

Interagency Financial Institution

Web Site Privacy Survey Report

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Board of Governors of the Federal Reserve System

Federal Deposit Insurance Corporation

Office of the Comptroller of the Currency

Office of Thrift Supervision

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Executive Summary

This report presents the results of the Interagency Financial Institution Web Site Privacy Survey conducted during May and July of 1999. The Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision (the "agencies") conducted this survey of bank and savings association Web sites to determine the extent to which financial institution Web sites posted privacy policies and information practice statements. More specifically, the survey was designed to answer the following questions:

- What proportion of Web sites collects personal information and what types of information are collected?
- What proportion of Web sites allows consumers to conduct banking transactions on-line?
- What proportion of Web sites posts privacy disclosures, and what do these disclosures say?

The purpose of the survey was to obtain an indication of the state of the financial services industry with respect to on-line privacy disclosures. The survey was designed to supplement previous Web site privacy surveys that did not focus on financial institutions. However, the survey differs materially from previous surveys, and no direct comparisons should be made. The report does not make any policy recommendations.

The agencies began work on the survey in February 1999. The agencies will monitor, as appropriate, the industry's progress in responding to consumer privacy issues and complying with the new legal mandates contained in the financial services reform legislation through regular supervisory activities.

The Web site survey results are based on an analysis of 314 Web sites selected at random and the Web sites of the 50 largest institutions (by asset size) that are on-line. A separate analysis of the Web sites of the 50 largest institutions was conducted because these sites were likely to reach the largest number of consumers. Because this is such a rapidly changing area, the survey results reflect the status of disclosures at a particular moment in time. Each of the proportions quoted in this report is an estimate, rather than an exact figure, unless it specifically refers to the 50 largest institutions.

The sampling frame of Web sites was compiled from internal agency databases and from publicly available sources. The steps followed to collect the data were as follows: (1) surfers randomly selected Web sites from the sample; (2) surfers reviewed the Web sites with the assistance of proctors when required; (3) surfers printed certain pages from the Web sites and completed the survey questionnaire; (4) a different surfer repeated steps one through three for each of the Web sites; (5) a computer program compared the results from the two surfings; (6) proctors reconciled the differences. The agencies keyed the reconciled results twice to ensure accurate data entry.

The key findings are as follows:

Information Collection from Consumers and Interactivity

The survey collected data on the extent and type of information collected by Web sites, as well as data on interactivity. A Web site was defined to be interactive if it allowed consumers to conduct banking on-line. A site was considered interactive if consumers were able to access an account or transfer funds between accounts, open a new account, apply for a credit card, or apply for a consumer loan or mortgage on-line.

- The majority of Web sites (64 percent) collected personal information. Thirty-six percent of sites collected no personal information at all.
- Thirty-eight percent of all sites were interactive. Interactive sites were twice as likely to collect personal information, such as name and address, and 20 times as likely to request a consumer's social security or bank account number than Web sites that did not offer interactive capabilities.

Privacy Disclosures

In this report, the term privacy disclosure includes a privacy policy and/or information practice statement. A privacy policy is generally a comprehensive disclosure describing the Web site's or the institution's policies and practices related to the collection and use of consumer information. An information practice statement is usually a shorter statement focused on a more limited area, such as data security.

- Forty-eight percent of all Web sites posted some type of privacy disclosure, 40 percent posted a privacy policy, 29 percent posted an information practice statement, and 21 percent posted both types of disclosures.
- Web sites that collected personal information were almost three times more likely to post a privacy policy than sites that did not collect any personal information. Of sites that collected personal information, 62 percent posted some type of privacy disclosure, 52 percent posted a privacy policy, 39 percent posted an information practice statement, and 29 percent posted both types of disclosures.
- An interactive Web site was three times as likely to post a privacy disclosure than a Web site that was not interactive. Eighty-six percent of interactive Web sites posted at least one privacy disclosure (either a privacy policy or an information practice statement).

Content of Privacy Disclosures

The analysis of the content of privacy disclosures draws on "principles of fair information practice" identified by the Federal Trade Commission (FTC) in "Privacy Online: A Report to Congress" (June 1998). As utilized by the FTC, the principles include notice, choice, access, security, and enforcement. The scope of this survey did not include enforcement; however, it considered the ability of consumers to question or complain about a privacy practice or possible violation of the privacy policy (referred to as "contact"). For ease of presentation in this report, "contact" is treated as a principle of fair information practice. In this report, consumer "choice" includes a sub-category referred to as "secondary use." Secondary use refers to notification regarding disclosures to third parties (including affiliates) or subsequent use of information for purposes other than that for which it was initially collected.

- The principle of fair information practice most frequently addressed in privacy disclosures was notice regarding information handling practices (84 percent).
- Twenty-one percent of Web sites addressed all of the principles of fair information practices (i.e., notice, choice, access, security, and contact).
- Eighteen percent of sites with a privacy disclosure offered consumers the ability to opt out of information sharing with third parties and 16 percent offered the opportunity to opt out of secondary uses of information within the institution.

Web Sites of the 50 Largest Institutions

- The Web sites of the 50 largest institutions were more likely to collect information and offer interactive capabilities than the Web sites of banks and thrifts randomly surveyed. One hundred percent of the Web sites of the 50 largest institutions collected personal or demographic information and 94 percent were interactive.
- Ninety-six percent of the Web sites of the 50 largest institutions provided at least one privacy disclosure.
 - The principle of fair information practice most frequently addressed in privacy disclosures was notice (84 percent).
 - Seventeen percent of Web sites addressed all the principles of fair information practice (i.e., notice, choice, access, security, and contact).
 - Fifty-two percent of sites with a privacy disclosure offered consumers the ability to opt out of information sharing with third parties and 31 percent offered the opportunity to opt out of secondary uses of information within the institution.

INTERAGENCY FINANCIAL INSTITUTION WEB SITE PRIVACY SURVEY REPORT

Introduction

This report presents the results of an interagency survey of bank and savings association Web sites. Conducted during May and July 1999 by the federal agencies that supervise these institutions (the Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, Office of the Comptroller of the Currency, and Office of Thrift Supervision) the survey examined the collection of consumer information, interactive capabilities, and privacy disclosures at these sites. The survey forms one part of the agencies' ongoing consideration of consumer privacy issues, and also supplements previous Web site surveys that did not focus on financial institutions, such as the Federal Trade Commission's "Privacy Online: A Report to Congress" (June 1998), and the Georgetown Internet Privacy Policy Survey, "Privacy Online in 1999: A Report to the Federal Trade Commission" (June 1999).

The purpose of the survey and this report is to provide an indication of the state of the financial services industry with respect to on-line privacy disclosures¹, data collection, and interactivity. Because this is such a rapidly changing area, the survey results reflect the status of disclosures at a particular moment in time. The report does not contain any policy recommendations. It addresses only the disclosures posted on Web sites and does not consider institutions' adherence to these policies, their actual practices, or disclosures made as part of individual contract formation. Because the survey differs materially from the two surveys cited above -- for example, the nature of the sample and the content of the questionnaire -- no direct comparisons should be made.

The agencies surveyed 314 Web sites selected at random and the Web sites of the 50 largest institutions that are on-line, by asset size. The purpose of including the Web sites of the 50 largest institutions was to include those Web sites that were likely to reach the largest number of consumers. The interagency survey identified characteristics that typify financial institutions and included questions related to the types of services these institutions offer on-line. Institutions with interactive Web sites (particularly those that allow consumers to apply for credit or open an account) are more likely to collect sensitive personal information, such as social security number or income, on-line.

The report makes certain distinctions based on the survey findings. For instance, it distinguishes between Web sites that collect information and sites that do not. This distinction was made because consumers asked to provide information would more likely be interested in knowing how the information is used and protected. This report also discusses interrelationships among interactivity,² collection of information, and privacy disclosures.

¹ In this report, the term privacy disclosure includes a privacy policy and/or information practice statement. A privacy policy is generally a comprehensive disclosure describing the Web site's or the institution's policies and practices related to the collection and use of consumer information. An information practice statement is usually a shorter statement focused on a more limited area, such as data security.

² An interactive Web site is one that allows consumers to conduct banking on-line. For example, consumers can access an account or transfer funds, open a new account, apply for a credit card, or apply for a consumer loan or mortgage on-line.

The report has five main parts. First, a brief discussion of methodology explains how the survey was conducted and the levels of precision and confidence associated with the results.

Second, the report indicates whether the surveyed sites collected personal or demographic information and discusses what information they collected. The discussion distinguishes between interactive sites and non-interactive sites.

Third, the report shows the proportion of Web sites that presented privacy disclosures and how a consumer visiting the Web site can access these disclosures on-line. The report discusses the relationship between interactivity and the types of privacy disclosures posted.

Fourth, the report analyzes the content of the privacy disclosures presented. This analysis draws on principles of fair information practice, including notice, choice, access, security, and contact.³ The use of these principles (and the inclusion or exclusion of specific principles) for purposes of analysis does not imply the agencies' endorsement of them as norms.

Fifth, the report presents separate findings concerning the Web sites associated with the 50 largest institutions.

The report has four appendices. Appendix A contains data tables for all sites surveyed. Appendix B contains data tables for the Web sites associated with the 50 largest institutions surveyed. Appendix C contains the survey questionnaire, including numerical responses to each question for the 314 randomly selected banks and thrifts as well as for the 50 largest institutions.⁴ Appendix D contains a detailed discussion of methodology.

Questions or comments should be directed to the public affairs office of any of the participating agencies.

³ The Federal Trade Commission identified a set of principles including notice, choice, access, security and enforcement, in its survey cited above. For ease of presentation in this report, "contact" and "secondary use" are referred to as principles. In this report, choice includes a sub-category referred to as "secondary use." The scope of this survey did not include enforcement; however, the survey considered the ability of consumers to question or complain about a privacy practice or possible violation of the privacy policy.

⁴ Because the results for the 314 randomly selected banks and thrifts are not appreciably different from those for all sites, a separate set of tables is not provided.

A. Methodology

The final sample for the Web site survey was composed of 314 Web sites selected at random and the Web sites associated with the 50 largest institutions. The sampling frame was compiled from internal agency databases and from publicly available sources. The survey was designed to achieve a 95 percent confidence interval⁵ no larger than ± 5 percent for estimating a proportion from the full sample. The steps followed to collect the data were as follows: (1) surfers randomly selected Web sites from the sample; (2) surfers reviewed the Web sites with the assistance of proctors as needed; (3) surfers printed certain pages from the Web sites and completed the survey questionnaire; (4) a different surfer repeated steps one through three for each Web site; (5) a computer program compared the results from the two surfings; and (6) proctors reconciled the differences. The agencies keyed the reconciled results twice to ensure accurate data entry.

Estimates for the full universe of bank and thrift Web sites are weighted estimates. The separate results for the 50 largest institutions are simple percents. Confidence intervals are given in parentheses in the tables in the appendices to provide a measure of the level of precision of the survey estimates. Additional information related to methodology is provided in appendix D.

