

# BIOMETRICS AND DISABILITY RIGHTS: LEGAL COMPLIANCE IN BIOMETRIC IDENTIFICATION PROGRAMS

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## Abstract

*Biometric technology is a rapidly expanding field in both the public and private sectors. Biometric data is increasingly being used to create more secure methods of identifying individuals, track the movements of people, and allow access to restricted areas. The use of biometric data in such a wide range of applications presents a unique challenge to people with disabilities. Studies evaluating the impact of biometric programs on the disability community are limited, but tend to indicate that many people with disabilities will face difficulties accessing biometric programs. This raises the concern that people with disabilities may face increased difficulty in accessing opportunities and services that require the production of biometric data, or be unable to use documents that require biometric data. Because of the potential for discrimination, it is necessary to implement legislative protections to ensure the civil rights of people with disabilities as these programs begin to be implemented on a widespread basis.*

## TABLE OF CONTENTS

I.	Introduction.....	210
II.	Disability and Biometric Definitions .....	211
	A. Definition of Biometrics.....	211
	B. Definition of Disability.....	211
	C. Introduction to the Problem.....	212
III.	Existing Biometric Programs .....	212
	A. Selected Federal Programs .....	212
	B. Selected State-Level Systems.....	214
	C. Selected Private Sector Uses of Biometric Data.....	216
IV.	Proposed Programs .....	218
	A. Selected Federal Programs .....	218
	1. Social Security.....	218

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	2. DHS Testing for Facial Recognition Programs for First Responders .....	218
V.	Current Structure of Anti-Discrimination Laws.....	219
	A. Federal Statutes .....	219
	1. Section 504 (Applying to Federal Programs and Federally Funded Programs) .....	219
	2. Americans with Disabilities Act (ADA) .....	221
	3. Genetic Information Nondiscrimination Act (GINA) .....	223
	B. State Statutes Regarding Biometric Data .....	224
	C. Case Law .....	226
VI.	Quantitative Impact on People with Disabilities .....	229
	A. Potential Data Problems .....	229
	B. Statistics.....	230
VII.	Qualitative Impact on People with Disabilities .....	232
	A. Difficulty in Obtaining Employment.....	232
	B. Difficulty in Obtaining Housing.....	233
	C. Difficulty Accessing Social Services Programs .....	234
VIII.	Proposed Regulatory Changes.....	235
	A. Americans with Disabilities Act: Title I.....	235
	B. Americans with Disabilities Act: Title II.....	236
	C. Americans with Disabilities Act: Title III .....	238
	D. Genetic Information Nondiscrimination Act.....	240
	E. Section 504.....	241
	F. Access Board Regulations .....	241
IX.	Conclusion .....	243

## I. INTRODUCTION

The disability community often faces difficulty when accessing programs and services in the community.<sup>1</sup> While many aspects of technology have helped improve the lives of people with disabilities,<sup>2</sup> technology also has the potential to increase the segregation of people with disabilities, channeling more people with disabilities into alternative or adaptive programs and services instead of facilitating inclusion.<sup>3</sup> Biometric data systems are a rapidly growing area of technology that is being integrated into a large number of governmental and private programs.<sup>4</sup> This Article examines a selection of current and proposed biometric programs in the United States, analyzes the potential

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1. Helena Agyei, *Breaking Barriers for the Inclusion of Persons with Disability in National Development*, 4 AM. J. EDUC. RES. 8 (2016).

2. NABIL EID, INNOVATION AND TECHNOLOGY FOR PERSONS WITH DISABILITIES 6 (2013), <http://www.un.org/esa/socdev/egms/docs/2013/ict/innovation-technology-disability.pdf>.

3. COMM. ON DISABILITY IN AM., INST. OF MED., THE FUTURE OF DISABILITY IN AMERICA 196–97 (Marilyn J. Field & Alan M. Jette eds., 2007).

4. Anil K. Jain & Arun Ross, *Introduction to Biometrics*, in HANDBOOK OF BIOMETRICS 12 (Anil K. Jain et al. eds., 2008); Anil K. Jain et al., *Biometrics: A Grand Challenge*, in 2 PROCEEDINGS OF THE 17TH INTERNATIONAL CONFERENCE ON PATTERN RECOGNITION 935, 935 (2004).

impact of these programs on the disability community, and provides legislative recommendations to ensure the rights of people with disabilities are protected as these systems become more common.

## II. DISABILITY AND BIOMETRIC DEFINITIONS

### A. *Definition of Biometrics*

Biometric data is the “automatic recognition of people based on their distinctive anatomical (e.g., face, fingerprint, iris, retina, hand geometry) and behavioral (e.g., signature, gait) characteristics . . . .”<sup>5</sup> While the most commonly used and recognized biometric is the fingerprint, new technologies are constantly being developed, which increases the type of biometric data that can be measured.<sup>6</sup> Biometric data is primarily used as a way of identifying the person who initially provided the biometric data, or as a means of identifying that someone is not the person who provided the biometric data.<sup>7</sup>

Biometric data has some advantages over the traditional methods of determining identity. Unlike passwords or identification cards, “biometric identifiers cannot be shared or misplaced, and they intrinsically represent the individual’s bodily identity.”<sup>8</sup> Biometric data is traditionally used for three functions: making a positive identification, which determines if a person is who they say they are; large-scale identifications, such as driver’s licenses and border control; and screening, to determine whether an individual is the person being sought for a particular reason.<sup>9</sup>

### B. *Definition of Disability*

An examination of disability and biometrics requires an understanding of what is considered to be a disability in the United States. A protected disability is defined statutorily. The most commonly used definition is the one given in the regulations implementing Title II of the Americans with Disabilities Act (ADA) of 1990.<sup>10</sup> These regulations define a disability as “a physical or mental impairment that substantially limits one or more of the major life activities of such individual; a record of such an impairment; or being regarded as having such an impairment.”<sup>11</sup> The ADA also gives a

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5. Jain et al., *supra* note 4.

6. James Wayman et al., *An Introduction to Biometric Authentication Systems*, in BIOMETRIC SYSTEMS 1, 2–3 (James Wayman et al. eds., 2005). Potential new biometric identification measures include voice identification, Judith A. Markowitz, *Voice Biometrics*, 43 COMM. ACM 66 (2000), EEG (brain wave) identification, A. Riera et al., *Unobtrusive Biometric System Based on Electroencephalogram Analysis*, 2008 EURASIP J. ON ADVANCES SIGNAL PROCESSING 1, and ear shape, Anupam Sana & Phalguni Gupta, *Ear Biometrics: A New Approach*, in PROCEEDINGS OF THE 6TH INTERNATIONAL CONFERENCE ON ADVANCES IN PATTERN RECOGNITION 46 (2007).

7. Jain & Ross, *supra* note 4.

8. Jain et al., *supra* note 4.

9. *Id.* at 935–36.

10. 28 C.F.R. § 35.104 (2015).

11. *Id.*

detailed definition of disability, listing a wide number of medical conditions and impairments that qualify for protection.<sup>12</sup>

The American Community Survey (ACS) report on disability statistics in 2014 found that 12.6% of Americans, or just under forty million people, have a disability.<sup>13</sup> Disability is defined in the ACS report as a serious difficulty in any one of six categories, including hearing, vision, cognition (e.g., concentrating, remembering, or making decisions), ambulation (e.g., walking or climbing stairs), self-care (e.g., dressing or bathing), and independent living (e.g., doing errands alone).<sup>14</sup>

### C. *Introduction to the Problem*

The United States has a sizeable disability community, which faces difficulty in accessing certain facilities and programs.<sup>15</sup> Many biometric programs are already being used, either as fully implemented programs or in trial programs.<sup>16</sup> These programs exist in the federal, state, and private sectors, and additional programs are continually being proposed and tested.<sup>17</sup> These programs rarely contain specific protections for people with disabilities.<sup>18</sup> The increase in the use of biometric data to control access to programs, services, and facilities raises the concern of increased discrimination if affirmative steps are not taken to protect the rights of people with disabilities when faced with requests for biometric data.<sup>19</sup>

## III. EXISTING BIOMETRIC PROGRAMS

### A. *Selected Federal Programs*

The US-VISIT program records fingerprints and two-dimensional facial images (not facial scans) from aliens leaving the United States.<sup>20</sup> This program is not yet being used at all points of departure from the United States, but is being implemented in stages.<sup>21</sup> This program is one of the few programs currently in use that addresses the issues that may result from attempting to

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12. 42 U.S.C. § 12102(2)(A)–(B) (2012) (“[M]ajor life activities include, but are not limited to, caring for oneself, performing manual tasks, seeing, hearing, eating, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, and working . . . . [A] major life activity also includes the operation of a major bodily function, including but not limited to, functions of the immune system, normal cell growth, digestive, bowel, bladder, neurological, brain, respiratory, circulatory, endocrine, and reproductive functions.”).

13. William Erickson et al., *Disability Statistics from the 2014 American Community Survey (ACS)*, CORNELL U., <https://www.disabilitystatistics.org/reports/acs.cfm?statistic=1> (last visited Sept. 17, 2016).

14. *Id.*

15. Agyei, *supra* note 1.

16. COMM. ON DISABILITY IN AM., *supra* note 3.

17. *Id.*

18. Agyei, *supra* note 1.

19. *Id.*

20. U.S. DEP’T OF HOMELAND SEC., BIOMETRIC STANDARDS REQUIREMENTS FOR US-VISIT 19, 34 (Mar. 15, 2010), [https://www.dhs.gov/xlibrary/assets/usvisit/usvisit\\_biometric\\_standards.pdf](https://www.dhs.gov/xlibrary/assets/usvisit/usvisit_biometric_standards.pdf).

21. *Id.*

obtain biometric data from people with disabilities. The procedure document implementing the US-VISIT program states the following regarding balancing the needs of the program with the civil rights of people with disabilities:

The Department will make reasonable efforts that are also consistent with the Government's need to verify an alien's identity to accommodate any person with disabilities which prevent him or her from complying with the requirements of this rule for fingerprinting, photographs or other biometric collections. We will follow all required procedures that are applicable to government action under the Americans with Disabilities Act . . . and the Federal Rehabilitation Act.<sup>22</sup>

This statement is very broad, and could produce mixed results if it is not followed up with more detailed procedural guidance. The broadness of the directive allows the Department of Homeland Security to adjust to meet the needs of each individual, but without more details of how they intend to apply the Americans with Disabilities Act to their identity verification program, there is still a great deal of room for discrimination to occur. The Department of Homeland Security (DHS) is currently using only fingerprints and photographs in the US-VISIT program, but they are already in the process of implementing iris scans and studying the feasibility of using facial recognition as an additional biometric.<sup>23</sup> While DHS has not yet released the procedural documents for these proposed additions to the US-VISIT program,<sup>24</sup> on its face it would not require any change in the policy currently in place for the existing biometric data collection system.

A number of federal departments use the data generated by the US-VISIT program.<sup>25</sup> These agencies include U.S. Immigrations and Customs Enforcement, U.S. Citizenship and Immigrations Service, U.S. Customs and Border Protection, the Department of Defense and associated intelligence communities, the Department of Justice, the Department of State, and state and local law enforcement agencies.<sup>26</sup> The broad sharing of this data makes it especially important that the data be collected in a way that preserves the rights of persons with disabilities. A civil rights violation on the part of an agent of the US-VISIT program could result in a loss of access to programs and services when that individual needs to interact with other federal agencies. In addition, the FBI exchanges DNA data with state and local law enforcement agencies and the international community, and maintains the data in the National DNA Index System (NDIS), which is interoperable with the Combined DNA Index System (CODIS) database.<sup>27</sup> A new standard for the storage and transmission of DNA information is under development between the FBI and the international law enforcement community. The US-VISIT

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22. 69 Fed. Reg. 468, 471 (Jan. 5, 2004) (codified at 8 C.F.R. pts. 214, 215, 235 (2016)).

23. U.S. DEP'T OF HOMELAND SEC., *supra* note 20.

24. *Id.* at 21.

25. *Id.* at 1.

26. *Id.* at iii.

