
Lawyering in the Digital Age / Fall 2016
Legal Services Corporation Project

Columbia Law School
New York, NY

Optimizing Online Outreach for Legal Services Organizations

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Note from the Authors on Navigating this Report: we have included internal hyperlinks throughout this Report whenever we reference another Section, so that the readers can simply click on the hyperlink – rather than scroll up or down – to quickly move to the particular Section. To return to the Section you were on after viewing a hyperlink: If using a PC, simply right click and select, “Previous View,” or press “ALT + Left Arrow” on the keyboard. On Macs, the keyboard combination is “Command + Left Arrow”.

EXECUTIVE SUMMARY

The Legal Services Corporation (LSC), through its Technology Initiative Grant program, is using technology to narrow the “justice gap.” In 2011, LSC convened a summit with a mission to, “explore the potential of technology to move the United States toward providing some form of effective assistance to 100% of persons otherwise unable to afford an attorney for dealing with essential civil legal needs.”¹ One component of that effort is encouraging LSC affiliates to create websites, “...accessible through computers, tablets, or smartphones that provide sophisticated but easily understandable information on legal rights and responsibilities, legal remedies, and forms and procedures for pursuing those remedies.”² This goal grows out of the recognition that increasingly, people, across demographics, turn to the internet as a primary source of information and assistance.

This Report tracks current, relevant trends in internet and technology use as a backdrop to an in-depth examination of Google Analytics data generated by a sampling of prominent LSC-affiliated websites. Through this Report, we suggest practices aimed at optimizing online outreach to LSC’s target audience. In particular, we examine how to reach three groups that LSC has identified as at risk of being unable to find or use online resources: *non-native English speakers*, *low-literacy native English speakers*, and the “*tech-averse*”.

We are grateful to Glenn Rawdon, Program Counsel for Technology at LSC, for his guidance and support. In addition, we wish to acknowledge the cooperation of the LSC grantees who graciously provided the website analytical data that greatly informed our work.

Section 1 of this Report identifies the parties, our mission, and methods. The Legal Services Corporation (“LSC”) is an independent nonprofit that provides financial support to civil legal aid organizations that serve low-income Americans.³ LSC is the single largest organization of its kind. LSC is deeply invested in “Maximiz[ing] the availability, quality, and effectiveness of the

¹ Legal Services Corporation, *Report of The Summit on the Use of Technology to Expand Access to Justice*, p. 1; December 2013. (Herein, “LSC Technology Summit Report”)

² LSC Technology Summit Report, p. 2.

³ <http://www.lsc.gov/about-lsc>

services its grantees provide to eligible low-income individuals,”⁴ especially through digital technology. Columbia Law School’s *Lawyering in the Digital Age Clinic* (“the Clinic”),⁵ working with Glenn Rawdon, studied a rich new source of data to understand how to maximize targeted online interaction. The Clinic sought to provide a foundation for new and innovative research into online outreach optimization.

Section 2 describes the goals for the project: to identify common issues in online outreach, and brainstorm how best to address the issues. Here, we have pulled together current information regarding national trends in online access, with an emphasis on online use in low-income communities. The digital divide has morphed in recent years, adding the smartphone as a new access point for LSC’s target population to obtain essential information and civil legal services.

However, there are many issues that currently impede online communication with the target audience, including website design, language options, and readability. The Clinic team studied statistical data related to these issues by tracking national online behavioral trends for language use and reading comprehension and cross-referencing its findings with Google Analytics user data from six prominent LSC-funded websites. The Report’s intended impact is to provide a current picture of LSC’s online target audience, as well as guidelines for effective online outreach that can be implemented now. In so doing, we compiled a list of implementable changes in the short term, as well as issues that are ripe for further research.

Section 3 outlines our research of relevant national behavioral trends in internet use, device preference, and preferred language of LSC’s target groups. Communicating online has become crucial in expanding civil legal services to the broadest audience: approximately 84% of American adults used the internet in 2015.⁶ Additionally, mobile-friendly websites will make a significant difference in reaching the target population because internet use through smartphones is rapidly increasing.⁷

⁴ <http://www.lsc.gov/about-lsc/who-we-are/strategic-plan>.

⁵ <http://web.law.columbia.edu/clinics/lawyering-in-the-digital-age-clinic>

⁶ Andrew Perrin and Maeve Duggan, *Americans’ Internet Access: 2000-2015*, Pew Research Center; June 26, 2015.

⁷ ⁵ Aaron Smith et. al., *U.S. Smartphone Use in 2015*, Pew Research Center; April 1, 2015.