B. Data Collection and Interactivity

The survey examined the extent to which Web sites collected personal or demographic information about consumers (questions 1 and 2). Personal information is information that can be linked to a specific individual, for example, a name or a social security number. Demographic information is personal information, such as income or gender, which does not identify a specific individual. The surfers also looked at the extent to which Web sites allowed consumers to bank on-line (question 3). Web sites were classified as interactive if a consumer could access an account or transfer funds, open a new account, apply for a credit card, or apply for a consumer loan or mortgage. The results showed that interactive sites collected more personal information than sites that were not interactive. The survey findings are summarized below and additional detail is provided in appendices A through C.

Data Collection

Sixty-four percent of sites collected at least one item of personal or demographic information; 58 percent collected at least three. The items most often collected were the consumer's name (63 percent of sites), e-mail address⁶ (61 percent), and postal address (57 percent).

⁵ The 95 percent confidence intervals are provided in the appendices to this report. Those confidence intervals indicate that we can be 95 percent confident that the true value is within the stated range.

⁶ For purposes of this survey, a "yes" answer to the question concerning collection of e-mail addresses was recorded only if the consumer was asked to independently provide his or her e-mail address in response to an explicit question from the institution. A consumer's ability to click on a "send e-mail" button was not considered to be collecting an e-mail address.

Interactivity

Thirty-eight percent of Web sites were interactive. Eight percent of sites offered at least three interactive capabilities. The capability offered most often was accessing accounts or transferring funds (31 percent). The capability offered least often was applying for a credit card (7 percent).

Relationship of Interactivity to Data Collection

Ninety percent of interactive sites collected at least one item of information, and 87 percent collected at least three. By contrast, 48 percent of non-interactive sites collected at least one item of information, and 40 percent collected at least three items. The items collected most often by interactive sites and non-interactive sites alike were the consumer's name, e-mail address, and postal address.

Interactive sites were twice as likely to collect personal information such as name and address, and 20 times as likely to request a consumer's social security number than non-interactive sites (see table 1).

Table 1: Comparison of Financial Institution Collection of Information, Estimated for All Web Sites

Information Collected⁷	Percent of All	Percent of Interactive	Percent of Non-Interactive
Name	63	90	46
E-mail address	61	86	46
Postal address	57	86	38
Social Security number	26	63	3
Bank account number	18	43	2
Telephone number	54	85	35

C. Privacy Disclosures

The surfers searched the Web sites in the sample for privacy policies and information practice statements (questions 5 and 9).⁸ Privacy policies were generally located in one place on the site and were most commonly accessed by clicking on an icon or a hyperlink. An information practice statement or a link thereto often appeared on a Web page that requested personal information from the consumer. For example, an information practice statement related to security might say: "All transactions are processed on a secure server."

⁷ The percentages presented in Tables 1-9 are estimated proportions and do not include confidence intervals. For confidence intervals associated with these estimates, see appendix A.

⁸ In this report the term privacy disclosure includes a privacy policy and/or information practice statement. A privacy policy is generally a comprehensive disclosure describing the Web site's or the institution's policies and practices related to the collection and use of consumer information. An information practice statement is usually a shorter statement focused on a more limited area, such as data security.

Forty-eight percent of Web sites surveyed provided at least one disclosure (either a privacy policy or an information practice statement) and 52 percent of sites provided no disclosures (table 2).

Table 2: Types of Privacy Disclosure, Estimated for All Web Sites

Type of Disclosure	Percent of All
Privacy policy	40
Information practice statement	29
Both disclosures	21
At least one disclosure	48
No disclosures	52

Table 3 illustrates that Web sites collecting personal and/or demographic information were almost three times as likely to post a privacy disclosure than those sites that did not collect information. Sixty-two percent of Web sites collecting information provided at least one disclosure.

Table 3: Relationship of Privacy Disclosures to the Collection of Information, Estimated for All Web Sites

Type of Disclosure	Percent that Collect Information	Percent Collecting No Information
Privacy policy	52	18
Information practice statement	39	12
Both disclosures	29	7
At least one disclosure	62	23
No disclosures	38	77

As table 4 shows, an interactive Web site was three times as likely to have a privacy disclosure than a non-interactive site.

Table 4: Relationship of Privacy Disclosures to Interactivity, Estimated for All Web Sites

Type of Disclosure	Percent of Interactive	Percent of Non-Interactive
Privacy policy	67	23
Information practice statement	70	5
Both disclosures	51	3
At least one disclosure	86	25
No disclosures	14	75

For sites with privacy policies, the type of interactive capability did have an appreciable impact on the frequency of disclosures (table 5). When looking at information practice statements only, there was a greater incidence of such statements on sites where consumers could access their account or transfer funds than on sites with other types of interactivity.

Table 5: Types of Disclosure by Interactive Capability, Estimated for All Web Sites

Type of Disclosure	Percent That Provide Ability to Access or Transfer Funds Between Accounts	Percent That Provide Ability to Open a New Account	Percent That Provide Ability to Apply for a Credit Card	Percent That Provide Ability to Apply for a Consumer Loan or Mortgage
Privacy policy	69	74	82	76
Information practice statement	81	76	68	51
Both disclosures	59	61	55	46
At least one disclosure	91	89	95	81
No disclosures	9	11	5	19

Location of Disclosures

As table 6 shows, of the 40 percent of Web sites surveyed that posted a privacy policy, 78 percent had a link to the privacy policy from their home page. For 20 percent of the sites with home page links, the link was located at the top of the home page, while for 66 percent of these sites the surfer had to scroll down the visible portion of the page to locate the link (question 7).⁹

Of those sites with privacy policies that collected information, 82 percent provided a link to the privacy policy from the home page, and 39 percent provided a link to it on at least one Web page where personal or demographic information was requested. Of the 29 percent of Web sites that posted an information practice statement, 38 percent provided a link to it on at least one Web page where personal or demographic information was requested (questions 8 and 10).

⁹ The determination of whether a consumer would have to scroll down a Web site's home page varied depending upon the browser used, screen size, and screen resolution.

Table 6: Location of Privacy Policy, Estimated for All Web Sites with Privacy Policies

Location	Percent of All	Percent of Interactive
Linked from home page	78	81
Linked from information collection	32	33
Linked from both	29	29
Linked from either information collection or home page	82	84
Linked from neither information collection nor home page	18	16

D. Content of Disclosures

Surfers evaluated the content of privacy disclosures by answering questions concerning the extent to which the disclosures addressed certain principles of fair information practice. For purposes of this survey and ease of presentation, the principles were defined as follows:

- Notice included statements informing the consumer about what information was collected, how the information was collected, how the collected information would be used, and whether the site said anything about its use or non-use of "cookies"¹⁰.
- Choice included statements that informed consumers of any opportunity to exercise choice about whether they wanted to be contacted by the financial institution (internal opt out) or whether consumers could exercise choice about the disclosure of information to third parties¹¹ (external opt out). A sub-category of choice related to "secondary use" -- the subsequent use of information for purposes other than that for which it was initially collected by the institution. Secondary use included statements informing consumers whether the institution might use the information collected about them to contact them for marketing or other purposes or whether such information might be disclosed to third parties.¹²
- Access included statements describing how consumers might ask questions about or review information collected about them. Access also included statements related to how consumers could correct inaccuracies in information that the institution maintains about them.

¹⁰ A "cookie" is a piece of information that a Web site stores on a visitor's Web browser that is retrieved when the visitor logs onto the site again. While the survey questionnaire asked whether the Web site said anything about its use of cookies, the agencies did not attempt to verify whether cookies were actually being used.

¹¹ For purposes of this survey, the term "third parties" may include affiliates of a financial institution.

¹² If consumers are not informed of potential secondary uses of information they cannot make an informed choice. Because information regarding secondary use is an integral part of choice, the survey questionnaire categorized notices related to secondary use as choice.

- Security included statements informing consumers about the steps taken to provide security for information during on-line transmission and while stored by the financial institution. This could include statements related to the use of a secure server.
- Contact included statements informing consumers about how they could submit questions or complaints about privacy.

Overall Results

The principles most frequently addressed in privacy disclosures were notice (84 percent) and security (81 percent). With respect to the comprehensiveness of the privacy disclosures: 3 percent addressed none of the principles; 14 percent addressed exactly one principle; 18 percent addressed exactly two principles; 26 percent addressed exactly three principles; 18 percent addressed exactly four principles; and 21 percent addressed exactly five principles. More detailed results for each of the principles of fair information practice are presented below.

Notice

The survey contained three questions concerning notice (questions 13-15). These questions asked whether the site contained language about what information it collected, how that information would be used, and whether the site used cookies. Notice was the most frequently addressed principle. Eighty percent of sites that posted privacy disclosures contained language about how the information collected from consumers would be used. Forty-four percent contained language about what information they collected. Twenty-four percent contained language about their use or non-use of cookies.

Overall, for sites with a privacy disclosure 84 percent provided a statement addressing at least one of the questions concerning notice. Thirteen percent provided statements addressing all three questions.

Choice

Opt out

The survey contained two questions concerning choice (questions 17 and 21). These questions asked whether the site informed consumers about any opportunity to opt out of being contacted by the institution for marketing purposes (“internal opt out”) or the sharing of their information with a third party (“external opt out”). Sixteen percent of the sites with disclosures offered an internal opt out and 38 percent of those permitted consumers to exercise this choice on-line. Eighteen percent provided an external opt out and 4 percent of those permitted consumers to exercise that choice on-line.

Twenty-eight percent of sites with a privacy disclosure provided a statement addressing at least one of the two questions concerning choice. Seven percent of sites had statements addressing both questions.

Secondary Use

The five questions concerning secondary use (questions 16, 19, 20, 23 and 24) asked whether the site informed consumers that information collected would be used by the financial institution to contact them for marketing purposes, and/or might be disclosed to third parties (including the nature of such disclosures to third parties). Thirty-eight percent of the sites with a privacy disclosure provided a statement informing consumers that personal information might be used by the financial institution to contact them for marketing purposes. Sixty-two percent of sites provided a statement informing consumers that personal information might be disclosed to third parties for reasons other than as required by law.

Sixty-six percent of sites with a privacy disclosure provided a statement addressing at least one of the questions concerning secondary use and 22 percent provided statements addressing all five questions.

Access

The survey contained three questions concerning access (questions 25-27). Those questions asked whether the site provided a statement to consumers informing them that they might ask questions regarding information collected about them, review the information, and correct any errors. Twenty-three percent of sites with a privacy disclosure informed consumers that they could ask questions about the information collected about them, while 1 percent (two Web sites) told consumers that they could review the information collected.

Thirty-six percent of sites with a privacy disclosure provided a statement addressing at least one of the access questions, and less than 1 percent (one Web site) provided statements addressing all three access questions.

Security

The survey contained two questions concerning security (questions 28 and 29). These questions asked whether the site provided a statement informing consumers about the steps taken to secure information during on-line transmission and while in storage. Sixty-five percent of sites with a privacy disclosure provided a statement addressing the security of data being transferred on-line and 55 percent addressed the security of information in storage.

Eighty-one percent of sites with a privacy disclosure provided a statement addressing at least one question concerning security and 39 percent provided statements addressing both questions.

Contact

The survey contained two questions concerning contact (questions 30 and 31). These questions asked whether the site provided a statement informing consumers how to submit a question or a complaint about privacy. Thirty-five percent of the sites with a privacy disclosure provided a statement telling consumers how to submit a question about privacy, while 5 percent provided a statement telling consumers how to submit a complaint about privacy.