27. *Id.* at 38.

program has suggested that they should become involved in the development of the new standard and make plans for the standard's implementation.<sup>28</sup> This would suggest that the US-VISIT program is at least considering the possibility of including DNA in its biometric programs.<sup>29</sup> If DNA were collected by the US-VISIT program and shared with the agencies and departments listed above, it would create a privacy issue for information that could disclose an otherwise invisible disability, or the propensity to develop a disability. In addition, this potential use of DNA information is not currently covered by the privacy standards in the Genetic Information Nondiscrimination Act.<sup>30</sup>

The TSA's Transportation Worker Identification Credential (TWIC) is an identification system that uses fingerprints and photos stored on an identification card that can be screened by the Coast Guard.<sup>31</sup> Possessing this credential allows transportation workers to access certain security sensitive areas, especially in port areas.<sup>32</sup> Obtaining the TWIC credential requires that the applicant provide a full set of fingerprints, two of which are stored on a chip in the card.<sup>33</sup> When a TWIC holder wants to access a secure area that requires the credential, the cardholder provides the card and a scan of one fingerprint to compare to the one stored on the chip.<sup>34</sup> If the stored fingerprint and the one provided at the access point match, the cardholder is allowed to enter the secure area.<sup>35</sup> No procedures could be located for those with disabilities who are unable to provide any fingerprints to record on the card or who may not be able, due to a permanent or temporary disability, to provide a fingerprint at the access point.<sup>36</sup>

### B. Selected State-Level Systems

Public school systems are slowly beginning to implement biometric systems for a variety of reasons, and with varying degrees of success. The Freehold Borough School District in New Jersey began using iris scans in 2006 to verify the identity of adults who enter the school.<sup>37</sup> Participation in the

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28. *Id.*

29. *Id.* ("The FBI exchanges deoxyribonucleic acid (DNA) data with State and local law enforcement agencies and the international community and maintains the data in the National DNA Index System (NDIS). . . . US-VISIT should become engaged in the standard development process and plans for its implantation should be developed.")

30. Genetic Information Nondiscrimination Act of 2008, Pub. L. No. 110-233, 122 Stat. 881 (codified as amended in scattered sections of 42 U.S.C.); *see also* 29 C.F.R. § 1635.4(a)-(b) (2015). GINA covers employers, employment agencies, and labor agencies in the hiring, discharge, compensation, terms, conditions, or privileges of employment and admission to, or employment in, any program established to provide apprenticeship or other training or retraining. *Id.* GINA does not provide any guidance on the acceptable use and confidentiality of genetic information by other organizations or agencies. *Id.*

31. *TWIC® Card and Reader Technology*, TRANSP. SEC. ADMIN., <https://www.tsa.gov/for-industry/twic-card-reader-technology> (last visited Sept. 2, 2016).

32. *Id.*

33. *Id.*

34. *Id.*

35. *Id.*

36. *Id.*

37. Greg Toppo, *Eye Scans: A High-Tech Hall Pass?*, USA TODAY (Feb. 22, 2006, 10:40 PM), [http://usatoday30.usatoday.com/tech/news/technovations/2006-02-22-iris-school\\_x.htm](http://usatoday30.usatoday.com/tech/news/technovations/2006-02-22-iris-school_x.htm).

program is and has always been optional, and anyone choosing not to participate can still enter and be verified through the school office.<sup>38</sup> The program was implemented due to post-9/11 security concerns and because the swipe-card system they were using before had not worked well.<sup>39</sup> Persons with disabilities who could not provide an iris scan could simply opt out of participating in the system and use the alternative means of entry,<sup>40</sup> though this may not be as convenient for the person with the disability and does not truly provide equal access.

In 2013, the Polk County School System in Florida began using an iris scanner to track the movement of children at the school, including their arrival and departure from schools and school busses.<sup>41</sup> The program was initially designed to allow parents to opt their children into the program; however, the school began scanning children before information on the program and information on opting out was sent to the parents.<sup>42</sup> As a result of parental resistance to the premature scanning, the vendor providing the system was asked to delete all data until the details of the pilot project could be further developed.<sup>43</sup> The program has not yet been restarted.<sup>44</sup>

The Connecticut Department of Social Services has implemented a biometric system for certain public assistance programs.<sup>45</sup> This program uses digitally stored photographs and fingerprints to match social service benefit cards to the benefit recipients.<sup>46</sup> If a recipient of the benefit does not participate in the biometric program, they are subject to disqualification from the program.<sup>47</sup> The Commissioner of Social Services may exempt people from the biometric requirement, but there are no statutory guidelines for when the Commissioner should give exemptions.<sup>48</sup> If the Commissioner decided not to exempt people with disabilities from the biometric requirement, certain applicants for services may be denied access to the state social services programs.<sup>49</sup>

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38. *Id.*

39. *Id.*

40. *Id.*

41. Matthew Pleasant, *Iris Scanning Controversy Grew from Multiple Mistakes*, LEDGER (June 14, 2013, 11:46 PM), <http://www.theledger.com/article/20130614/NEWS/130619733>.

42. *Id.*

43. *Id.*

44. *Id.*

45. CONN. GEN. STAT. § 17b-30(b) (2015).

46. *Id.* § 17b-30(a).

47. *Id.* § 17b-30(c).

48. *Id.* § 17b-30(a), (c). Regarding the use of biometric data for access to social programs:

The Commissioner of Social Services and the Commissioner of Motor Vehicles shall examine available biometric identifier systems and to the greatest extent possible, select a system which is compatible with the systems of surrounding states. . . . A recipient of a program utilizing said system pursuant to subsection (b) of this section shall participate in said system or be subject to disqualification from such program. The commissioner shall have the authority to exempt a recipient from participation in said system.

*Id.*

49. *Id.*

### C. Selected Private Sector Uses of Biometric Data

In the private sector, casinos have been at the forefront of implementing biometric systems. The earliest programs focused on attempts to use facial recognition software to identify those entering the casino and compare those images to a known list of banned persons.<sup>50</sup> However, initial trial programs in Las Vegas casinos attempting to use this facial recognition software fared poorly.<sup>51</sup> The failure of the facial recognition systems has been attributed to the low lighting standard for most casinos, and the fact that simple disguises can defeat most facial recognition programs.<sup>52</sup> There has been some discussion in the casino industry of using iris scans in the near future for a similar purpose, in the hopes that this method will avoid the problems encountered by the facial recognition programs.<sup>53</sup> Despite the failures of facial recognition programs in Las Vegas, Atlantic City casinos have used facial recognition systems with some degree of success since 1997.<sup>54</sup> These systems are used to identify known cheaters, checking customer images from surveillance cameras against a database of approximately ten thousand identified banned persons.<sup>55</sup> When a potential match is discovered, a photograph of the banned individual and the surveillance of the current customer are brought up on a screen for security personnel to verify the match.<sup>56</sup> The difference in success rates between Las Vegas and Atlantic City seems to be largely an issue of automation.<sup>57</sup> Atlantic City maintained a high degree of human involvement in the identification process and was able to use trained staff to avoid some of the pitfalls of Las Vegas's facial recognition systems.<sup>58</sup>

The Disney World series of theme parks has used biometric systems since 1996.<sup>59</sup> The scanners match the individual using a ticket or season pass to the person who was originally issued the ticket.<sup>60</sup> Initially, Disney used a two-finger scanner that recorded the shape of the fingers, but in 2006, Disney moved to using a single-finger fingerprint scanner.<sup>61</sup> Disney has established policies for people with disabilities, and does not require fingerprint scans for

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50. *Smile! You're on Casino Camera*, CBS NEWS (Feb. 26, 2001, 1:07 PM), <http://www.cbsnews.com/news/smile-youre-on-casino-camera/>.

51. Rachel Crosby, *Aria Security Is the Old-Fashioned Way—Watching People*, LAS VEGAS R.-J. (Aug. 23, 2014, 9:03 PM), <http://www.reviewjournal.com/business/casinos-gaming/aria-security-old-fashioned-way-watching-people>.

52. Ellen Nakashima, *From Casinos to Counterterrorism*, WASH. POST (Oct. 22, 2007), <http://www.washingtonpost.com/wp-dyn/content/article/2007/10/21/AR2007102101522.html>.

53. *Id.*

54. CBS NEWS, *supra* note 50.

55. *Id.*

56. *Id.*

57. *Id.*; Nakashima, *supra* note 52.

58. CBS NEWS, *supra* note 50; Nakashima, *supra* note 52.

59. Mike Thomas, *Finger Scanners at Disney: Just What Are They Scanning?*, ORLANDO SENTINEL: THE MIKE THOMAS BLOG (May 22, 2007, 1:28 PM), [https://web.archive.org/web/20150926020731/http://blogs.orlandosentinel.com/news\\_columnist\\_mikethomas/2007/05/finger\\_scanners.html](https://web.archive.org/web/20150926020731/http://blogs.orlandosentinel.com/news_columnist_mikethomas/2007/05/finger_scanners.html).

60. *Id.*

61. *Id.*

people whose disabilities prevent them from using the scanner.<sup>62</sup> SeaWorld and Universal Studios use similar systems.<sup>63</sup> It is unclear to what extent these theme parks may share retained fingerprint identification point calculations.<sup>64</sup>

At least one private school, The Academy of Appleton, Wisconsin, has chosen to use a biometric system to secure its campus.<sup>65</sup> They have selected a system that maps hand geometry.<sup>66</sup> The system allows parents access into the building to pick up their children after school and permits teachers to access the building on nights and weekends.<sup>67</sup> Saint John the Baptist Middle School in Salt Lake City, Utah, is using biometric data as well, but for a different purpose.<sup>68</sup> This school is using fingerprint readers in an attempt to speed up the lunch line in the cafeteria.<sup>69</sup> All students have their fingerprint enrolled in the system on the first day of school.<sup>70</sup> Students then scan their finger each time they go through the lunch line, and the cost of lunch is deducted from their account.<sup>71</sup> From the language of the newsletter describing the program, it does not appear that there is an option for parents to refuse to have their child enrolled in the program, though a child may pay cash instead of swiping their finger at the lunch line.<sup>72</sup> Presumably, a child with disabilities precluding the use of the scanner could pay with cash instead, but this would inconvenience students with disabilities more than students without disabilities, especially considering that students who cannot provide fingerprints may also have difficulty physically handling the necessary cash.

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62. *Id.*

63. *3 for 1 Pass*, SEAWORLD SAN DIEGO, [https://seaworldparks.com/en/seaworldvacations/sitecore/content/parks/seaworld\\_sandiego/home/pages/sd-3-for-1](https://seaworldparks.com/en/seaworldvacations/sitecore/content/parks/seaworld_sandiego/home/pages/sd-3-for-1) (last visited Sept. 2, 2016); *Biometrics*, UNIVERSAL STUDIOS HOLLYWOOD, <http://www.universalstudioshollywood.com/faqs/biometrics/> (last visited Sept. 2, 2016).

64. This disclaimer appears on online ticket order forms for SeaWorld Entertainment:

Touch-n-Go finger scan ID verification system is used with this ticket product. The Touch-n-Go system scans your fingerprint and then uses measurements based on your fingerprint to calculate a numerical value. Fingerprints are not stored in the Touch-n-Go system and the information will not be shared with anyone outside of our parks.

SEAWORLD SAN DIEGO, *supra* note 63. The Walt Disney Company, SeaWorld Entertainment, and Universal Studios have not made biometric specific privacy policies available.

65. Ellen Mizio, *The Use of Biometric Technology in K-12 Schools*, NAT'L CLEARINGHOUSE FOR SCI., TECH. & L. (Jan. 2011), <http://www.ncstl.org/evident/the%20use%20of%20biometric%20technology%20in%20k-12%20schools-mizio>.

66. *Id.*

67. *Id.*

68. *Lunch Program*, ST. JOHN THE BAPTIST MIDDLE SCH., <http://www.sjb-middle.org/lunch-program> (last visited Sept. 2, 2016).

69. *Id.*

70. *Id.*

71. *Id.*

72. *Id.* ("The cafeteria uses a biometric positive ID system. The system uses a finger touch pad to positively identify a student. All new students will have their fingers scanned the first week of school.")

#### IV. PROPOSED PROGRAMS

##### A. *Selected Federal Programs*

###### 1. *Social Security*

A number of proposals have been made over the years to improve the security of Social Security cards. The most recent one, part of a bill that was defeated in 2007, called upon the Commissioner of Social Security to evaluate the feasibility of including biometric data on Social Security cards, and within two years to begin issuing fraud and tamper-resistant Social Security cards, which might or might not include biometric data.<sup>73</sup> Subsequent bills have proposed the use of fraud and tamper-resistant Social Security cards but have not specifically included biometric data as part of the proposal, though they do not exclude it as a method of creating a fraud and tamper-resistant card.<sup>74</sup> Programs like these have not yet been passed into law, so the potential impact on people with disabilities is purely hypothetical. However, extrapolating from the known rate of failure to enroll and verify biometric data of people with disabilities,<sup>75</sup> it is easy to see that passing a law requiring biometric data on Social Security cards could present a significant barrier for people with disabilities unless the legislation or implementing regulations contain provisions specifying a process for accommodating people with disabilities in their applications for Social Security cards.