Furthermore, widespread communication in the U.S. requires communicating in languages other than English. The number of Americans who communicate in languages other than English has consistently increased over the past three decades, and an increasing percentage of the population uses no English at all.⁸ Finally, successful communication requires comprehensible information. LSC programs face a daunting array of resource constraints. In order to maximize the efforts that LSC programs put towards online outreach, it is essential that users engage with online content. Attention to the reading level of the text, as well as effective use of non-textual content can help ensure that lay-focused websites achieve the intended result.

[Section 4](#) provides insights into the behavior of online users of our sample sites. We sorted the sample site data that we accessed through Google Analytics to a dataset of 50,000 data points. The dataset was based on averages of over 9 million individual user sessions from six LSC grantee sites operating in six different states. Due to the fast-paced nature of the internet, we mostly concentrated on the data from the past year (starting from Sep 30, 2015), and occasionally on data gathered over the past three years, in order to establish trends (starting from Sep 30, 2013).

The following are a few examples of the kind of observations suggested by the data: Users seemed most engaged with text written between fourth- and fifth-grade comprehension levels. Non-native English speakers found our sample LSC grantee websites less frequently than demographic trends would suggest. Even fewer non-native English speakers found the sample sites' online intake systems. Visitors also navigated our sample sites using mobile devices such as smartphones and tablets almost as often as they use desktop/laptop computers. The data also highlights areas that seem worthy of further investigation (See also [Section 6.2](#)).

[Section 5](#) provides a substantial set of practical recommendations for optimizing online outreach to LSC's target audience, particularly non-native English speakers, low-literacy native English speakers, and the "tech-averse." [Section 6](#) summarizes questions addressed by our research and identifies areas that merit further inquiry.

⁸ Camille Ryan, *Language Use in the United States: 2011*, American Community Survey Reports; August 2013.

⁹ <http://openadvocate.org/writeclearly/>

SECTION 1: INTRODUCTION

1.1 STAKEHOLDERS

1.1.1 Legal Services Corporation

Legal Services Corporation (“LSC”) provides grants to 134 unique non-profit organizations across the United States, who provide free civil legal services to low-income Americans and are located throughout the 50 states, the District of Columbia, and the United States’ territories. LSC-funded programs help people who live in households with annual incomes at or below 125% of the federal poverty guidelines – in 2015, \$14,713 for an individual, \$30,313 for a family of four.¹⁰ LSC-funded programs helped approximately 1.8 million people in 2015.¹¹

To date, LSC’s Technology Initiative Grants (“TIG”) program, founded in 2000, has provided more than \$53 million to fund more than 647 projects.¹² In 2015, LSC provided \$4,203,977 to 36 projects in 25 states and territories.

LSC grantees in several states have developed websites with online applications that simplify clients’ search and application for legal services. According to *2015 LSC By the Numbers*, LSC grantee websites received approximately 17,701,888 unique visitors in 2015. There were 1,569,929 downloads of self-help legal forms and printed materials.

2015 Client Age Categories by Race/Ethnicity ¹¹					
Race/Ethnicity	Age Under 18	Age 18 - 35	Age 36 - 59	60 and Over	Grand Total
White, non-Hispanic	4,057	115,313	149,990	64,993	334,353
African American, non-Hispanic	3,516	74,979	103,193	33,044	214,732
Hispanic	4,499	53,982	59,036	17,971	135,488
Asian or Pacific Islander	240	7,410	10,352	5,165	23,167
Native American	407	6,736	8,678	3,803	19,624
Other Race	1,577	10,464	12,148	3,853	28,052
Total	14,296	268,884	343,397	128,839	755,416

Figure 1

LSC grantees serve a diverse population across the United States. According to *2015 LSC By the Numbers* report, LSC grantees served clients across several racial/ethnic classifications:

¹⁰ <http://www.lsc.gov/about-lsc/who-we-are>.

¹¹ Legal Services Corporation, *2015 LSC By The Numbers*.

¹² <http://www.lsc.gov/grants-grantee-resources/our-grant-programs/tig>

44.3% of clients identified as White, non-Hispanic; 28.4% identified as African- American, non-Hispanic; 17.9% identified as Hispanic; 3.1% identified as Asian or Pacific- Islander; 2.6% identified as Native American; and 3.7% identified as Other Race. Regarding age, 1.9% were under 18 years old, 35.6% were 18-35 years old, 45.5% were 36-59 years old, and 17.0% were 60 and over.