Thirty-seven percent of sites with a privacy disclosure provided a statement addressing at least one question concerning contact and 4 percent provided a statement addressing both questions.

E. Results for the 50 Largest Institutions

This section presents the findings for the Web sites associated with the 50 largest institutions based on the same survey instrument used to analyze the 314 Web sites selected completely at random. A list of the largest insured institutions (by asset size as reported for December 31, 1998)¹³ was used to identify the 50 largest institutions with Web sites. Affiliated institutions that shared a common Web site were treated as duplicates and deleted. Institutions with a wholesale designation¹⁴ under the Community Reinvestment Act (CRA) regulations were excluded since the purpose of reviewing the 50 largest institutions was to include Web sites reaching the largest number of consumers.

The results showed that all of these Web sites collected information and 94 percent were interactive. The results are summarized below and additional detail is provided in appendix B.

Data Collection

One hundred percent of the Web sites of the 50 largest institutions collected three or more items of personal or demographic information. The items most often collected were the consumer's name (100 percent of sites), telephone number (100 percent), postal address (100 percent), and e-mail address (98 percent).

Interactivity

Ninety-four percent of the Web sites of the 50 largest institutions were interactive. Forty-two percent of sites offered at least three interactive capabilities. The capability offered most often was accessing accounts or transferring funds (70 percent). The capability offered least often was opening a new account (44 percent).

Privacy Related Disclosures

Table 7 shows that 96 percent of the Web sites of the 50 largest institutions provided at least one disclosure (either a privacy policy or an information practice statement) while 4 percent of sites provided no disclosures.

¹³ Reports of Condition are filed quarterly with the FDIC by insured commercial banks. Statements of Condition for OTS-regulated savings associations are filed quarterly with the OTS. Both contain a variety of financial information, including assets.

¹⁴ A bank with a wholesale designation under the CRA is not in the business of extending home mortgage, small business, small farm, or consumer loans to retail customers.

Table 7: Types of Privacy Disclosure for the Web Sites of the 50 Largest Institutions

Type of Disclosure	Percent of All
Privacy policy	92
Information practice statement	92
Both disclosures	88
At least one disclosure	96
No disclosures	4

For those sites with privacy disclosures, the type of interactive capability did not have an appreciable impact on the frequency of disclosures (table 8). However, when looking at information practice statements only, there was a lower incidence of such statements on sites where a consumer could apply for a consumer loan or mortgage than on sites with other types of interactivity.

Table 8: Types of Disclosure by Interactive Capability for the Web Sites of the 50 Largest Institutions

Type of Disclosure	Percent That Provide Ability to Access or Transfer Funds Between Accounts	Percent That Provide Ability to Open a New Account	Percent That Provide Ability to Apply for a Credit Card	Percent That Provide Ability to Apply for a Consumer Loan or Mortgage
Privacy policy	97	100	100	100
Information practice statement	100	100	100	93
Both disclosures	97	100	100	90
At least one disclosure	100	100	100	100
No disclosures	0	0	0	0

Location of Disclosures

Of the 46 Web sites (92 percent of the 50 largest institutions) that posted a privacy policy, 98 percent had a link to the privacy policy from their home page. In 11 percent of the sites with home page links, the link was located at the top of the home page; while in 67 percent of these sites the surfer had to scroll down to locate the link.¹⁵ Of those sites with privacy policies that collected information, 98 percent provided a link to the privacy policy from the home page, and 57 percent provided a link to it on at least one Web page where personal or demographic information was requested. Of the 46 Web sites that posted an information practice statement, 65 percent provided a link to it on at least one Web page where personal or demographic information was requested.

¹⁵ The determination of whether a consumer would have to scroll down a Web site's home page varied depending upon the browser used, screen size, and screen resolution.

Table 9: Location of Privacy Policy for the Web Sites of the 50 Largest Institutions (with Privacy Policies)

Location	Percent of All	Percent of Interactive
Linked from home page	98	98
Linked from information collection	57	56
Linked from both	57	56
Linked from either information collection or home page	98	98
Linked from neither information collection nor home page	2	2

Content of Disclosures for the 50 Largest Institutions - Overall Results

The principles most frequently addressed by the 50 largest institutions in privacy disclosures were notice and secondary use (98 percent), followed by security (96 percent). With respect to the comprehensiveness of the privacy disclosures: 8 percent addressed exactly two principles; 40 percent addressed exactly three principles; 35 percent addressed exactly four principles; and 17 percent addressed exactly five principles. More detailed results for each of the principles of fair information practice are presented below.

Notice

Notice was one of the most frequently addressed of the five principles. Ninety-six percent of sites that posted privacy disclosures provided statements about how the information collected from consumers would be used. Fifty-eight percent indicated what information they collected. Forty-six percent contained language about their use or non-use of cookies.

Overall, 98 percent of sites with a privacy disclosure provided a statement addressing at least one of the three questions concerning notice. Thirty-one percent provided statements addressing all three questions.

Choice (including Secondary Use)

Thirty-one percent of the sites with privacy disclosures provided an internal opt out (regarding secondary uses of information within the institution) and 13 percent of those permitted consumers to exercise this choice on-line. Fifty-two percent contained an external opt out (of information sharing with third parties) and 4 percent of those permitted consumers to exercise that choice on-line.

Fifty-six percent of sites with a privacy disclosure provided a statement addressing at least one of the questions concerning choice. Twenty-seven percent of sites provided statements addressing both choice questions.

With respect to the questions concerning secondary use, 79 percent of the sites with a privacy disclosure provided a statement informing consumers that personal information might be used to contact them for marketing purposes. Ninety-eight percent of sites provided a statement informing consumers that personal information might be disclosed to third parties other than as required by law.

Ninety-eight percent of sites with a privacy disclosure provided a statement addressing at least one of the questions concerning secondary use and 56 percent provided statements addressing all five questions.

Access

In response to the three questions regarding access, 27 percent of sites with a privacy disclosure provided a statement informing consumers that they could ask questions about the information collected about them, but only one Web site provided a statement informing consumers that they could review the information collected.

Forty-four percent of sites with a privacy disclosure provided a statement addressing at least one of the access questions, and none of the sites provided statements addressing all three access questions.

Security

Ninety-two percent of sites with a privacy disclosure provided a statement addressing the security of data being transferred on-line and 77 percent addressed the security of information in storage.

Ninety-six percent of sites with a privacy disclosure provided a statement addressing at least one question concerning security and 73 percent provided statements addressing both questions.

Contact

Regarding questions concerning contact, 23 percent of the sites with a privacy disclosure provided a statement telling consumers how to submit a question about privacy, while one site provided a statement telling consumers how to submit a complaint about privacy.

Twenty-five percent of sites with a privacy disclosure provided a statement addressing one question concerning contact and none of the sites provided a statement addressing both questions.

Appendix A

Data Tables with Estimates for All Web Sites

- Table 1: Personal or Demographic Information Collected by Interactive Capability
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- Table 8: Number of Principles of Fair Information Practice by Information Collection and Interactive Capability
- Table 9: Sites Providing Internal and External Opt Out by Interactive Capability

- **Table 1: Personal or Demographic Information Collected by Interactive Capability, Estimated for All Web Sites**

Information Collected	Percent of All* (Confidence Interval)	Percent of Interactive (Confidence Interval)	Percent of Non-Interactive (Confidence Interval)
Name	62.8 (57.9-67.6)	90.3 (84.3-94.4)	45.9 (39.4-52.3)
E-mail address	61.2 (56.2-66.0)	86.2 (79.6-91.2)	45.8 (39.4-52.2)
Postal address	56.6 (51.6-61.5)	86.1 (79.4-91.0)	38.4 (32.2-44.8)
Telephone number	54.1 (49.1-59.1)	85.4 (78.7-90.6)	34.8 (28.9-41.2)
Credit card number	4.2 (2.6-6.6)	11.0 (6.9-17.0)	0.0 (0.0-1.6)
Social security number	26.1 (21.9-30.6)	63.1 (55.0-70.7)	3.2 (1.5-6.2)
Bank account number	17.6 (14.2-21.6)	42.7 (35.0-50.8)	2.1 (0.8-4.8)
Age/date of birth	25.4 (21.3-29.9)	59.1 (51.0-66.8)	4.6 (2.4-8.1)
Gender	5.3 (3.6-7.8)	11.3 (7.6-16.9)	1.5 (0.4-4.1)
Income	19.9 (16.2-24.0)	48.6 (40.8-56.7)	2.1 (0.8-4.8)
Occupation	18.1 (14.7-22.2)	41.0 (33.5-49.2)	4.0 (2.0-7.4)
Marital status	6.0 (4.1-8.7)	14.0 (9.5-20.3)	1.0 (0.2-3.3)
Race	2.7 (1.4-4.8)	7.1 (3.8-12.3)	0.0 (0.0-1.6)
No elements of information	35.9 (31.2-40.9)	9.7 (5.6-15.7)	52.1 (45.6-58.6)
At least one element of information	64.0 (59.1-68.8)	90.3 (84.3-94.4)	47.9 (41.4-54.4)
Three or more elements of information	58.2 (53.2-63.0)	87.0 (80.5-91.9)	40.4 (34.2-46.8)

***Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses. Estimated proportions are based on a total sample size of 364 Web sites. Estimated proportions of interactive and non-interactive sites are based on subsets of 162 and 202 Web sites, respectively.**

Table 2: Interactive Capabilities, Estimated for All Web Sites

Type of Interactive Capability	Percent of All* (Confidence Interval)
Access or transfer funds between accounts	31.0 (26.6-35.8)
Open a new account	14.2 (11.1-18.0)
Apply for a credit card	6.9 (4.8-9.6)
Apply for consumer loan or mortgage	15.9 (12.6-19.7)
None of the above	61.8 (56.9-66.6)
At least one of the above	38.2 (33.4-43.1)
At least three of the above	7.6 (5.4-10.6)

*** Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses. Estimated proportions are based on a total sample size of 364 Web sites.**

Table 3: Incidence of Privacy Disclosure by Information Collection and Interactive Capability, Estimated for All Web Sites

Type of Disclosure	Percent of All* (Confidence Interval)	Percent That Collect Information (Confidence Interval)	Percent of Interactive (Confidence Interval)	Percent of Non-Interactive (Confidence Interval)
Privacy policy	39.7 (34.9-44.6)	51.8 (45.5-58.0)	67.2 (59.2-74.5)	22.6 (17.6-28.5)
Information practice statement	29.4 (25.1-34.1)	39.2 (33.3-45.3)	69.7 (61.8-76.8)	4.6 (2.4-8.1)
Both disclosures	21.0 (17.2-25.2)	28.8 (23.6-34.6)	50.7 (42.7-58.8)	2.6 (1.0-5.5)
At least one disclosure	48.1 (43.2-53.2)	62.1 (55.8-68.0)	86.2 (79.6-91.2)	24.6 (19.4-30.6)
No disclosure	51.9 (46.8-56.8)	37.9 (32.0-44.2)	13.8 (8.8-20.4)	75.4 (69.4-80.6)

* Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses. Estimated proportions are based on a total sample size of 364 Web sites. Estimated proportions of interactive sites, non-interactive sites, and sites that collect information are based on subsets of 162, 202, and 248 Web sites, respectively.