###### 2. *DHS Testing for Facial Recognition Programs for First Responders*

The Department of Homeland Security has initiated a system to test commercially available facial recognition products and algorithms to establish whether any of these programs, either in their current form or with some revisions, may be of use to first responders and security personnel.<sup>76</sup> These programs are being tested specifically for their use in crowds; the testing environment being used is minor league hockey games.<sup>77</sup> The hope is that facial recognition programs will be able to assist first responders and security in crowd situations to determine if there is a person of interest to them in the

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73. S. 1639, 110th Cong. § 305(a)(4) (2007) (“Within 180 days of enactment, the Commissioner of Social Security shall provide to Congress a report on the utility, costs and feasibility of including a photograph and other biometric information on the Social Security card.”).

74. H.R. 15, 113th Cong. § 3102 (2013). While this bill did not specifically require that fraud-resistant Social Security cards contain biometric data, it would have required biometric data to be included on a number of immigration and work authorization documents, and contained a provision for people who could not provide the requested biometric data due to a disability. *Id.* § 2211(b)(7)(B) (“The Secretary shall provide an alternative procedure for applicants who cannot provide the biometric data required under subparagraph (A) because of a physical impairment.”).

75. Andrew S. Patrick, *Fingerprint Concerns: Performance, Usability, and Acceptance of Fingerprint Biometric Systems*, ANDREW PATRICK: ESSAYS (June 25, 2008), <http://www.andrewpatrick.ca/essays/fingerprint-concerns-performance-usability-and-acceptance-of-fingerprint-biometric-systems/>.

76. John Twachtman, *DHS Testing Facial Recognition Accuracy*, GOV'T TECH., (Nov. 5, 2013), <http://www.govtech.com/data/DHS-Testing-Facial-Recognition-Accuracy.html>.

77. *Id.*

crowd.<sup>78</sup> If such a program comes into common use, it may present problems for people with disabilities who may have facial features that differ from what the algorithm recognizes as typical.<sup>79</sup> This could draw unwanted attention to them from the monitoring authorities.<sup>80</sup>

## V. CURRENT STRUCTURE OF ANTI-DISCRIMINATION LAWS

### A. Federal Statutes

#### 1. Section 504 (Applying to Federal Programs and Federally Funded Programs)

Section 504 was initially a single sentence added to the end of the Rehabilitation Act of 1973.<sup>81</sup> In addition to providing the first federal level protection for the civil rights of people with disabilities, the regulations implementing Section 504 established a framework on which the Americans with Disabilities Act would later be developed.<sup>82</sup> In the 1992 amendment to the Rehabilitation Act, Congress amended the “Declaration of Purpose” section to include a detailed policy statement.<sup>83</sup> The text of the policy statement pertaining to this discussion states:

It is the policy of the United States that all programs, projects, and activities receiving assistance under this chapter shall be carried out in a manner consistent with the principles of—

- (1) respect for individual dignity, personal responsibility, self-determination, and pursuit of meaningful careers, based on informed choice, of individuals with disabilities;
- (2) respect for the privacy, rights, and equal access (including the use of accessible formats), of the individuals;
- (3) inclusion, integration, and full participation of the individuals;
- (4) support for the involvement of an individual’s

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78. *Id.*

79. Jonathan Keane, *Facial Recognition Apps Are Leaving Blind People Behind*, VICE: MOTHERBOARD, (Mar. 22, 2016, 5:00 AM), <http://motherboard.vice.com/read/facial-recognition-apps-are-leaving-blind-people-behind>.

80. Bruce Schneier, *The Era of Automatic Facial Recognition and Surveillance Is Here*, FORBES: TECH, (Sept. 29, 2015, 9:30 AM), <http://www.forbes.com/sites/bruceschneier/2015/09/29/the-era-of-automatic-facial-recognition-and-surveillance-is-here/>.

81. Rehabilitation Act of 1973, Pub. L. No. 93-112, § 504, 87 Stat. 355, 394 (1973) (codified as amended at 29 U.S.C. § 794(a) (2012)) (“No otherwise qualified handicapped individual in the United States, as defined in section 7(6), shall, solely by reason of his handicap, 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.”).

82. David Pfeiffer, *Signing the Section 504 Rules: More to the Story*, RAGGED EDGE ONLINE, <http://www.raggededgemagazine.com/0102/0102ft6.html> (last visited Sept. 2, 2016); DEBORAH LEUCHOVIOUS, PACER CENTER, *ADA Q&A . . . THE REHABILITATION ACT AND THE ADA CONNECTION 1* (2003), <http://www.pacer.org/parent/php/PHP-c51f.pdf>.

83. Rehabilitation Act Amendments of 1992, Pub. L. No. 102-569, § 101, 106 Stat. 4344, 4347 (1992) (codified as amended at 29 U.S.C. § 701(c) (2012)).

representative if an individual with a disability requests, desires, or needs such support; and  
 (5) support for individual and systemic advocacy and community involvement.<sup>84</sup>

Programs covered by Section 504 are limited to those that receive federal funding.<sup>85</sup> However, this still represents a substantial number of programs at all levels of government and private programs.<sup>86</sup> For example: housing programs that receive federal funding through Section 8 or similar programs; public elementary and secondary schools; private schools that receive any form of federal assistance; colleges and universities, including private higher education institutions, that receive federal grant funding, federal student aid, or any other federal assistance; and transportation systems that rely on government subsidies.<sup>87</sup> This list is by no means exhaustive, but it shows the wide scope of Section 504's impact. Entities that would not be under the coverage of Section 504 include private businesses and organizations, privately run transportation systems, and some private schools, as long as they receive no form of federal funding.<sup>88</sup>

The text of the implementing regulations for Section 504 is broad, but also nonspecific. Unlike more recent legislation protecting disability rights, such as the Americans with Disabilities Act,<sup>89</sup> the Air Carrier Access Act,<sup>90</sup> or the Fair Housing Act,<sup>91</sup> the Section 504 regulations do not list specific situations, programs, or devices that require specific types of accommodation. The Section 504 regulations broadly prohibit recipients of federal aid from discriminating on the basis of disability:

A recipient, in providing any aid, benefit, or service, may not, directly or through contractual, licensing, or other arrangements, on the basis of disability . . . [p]rovide a qualified disabled person with an aid, benefit, or service that is not as effective in affording equal opportunity to obtain the same result, to gain the same benefit, or to reach the same level of achievement as that provided to others . . . .

. . . .

A recipient may not directly or through contractual or other arrangements, utilize criteria or methods of administration: (i) That have the effect of subjecting qualified disabled persons to discrimination on the basis of disability, (ii) That have the purpose or effect of defeating or substantially impairing accomplishment of

84. *Id.*

85. *Mengine v. Runyon*, 114 F.3d 415, 418 n.2 (3d Cir. 1997).

86. *Funding of Federal, State, and Local Programs*, LEADERSHIP CONF., <http://www.civilrights.org/census/your-community/funding.html> (last visited Sept. 2, 2016).

87. *Id.*

88. 29 U.S.C. § 794(a) (2012).

89. Pub. L. No. 101-336, 104 Stat. 327 (1990) (codified as amended at 42 U.S.C. §§ 12101–213 (2012)).

90. Pub. L. No. 99-435, 100 Stat. 1080 (1986) (codified as amended at 49 U.S.C. § 41705 (2012)).

91. Pub. L. No. 90-284, tit. VIII, 82 Stat. 81 (1968) (codified as amended at 42 U.S.C. §§ 3601–19 (2012)).

the objectives of the recipient's program or activity with respect to disabled persons, or (iii) That perpetuate the discrimination of another recipient if both recipients are subject to common administrative control or are agencies of the same State.<sup>92</sup>

Section 504 has a sufficiently broad scope to generally prohibit discrimination in biometric programs, but because of the nonspecific language, the Section 504 text and regulations provide no specific guidance for recipients of federal funding.

## 2. *Americans with Disabilities Act (ADA)*

The Americans with Disabilities Act of 1990 was the first legislation to provide broad civil rights protection to people with disabilities in almost every sector of public life. Unlike Section 504 of the Rehabilitation Act, the ADA covers almost every aspect of society, with very limited exceptions. These exceptions are for certain private clubs and religious entities, when these organizations are operating strictly privately or for solely religious purposes.<sup>93</sup> The ADA opened many doors to people with disabilities that had previously been closed. However, despite Congress's intent to provide protection to a broad class of people with disabilities, the Supreme Court's interpretation of the ADA greatly limited this.<sup>94</sup> The Americans with Disabilities Amendments Act (ADAA) of 2008<sup>95</sup> was passed to clarify Congress's intent in certain aspects of the Americans with Disabilities Act of 1990.<sup>96</sup>

The ADA is categorized into three main sections. Title I applies to disability-related discrimination in employment at the state and local government level and in the private sector.<sup>97</sup> Title II applies to the programs and services of state and local governments, including social services programs; public transportation; access to buildings, parks, and other facilities; and access to programs of any type that the state or local government offers.<sup>98</sup>

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92. 10 C.F.R. § 4.121(b)(1), (3) (2015).

93. 42 U.S.C. § 12187 (2012) ("The provisions of this subchapter shall not apply to private clubs or establishments exempted from coverage under title II of the Civil Rights Act of 1964 . . . or to religious organizations or entities controlled by religious organizations, including places of worship.")

94. See, e.g., *Sutton v. U.S. Airways*, 527 U.S. 471 (1999) (holding that a group of near-sighted applicant pilots were not disabled under the ADA); *Toyota Motor Mfg., Ky., Inc. v. Williams*, 534 U.S. 184 (2002) (holding that an employee with carpal tunnel syndrome did not have a disability under the ADA).

95. ADA Amendments Act of 2008, Pub. L. No. 110-325, 122 Stat. 3553 (2008) (codified as amended at 42 U.S.C. §§ 12101–213).

96. See *id.* § 2(a)(1), (3)–(6), 122 Stat. at 3553 ("Congress finds that . . . in enacting the Americans with Disabilities Act of 1990 . . . Congress intended that the Act 'provide a clear and comprehensive national mandate for the elimination of discrimination against individuals with disabilities' and provide broad coverage . . . . [W]hile Congress expected that the definition of disability under the ADA would be interpreted consistently with how courts had applied the definition of a handicapped individual under the Rehabilitation Act of 1973, that expectation has not been fulfilled; the holdings of the Supreme Court in *Sutton v. United Air Lines, Inc.* . . . and its companion cases have narrowed the broad scope of protection intended to be afforded by the ADA, thus eliminating protection for many individuals whom Congress intended to protect; the holding of the Supreme Court in *Toyota Motor Manufacturing, Kentucky, Inc. v. Williams* . . . further narrowed the broad scope of protection intended to be afforded by the ADA . . . .").

97. See 29 C.F.R. pts. 1630, 1602 (2015).

98. See 28 C.F.R. pt. 35 (2015).

Title III prohibits discrimination by places of public accommodation—which are non-governmental entities and include private businesses that are open to the general public—including discrimination related to physical access and access to the programs and services offered by the public accommodation.<sup>99</sup>

Somewhat similar to Section 504, the text of the Americans with Disabilities Act is very broad and overall nonspecific, though it does include certain provisions for transportation systems.<sup>100</sup> The text of the Americans with Disabilities Act prohibiting discrimination is:

Subject to the provisions of this title, 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.<sup>101</sup>

Unlike Section 504 though, the implementing regulations for the Americans with Disabilities Act specifically address numerous situations for employers, state and local governments, and private entities. For example, Title II, in addition to the generalized prohibition on discrimination, contains regulations specifically directing how state and local governments should address specific issues, such as: the use of service animals and mobility devices, and ticketing for special events and similar activities.<sup>102</sup> Title III contains specific provisions for matters such as: the removal of barriers to access; access to examinations and classes; seating at assemblies; transportation programs; and the balancing of accessibility and maintaining historical features during renovations of historic sites and buildings.<sup>103</sup>

The current structure of the implementing regulations for the ADA does not bar its application to biometric programs, but neither does it specifically address them. In the past, the pace of technology has rapidly exceeded the details of the ADA, leaving the application of the law and regulations to the new technology up to the courts.<sup>104</sup> This has often resulted in new rule making or new guidelines being issued to clarify the application of the ADA to the new technology.<sup>105</sup>

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99. See 49 C.F.R. pts. 27, 37, 38 (2015).

