

# The National Data Center and the Federal Information Network: A Paradox

Sean Cawley

College of Arts and Science, Vanderbilt University

**Technological advancement and increasing data collection activities compelled the call for a National Data Center in 1965. Theoretically, the Center would increase efficiency and diminish costs, as the inefficiencies of information transfer between agencies and organizations steadily rose. However, a firestorm of criticism met the proposal from a number of sectors due to a perceived lack of privacy concerns, which eventually spelled the Center's demise. The destruction of an explicit locale for data storage and retrieval, however, catalyzed the formation of numerous implicit data centers that jeopardized privacy to a far greater degree than it was originally feared the Center would. The history of the National Data Center's demise and the subsequent construction of implicit data centers consists of a useful case study when considering the proper reaction to perceived privacy concerns regarding new technologies.**

In 1948, George Orwell's critically acclaimed dystopian novel, *Nineteen Eighty-Four*, envisioned a future characterized by excessive government oversight in a surveillance state where individuals' personal lives were subject to constant government scrutiny while privacy became an antiquated concept of past generations. Though a far cry from Orwell's dystopian prediction, the mid-to-late-1960s presented the first instance of privacy concerns resulting from the government's use of computerization to accumulate and acquire vast amounts of information on its citizenry. The first event in this context took the form of a proposition for a centralized statistical database termed the National Data Center. Unlike Orwell's easily controllable citizenry, however, the people of the United States and several U.S. Congressmen leveled a firestorm of criticism against the Center's proponents. Their protests succeeded in warding off the government's explicit attempts at data collection. However, the dismantling of the proposal for a National Data Center paradoxically catalyzed the formation of an implicit federal information network that compromised privacy by the 21<sup>st</sup> Century to a degree hardly entertained during the time of the Center's proposal in the mid-1960s.

The proposal for a National Data Center arrived in 1965 with a report released by the Social Science Research Council (SSRC) of the American Economic Association after a three-year study found that the decentralized nature of the present statistical system prohibited effective utilization of socio-economic data by federal agencies as well as non-governmental

organizations.<sup>1</sup> The Bureau of the Budget soon evaluated the recommendation, and a report by Edgar Dunn, a consultant for the agency, urged the immediate creation of a data service center.<sup>2</sup> The rationale undergirding the proposals for a National Data Center in the report filed by the SSRC and the Dunn Report sought to increase efficiency in data-processing endeavors. Given the Office of Statistical Standards of the Bureau of the Budget's mandate to improve, develop, and coordinate Federal statistical services, the concept of a single location for the storage of data seemed reasonable, as the task of coordination amongst different federal agencies was becoming increasingly difficult.<sup>3</sup> The committee identified the problems regarding the government's information processing activities were rooted in the decentralized nature of the federal statistical system, which contrasted unfavorably with many other countries that maintained a central statistical office responsible for the record keeping of the nation.<sup>4</sup> This decentralization had several injurious side effects. First, decentralization caused considerable time, effort, and cost to be spent on locating and transposing data into a functional form for subsequent users. Second, it necessitated inefficient duplication of information, which placed a high reporting burden on individuals as well as institutions. Finally, large quantities of useful data were lost in the incomprehensible labyrinth of

1 Harvard Law Review, "Privacy and Efficient Government: Proposals for a National Data Center," *Harvard Law Review* 82 (1968): 401.

2 Ibid.

3 Richard Ruggles, Richard Miller, Edwin Kuh, Stanley Lebergott, Guy Orcutt, and Joseph Pechman, "Committee on the Preservation and Use of Economic Data" (report presented to the Social Science Research Council of the American Economic Association, 1965), 7.

4 Ibid., 6.

data storage facilities and thus were unavailable to shed insight on numerous pressing contemporary issues.<sup>5</sup>

The advantages of centralizing the federal statistical system lay primarily in harnessing the opportunities afforded by the advent of the computer era, which allowed research and policy decisions to adopt an empirical formulation. The increased availability of data allowed relevant and reliable statistics to form the crucial framework for the quantitative framework of effective policy decisions.<sup>6</sup> Raymond Bowman, the Assistant Director of the Office of Statistical Standards, pleaded, “Issues have multiplied faster than our present ability adequately to evaluate them.”<sup>7</sup> Areas of inquiry demanding empirical analysis included both economic and non-economic subjects. The changing nature of population growth, the relation between education and economic growth, the interplay between prices, productivity and wages, reasons for a given level of unemployment, the impact of social and economic changes on a community, the study of disease, policy underwriting regarding urbanization and transportation, and the efficiency of resource allocation by government programs were all areas in which the intensification of the scope of inquiry necessitated access to statistical data.<sup>8</sup>

Therefore, in the wake of the Dunn Report, the Kaysen Task Force was tasked with considering feasible measures that ought to be taken to improve storage of and access to statistics,<sup>9</sup> which culminated in a report recommending a redesign of the Federal Statistical System into a Central Statistical Agency.<sup>10</sup> Thus, the proposals for a National Data Center embodied the natural response for efficiency improvements in a government insistent on founding policy decisions on accurate, actionable data. Proponents of the data center argued it would make more data available to researchers within and outside of the government, reduce costs, facilitate larger sample sizes in research endeavors, diminish costly, inefficient duplication of data, encourage standardization of data processing techniques, and provide for easier verification of research proposals.<sup>11</sup>

5 Arthur R. Miller, *The Assault on Privacy: Computers, Dossier Data Banks, and Dossiers* (Ann Arbor: The University of Michigan Press, 1971), 56.