1.1.2 Lawyering in the Digital Age Clinic

Columbia Law School's Lawyering in the Digital Age Clinic, founded in 2001, "explores the impact of technology on law practice and the profession through client work and collaborative projects with major public interest legal organizations and prominent jurists."¹³ Under the direction of professors Mary Marsh Zulack, Brian Donnelly, and Conrad Johnson, clinic students learn how to use technology to augment traditional lawyering tasks and acquire the new technology-related skills that are transforming law practice. Clinic students work shoulder-to-shoulder, both in person and online, with lawyers from a wide range of public-interest organizations and members of the judiciary.¹⁴ Professor Johnson, recognized nationally as a leader in innovative legal education, access to justice, technology in law practice and diversity in legal education, supervised the research team that produced this Report. The team members are Corben Green, Roope Marttila, Wendell Ramsey, and Yu Jin Yi.

1.2 THE PROJECT

1.2.1 Improve Online Outreach Nationally

Glenn Rawdon, Program Counsel for Technology at LSC, was our point person for this project. Glenn explained that LSC recognized the increasing need for its grantees to provide information and support online to clients in their local communities. He indicated that LSC wanted to create a list of best practices to expand online outreach generally, with a particular focus on three potential client bases:

- Non-native English speakers;

¹³ <http://web.law.columbia.edu/clinics/faculty#johnson>

- Low-literacy English speakers; and
- The “tech-averse.”

Glenn asked our group to investigate the extent of the challenge and provide LSC with ideas and resources to help achieve its goals. He explained that LSC wanted to reach people with different languages/cultural norms, education levels, and access to technology. Glenn informed us of the LSC’s collaborative work through The Summit on the Use of Technology to Expand Access to Justice (“Summit”). The Summit’s mission, outlined in their December 2013 report, was, “to explore the potential of technology to move the United States toward providing some form of effective assistance to 100% of persons otherwise unable to afford an attorney for dealing with essential civil legal needs.”¹⁴ The Summit’s mission served as a useful context for our Report and Glenn’s direction that we assist LSC to ensure that it helped those in need find the legal information they search for.

1.2.2 Our Contribution

Through our research, the project team sought to bring together in one report, national trends that affect online outreach, current trends in site traffic among a sampling of prominent LSC-affiliated websites and proposed recommendations for online outreach to underserved populations. An extensive review of Google Analytics data from our sample sites viewed against the backdrop of national trends and current user-experience research substantiated our conclusions and directed many of our recommendations. We aimed to provide an innovative way to both *understand* clients’ behavior and *adapt* to it.

To the extent that this approach is helpful, we encourage expanded use of site analytics for sculpting content on LSC-affiliated websites to meet the specific needs of target audiences. While data culled from individual websites is illuminating, contrasting that information with analytics gathered from an in-depth analysis of multiple LSC grantee sites provides additional insight. For that reason, we undertook an aggregated cross-site analysis of prominent legal services websites using Google Analytics so that LSC online content providers can now use the data in this report as a meaningful point of comparison.

¹⁴ Legal Services Corporation, *Report of The Summit on the Use of Technology to Expand Access to Justice*, December 2013.

SECTION 2: PROJECT GOALS

2.1 IDENTIFY THE COMMON ISSUES IN ONLINE OUTREACH

Our research highlights the fact that the divide of access to online resources has been transformed drastically. This has created new issues for reaching LSC’s target audience. LSC recognizes that, “technology can be a powerful tool in narrowing the justice gap—the difference between the unmet need for civil legal services and the resources available to meet that need.”

¹⁵Online outreach can expand access to high-quality, free information and services. The benefits of expanding technologically are many: providing services online makes information free, in-time, and available almost everywhere.

We recognize that all LSC grantees do impactful work in their respective communities within an environment of overwhelming demand, constrained resources and shifting priorities. Such conditions necessarily force organizations into making tradeoffs in terms of where they spend valuable time, effort and resources. It is therefore no surprise that many organizations have not yet optimized their web presence. By addressing issues including web design, readability, non-English language options, and browser compatibility, we aim to make it easier for LSC-affiliated offices to achieve their outreach goals and make their expertise useful and available to their target audience.

2.2 ADDRESS ISSUES IN ONLINE OUTREACH

In considering best practices, we studied behavioral trends regarding language and internet use nationally and in the six states in which our sample sites are located. We then studied the same trends for visitors of our six sample sites. We compared our findings in order to discover

¹⁵ Id.

narrowly tailored solutions and suggestions that would be uniquely valuable to legal aid organizations facing specific outreach challenges. Along the way, we kept track of the holes in our data and research so that future projects could refine and expand on our work.