Table 4: Types of Disclosure by Information Collection, Estimated for All Web Sites

Type of Disclosure	Percent Collecting No Elements of Information (Confidence Interval)	Percent Collecting At Least One Element of Information (Confidence Interval)	Percent Collecting At Least Three Elements of Information (Confidence Interval)
Privacy policy	18.1 (12.2-25.6)	51.8 (45.5-58.0)	53.8 (47.2-60.3)
Information practice statement	12.1 (7.3-18.8)	39.2 (33.3-45.3)	41.5 (35.3-48.1)
Both disclosures	6.9 (3.4-12.5)	28.8 (23.6-34.6)	31.2 (25.6-37.5)
At least one disclosure	23.3 (16.7-31.3)	62.1 (55.8-68.0)	64.1 (57.6-70.2)
No disclosures	76.7 (68.7-83.3)	37.9 (32.0-44.2)	35.9 (29.8-42.4)

*** Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses. Estimated proportions of sites with no elements of information, at least one element of information, and at least three elements of information are based on subsets of 116, 248, and 229 Web sites, respectively.**

Table 5: Types of Disclosure by Interactive Capability, Estimated for All Web Sites

Type of Disclosure	Percent That Provide Ability to Access or Transfer Funds Between Accounts * (Confidence Interval)	Percent That Provide Ability to Open a New Account (Confidence Interval)	Percent That Provide Ability to Apply for a Credit Card (Confidence Interval)	Percent That Provide Ability to Apply for a Consumer Loan or Mortgage (Confidence Interval)
Privacy policy	68.8 (60.0-76.9)	73.8 (60.4-84.5)	81.9 (63.3-93.8)	76.2 (64.0-85.9)
Information practice statement	81.0 (72.9-87.4)	76.0 (63.0-86.4)	68.4 (50.0-84.4)	50.5 (38.4-63.0)
Both disclosures	58.8 (49.8-67.6)	60.7 (47.2-73.2)	54.9 (38.3-73.4)	46.2 (34.7-58.9)
At least one disclosure	91.0 (84.3-95.3)	89.1 (77.7-95.8)	95.5 (79.7-99.2)	80.5 (68.7-89.2)
No disclosures	9.0 (4.7-15.7)	10.9 (4.2-22.3)	4.5 (0.8-20.3)	19.5 (10.8-31.3)

* Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses. Estimated proportions of sites with the following interactive capabilities are based on varying subsets of Web sites (shown in parentheses):

- 1) Access or transfer funds between accounts (129)
- 2) Open a new account (64)
- 3) Apply for a credit card (42)
- 4) Apply for a consumer loan or mortgage (76)

Table 6a: Location and Prominence of Privacy Policy by Information Collection and Interactive Capability, Estimated for All Web Sites with Privacy Policies

Location and Prominence Of Privacy Policy	Percent of All * (Confidence Interval)	Percent That Collect Information (Confidence Interval)	Percent of Interactive (Confidence Interval)	Percent of Non-Interactive (Confidence Interval)
Linked from home page	78.0 (70.8-84.1)	82.1 (74.4-88.1)	80.5 (71.5-87.5)	73.4 (59.5-84.4)
At top of page	19.9 (13.5-28.0)	19.2 (12.6-27.9)	17.8 (10.6-27.7)	24.1 (12.5-40.1)
Scroll down	66.3 (57.4-74.2)	68.6 (59.1-76.8)	67.6 (56.7-76.9)	63.8 (47.4-78.1)
Linked from information collection	32.4 (25.5-40.2)	38.8 (30.8-47.4)	33.0 (24.6-42.5)	31.4 (19.8-45.4)
Linked from both	28.5 (22.0-36.0)	34.1 (26.5-42.6)	29.4 (21.5-38.8)	26.9 (16.0-40.8)
Linked from either information collection or home page	81.9 (74.9-87.5)	86.7 (79.7-91.9)	84.1 (75.4-90.4)	77.9 (64.5-87.8)
Linked from neither information collection nor home page	18.1 (12.5-25.1)	13.3 (8.1-20.3)	15.9 (9.6-24.6)	22.1 (12.2-35.5)

* Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses. Estimated proportions of sites shown as “at top of page” and “scroll down” are based on a subset of sites where the answer was "yes" to “linked from home page.”

Estimated proportions are based on the varying subsets of Web sites (shown in parentheses):

- 1) All (166)
- 2) Those that collect information (145)
- 3) Those that are interactive (120)
- 4) Those that are non-interactive (46)

Table 6b: Location and Prominence of Information Practice Statement by Information Collection and Interactive Capability, Estimated for All Web Sites with Information Practice Statements

Location and Prominence of Information Practice Statement	Percent of All* (Confidence Interval)	Percent That Collect Information (Confidence Interval)	Percent of Interactive (Confidence Interval)	Percent of Non-Interactive (Confidence Interval)
Linked from information collection	38.1 (29.8 - 47.3)	44.7 (35.4 - 54.6)	42.0 (33.0 - 51.7)	1.9 (1.9 - 32.1)

*Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses.

Estimated proportions are based on varying subsets of Web sites (shown in parentheses):

- 1) All (133)
- 2) Those that collect information (119)
- 3) Those that are interactive (123)
- 4) Those that are non-interactive (10)

Table 7a: Content of Privacy Disclosures by Information Collection and Interactive Capability, Estimated for All Web Sites with Disclosures

Notice	Percent of All* (Confidence Interval)	Percent That Collect Information (Confidence Interval)	Percent of Interactive (Confidence Interval)
Q13: Does the site say anything regarding what information is collected about consumers?	43.7 (36.7-50.9)	44.3 (36.7-52.3)	40.2 (32.0-48.9)
Q14: Does the site say anything regarding how the information collected about consumers will be used?	79.8 (73.4-85.2)	83.4 (76.6-88.7)	78.2 (70.1-84.9)
Q15: Does the site say anything about the use or non-use of "cookies?"	23.7 (18.1-30.2)	23.2 (17.3-30.4)	30.0 (22.8-38.4)
At least one of the above	83.8 (77.8-88.7)	86.6 (80.2-91.4)	83.8 (76.3-89.6)
All of the above	12.6 (8.6-18.0)	12.9 (8.6-19.0)	15.6 (10.4-22.8)

* Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses. Estimated proportions of sites with disclosures, sites with disclosures that collect information, and interactive sites with disclosures are based on subsets of 195, 168, and 145 Web sites, respectively.

Table 7b: Content of Privacy Disclosures by Information Collection and Interactive Capability, Estimated for All Web Sites with Disclosures

Choice	Percent of All* (Confidence Interval)	Percent That Collect Information (Confidence Interval)	Percent of Interactive (Confidence Interval)
Secondary Use			
Q16: Does the site say that the financial institution may use the information collected about consumers to contact consumers for marketing or other purposes?	38.4 (31.7-45.4)	41.7 (34.3-49.6)	38.2 (30.4-46.8)
Q19: Does the site say that the information collected about consumers may be disclosed to third parties, other than as required by law?	61.9 (54.7-68.8)	68.7 (60.9-75.8)	68.7 (60.2-76.4)
Q20: Does the site provide any information about the type(s) or name(s) of third parties to whom the information collected about consumers will be disclosed, other than as required by law?	54.5 (47.2-61.6)	60.5 (52.6-68.0)	61.8 (53.2-70.1)
Q23: Does the site provide any information about the limitations on, or the circumstances under which, information about consumers will be disclosed to third parties?	61.9 (54.7-68.8)	68.7 (60.9-75.8)	68.7 (60.2-76.4)
Q24: Does the site say that if consumer information is provided to a third party either: (1) the third party will be required to keep the information confidential; or (2) the third party will adhere to privacy principles acceptable to the financial institution?	37.4 (30.7-44.4)	41.3 (33.9-49.2)	39.6 (31.5-48.3)
At least one of the above	66.4 (59.3 - 73.0)	74.1 (66.7 - 80.8)	72.5 (64.1 - 79.8)
All of the above	22.3 (17.0 - 28.7)	24.7 (18.7 - 31.9)	23.2 (16.9 - 31.1)
Opt Out			
Q17: Does the site inform consumers of any opportunity to exercise choice about whether they want to be contacted by the financial institution for marketing or other purposes?	15.8 (11.2-21.7)	17.6 (12.4-24.3)	16.6 (11.2-23.7)

Table 7b: Content of Privacy Disclosures by Information Collection and Interactive Capability, Estimated for All Web Sites with Disclosures (Continued)

Choice	Percent of All* (Confidence Interval)	Percent That Collect Information (Confidence Interval)	Percent of Interactive (Confidence Interval)
Q18: Can the consumer exercise this choice on-line?	38.0 (21.7-56.6)	41.4 (23.7-60.3)	47.5 (26.5-66.7)
Q21: Does the site say consumers may exercise choice about whether collected information will be shared with third parties, other than as required by law?	18.2 (13.4-24.2)	19.0 (13.7-25.7)	18.2 (12.8-25.4)
Q22: Can the consumer exercise this choice on-line?	4.1 (1.2-17.1)	4.8 (1.4-19.1)	6.1 (1.8-23.2)
At least one of the above (secondary use and opt out combined)	66.4 (59.3-73.0)	74.1 (66.7-80.8)	72.5 (64.1-79.8)
All of the above except for Q18 and Q22	5.0 (2.8-8.9)	5.2 (2.8-9.7)	5.4 (2.9-10.4)

* Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses. A negative response to Q20, Q21, Q23, or Q24 was assumed when the answer to Q5 and/or Q9 was yes but there was no answer to Q20, Q21, Q23, or Q24. See Appendix C for additional detail concerning the survey questionnaire. Estimated proportions of sites that addressed Q18 and Q22 are based on a subset of sites where the answer was yes to Q17 and Q21, respectively. Estimated proportions are based on varying subsets of Web sites (shown in parentheses):

- 1) All (195)
- 2) Those that collect information (168)
- 3) Those that are interactive (145)

Table 7c: Content of Privacy Disclosures by Information Collection and Interactive Capability, Estimated for All Web Sites with Disclosures

Access	Percent of All* (Confidence Interval)	Percent That Collect Information (Confidence Interval)	Percent of Interactive (Confidence Interval)
Q25: Does the site say that consumers may ask questions regarding information collected about them?	22.7 (17.1-29.2)	25.1 (18.8-32.5)	21.9 (15.4-29.8)
Q26: Does the site say that consumers may review information collected about them?	1.4 (0.3-4.3)	1.7 (0.4-5.2)	2.0 (0.5-6.3)
Q27: Does the site say how consumers may proceed to correct any errors in the information collected about them?	25.2 (19.3-31.9)	29.7 (22.8-37.4)	29.3 (22.0-37.7)
At least one of the above	35.8 (29.2-42.9)	40.2 (32.8-48.1)	36.4 (28.5-45.0)
All of the above	0.6 (0.1-3.2)	0.8 (0.1-3.9)	0.9 (0.2-4.7)

* Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses. Estimated proportions of sites with disclosures, sites with disclosures that collect information, and interactive sites with disclosures are based on subsets of 195, 168, and 145 Web sites, respectively.