6 *Ibid.*, 55.

7 Raymond T. Bowman, “Crossroad Choices for the Future Development of the Federal Statistical System,” *Journal of the American Statistical Association* 63 (1968): 810.

8 *Ibid.*

9 Carl Kaysen, Charles C. Holt, Richard Holton, George Kozmetsky, H. Russell Morrison, and Richard Ruggles, “Report of the Task Force on the Storage of and Access to Government Statistics,” *The American Statistician* 23 (1969): 11.

10 *Ibid.*, 14.

11 Miller, *The Assault on Privacy*, 57.

For all of its proposed benefits, a fundamental dichotomy between the advocates and dissenters of the National Data Center would emerge. The distinction between a statistical system and an intelligence center formed this division. Proponents of the Center emphasized its solely statistical nature, as the models proposed in the Dunn and Kaysen Reports strictly addressed statistical uses of data.<sup>12</sup> In an article published in defense of his original proposal, Dunn admitted his failure to address the difference between a statistical and intelligence system and succinctly delineated between the two. Where intelligence systems generate data about individuals as an individual, a statistical center is concerned only with generating aggregates that describe relationships between populations.<sup>13</sup> Finally, the Kaysen Report briefly addressed concerns about the type of data that would be included in the Center. Original concerns consisted of the inclusion of individual dossiers incorporating police and FBI information and government personnel records. The Report offered a swift rebuttal, insisting its sole purpose was the collection and organization of general economic, social, and demographic information.<sup>14</sup> No information would be included in the Center that was not already collected by agencies of the federal government.<sup>15</sup>

However, criticism towards the Center revolved around fears of its utilization as an intelligence center or a “dossier bank.” The inception of the dossier bank concerns occurred during a pivotal congressional hearing in July 1966. In support of the Center, Bowman assured his listeners that the NDC would have no interest in building up dossiers on individuals because individual cases were irrelevant to statistical interests. When pressed by Representative Cornelius Gallagher of New Jersey, one of the data center’s most virulent opponents, Bowman later admitted the Center would require the ability to collate data individually.<sup>16</sup> The data in the Center would primarily be utilized to measure the effect of changes in one variable on another in order to inform policy decisions. A connecting link must be present between the variables in order to perform this analysis effectively; namely, individual identification.<sup>17</sup> Thus, in order to be effective statistically,

12 Harvard Law Review, “Privacy and Efficient Government,” 405.

13 Edgar S. Dunn, “The Idea of a National Data Center and the Issue of Personal Privacy,” *The American Statistician* 21 (1967): 23.

14 Kaysen et al., “Report of the Task Force,” 19.

15 Alan F. Westin, *Privacy and Freedom* (New York: Association of the Bar of the City of New York, 1967), 317.

16 U.S. Congress, House of Representatives, Subcommittee on the Committee on Government Operations, H.R. 2224, *The Computer and the Invasion of Privacy*, 89th Congress, 2nd Sess., July 26-28, 1966: 52.

17 Anthony Prisoroff, “The National Data Center: The Computer vs. the Bill of Rights,” *The Nation*, October 31, 1966, 450.

the Center would essentially need to be equipped with the abilities of an intelligence center, though ostensibly not used for such ends. From that point onward, Gallagher and the rest of the Center's opponents inveighed against the proposed "dossier bank." Operating under the assumption that the mere capability of the government to reach beyond its bounds would inevitably result in the abuse of its newfound power, privacy advocates suspected a statistical center one day would be an intelligence center the next.<sup>18</sup> According to this side of the argument, the creation of the National Data Center would lead to a "computerized man," stripped of his individuality and privacy.<sup>19</sup>

Despite all of the National Data Center's perceived benefits, its proposal arrived during a tempestuous moment, leading to a firestorm of criticism. Discussions regarding the feasibility of a National Data Center present the first large-scale incident of concerns regarding computers' data-collection abilities on privacy. The 1940s and 1950s were largely characterized by computer specialists eagerly and perhaps myopically peering into a future saturated with the supposed unfathomable benefits of computerization without thought of privacy concerns, while a few thoughtful forward-thinkers voiced privacy concerns amidst the wilderness of technocratic infatuation.<sup>20</sup> The first years of the 1960s became a repository of privacy concerns serving as the powder keg that eventually erupted with the spark of the National Data Center proposal.