100. 42 U.S.C. § 12148 (2012).

101. Americans with Disabilities Act of 1990, Pub. L. No. 101-336, § 202, 104 Stat. 327, 337 (1990) (codified as amended at 42 U.S.C. § 12132 (2012)).

102. 28 C.F.R. §§ 35.136–.138.

103. 28 C.F.R. §§ 36.305, .308–.310, .405.

104. See, e.g., Joseph J. Lazzarotti, *Biometric Screening Requirement Under Wellness Program Violates ADA and GINA, According to EEOC Suit*, JACKSONLEWIS (Oct. 29, 2014), <http://www.benefitslawadvisor.com/2014/10/articles/employee-health-welfare-plans/biometric-screening-requirement-under-wellness-program-violates-ada-and-gina-according-to-eeoc-suit/> (discussing an EEOC challenge to an employer's wellness program that asks employees to undergo biometric screenings).

105. See, e.g., Advance Notice of Proposed Rulemaking: Accessibility of Web Information and Services of State and Local Government Entities and Public Accommodations, 75 Fed. Reg. 43,460 (July 26, 2010) (providing notice of a potential regulation revision from the DOJ regarding accessibility of web information to people with disabilities under the ADA).

### 3. *Genetic Information Nondiscrimination Act (GINA)*

The Genetic Information Nondiscrimination Act was enacted to combat the ever-increasing ability of employers to gain genetic information about employees.<sup>106</sup> In addition, as more specific and accurate genetic testing is becoming available, the scope of genetic information that can be gained from a simple test is becoming greater.<sup>107</sup> Concerned about the potential discriminatory impact of this growing technology, Congress enacted GINA to address issues of employment discrimination based on genetic information.<sup>108</sup> The legislative history for GINA states: “Congress has been informed of examples of genetic discrimination in the workplace. These include the use of pre-employment genetic screening at Lawrence Berkeley Laboratory, which led to a court decision in favor of the employees in that case *Norman-Bloodsaw v. Lawrence Berkeley Laboratory* (135 F.3d 1260, 1269 (9th Cir. 1998)).”<sup>109</sup>

GINA is thorough in its treatment of employment discrimination based on genetic information. In addition to the most obvious method of acquiring genetic information through DNA testing, GINA also prohibits discrimination based on more ambiguous forms of genetic information, including predispositions towards medical conditions and family histories of potentially genetically linked medical conditions.<sup>110</sup> The text of GINA shows its breadth:

It shall be an unlawful employment practice for an employment agency—

- (1) to fail or refuse to refer for employment, or otherwise to discriminate against, any individual because of genetic information with respect to the individual;
- (2) to limit, segregate, or classify individuals or fail or refuse to refer for employment any individual in any way that would deprive or tend to deprive any individual of employment opportunities, or otherwise adversely affect the status of the individual as an employee, because of genetic information with respect to the individual; or
- (3) to cause or attempt to cause an employer to discriminate against an individual in violation of this title.<sup>111</sup>

GINA comprehensively addresses potential discrimination based on DNA as a biometric, but only in the employment arena. GINA does not apply to discrimination in any other area, and as such has limited overall effectiveness in addressing the issue of disability discrimination based on DNA as a biometric.

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106. Genetic Information Nondiscrimination Act of 2008, Pub. L. No. 110-233, 122 Stat. 881 (codified as amended in scattered sections of 42 U.S.C.); 42 U.S.C. § 2000ff-1 (2012).

107. *Genetic Information and the Workplace*, U.S. DEP'T OF LAB., <https://www.dol.gov/dol/aboutdol/history/herman/reports/genetics.htm>. (last visited Sept. 2, 2016).

108. H.R. REP. NO. 110-28, at 2 (2007).

109. Genetic Information Nondiscrimination Act of 2008 § 2(4).

110. *Id.* § 2(3), 122 Stat. at 882.

111. *Id.* § 203(a), 122 Stat. at 908–09.

The potential discriminatory uses of DNA or other genetic information far exceed just the employment environment. An incident at the U.S.-Canada border gave a hint at the potential discriminatory impact of the increasing use of DNA as a biometric. A Canadian citizen was prevented from entering the United States because she had once been hospitalized for depression.<sup>112</sup> The border agent cited Section 212 of the Immigration and Nationality Act<sup>113</sup> (INA) as the reason for the exclusion.<sup>114</sup> The INA states that a person can be denied entry into the United States if they are determined “to have a physical or mental disorder and behavior associated with the disorder that may pose, or has posed, a threat to the property, safety, or welfare of the alien or others.”<sup>115</sup> It is greatly concerning that a history of treatment for a common mental illness would provide a reason to assume an individual may pose a threat to social safety and welfare.

While this incident did not specifically include DNA or genetic data, it is easy to see how a similar rationale could be based on a DNA biometric. An individual whose DNA information is readily available through a biometric screening program, or who is required to provide DNA to participate in any program, service, or activity, may find themselves excluded based on a genetically indicated propensity for a condition or disorder that could theoretically give rise to a threat to social safety and welfare.<sup>116</sup> This is not a remote possibility; it is known that the Department of Homeland Security is actively investigating the use of DNA as a biometric.<sup>117</sup> The addition of DNA biometrics to existing programs as a potential means of exclusion raises substantial concerns for people with disabilities.

### B. State Statutes Regarding Biometric Data

State laws regarding the use, collection, and privacy of biometric data have become far more prevalent in recent years as legislators become aware of both the benefits and dangers of using biometric systems.<sup>118</sup> Currently, no state law specifically addresses the impact of disability on the collection and use of biometric data. Several state statutes, however, contain alternatives that would provide for a person with a disability who could not use the proposed biometric systems. Two of these statutes pertain to school systems. The state statutes of Illinois<sup>119</sup> and Louisiana<sup>120</sup> require that school systems receive

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112. *Canadian Woman Refused U.S. Entry Because of Depression*, CBC NEWS (Nov. 29, 2013, 7:37 PM), <http://www.cbc.ca/news/canada/toronto/canadian-woman-refused-u-s-entry-because-of-depression-1.2444960>.

113. Immigration and Nationality Act, Pub. L. No. 82-414, § 212, 66 Stat. 163, 182 (1952) (codified as amended at 8 U.S.C. § 1182 (2012)).

114. CBC NEWS, *supra* note 112.

115. 8 U.S.C. § 1182(a)(1)(A)(iii)(I) (2012).

116. Ryan E. Lawrence & Paul S. Appelbaum, *Genetic Testing in Psychiatry: A Review of Attitudes and Beliefs*, 74 PSYCHIATRY 315 (2011).

117. U.S. DEP'T OF HOMELAND SEC., *supra* note 20.

118. Theodore F. Claypool & Cameron S. Stoll, *State Forays into the Regulation of Biometric Data*, LAW360 (Nov. 10, 2015, 11:12 AM), <http://www.law360.com/articles/724349/state-forays-into-the-regulation-of-biometric-data>.

119. 105 ILL. COMP. STAT. 5/10-20.40(b)(1) (2009) (“For the purposes of this Section, ‘biometric

permission from the parents of minor students, or from students themselves if they are of the age of majority. In addition, these statutes provide that students who do not participate in the biometric program cannot be denied any services provided to those who are in the program.<sup>121</sup> This provides a functional, though not explicit, alternative for students who cannot use the biometric system due to a disability.<sup>122</sup> These students have the option to “opt out” of the biometric program, and by law, cannot be denied any of the opportunities enjoyed by students who participate in the biometric program.<sup>123</sup> Arizona likewise requires permission for students to be enrolled in any school biometric program, but does not provide specific protections for students who do not, or cannot, participate in the program.<sup>124</sup> A statute of this nature is concerning on many levels, but is especially problematic for those students who are unable to participate due to a disability and who may find no protection if they wish to participate in a program that requires biometric enrollment.<sup>125</sup>

Texas’s system of biometrically enhanced driver’s licenses and non-driver’s identity cards provides an alternative that could be utilized by people with disabilities who are unable to provide biometric data.<sup>126</sup> A Texas state statute currently permits the issuance of enhanced driver’s licenses and non-driver’s identity cards that include biometric information on them.<sup>127</sup> However, departments issuing the enhanced licenses and identity cards must also continue issuing the standard licenses and cards without biometric information.<sup>128</sup> Persons with disabilities can currently choose to use a standard, non-biometrically enhanced form of driver’s license or identity card.<sup>129</sup> As long as this standard version is available and acts equally to the enhanced version, people with disabilities that prevent them from accessing

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information’ means any information that is collected through an identification process for individuals based on their unique behavioral or physiological characteristics, including fingerprint, hand geometry, voice, or facial recognition or iris or retinal scans . . . . School districts that collect biometric information from students shall adopt policies that require, at a minimum, all of the following: Written permission from the individual who has legal custody of the student . . . or from the student if he or she has reached the age of 18.”)

120. LA. REV. STAT. ANN. § 17:100.8(B)(2) (2015) (“The governing authority of each public elementary and secondary school that collects biometric information from students shall develop, adopt, and implement policies governing the collection and use of such information that, at a minimum, shall: Require written permission from the student’s parent or other legal guardian, or the student if he or she is eighteen years of age or older, prior to the collection of any biometric information.”)

121. *See, e.g., id.* § 17:100.8(C) (“A student shall not be refused or denied any services due to the failure of the student’s parent or other legal guardian, or the student if he or she is eighteen years of age or older, to provide written consent . . . .”).

122. LA. ADMIN. CODE tit. 28, pt. CXV, § 1149 (B)(6)(b), (B)(8) (2016).

123. *Id.*

124. ARIZ. REV. STAT. ANN. § 15-109 (2016).

125. *Id.*

126. TEX. TRANSP. CODE ANN. § 521.032(a) (2015).

127. *Id.*

128. *Id.* § 521.032(a)–(b) (“If the department issues an enhanced driver’s license or personal identification certificate, the department shall continue to issue a standard driver’s license and personal identification certificate and offer each applicant the option of receiving the standard or enhanced driver’s license or personal identification certificate . . . . The department shall implement a one-to-many biometric matching system for the enhanced driver’s license or personal identification certificate. An applicant for an enhanced driver’s license or personal identification certificate must submit a biometric identifier as designated by the department . . . .”).

129. *Id.* § 521.032(a).

biometric programs will continue to have access to the same programs and benefits as those who utilize the biometrically enhanced documents.<sup>130</sup>

### C. Case Law

Technology has given rise to many lawsuits and civil rights complaints under the ADA and Rehabilitation Act.<sup>131</sup> While none of these cases have specifically addressed issues relating to biometric technology, current case law and recent settlement agreements provide some guidance on how the courts may interpret future cases involving the accessibility of biometric identification systems.<sup>132</sup>

Common areas of litigation in accessible technology have involved the accessibility of websites, video streaming services, and aspects of educational technology.<sup>133</sup> Access to places of public accommodation can be defined not only as access to the physical location of the public accommodation, but also as access to the full range of services they provide.<sup>134</sup> Other courts have defined public accommodations more narrowly, finding that equal access to public accommodations applies only to brick-and-mortar facilities, not to websites or other digital services.<sup>135</sup>

Recent cases that have involved the ADA and issues of technology include *National Federation of the Blind v. Scribd, Inc.*, which found that the online library Scribd was required to provide equal access to its website and mobile applications to people with disabilities, specifically those who are blind or visually impaired.<sup>136</sup> An earlier case, *National Association of the Deaf v. Netflix, Inc.* found that the ADA applied to Netflix's online streaming service as a place of public accommodation, despite Netflix having no physical place of public accommodation associated with the streaming website.<sup>137</sup> This differs from the decision in *Young v. Facebook, Inc.* decided the previous year, which found that the social networking site was not a place of public accommodation because it did not have a physical facility.<sup>138</sup>

The problems raised by biometric identification systems differ somewhat from the issues discussed in these cases and settlement agreements. The cases

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130. *Id.*

131. See Catherine Russell, *Access to Technology for the Disabled: The Forgotten Legacy of Innovation?*, 12 INFORM. COMM. TECH. L. 237, 242–43 (2003) (describing lawsuits brought under the ADA).

