	35
D. Access to Educational, Religious, Healthcare, and Rehabilitative Programs, Disciplinary Hearings, and Employment Opportunities.....	36
1. Defendants' Denial of Effective Communication and Equal Access	36
2. Background and Implementation of Interpretative Services and Restraint Mechanisms for Effective Communication and Equal Access	36
a. Qualified Sign Language Interpreters	36
b. Video Remote Interpreting Services.....	37
c. Communication Access Real-time Translation ("CART").....	38
d. Audio Assistive Listening Device System ("ALDS").....	39
E. Restraint Mechanisms and Effective Communication.....	39
F. Need for Staff Training Regarding ADA Requirements	40
G. Procedures for Requesting ADA Accommodations	41
IX. CONCLUSION.....	41

I. INTRODUCTION

1. My name is Richard Lorenzo Ray. I make the following statements based on my own personal knowledge, and, if called as a witness, I could and would testify as to the following.
2. I have been retained by the law firm of Weil, Gotshal & Manges LLP to provide analysis and testify as an independent expert on behalf of the Plaintiffs concerning effective communication and equal access for the deaf and hard-of-hearing in the Kentucky Department of Corrections' ("KDOC") prison system.
3. I have been asked to opine on (1) accommodations (or lack thereof) for the deaf and hard-of-hearing in state custody in Kentucky, (2) whether Defendants failed to provide appropriate accommodations for the deaf and hard-of-hearing inmates in the KDOC's custody, including Plaintiffs Michael Knights ("Mr. Knights"), inmate #233021, and Oscar Adams ("Mr. Adams"), inmate #243676, (3) the means by which Defendants could have complied with the law regarding accommodations for the deaf and hard-of-hearing inmates in its custody, (4) and whether implementation of such means is feasible, practical, cost-effective, and secure.
4. The opinions I have formed are introduced in Section IV, below, and addressed in more detail in Section VIII. In forming my opinions, I considered facts disclosed in interrogatory responses and document productions that relate to the deaf and hard-of-hearing inmates in KDOC's custody, my knowledge and experience regarding reasonable accommodations that can be made for the deaf and hard-of-hearing to ensure effective communication and equal access to programs and services, the interpretations of applicable legal requirements to provide such accommodations by governmental agencies, and the text of statutes and regulations that I understand (or have been asked to assume) would apply to accommodations for deaf and hard-of-hearing inmates in the KDOC's custody.¹ In doing so, I have concluded that Defendants failed to provide Mr. Knights and Mr. Adams (as well as other deaf and hard-of-hearing inmates in the custody of KDOC) with the means to effectively communicate with individuals, both inside and outside of prison, to have an equal opportunity to participate in programs, services, and activities and to receive announcements, including emergencies, in KDOC facilities. Further, I determined that Defendants could have provided such means in a reasonable and secure manner.
5. I expect to be called to provide expert testimony at the trial regarding the opinions I formed on the issues discussed in this report. This report, including the exhibits and attachments, identifies all of my opinions as of this time. I reserve the right to supplement this report to address any issues raised by Defendants' experts or

¹ A comprehensive list of the materials that I relied upon for this report is disclosed in Section III.

resulting from further discovery—including depositions, interrogatories, document requests and requests for admission—relating to any of the opinions disclosed herein. Additionally, if any facts or information absent from the record is newly disclosed in Defendants' expert report(s), I reserve the right to supplement my analysis based on such.

II. QUALIFICATIONS, COMPENSATION, AND PREVIOUS TESTIMONY

A. Qualifications

6. I have been employed by the City of Los Angeles Department on Disability for the past 22 years to assess, monitor, and ensure the city's compliance with the Americans with Disabilities Act of 1990 ("ADA"), the Rehabilitation Act of 1973, and other applicable federal, state, and local disability laws. Currently, I am the ADA and Technology Access Coordinator. Prior to that, I was the Deputy ADA Compliance Officer and ADA Compliance Officer. In these capacities, I have advised the city on the steps it must take to comply with applicable disability law, provided technological and technical assistance to city departments to improve access to and communication with the deaf and hard-of-hearing, and coordinated access to city facilities, programs, services and activities for deaf and hard-of-hearing individuals. Having held these positions, I am knowledgeable on the requirements of the ADA, the Rehabilitation Act, and other disability laws. Through my employment I am also well versed in various technologies and methods for improving communication and access for the deaf and hard-of-hearing.
7. As an example of my experience, I advised and oversaw the implementation of a system permitting 9-1-1 emergency access to the disabled, among other telecommunications systems. Additionally, I am currently assisting in the implementation of a new telecommunications system designed to accommodate deaf individuals at the Los Angeles Police Department ("LAPD") Metropolitan Detention Center and at all city police stations' public counters, booking, housing, and medical areas. The system includes (1) Video Remote Interpreting ("VRI") services, (2) public access videophones, and (3) a visual paging system. Additional examples of my job responsibilities include:
 - Evaluate, analyze, and provide recommendations to the LAPD on various policy issues, including procedures for obtaining sign language interpreters in compliance with ADA Title II and Rehabilitation Act of 1973.
 - Provide recommendations to the Los Angeles Police Commission's Professional Advisory Committee ("PAC") and its subcommittees, which include, *inter alia*, the Language-Culture Task Force and Diversity Training Redesign Committee.
 - Provide recommendations to the Los Angeles Fire Department Community Emergency Response Team ("CERT") and the Mayor's Crisis Response

Team ("CRT") regarding the interaction with individuals with disabilities as well as individuals who are deaf, deaf-blind, and hard of hearing.

- Provide assistance and support to city, state, and local entities during natural disasters and crises through emerging telecommunications technologies including videophone, current state-of-the-art systems as well as the latest technologies available for effective communications and services to meet the needs of people with disabilities before, during and after emergencies. These entities include, *inter alia*, the Emergency Management Department, the LAPD, and Los Angeles World Airports.
 - Conduct research on text messaging system to interface with 9-1-1 system for all level of governments to provide direct access to 9-1-1 emergency services.
 - Research, update and maintain emerging telecommunication technology for city programs and facilities. These programs and facilities include, *inter alia*, 9-1-1 and 3-1-1 services, police stations, libraries, and airports.
 - Developing ADA training programs for ADA Coordinators in all city departments. These trainings include instruction on ADA terminology, equipment utilization, and ensuring that all coordinators are aware of current law and emerging technologies.
 - Assist city departments in obtaining and providing communication accommodations and auxiliary services such as telephone access, TTY, videophones, text telephones, public TTY equipped payphones, sign language interpreter services, computer aide transcriptions, assistive listening systems, videotext display, note-takers, captioning and real-captioning services as well as any other effective communication system to allow individuals who are deaf, deaf-blind, hard of hearing and individuals who have speech disabilities access to city programs and services. Providing training to more than 50,000 city employees for over twenty-two years.
8. For additional information of my job responsibilities and past employment experience, please see **Exhibit A** for my complete curriculum vitae.
9. In addition to my job responsibilities, I am the current co-chair of the National Emergency Number Association Accessibility Committee and the California Commission on Disability Access. In the past, I have served as a co-chair of the Federal Communications Commission's Emergency Access Advisory Committee ("EAAC") and president of the California Association of the Deaf ("CAD"). I have also served as a member of the National Advisory Board of Preparedness and Emergency Response Research Center, the University of Berkeley and California Public Utilities Commission Equipment Program Advisory Committee ("EPAC"), Deaf and Disabled Telecommunications Programs Administrative Committee, TDD Placement Interim Committees, the Los Angeles County Metropolitan Transportation Authority, Service Authority for Freeway

Emergency Hearing and Speech Impaired Task Force, the County of Los Angeles Commission on Human Relations, and the Media Image Coalition.

10. I have made several presentations to various federal agencies. For example, in 1995 I gave a presentation on "Five Years of ADA Implementation: 9-1-1 Emergency Access for Deaf and Hard of Hearing" to the Federal Emergency Management Agency ("FEMA"). I have also presented several times for the National Emergency Number Association on emerging technologies, emergency notification, and emergency communications as they relate the deaf and hard-of-hearing. Among other organizations, I have also presented to the Federal Communications Commission ("FCC") on emergency calling for the deaf and hard-of-hearing and to the Centers for Disease Control and Prevention ("CDC") on policies and regulations on accessibility to programs and services before, during and after disasters.
11. For my contributions to my field, I have received various awards and recognitions. A list of these honors is provided in my curriculum vitae, attached hereto as **Exhibit A**.
12. In 2000, I earned a Disability Rights Masters Certificate from Loyola Law School in Los Angeles, California.
13. I was born with severe hearing loss and wore hearing aids during childhood and into adult life. In 2000, I lost my remaining residual hearing and became completely deaf.

B. Previous Testimony

14. I have been engaged as an expert consultant and witness in other cases, as disclosed on my curriculum vitae at **Exhibit A**. In *Bryant v. United States Bureau of Prisons, et. al*, for instance, I testified on general access to prison programs, services, and activities as well as effective communications utilizing current technologies. I also testified for the *Berke v. United States Bureau of Prison* case on effective communications.

C. Compensation

15. I have been retained by Weil in this case at the rate of \$100.00 per hour to draft this report and testify about the accommodations necessary to provide Mr. Knights, Mr. Adams, and other deaf and hard-of-hearing inmates with the means to effectively communicate and access prison programs, services, announcements, and activities. I am also compensated for out-of-pocket expenses as well as reasonable transportation and lodging costs incurred in connection with services I perform in this litigation. My compensation is not dependent on the outcome of this case or the opinions and conclusions I offer.

III. MATERIALS CONSIDERED

16. I have been provided with, reviewed, and used the materials listed in **Exhibit B** in developing my report. Additionally, I have reviewed and I am relying on the materials cited in my report.

IV. SUMMARY OF OPINIONS

17. It is my opinion, based on my experience, my understanding of the laws as described to me by counsel and as stated in Section V, and analysis of the factual record and all materials cited in my report, that the Defendants have failed to provide Plaintiffs Mr. Knights and Mr. Adams, as well as all other deaf and hard-of-hearing inmates in the custody of the KDOC, with the means to communicate effectively with individuals both inside and outside of prison and to have equal access to prison facilities, programs, services, announcements, and activities.
18. It is further my opinion that the Defendants should have provided the following accommodations to ensure effective communication and equal access for Mr. Knights, Mr. Adams, and all deaf and hard-of-hearing individuals in KDOC's custody: (1) videophone access;² (2) certified sign language interpreters available in person, or remotely via Video Remote Interpreting ("VRI"), and upon request; (3) Video Relay Service ("VRS") access; (4) CapTel systems; (5) CART services and/or ALDS (6) in-cell visual alarms and/or wireless notification systems; (7) bed shakers; (8) visual paging systems; (9) sufficient range of motion of their hands to permit effective communication whenever possible; (10) KDOC staff training concerning the deaf and hard-of-hearing inmates.³
19. There were and are no insurmountable technological or security impediments to implementing such accommodations at KDOC facilities. Indeed, other prison systems and government agencies have already implemented many of them.⁴

V. RELEVANT LEGAL PRINCIPLES AND GUIDELINES

20. I am not a legal expert and offer no legal opinions. I have an understanding of various legal principles that apply to the pertinent issues of this case from my professional experience and background and from information provided to me by

² Meaningful videophone access requires that deaf and hard-of-hearing videophone users have twice the amount of time to converse as hearing inmates using voice telephones because of the additional time needed to sign. Similarly, TTY users need three times as long to converse due to how much longer it can take users to type out and read text. Although the speed at which individuals communicate in a particular language can vary from person to person, on the whole it takes longer to sign than to speak and much longer to type than to speak. See Section VIII.B. of my report for further detail.

³ For example, cuffing inmates' hands behind the back or using cuffs that otherwise prevent signing denies deaf and hard-of-hearing inmates a means to effectively communicate.

⁴ These include, *inter alia*, the Powhatan Correctional Center in Virginia, Vermont's state prison system, Wisconsin's state prison system, all federal government agencies, the U.S. Department of Defense, and portions of the U.S. military.

counsel. I have applied those standards in arriving at my conclusions in this report.