The press developed an increasingly circumspect perspective on computers, fearing man would eventually surrender his decision making abilities to computers and thereby forfeit control in the guidance of his own affairs.<sup>21</sup> Inter-agency data transfer within the federal government via "machine to machine reporting" also received more attention during the early 1960s.<sup>22</sup> One Congressional hearing revealed that the Veterans' Administration and the Department of Health, Education, and Welfare provided information on issued checks via magnetic tapes to the Treasury Department.<sup>23</sup> In 1964, the *New York Times*

18 Ibid.  
19 U.S. Congress, *The Computer and the Invasion of Privacy*, 2.  
20 Westin, *Privacy and Freedom*, 305. Examples of these voices in the wilderness include Bernard Benson, President of the Benson-Lehner Corporation, Dr. Richard Hamming, a computer scientist with Bell Telephone, and the author David Bergamini. See: Westin, *Privacy and Freedom*, 299-305.

21 Stanley Penn, "Electronic Wizards: Computers of Future Will Gain Versatility, Move into New Fields," *Wall Street Journal*, July 13, 1964.

22 Westin, *Privacy and Freedom*, 307.

23 U.S. Congress, House of Representatives, Committee on Post Office and Civil Service, *House Report No. 858: Use of Electronic Data Processing Equipment in the Federal Government*, 88<sup>th</sup> Congress, 1<sup>st</sup> Sess., October 16, 1963 (Washington: U.S. Government Printing Office, 1963): 24.

published an article recounting the Senatorial uproar in a hearing in which the Federal Trade Commission (FTC) requested authorization for the purchase of a computer. One FTC agent mentioned that a side-effect of computer usage by the FTC was the capability of its agents to access income tax returns of corporations from files possessed by the Internal Revenue Service. Senators labeled this demonstration of inter-agency data sharing within the federal government as "shocking" and "unconscionable."<sup>24</sup> Computers also proved able to facilitate information sharing outside the sphere of the federal government. In 1960, the Credit Data Corporation began accumulating a mountain of credit information on individuals stored on a centralized databank that allowed subscribing companies to acquire credit checks on individuals in a mere 90 seconds.<sup>25</sup> In addition to the aforementioned focalized concerns regarding the privacy implications of computerized data-processing, rising privacy issues concerning electronic eavesdropping, psychological testing, and polygraphing<sup>26</sup> resulting from escalating computerization in the 1950s and early 1960s provided ammunition for the powder keg of computerization and privacy debates that erupted with the proposal for a National Data Center in 1965.<sup>27</sup>

This historical backdrop would be fateful for the National Data Center. Criticism for the Center arose from a myriad of different sources, namely newspapers and magazines, members of Congress, and legal and sociological periodicals. The response issued by members of Congress and the public was extraordinarily vituperative and is reflected in the forthcoming newspaper and magazine articles as well as Congressional hearings. From these sectors arose a unanimous clamor for the immediate dismissal of any consideration of the National Data Center. On the other hand, more informed scholars and researchers, while unanimously calling for increased privacy considerations, presented a divided approach on the Center's formation.

In addition to unanimous condemnation of the National Data Center proposition, public and Congressional sentiments display a common thread of allusion to Orwell's predicted Big Brother characterization of the federal government as an information-equipped totalitarian regime. A *New York Times* article branded the National Data Bank as "an Orwellian threat to privacy" before

24 The *New York Times* Archives, "FTC is Assailed on Tax Checking," *The New York Times*, June 20, 1964.

25 The *New York Times* Archives, "New Service Uses Computers to Supply Fast Credit Checks," *The New York Times*, July 10, 1966.

26 Westin, *Privacy and Freedom*, 311.

27 Research regarding the sources found in footnotes 17, 19, 20, & 21 are indebted to Westin, *Privacy and Freedom*, 305-309.

continuing the literary allusion, labeling the Center again as “A Big Brother in Washington with an eye on all of (the public).”<sup>28</sup> Another article in *The Times* alluded to the Orwellian prophesy without explicit mention, warning that the NDC would cause the public to feel a suffocating sense of surveillance before reminding its readers that “one of the hallmarks of totalitarianism has been this sense that somewhere there is an all-seeing eye.”<sup>29</sup> The *Chicago Tribune* continued the autocratic warnings, quoting a Michigan law professor’s intimations that the Center’s insatiable appetite for information would “become the heart of a surveillance system that will turn society into a transparent world.”<sup>30</sup> The *Washington Post* also weighed in, warning the National Data Center was a “harbinger of Big Brother.”<sup>31</sup> The Orwellian allusions stretched to the West Coast of the country as well with an article appearing in the *LA Times* entitled “Big Brother May be a Computer.”<sup>32</sup> Public sentiment also echoed Congressman Gallagher’s aforementioned concrete fears of the data center becoming a “dossier bank.” The *New York Times* branded the Center a “proposed giant dossier bank.”<sup>33</sup> Another notable news source released an article with a headline that summarizes pervasive fears regarding the National Data Center: “There’s a Dossier on You.”<sup>34</sup>

Congressional outcry against the Center joined the public debate. The Congressional Committee on Government Operations used grandiose language in its denunciation of the Center, stating that the Center would instill “a suffocating sense of surveillance... not an atmosphere in which freedom can long survive.”<sup>35</sup> The Committee also reiterated Orwellian fears, predicting the citizenry would conceive of the NDC as a “big brother” system.<sup>36</sup> During the special hearing entitled “The Computer and the Invasion of Privacy,” the congressional committee adopted a

28 Nan Robertson, “Data Bank: Peril or Aid?: The U.S. Central Bank: Would it Threaten Your Privacy?” *The New York Times*, January 7, 1968.