132. Michael P. Daly et al., *Biometrics Litigation: An Evolving Landscape*, PRACTICAL L., Apr./May 2016, at 38–39, 41 (“No federal law directly addresses the collection and use of biometric data outside of the healthcare, insurance, and employment contexts.”).

133. See Nat'l Fed'n of the Blind v. Scribd Inc., 97 F. Supp. 3d 565 (D. Vt. 2015) (concerning accessibility to the website and mobile applications of Scribd, an online library service); see also Nat'l Ass'n of the Deaf v. Netflix, Inc., 869 F. Supp. 2d 196 (D. Mass. 2012) (holding that the Americans with Disabilities Act is applicable to Netflix's online video streaming service).

134. Nat'l Fed'n of the Blind v. Target Corp., 452 F. Supp. 2d 946, 953 (N.D. Cal. 2006).

135. See, e.g., Cullen v. Netflix, Inc., 880 F. Supp. 2d 1017 (N.D. Cal. 2012) (holding that Netflix's website was not a place of public accommodation); Access Now, Inc. v. Sw. Airlines, Co., 227 F. Supp. 2d 1312 (S.D. Fla. 2002) (holding that an airline's website is not a “place of public accommodation”).

136. *Scribd Inc.*, 97 F. Supp. 3d at 575–76.

137. *Netflix, Inc.*, 869 F. Supp. 2d at 200–01.

138. *Young v. Facebook, Inc.*, 790 F. Supp. 2d 1110, 1115 (N.D. Cal. 2011).

discussed above primarily concern access to digital content of some sort, whether that is a website, a digital textbook, or a streaming video.<sup>139</sup> It is possible for biometric identification systems to be used to access similar digital content.<sup>140</sup> In those situations, the case law for that circuit regarding access to online resources would likely apply, since the ultimate goal is access to those online resources.<sup>141</sup> The scope of use of biometric identification systems is far broader than access to online resources.<sup>142</sup> Biometric identification systems, as described in the sections above, are already being used to control access to physical facilities, electronic devices, social services programs, and immigration; and to secure identification documents.<sup>143</sup> The existing case law covering accessible technology may not be controlling on some or all of these situations.

The extent to which existing case law will affect the use of biometric identification systems in controlling access to physical facilities depends on the definition of accessibility used by the courts. The Department of Justice's Office of Civil Rights has recently defined accessibility in the context of educational technology access in three complaint resolution agreements with post-secondary schools:

[T]he opportunity to acquire the same information, engage in the same interactions, and enjoy the same services as a person without a disability in an equally effective and equally integrated manner, with substantially equivalent ease of use. A person with a disability must be able to obtain the information as fully, equally, and independently as a person without a disability.<sup>144</sup>

A similar definition appears in the settlement agreement in *National Federation of the Blind v. Law School Admission Council*: “Full and Equal Access’ means that . . . blind guests using screen-reader software may acquire the same information and engage in the same transactions as are available to sighted guests with substantially equivalent ease of use.”<sup>145</sup> In *Baughman v. Walt Disney World Co.*, the court emphasized a person with a disability’s “full

139. See *Scribd Inc.*, 97 F. Supp. 3d 565 (concerning accessibility to the website and mobile applications of Scribd, an online library service); see also *Netflix, Inc.*, 869 F. Supp. 2d 196 (holding that the Americans with Disabilities Act is applicable to Netflix’s online video streaming service).

140. See generally Anil K. Jain et al., *Biometrics: A Tool for Information Security*, 1 IEEE TRANSACTIONS ON INFO. FORENSICS & SEC. 125 (June 2006), [http://biometrics.cse.msu.edu/Publications/GeneralBiometrics/JainRossPankanti\\_BiometricsInfoSec\\_TIFS06.pdf](http://biometrics.cse.msu.edu/Publications/GeneralBiometrics/JainRossPankanti_BiometricsInfoSec_TIFS06.pdf) (supporting usage of biometric authentication in digital rights management systems to ensure only authorized users can access digital media and content and to further increase information security).

141. *Id.*

142. *Id.*

143. See, e.g., *Biometrics*, GLOBALSECURITY.ORG, <http://www.globalsecurity.org/security/systems/biometrics.htm> (last updated July 13, 2011) (illustrating several different types of biometric technology and their uses).

144. Resolution Agreement, Univ. of Cincinnati, OCR Compliance Review No. 15-13-6001 (Dec. 8, 2014); Resolution Agreement, Youngstown State Univ., OCR Compliance Review No. 15-13-6002 (Nov. 25, 2014); Resolution Agreement, S.C. Tech. Coll. Sys., OCR Compliance Review No. 11-11-6002 (Feb. 28, 2013).

145. Settlement Agreement, Nat’l Fed’n of the Blind v. Law Sch. Admissions Council, No. RG09436691, ¶ 4.1 (Sup. Ct. Cal. Apr. 25, 2011).

and equal enjoyment” (emphasis theirs) of a public facility as opposed to “mere access.”<sup>146</sup> The court characterized Disney as taking the position that “even if [plaintiff’s] access is made ‘uncomfortable or difficult’ by its policies, any discomfort or difficulty [plaintiff] may suffer is too darn bad.”<sup>147</sup> The court, though, rejected that position, stating, “If [Disney] can make [plaintiff’s] experience less onerous and more akin to that enjoyed by its able-bodied patrons, it must take reasonable steps to do so.”<sup>148</sup>

These definitions, while varying in their exact terminology, require a high standard of accessibility. A facility, program, or piece of technology would not be accessible if it did not provide an experience for people with disabilities that is as close as reasonably possible to the experience of people without disabilities. A simple example of this is found in *Kalani v. Starbucks Corp.* in which the court found that Starbucks was required to provide a wheelchair accessible table that faced the interior of the store.<sup>149</sup> All existing wheelchair accessible tables were set up so a wheelchair user could only face the wall.<sup>150</sup> The district court, relying on *Fortyune v. American Multi-Cinema, Inc.*,<sup>151</sup> found that even though the store was not violating any provision of the ADA Accessibility Guidelines (ADAAG), forcing wheelchair users to sit facing the wall while people without disabilities could face the interior of the store did not provide full and equal enjoyment of the facility to wheelchair users.<sup>152</sup> This requirement for full and equal enjoyment will affect the options that Title III entities will have available to them if they establish alternative measures for people with disabilities who cannot use their biometric identification systems. If the Title III entity chooses an alternative to its biometric identification system that is more cumbersome, more time intensive, or that causes delays, then this alternative might not comply with the full and equal enjoyment requirement.

The majority of case law involving technology compliance falls under Title III. There are a few settlement agreements showing the Department of Justice’s approach to digital accessibility under Title II.<sup>153</sup> One addresses the acquisition of inaccessible e-readers by the Sacramento (California) Public Library Authority<sup>154</sup> and requires the library to acquire accessible e-readers and to stop purchasing inaccessible ones for its lending program.<sup>155</sup> Another

146. *Baughman v. Walt Disney World Co.*, 685 F.3d 1131, 1134–35 (9th Cir. 2012).

147. *Id.* at 1136.

148. *Id.*

149. *Kalani v. Starbucks Corp.*, 117 F. Supp. 3d 1078, 1090 (N.D. Cal. 2015), *appeal docketed*, No. 15-16710 (9th Cir. Aug. 28, 2015).

150. *Id.* at 1081.

151. *Fortyune v. Am. Multi-Cinema, Inc.*, 364 F.3d 1075 (9th Cir. 2004).

152. *Kalani*, 117 F. Supp. 3d at 1086.

153. See Settlement Agreement between the United States, the Nat’l Fed’n of the Blind, and Sacramento (Cal.) Public Library Auth., Dept. of Justice Compl. #204-11E-387 (Aug. 28, 2012) [hereinafter Settlement Agreement Sacramento]; Settlement Agreement between the United States and Orange Cty. Clerk of Courts in Fla., Dep’t of Justice Compl. #204-17M-440 (July 17, 2014) [hereinafter Settlement Agreement Orange Cty.].

154. Settlement Agreement Sacramento, *supra* note 153.

155. Federal regulations prohibit Title II entities from providing a person with a disability a service that: [I]s not as effective in affording equal opportunity to obtain the same result, to gain the same benefit, or to reach the same level of achievement as provided to others; [p]rovide different or

settlement agreement with the Orange County Clerk of Courts in Florida addresses the accessibility of digital court records and the requirement that the Clerk of Courts provide accessible records to an attorney with a case before the court.<sup>156</sup> While these records might not demand the same level of access as the Title III requirement for full and equal enjoyment, it is nevertheless clear that Title II entities must provide people with disabilities equal opportunity to receive the same benefits and services as people without disabilities.<sup>157</sup> If biometric data were used to access social services programs, delays caused by the inability to provide the requested biometric data would result in an unequal benefit to people with disabilities.

## VI. QUANTITATIVE IMPACT ON PEOPLE WITH DISABILITIES

### A. *Potential Data Problems*

Two primary issues may result from attempting to obtain biometric data from people with disabilities. The first is that some people with disabilities may not be able to provide the requested data.<sup>158</sup> Some people with disabilities may lack the source of the data.<sup>159</sup> A person who is missing her arms or hands may not be able to provide finger or palm scans, or a person missing some of her fingers may not be able to provide a full set of fingerprints. A person may not be able to provide information for an iris scan if she does not have irises or is unable to look directly into the camera for the necessary amount of time.<sup>160</sup>

In other cases, the individual may have the source of the data but be unable to utilize it for biometric enrollment. A person who cannot straighten her fingers sufficiently to allow a fingerprint or palm scan may be unable to reliably use a system that requires this data as a means of accessing a program or facility.<sup>161</sup> Facial recognition could also be difficult for those who have trouble positioning their head or maintaining a specified head position for the necessary time.<sup>162</sup> These problems were all noticed in a study of biometric enrollment and verification conducted in the United Kingdom.<sup>163</sup>

A final potential problem that has not yet been studied is the possibility that a person with a disability may have and be able to provide the requested

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separate aids, benefits, or services to individuals with disabilities or to any class of individuals with disabilities than are provided to others unless such action is necessary to provide qualified individuals with disabilities with aids, benefits, or services that are as effective as those provided to others . . . [or o]therwise limit a qualified individual with a disability in the enjoyment of any right, privilege, advantage, or opportunity enjoyed by others receiving the aid, benefit, or service.

28 C.F.R. § 35.130(b)(1)(iii), (iv), (vii).

156. Settlement Agreement Orange Cty., *supra* note 153.

157. *Id.*

158. ATOS ORIGIN, UK PASSPORT SERVICE BIOMETRICS ENROLMENT TRIAL 209 (May 2005), [http://www.dematerialisedid.com/PDFs/UKPSBiometrics\\_Enrolment\\_Trial\\_Report.pdf](http://www.dematerialisedid.com/PDFs/UKPSBiometrics_Enrolment_Trial_Report.pdf).

159. *Id.*

160. *Id.* at 204–07.

161. *Id.* at 46–48.

162. *Id.* at 32–33.

163. *Id.* at 32–33, 46–48, 204–07.

data, but the data varies from the typical data significantly enough that the biometric software cannot utilize it.<sup>164</sup> Potential situations in which this could happen include individuals who have genetic conditions affecting their facial structure or who have injuries or congenital conditions affecting the structure of their hands or palms. These people may be able to present the data for enrollment, but if the data goes outside the range of the biometric scanner, it may not be usable.

### B. Statistics

A study of biometric enrollment and verification in the United Kingdom by Atos Origin found that 0.62% of their sample group of people with disabilities were unable to enroll any of the three biometrics tested: fingerprints, facial scans, and iris scans.<sup>165</sup> If 0.62% of all disabled Americans were unable to provide this data, approximately 241,000 Americans would be unable to provide any of the three most common types of biometric data.<sup>166</sup>

The individual types of biometric data can be broken down to show the relative success for people with disabilities. Approximately 2.3% of people studied in the “disabled” group failed to enroll a facial biometric at all.<sup>167</sup> This would mean that approximately 914,000 Americans would be unable to enroll in a facial recognition biometric program.<sup>168</sup>

For the iris scan program that was tested, 39% of the disabled group was unable to enroll an iris scan.<sup>169</sup> This would equate to approximately 15.5 million Americans with disabilities who would not be able to enroll in an iris-scan-based biometric program.<sup>170</sup>

Fingerprinting, the most common and well known biometric in use, had an enrollment failure rate of 3.9% in the group of people with disabilities.<sup>171</sup> This equates to around 1.5 million Americans with disabilities who are unable to use fingerprint-based biometric systems.<sup>172</sup>

Verification of the enrolled data presented another substantial challenge for the test group of people with disabilities. The success rate for people with disabilities for verification of the facial recognition was about 48%,<sup>173</sup> though the authors of the report were not sure the high failure rate was due to disability-related concerns, and attributed most of the failures to lighting problems.<sup>174</sup>

The failure rate of verification of iris scans for people with disabilities is

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164. *See id.* at 47 (discussing participants who, for reasons of physical impairment, were unable to use fingerprint readers).