A. Americans with Disabilities Act of 1990

21. Counsel has informed me, and I understand also from my professional background, that Title II of the Americans with Disabilities Act (“ADA”) of 1990, as amended, requires state and local governments to provide individuals with disabilities with an equal opportunity to participate in and enjoy programs, services, and activities unless doing so would fundamentally alter the nature of the programs or service, or would impose an undue financial or administrative burden.
22. Specifically, 42 U.S.C. § 12132 states 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.”⁵ Further, Title II of the ADA defines a “qualified individual with a disability” as “an individual with a disability who, with or without reasonable modification to rules, policies, or practices, the removal of ... communication ... barriers, or the provision of auxiliary aids and services, meets the eligibility requirements for the receipt of services or the participation in programs or activities provided by a public entity.”⁶ “Public entity” is defined to include “any department, agency, ... , or other instrumentality of a State or States or local government”⁷
23. Mr. Knights, Mr. Adams, and all other deaf or hard-of-hearing inmates in the custody of the KDOC are “qualified individual[s] with a disability” for purposes of the ADA since they are eligible to receive the following services and participate in the following programs and activities to the same extent other hearing inmates in the KDOC’s custody are eligible: (1) telecommunications with individuals outside of prison; (2) educational, religious, healthcare, and rehabilitative programs; (3) notifications of daily events and safety announcements; (4) participation in disciplinary and other hearings; and (5) employment opportunities. Moreover, the KDOC and its facilities are “public entit[ies]” under Title II of the ADA as they are clearly a department or other instrumentality of the State of Kentucky.
24. Counsel has informed me, and I understand also from my professional background, that the regulations promulgated by the U.S. Department of Justice

⁵ See also 28 C.F.R. § 35.130 (“No qualified individual with a disability shall, on the basis of 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 public entity.”).

⁶ 42 U.S.C. § 12131(2).

⁷ 42 U.S.C. § 12131(1).

implementing Title II of the ADA⁸ that further define the scope and meaning of the law. They emphasize that a person shall not be excluded from participation in or denied the benefits of services, programs, or activities of a public entity on the basis of a disability.⁹ I also understand from counsel, and based on my professional background, that the regulations clarify that effective communication is part of the ADA's antidiscrimination mandate by requiring that communications with "applicants, participants, and members of the public ... with disabilities are as effective as communications with others."¹⁰

25. Counsel has informed me, and I understand also from my professional background, that under these regulations, the state or local government is required to: (1) make reasonable modifications to policies, practices, or procedures to prevent discrimination on the basis of disability;¹¹ (2) ensure that communications with individuals with disabilities are as effective as communications with others;¹² and (3) provide "auxiliary aids and services where necessary to afford qualified individuals with disabilities ... an equal opportunity to participate in, and enjoy the benefits of, a service, program, or activity conducted by a public entity."¹³
26. Importantly, I understand that when determining what type of auxiliary aid or service is necessary to ensure that an individual with a disability is not denied effective communication, "a public entity shall give primary consideration to the requests of individuals with disabilities."¹⁴ Further, the analysis of the ADA regulations in the Federal Register state that the "public entity shall honor the choice [of the individual with the disability] unless it can demonstrate that another effective means of communication exists or that use of the means chosen would not be required under § 35.164" (*i.e.*, constitute an undue burden).¹⁵

⁸ See 42 U.S.C. § 12134.

⁹ 28 C.F.R. § 35.130(a), (b)(1).

¹⁰ 28 C.F.R. § 35.160.

¹¹ 28 C.F.R. § 35.130(b)(7).

¹² 28 C.F.R. § 35.160(a)(1).

¹³ 28 C.F.R. § 35.160(b)(1). See also 28 C.F.R. § 35.104 (defining "[a]uxiliary aids and services" as including, *inter alia*, "[q]ualified interpreters on-site or through video remote interpreting (VRI) services; notetakers; ... written materials; exchange of written notes; telephone handset amplifiers; assistive listening devices; assistive listening systems; telephones compatible with hearing aids; ... voice, text, and video-based telecommunications products and systems, including text telephones (TTYs), videophones, and captioned telephones, or equally effective telecommunications devices").

¹⁴ 28 C.F.R. § 35.160(b)(2).

¹⁵ 56 Fed. Reg. at 35711-12.

27. In sum, the Title II of the ADA and its regulations prohibit a public entity from denying, or failing to provide, a person with a disability—such as those who are deaf or hard-of-hearing—means to communicate effectively and to have equal access to the public entity’s facilities, programs, services, and activities.

B. Rehabilitation Act of 1973

28. Counsel has informed me, and I understand also from my professional background, that section 504 of the Rehabilitation Act of 1973 prohibits discrimination on the basis of a disability in programs conducted by Federal agencies, in programs receiving Federal financial assistance, in Federal employment, and in the employment practices of Federal contractors.¹⁶ Section 503 of the act states:

No otherwise qualified individual with a disability in the United States, as defined in section 705(20) of this title, shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance or under any program or activity conducted by any Executive agency or by the United States Postal Services.¹⁷

29. Mr. Knights, Mr. Adams, and all other deaf or hard-of-hearing inmates in the custody of the KDOC are “qualified individuals” according to 29 U.S.C. § 705(20), which defines the term as “any person who has a disability as defined in section 3 [42 U.S.C. § 12102] of the American with Disabilities Act of 1990.” Additionally, the KDOC is a “program or activity” receiving Federal financial assistance for the purposes of the Rehabilitation Act.¹⁸
30. Counsel has informed me, and I understand also from my professional background, that the regulations implementing the Rehabilitation Act provide further clarity on the prohibitions against denying equal access to persons with a disability. 28 C.F.R. § 42.503(b)(1) states that an entity receiving Federal funding cannot, *inter alia*, “(i) [d]eny a qualified handicapped person the opportunity accorded to others to participate in the program or activity receiving Federal financial assistance; (ii) [d]eny a qualified handicapped person an equal opportunity to achieve the same benefits that others achieve in the program or activity receiving Federal financial assistance; ... (iv) [d]eny a qualified handicapped person an equal opportunity to participate in the program or activity by providing services to the program”

¹⁶ 29 U.S.C. § 794(a)

¹⁷ *Id.* See also 28 C.F.R. § 42.503.

¹⁸ 29 U.S.C. § 794(b) (“For the purposes of this section, the term ‘program or activity’ means all of the operations of ... a department, agency, special purpose district, or other instrumentality of a State or of a local government”).

31. Counsel has informed me, and I understand also from my professional background, that the regulations also state that an entity must provide those with a disability adequate means for effective communication. Under 28 C.F.R. § 42.503(e), “[r]ecipients shall insure that communications with their applicants, employees and beneficiaries are effectively conveyed to those having impaired vision and hearing.” Additionally, I understand that 28 C.F.R. § 42.503(f) states that “[a] recipient that employs fifteen or more persons shall provide appropriate auxiliary aids to qualified handicapped persons with impaired sensory, manual, or speaking skills where a refusal to make such provision would discriminatorily impair or exclude the participation of such persons in a program or activity receiving Federal financial assistance.” I also understand that under this regulation, auxiliary aids may include “qualified interpreters” and “telephonic devices.”¹⁹
32. In sum, the Rehabilitation Act and its regulations prohibit a public entity from denying, or failing to provide, a person with a disability—such as those who are deaf or hard-of-hearing—means to communicate effectively and to have equal access to the public entity’s facilities, programs, services, and activities.

C. Religious Land Use and Institutionalized Persons Act of 2000

33. I understand from counsel that under the Religious Land Use and Institutionalized Persons Act of 2000, governments may not impose substantial burdens on the religious exercises of institutionalized persons even if the burden results from a rule of general applicability.²⁰
34. It is my understanding that Mr. Knights, Mr. Adams, and other deaf and hard-of-hearing individuals in the custody of the KDOC are “institutionalized persons” for the purposes of The Religious Land Use and Institutionalized Persons Act of 2000.
35. I understand from counsel that the “government” for purposes of this Act is defined as meaning “(i) a State, county, municipality, or other governmental entity under the authority of a State; (ii) any branch, department, agency, instrumentality, or official of an entity listed clause (i); and (iii) any other person acting under color of State law ...”²¹ Applying this standard to the issues in this case, the KDOC and its prisons – including Bell County Forestry Camp, Blackburn Correctional Complex, Eastern Kentucky Correctional Complex, Green River Correctional Complex, Kentucky Correctional Institute for Women, Kentucky State Penitentiary, Kentucky State Reformatory, Little Sandy Correctional Complex, Luther Luckett Correctional Complex, Northpoint Training Center,

¹⁹ 28 C.F.R. § 42.503(f).

²⁰ 42 U.S.C. § 2000cc-1(a).

²¹ 42 U.S.C. § 2000cc-5(4).

Expert Report of
Richard Lorenzo Ray

Roederer Correctional Complex, and Western Kentucky Correctional Complex – each qualify as “government” for purposes of this Act, because they are a governmental entity under the authority of the State of Kentucky or a branch, department, agency or instrumentality of Kentucky.

D. Kentucky Civil Rights Act Provision of Interpreters, KRS 344.500

36. I understand from counsel that the Kentucky Civil Rights Act, KRS 344.500, provides that a “qualified interpreter shall be appointed in any proceeding before a board, commission, agency, or licensing authority of the state or any of its political subdivisions, when the principal party in interest or a witness is deaf, hard of hearing, or speech impaired.”²²
37. It is my understanding that the KDOC and Kentucky’s various correctional institutions are state agencies that sponsor many inmate proceedings before a state board, commission, or agency, including parole and disciplinary hearings.

E. Kentucky Civil Rights Act, KRS 344.120

38. I understand from counsel that the Kentucky Civil Rights Act, KRS 344.120, provides that “it is an unlawful practice for a person to deny an individual the full and equal enjoyment of the goods, services, facilities, privileges, and accommodations of a place of public accommodation.”²³
39. It is my understanding that Defendants are state actors that fall within the Kentucky Civil Right Act’s definition of “person.”²⁴

F. Free Speech Rights under the First and Fourteenth Amendments of the United States Constitution

40. I understand from counsel that under the First and Fourteenth Amendments of the United States Constitution, States “shall make no law . . . abridging the freedom of speech.”²⁵
41. I further understand from counsel that 42 U.S.C. § 1983 creates a cause of action when a “person who under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory or the District of Columbia, subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws.”

²² KRS 344.500.

²³ KRS 344.120.

²⁴ KRS 344.010

²⁵ Constitution of the United States, as amended.

G. Free Exercise of Religion under the First and Fourteenth Amendments of the United States Constitution

42. I understand from counsel that under the First and Fourteenth Amendments of the United States Constitution, States “shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof.”²⁶
43. As noted above, I further understand from counsel that 42 U.S.C. § 1983 creates a cause of action when a “person who under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory or the District of Columbia, subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws.”

H. Freedom from Cruel and Unusual Punishment under the Eighth and Fourteenth Amendments

44. I understand from counsel that the Eighth and Fourteenth Amendments of the United States Constitution, “[e]xcessive bail shall not be required, nor excessive fines imposed, nor cruel and unusual punishments inflicted.”²⁷
45. As noted above, I further understand from counsel that 42 U.S.C. § 1983 creates a cause of action when a “person who under color of any statute, ordinance, regulation, custom, or usage, of any State or Territory or the District of Columbia, subjects, or causes to be subjected, any citizen of the United States or other person within the jurisdiction thereof to the deprivation of any rights, privileges, or immunities secured by the Constitution and laws.”

VI. SUMMARY INFORMATION ON DEAF AND HARD-OF-HEARING INDIVIDUALS

46. Hearing loss affects all levels of society, every age, race, education level, and occupation.²⁸ Some people are born deaf and some become deaf later in life. Deafness is caused by a wide range of factors, including but not limited to heredity, illness, disease, accident, medication, violence, and aging.
47. The intelligence, personality, age at the onset of deafness, language background, listening skills, lip-reading ability, writing, reading, and speech ability, vary with each person. In most, but not all cases, hearing loss may also cause speech difficulties while deafness almost always does. People who are born deaf have

²⁶ Constitution of the United States, as amended.