Table 7d: Content of Privacy Disclosures by Information Collection and Interactive Capability, Estimated for All Web Sites with Disclosures

Security	Percent of All* (Confidence Interval)	Percent That Collect Information (Confidence Interval)	Percent of Interactive (Confidence Interval)
Q28: Does the site say anything about the steps taken to provide security for information during on-line transmission between the customer and the financial institution?	64.8 (57.7-71.4)	69.8 (62.1-76.7)	82.5 (75.0-88.5)
Q29: Does the site say anything about the steps taken to provide security for information while stored by the financial institution?	55.0 (47.8-62.1)	58.8 (50.8-66.4)	59.7 (51.1-68.0)
At least one of the above	81.1 (74.8-86.3)	84.9 (78.4-90.1)	91.4 (85.0-95.4)
All of the above	38.7 (32.0-45.8)	43.7 (36.2-51.6)	50.9 (42.3-59.5)

* Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses. Estimated proportions of sites with disclosures, sites with disclosures that collect information, and interactive sites with disclosures are based on subsets of 195, 168, and 145 Web sites, respectively.

Table 7e: Content of Privacy Disclosures by Information Collection and Interactive Capability, Estimated for All Web Sites with Disclosures

Contact	Percent of All* (Confidence Interval)	Percent That Collect Information (Confidence Interval)	Percent of Interactive (Confidence Interval)
Q30: Does the site say how to submit a <u>question</u> about privacy?	35.4 (28.7-42.4)	39.7 (32.1-47.6)	33.8 (26.0-42.4)
Q31: Does the site say how to <u>complain</u> about privacy?	5.3 (2.7-9.6)	4.0 (1.6-8.5)	3.9 (1.5-8.9)
At least one of the above	36.8 (30.0-43.9)	40.6 (33.1-48.5)	34.9 (27.0-43.6)
All of the above	3.9 (1.7-7.8)	3.1 (1.1-7.3)	2.8 (0.8-7.5)

* Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses. Estimated proportions of sites with disclosures, sites with disclosures that collect information, and interactive sites with disclosures are based on subsets of 195, 168, and 145 Web sites, respectively.

Table 8: Number of Principles of Fair Information Practice by Information Collection and Interactive Capability, Estimated for All Web Sites with Disclosures

Number of Principles* (notice, choice, access, security, or contact)	Percent of All** (Confidence Interval)	Percent That Collect Information (Confidence Interval)	Percent of Interactive (Confidence Interval)
None	3.2 (1.2-6.9)	0.8 (0.1-3.9)	0.0 (0.0-3.1)
One	14.2 (9.6-20.0)	12.5 (7.8-18.7)	11.3 (6.5-18.0)
Two	17.8 (12.8-24.0)	14.6 (9.5-21.1)	19.3 (13.0-27.2)
Three	25.9 (20.1-32.7)	27.5 (21.0-34.9)	28.5 (21.3-36.9)
Four	18.0 (13.1-24.0)	21.0 (15.3-28.0)	20.7 (14.6-28.3)
Five	20.9 (15.4-27.2)	23.7 (17.5-31.0)	20.1 (13.8-28.0)

***The scope of this survey did not extend to enforcement. The inclusion of contact as a principle of fair information practice is for ease of presentation only.**

**** Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses. Estimated proportions of sites with disclosures, sites with disclosures that collect information, and interactive sites with disclosures are based on subsets of 195, 168, and 145 Web sites, respectively.**

Table 9: Sites Providing Internal and External Opt Out by Interactive Capability, Estimated for All Web Sites with Disclosures

Type of Opt Out	Percent of All* (Confidence Interval)	Percent of Interactive (Confidence Interval)
Internal opt out (Q17)	15.8 (11.2-21.7)	16.6 (11.2-23.7)
External opt out (Q21)	18.2 (13.4-24.2)	18.2 (12.8-25.4)
Yes to both	6.6 (4.0-10.9)	6.8 (3.9-12.2)
Yes to at least one	27.5 (21.6-34.2)	28.0 (21.0-36.1)
Yes to neither	72.5 (65.8-78.4)	72.0 (63.9-79.0)

* Cell entries are estimated proportions with 95 percent confidence intervals shown in parentheses.

A negative response to Q21 was assumed when the answer to Q5 and/or Q9 was yes but there was no answer to Q21. See appendix C for additional detail concerning the survey questionnaire.

Estimated proportions of sites with responses to Q17 and Q21 are based on a subset of 195 Web sites. Estimated proportions of interactive sites with responses to Q17 and Q21 are based on a subset of 145 Web sites.

Appendix B

Data Tables for the Web Sites of the 50 Largest Institutions¹

- Table 1: Personal or Demographic Information Collected by Interactive Capability
- Table 2: Interactive Capabilities
- Table 3: Incidence of Privacy Disclosure by Information Collection and Interactive Capability
- Table 4: Types of Disclosure by Information Collection
- Table 5: Types of Disclosure by Interactive Capability
- Table 6: Location and Prominence of Disclosures
 - 6a: Privacy Policy by Information Collection and Interactive Capability
 - 6b: Information Practice Statement by Information Collection and Interactive Capability
- Table 7: Content of Privacy Disclosures by Information Collection and Interactive Capability
 - 7a: Notice
 - 7b: Choice
 - 7c: Access
 - 7d: Security
 - 7e: Contact
- Table 8: Number of Principles of Fair Information Practice by Information Collection and Interactive Capability
- Table 9: Sites Providing Internal and External Opt Out by Interactive Capability

¹ See appendix D1.3 for a discussion of how the Web sites associated with the 50 largest institutions were selected for analysis.

Table 1: Personal or Demographic Information Collected by Interactive Capability for the Web Sites of the 50 Largest Institutions

Information Collected	Percent of All	Percent of Interactive	Percent of Non-Interactive
Name	100.0	100.0	100.0
E-mail address	98.0	100.0	66.7
Postal address	98.0	97.9	100.0
Telephone number	100.0	100.0	100.0
Credit card number	18.0	19.1	0.0
Social security number	82.0	83.0	66.7
Bank account number	78.0	80.9	33.3
Age/date of birth	80.0	83.0	33.3
Gender	46.0	48.9	0.0
Income	70.0	72.3	33.3
Occupation	64.0	68.1	0.0
Marital status	38.0	40.4	0.0
Race	8.0	8.5	0.0
No elements of information	0.0	0.0	0.0
At least one element of information	100.0	100.0	100.0
Three or more elements of information	100.0	100.0	100.0

Proportions for interactive and non-interactive are based on 47 and 3 Web sites, respectively.

Table 2: Interactive Capabilities for the Web Sites of the 50 Largest Institutions

Type of Interactive Capability	Percent of All
Access or transfer funds between accounts	70.0
Open a new account	44.0
Apply for a credit card	48.0
Apply for consumer loan or mortgage	60.0
None of the above	6.0
At least one of the above	94.0
At least three of the above	42.0

Table 3: Incidence of Privacy Disclosure by Information Collection and Interactive Capability for the Web Sites of the 50 Largest Institutions

Type of Disclosure	Percent of All	Percent That Collect Information	Percent of Interactive	Percent of Non-Interactive
Privacy policy	92.0	92.0	95.7	33.3
Information practice statement	92.0	92.0	95.7	33.3
Both disclosures	88.0	88.0	91.5	33.3
At least one disclosure	96.0	96.0	100.0	33.3
No disclosure	4.0	4.0	0.0	66.7

Proportions for interactive, non-interactive, and those that collect information are based on 47, 3, and 50 Web sites, respectively.

Table 4: Types of Disclosure by Information Collection for the Web Sites of the 50 Largest Institutions

Type of Disclosure	Percent Collecting No Elements of Information	Percent Collecting At Least One Element of Information	Percent Collecting at Least Three Elements of Information
Privacy policy	n/a	92.0	92.0
Information practice statement	n/a	92.0	92.0
Both disclosures	n/a	88.0	88.0
At least one disclosure	n/a	96.0	96.0
No disclosures	n/a	4.0	4.0

Proportions for those collecting no elements of information, at least one element of information, and at least three elements of information are based on subsets of 0, 50, and 50 Web sites, respectively.

Table 5: Types of Disclosure by Interactive Capability for the Web Sites of the 50 Largest Institutions

Type of Disclosure	Percent That Provide Ability to Access or Transfer Funds Between Accounts	Percent That Provide Ability to Open a New Account	Percent That Provide Ability to Apply for a Credit Card	Percent That Provide Ability to Apply for a Consumer Loan or Mortgage
Privacy policy	97.1	100.0	100.0	96.7
Information practice statement	100.0	100.0	100.0	93.3
Both disclosures	97.1	100.0	100.0	90.0
At least one disclosure	100.0	100.0	100.0	100.0
No disclosures	0.0	0.0	0.0	0.0

Proportions of those that have the following interactive capabilities are based on varying subsets of 50 Web sites (shown in parentheses):

- 1) Access or transfer funds between accounts(35)**
- 2) Open new account (22)**
- 3) Apply for credit card (24)**
- 4) Apply for consumer loan or mortgage (30)**

Table 6a: Location and Prominence of Privacy Policy by Information Collection and Interactive Capability for the Web Sites of the 50 Largest Institutions with Privacy Policies

Location and Prominence Of Privacy Policy	Percent of All	Percent That Collect Information	Percent of Interactive	Percent of Non-Interactive
Linked from home page	97.8	97.8	97.8	100.0
At top of page	11.1	11.1	11.4	0.0
Scroll down	66.7	66.7	65.9	100.0
Linked from information collection	56.5	56.5	55.6	100.0
Linked from both	56.5	56.5	55.6	100.0
Linked from either information collection or home page	97.8	97.8	97.8	100.0
Linked from neither information collection nor home page	2.2	2.2	2.2	0.0

Proportions of sites shown as “at top of page” and “scroll down” are based on a subset of sites where the answer was yes to “linked from home page.” Proportions are based on varying subsets of 50 Web sites (shown in parentheses):

- 1) All (46)
- 2) Those that collect information (46)
- 3) Those that are interactive (45)
- 4) Those that are non-interactive (1)

Table 6b: Location and Prominence of Information Practice Statement by Information Collection and Interactive Capability for the Web Sites of the 50 Largest Institutions with Information Practice Statements

Location and Prominence of Information Practice Statement	Percent of All	Percent That Collect Information	Percent of Interactive	Percent of Non-Interactive
Linked from information collection	65.2	65.2	64.4	100.0

Proportions are based on varying subsets of Web sites (shown in parentheses):

- 1) All (46)**
- 2) Those that collect information (46)**
- 3) Those that are interactive (45)**
- 4) Those that are non-interactive (1)**

Table 7a: Content of Privacy Disclosures by Information Collection and Interactive Capability for the Web Sites of the 50 Largest Institutions with Disclosures

Notice	Percent of All	Percent That Collect Information	Percent of Interactive
Q13: Does the site say anything regarding what information is collected about consumers?	58.3	58.3	57.4
Q14: Does the site say anything regarding how the information collected about consumers will be used?	95.8	95.8	97.9
Q15: Does the site say anything about the use or non-use of cookies?	45.8	45.8	46.8
At least one of the above	97.9	97.9	97.9
All of the above	31.3	31.3	31.9