By their very nature, best practices are not necessarily groundbreaking or novel, but we recognize that with the many constraints LSC funded organizations are facing, it can be difficult to stay on top of all of the research and shifting attitudes toward different ideas regarding online outreach. Moreover, the LSC-affiliated sample sites we studied made use of many helpful practices and techniques that we pass on here so that a broader audience might gain from great work that has already been done by LSC.

SECTION 3: FRAME THE OUTREACH ISSUES

3.1 NATIONAL BEHAVIORAL TRENDS

Nationally, the internet is where most people turn first to seek essential information. This puts a premium on communicating about legal issues and available services effectively. It also represents a great opportunity, because the internet is a relatively cost-free tool for disseminating information widely. In this section, we pull together national trends in internet use and language use as references for our empirical findings and recommendations.

3.1.1 Internet Use Across the Nation

Internet use at home is rapidly becoming universal in the United States and there is no foreseeable end to this trend. Providers of civil legal services can no longer correctly assume that a high percentage of potential clients will not search for resources online. According to the Pew Research Center's *Americans' Internet Access: 2000-2015*, 84% of American adults used the internet in 2015.¹⁶ Per the U.S. Census Bureau's *Computer and Internet Use in the United States: 2013*, in 2013, approximately 74% of households in the United States reported having a subscription to an internet service provider.¹⁷ Approximately 51% of limited English-speaking households reported internet use (See Figure 2 below).

¹⁶ Andrew Perrin and Maeve Duggan, *Americans' Internet Access: 2000-2015*, Pew Research Center; June 26, 2015.

¹⁷ Thomas File and Camille Ryan, *Computer and Internet Use: 2013*, American Community Survey Reports; November 2014.

Figure 2

Computer and Internet Use by Individual Characteristics: 2013

(In thousands. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www)

Characteristics	Total individuals	Lives in a house with a computer			Lives in a house with Internet use	
		Total	Desktop or laptop computer	Handheld computer	With some Internet subscription ¹	With high-speed Internet connection ¹
Total	308,099	88.4	83.0	71.0	79.0	78.1
Age						
0–17 years	73,371	92.2	85.1	80.1	81.2	80.6
18–34 years	69,892	92.7	85.5	81.6	81.2	80.7
35–44 years	39,854	92.5	87.1	79.8	83.3	82.7
45–64 years	81,825	88.3	84.5	66.9	80.6	79.6
65 years and older	43,157	71.0	68.3	37.8	64.3	62.4
Race and Hispanic origin						
White alone, non-Hispanic	192,745	90.1	86.5	71.5	82.5	81.6
Black alone, non-Hispanic	37,055	81.9	72.5	65.7	67.3	66.6
Asian alone, non-Hispanic	15,524	95.3	93.2	82.5	89.9	89.3
Hispanic (of any race)	52,992	84.3	74.6	68.5	71.1	70.2
Sex						
Male	150,750	88.7	83.3	71.7	79.4	78.5
Female	157,349	88.0	82.6	70.3	78.5	77.6
Region						
Northeast	54,235	89.5	85.5	71.1	82.5	81.7
Midwest	65,772	88.5	83.3	69.6	79.0	77.9
South	115,407	86.7	80.3	70.1	75.9	75.0
West	72,685	90.1	85.0	73.5	81.2	80.4
Disability						
With a disability	38,486	73.9	68.7	48.3	63.8	62.5
Without a disability	269,613	90.4	85.0	74.2	81.1	80.3
Total civilians 16 years and older	242,226	87.4	82.5	68.5	78.4	77.5
Employment status						
Employed	143,978	92.7	87.8	77.9	84.1	83.3
Unemployed	13,104	87.1	79.5	68.7	74.2	73.4
Not in civilian labor force	85,144	78.3	74.0	52.6	69.5	68.1
Total 25 years and older	206,439	86.4	81.8	66.3	77.9	76.8
Educational attainment						
Less than high school graduate	26,914	66.1	57.6	45.4	53.7	52.6
High school graduate (includes equivalency)	56,974	79.9	73.8	55.1	69.7	68.3
Some college or associate's degree	60,527	91.2	86.8	70.7	82.4	81.4
Bachelor's degree or higher	62,025	96.3	94.6	81.5	91.5	90.8

¹ About 4.2 percent of all households reported household Internet use without a paid subscription. These households are not included in this table.
 Note: Handheld computers include smart mobile phones and other handheld wireless computers. High-speed Internet indicates a household has Internet service type other than dial-up alone.
 Employment status estimates exclude active duty members of the armed forces.
 For a version of Table 2 with margins of error, please see Appendix Table B at www.census.gov/hhes/computer/.
 Source: U.S. Census Bureau, 2013 American Community Survey.