²⁷ Constitution of the United States, as amended.

²⁸ Hearing Loss Association of America, <http://www.hearingloss.org/content/basic-facts-about-hearing-loss> (Retrieved September 15, 2014); National Association of the Deaf, <http://nad.org/issues/health-care/providers/questions-and-answers> (Retrieved September 15, 2014)

never heard speech sounds. Few may speak clearly and many may not at all. There are literacy level differences among the deaf community. Further, while some individuals have English literacy skills, many individuals do not have a written form of a language to communicate via pen and paper. Also, individuals may not necessarily have expertise in reading lips. Even for those who can lip-read, numerous factors can inhibit an individual's ability to rely on lip reading. Only 30 percent of words can be visually recognized by an expert lip-reader; the rest is left to guess work.²⁹

48. The majority of deaf individuals in the United States utilize ASL as their primary language.³⁰
49. ASL has its own structure, syntax, and grammar. Persons who use sign language are very expressive with their hand movements and may also use speech, fingerspelling, writing, body language, and facial expressions. While ASL is not a written English language, it is a visual manual language with its own unique structure, syntax, and grammar. It is based on the movement of the signs, other body movements, and non-manual grammatical markers, which are known as "facial grammar." The setting is established not by words, but by visual-based perceptions. Accompanying facial expressions and body language indicate the intensity of emotion.

VII. SUMMARY OF THE DEFENDANTS' TREATMENT OF THE DEAF AND HARD-OF-HEARING INMATES IN ITS CUSTODY

50. The Kentucky Department of Corrections is a division of the Kentucky Justice & Public Safety Cabinet, which is part of Kentucky's executive branch.³¹ The KDOC operates and manages 12 institutions housing inmates. These institutions include: (1) Bell County Forestry Camp ("BCFC"); (2) Blackburn Correctional Complex ("BCC"); (3) Eastern Kentucky Correctional Complex ("EKCC"); (4) Green River Correctional Complex ("GRCC"); (5) Kentucky Correctional Institute for Women ("KCIW"); (6) Kentucky State Penitentiary ("KSP"); (7) Kentucky State Reformatory ("KSR"); (8) Little Sandy Correctional Complex ("LSCC"); (9) Luther Luckett Correctional Complex ("LLCC"); (10) Northpoint

²⁹ National Association of the Deaf, <http://nad.org/issues/health-care/providers/questions-and-answers> (Retrieved September 15, 2014)

³⁰ "American Sign Language," National Association of the Deaf, <http://www.nad.org/issues/american-sign-language> (Retrieved August 17, 2014).

³¹ Office of Kentucky Governor Steve Beshear, Governor's Office, Governor's Cabinet, <http://governor.ky.gov/office/Pages/cabinet.aspx> (Retrieved Sep. 8, 2014); Justice & Public Safety Organization Chart (Jul. 25, 2011), <https://hr.personnel.ky.gov/Documents%20Anonymous/OC%2054.pdf> (Retrieved Sep. 8, 2014); DEPARTMENT OF CORRECTIONS ORGANIZATION CHART, <https://hr.personnel.ky.gov/Documents%20Anonymous/OC%2054527.pdf> (last visited Sep. 8, 2014).

Training Center ("NTC"); (11) Roederer Correctional Complex ("RCC"); and (12) Western Kentucky Correctional Complex ("WKCC").³²

51. Named Plaintiffs Mr. Knights and Mr. Adams are housed at KSP and KSR, respectively. In total, it appears that there are approximately 60 deaf and hard-of-hearing inmates in the KDOC's custody. These include the 57 inmates identified in Defendants' interrogatory responses, and 3 inmates who I understand have been additionally identified by either Mr. Knights or Mr. Adams as being deaf or hard-of-hearing.³³ Each of the KDOC's prisons currently houses at least one of these 60 inmates with the exception of BCFC, LLCC, and RCC.³⁴
52. Each of the 12 KDOC facilities have systems that can be described as teletypewriter for the deaf ("TTY") or telecommunications device for the deaf ("TDD"), which enable, as described in more detail below, a person to communicate over telephone lines by text in real-time.³⁵ This is in accordance with the KDOC's Policy and Procedure No. 16.3, titled "Inmate Access to Telephones," which specifies that "[a]n inmate with hearing or speech disabilities and inmates who wish to communicate with parties who have these disabilities shall be afforded access to a telecommunications device for the deaf (TDD) or comparable equipment." Currently, however, videophone telecommunication services are only available at BCC and LLCC.³⁶
53. According to the Defendants' interrogatory responses, an unspecified number of facilities, which also have not been identified, have an unspecified number of staff members who "know sign language and provide assistant [*sic*] and in some situations facilities [*sic*] utilize the services of the Kentucky Commission on the Deaf and Hard of Hearing to arrange for interpreters."³⁷ It is unclear whether these staff members are available in all facilities housing deaf and hard-of-hearing inmates. It is also unclear whether these staff members know American Sign Language ("ASL") and the extent to which they are proficient in such. Based on the fact that Plaintiffs' Interrogatory No. 20 sought identification of all "qualified" sign language interpreters and the fact that Defendants' failed to identify any such individuals as being qualified, it appears that there may not even be a single qualified or certified interpreter at any KDOC facility. In fact, I have not seen

³² Defendants' Response to Interrogatory No. 2.

³³ I understand that Mr. Knights identified Randell Burke (inmate # 145640) and Mitchell Griffith (unknown inmate number), both of KSR, as being deaf or hard-of-hearing. I also understand that Mr. Adams identified Jamiah J. Mayberry (inmate # 159961) of KSR as being deaf or hard-of-hearing.

³⁴ Defendants' Response to Interrogatory No. 2.

³⁵ Defendants' Response to Interrogatory No. 20.

³⁶ Defendants' Response to Interrogatory No. 20.

³⁷ Defendants' Response to Interrogatory No. 20.

any evidence of, and Defendants have not provided any evidence of, deaf and hard-of-hearing inmates receiving qualified sign language interpreting services despite their being numerous qualified interpreters available through the Kentucky State Commission on the Deaf and Hard of Hearing. **Exhibit C.**

54. Other auxiliary aids and services provided to the deaf and hard-of-hearing inmate population in the KDOC's custody appear limited. According to the KDOC's Policy and Procedure No. 13.2, § II.E., "[h]earing [a]ides shall be provided to any inmate who has a hearing loss of a severe nature (greater than or equal to 80dB) at the department's expense." Further, "[a]n inmate may request hearing aides be provided for hearing loss that is less than severe (less than 80dB), but the inmate shall pay for the full cost of the hearing aides." Defendants have also stated that "[s]ome inmate [*sic*] at the Kentucky State Reformatory have pocket talkers" and that "[s]everal institutions have volume control handsets for telephones."³⁸ Defendants have not produced any other evidence of auxiliary aids and services for the deaf and hard-of-hearing inmates in the KDOC's custody.
55. The extent of notification systems for the deaf and the hard-of-hearing inmates appears limited to "flashing strobe lights for fire alarms" at the WKCC.³⁹ Defendants have not produced any other evidence of notification systems for the deaf and hard-of-hearing inmates in the KDOC's custody.
56. Moreover, based on the discovery provided by Defendants to date, KDOC does not have any written or otherwise standard policies or procedures for inmate access to sign language interpreters, and for screening sign language interpreters,⁴⁰ or other auxiliary aids and services with the exception of hearing aids and TDD.⁴¹ In fact, Defendants have acknowledged that there are not any policies that single out deaf and hard-of-hearing inmates.^{42 43}
57. Relatedly, while the KDOC does have policies on training its staff,⁴⁴ Defendants admitted that "there is no training provided that is specific to deaf or hard of hearing inmates."⁴⁵ Further, KDOC Correction Policy No. 4.7 indicates that each

³⁸ Defendants' Response to Interrogatory No. 20.

³⁹ Defendants' Response to Interrogatory No. 20.

⁴⁰ Should Defendants provide additional information responsive to Plaintiffs' Interrogatory No. 20, which clearly asks for this information, I reserve the right to supplement this report accordingly.

⁴¹ KDOC CPP 13.2, § II.E.; KDOC CPP 16.3, § II.D.

⁴² Defendants' Response to Interrogatory No. 18.

⁴³ If the Defendants produce any such policies concerning effective communication and access for the disabled, including the deaf and hard-of-hearing, I reserve the right to supplement my report to that extent.

⁴⁴ *See, e.g.*, KDOC CPP 4.7.

⁴⁵ Defendants' Response to Interrogatory No. 5.

institution should have a written training plan that is updated annually.⁴⁶ Defendants have not produced such training plans or any training materials for its staff.⁴⁷

58. KDOC does have a standard policy and procedure for addressing grievances filed by inmates. KDOC's Correction Policy & Procedure No. 14.6, titled "Inmate Grievance Procedure," permits inmates to file a grievance related to "[p]ersonal and social services needs;" "[c]orrections policies and procedures;" "[i]nstitutional policies and procedures;" "[p]ersonal action by staff;" "[s]taff conflict;" or "[h]ealth care concern." The grievance may either be informally resolved or heard by a Grievance Committee, which can make a recommendation on how to resolve the grievance. Recommendations can be appealed to the institution's Warden and then to the Commissioner.⁴⁸ In their interrogatory responses, Defendants have identified the following 6 grievances relating to any deaf or hard-of-hearing inmate's request for accommodations concerning effective communications or access to programs and activities: (1) grievance #13-1076 by Mr. Adams seeking interpreters, flashing alert lights, shaking bed, and videophones; (2) grievance #12-224 by Mr. Knights seeking videophones; (3) grievance #13-08-025-P by Mr. Knights seeking videophones; (4) grievance #13-401 by Autumn Drass (inmate #263003) seeking notification of announcements; (5) grievance #14-238 by Jessica Callahan (inmate #258862) seeking notification of events; and (6) grievance #13-1315 by David Ward (inmate #205382) seeking repair of telephone volume control function.⁴⁹ There is at least one other grievance, which was filed by Mr. Adams seeking interpreters, videophones, effectively equal access to phones, and non-aural notification of announcements.⁵⁰
59. Regarding grievance # 13-1076, Mr. Adams is profoundly deaf and has been deaf since his birth. Mr. Adams relies on ASL to communicate, and he requires a sign language interpreter to effectively communicate with persons who do not know ASL. Due to Mr. Adams's deafness, he cannot communicate over a standard voice telephone. His grievance lays out how his Narcotics Anonymous advisor requested an interpreter for Mr. Adams so that he would fully understand the educational materials. This request was denied, and so Mr. Adams filed the grievance asking for the matter to be investigated and for an interpreter to be provided.⁵¹ The Deputy Warden denied the request, stating that written materials

⁴⁶ KDOC CPP 4.7, § II.N.

⁴⁷ I reserve the right to supplement my report to the extent such materials are produced and concern training on deaf and hard-of-hearing inmates (or show total lack of training for deaf and hard-of-hearing inmates).

⁴⁸ KDOC CPP 14.6.

⁴⁹ Defendants' Response to Interrogatory No. 4.

⁵⁰ Grievance No. 14-0762 produced by Defendants.

⁵¹ Department of Corrections Inmate Grievance Form, Grievance #13-1076 (Aug. 8, 2013); Grievance Information Form, Grievance #13-1076 (Aug. 7, 2013).

for Narcotics Anonymous would be a reasonable accommodation.⁵² The Warden agreed, even though the Grievance Committee recommended that “the institution examine the possibility of inmate interpreters, trained and paid or volunteering to assist the hearing impaired.”⁵³ Mr. Adams appealed to the Commissioner, stating that he needs an interpreter “so [he] can fully understand during ever [sic] programs, meeting and doctor.”⁵⁴ Mr. Adams also discussed the needs for flashing alert lights, shake beds, videophones, and equal access to the phones.⁵⁵ In response, the Commissioner stated that the KDOC was working with the Kentucky Commission on the Deaf and Hard of Hearing and that Mr. Adams’s problems would be addressed in the near future.⁵⁶ I understand that, to date, these issues have not been addressed.