29 Vance Packard, “Don’t Tell it to the Computer,” *The New York Times*, January 8, 1967.

30 Thomas Powers, “Cites Dangers in a Personal Data Center,” *The Chicago Tribune*, February 24, 1968.

31 George Lardner Jr., “Data Center Hearing Warned on Privacy: Hearing on Data Center Cautioned on Privacy,” *The Washington Post*, July 27, 1966.

32 Viewpoint of the Times, “‘Big Brother’ May be a Computer,” *The Los Angeles Times*, October 8, 1967.

33 Nan Robertson, “Data Center Held Peril to Privacy,” *The New York Times*, July 27, 1966.

34 Richard Harwood, “There’s a Dossier on You,” *The Washington Post*, May 29, 1966.

35 U.S. Congress, House of Representatives, Committee on Government Operations, *Privacy and the National Data Bank Concept*, 90<sup>th</sup> Congress, 2<sup>nd</sup> Sess., July 1968 (Washington: U.S. Government Printing Office, 1968): V.

36 *Ibid.*, 3.

hostile demeanor towards those defending the proposals for the National Data Center and labeled the Center as a “monster” and an “octopus.”<sup>37</sup> In a speech on the floor of the House, Gallagher noted the apparent obviousness of the great power held by the federal official with the authority to push a button that would instantly produce a dossier.<sup>38</sup>

Academics offered a more tempered view of the privacy concerns posed by a National Data Center. Sociologists, as the original framers of the proposal, supported its creation while simultaneously taking privacy concerns very seriously. Their largely economically-based reasoning found that foregoing knowledge in a swiftly changing world would be devastating for individuals and societies alike; therefore, the benefits of the Center outweighed the costs of privacy concerns.<sup>39</sup> Two prominent researchers posited that effective maintenance of privacy consisted of consent and confidentiality. Additionally, the sociologists asserted that privacy safeguards must be established before the creation of the Center.<sup>40</sup> Specifically, legislation should provide explicit standards for privacy and determined penalties for transgressors. The Center would also need to be independent of other agencies, possess a Public Advisory Committee to oversee its operation, and establish a “devil’s advocate group” that would attempt to illegally acquire information. Finally, the Center would require strict safeguards regarding input, processing, and output operations including the opportunity for individuals to be aware of and review any of their own information in the Center, rejection of requests for data on specific individuals, and cryptographically coded output.<sup>41</sup> Scholars also admitted the usefulness and necessity of a National Data Center in an increasingly complex society, thereby advocating the establishment of policies and techniques to prevent possibilities of abuses of power rather than sacrifice the Center’s benefits.<sup>42</sup> A Harvard Law Review article proposed numerous safeguards, including the scrambling of individual identifications according to a secret program and the establishment of specific variable boundaries and sample sizes.<sup>43</sup>

Thus, responses to the proposal of a National Data Center were often heated and fearlessly employed strong

37 Westin, *Privacy and Freedom*, 319.

38 Prisoroff, “National Data Center: The Computer vs. the Bill of Rights,” 450.

39 Jack Sawyer and Howard Schechter, “The Responsibility of Social Scientists,” *The American Psychologist* 813 (1968): 811.

40 *Ibid.*, 815.

41 *Ibid.*, 816.

42 Harvard Law Review, “Privacy and Efficient Government,” 417.

43 *Ibid.*, 413-414.

verbiage. A side-by-side comparison of the proposal and response yields some insight regarding whether predictions of a surveillance state and the materialization of big brother were prudent. Notably, discussion of privacy concerns was conspicuously absent from the Center's first two proposals: the aforementioned Ruggles and Dunn Reports. Both read as though written by those so transfixed by the technological capabilities of the future they myopically bypassed present realities. The Dunn Report noted confidentiality restrictions but operated under the assumption that existing rules would provide adequate safeguards.<sup>44</sup> Dunn later admitted privacy concerns to be a "gigantic oversight" but defended his reasoning on the grounds that, considering the context and audience the report addressed, the protection of privacy was justifiably assumed.<sup>45</sup> Pragmatically, detailed discussions of privacy may have been premature, as both the Ruggles and Dunn Reports consisted of mere introductory sketches of the National Data Center concept; therefore, the realities of privacy threats remained hypothetical until the Center's scope and activities were more concretely defined.<sup>46</sup>

The Center's far-reaching benefits were also often overlooked in the ensuing debates. The contemporary, decentralized state of data collection caused many policy decisions to be formulated on the basis of questionable information.<sup>47</sup> If the Center could provide for increased, accurate empirical analysis upon which to found policy decisions, as a centralized statistical database likely would, its positive effects would have been widespread. According to one advocate of the National Data Center, information is indispensable in seeking the twin goals of national development and human enrichment, and the long-run evolution of the federal statistical system is essential for viable utilization of this information.<sup>48</sup> Thus, though original proposals for the Center contained little mention of privacy concerns, focusing largely on the benefits of the Center at the formative stage is plausibly justifiable.