Proportions are based on varying subsets of 50 Web sites (shown in parentheses):

- 1) All (48)**
- 2) Those that collect information (48)**
- 3) Those that are interactive (47)**

Table 7b: Content of Privacy Disclosures by Information Collection and Interactive Capability for the Web Sites of the 50 Largest Institutions with Disclosures

Choice	Percent of All	Percent That Collect Information	Percent of Interactive
Secondary Use			
Q16: Does the site say that the financial institution may use the information collected about consumers to contact consumers for marketing or other purposes?	79.2	79.2	80.9
Q19: Does the site say that the information collected about consumers may be disclosed to third parties, other than as required by law?	97.9	97.9	97.9
Q20: Does the site provide any information about the type(s) or name(s) of third parties to whom the information collected about consumers will be disclosed, other than as required by law?	91.7	91.7	93.6
Q23: Does the site provide any information about the limitations on, or the circumstances under which, information about consumers will be disclosed to third parties?	97.9	97.9	97.9
Q24: Does the site say that if consumer information is provided to a third party either: (1) the third party will be required to keep the information confidential; or (2) the third party will adhere to privacy principles acceptable to the financial institution?	60.4	60.4	61.7
At least one of the above	97.9	97.9	97.9
All of the above	56.3	56.3	57.4

Table 7b: Content of Privacy Disclosures by Information Collection and Interactive Capability for the Web Sites of the 50 Largest Institutions with Disclosures (Continued)

Choice	Percent of All	Percent That Collect Information	Percent of Interactive
Opt Out			
Q17: Does the site inform consumers of any opportunity to exercise choice about whether they want to be contacted by the financial institution for marketing or other purposes?	31.3	31.3	31.9
Q18: Can the consumer exercise this choice on-line?	13.3	13.3	13.3
Q21: Does the site say consumers may exercise choice about whether collected information will be shared with third parties, other than as required by law?	52.1	52.1	53.2
Q22: Can the consumer exercise this choice on-line?	4.0	4.0	4.0
At least one of the above (secondary use and opt out combined)	97.9	97.9	97.9
All of the above except for Q18 and Q22	20.8	20.8	21.3

A negative response to Q20, Q21, Q23, or Q24 was assumed when the answer to Q5 and/or Q9 was yes but there was no answer to Q20, Q21, Q23, or Q24. See Appendix C for additional detail concerning the survey questionnaire. Proportions of sites that addressed Q18 and Q22 are based on a subset of sites where the answer was yes to Q17 and Q21, respectively.

Proportions are based on varying subsets of 50 Web sites (shown in parentheses):

- 1) All (48)
- 2) Those that collect information (48)
- 3) Those that are interactive (47)

Table 7c: Content of Privacy Disclosures by Information Collection and Interactive Capability for the Web Sites of the 50 Largest Institutions with Disclosures

Access	Percent With Disclosures	Percent That Collect Information	Percent of Interactive
Q25: Does the site say that consumers may ask questions regarding information collected about them?	27.1	27.1	27.7
Q26: Does the site say that consumers may review information collected about them?	2.1	2.1	2.1
Q27: Does the site say how consumers may proceed to correct any errors in the information collected about them?	25.0	25.0	25.5
At least one of the above	43.8	43.8	44.7
All of the above	0.0	0.0	0.0

Proportions are based on varying subsets of 50 Web sites (shown in parentheses):

- 1) All (48)**
- 2) Those that collect information (48)**
- 3) Those that are interactive (47)**

Table 7d: Content of Privacy Disclosures by Information Collection and Interactive Capability for the Web Sites of the 50 Largest Institutions with Disclosures

Security	Percent of All	Percent That Collect Information	Percent of Interactive
Q28: Does the site say anything about the steps taken to provide security for information during on-line transmission between the customer and the financial institution?	91.7	91.7	93.6
Q29: Does the site say anything about the steps taken to provide security for information while stored by the financial institution?	77.1	77.1	78.7
At least one of the above	95.8	95.8	97.9
All of the above	72.9	72.9	74.5

Proportions are based on varying subsets of 50 Web sites (shown in parentheses):

- 1) All (48)**
- 2) Those that collect information (48)**
- 3) Those that are interactive (47)**

Table 7e: Content of Privacy Disclosures by Information Collection and Interactive Capability for the Web Sites of the 50 Largest Institutions with Disclosures

Contact	Percent of All	Percent That Collect Information	Percent of Interactive
Q30: Does the site say how to submit a <u>question</u> about privacy?	22.9	22.9	23.4
Q31: Does the site say how to <u>complain</u> about privacy?	2.1	2.1	2.1
At least one of the above	25.0	25.0	25.5
All of the above	0.0	0.0	0.0

Proportions are based on varying subsets of 50 Web sites (shown in parentheses):

- 1) **All (48)**
- 2) **Those that collect information (48)**
- 3) **Those that are interactive (47)**

Table 8: Number of Principles of Fair Information Practice by Information Collection and Interactive Capability for the Web Sites of the 50 Largest Institutions with Disclosures

Number of Principles* (notice, choice, access, security, and contact)	Percent of All	Percent That Collect Information	Percent of Interactive
None	0.0	0.0	0.0
One	0.0	0.0	0.0
Two	8.3	8.3	6.4
Three	39.6	39.6	40.4
Four	35.4	35.4	36.2
Five	16.7	16.7	17.0

***The scope of this survey did not extend to enforcement. The inclusion of contact as a principle of fair information practice is for ease of presentation only.**

Proportions are based on varying subsets of 50 Web sites (shown in parentheses):

- 1) All (48)**
- 2) Those that collect information (48)**
- 3) Those that are interactive (47)**

Table 9: Sites Providing Internal and External Opt Out by Interactive Capability for the Web Sites of the 50 Largest Institutions

Type of Opt Out	Percent of All	Percent of Interactive
Internal opt out (Q17)	31.3	31.9
External opt out (Q21)	52.1	53.2
Yes to both	27.1	27.7
Yes to at least one	56.3	57.4
Yes to neither	43.7	42.6

A negative response to Q21 was assumed when a surfer answered Q5 and/or Q9 affirmatively but did not answer Q21. See Appendix C for additional detail concerning the survey questionnaire.

Proportions of those that responded to Q17 and Q21 are based on 48 Web sites. Proportions of those that are interactive and answered Q17 and Q21 are based on 47 Web sites.

Appendix C
Survey Questionnaire and Responses

1999 Final (July 26, 1999)
Financial Institution Web Site Privacy Policy Survey

Instruction: This part requires you to look for the kinds of *personal* and *demographic information* that the site requests the consumer to provide, and for the kinds of things consumers can do on the site. **Do not** refer to any screen, which collects information related to employment opportunities or job applications in answering any survey question. Circle 0 for “No” or 1 for “Yes” to each question below.

Q1: Does the site collect any of the following personal information?

(Personal information is information that can be linked to an individual. See “Key Terms” in the Instructions for additional information.)

Circle the correct answer for each of the following.

	<u>No</u> 0	<u>Yes</u> 1
Q1a. Name		
50 Largest	0	50
Remaining Institutions	120	194
Q1b. Email address	0	1
50 Largest	1	49
Remaining Institutions	125	189
Q1c. Postal address	0	1
50 Largest	1	49
Remaining Institutions	140	174
Q1d. Telephone number	0	1
50 Largest	0	50
Remaining Institutions	148	166

	<u>No</u> 0	<u>Yes</u> 1
Q1f. Credit card number		
50 Largest	41	9
Remaining Institutions	302	12
Q1g. Social security number	0	1
50 Largest	9	41
Remaining Institutions	237	77
Q1h. Bank account number	0	1
50 Largest	11	39
Remaining Institutions	264	50

Q2: Does the site collect any of the following demographic information?

(Demographic information is personal information that is not unique to a particular individual. See “Key Terms” in the instructions for further information.)

	<u>No</u> 0	<u>Yes</u> 1
Q2a. Age or date of birth		
50 Largest	10	40
Remaining Institutions	239	75
Q2c. Gender	0	1
50 Largest	27	23
Remaining Institutions	301	13
Q2f. Income	0	1
50 Largest	15	35
Remaining Institutions	256	58

	<u>No</u> 0	<u>Yes</u> 1
Q2h. Occupation		
50 Largest	18	32
Remaining Institutions	261	53
Q2i. Marital status	0	1
50 Largest	31	19
Remaining Institutions	298	16
Q2j. Race	0	1
50 Largest	46	4
Remaining Institutions	306	8

Q3: Can a person apply for or conduct any of the following on this site?

	<u>No</u> 0	<u>Yes</u> 1
Q3a. Access or transfer funds between accounts.	0	1
50 Largest	15	35
Remaining Institutions	220	94
Q3b. Open a new account.	0	1
50 Largest	28	22
Remaining Institutions	272	42
Q3c. Apply for a credit card.	0	1
50 Largest	26	24
Remaining Institutions	296	18
Q3d. Apply for a consumer loan or home mortgage.	0	1
50 Largest	20	30
Remaining Institutions	268	46

Part III: Privacy Policy Notice

	<u>No</u> 0	<u>Yes</u> 1
Q5: Is a <i>Privacy Policy</i> posted on this site?	0	1
50 Largest	4	46
Remaining Institutions	194	120

(A Privacy Policy is a self contained statement of the financial institution's procedures and practices regarding the privacy of customer financial information, although it may include links to privacy related material. See "**Key Terms**" in the Instructions for additional information.)

Instruction: If the answer to Q5, is "No", skip to Question 9. If the answer to Q5 is "Yes," print a copy of the document, place it in the Folder for this URL, and continue the survey of this site. Record the URL for each page on the appropriate copy, if the URL does not print. If you cannot print a web page, call the Proctor.

	<u>No</u> 0	<u>Yes</u> 1
Q7: Is there a link to the <i>Privacy Policy</i> on the site's home page?	0	1
50 Largest	1	45
Remaining Institutions	28	92

If the answer to Q7 is "No," skip to Question 8; if "Yes," answer each of the following.

	0	1
Q7a. Is the link located at the top of the home page?	0	1
50 Largest	40	5
Remaining Institutions	73	19

	<u>No</u> 0	<u>Yes</u> 1
Q7c. Must the site visitor scroll down to locate the link on the home page?	0	1
50 Largest	15	30
Remaining Institutions	31	61

Q8: Review your answers to Q1 & Q2; if the answers to all parts to Q1 & Q2 are “No,” skip to Question 9; otherwise answer the following.

Does a link to the *Privacy Policy* or does the *Privacy Policy* itself appear on at least one Web page where personal information or demographic information is collected from consumers?

	<u>No</u> 0	<u>Yes</u> 1
50 Largest	20	26
Remaining Institutions	62	37

Part IV: Information Practice Statements

Q9: Is one or more Information Practice Statement(s) posted on this web site?

	<u>No</u> 0	<u>Yes</u> 1
50 Largest	4	46
Remaining Institutions	227	87

(An Information Practice Statement is a short statement addressing a particular aspect of a privacy policy or information handling procedure, such as security. It may appear in a question and answer format. It often appears or is linked from a screen discussing a particular product or service. See “Key Terms” in the Instructions for additional information.)