Approximately 77% of households with income less than \$30,000/year reported using the internet.¹⁸ According to Pew Research Center's *Americans' Internet Access: 2000-2015*, when divided by age groups, the percentages of internet users in 2015 were as follows: 96% of those 18-29 years old were users, 93% of those 30-49 years old were users, 81% of those 50-64 years old used the internet, and 58% of those 65 years old or older were users. The

¹⁸ Id.

percentages of users in 2015, when divided by education level, showed gaps similar to those by age group: 66% of participants with less than a high school education and 76% of high school graduates used the internet, while 90% of those with some college education and 95% of those with at least a college education were users. In short, almost all young people and college-educated people use the internet. Fewer seniors and the relatively less-educated use the internet, yet a substantial majority of people in those groups reported using the internet. Regardless of classification, people are using the internet more than ever.

However, while internet use has become pervasive, there are still large groups who use the internet less frequently. Moreover, some of those who use the internet do not always use it to its full advantage. User comfort level with technology impacts how people interact with websites. National studies have demonstrated that most adults, especially the older population, low-income adults, and the relatively less educated who use the internet experience discomfort when doing so.

According to Pew Research Center's 2016 report, *Digital Readiness Gaps*, 52% of adults who participated in a national survey about comfort with digital technology considered themselves "relatively hesitant" to use the internet, while 48% of adults identified as "relatively more prepared."¹⁹ The "relatively hesitant" classification contains a range of three subgroups: "the unprepared," who do not use the internet for learning and lack confidence in their computer skills (14%); "traditional learners," who have technology but are not as likely to use the internet for pursuing learning (5%), and "the reluctant", who have relatively higher levels of digital skills but low use of the internet for learning (33%).

The "relatively more prepared" classified themselves on a continuum that included, "cautious clickers," i.e., those who have high levels of confidence in their online abilities but are less familiar with online learning terms²⁰ (31%); or "digitally ready," i.e., those who have technology and are confident about their digital skills (17%).²¹ These stats highlight the baseline reality that internet users approach online engagement with varying skill sets, confidence, and comfort

¹⁹ John B. Horrigan, *Digital Readiness Gaps*, Pew Research Center; September 20, 2016.

²⁰ In its *Digital Readiness Gaps* report, the Pew Research Center asked its survey takers how often they used the internet for online learning. Questions included how familiar each person was with terms used in current online learning materials.

²¹ *Id.*

levels. It is therefore critical that online content providers do what they can to help all intended users to navigate online content successfully. The stats also validate LSC's aim to tailor its recommendations to the least common denominator for all target users, in order to better help those who are less able to help themselves find legal resources.

Figure 3

Demographics: Five groups

% of U.S. adults

	Digitally Ready (17% of adults)	Cautious Clickers (31% of adults)	The Reluctant (33% of adults)	Traditional Learners (5% of adults)	The Unprepared (14% of adults)
Gender					
Male	49	50	53	43	42
Female	51	50	47	57	58
Parents of minor children					
Parents	37	30	26	30	25
Non-parents	63	70	74	70	75
Race/Ethnicity					
White	65	68	62	53	65
Black	12	11	12	17	10
Hispanic	13	9	20	21	18
Age					
18-29	25	28	20	14	8
30-49	48	38	28	33	24
50-64	20	22	27	36	33
65+	6	11	24	15	33
Household Income					
Under \$30K	22	23	42	36	42
\$30K to \$50K	16	19	19	13	17
\$50K to \$75K	16	13	11	13	12
\$75K and over	38	37	17	27	16
Education					
High school grad or less	19	29	55	41	55
Some college	30	38	28	29	28
Bachelor's degree or more	51	33	16	30	16
Geography					
Rural	16	15	20	17	17
Urban	39	35	33	39	33
Suburban	45	50	47	44	50

Source: Survey conducted Oct. 13-Nov. 15, 2015.

*Digital Readiness Gaps-

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Low-income Americans expressed higher levels of discomfort and unpreparedness regarding internet use. According to *Digital Readiness Gaps*, 42% of participants that identified as “the reluctant” reported living in homes with household incomes under \$30,000, compared to 42% of “the unprepared,” and 36% of “traditional learners.” Similarly, participants who had at most a high school education represented 55% of “the reluctant,” 55% of “the unprepared,” and 41% of “traditional learners. This is important because it highlights the need to make online resources as user-friendly as possible to encourage potential clients to engage with your website.