Against this backdrop, the National Data Center endured a profusion of accusations about the creation of a surveillance state. Though original reports overlooked privacy concerns, the response to them was arguably overblown. Notably, the dichotomy between a statistical and intelligence center never dissipated.<sup>49</sup> Each report advocating the creation of the National Data Center insisted

on its sole purpose being statistical; however, dissenters remained transfixed on the possibility of it becoming an intelligence center. Condemnation of a given entity on the basis of its potential to be used for distasteful purposes demonstrates little faith in the established infrastructure of legislative and procedural checks and regulations.

Additionally, the belated application of privacy safeguards to the Center's conceptualization did little assuage its opponents. Multiple scholars offered a variety of detailed safeguards that would significantly enhance privacy regarding data input, processing, and output in the NDC, the beginnings of which have been mentioned.<sup>50</sup> Most importantly, the uproar generated by the National Data Center failed to abate even after privacy concerns were explicitly addressed in the Kaysen Report. Unlike the Ruggles and Dunn Reports, the Kaysen Report explicitly addressed privacy concerns. Kaysen's concluding findings outlined a list of recommendations, the second of which was to develop safeguards pursuant to the preservation of the individual's right to privacy.<sup>51</sup> This recommendation appeared second in the report's list of priorities, beneath only the endorsement of a statistical agency itself, which highlights the primacy of privacy in the Kaysen Report's concerns. However, much of the criticism directed towards the Center occurred even after the Kaysen Report's release. Finally, proponents of the National Data Center pointed out that the present decentralized state of the federal statistical system led to a considerable lack of uniformity in enforcement and disclosure rules. Thus, a singular system for the collection and storage of data would provide a more easily enforceable and uniform set of regulations, which would in turn deter major violations of privacy from taking place.<sup>52</sup> Anything, including information, is much more easily watched when housed under one roof rather than spread out among multiple homes.<sup>53</sup>

These are the realities to which the foregoing grandiose criticism was directed. Though original propositions certainly committed serious oversight in neglecting genuine discussion of privacy concerns, the issue was later practically addressed. The proposal of a statistical center initiated a deluge of fears about the creation of a surveillance state, which blinded its dissenters from considering the feasibility of creating a Center enshrined in practical privacy safeguards. The result has been the implicit devel-

44 Westin, *Privacy and Freedom*, 317.

45 Dunn, "The Idea of a National Data Center," 23.

46 Miller, *The Assault on Privacy*, 58.

47 Dunn, "The Idea of a National Data Center," 22.

48 *Ibid.*, 27.

49 Westin, *Privacy and Freedom*, 319-320.

50 For a full discussion of detailed, proposed safeguards, see Harvard Law Review, "Privacy and Efficient Government," 406-417; Sawyer and Schechter, "The Responsibility of Social Scientists," 813-817.

51 Kaysen et al., "Report of the Task Force," 11.

52 *Ibid.*, 12.

53 U.S. Congress, *The Computer and Invasion of Privacy*, 66.

opment of an interminable federal information network. The benefits afforded by a centralized statistical system proved to be of such a magnitude that its development continued despite its explicit rejection in the proposition for the National Data Center. Paradoxically, the firestorm of criticism leveled at the NDC's perceived privacy compromises catalyzed the development of a similar information network with even fewer privacy safeguards.

In his analysis of the reaction to the National Data Center, Arthur Miller, a professor of law at the University of Michigan, indicated as early as 1971 that "the roots of a federal information network have begun to take hold" despite the destruction of the Center's proposal.<sup>54</sup> Miller feared that failure to establish a data center under a legislative mandate to take strict steps towards the protection of privacy would ultimately serve to undermine privacy,<sup>55</sup> particularly as congressional hearings on the NDC revealed each federal agency's attempt to "constitute itself a data center."<sup>56</sup> The Federal Reports Act requires federal agencies to acquire clearance from the Office of Management and Budget before collecting data from ten or more persons. Clearance is rarely denied and some agencies regularly bypass the Reports Act by hiring independent contractors to perform data-gathering activities.<sup>57</sup> Miller also notes the Social Security Administration's data sharing activities through direct transmissions with Medicare and the National Blue Cross Headquarters.<sup>58</sup> With astonishing prescience, Miller concludes with the prediction that a system of data sharing throughout the federal government will come into being without the formal legitimization offered by the proposals for the NDC, which would nullify the opportunity to explicitly address privacy concerns.<sup>59</sup> After all, it is difficult to impose explicit regulations on an implicit system.