60. Mr. Adams filed another grievance on June 13, 2014 stating that using a notepad to communicate with other inmates in Narcotics Anonymous was ineffective when there is “too much conversation with group of inmates.”⁵⁷ Mr. Adams also reiterated that he and fellow deaf and hard-of-hearing inmates need flashing alert lights, shake beds, videophones and equal access to the phones.⁵⁸ Mr. Adams also requested vibrating clocks and beepers/pagers for deaf and hard-of-hearing inmates.⁵⁹ The informal response stated that “there are plans to obtain some adaptive equipment for deaf/hard of hearing inmates” and that available products were being reviewed.⁶⁰ I understand that, to date, adaptive equipment has not been provided, nor have these other issues been addressed.
61. Regarding grievance #12-224, Mr. Knights is completely deaf and has been deaf since his birth. Mr. Knights relies on ASL to communicate, and he requires a sign language interpreter to effectively communicate with persons who do not know ASL. Due to Mr. Knight’s deafness, he cannot communicate over a standard voice telephone. Mr. Knight conveys this in his grievance, and that he needs a videophone at LLCC to communicate with his family and friends who now use

⁵² August 27, 2013 Letter from James Coyne, Deputy Warden, to Oscar Adams Regarding Grievance 13-1076/Informal Resolution.

⁵³ Grievance Committee Findings and Recommendations, Grievance #13-1076 (Sep. 12, 2013); Warden’s Review, Grievance #13-1076 (Dec. 13, 2013).

⁵⁴ Department of Corrections Grievance Appeal Form, Grievance #13-1076 (Dec. 16, 2013).

⁵⁵ *Id.*

⁵⁶ Commissioner’s Review, Grievance #13-1076 (Dec. 23, 2013).

⁵⁷ Department of Corrections Inmate Grievance Form, Grievance #14-0762 (Jun. 13, 2014).

⁵⁸ *Id.*

⁵⁹ *Id.*

⁶⁰ Informal Response Stage, Grievance #14-0762 (Aug. 1, 2014).

videophones.⁶¹ In the response, the Deputy Warden wrote the Grievance Committee to say that Mr. Knights was “being denied ... [his] preference of how he communicates,” because TTY was satisfactory.⁶² In response, the Grievance Committee recommended further research into the feasibility and costs associated with installing a videophone.⁶³ Upon review, the Warden agreed⁶⁴ and today there is a videophone in the LLCC,⁶⁵ even though there are currently no deaf or hard-of-hearing inmates in that facility.⁶⁶ Access to the videophone, however, is limited by advance notice provisions, among other things.⁶⁷ Moreover, after this grievance Mr. Knights was transferred to KSP, which does not have a videophone.

62. A year later, in August of 2013, Mr. Knights, who was then and is now at the KSP, filed grievance #13-08-025-P stating that he had requested that a videophone be installed, but his request was denied by the Warden on security grounds.⁶⁸ He conveyed that he is not able to effectively communicate with his friends and family without one.⁶⁹ The Grievance Committee and the Warden both denied the request, stating that a TDD was sufficient.⁷⁰ In his appeal to the Commissioner, Mr. Knights pointed out that communicating via TTY/TDD with hearing individuals is different than communicating with the deaf who rely on videophones for communications.⁷¹ He also explained that installation of a videophone would not cause an undue burden as it can be obtained for free.⁷² In response, the Commissioner stated that the TDD was compliant with policies and

⁶¹ Department of Corrections Inmate Grievance Form, Grievance #12-224 (Aug. 22, 2012).

⁶² August 21, 2012 Letter from Tiffany Ratliff, Deputy Warden, to LLCC Grievance Committee Regarding #12-224.

⁶³ Grievance Committee Findings and Recommendations, Grievance #12-224 (Aug. 28, 2012).

⁶⁴ Warden's Review, Grievance #12-224 (Sep. 6, 2012).

⁶⁵ Defendants' Response to Interrogatory No. 20. *See also* Attachments E-I to Department of Corrections Inmate Grievance Form, Grievance #13-08-025-P (Aug. 29, 2013).

⁶⁶ Defendants' Response to Interrogatory No. 2.

⁶⁷ Attachments H and I to Department of Corrections Inmate Grievance Form, Grievance #13-08-025-P (Aug. 29, 2013).

⁶⁸ Department of Corrections Inmate Grievance Form, Grievance #13-08-025-P (Aug. 29, 2013).

⁶⁹ *Id.*

⁷⁰ Grievance Committee Findings and Recommendation, Grievance #13-08-025-P (Sep. 18, 2013); Warden's Review, Grievance #13-08-025-P (Oct. 7, 2013).

⁷¹ Department of Corrections Grievance Appeal Form, Grievance #13-08-025-P (Oct. 10, 2013).

⁷² *Id.*

the ADA and that therefore a videophone would not be installed.⁷³ A videophone still has not been installed at KSP, nor have other adequate accommodations been provided.⁷⁴

VIII. OPINIONS REGARDING THE DENIAL OF EQUAL ACCESS AND EFFECTIVE COMMUNICATION AND TECHNOLOGIES THAT CAN BE IMPLEMENTED AS A REMEDY

A. Overview

63. Inmates who are deaf or hard-of-hearing must have the same access to effective communication as do hearing inmates and must have an equal opportunity to participate in and access the benefits of KDOC's programs and activities, including the use of its facilities.
64. Auxiliary aids and services must be provided to ensure effective communication with and equal access for incarcerated individuals who are deaf and hard of hearing. Auxiliary aids and services⁷⁵ include but are not limited to: (1) videophone access;⁷⁶ (2) certified sign language interpreters available in person, or remotely via VRI, and upon request; (3) VRS access; (4) CapTel systems; (5) CART services and/or ALDS (6) in-cell visual alarms and/or wireless notification systems; (7) bed shakers; and (8) visual paging systems.
65. It is crucial to provide communication access to individuals who are deaf and hard-of-hearing who rely on sign language as their primary mode of communication. The lack of communication as well as the absence of an impartial qualified interpreter or other auxiliary aid or service during prison personnel interactions presents a substantial risk of serious miscommunication. Such miscommunication could potentially result in individuals receiving unnecessary or harsh treatment by officers, losing good time credits, and not being able to participate in the activities, programs and services at the prison. It also presents a severe safety risk if inmates are unable to receive announcements of emergencies. In addition, the compounding of fear, frustration, anger, and anxiety of possible miscommunication could lead to emotional distress, which

⁷³ Commissioner's Review, Grievance #13-08-025-P (Nov. 8, 2013).

⁷⁴ Defendants' Response to Interrogatory No. 20.

⁷⁵ ADA Best Practices Tool Kit for State and Local Governments: General Effective Communication Requirements Under Title II of the ADA, Department of Justice (Feb. 27, 2007), <http://www.ada.gov/pcatoolkit/chap3toolkit.htm>.

⁷⁶ Meaningful videophone access requires that deaf and hard-of-hearing videophone users have twice the amount of time to converse as hearing inmates using voice telephones because of the additional time needed to sign. Similarly, TTY users need three times as long to converse due to how much longer it can take users to type out and read text. Although the speed at which individuals communicate in a particular language can vary from person to person, on the whole it takes longer to sign than to speak and much longer to type than to speak. See Section VIII.B. of my report for further detail.

may cause serious traumatic affects to their well-being. Such deprivation of full communication access creates frustration, insecurity, low self-esteem, low morale, and many other negative emotions. Any negative emotion could potentially distract focus on personal well-being, which defeats the purpose of working through the rehabilitation programs and services offered by KDOC. Further, inmates who are not able to effectively communicate are limited in their ability to participate in and benefit from any prison service, program, or activity, especially when compared to hearing inmates who can communicate verbally to each other.

B. Access to Video-Based Services for Telecommunications

1. Defendants' Denial of Effective Communication

66. By denying deaf and hard-of-hearing inmates access to videophones and other video-based services to communicate with their family and friends outside of prison, the Defendants deny deaf and hard-of-hearing inmates, including Mr. Knights and Mr. Adams, effective communication. Deaf and hard-of-hearing inmates have expressed⁷⁷ and as described in more detail below in Sections VIII.B.2., communications via TTY are not as effective as the communications that hearing inmates engage in with hearing individuals outside of prison.
67. Further compounding the limitations imposed on effective communication are the time limits placed on the deaf and hard-of-hearing to communicate via non-verbal means. Generally, it takes a hearing person much longer to communicate by typing out and reading conversations than it does for that same person to speak and hear that conversation verbally. Similarly, and as described in more detail below in Section VIII.B.2.b., a deaf or hard-of-hearing person also requires more time to type out and read a conversation than a hearing person needs to speak it. This problem is further compounded by the fact that the transmission protocol for TTY/TDD caps the speed at which typed words are conveyed, as described below in Section VIII.B.2.b. Therefore, a deaf or hard-of hearing person using TTY/TDD is denied the ability to communicate with others over the phone as effectively as a hearing person using voice communications when the same time limits on call time are imposed. A deaf or hard-of-hearing person simply cannot convey the same amount of thoughts, ideas, or expressions in the same amount of time as a hearing person can. Accordingly, deaf and hard-of-hearing inmates should be given three times as long to engage in phone conversations via TTY/TDD as hearing persons have to converse on the phone verbally.
68. Similarly, signing by way of videophone generally takes longer than communicating the same information verbally over a traditional telephone connection. Therefore, deaf and hard-of-hearing inmates should be accorded twice the amount of time to engage in phone conversations via videophone as hearing persons have to converse on the phone verbally.

⁷⁷ See Section VII, above, discussing grievances filed by Messrs. Knights and Adams.

69. Videophone and VRS access in the KDOC's prisons should be implemented so that deaf and hard-of-hearing inmates are not denied equally effective access to communication with friends and family outside of prison. Below, I explain provide some background information on these remedies and how such remedies could be implemented practically and safely.

2. Background and Methods of Improving Voice Communications for Deaf and Hard-of-Hearing Inmates to Ensure Effective Communications

70. Auxiliary aids and services that provide effective communication and equal access are widely available and easy to implement. Many are already being used in prisons in the United States of America.

a. Voice Communications

71. Telephone communication is one of the most important forms of communication in society today and is an essential function for people from all walks of life. Telephones help people to connect directly to each other even in distant locations by simply dialing the contact number. Connections are established instantly.
72. Due to advancements in technology, telephone devices have evolved with new services and capabilities. The development of digital data communication methods, such as the protocols used for the internet, have made it possible to digitize voice and transmit it as real-time data across computer networks, giving rise to the field of Internet Protocol ("IP") telephony that is rapidly replacing traditional telephone network infrastructure. Since 2006, many Voice over Internet Protocol ("VoIP") companies, such as Vonage Business, Nextiva, RingCentral and JIVE Communications offer services to consumers and businesses.
73. Technological changes in the industry and expansion of telecommunications now provide people many communication options. Individuals who are deaf and hard-of-hearing, and individuals with a speech disability are also following these trends and are rapidly migrating to more advanced telecommunications methods, both for peer-to-peer and third party telecommunication relay service ("TRS") communications. Internet-based equipment includes, but is not limited to, wireless devices, videophones/videocams, computers, and tablets.

b. Teletypewriter for the Deaf ("TTY")

74. TTY is a 60-year-old technology that enables remote communications between deaf individuals and between deaf and hearing individuals. In a conversation between two deaf individuals, both parties type and read responses using the teletypewriter device, and their typed conversation is transmitted back and forth across the standard telephone network. In a conversation between a deaf individual and a hearing individual, the deaf party uses the TTY while the hearing party uses a standard telephone. An operator then dictates the deaf individual's

typed messages to the hearing party and types the hearing individual's spoken messages to the deaf party.⁷⁸ To utilize a TTY a deaf individual must have access to a teletypewriter device.