Instruction: If the answers to Q5 & Q9 are “No,” stop the survey of this URL, place this survey document in the Folder for this URL, and proceed to the next Folder. If the answer to Q5 is “Yes,” and the answer to Q9 is “No,” skip to Question 11. If the answer to Q9 is “Yes,” print a copy of each Information Practice Statement and place it in the Folder for this URL and continue with Question 10. Record the URL for each page on the appropriate copy, if the URL does not print. If you cannot print an Information Practice Statement, call a proctor for assistance.

Q10: Review your answers to Q1 & Q2; if the answers to all parts to Q1 & Q2 are “No,” skip to Question 11.

Does any Information Practice Statement or link to an Information Practice Statement appear on at least one web page where either personal information or demographic information is collected from consumers?

	<u>No</u> 0	<u>Yes</u> 1
50 Largest	16	30
Remaining Institutions	42	31

Part V: Scope of Privacy Policy & Information Practice Statements (“Disclosures”)

Instruction: The answers to Parts V & VI of this survey are to be based upon the content of the Privacy Policy and/or Information Practice Statement(s) on this web site.

Q11: Do these Disclosures apply only to information collected from consumers at this site?

	<u>No</u> 0	<u>Yes</u> 1
50 Largest	37	11
Remaining Institutions	64	83

Part VI: Content of Disclosures

Notice

Q13: Does the site say anything regarding what information is collected about consumers? No Yes
0 **1**

50 Largest	20	28
Remaining Institutions	84	63

Q14: Does the site say anything regarding how the information collected about consumers will be used? **0** **1**

50 Largest	2	46
Remaining Institutions	31	116

Q15: Does the site say anything about the use or non-use of “cookies”? **0** **1**

50 Largest	26	22
Remaining Institutions	114	33

Choice

Q16: Does the site say that the financial institution may use the information collected about consumers to contact consumers for marketing or other purposes? No Yes
0 **1**

50 Largest	10	38
Remaining Institutions	94	53

Q17: Does the site inform consumers of any opportunity to exercise choice about whether they want to be contacted by the financial institution for marketing or other purposes? **0** **1**

50 Largest	33	15
Remaining Institutions	125	22

If the answer to Q17 is “No,” skip to Question 19; if “Yes” answer the following.

Q18: Can the consumer exercise this choice online? No Yes
0 **1**

50 Largest	13	2
Remaining Institutions	13	9

Q19: Does the site say that the information collected about consumers may be disclosed to third parties, other than as required by law? (E.g. advertisers, business partners, affiliates, or credit reporting agencies.) **0** **1**

50 Largest	1	47
Remaining Institutions	59	88

If the answer to Q19 is “No,” skip to Question 25.

Q20: Does the site provide any information about the type(s) or name(s) of third parties to whom the information collected about consumers will be disclosed, other than as required by law? (E.g. advertisers, business partners, affiliates, or credit reporting agencies.)

	<u>No</u> 0	<u>Yes</u> 1
50 Largest	3	44
Remaining Institutions	11	77

Q21: Does the site say consumers may exercise choice about whether collected information will be shared with third parties, other than as required by law?

(E.g., Can the customer opt out of information disclosure to third parties?)

	0	1
50 Largest	22	25
Remaining Institutions	64	24

If the answer to Q21 is “No,” skip to Question 23; if “Yes” answer the following.

Q22: Can the consumer exercise this choice online?

	0	1
50 Largest	24	1
Remaining Institutions	23	1

Q23: Does the site provide any information about the limitations on, or the circumstances under which, information about consumers will be disclosed to third parties?

	0	1
50 Largest	0	47
Remaining Institutions	0	88

Q24: Does the site say that if consumer information is provided to a third party either: (1) the third party will be required to keep the information confidential; or (2) the third party will adhere to privacy principles acceptable to the financial institution? `

	<u>No</u> 0	<u>Yes</u> 1
50 Largest	18	29
Remaining Institutions	35	53

Access

Q25: Does the site say that consumers may ask questions regarding information collected about them?

	<u>No</u> 0	<u>Yes</u> 1
50 Largest	35	13
Remaining Institutions	114	33

Q26: Does the site say that consumers may review information collected about them?

	0	1
50 Largest	47	1
Remaining Institutions	145	2

Q27: Does the site say how consumers may proceed to correct any errors in the information collected about them?

	0	1
50 Largest	36	12
Remaining Institutions	110	37

Security

Q28: Does the site say anything about the steps taken to provide security for information during online transmission between the customer and the financial institution?

	<u>No</u>	<u>Yes</u>
	0	1
50 Largest	4	44
Remaining Institutions	54	93

Q29: Does the site say anything about the steps taken to provide security for information while stored by the financial institution?

	0	1
50 Largest	11	37
Remaining Institutions	68	79

Contact Information

Q30: Does the site say how to submit a question about privacy?
(E.g. provide contact information)

	<u>No</u>	<u>Yes</u>
	0	1
50 Largest	37	11
Remaining Institutions	94	53

Q31: Does the site say how to complain about privacy?

	<u>No</u>	<u>Yes</u>
	0	1
50 Largest	47	1
Remaining Institutions	139	8

Instruction: Be sure you have not circled an answer for any question you were asked to skip. Next, be sure you have circled an answer for all the other questions in the survey, and that you have written in specific responses where appropriate. Place the completed survey document, together with the copies of the home page, privacy policy, and any information practice statements you have referred to, in the folder for this URL and go on to your next folder.

Appendix D Methodology

This appendix provides details of the methodology used in the Web site survey. It is divided into four main sections, each with subsections:

- (1) Sample design and selection
- (2) Data collection
- (3) Data validation and cleaning
- (4) Weighting and estimation

D.1. Sample Design and Selection

The final sample for the Web site survey was a stratified random sample of 364 Web sites. This section provides details on the design and selection of this sample.

D.1.1. Background

We selected a scientific sample (known as a probability sample) of Web sites that would allow us to make statistically valid inferences about the full universe of financial institution Web sites. The specific probability sample used is described in Section D.1.3.

To make the sampling frame (the list from which the sample of Web sites was selected) and analysis of the data as straightforward and easy to interpret as possible, we made the Web site, rather than the financial institution, the sampling unit and the unit of analysis. In a high percentage of cases there was a one-to-one correspondence between financial institutions and Web sites. However, some institutions had more than one Web site, and alternatively, other institutions shared a single Web site (sharing generally involved affiliated institutions within a holding company). Therefore, the target universe (or population) for the survey was all active Web sites associated with banks and thrifts. The sampling frame consisted of the most complete list of bank and thrift Web site addresses (URLs) that could reasonably be developed.

D.1.2. Development of the Sampling Frame

Because there was no comprehensive source of bank and thrift Web site addresses, we used a combination of sources to develop the sampling frame. These were as follows:

- (1) The Bankweb directory of financial institution Web sites (www.bankweb.com).
- (2) The FDIC's internal database of FDIC-supervised banks with Web sites.
- (3) The FDIC's internal database of insured institutions with transactional Web sites.
- (4) The OTS' internal database of thrift URLs based on TFR data.
- (5) The OCC's database of banks with Web sites developed in June 1998.
- (6) The FRB's internal database of member banks and holding companies with Web sites.

Some of the internal agency lists were developed from on-site examinations and/or off-site monitoring programs.

The merging of these sources generated a sampling frame of 2,276 bank and thrift URLs. Although we attempted to identify and delete duplicate listings, we discovered during the surfing phase that some duplicate listings remained. Therefore, we took additional measures to remove duplicates, which are described in Section D.3.3.

D.1.3. Initial Sample Design and Selection

The Web sites associated with the 50 largest institutions were included in the sample with certainty. These 50 certainty selections were identified as follows:

- (1) A list of the largest insured institutions (by asset size as reported as of December 31, 1998) was generated and used to identify the 50 largest institutions with Web sites.
- (2) Affiliated institutions that shared a common Web site were treated as duplicates and were replaced by the next largest institution until a total of 50 unique Web sites was obtained.
- (3) Institutions with wholesale designations under the Community Reinvestment Act regulations and institutions where the interagency team was unable to locate a Web site in May 1999 were excluded from the certainty stratum.

All Web sites in the sampling frame, other than the 50 that were selected with certainty, made up the noncertainty stratum. For the noncertainty stratum, we wanted to select a probability sample that would provide estimates with adequate precision for both the entire stratum population and for population subgroups that contained at least 25 percent of the bank and thrift Web sites in the stratum. We therefore selected a simple random sample of 600 bank and thrift Web sites from the noncertainty stratum -- a sample size that would provide a precision of ± 3.5 percentage points at the 95 percent confidence level for estimating a stratum population proportion that is about 50 percent. For a subgroup that contains 25 percent of the stratum population, the precision would be ± 7 percentage points at the 95 percent confidence level for estimating a subgroup proportion that is about 50 percent.

In total, we selected a stratified random sample of 650 URLs (50 certainty and 600 noncertainty bank and thrift URLs). In addition, we randomly selected a "reserve pool" of URLs so that sample replacements were available for sites identified as ineligible for the survey. Reasons for ineligibility included sites that were no longer active and sites that did not represent a financial institution. All random selections from the noncertainty stratum, including reserve pool selections, were made with equal probability, based on random number assignments.

After we deleted all ineligible sites and replaced them with sites from the reserve pool, and after we completed extensive data cleaning activities (described in Section D.3), the sample consisted of 651 Web sites.

D.1.4. Revised Sample Design and Selection

As a check on the quality of the survey data, an independent resurfing was conducted by the agencies for a sample of 122 of the 601 initially surfed Web sites from the noncertainty stratum (see Section D.3.2 for details). After comparing the responses from surfing and resurfing these 122 sites, we decided that all sample Web sites should be subjected to the same resurfing data verification process to ensure data quality.

We decided to reduce the sample to 364 Web sites (the 50 largest institutions plus 314 randomly selected sites from the noncertainty stratum). This would permit estimates of a 50 percent characteristic for the noncertainty stratum to within ± 5 percent with 95 percent confidence. Each of these Web sites was independently surfed a second time, and any differences between the two sets of surfing results were reconciled to develop the final data set.

The target final sample size therefore was 370 (320 plus the 50 largest institutions). The 320 bank and thrift sites that were retained for the final sample were selected as a random subsample from the 601 bank and thrift Web sites that were surfed for the initial sample. During the resurfing activity, six sites from the noncertainty stratum were dropped from the final sample because they could not be accessed during the resurfing period in July 1999, reducing the noncertainty sample size from 320 to 314. The loss of precision due to the reduction of the final sample size from 370 sites to 364 sites was minor.

The final sample of 364 Web sites still permits reasonably precise estimates to be made for subgroups. For a subgroup that makes up about half of the universe, a 50 percent characteristic can be estimated to within about ± 8 percent with 95 percent confidence. For a subgroup that makes up about one-third of the noncertainty stratum, the sample size would be about 100 sites. This would yield a 95 percent confidence interval of about ± 10 percent for estimating a 50 percent characteristic.

D.2. Data Collection

The survey instrument, which was developed by an interagency project team, is discussed in Section D.2.1. Surfers from all of the participating agencies collected the data during the initial data-collection period and the final data-collection period. The details of the data collection are given in Section D.2.2.