Acknowledgment of the dangers technological innovation presents the privacy realm originates in Warren and Brandeis's groundbreaking work, *The Right to Privacy*. In this essay, they mention, "numerous mechanical devices threaten to make good the prediction that 'what is whispered in the closet shall be proclaimed from the housetops.'"<sup>60</sup> The abilities afforded by the development of the computer, however, presented privacy compromises resulting from the increased yet poorly monitored

availability of data to a greater degree than Warren and Brandeis originally imagined. Instantaneous photography and national newspaper circulation pale when compared to the power of the computer to gather and disseminate information. The latter half of the 20<sup>th</sup> century was increasingly characterized by the casual surrender of personal information electronically, which proved nearly ineradicable. Information required when filing tax returns, applying for insurance, opening a bank account, and filling out paperwork in a medical setting<sup>61</sup> progressively became more comprehensive and completed electronically during this period.

The most effective characteristic lending the computer the ability to compromise privacy is its unique capacity to ensure accessibility of information. Cyberspace proved remarkably easy to covertly steal information from.<sup>62</sup> In 1989, a Business Week reporter sought to prove the ease with which one could acquire private information on anyone else. With a single phone call, a \$50 fee, and a home computer, he successfully procured the current Vice President, Dan Quayle's, credit report. His reported emphasized the ease with which he completed his task.<sup>63</sup> Collection and sharing of data represents a genuine privacy concern, though the extent of the concern is difficult to measure due to its secretive nature. However, isolated incidents and reports indicate the genuine prescience of Miller's prediction that the roots of a federal information network had taken hold, such as those recently mentioned towards the end of the 20<sup>th</sup> century. The federal information network has expanded from Miller's aforementioned catalogue of examples in the public sphere into the private sphere in the 21<sup>st</sup> century. For example, the U.S. government subpoenaed Google to turn over individualized data on millions of citizens in 2006.<sup>64</sup> Recently, the Edward Snowden affair in 2013 revealed the federal government possessed phone record metadata on all Verizon customers and likely all Americans for seven years.<sup>65</sup>

Legislative response privacy breaches resulting from increased accessibility of information lagged behind the severity of the threat. Numerous laws were put into effect, yet they were impaired by their limited scope. Two commentators wrote the primary problem with the legislative response was the lack of an overall privacy policy.

54 Miller, *The Assault on Privacy*, 60.

55 Ibid., 59.

56 U.S. Congress, *The Computer and the Invasion of Privacy*, 61.

57 Miller, *The Assault on Privacy*, 62.

58 Ibid., 60.

59 Ibid., 61.

60 Samuel D. Warren and Louis D. Brandeis, "The Right to Privacy," *Harvard Law Review* 4 (1890), 195.

61 Alderman, Ellen and Caroline Kennedy. *The Right to Privacy* (New York: Vintage Books, 1997), 323.

62 Ibid., 324.

63 Ibid., 325.

64 Katie Hafner and Matt Richtel, "Google Resists U.S. Subpoena of Search Data," *The New York Times*, January 20, 2006.

65 Jennifer Granick and Christopher Sprigman, "The Criminal NSA," *The New York Times*, June 27, 2013.

Rather than develop a comprehensive policy and apply it uniformly, Congress responded to specific, individual concerns that left loopholes.<sup>66</sup> For example, the Fair Credit Reporting Act of 1970 limited disclosure of information from credit files. The Privacy Act of 1974 forbade the disclosure of information by federal agencies for any other reason than that for which it was originally gathered.<sup>67</sup> However, codified exceptions strangle the effectiveness of these Acts. The Fair Credit Reporting Act allowed for disclosure to anyone with a “legitimate business need.”<sup>68</sup> The Privacy Act contained an exception in any case that could be construed a “routine use” of information.<sup>69</sup> Liberal application of these exceptions severely hindered the Acts’ effectiveness in protecting privacy. Thus, the lack of an overall policy provided the framework for the aforesaid legislative ineffectiveness. Centralization of data into a singular database at the beginning of the computerized information era could have provided a framework around which legislatures may have been empowered to construct a sweeping privacy policy. Comprehensive explicit regulations are, after all, more easily applied to a comprehensive explicit system.