75. TTYs offer limited effectiveness compared to sign language translation and the other auxiliary aids and services.⁷⁹ Most fundamentally, a TTY's capacity to facilitate communication is completely dependent on deaf users' often limited reading and writing skills. In addition, most deaf individuals no longer use TTY devices (relying instead on videophones) and, as a result, deaf inmates who can only access TTYs are often unable to contact deaf friends and family members with the device.⁸⁰
76. Whereas an average typing rate is 40 words per minute and a professional typist can type as many as 80-100 words per minute, in the U.S. most TTYs use a communication code that is limited to transmitting text over telephone lines between the rate 30⁸¹ to 60 words per minute.⁸² Further, TTYs do not have controllable upper and lower case characters. All outgoing text appears in lower case, while all incoming text appears in upper case. They also do not offer special characters such as "@" "&" "*" "%", etc.⁸³ Consequently, a TTY conversation takes much longer than a signed conversation and longer than the average, real-time typed conversation.⁸⁴ Deaf inmates therefore require at least three times the call time to use TTY as hearing prisoners using standard telephones.⁸⁵

⁷⁸ TTY is not the only communication device for the deaf that utilizes operators. Video-based services discussed later in this report also utilize operators.

⁷⁹ <http://www.fcc.gov/document/eaac-tty-transition>

⁸⁰ The Federal Communications Commission has documented the decline in TTY use. Of all operator-assisted calls involving deaf individuals, the FCC estimates that today only 12% are TTY calls. The majority (75%) are video-based calls. "Emergency Access Advisory Committee (EAAC) Report on TTY Transition," Federal Communications Commission Emergency Access Advisory Committee, <http://eaac-recommendations.wikispaces.com/file/view/EAAC%20TTY%20transition%20report%20March%2011-%202013.pdf/472527454/EAAC%20TTY%20transition%20report%20March%2011-%202013.pdf> (Retrieved August 17, 2014).

⁸¹ "TTY Transition," Federal Communications Commission Emergency Access Advisory Committee (EAAC) Report on TTY Transition, March 2013, <http://transition.fcc.gov/cgb/dro/4regs.html> (Retrieved September 15, 2014)

⁸² "TRS Rules," Federal Communications Commission, December 13, 2011 <http://www.fcc.gov/document/emergency-access-advisory-committee-eaac-report-tty-transition> (Retrieved September 15, 2014)

⁸³ http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db1217/DOC-321704A1.txt

⁸⁴ "EEAC Report on TTY Transition"; "TTY Overview," Massachusetts Department of Health and Human Services, <http://www.mass.gov/eohhs/gov/departments/mcdhh/programs/hearing-dogs/tty-overview.html> (Retrieved August 17, 2014).

⁸⁵ <http://nad.org/issues/justice/jails-and-prisons/rights-deaf-inmates> (Retrieved September 11, 2014).

77. For all of the above reasons, the Defendants' provision of limited TTY access to Mr. Knights, Mr. Adams, and other deaf and hard-of-hearing inmates does not provide them with the means to effectively communicate with deaf, hard-of-hearing, and hearing individuals outside the prison. The Defendants need to replace or supplement these TTY devices with the video-based services described below to provide Mr. Knights, Mr. Adams and the deaf and hard-of-hearing inmates with remote communications technology comparable to that used by their hearing peers.

c. Traditional and Internet-based Telecommunications Relay Services

78. Title IV of the ADA amended the landmark Communications Act of 1934 that requires all telecommunications companies in the United States take steps to ensure functionally equivalent services for consumers with disabilities, notably individuals who are deaf, deaf-blind, hard-of-hearing and individuals with speech disabilities through the provision of traditional relay services.⁸⁶
79. A third party TRS is a telephone service that allows persons with hearing or speech disabilities to place and receive telephone calls. TRS is available in all 50 states, the District of Columbia, Puerto Rico and the U.S. territories for local and/or long distance calls. TRS providers – generally telephone companies – are compensated for the costs of providing TRS from either a state or a federal fund. There is no cost to the TRS user. There are several forms of TRS, depending on the particular needs of the user and the equipment available.
80. The FCC adopted the internet-based TRS, which in 2002 began to include other services: text-to-voice TTY-based TRS; voice carry over; hearing carry over; speech-to-speech (“STS”) relay service; shared on-English language relay services; captioned telephone service; IP captioned telephone service; IP relay service; and video relay service VRS, which are made over the internet by consumers who use broadband connections. TRS providers must also offer the service 24 hours a day, seven days a week.
81. The FCC has ruled that VRS through a TTY relay service is not permitted.⁸⁷ Federal VRS handles only video-to-voice calls or voice-to-video relay calls.
82. On July 1, 2006, the FCC required VRS providers to answer 80 percent of calls within two and a half minutes. On January 1, 2007, the FCC rules changed and VRS providers were required to answer 80 percent of all VRS calls within 120 seconds.

⁸⁶ https://apps.fcc.gov/edocs_public/attachmatch/FCC-13-101A1.doc (Retrieved September 11, 2014).

⁸⁷ https://www.fedvrs.us/supports/what_is_vrs

83. The FCC has continued to adopt various rules to improve the VRS service. One of the recent rulings that the FCC issued requires VRS providers to answer (*i.e.*, provide the equivalent of a dial tone) 85 percent of all VRS calls within 30 seconds. The new rulings were commenced on July 1, 2014.
84. Nevertheless, in some cases, the connection time from the caller to the calling party through internet-based relay varies, and can range from 2 to 5 minutes. The connection time depends on the availability of a video interpreter (“VI”) or communication assistant (“CA”). When a call is placed to VRS, the call may be placed in a queue for the next available VI or CA to answer. Once the caller and VI or CA are connected, communication is then established. The VI or CA would then place and connect the call to a calling party.
85. There is also a lag time when utilizing a VI or CA who facilitates communication between the caller and the call recipient as the VI or CA will be slightly behind when relaying to ensure accuracy in dialogue.⁸⁸
86. TTY calls placed through TRS take quite a bit longer than direct TTY connections because the CA has to wait until two or three sentences are read before translating from American Sign Language to standard English for accuracy. The entire message is then relayed to the calling party.⁸⁹

d. Video-Based Services

87. Deaf individuals are increasingly using video-based communications devices instead of TTYs for phone calls. All of these devices and services are preferable to TTYs because they are not reliant on deaf individuals’ often limited reading and writing skills.

(a) Videophone

88. A videophone uses high-speed internet to enable real-time video communication. Once connected, two deaf users can sign with one another over the video monitor as they would in person.⁹⁰
89. Videophones are provided in various major brands and models listed in **Exhibit D**. These include: ZVRS Z-150, Z-340, Z4, or Z5; Sorensen nTouch; Cisco IP Video Phone E20; or a desktop computer with built-in webcam or a laptop with a built-in webcam using desktop videoconferencing.

⁸⁸ http://rid.org/UserFiles/File/pdfs/Standard_Practice_Papers/VRI_SPP.pdf

⁸⁹ <http://www.justice.gov/crt/508/report/telecom.htm>

⁹⁰ This report uses the term “videophone” to refer to communications between deaf individuals via video monitor. It should be noted, however, that the video monitor for other types of video-based communications such as VRI and VRS is also commonly referred to as a videophone.

90. Videophones powered by high-speed internet connections have been widely available in the U.S. at either no cost or modest cost since at least the mid-2000s. Any deaf individual can apply for a free videophone through a vendor of his or her choice.⁹¹ Deaf users also do not incur per-minute usage costs, which are instead paid for by the FCC's Telecommunications Relay Services Fund. For those not eligible to receive a free videophone, the device ranges in price but typically can be purchased for between \$75 and \$150.⁹² Likewise, the high-speed internet service which powers videophones can generally be procured at the modest cost of approximately \$30.00-\$50.00 per month per household.⁹³ As discussed below, this existing connection can safely be used to enable video-based communications for deaf inmates.
91. The Defendants must assess suitability of video conferencing equipment such as desktop PCs, laptops, videophones, or other webcam solutions provided by major manufacturers of video conferencing devices through the Request for Proposal ("RFP"). Once the Defendants select an appropriate videophone provider, they need only ensure that the KDOC's facilities have a high-speed internet connection into which the videophone device can connect. Moreover, LLCC already has high-speed internet connection for videophone technology. Additionally, several options exist to monitor in real time and record videophone use, as described in Section VIII.B.2.f.(c).

(b) Video Relay Services

92. VRS uses high-speed internet to enable remote communications between deaf and hearing individuals. The deaf individual signs to an intermediary sign language interpreter via video monitor. The interpreter, in turn, relays the deaf person's message to the hearing individual in spoken English and vice versa. In a VRS conversation, the hearing party speaks into a standard telephone as he or she normally would. VRS has been widely available in the U.S. since at least the mid-2000s.
93. VRS is free of charge to all users, deaf or hearing. VRS is not intended for parties in the same physical location (*e.g.*, same room), and VRS interpreters are trained to refuse calls if they conclude the parties are in the same physical location.

⁹¹ See, *e.g.*, "Application Form for Deaf and Hard of Hearing Individuals," Sorenson Communications, http://www.sorensonvrs.com/ntouch_apply_form (Retrieved August 17, 2014).

⁹² "Buy Videophone," Google Search Results, <https://www.google.com/search?q=buy+videophone&sourceid=ie7&rls=com.microsoft:en-US:IE-Address&ie=&oe=#q=buy+videophone&rls=com.microsoft:en-US:IE-Address&tbm=shop> (Retrieved August 17, 2014).

⁹³ See, *e.g.*, Xfinity internet Rates, http://www.comcastspecial.com/city/washington-dc/internet.html?PID=google_branded:comcast_high_speed_internet:comcast_washington_dc:internet_Comcast_High_Speed_internet&gclid=CNDLyeCuvb4CFW0aOgodo3gAYA (Retrieved August 17, 2014).



Video Relay Service (VRS)

94. VRS is the only form of remote communication that allows both deaf and hearing individuals to communicate using their preferred method of communication. This is the closest analog to the effectiveness and efficiency of communication between two deaf persons signing over videophone or two hearing persons having a voice-to-voice conversation over the phone. Consequently, Mr. Knights and Mr. Adams, as well as other similarly-situated deaf and hard-of-hearing inmates, require VRS to be able to contact their hearing associates outside of prison in a manner comparable to hearing inmates contacting hearing associates over a standard telephone. The Defendants' failure to provide Mr. Knights, Mr. Adams, and other deaf and hard-of-hearing inmates who rely on signing for communication with VRS access therefore denied them effective communication and equal access.

e. Implementation of Technological Solutions

(a) Videoconference v. Videophone

95. Videoconferencing differs from a videophone call in that the former is designed to serve a conference or multiple locations rather than individuals. Most people who can hear have no experience with videophone technology and assume that it is the same as videoconferencing that they experience in the working environment.
96. A videophone is a telephone with a video display, capable of simultaneous video and audio for communication between people in real-time. Video devices use both Session Initiation Protocol ("SIP") and H.323 protocols.
97. Videoconferencing uses a Multipoint Control Unit ("MCU"). Videoconferencing allows two or more locations to communicate as if they were sitting right next to each other by simultaneous two-way video and audio transmissions utilizing a set of video phone SIP/H.323 technologies. A videoconference system generally needs more capabilities, which are often prohibitively expensive and require much larger bandwidth requirements for most organizations and businesses.

98. On the contrary, the videophone is not a complex system and does not require much bandwidth, which is useful tool for more effective access to and use for communication. The implementation of videophone system is reasonable communication for effective communication from a technological stand point.

(b) Broadband

99. The term “broadband” refers to the wide bandwidth characteristics of a transmission medium and its ability to transport multiple signals and traffic types simultaneously. The medium can be coaxial cable, optical fiber, twisted pair, or wireless. In contrast, the term “baseband” describes a communication system in which information is transported across a single channel.
100. Broadband speed is measured in megabits per second, commonly written as Mb or Mbps (as in 24Mb, or 24Mbps). Megabits and megabytes tend to be written as Mb, MB. GB is used when referring to gigabytes. These terms denote memory capacity, not speed. One gigabyte is equal to 1,024 MB or 1,048,576 Mb.⁹⁴
101. Every page, image and video on the web comes to the home device as small pieces of data, or packets. How fast these packets move on the network is measured in megabits per second, abbreviated Mbps. A broadband connection has two speeds: download and upload. Download speed is the speed of getting information from the web to your computer, and upload speed is the reverse.