3.1.2 Smartphone Use Across the Nation

The rate of internet use on-the-go has also risen rapidly over the last 5-10 years. Smartphone usage in the United States has had a unique effect on the digital divide: smartphone browsers have provided a new point of access to the internet to anyone that can obtain a compatible handheld device. For low-income Americans, smartphones are a relatively affordable means to accessing the internet, often more affordable than home desktops and laptops.

Indeed, sometimes smartphones are their only way to access the internet. This argues for creating web content that is mobile-compatible. The LSC Technology Summit Report emphasized the need to “[take] advantage of mobile technologies to reach more persons more effectively”²² because it recognized the impact mobile technologies will have on closing the justice gap.

Young Adults, Non-Whites, Lower Income Americans are Especially Dependent on Smartphones for Online Access

% of American adults in each group who have a smartphone but lack broadband at home, or have limited options for online access other than their cell phone

	% who have a smartphone and...		Total “Smartphone- Dependent”*
	Do not have broadband at home 10%	Have few access options other than cell phone 15%	
All adults	10%	15%	7%
Male	10	12	5
Female	11	18	8
18-29	20	25	15
30-49	11	16	6
50-64	6	11	4
65+	4	7	2
White, non-Hispanic	7	12	4
Black, non-Hispanic	21	19	12
Hispanic	17	23	13
HS grad or less	15	19	9
Some college	10	16	7
College+	4	7	2
Less than \$30,000/yr	19	24	13
\$30,000-\$74,999	8	14	5
\$75,000 or more	3	5	1
Urban	12	17	8
Suburban	9	14	6
Rural	11	14	7

Pew Research Center American Trends Panel survey, October 3-27 2014. **Smartphone dependent* users are those who own a smartphone but have no broadband at home, and have limited access options beyond their cell phone.

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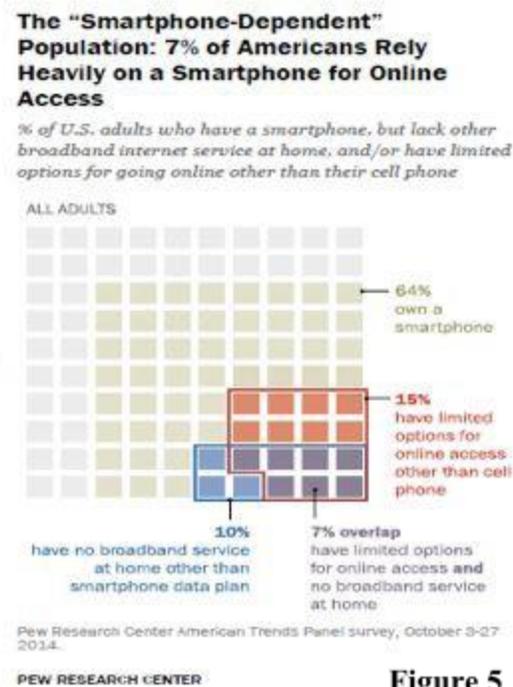
Figure 4

²² Legal Services Corporation, *Report of The Summit on the Use of Technology to Expand Access to Justice*. December 2013.

In 2015, 64% of American adults owned a smartphone.²³ For LSC offices in particular, it is important to note that 7% of adults were “smartphone dependent” in that they had limited options for online access and no broadband service at home (Figure 5).²⁴ This has obvious significance for LSC in that the target audience for LSC grantees’ websites typically has severely limited household incomes. In 2015, approximately 13% of Americans with annual household incomes of less than \$30,000 were smartphone-dependent. This should encourage legal services organizations to design websites that are easily viewed on the mobile platforms on which many low-income people are dependent.

U.S. Smartphone Use in 2015 also provided insight into the logical conclusion that smartphone browsers are used for a wide range of functions. The high-frequency use of smartphone browsers, however, presents a different problem: for most

Americans, smartphone data is limited and overuse is costly. Smartphones are not simply recreational or informal tools. Even users who can access the internet through devices other than their smartphones still use their smartphone browsers for more than recreational/informal activities. In 2015, 23% of smartphone owners nationally reported having had to cancel or suspend their service in the past due to financial constraints. Along with lower-income users, African Americans and Latinos are nearly twice as likely as whites to have suspended or cut off their smartphone service, and younger smartphone owners are substantially more likely to have done so compared with older adults. This reinforces the necessity of making information viewed on smartphone browsers easily and quickly accessible in order to save users’ time and money.