However, the most unsettling confirmation of Miller’s fears of a federal information network have manifested in an invidious intertwining of the public and private sectors. Since its inception in 1997, for example, ChoicePoint has evolved from a firm that sold credit data to the insurance industry into a multi-purpose commercial source of personal information on millions of individual Americans. The firm effectively transformed itself into a “private intelligence service” with a self-declared prerogative to provide “actionable intelligence.” The company’s clientele skyrocketed from 1,000 to 50,000 from 1997 to 2005, including corporate and government subscribers.<sup>70</sup> Privacy issues involved in the selling of individualized, personal information on U.S. citizens to the government and major corporations aside, the firm has also not proven immune to significant security breaches. In 2005, identity thieves disguised as businesses managed to access ChoicePoint’s personal profiles of U.S. consumers, compromising information on Social Security numbers, credit histories, criminal records, and other sensitive material on

up to 35,000 Americans.<sup>71</sup>

ChoicePoint’s immense data warehouses are strikingly reminiscent of that which was first suggested in the proposition of a National Data Center in 1965. In fact, ChoicePoint’s manifestation is arguably more invidious as it provides increasingly detailed information to those willing to pay in both the public and private sectors. However, the firm’s creation was not greeted by the unanimous public outcry that awaited the NDC proposals. Fears of the appearance of Big Brother remained dormant and application of the once-fearful word “dossier” occurred without comment. Thus, Miller’s fears slowly became realized. As predicted, advocates of the computerization of information learned their lesson from the uproar that brought about the defeat of the original proposals for a National Data Center, and the federal information network took root informally with no public debate that would require detailed discussion of privacy issues.<sup>72</sup>

The history of the National Data Center proposal in the 1960s morphing into the implicit creation of a federal information network demonstrates a pattern of controversy normalization. That is, controversial phenomena often eventually fade as outcries ultimately die out and that which once was controversial becomes a normalized dimension of reality. Such an occurrence ought to be recognized and carefully monitored wherever else in society it may be found to occur. Regarding computerization, MIT professor Robert M. Fano remarked, “You can never stop these things. It is like trying to prevent a river from flowing into the sea. What you have to do is to build dams, to build waterworks, to control the flow.”<sup>73</sup>

The opponents of the National Data Center succumbed to fears of the manifestation of a prophesied literary dystopia without seriously analyzing the positive implications of a National Data Center or the inevitability of growing data warehousing, processing, and sharing capacities afforded by computerization. Incentives for the gathering of information intelligence are remarkably high; thus, that which was unable to proceed directly inevitably continued indirectly in a manner that made it far more difficult to address privacy concerns. Unfortunately, the cure has proven more dangerous than the disease.<sup>74</sup> Vehement criticism of the National Data Center paradoxically gave rise to the development of a far more intricate federal

66 Alderman and Kennedy, *The Right to Privacy*, 330.

67 Ibid.

68 Ibid.

69 Ibid.

70 Robert O’Harrow Jr., “In Age of Security, Firm Mines Wealth of Personal Data,” *The Washington Post*, January 20, 2005.

71 Stephen E. Fienberg, “Privacy and Confidentiality in an e-commerce World: Data Mining, Data Warehousing, Matching, and Disclosure Limitation,” *Statistical Science* 21 (2006): 144.

72 Miller, *The Assault on Privacy*, 61.

73 Westin, *Privacy and Freedom*, 326.

74 Miller, *The Assault on Privacy*, 66.

information network, which further compromised privacy. Recognition of such a happenstance ought to discourage preventative measures that seek to keep Fano's proverbial river from flowing into the sea. In closing, the instance of the National Data Center provides valuable lessons regarding the reality that revolutionary new technologies affording the opportunity for profits will inevitably be exploited for profitable ends. Therefore, these technologies ought to be received with an even-keeled acceptance of their existence and thoughtful reasoning regarding effective and reasonable privacy safeguards. While the river of information may not be able to be completely stopped, careful attention must be paid first to the inevitability of the river's existence and secondly to the construction of regulatory waterworks that will protect Americans' right to privacy.