165. *Id.* at 9.

166. ATOS ORIGIN, *supra* note 158, at 9; Erickson et al., *supra* note 13.

167. ATOS ORIGIN, *supra* note 158, at 31.

168. *Id.*; Erickson et al., *supra* note 13.

169. ATOS ORIGIN, *supra* note 158, at 38.

170. *Id.*; Erickson et al., *supra* note 13.

171. ATOS ORIGIN, *supra* note 158, at 46.

172. *Id.*; Erickson et al., *supra* note 13.

173. ATOS ORIGIN, *supra* note 158, at 10.

174. *Id.* at 32.

more easily attributable to disability-related causes.<sup>175</sup> The success rate for people with disabilities was about 91%, compared to the non-disabled group's success rate of 96%.<sup>176</sup> The main identified factors for failures for people with disabilities were the use of strong or tinted glasses, behavioral concerns, and problems with positioning.<sup>177</sup>

The rate of success for people with disabilities attempting to verify a fingerprint scan was approximately 80% compared with 86% for people without disabilities.<sup>178</sup> The reasons for verification failures for people with disabilities are not listed; however, the report noted that people with visual, learning, and physical disabilities had the highest failure rates, and people with hearing impairments had a failure rate similar to people without disabilities.<sup>179</sup>

It is also worth noting that the people in the other test groups not specifically included in the disability group may have had disabilities as well, and those disabilities may be responsible for some of the failures of the other test groups.<sup>180</sup> This is confirmed by the reports of the testers when they noted the reasons for enrollment failures.<sup>181</sup> For instance, in the group of people solicited randomly off the street, one partially sighted person failed to enroll in the facial biometric due to difficulty looking straight ahead.<sup>182</sup> Additionally, some of the failures attributed to the participant's behavior may be due to mental illness or developmental or intellectual disabilities, which may not have been immediately obvious to the tester.<sup>183</sup>

While the percentage of individuals who were unable to enroll in one or more of the biometric programs seems small, when calculated against the number of people with disabilities in the United States,<sup>184</sup> the number of individuals potentially affected ranges from the hundreds of thousands to the millions. In addition, the data presented above only considers the ability of an individual to enroll or verify a certain subset of potential biometric data on a small subset of available equipment. Finally, the impact must be evaluated by considering the combined data of both the enrollment and verification processes. People with disabilities who failed to enroll data during the initial enrollment process did not proceed to the verification process at all,<sup>185</sup> resulting in a much smaller sample size for the verification process and likely excluding people with the most severe disabilities.

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175. *Id.* at 61.

176. *Id.* at 60.

177. *Id.* at 61.

178. *Id.* at 63.

179. *Id.* at 65.

180. *Id.* at 67–68.

181. *Id.* at 55–56, 59, 61.

182. *Id.* at 196.

183. *Id.*

184. Press Release, U.S. Census Bureau, Nearly 1 in 5 People Have a Disability in the U.S., Census Bureau Reports (July 25, 2012), <https://www.census.gov/newsroom/releases/archives/miscellaneous/cb12-134.html>.

185. ATOS ORIGIN, *supra* note 158, at 52.

## VII. QUALITATIVE IMPACT ON PEOPLE WITH DISABILITIES

### A. *Difficulty in Obtaining Employment*

People with disabilities are already disadvantaged in obtaining employment. The unemployment and underemployment of people with disabilities has been an ongoing problem in the United States, and remains so to this date. The most recent statistics from the Bureau of Labor Statistics report, “Persons with a Disability: Labor Force Characteristics—2015,” reflect that only 17.5% of persons with disabilities were employed, compared with 65% of persons without disabilities.<sup>186</sup> Employed persons with disabilities were also more likely to be self-employed than employed persons without disabilities.<sup>187</sup> Surveys of employers have found that employers are less likely to hire applicants with disabilities, with one study finding that “[o]ne third of the respondents indicated that they would not knowingly hire an applicant with a learning disability.”<sup>188</sup> The reasons for choosing not to hire people with disabilities vary, but they often result from a lack of experience working with employees with disabilities.

Employers report several concerns surrounding the work potential of employees with disabilities that may derive from existing myths and misconceptions and not from their direct experiences with workers with disabilities. These myths and misconceptions may frequently result in an applicant or employee with a disability’s not being recognized as a “qualified employee with a disability” under the provisions of the ADA.<sup>189</sup>

Many job applicants with disabilities feel pressure to hide their disability, or the severity of their disability, to the greatest extent possible, fearing that this information would compromise their ability to compete for the job on equal footing.<sup>190</sup> Employees with disabilities may choose to hide or minimize an existing or acquired disability because they feel it would negatively have an impact on their chances of promotion, or even that it might result in the termination of their employment.<sup>191</sup> A report examining the physical and social factors that play a role in the employment of people with disabilities found that employees with disabilities use a number of strategies to shape

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186. *Persons with a Disability: Labor Force Characteristics—2015*, BUREAU LAB. STAT. (June 21, 2016), <http://www.bls.gov/news.release/disabl.nr0.htm>.

187. *Id.*

188. Darlene D. Unger, *Employers’ Attitudes Toward Persons with Disabilities in the Workforce: Myths or Realities?*, 17 FOCUS ON AUTISM & OTHER DEV. DISABILITIES 2, 4 (2002).

189. *Id.* at 8.

190. SARAH VON SCHRADER ET AL., CORNELL UNIV. EMP. & DISABILITY INST., EMERGING EMPLOYMENT ISSUES FOR PEOPLE WITH DISABILITIES 9 (Dec. 7, 2011), <http://digitalcommons.ilr.cornell.edu/cgi/viewcontent.cgi?article=1288&context=edicollect> (“There is a common and not unfounded fear that disclosing a disability may lead to not being selected for a position or result in differential treatment in the workplace. Common concerns include lowered expectations, lack of respect, isolation from workers, decrease in job responsibility, and being passed over for promotion.”).

191. *Id.*

expectations in the workforce, including concealing the disability.<sup>192</sup>

Biometric data, if not properly protected, has the potential to reveal disabilities that might not otherwise be apparent in the employment process. If a person with a disability were required to obtain an alternative form of a Social Security card or other identification, and this fact was apparent on the identification, an otherwise hidden disability might be revealed and employers might choose not to hire that person based on their feelings about hiring people with disabilities.<sup>193</sup> In addition, some biometric data inherently records disabilities, such as facial deformities on facial recognition software, the presence of an artificial eye or eyes on an iris scan, or missing fingers or limbs on a fingerprint or palm scan.<sup>194</sup> If biometric data were required as a condition of employment by an employer, they may not be willing to provide alternative methods for completing the process.<sup>195</sup> Moreover, if the collection of biometric data were required early in the application process, the collected data could be used to exclude people with disabilities from further consideration for a position if the employer is uncomfortable hiring people with disabilities.<sup>196</sup> Also, as types of biometrics become increasingly more diverse, the types of disabilities potentially identifiable by the nature or lack of biometric data increases as well.<sup>197</sup>

### B. *Difficulty in Obtaining Housing*

People with disabilities already face discrimination in obtaining housing, especially in the rental market.<sup>198</sup> If potential landlords were to have access to biometric data from a rental applicant, this would facilitate the already pervasive discrimination, since discriminatory behavior tends to happen at the time of disability disclosure.<sup>199</sup> Similar to the concerns raised about applicants for employment, a potential tenant who is missing biometric data due to a disability, or who is known to have used alternative procedures to obtain a certain document or form of identification, may be identified as having a disability earlier in the process.<sup>200</sup> This would make it easier for potential lessors to exclude applicants with disabilities, and make it harder for an

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192. Dianna L. Stone & Adrienne Colella, *A Model of Factors Affecting the Treatment of Disabled Individuals in Organizations*, 21 ACAD. OF MGMT. REV. 352, 387–88 (1996).

193. See, e.g., SCHRADER ET AL., *supra* note 190, at 11 (“Persons with disabilities could also be disadvantaged by credit checks, . . . as employer decisions may be influenced by what is learned about past medical history/debt.”).

194. Rachel J. Minter, *The Informatization of the Body: What Biometric Technology Could Reveal to Employers About Current and Potential Medical Conditions*, 2011 A.B.A. SEC. LAB. & EMP. L. 227, 238 (Apr. 7, 2011), [http://www.americanbar.org/content/dam/aba/administrative/labor\\_law/meetings/2011/eo/014.authcheckdam.pdf](http://www.americanbar.org/content/dam/aba/administrative/labor_law/meetings/2011/eo/014.authcheckdam.pdf).

195. *Using Biometrics in the Workplace*, FISHER & PHILLIPS LLP (Jan. 6, 2014), <https://www.fisherphillips.com/pp/newsletterarticle-using-biometrics-in-the-workplace.pdf>.

196. Minter, *supra* note 194, at 238.

197. *Id.* at 239.

198. MARGERY AUSTIN TURNER ET AL., U.S. DEP’T OF HOUS. & URBAN DEV., DISCRIMINATION AGAINST PERSONS WITH DISABILITIES: BARRIERS AT EVERY STEP 2 (June 2005), [https://www.huduser.gov/Publications/pdf/DDS\\_Barriers.pdf](https://www.huduser.gov/Publications/pdf/DDS_Barriers.pdf).

199. *Id.*

200. *Id.*

applicant to prove that they were excluded because of the disability instead of for a valid reason, such as another applicant appearing with a better credit score.<sup>201</sup>

### C. *Difficulty Accessing Social Services Programs*

In the United States, about nine million adults receive Social Security Disability Insurance or Supplemental Security Income.<sup>202</sup> In 2014, 28.1% of people with disabilities between the ages of eighteen and sixty-four lived at or below the federal poverty line.<sup>203</sup> Social services often used by people with disabilities are vocational rehabilitation services, adult day programs and sheltered workshops, early childhood special education programs, advocacy services, energy assistance programs, personal care assistant funding, and independent living programs.<sup>204</sup>

People with disabilities already face a number of barriers to accessing social services programs, including problems with transportation,<sup>205</sup> accessing interviews and applications,<sup>206</sup> and communicating with agencies.<sup>207</sup> The Connecticut statute discussed above poses an additional concern for people with disabilities wishing to access social services programs. If the ability to establish biometric requirements for accessing social services programs, and the ability to make exceptions to those programs, is given solely to the Commissioner of Social Services without further legislative guidance, there is a substantial risk that people with disabilities who cannot provide the required biometric data will either be excluded from the program or will be forced to bring an administrative complaint or costly litigation. Resorting to a complaint or litigation to obtain access to a program would delay, perhaps significantly, the applicant's ability to participate in the social services program.

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201. *Id.*

202. David C. Stapleton et al., *Dismantling the Poverty Trap: Disability Policy for the Twenty-First Century*, 84 MILLBANK Q. 701, 703 (2006).

203. LEWIS KRAUS, REHAB. RES. & TRAINING CTR. ON DISABILITY STAT. & DEMOGRAPHICS, 2015 DISABILITY STATISTICS ANNUAL REPORT 29 (2015), [http://www.disabilitycompendium.org/docs/default-source/2015-compendium/annualreport\\_2015\\_final.pdf](http://www.disabilitycompendium.org/docs/default-source/2015-compendium/annualreport_2015_final.pdf).

204. *See generally* DISABILITY.GOV, <https://www.disability.gov> (last visited Sep. 10, 2016) (listing types of services provided to disabled persons).

205. *See, e.g.*, Samina T. Syed et al., *Traveling Towards Disease: Transportation Barriers to Health Care Access*, 38 J. C.MTY. HEALTH 976 (2013); James H. Rimmer et al., *Physical Activity Participation Among Persons with Disabilities: Barriers and Facilitators*, 26 AM. J. PREVENTIVE MED. 419, 424 (2004).