(c) Bandwidth vs. Speed

102. There are two different factors to consider when measuring speed. Bandwidth refers to the size of the conduit in which the data is travelling within. Speed refers to the rate at which the data is traveling at. Using that definition, a larger bandwidth will permit more data to travel, which will also increase the rate at which it travels. However, this does not necessarily mean that the speed of the broadband connection will be the same as the bandwidth. Bandwidth simply refers to the size of the “pipe” in which it is traveling.
103. There is no difference between uploading data and downloading data aside from the direction of the data transfer. The faster the internet connection speed, the faster the uploading and downloading capability. Ideally, upload and download speeds are most easily measured when they are symmetrical, which means the same speed for uploads and downloads. However, often internet service providers only advertise the speed of the data in the fastest direction, which is usually the download speed. Download speeds are also usually much faster than upload speeds, because most internet users retrieve data from the internet – not transmit data and files to the internet. If a user who uploads large files such as photos, videos, video streaming, two-way video communication or other information over the internet, they should look for faster upload speeds.

⁹⁴ Byte Converter Conversion Calculator. Retrieved on March 23, 2014. <http://www.tlshopper.com/tools/calculate/>

(d) Broadband Speed Guide

104. The FCC posted the Broadband Speed Guide for comparing online activities with the minimum download speed (megabits per second, or mbps) needed for adequate light, moderate and high performance with one, two, three or four devices at a time (such as a laptop, tablet, video technology, or game console).⁹⁵ Additional speed may enhance performance.
105. Generally, videophones perform best with a download speed of at least 384 kBit/s or more (for total conversation including video, audio, and (real-time) text in any combination) and an upload speed of 1.5 mbps – 2.0 mbps.

(e) Internet Connection

106. The KDOC may decide to contract with an internet service provider (ISP), a company that provides service, using a high-speed DSL or cable modem, to allow a user to access the internet. The two major choices for internet access are DSL and cable internet. DSL internet connections work through telephone lines, effectively splitting them in two components: one part for voice network and the other part for internet data network. The other option, cable, works through the same cable outlet which connects to TV. A cable modem for broadband internet connection can be utilized. The coaxial cable used by the cable TV provides much greater bandwidth than a telephone line. A cable internet modem can be used to achieve extremely fast access to the internet.
107. The other high-speed option the KDOC may decide to use for setting up video conferencing is the KDOC's existing network. VRS providers believe that videophone technology is safe and easy to use with network security features like firewalls. At this time, some federal agencies are using a secure VRS system that is compatible with their firewalls. A private encrypted virtual private network ("VPN") can also be used specifically for videophones for video conferencing, VRS, and VRI services. This VPN would not intermingle with the internet that is used by the general public. The KDOC can choose to use the existing network or circumvent the firewall without decreasing security by having the videophone system on an encrypted circuit with direct "pipes." However, replicating the pipes might be cost prohibitive and unnecessary.

f. Implementation of Video-Based Services

108. Based on my experience, there is no significant technological barrier preventing or that would have prevented the implementation of the above-discussed video-based accommodations. Moreover, any security concerns with these services were either unfounded or easily addressed.

⁹⁵ Federal Communications Commission – Broadband Speed Guide. <http://www.fcc.gov/guides/broadband-speed-guide> (Last visit August 17, 2014)

(a) Security

109. A security concern associated with video-based equipment is that hackers who seek and exploit weaknesses in a computer system or computer network might gain access to a facility's other online activities via video-based communications systems.⁹⁶
110. The FCC-approved VRS providers, however, believe that video equipment and video-based communications systems are safe to use with a standard internet service provider ("ISP") and typical security features such as firewalls to bar access to other online systems via video-based communications.⁹⁷ Tellingly, in the past five years the U.S. Department of Defense, the city of Los Angeles Mayor's Office Help Desk, and several other Los Angeles city departments have used video-based communications protected by firewalls. The City of Los Angeles has yet to experience any network or firewall security issues with this setup and, to this author's knowledge, neither has the Department of Defense. A 15-second video clip to demonstrate the clarity of video image using Z-20 on the existing Los Angeles city government network is included in **Exhibit E**. In addition to firewalls, an entity can also set up an encrypted VPN to separate video-based communications from other online activities.
111. Alternatively, a hyper-cautious entity might route its video-based communications through a separate set of physical internet cables to enhance security. This approach is both unnecessary and expensive, however.
112. Indeed, any prison willing to adopt video-based services need only choose from a variety of video equipment and set up a high-speed internet connection to begin providing services. Moreover, several options exist to monitor, interrupt, and record video-based communications in real time and protect a prison's internet network from outside interference.

(b) Setting Up Video-Based Services

⁹⁶ When discussing security, it is important to draw a distinction between video-based equipment and communications (discussed above) and over-the-top ("OTT") applications. The latter includes such services like OoVoo, Skype, Tango, Fring, Camfrog, Qik and other similar video applications, which are offered to over 22 million people world-wide for free use for video chat and voice calls on smartphones and computers. These video communications can be recorded and uploaded to YouTube. The Oovoo video calls can also be stored on an ooVoo server with the ooVoo Premium Plan; however, there is security issue associated with ooVoo, Skype or similar OTT applications. They do not provide encryption within audio or video calls. Further, these communications are vulnerable to interception before reaching the intended recipient. They do not provide protection against man-in-the-middle attacks. While ooVoo and Skype encrypts users' sessions and other traffic including call initiation, they may be monitored by unauthorized parties. This flaw makes it possible for hackers to run hostile code on computers running vulnerable versions of Skype. The attacker could provide a malformed URL using the Skype URI format, and lure the user to request it to execute the attack. *See* <http://www.computer.org/csdl/proceedings/hicss/2014/2504/00/2504e858-abs.html>

⁹⁷ Videophone Telecommunication Accessibility in Federal Government: Technology and Policy Analysis, page 2, <https://tap.gallaudet.edu/videocomm/> (Retrieved September 11, 2014)

113. To register and obtain a videophone and VRS (and, as discussed in more detail in Section VIII.D.2.b, VRI) services, the KDOC must complete a form and submit the application online. Once the form is submitted, a customer service representative will contact the KDOC via email with a local 10-digit number. A professional installer will make an appointment to visit the KDOC and assist with installing the videophone. The professional installer will be responsible for troubleshooting networking issues and training customers (e.g., deaf or hard-of-hearing inmates and KDOC staff) on how to place a call using a VRS. Installation and technical support are always free.

(c) Monitoring and Recording Video-Based Service

114. Many prisons monitor, interrupt, and record hearing inmates' phone calls. I understand that the Kentucky Department of Corrections monitors and records conversations on all inmate telephones located within the institutions. Videophone, VRS, and TRS providers do not keep records of the contents of any conversation to ensure that confidentiality of VRS users is maintained.
115. There are various methods for monitoring and recording video-based communications between a deaf detainee and the calling party to ensure functional equivalency.
116. Below is a description of possible methods include but are not limited to monitoring, interrupting and recording deaf inmates' video-based communications so that providing effective communication and equal access to deaf inmates without imposing security risks.⁹⁸

(i) Contract Vendors

117. The KDOC may choose to contract with a vendor that can provide both VRS and point-to-point videophone calls, and also can monitor, record, interrupt or barge in these video calls. There are several vendors who provide this service and functionality and those vendors are identified in **Exhibit F**. Four vendors in particular, RenovoSoftware, Inc., Polycom, Televideo and Cisco Systems, Inc., are recommended. The RenovoSoftware application, Polycom and Cisco products allow jail or prison management to monitor, record, and interrupt video sessions that are in process. These vendors also help to ensure that a client-attorney communication is private with no monitoring, recording or barge-in capabilities.
118. Alternatively, prisons can enlist IT vendors to assist in monitoring video-based communications. The Virginia Department of Corrections uses IT contractor Northrop Grumman for this purpose.

⁹⁸ These methods allow for the recording, storing, monitoring, and interrupting of video-based calls. In order to understand the content of these calls, however, prisons will have to hire someone fluent in ASL on an ongoing or as-needed basis.

(ii) *Computer with ZVRS Z-4 and Z-5 Applications*

119. The ZVRS Z-4 and Z-5 computer applications for PCs and Macs⁹⁹ also monitor, record, and interrupt incoming and outgoing video communications. The user simply clicks on the red "RECORD A CALL" button to the right of the self-view screen. The button turns blue to indicate recording has commenced. Notably, all callers will be notified that the call is being recorded.
120. To access all recorded calls using this application, click on the "VIDEO RECORDER" icon. In the Video Recorder window, there are four columns for each recording: Name, Date, Time, and Duration. Copies of selected recording can be saved as MOV (*.mov) files and stored or exported for later review. The recorded call may be paused or played back as desired. See **Exhibit G**.
121. Attached as **Exhibit H** is a 60-second video clip demonstrating how a video call using any videophone application or equipment can be monitored using the Z-5 application with a Mac or PC. **Exhibits I.1** and **Exhibit I.2** further explain how prison staff can use Z-5 to monitor calls.

(iii) *Stand-alone Videophone equipped with Video/Audio Line Output*

122. A stand-alone videophone can connect to a DVD recorder using a standard audio/visual cord to capture and store calls for later review. The DVD recorder cannot interrupt calls, however. DVD-ROM discs can only be read and not edited or erased. Rewritable DVDs (DVD-RW, DVD+RW, and DVD-RAM) can be recorded and erased multiple times.

(iv) *TV equipped with an HDMI input jack for Videophone*

123. Sorenson nTouch videophones are made up of three separate hardware devices: (1) the Main Unit, (2) the Remote Camera Unit ("RCU"), and (3) the hand-held remote control. The Main Unit connects to the RCU with a USB cable and to a TV set using either a composite video cable or an HDMI cable. A DVD-R can be connected to the main unit using a standard AV cord to record calls for later review. The DVD-R cannot interrupt calls, however.

(v) *Purple Videophone Kiosk*

124. Purple Videophone Kiosk with a recording capability may be housed at the jail's IT infrastructure using laptops, servers, cloud, contracted vendor or other system for storing all data. It provides recorded data of point-to-point and both voice and

⁹⁹ Notably, a prison can also remove all access to web browsers on computers being used for video-based communications to prevent unauthorized use by inmates.

video communication through VRS through its contractor Televideo Network, LLC.

g. The Status of Implementing Video-Based Services Within the Government

(a) Federal Government

125. The United States General Services Administration (“GSA”) contracted Sprint Relay to provide the federal relay interpreting services, which offers instantaneous video interpreting for one-on-one meetings and appointments with managers, supervisors, peers, co-workers, and customers.¹⁰⁰ Federal employees who are deaf or hard-of-hearing received and utilized videophone technologies, which are funded through Computer/Electronic Accommodations program (“CAP”), a federal program to help the federal government make their work and military home environments accessible to people with disabilities. For example, the Department of Defense, Edwards Air Force Base employees received and utilized videophone equipment to use video interpreting services in spring of 2012 as part of a reasonable accommodation under Section 501 of the Rehabilitation Act of 1973.¹⁰¹

(b) Video-Based Services in State Prison Systems

126. On November 17, 2010, Virginia Powhatan Correctional Center (“Powhatan”) and Plaintiff David Bryant entered into a settlement agreement which provides Powhatan’s deaf inmates with access to videophones, VRS, and VRI. In so doing, Powhatan became the first U.S. prison to provide deaf inmates with videophone access. See **Exhibit J**.¹⁰² As part of the settlement, the Virginia Department of Corrections also implemented new policies and procedures regarding the use of these devices and the TTY. These policies provide for the monitoring, recording, and storing of video- and text-based communications with exceptions for attorney-client communications. Since this settlement agreement was reached, both the Vermont and Wisconsin state prison systems have granted deaf inmates videophone access as well.¹⁰³ On April 5, 2011, the Texas Court of Appeals for the Third District issued a preliminary injunction ordering the Texas Department of Criminal Justice (“TDCJ”) to provide telecommunications access to deaf prisoners via the Texas relay service. The court also ordered TDCJ to

¹⁰⁰ Federal Video Relay Service, retrieved on August 17, 2014, https://www.fedvrs.us/supports/what_is_vrs

¹⁰¹ Edwards Air Force Base Publication, 10/17/2012. Retrieved on August 17, 2014. <http://www.edwards.af.mil/news/story.asp?id=123322299>

¹⁰² “Powhatan Prison First to have Videophone for Deaf,” *Contact Center Solutions Industry News* (November 18, 2010), <http://callcenterinfo.tmcnet.com/news/2010/11/18/5146457.htm> (Retrieved August 17, 2014).