²³ Aaron Smith et. al., *U.S. Smartphone Use in 2015*, Pew Research Center; April 1, 2015

²⁴ *Id.*

3.1.3 Language Use Across the Nation

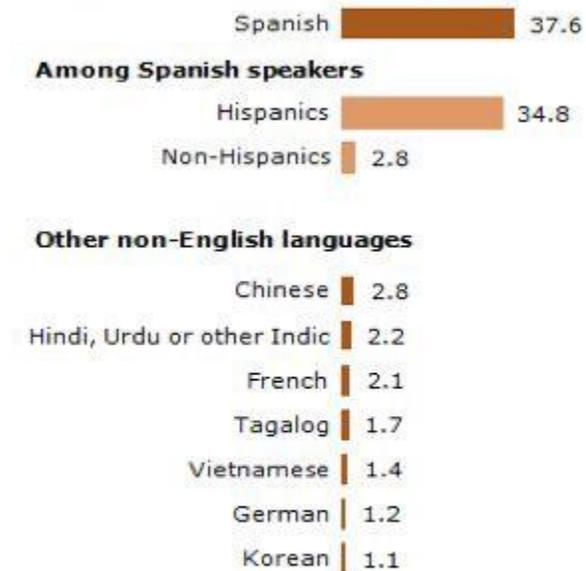
Any attempt to reach LSC’s target population online must necessarily include multiple language options. According to the U.S. Census Bureau’s *Language Use in the United States: 2011*, except for German and Italian, all of the top ten most popular non-English languages spoken in the U.S. saw their use increase since the 1980s.²⁵ It is worth noting that, with the overall increase in the number of non-native speakers of English in the US, came an increase in non-native speakers of English who speak English “less than very well.” According to Pew Research Center’s *U.S. Foreign-Born Population Trends*, about half of the U.S. immigrant population is not proficient in English,²⁶ which indicates that effective outreach in multiple languages is crucial. We must also acknowledge that an increasing number of Americans do not communicate in English at all.

Regarding those who consider themselves unable to speak English very well: in 2011, approximately 43.7% of Americans 5 years of age or older who spoke Spanish at home reported speaking English less than “very well.” Approximately 38.6% of those who spoke a language other than Spanish at home reported speaking English less than “very well.”²⁷ In 2011, approximately 7% of the population 5 years of age and older spoke no English at home.

Figure 6

Non-English Languages Spoken in U.S. Homes, 2011

(in millions among persons ages 5 and older)



Note: Chinese includes Mandarin and Cantonese. Hindi, Urdu or other Indic includes Bengali, Panjabi, Marathi, Gujarati, Sinhalese, Kannada, and other unspecified Indic languages. French includes Creole French. Only languages with more than one million speakers shown.

Source: Pew Research Hispanic Center analysis of the American Community Survey (1% IPUMS)

PEW RESEARCH CENTER

²⁵ Camille Ryan, *Language Use in the United States: 2011*, American Community Survey Reports; August 2013.

²⁶ <http://www.pewhispanic.org/2015/09/28/chapter-5-u-s-foreign-born-population-trends/>

²⁷ *Language Use in the United States: 2011*.

Approximately 9% of those who spoke Spanish at home spoke no English at home. The rate of no English being spoken at home rose to 9.7% for those who spoke Chinese at home.²⁸ In 2011, Spanish was the primary language spoken in approximately 37.6 million American homes (Figure 6). Chinese was the primary language in 2.8 million American homes. Hindi, Urdu, or other Indic languages were primarily used in 2.2 million homes. French was the language of choice in 2.1 million homes.

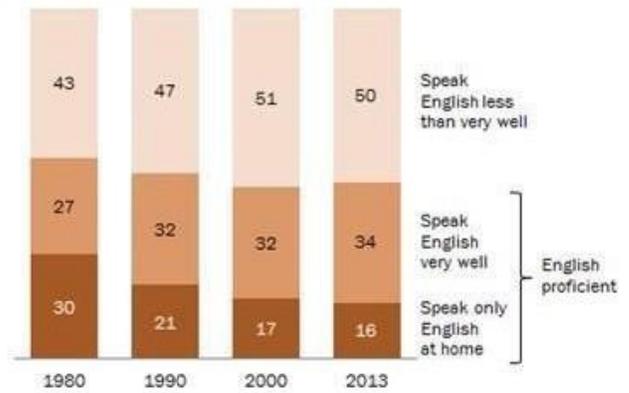
Korean was the primary language spoken in 1.1 million homes. With so many different primary languages in American households it is crucial to employ the plain language strategies discussed in [Section 3.2.1](#) to accommodate users who are less comfortable with English.