206. This difficulty can be due to sensory disabilities preventing access to physical or inaccessible digital forms, physical disabilities making it difficult to fill out forms, or cognitive, intellectual, developmental, learning, or psychiatric disabilities making the forms difficult to understand and fill out correctly. *See* Susanne M. Bruyère et al., *HR's Role in Managing Disability in the Workplace*, EMP. RELATIONS TODAY, Autumn 2000, at 47 (describing interviews and applications); Yevgen Borodin et al., *More than Meets the Eye: A Survey of Screen-Reader Browsing Strategies*, in PROCEEDINGS OF THE 2010 INTERNATIONAL CROSS DISCIPLINARY CONFERENCE ON WEB ACCESSIBILITY (W4A) (2010), <http://cs.rochester.edu/hci/pubs/pdfs/browsing-strategies-w4a10.pdf>.

207. *Id.*

## VIII. PROPOSED REGULATORY CHANGES

The current text and regulations of the Americans with Disabilities Act is already sufficient to provide a suitable framework to include biometric programs.<sup>208</sup> However, it would be beneficial for the Department of Justice to issue guidance on the ADA to specifically include protections for people with disabilities who are attempting to utilize biometric programs.

A. *Americans with Disabilities Act: Title I*

Title I of the ADA<sup>209</sup> protects people with disabilities against employment discrimination.<sup>210</sup> An addition to the regulation regarding several concerns about the impact of biometric systems on employees and job applicants with disabilities would provide clear standards for employers, employees, and applicants during the application process and during any term of employment.<sup>211</sup>

One possible resolution to concerns about biometric data gathered by the employer during the application process is to treat biometric data the same way the regulations treat medical examinations. Currently, medical examinations conducted during the course of an employment application must be done after a conditional offer of employment is made.<sup>212</sup> A similar structure may be advisable for prospective employers to prevent the disclosure of otherwise hidden disabilities. In addition, as with medical records and reports, employers should be required to keep biometric data separate from an applicant or employee's employment records.

This proposal, however, does not address issues of confidentiality of biometric data that may already exist before a person with a disability pursues employment. This primarily concerns aspects of confidentiality and specific regulations on the use of biometric data. It is currently unknown how future programs may maintain and provide access to biometric data stored on enhanced identification cards, Social Security cards, or other types of documentation that an employer may request during the application process or at times during the course of a person with a disability's employment. Ideally, any piece of documentation using biometric data would not make it apparent if any or all of the data were not able to be obtained because of a disability, or if alternate procedures were used. Even if that information is not apparent on the face of the document, if an employer were able to access more detailed information by scanning a card or otherwise accessing the biometric

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208. 29 C.F.R. pts. 1630, 1602 (2015); Symposium, William A. Herbert & Amelia K. Tuminaro, *The Impact of Emerging Technologies in the Workplace: Who's Watching the Man (Who's Watching Me)?*, 25 HOFSTRA LAB. & EMP. L.J. 355, 369 (2008).

209. Pub. L. No. 101-336, tit. I, 104 Stat. 327, 330-37 (1990) (codified as amended at 42 U.S.C §§ 12111-17 (2012)); 29 C.F.R. pts. 1630, 1602 (2015).

210. 29 C.F.R. §§ 1630.1, 1602.1.

211. Kristin Madison, *Employer Wellness Incentives, the ACA, and the ADA: Reconciling Policy Objectives*, 51 WILLAMETTE L. REV. 407, 457 (2015).

212. 29 C.F.R. § 1630.14.

information stored on the card, previously unknown information about a disability may become obvious.<sup>213</sup> Preferably, biometric data stored on an enhanced identification card or other document would not be accessible to employers or prospective employers, but this would likewise require legislation to implement. Regardless of whether employers or prospective employers are able to access this data, updated regulations must prohibit employers and prospective employers from using any biometric data they have access to or knowledge of for discriminatory purposes.

#### B. *Americans with Disabilities Act: Title II*

The entities regulated by Title II of the ADA,<sup>214</sup> state and local governments, present additional concerns.<sup>215</sup> A matter of general concern to all people, with and without disabilities, is how a state or local government will acquire, use, store, and share biometric data. For people with disabilities, especially those with disabilities that may not be readily apparent to the average observer, the use and sharing of biometric data collected by a state or local government could raise issues of medical privacy. It could also raise concerns about increased discrimination both in governmental programs and by whomever the local government shared the data with. The acquisition of this biometric data, as shown in the UK Atos study discussed above,<sup>216</sup> poses an access problem across all uses of biometrics, and governmental uses are no exception. Any governmental acquisition of biometric data will require appropriate modifications for people with disabilities who cannot provide all or any of the requested biometric data, to ensure those people are not excluded from participation in programs run by the state or local government, such as the Connecticut social services programs discussed above.

The regulations implementing Title II of the ADA should be amended to provide adequate guidance to state and local governments to avoid discrimination against people with disabilities. These regulations must cover the accessibility of the physical process of biometric screening, ensuring that people with disabilities are not excluded from entry into programs that require biometric enrollment. Second, these regulations must consider any inherent barriers that the requirement for biometric data may place in the way of people with disabilities. If people with disabilities are not informed that the program they are trying to access has accessible options available, they may not even attempt to use these programs. Any updates to the laws should also include a requirement for notifying people with disabilities that accessible options will be made available for people whose disabilities would affect their ability to

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213. See generally William J. Lawson & Michael F. Shapiro, *An Adaptive Device for Existing and Contemplated Security Systems*, INT'L CTR. FOR DISABILITY RES. ON THE INTERNET, [http://www.icdri.org/biometrics/adaptive\\_device.htm](http://www.icdri.org/biometrics/adaptive_device.htm) (last visited Sept. 2, 2016) (discussing potential of smart cards storing information regarding one's disability).

214. Pub. L. No. 101-336, tit. II, 104 Stat. 327, 337-53 (1990) (codified as amended at 42 U.S.C. §§ 12131-65 (2012)); 28 C.F.R. pt. 35 (2015).

215. See 28 C.F.R. §§ 35.101, .104.

216. See *supra* Section VI.B.

provide the requested biometric data. This could be done in a way similar to the notifications provided for public forms or other similar gatherings or programs. This would entail adding a line to any program announcements stating that if an individual wishing to access the program has a disability that would affect her use of the biometric equipment, then alternative methods of accessing the program are available. It would also include identifying a contact person that the person with disabilities can reach to discuss her needs in the program.

Another factor for consideration is who can access the biometric data that is provided to state and local governments, whether that data is from people with disabilities or people without disabilities. For people with disabilities, there is an increased concern that this biometric data will expose their disabilities to a wider audience than they might otherwise have chosen.<sup>217</sup> This is especially true for those with disabilities who might normally be able to go throughout their daily lives without anyone except a close circle of friends being aware of their disability. If this biometric data is not properly protected, people with hidden disabilities may find that there is increased discrimination against them as more people become aware of their disability. This potential discrimination could have an impact on many of the factors described above, such as employment and housing; however, it is also possible that an inappropriate disclosure of a hidden disability could affect a person's social life if they had chosen not to disclose their disability to many other people.

A further matter of concern is how state and local governments will be permitted to use this data. The program currently in use in Connecticut<sup>218</sup> shows some of the potential problems of widespread use of biometric data in state governments. If biometric data is required to access certain programs and services that may be essential to maintaining the welfare of people with disabilities—and no clear legislative direction is given as to when these programs make exceptions for people with disabilities who cannot provide the necessary biometric data—then it is entirely possible that people with disabilities will have to initially resort to legal action to access essential programs and services. It is essential that any changes to Title II of the ADA include a provision to ensure that state and local governments are well informed of their responsibilities to the disability community in the use of biometric data as a gateway to participation in any program and service provided by that government entity. This should include, among other things, guidelines for when and how a state or local government agency can share this data either within its own organization or with outside governmental or private groups. Governmental organizations must be careful not to violate the essential privacy rights of citizens, including those with disabilities, when they share this data, and must inform users of the biometric systems of the possible ways in which their biometric data may be shared. This is particularly concerning if governmental organizations propose to share biometric data with

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217. Minter, *supra* note 194, at 238.

218. CONN. GEN. STAT. § 17b-30(b) (2015).

private organizations. If biometric programs are being used as a gateway to access welfare services or similar programs, disclosure of this data to private organizations would identify these individuals not only as people with disabilities but also as people who rely on governmental assistance to survive.<sup>219</sup> This could result in many individuals with disabilities, especially the elderly or those with intellectual disabilities, being targeted by scammers or other individuals or organizations with bad intentions because they may be perceived as more vulnerable due to their disability and income. There are already disturbing trends that show that the elderly may be more susceptible to common scams,<sup>220</sup> and it would not be surprising if it also held true for certain groups of people with disabilities.

### C. *Americans with Disabilities Act: Title III*

The entities covered by Title III of the ADA<sup>221</sup> represent a wide range of private businesses and facilities, which are already using a great diversity of biometric programs.<sup>222</sup> Private businesses, such as casinos and theme parks, have been some of the earliest adopters of biometric data collection and use.<sup>223</sup> Despite the long-term use of these programs in the private sector, courts have not yet addressed the accessibility of these programs by people with disabilities. This is likely because private organizations such as theme parks and casinos can easily bypass their biometric screening process to avoid creating difficulties for their patrons with disabilities.<sup>224</sup> In general, patron-focused private businesses have an economic incentive to provide access to all patrons, including those with disabilities.<sup>225</sup> However, history has demonstrated that without a regulatory structure designed to provide access for people with disabilities, many businesses will still fail to make modifications to provide adequate access for patrons with disabilities.<sup>226</sup>

The statement of findings and purpose for the Americans with Disabilities

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219. Minter, *supra* note 194, at 240.

220. *Scams and Safety: Common Fraud Schemes: Seniors*, FED. BUREAU OF INVESTIGATIONS, <https://www.fbi.gov/scams-and-safety/common-fraud-schemes/seniors> (last visited Sep. 10, 2016).

221. Pub. L. No. 101-336, tit. III, 104 Stat. 327, 353–65 (1990) (codified as amended at 42 U.S.C. §§ 12181–89 (2012)); 28 C.F.R. pt. 36 (2015).

222. 28 C.F.R. §§ 36.101, .104; *see also* Tim Green, *10 Startups at the Frontier of Biometric Authentication*, HOT TOPICS, <https://www.hottopics.ht/stories/consumer/dont-go-hacking-my-heart-10-startups-at-the-frontier-of-biometric-authentication/> (last visited Sept. 9, 2016) (describing various companies using biometric authentication); Team Synerion, *Top 3 Uses of Biometrics in Business*, SYNERION (July 13, 2015, 12:35 PM), <http://blog.synerion.com/top-3-uses-of-biometrics-in-business> (describing various uses of biometrics in business); Tom Olzak, *Chapter 12—Applications of Biometrics*, INFOSEC INST. (Nov. 12, 2012), <http://resources.infosecinstitute.com/chapter-12-applications-of-biometrics/> (describing various types of biometrics).

223. *See* Tana Ganeva, *5 Unexpected Places You Can Be Tracked with Facial Recognition Technology*, ALTERNET, [http://www.alternet.org/story/152231/5\\_unexpected\\_places\\_you\\_can\\_be\\_tracked\\_with\\_facial\\_recognition\\_technology](http://www.alternet.org/story/152231/5_unexpected_places_you_can_be_tracked_with_facial_recognition_technology) (last visited Sept. 2, 2016) (noting increased biometric data collection in commerce).

224. *See Theme Parks and Your Privacy*, ELEC. PRIVACY INFO. CTR., <https://epic.org/privacy/themepark/> (last visited Sept. 2, 2016) (stating Disney World will allow guests to show a picture I.D. instead of getting fingerprinted).

225. Kevin J. Coco, *Beyond the Price Tag: An Economic Analysis of Title III of the Americans with Disabilities Act*, 20 KAN. J.L. & PUB. POL'Y 58, 88 (2010).

226. 42 U.S.C. § 12101 (2012).