¹⁰³ “Re: In the Matter of Rates for Interstate Inmate Calling Services,” HEARD Letter to FCC (August 17, 2014).

“investigate ways to implement the use of videophone technology to accommodate inmates with disabilities.”¹⁰⁴

127. On June 20, 2013, Executive Office for Immigration Review Administrative Law Judge Ellen Thomas issued a Recommended Decision with Findings of Fact, Conclusions of Law, and Remedies in the Bryant case. *See Exhibit K*. On September 4, 2013, the Department of Justice issued a final decision affirming Judge Thomas’ Recommended Decision. Notably, DOJ added that the Bureau of Prisons must complete an investigation into whether VRS technology can be implemented at the U.S. Penitentiary in Tucson, AZ as a reasonable accommodation. *See Exhibit L*.¹⁰⁵

(c) VRS and the Federal Communications Commission

128. The Federal Communications Commission has taken several steps to ensure that VRS will continue as a vibrant service. Title IV of the ADA requires the FCC to ensure that: (1) Telecommunications Relay Services (TRS) are available to the greatest extent possible to persons with hearing or speech disabilities;¹⁰⁶ and (2) TRS offers persons with hearing and speech disabilities access to a telephone system that is “functionally equivalent” to voice telephone service.¹⁰⁷ In March 2000, the Commission recognized several new forms of TRS, including VRS.¹⁰⁸
129. In addition, the FCC released a Report and Order and Further Notice of Proposed Rulemaking on June 10, 2013 proposing new rules to improve the quality and enhance the sustainability and integrity of VRS. These documents promote the interoperability and portability of VRS equipment and seek to improve VRS quality and protections for consumers. In particular, they seek to ensure that VRS users who have different service providers and equipment can call one another.¹⁰⁹

h. Captioned Telephone

¹⁰⁴ “Texas Court Orders TDCJ to Provide Hearing Impaired Telecommunications,” *Prison Legal News*, Vol. 23, No. 9, Page 43 (September 12, 2012), https://www.prisonlegalnews.org/includes/_public/_issues/pln_2012/09pln12.pdf

¹⁰⁵ This author could not find out the results of either of the above-mentioned investigations.

¹⁰⁶ 47 U.S.C. § 225(b)(1).

¹⁰⁷ 47 U.S.C. § 225(a)(3).

¹⁰⁸ *See* “Telecommunications Relay Services for Individuals with Hearing and Speech Disabilities,” CC Docket No. 98-67, Report and Order and Further Notice of Proposed Rulemaking, 15 FCC Rcd 5140, 5152-54, paras. 21-27 (March 6, 2000).

¹⁰⁹ 47 C.F.R. 64.611(e); “Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities; E911 Requirements for IP-Enabled Service Providers,” CC Docket Nos. 98-67, CG Docket Nos. 03-123, WC Docket No. 05-196, Second Report and Order and Order on Reconsideration, 24 FCC Rcd. 791, 818-20, 60-64 (2008).

130. Many deaf and hard-of-hearing persons who have intelligible speech and can read English use captioned telephone services.
131. A captioned telephone is a special telephone that has a built-in screen to display in text (captions) everything the other person on the call says. When an outgoing call is placed using a captioned telephone, the call is connected automatically to a Communication Assistant (CA) at the Captioned Telephone Service Provider Call Center. The CA, a specially trained operator, hears the person is speaking. The CA repeats or re-voices what that person says and speech recognition technology automatically transcribes the CA's voice into text (captions), which is displayed on the captioned telephone.
132. There are various types of captioned telephones that are available through Ultratec, Inc.¹¹⁰ and Sorenson Communications¹¹¹ as listed in **Exhibit M**. The captioned telephone service is free to the user because it is reimbursed by the Federal Communications Commission for providing the service to individuals who are deaf or hard of hearing that prefer to speak for themselves. The funds for this service come from a surcharge that all United States residents pay on their monthly phone bills for telecommunications relay services. These manufacturers produce various types of captioned telephone such as Analog VCO Phone, Analog (one line) Analog two-line CapTel, Analog/Internet CaptionCall, Internet WebCapTel with any phone and Internet Mobile CapTel. These types of captioned telephone can be connected to prison telephone network which allows calls be recorded. Further, they can be provided at no or low cost.

C. Access to Notification of Events and Announcements

1. Defendants' Discrimination and Denial of Equal Access

133. When the KDOC relies solely on audible notifications or alerts – whether to notify inmates of scheduled activities or meals, important announcements, or emergencies – it discriminates against deaf and hard-of-hearing inmates. As a result, deaf and hard-of-hearing inmates are in greater risk of death or injury due to fire and other emergencies, particularly when they are asleep or otherwise isolated from others. Further, the death and hard-of-hearing may not be aware of when certain activities or programs start to the same extent as hearing inmates and may miss their opportunity to participate in and benefit from such. Accordingly, a deaf and hard-of-hearing inmate would be denied equal access.
134. Certain auxiliary aids and notification systems should be implemented in the KDOC's prisons so that deaf and hard-of-hearing inmates are not discriminated against and denied equal access to notifications and announcements, and thereby certain programs and activities. Below, I provide some background information

¹¹⁰ <http://www.ultratec.com>

¹¹¹ <https://www.captioncall.com/captioncall>

on these remedies and how such remedies could be implemented practically and safely.

2. Background and Implementation of Auxiliary Aids and Notifications Systems to Remedy Discrimination and Denial of Equal Access

135. There are many types of notification systems that can assist deaf individuals. The need for such notification systems is highlighted by the fact that deaf individuals must rely on visual cues to understand emergency-related communications. *See Exhibit N.*
136. KDOC Policies and Procedures Number 17.1 regarding Inmate Personal Property, which went into an effective on February 3, 2014, prohibits any inmate possessing a device that provides for the electronic storage of information, which may facilitate illegal activities or activities that may pose a security threat. It may be utilized, however, for legitimate institutional needs. These devices may include an electronic typewriter with data or information storage capacity, a computer, a programmable calculator, and a watch or other device with a programmable calculator or another memory feature.¹¹²

a. In-Cell Visual Alarms

137. Certain standing and portable visual alarms shine brightly enough to wake up a sleeping deaf individual. Portable visual alarms can be easily moved from cell to cell. Moreover, a prison can purchase a battery-powered unit or shorten the unit's power cord to address security and inmate safety concerns.
138. Mr. Knights, Mr. Adams, and similarly situated deaf and hard-of-hearing inmates require a standing or portable visual alarm bright enough to wake them from sleep for their safety and to ensure equal access to prison services. To the extent the KDOC did not provide such an alarm, it denied Mr. Knights, Mr. Adams and other similarly situated deaf and hard-of-hearing inmates equal access to prison services.

b. Wireless Notification Systems with Shakers

139. Wireless notification systems use sound monitors that can detect sounds such as triggered audible alarms, door knocking, and phones ringing. When the device detects these sounds, it alerts deaf users with a bright visual flasher and a powerful bed shaker.
140. The system consists of a master unit and a bed shaker. The master unit consists of an alarm clock with a large display, a flasher with 6 LED lights, and a motion sensor. The face of the master unit has large bright icons to note which event has

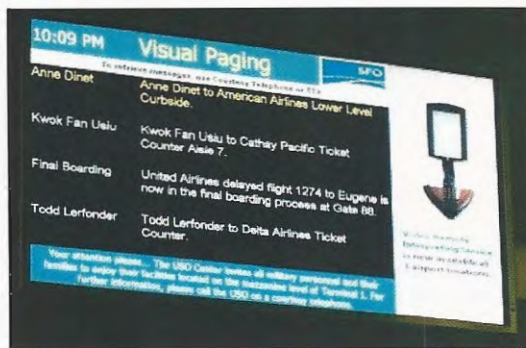
¹¹² KDOC CPP 17.1, § II.A.17.

activated the alarm. Wireless notification systems are available in the models listed in **Exhibit O**.

141. Prisons should install wireless notification systems in addition to or in lieu of in-cell visual alarms since these systems are able to alert deaf inmates who are in their cells to both emergency and non-emergency situations.

c. Visual Paging Systems

142. Visual paging systems relay important messages to deaf individuals. These systems use digital signage networks composed of CRT monitors, LCD flat screen panels, plasma displays, split flap boards, high-definition TVs, or LEDs. They are available in wireless and wired formats. Ideally, these devices are connected throughout the prison via existing TV monitors.



Examples of Visual Paging System
San Francisco Airport and Bainbridge Island Ferry

143. Mr. Knights and Mr. Adams may have required a visual paging system to alert them of audible announcements of all kinds. To the extent the Defendants did not provide him with access to this service, it denied them effective communication and equal access. Further, deaf and hard-of-hearing inmates that have missed activities and programs that other inmates had access to because they could hear announcements have been discriminated against and denied equal access. Finally, without visual and physical emergency notification systems, all deaf and hard-of-hearing inmates are at a greater risk of injury or harm due to the Defendants' lack of accommodations.
144. As discussed in Section VII of this report, inmates Ms. Drass and Ms. Callahan were not notified by staff that they were to report to the dining room, library, or recreation. Ms. Callahan was unable to report to the medicine line to receive her medication. Their grievances were apparently addressed and guards were instructed to manually notify them. This procedure is still problematic due to inconsistencies associated with using different staff members, staff members being unable to immediately locate the deaf and hard-of-hearing inmates, and the lack of any written or standard staff training specific to the deaf and hard-of-hearing. Further, this procedure is not as reliable as the other visual and physical

safety systems discussed above because a staff member may forget to notify the deaf and hard-of-hearing inmates.

D. Access to Educational, Religious, Healthcare, and Rehabilitative Programs, Disciplinary Hearings, and Employment Opportunities

1. Defendants' Denial of Effective Communication and Equal Access

145. When the Defendants limit access to or deny the use of interpretative services, deaf and hard-of-hearing inmates such as Mr. Knights and Mr. Adams do not have the same opportunity as hearing inmates to participate in and enjoy the benefits of educational, religious, healthcare, and rehabilitative programs, disciplinary proceedings, and employment opportunities. This is because such deaf and hard-of-hearing inmates require interpretative services – such as qualified interpreters and Video Remote Interpreting (VRI) – to communicate as effectively as hearing inmates in such programs, proceedings, and opportunities. This is a denial of effective communication and equal access.
146. This problem is compounded by the use of hand cuffs or restraints that prevent deaf and hard-of-hearing inmates that rely on ASL from communicating. Thus, even if interpretative services are available, inmates with overly-restrictive restraints cannot communicate as effectively as hearing inmates in the same restraints. The failure of the Defendants to accommodate such deaf and hard-of-hearing inmates (such as Mr. Knights and Mr. Adams) to the extent it is reasonable and safe is a denial of effective communication and equal access.
147. Policy changes should be implemented within the KDOC to permit better access, including emergency access, to interpretative services so that deaf and hard-of-hearing inmates are not denied effective communication and equal access in programs, hearings, and employment opportunities. Further, the policy changes should be altered to allow deaf and hard-of-hearing inmates that rely on ASL to communicate when some level of restraints are necessary, whether those restraints are less-restrictive cuffs or shock-type devices. Below, I explain provide some background information on these remedies and how such remedies could be implemented practically and safely.