PRIMARY REFERENCES

- Anthony Prisentdorf, "The Computer vs. The Bill of Rights." *The Nation*, Oct. 1966.
- Arthur R. Miller, "The National Data Center and Personal Privacy." *The Atlantic*, Nov. 1967.
- Bancroft, T.A. "The Statistical Community and the Protection of Privacy." *The American Statistician*, 26, No.4 (1972): 13-16.
- Bowman, Raymond T. "Crossroad Choice for the Future Development of the Federal Statistical System." *Journal of the American Statistical Association*, 63, No. 323 (1968): 801-816.
- Dunn Jr., Edgar S. "The Idea of a National Data Center and the Issue of Personal Privacy." *The American Statistician*, 21, No. 1 (1967): 21-27.
- George Lardner Jr., "Center for Data on Everybody Recommended: No Secrets Barred." *The Washington Post (1959-1973)*. June 13, 1966.
- George Lardner Jr., "Data Center Hearing Warned on Privacy." *The Washington Post (1959-1973)*, July 27, 1966.
- Granick, Jennifer and Christopher Sprigman, "The Criminal NSA," *The New York Times*, June 27, 2013.
- Hafner, Katie and Matt Richtel, "Google Resists U.S. Subpoena of Search Data," *The New York Times*, January 20, 2006.
- Harvard Law Review. "Privacy and Efficient Government: Proposals for a National Data Center." *Harvard Law Review*, 82, No. 2 (1968): 400-417.
- Kaysen, Carl, C.C. Holt, R. Holton, G. Kozmetsky, H.R. Morrison, and Richard Ruggles, "Report of the Task Force on the Storage of and Access to Government Statistics." *The American Statistician*, 23, No. 3 (1969): 11-19.
- Kraus, Rebecca S. "Statistical Déjà vu: The National Data Center Proposal of 1965 and its Descendants." Paper presented at the Joint Statistical Meetings, Miami Beach, Florida, August 1, 2011.
- Miller, Arthur R. "Personal Privacy in the Computer Age: The Challenge of a New Technology in an Information-Oriented Society." *Michigan Law Review*, 67, No. 6 (1969): 1089-1246.
- Miller, Arthur R. *The Assault on Privacy: Computers, Data Banks, and Dossiers*. Michigan: The University of Michigan Press, 1971.
- Nan Robertson, "Data Bank: Peril or Aid?" *New York Times (1923- Current File)*, Jan. 7, 1968.
- Nan Robertson, "Data Center Aims Scored in Inquiry." *New York Times (1923- Current File)*, July 28, 1966.
- Nan Robertson, "Data Center Held Peril to Privacy." *New York Times (1923- Current File)*, July 27, 1966.
- Richard Harwood, "There's a Dossier on You." *The Washington Post (1959-1973)*, May 29, 1966.
- Richard Ruggles, Richard Miller, Edwin Kuh, Stanley Lebergott, Guy Orcutt, and Joseph Pechman, "Committee on the Preservation and Use of Economic Data" (report presented to the Social Science Research Council of the American Economic Association, 1965).
- Robert O'Harrow Jr., "In Age of Security, Firm Mines Wealth of Personal Data," *The Washington Post*, January 20, 2005.
- Sawyer, Jack and H. Schecter. "Computers, Privacy, and the National Data Center: The Responsibility of Social Scientists." *The American Psychologist*, 23. (1968): 810-818.
- Stanley Penn, "Electronic Wizards: Computers of Future Will Gain Versatility, Move into New Fields," *Wall Street Journal*, July 13, 1964.
- Stephen E. Fienberg, "Privacy and Confidentiality in an e-commerce World: Data Mining, Data Warehousing, Matching, and Disclosure Limitation," *Statistical Science* 21 (2006): 143-154.
- The New York Times Archives*, "FTC is Assailed on Tax Checking," *The New York Times*, June 20, 1964.
- The New York Times Archives*, "New Service Uses Computers to Supply Fast Credit Checks," *The New York Times*, July 10, 1966.



Thomas Powers, "Cites Dangers in a Personal Data Center." *The Chicago Tribune (1963- Current File)*, Feb. 24, 1968.

*Free Society: Computers, Data-Keeping, and Privacy*. New York: Quadrangle Books, 1972.

U.S. Congress, House of Representatives, Committee on Government Operations, *Privacy and the National Data Bank Concept*, 90<sup>th</sup> Congress, 2<sup>nd</sup> Sess., July 1968 (Washington: U.S. Government Printing Office, 1968).

U.S. Congress, House of Representatives, Committee on Post Office and Civil Service, *House Report No. 858: Use of Electronic Data Processing Equipment in the Federal Government*, 88<sup>th</sup> Congress, 1<sup>st</sup> Sess., October 16, 1963 (Washington: U.S. Government Printing Office, 1963).

U.S. Congress, House of Representatives, Subcommittee of the Committee on Government Operations, *H.R. 2224, The Computer and Invasion of Privacy*, 89<sup>th</sup> Congress, 2<sup>nd</sup> Sess., July 26-28, 1966.

Westin, Alan F. *Privacy and Freedom*. New York: The Association of the Bar of the City of New York, 1967.

Vance Packard, "Don't Tell it to the Computer." *New York Times (1923- Current File)*, Jan. 8, 1967.

Viewpoint of the Times, "Big Brother May Be a Computer." *Los Angeles Times (1923-Current File)*, Oct. 8, 1967.

## SECONDARY REFERENCES

Alderman, Ellen and Caroline Kennedy. *The Right to Privacy* (New York, Vintage Books, 1997).

Brenton, Myron. *The Privacy Invaders*. Toronto: Longmans Canada Limited, 1964.

Habermann, Hermann. "Future of Innovation in the Federal Statistical System." *Annals of the American Academy of Political and Social Science*, 631 (2010): 194-203.

Malkiel, Burton G. "Problems with the Federal Economic Statistical System and Some Alternatives for Improvement." *The American Statistician*, 32, No. 3 (1978): 81-88.

Packard, Vance. *The Naked Society*. New York: Van Rees Press, 1964.

Smith, Robert Ellis. *Privacy: How to Protect What's Left of It*. New York: Anchor Books, 1979.

Warren, Samuel D. and Louis D. Brandeis. "The Right to Privacy." *Harvard Law Review*, 4, No. 5 (1890): 193-220.

Westin, Alan F., and Michael A. Baker. *Databanks in a*