Act in 1990 stated that discrimination against people with disabilities continued to be a pervasive problem.<sup>227</sup> The statement identified a wide variety of areas in which people with disabilities experienced discrimination.<sup>228</sup> These included education and access to public accommodations and recreation, among other services.<sup>229</sup> The findings further noted that data from the census and other studies showed that people with disabilities were significantly disadvantaged in almost every area of daily life.<sup>230</sup> Clearly, the benefit of making commerce accessible to consumers with disabilities was insufficient to ensure even a basic minimum level of accessibility without sweeping legislative action. Prior to the passage of the Americans with Disabilities Act, Section 504 of the Rehabilitation Act prohibited discrimination against people with disabilities in federally funded programs; however, Section 504 did not address public accommodations or private businesses.<sup>231</sup>

In the same way that good faith and potential economic benefit did not sufficiently motivate private businesses and public accommodations to provide access to people with disabilities prior to the passage of the Americans with Disabilities Act, it would be unwise to assume that the private sector will automatically consider the needs of people with disabilities during the implementation of biometric programs. A structured set of legislative guidelines will rapidly become necessary to ensure equal access to biometric programs in the private sector as these programs begin to expand.

The private sector will need regulatory guidance that is both specific enough to ensure equal access, yet broad enough to encompass a wide range of current and proposed biometric programs. Many of the current programs already provide an exception for people with disabilities who are unable to utilize the biometric scanning system. For example, the Disney-affiliated theme parks allow people with disabilities that prevent them from using the fingerprint scanners to simply bypass the system altogether.<sup>232</sup>

Regulations for Title III entities should include requirements for private businesses to implement alternative methods to reach the goals they are attempting to reach with their biometric program. Alternative methods could take several forms. The method that is already in use may be the simplest approach for many private entities: simply allowing people with disabilities that prevent them from using the biometric program to bypass the biometric system entirely, and instead use a different procedure that provides equivalent access and still meets the goals of the biometric program.<sup>233</sup> This option would likely be appealing to small businesses and other small Title III entities

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227. *Id.*

228. *Id.*

229. *Id.*

230. *Id.*

231. 29 U.S.C. § 791 (2012).

232. *Disney Introducing Photo Identification for Guests that Frequently Fail Biometric Authentication at the Turnstiles*, WDW MAGIC.COM (Mar. 3, 2015, 10:21 AM), <http://www.wdwmagic.com/other/mymagicplus/news/03mar2015-disney-introducing-photo-identification-for-guests-that-frequently-fail-biometric-authentication-at-the-turnstiles.htm>.

233. *Id.*

operating on a limited budget because it would not require the purchase of additional technology or equipment. However, this method of providing accessibility may be time-consuming for people with disabilities if the alternative method is not immediately available or requires tracking down a certain individual in an organization who can provide the needed identity verification. In addition, if the alternative system is rarely used, and the staff is not trained on it regularly, a bypass system that simply replaces the technology of the biometric system may ultimately prove to be ineffective for people with disabilities. Despite these problems, this option should probably be included in any regulation addressing the accessibility of biometric screening for people with disabilities.

The other option for ensuring accessibility in Title III entities who want to continue using biometric data is to require that the technology itself be accessible. Options for accessibility of electronic hardware and software are discussed below; however, it should be noted that even when a variety of options for biometric input are provided, there is still a subset of the disability community who would be unable to provide any of the requested data, as the UK Atos study showed.<sup>234</sup> Because of this, while regulations requiring adaptive biometric scanning and collection devices would greatly improve the usability of the devices for people with disabilities, it will still be necessary to provide non-biometric options for people whose disabilities prevent them from utilizing any biometric scanning programs. Still, the use of accessible biometric devices should not be forgotten in regulatory guidance, because of the benefits biometric technology may provide to many people with disabilities. It will still be necessary, however, for Title III entities to have a method of providing access to those people who cannot use any of the available biometric technologies.

#### *D. Genetic Information Nondiscrimination Act*

Currently, GINA only protects genetic information from being used in a discriminatory fashion in employment.<sup>235</sup> GINA should be amended or new legislation enacted to ensure that these protections are also given in all other environments. There are numerous areas in which discrimination based on a genetic propensity for a disability could be harmful. Aspects of life that currently consider medical data in decision making could be particularly affected. These effects are potentially wide-ranging, especially if genetic predisposition for a disability or medical condition is considered.<sup>236</sup> For example, if a person is trying to gain custody of a child during a divorce, and a prior biometric collection of DNA had occurred and indicated a predisposition for a future disability, the court might consider this factor in determining a

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234. See *supra* Section VI.B.

235. *Genetic Information Nondiscrimination Act of 2008*, NAT'L HUMAN GENOME RES. INST., <https://www.genome.gov/10002328/genetic-discrimination-fact-sheet/> (last visited Sept. 2, 2016).

236. Amanda Brower & Katherine T. Adams, *What GINA Wants, Will GINA Get?*, BIOTECHNOLOGY HEALTHCARE, June 2009, at 30.

child custody agreement.<sup>237</sup> Another area would be college dormitory housing. College dormitories already routinely exclude any student who has had a suicide attempt; if a student wishing to live in the dormitories showed a genetic predisposition to severe depression, the school may try to exclude them from dormitory housing because of the potential of a suicide attempt.<sup>238</sup> These are just a few examples of the potential impact on people with disabilities, or those who may develop a disability. Without legislation protecting people from discrimination based on genetic predispositions, there is little to effectively prevent this discrimination.

#### *E. Section 504*

Like the Americans with Disabilities Act, Section 504 of the Rehabilitation Act could be read generally to protect people with disabilities from discrimination in biometric programs.<sup>239</sup> Also like the ADA, the lack of specificity in the regulations can be problematic, both for federally funded programs trying to design compliant programs, and for people with disabilities seeking redress for discrimination.<sup>240</sup> Revisions to the implementing regulations for the Rehabilitation Act would serve to clarify the applicability of Section 504 to biometric programs. For the sake of simplicity and effectiveness, the revisions could follow closely the proposed changes to Title II of the Americans with Disabilities Act. What is essential in the proposed regulations is a positive identification of biometric programs as something protected by Section 504 and that accommodations must be provided to people with disabilities to ensure equal access to federally funded programs and services.

#### *F. Access Board Regulations*

The United States Access Board is an independent federal agency that promulgates regulations and guidelines for the physical accessibility requirements under the Americans with Disabilities Act and Sections 504<sup>241</sup> and 508<sup>242</sup> of the Rehabilitation Act. Section 508 of the Rehabilitation Act addresses accessibility of information technology and communications devices procured by the federal government.<sup>243</sup> These devices include websites, software programs, computers, and other similar pieces of technology.<sup>244</sup> The

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237. NAT'L COUNCIL ON DISABILITY, ROCKING THE CRADLE: ENSURING THE RIGHTS OF PARENTS WITH DISABILITIES AND THEIR CHILDREN 16 (Sept. 27, 2012), [http://www.ncd.gov/sites/default/files/Documents/NCD\\_Parenting\\_508\\_0.pdf](http://www.ncd.gov/sites/default/files/Documents/NCD_Parenting_508_0.pdf).

238. Valerie Kravets Cohen, Note, *Keeping Students Alive: Mandating On-Campus Counseling Saves Suicidal College Students' Lives and Limits Liability*, 75 FORDHAM L. REV. 3081, 3115 (2007).

239. 29 U.S.C. § 794 (2012).

240. *Id.*

241. *Id.*

242. *Id.* § 794d.

243. *Id.*

244. *About the Section 508 Standards*, U.S. ACCESS BD., <https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-section-508-standards> (last visited Sept. 2, 2016).

Section 508 Standards were initially released in 2000, but the Access Board is currently in the process of revising these regulations to keep pace with existing technology.<sup>245</sup> The Access Board has released drafts of proposed Section 508 Standards, most recently in 2015.<sup>246</sup> While these standards are only in draft form and would only affect federal acquisitions, they may still provide a framework for developing physical accessibility standards for biometric data collection devices.

The portions of the standards potentially relevant to biometric data collection devices are contained in functional performance criteria.<sup>247</sup> This standard identifies the minimum alternative for electronic devices, which use either voice, visual, or digital input. The Section 508 Standards list a number of functional limitations that are likely to affect an individual's ability to access a piece of electronic technology. These disabilities are: those without vision; with limited vision; without perception of color; without hearing; with limited hearing; without speech; with limited manipulation; with limited reach and strength; and those who have a need to minimize photosensitive seizure triggers.<sup>248</sup> This list of disabilities is very similar to the disabilities identified by the UK Atos biometric study, which made it difficult for individuals to enroll and verify biometric data.<sup>249</sup> The Section 508 Standards require that for each of these identified functional limitations, the software or electronic device must provide an alternative method of access.<sup>250</sup>

This set of standards, even in draft form, could provide a basis for the development of more accessible biometric scanning devices. For example, a biometric scanner that is used to control access to a building and requires the ability to see a screen, or the ability to straighten a finger or hand to produce finger or palm scans, would be required to provide some other means of access. This alternate means of access could, of course, be simply a bypass of the biometric scanner entirely so that some other form of verification, such as verification of identity by a person, could be used. However, while alternative methods of verification like this would meet the minimum level of accessibility necessary, it does not truly provide the person with a disability equal access, unless it is as simple and timely to use the alternative verification method as it is to use the biometric scanner. As a result, to the extent that technology permits, biometric scanning devices should provide accessibility options for as many different types of functional limitations as possible, to facilitate prompt and easy access by people with disabilities.

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245. 28 C.F.R. § 35.151 (2015).

246. Information and Communication Technology (ICT) Standards and Guidelines, 80 Fed. Reg. 10,880 (Feb. 27, 2015) (to be codified at 36 C.F.R. pts. 1193–94).

247. See, e.g., 36 C.F.R. § 1194.31(a) (2015) (“At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for assistive technology used by people who are blind or visually impaired shall be provided.”); *id.* § 1194.31(f) (“At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.”).

248. *Id.*

249. ATOS ORIGIN, *supra* note 158, at 238.

250. 29 U.S.C. § 794(d) (2012).

## IX. CONCLUSION

The analysis of the impact on increased use of biometric data on people with disabilities shows a clear reason for concern. Preliminary testing of biometric scanning devices in the United Kingdom shows that there are already impediments to physical access for people with disabilities with the currently available biometric scanning devices for fingerprints, facial recognition, and iris scans.<sup>251</sup> The lack of access to the basic function of biometrics is the first concern.

As biometric programs become more prevalent and are used for more diverse applications, the effects of using biometric data come into play. Existing programs range from tracking immigrants and school children, identifying cheaters in casinos, accessing social services programs, accessing restricted areas, and visiting theme parks. Proposed programs range even wider, including Social Security cards and driver's licenses, and use a wider range of biometric data, such as DNA collection. This opens up more potential for people with disabilities to be discriminated against if they are unable to provide certain biometric data, or if the biometric data they do provide reveals information about their disability that either affects their ability to access programs and services, or simply discloses data the person would rather keep private. Combined with the difficulties people with disabilities already face in accessing programs and services, adding additional obstacles could present insurmountable obstacles to some people with disabilities trying to access certain services.

The full impact of the increasing use of biometric technology cannot be truly established until the programs using this technology are active and able to be studied. Based on the hypothetical impact discussed in this Article, it is essential to protect the civil rights of people with disabilities in the process. Without legislative guidance, this will be difficult if not impossible to achieve. Comprehensive legislation addressing the accessibility and privacy of biometric data use for people with disabilities would both provide governmental entities and public accommodations with guidance when they implement biometric programs, and provide people with disabilities a means of recourse if they are discriminated against in either the collection or use of biometric data.

A person with a disability already faces a number of challenges in life not faced by those without disabilities. Despite federal, state, and local laws protecting people with disabilities from a wide range of discrimination, ongoing analysis has shown discrimination to be a continuing concern. The increasing use of biometric data in federal, state, and private programs raises additional concerns that these programs, if poorly implemented, could add to the discrimination against people with disabilities. While the current legal structure does not preclude their application towards issues of discrimination arising from programs using biometric data, the lack of specific directives on

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251. ATOS ORIGIN, *supra* note 158, at 31–53.

the topic is concerning. People with disabilities may be forced to file time-consuming complaints and lawsuits to clarify issues of access to programs requiring biometric data, further prolonging the delay in fully accessing those programs. In order to keep pace with the rapid development of this technology, definitive legal guidance is essential to provide clear guidelines to public officials and private sector actors who wish to utilize biometric data in their programs. The addition of specific legislation in federal and state laws to protect the rights of people with disabilities in this emerging field can help minimize any negative impact that the increasing use of biometric programs may have on the disability community.