D.2.1. Survey Instrument

A working group of representatives from the participating agencies prepared the survey instrument.

The survey form that we used to collect the initial data in May 1999 included 31 questions (several questions had multiple parts). Before the resurfing was performed in July 1999, some of the questions, or parts of questions, were removed from the questionnaire. Because the initial surfing results suggested that the responses were either not reliable or not useful, by deleting these questions we improved the efficiency of data collection for the resurfing activity. The final survey form is provided in appendix C.

D.2.2. Collecting the Web Site Data

There were two data-collection periods for this survey. Initially, we collected data on 651 Web sites during the week of May 24-28, 1999. A few sites were surfed in early June during the data cleaning phase. The data-collection of the final sample of 364 sites took place during the week of July 26-30, 1999, except that the 50 largest institutions plus 67 other sites were resurfed somewhat earlier.

For both data-collection periods, the data-collection team collected the data based on surfing the sample Web sites. All members of the data-collection team attended a half-day training session on the use of the survey forms prior to beginning data collection. The training also covered basic surfing techniques.

The initial survey in May 1999 was conducted at the FDIC's L. William Seidman Center in Arlington, Virginia. The computers used were running on the Windows 95 Operating System with Service Pack 3, using a Netscape Navigator 4.01 browser. The computer monitor screens were 17 inch and the screen resolution was set at 800 x 600.

The surfers were randomly assigned Web sites from the sample pool. Once they accessed a Web site, the surfers were required to determine whether the site represented a legitimate financial institution and whether the site's content was directed at consumers. If the site met these criteria, the surfers then explored the entire Web site to answer the survey questions.

Surfers had approximately 15 to 30 minutes to review a Web site, although they had some flexibility, depending on the size and complexity of the site. The surfers were instructed to print out certain pages of the Web site, including the home page and any page that contained a privacy disclosure. Several project coordinators from the sponsoring agencies served as "proctors," answering questions and assisting with technical difficulties.

Data entry was performed on-site. At the end of each day, an electronic file of data was transmitted to a central computer at the FDIC's Division of Research and Statistics for compilation and review to identify response pattern errors. At the end of the data-collection process, the combined data file was subject to a comprehensive data cleaning process, described in Section D.3.3.

The final data-collection phase took place on July 26-30, 1999, at the OCC's headquarters in Washington, D.C. The computers used were running on the Windows 95 Operating System with Service Pack 2, using an Internet Explorer 4.01 browser. The computer monitor screens were 15 inch and the screen resolution was set at 800 x 600.

The final data-collection team included many of the project coordinators who had served as proctors during the initial data-collection phase and several individuals who were part of the original team of surfers. The resurfing of each of the 364 sites was conducted without any reference to the initial surfing results. Therefore, each of the 364 Web sites was surfed twice independently.

Some of the 364 sites were resurfed before the second data-collection period. The 50 largest institutions sites were resurfed at the FDIC during the preceding week by one of the surfers, and 67 of the sample Web sites were resurfed three weeks earlier as part of the data-validation process described in Section D.3.2. The two sets of surfing results for each of the 364 sample sites were reconciled at the end of the resurfing data-collection activity.

The final reconciled results were then keyed twice during the weeks of July 26-30 and the week of August 2-6, 1999, once by OCC staff and a second time (independently) by FDIC staff. There were differences in the keying for only 18 records; these differences were reconciled at

FDIC during the week of August 2-6, 1999. The reconciled data set was subjected to some final data cleaning to produce the final data set of 364 Web site records.

D.3. Data Validation and Cleaning

We performed some data validation during the initial data-collection phase, as described in Section D.3.1. In addition, we conducted an extensive procedure to verify surfing results for about 20 percent of the sites in the original sample of 651 Web sites, described in Section D.3.2. Section D.3.3 describes the extensive data review and cleaning activities we used.

D.3.1. On-Site Verification

To improve the accuracy of the data collected by the surfers during the initial data-collection phase (May 24-28, 1999) we ran an automated program against the surfing results data file on a daily basis to detect skip pattern errors (inconsistent responses based on the survey questionnaire). The skip pattern errors we detected were sent to the proctors for follow-up verification and correction. Any recurring errors identified during this verification process were brought to the attention of the surfers.

D.3.2. Independent Verification for a Subsample of 122 Records

In addition to the verification of the Web sites for the 50 largest institutions, as a check on data quality, we independently verified a sample of 122 (about 20 percent) of the 601 sample Web sites selected from the noncertainty stratum. These 122 were selected randomly from Web sites that might be more likely than others to have surfing errors (e.g., those for which the surfer indicated that the site did not have any privacy disclosures).

We conducted this resurfing in early July 1999 and compared the resurfing results for these 122 sites to the original surfing results. The differences between results were reconciled to identify the correct responses, recognizing that some of the differences might be the result of changes in the content of the Web sites between late May and early July.

As a result of this check on data quality for these 122 sites, the agencies decided all sample Web sites should be verified to ensure accurate results. As discussed in Section D.1.3, this decision resulted in the resurfing of all 364 Web sites included in the final sample.

D.3.3. Data Review and Cleaning

The data review and cleaning process consisted of the following three activities: (1) checking the sample responses for errors in response (skip) patterns or other types of inconsistencies, (2) removing duplicates from the sampling frame, and (3) verifying that all of the frame and sample cases were accounted for. Each of these activities is discussed below:

Checking for response pattern errors and inconsistencies.

We used a Statistical Analysis System (SAS) program to check responses for “skip pattern” errors during the initial data- collection phase in May 1999. The program was applied to the survey data files completed each day so that most of the skip pattern errors could be corrected

during the data collection phase. This approach also allowed rapid feedback to be given to the surfers regarding any recurring skip pattern problems.

After collecting the data for the initial sample, we reviewed the survey instrument to identify response patterns that were inconsistent between questions or parts of the same question. We identified three such patterns. We checked the responses for all 651 sites in the initial sample to identify those with one or more of these three inconsistencies. All inconsistencies identified were resolved by resurfing the site (if necessary) to determine the correct response.

After the final sample of 364 Web sites was resurfed, verified, and reconciled, a final check for skip pattern errors or inconsistencies was carried out. Some errors were identified; these were corrected by resurfing the appropriate sites, as needed.

Removing duplicates from the sampling frame.

We used automated methods to remove duplicates from the original sampling frame prior to sample selection. This effort led to some deletions, but a number of duplicates remained, some of which could not be easily identified without surfing the Web sites.

Duplicates identified in the sample did not pose a major problem in terms of data quality. If a Web site was surfed twice, the two sets of answers were compared, and any differences were reconciled (re-surfing the site when necessary). However, duplicates in the sampling frame were a concern since frame duplicates would give some Web sites a multiple chance to be selected. We addressed this problem by conducting a search of the sampling frame for duplicate Web sites. We matched the listings by certificate (cert) number, URL, and name, and then surfed pairs of URLs that looked like they might lead to the same Web site. Forty-one duplicates were identified in this process and one triplicate, as well as seven duplicates of the Web sites for the 50 largest institutions.

For each duplicate (or the triplicate) identified, one listing was randomly chosen to remain in the frame. If a deleted listing corresponded to a sample selection, the listing was removed from the sample. To the extent that all of the duplicates were identified, the Web sites in a particular stratum each had an equal chance of being selected.

Verifying that all of the frame and sample cases were accounted for.

As a final check of the initial sample, we matched the sampling frame to the sample file to be sure that each listing in the sampling frame was accounted for. Specifically, we checked each Web site in the sample file to be sure that it was in the sampling frame file, and that it was identified as a sample selection. Also, we checked each site selected for the sample from the frame to be sure that it was in the sample file, or that it was classified as ineligible. This process led to a number of corrections in terms of cert numbers and URLs.

We made the same check for the final sample of 364 sites. We checked the sample file to be sure that all of the sites that were selected for the final sample were actually in the final sample or were classified as ineligible. This check led to a number of corrections of cert numbers and URLs that had been keyed incorrectly during data entry.

D.4. Weighting and Estimation.

The results of the Web site survey have been presented throughout this report in tables that give percentages corresponding to various Web site outcomes (e.g., the proportion of interactive Web sites that provide a privacy policy statement). Some estimates are given for the full universe of Web sites (or for a universe subgroup), while others are given for the 50 largest institutions. Estimates for the 50 largest institutions are simple percentages. However, estimates for the full universe of Web sites (or for universe subgroups) are weighted estimates that take into account the sampling rates that were applied for the certainty and noncertainty strata.

The derivation of appropriate weights for calculating valid estimates of percents for the full universe (or for universe subgroups) is given in Section D.4.1. The estimation formula used to compute these estimates is presented in Section D.4.2.

D.4.1. Derivation of Sample Weights.

The weight that is appropriate to reflect varying probabilities of selection, referred to as the sampling weight, is the reciprocal of the probability of selection. For the design used for the Web site survey (a stratified random sample with only two strata), the reciprocal of the probability of selection is simply the number of Web sites, N_h , in the universe in a stratum divided by the number of Web sites, n_h , in the sample for that stratum. Therefore, the weight, w_{hi} , assigned to the i^{th} sample unit selected from stratum h is given as follows:

$$w_{hi} = \frac{N_h}{n_h}.$$

Both the universe and sample counts that go into the above equation should be counts of eligible Web sites. The eligible sample counts are known for both strata (i.e., 50 and 314). However, the eligible universe count is unknown for the noncertainty stratum. Therefore, a valid estimate of the universe count for the noncertainty stratum was derived from the sample results. This was obtained by multiplying the initial noncertainty sampling frame count by the eligibility rates found in both the initial sample and in the resurfing sample for the noncertainty stratum.

The estimated universe count for the noncertainty stratum was 1,820. Therefore, using the above equation, the sampling weights for the two strata are as follows:

$$\text{50 largest institutions (certainty stratum): } W_{hi} = \frac{50}{50} = 1.00.$$

$$\text{Noncertainty Stratum: } W_{hi} = \frac{1820}{314} = 5.80.$$

D.4.2. Estimation

The appropriate estimate of a proportion, p , for either the entire universe or for a subgroup, of units that have some characteristic is computed as the ratio of the sum of the weights of the sample units that have the characteristic divided by the sum of the weights of all units in the sample. If the estimate is for a population subgroup, then both the sum of weights in the

numerator and in the denominator are restricted to members of the subgroup. The formula for this estimator is the following:

$$p = \frac{\sum_{i=1}^k w_i}{\sum_{i=1}^n w_i},$$

where

w_i = the weight assigned to the i^{th} Web site in the sample (or sample subgroup),

n = the number of Web sites in the sample (or sample subgroup),

k = the number of the n Web sites that have the specified characteristic.

All the estimates of universe percents that appear in this report, except for those pertaining to the 50 largest institutions banks and thrifts, were computed from the above formula.

In addition to the point estimates of proportions, all tables in appendix A include 95 percent confidence intervals. These confidence intervals are based on the hypergeometric distribution, which provides more accurate confidence intervals than would be obtained from the normal approximation method. For a description of this method, see *Theory of Sample Surveys*, by M. D. Thompson, Chapman and Hall, 1997, Section 3.2.