2. Background and Implementation of Interpretative Services and Restraint Mechanisms for Effective Communication and Equal Access

a. Qualified Sign Language Interpreters

148. Qualified sign language interpreters provide real-time translations in deaf individuals' primary language (ASL) and have been available for hire for decades. Because interpreter quality varies widely, it is important to use interpreters that

are certified by the National Registry of Interpreters for the Deaf (“RID”)¹¹³ and Kentucky Commission on the Deaf and Hard of Hearing. Service could be processed through the Interpreting Referral Services.¹¹⁴ Further, the Licensure Bill, which became effective July 1, 2003, states that sign language interpreters must be licensed in the state of Kentucky and certified by a national organization.¹¹⁵ This licensure and certification will help hiring entities that are not familiar with the sign language interpreting profession to quickly and reliably identify qualified practitioners using a who can provide adequate and effective communication.

149. Certified and qualified interpreters adhere to a code of professional conduct¹¹⁶ and are able to interpret effectively, accurately, and impartially using any necessary specialized vocabulary. The use of non-certified and unqualified interpreters can result in inadequate communication and miscommunication. Potential conflicts of interest concerns and privacy concerns also must be considered when selecting an interpreter, and interpreters who raise either concern – including interpreters that are fellow inmates in a prison setting – should only be used as a last resort.¹¹⁷ Interpreter-assisted communications are the only form of in-person communication that allows both the hearing and deaf individuals involved in a conversation to communicate as they would normally. Mr. Knights and Mr. Adams required this service to participate in prison classes, medical appointments, intake, orientation, and grievance interviews in a manner comparable to their hearing peers. Consequently, the Defendants’ failure to provide these services despite Mr. Adam and Mr. Knight’s timely requests was a denial of effective communication and equal access.

b. Video Remote Interpreting Services

150. VRI uses high-speed internet services to allow deaf and hearing individuals in the same physical location to communicate without an in-person interpreter. Instead of an in-person interpreter, VRI employs an off-site interpreter to provide translation services via video monitor. Like VRS, VRI has been widely available in the U.S. since at least the mid-2000.

¹¹³ www.rid.org

¹¹⁴ <http://www.kcdhh.ky.gov/oea/ic-state.html>

¹¹⁵ <http://www.kcdhh.ky.gov/oea/kbi.html>

¹¹⁶ “NAD-RID Code of Professional Conduct,” Registry of Interpreters for the Deaf, http://www.rid.org/UserFiles/File/NAD_RID_ETHICS.pdf (Retrieved August 17, 2014).

¹¹⁷ “ADA: Communications for Deaf and Hard of Hearing,” District of Columbia Department of Corrections Policy and Procedure No. 3800.3A, 10 (August 17, 2014).



Video Remote Interpreting (VRI)

151. This service should be utilized when an interpreter cannot be physically present to interpret for individuals who are at the same physical location. It is ideal for unplanned medical communications, brief interactions, and emergencies. For this reason, VRI is commonly used in locations such as hospitals, doctors' offices, mental health care settings, police stations, and other instances demanding near-immediate access to an interpreter.¹¹⁸ Prisons can contract with a vendor such as Purple Communications VRI Services¹¹⁹ or ZVRS¹²⁰ to enable VRI communications.
152. VRI is the only form of in-person communication that allows hearing and deaf individuals to communicate without an in-person interpreter in their preferred manner. Since an in-person interpreter cannot always be obtained in a timely manner, Mr. Knights, Mr. Adams and other similarly situated deaf and hard-of-hearing inmates require access to VRI services to be able to communicate with hearing individuals during emergencies and other unexpected events in a manner comparable to hearing inmates. The KDOC's failure to provide Mr. Knights and Mr. Adams with access to VRI therefore denied them effective communication and equal access.
153. Further background and implementation details for video-related services is described above in Section VIII.B.2.

c. Communication Access Real-time Translation ("CART")

154. CART Services utilize machine stenographers (real-time captioners) who manually enter verbal communication via a steno machine into a software program. The program converts the steno signals to English instantly, which is then displayed on a personal computer or projection screen deaf or hard-of-

¹¹⁸ See, e.g., "Position Statement: VRI Services in Hospitals," National Association of the Deaf, <http://nad.org/issues/technology/vri/position-statement-hospitals> (Retrieved August 17, 2014).

¹¹⁹ "VRI Services Home Page," Purple Communications, <http://www.purple.us/vri> (Retrieved August 17, 2014).

¹²⁰ "VRI Benefits/Services," ZVRS, <http://www.zvrs.com/benefitsservices/services/zi> (Retrieved August 17, 2014).

hearing person to read.¹²¹ The service is typically used by individuals who are hard-of-hearing, late-deafened, and those who lost their hearing after learning speech, read lips and rely solely on CART and captioning in group settings such as educational institutions, lectures, or at group meetings.

d. Audio Assistive Listening Device System ("ALDS")

155. ALDS enables persons with minimal hearing loss to participate in the proceedings of large group meetings, and public forums. An audio system is connected to an induction loop that amplifies sounds and tones. Sound and tones are then broadcast to personal hearing aid with telecoil switch, which are used by individuals who prefer audio enhancement. *See Exhibit P.*

E. Restraint Mechanisms and Effective Communication

156. KDOC inmates who are deaf and hard of hearing must have the ability to use sign language, make gestures or write notes when communicating issues, concerns or problems with prison staff when under restraints. I have been informed by counsel that Defendants' counsel advised them that KDOC policies limit the use of restraints to only three situations: (1) when transporting inmates to or from an institution; (2) when transferring an inmate into or out of the Special Management Unit; and (3) in response to security threats. However, this policy does not appear to be codified in KDOC's policies and procedures, which are available at <http://corrections.ky.gov/communityinfo/Policies%20and%20Procedures/Pages/default.aspx>. The lack of a clear written policy likely leads to situations where deaf and hard of hearing inmates are unnecessarily cuffed behind their backs, making it impossible for them to communicate. In the case that the KDOC may need to handcuff an inmate who is deaf or hard of hearing, the KDOC must, safety permitting, modify its regular practice of handcuffing inmates behind their backs, and instead handcuff deaf individuals in front of torso.¹²²
157. Further, as indicated in the Police Patrol: The Law Enforcement Magazine, published on May 6, 2013, chain hand cuffs are the restraint most suitable for continuing to communicate via sign language:

¹²¹ National Association of the Deaf, <http://nad.org/issues/technology/captioning/cart> (Retrieved September 15, 2014).

¹²² Northern District of Illinois under Title II of the Americans with Disabilities Act ("ADA"), 42 U.S.C. §§ 12131-12134. A settlement agreement between the Elk Grove Police Department and the United States, regarding the use of hand restraints on a deaf arrestee, was signed on October 28, 2008. According to the settlement agreement, "The Complainant, who is deaf, alleged that the Elk Grove Village Police Department violated the ADA by not providing him with a qualified sign language interpreter, despite his request for an interpreter, when necessary to ensure effective communication with him when he was arrested and transported to the Elk Grove Village Police Station where he was held for several hours. Complainant further alleged that he was handcuffed behind his back while being transported to the Police Station and thus, unable to communicate in his primary language, ASL, and not provided with a TDD while he was in custody." http://www.ada.gov/elk_grove.htm (Retrieved August 17, 2014).

Chain cuffs are the easiest to put on, but provide the wearer the most ability to move. Hinged cuffs only allow a prisoner to move his or her hands up and down with some linear movement, but no lateral or angular movement. This makes them better suited for transportation over long distances. Rigid cuffs severely restrict wrist movement: no angular, no lateral, no linear movement.¹²³

Exhibit Q.

Chain cuffs would be appropriate for individuals who need to use sign language to communicate, and they would still provide a level of restraint. This method would allow deaf individuals to sign within the parameter for the safety of staff or write notes if immediate communication is required.



Example of Inmate Wearing Chain Cuffs

158. The Law Enforcement Magazine also suggested another possible restraint option which is the Stun-Cuff:

It is a pain compliance device that is placed around the wrist or ankle and uses electrical bursts dispensed via a wireless transmitter to keep inmates in line. This entails holding the cuff out and activating it with the transmitter so that the prisoner can see and hear the electrical arc created.

If the Stun-Cuff is employed, it should be utilized for all inmates; not restricted to inmates who are deaf, deaf-blind, and hard of hearing.

F. Need for Staff Training Regarding ADA Requirements

¹²³ <http://www.policemag.com/channel/patrol/articles/2013/05/safe-prisoner-transport.aspx>

159. The Defendants must enhance their provision of staff training on the ADA and what its provision requires in regard to the needs of deaf and hard-of-hearing inmates, and all other inmates with disabilities. As Defendants admit, there is currently no policy specific to the needs of deaf or hard-of-hearing inmates, despite that KDOC Correction Policy No. 4.7 indicates that each institution should have an annually updated written training plan. At a minimum, the KDOC should adhere to its own policy requiring a training plan for its staff, and require comprehensive ADA training for its staff. The training should include, but not be limited to, effective communication and interaction with individuals who are deaf-and-hard of hearing. Please see **Exhibit R** for suggested training outline.

G. Procedures for Requesting ADA Accommodations

160. It is my understanding that the only written or defined procedure for inmates to seek accommodations under the ADA is the grievance procedure. This is not a sufficient mechanism to address inmates' attempts to obtain accommodations. A simpler procedure specific to the ADA must be provided.
161. A procedure for requesting reasonable accommodation must be implemented and an ADA Compliance Officer as well as Local Correctional Disability Rights Coordinators for Inmates at each facility must be identified to inform and advise inmates of the KDOC's commitment to comply with the ADA. An inmate seeking an accommodation must complete the Inmate Accommodation Request Form. In the form, the inmate must describe his/her specific disability, the specific activity for which accommodation is needed, and the specific action the inmate wants KDOC to take to accommodate his/her disability and allow him/her to participate in programs, services, and activities. The completed form must be processed and ensure that request for reasonable accommodation is properly evaluated. This form must be filed separately from the inmates file.

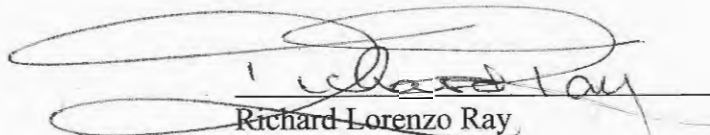
IX. CONCLUSION

162. The Defendants failed to provide Mr. Knights, Mr. Adams and other deaf and hard-of-hearing inmates with the means to communicate effectively and access prison programs, services, and activities at KDOC facilities. In particular, the Defendants should have provided the following accommodations to ensure effective communication and equal access for Mr. Knights, Mr. Adams and other deaf and hard-of-hearing inmates in the KDOC's custody: (1) videophone access; (2) VRI access; (3) VRS access; (4) in-cell visual and physical alarms and/or wireless notification systems; (5) a visual paging system; and (6) qualified sign language interpreters available upon request.
163. With today's expanding technology people have many communication options. People who are deaf, deaf-blind, hard-of-hearing, and individuals with a speech disability are following these trends and are rapidly migrating to more advanced telecommunications methods, both for peer-to-peer communications, video remote interpreting services, and videophone conferencing. Internet-based

equipment includes, but is not limited to, wireless devices, videophones/videocams, computers, and tablets. Due to technological changes in the industry and expansion of videophone systems, implementation of technology, programs, and services to meet their communication needs, the KDOC should be kept abreast to ensure communication accessibility. By utilizing the most current device interface with network connections, an individual is able to experience video communication that is more functionally equivalent to that enjoyed by people who can hear and speak.

164. As this report demonstrates, there were no insurmountable technological or security impediments to implementing the above accommodations at KDOC and other prisons. Indeed, other prison systems and government agencies had already implemented many of them.
165. In compliance with the Title II of the ADA, as amended, and the Rehabilitation Act of 1973, as amended, the Defendants must provide individuals who are deaf and hard-of-hearing with an "equal opportunity to participate in or benefit from the goods, services, facilities, privileges, advantages, or accommodations" offered by the KDOC.¹²⁴ To ensure an equal opportunity, the Defendants must develop and implement a policy and procedure on reasonable accommodation for inmates to allow inmates to follow steps for requesting an accommodation. The Defendants must provide reasonable accommodations including auxiliary aids and services including, but not limited to: sign language interpreters and video remote interpreting services to ensure effective communication for individuals who are deaf, deaf-blind, and hard-of-hearing.

Date: September 16, 2014



Richard Lorenzo Ray

¹²⁴ 28 C.F.R. § 36.202