Because we presumed that most people in the U.S. who do not speak English are born outside of the country, we studied the number of foreign-born people who do and do not speak English. Surveys show that fewer foreign-born Americans speak only English

Figure 7

Half of Immigrants Proficient in English in 2013

% of foreign born ages 5 and older who ...



Percent of the Foreign-Born Population With High English-Speaking Ability by Period of Entry, World Region of Birth, and Educational Attainment: 2012

(Foreign-born population aged 25 and older. Data based on sample. For information on confidentiality protection, sampling error, nonsampling error, and definitions, see www.census.gov/acs/www/)

High school graduate or higher (teal line) Less than high school (green line)

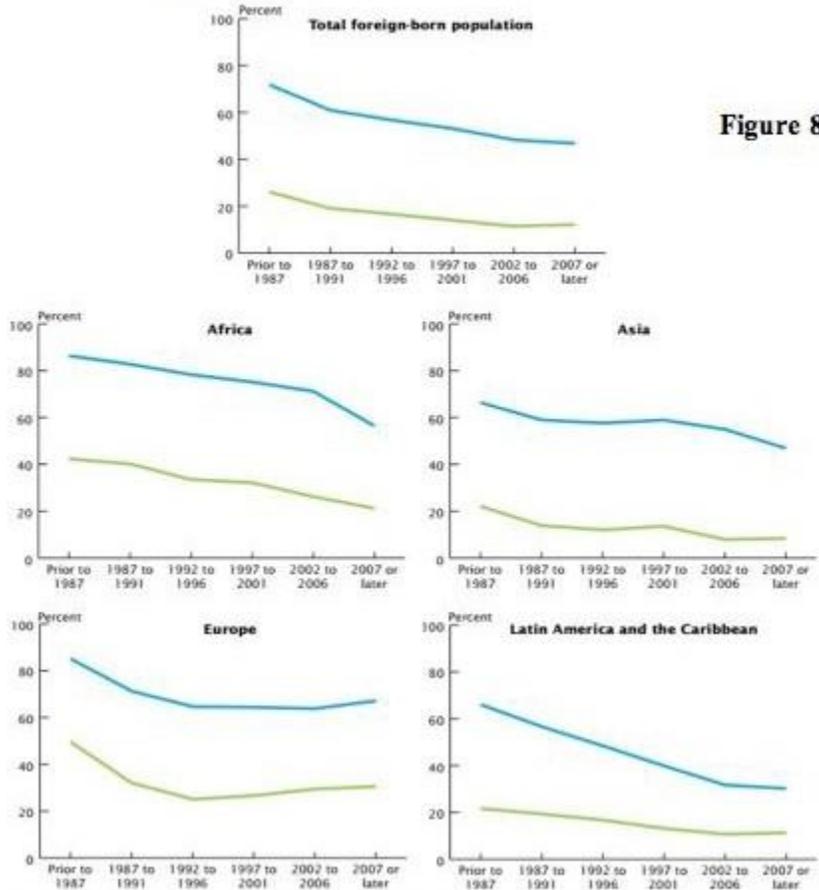


Figure 8

Note: High English-speaking ability refers to those who spoke only English at home or who spoke another language at home and spoke English "very well."
Source: U.S. Census Bureau, 2012 American Community Survey, 1-year estimates.

²⁸ Id.

at home than in the past, and that the number is steadily decreasing. This makes it even more important for websites to communicate in languages other than English.

The increasing use of languages other than English in America presents a compound problem for online communication: English may be absent in a person’s home and not spoken in the area where that person lives. There is a population in the U.S. identified as “linguistically isolated,” who live in areas where only their language of choice is spoken. Statistics show that the national trend in language use presents a two-fold concern for online outreach to foreign language users: (1) the number of American internet users who speak no English at home is steadily increasing, and (2) it is becoming less likely that anyone in the non-English- speaking population will find someone in

his/her neighborhood to help translate. According to U.S. Census Bureau’s *Analysis of the Linguistically Isolated Population in Census 2000*, 4.1% of all households were classified as linguistically isolated (U.S. Census Bureau defines a linguistically isolated household as one “in which all persons age 14 years” or older who speak a language other than English do not speak English “very well.”).²⁹

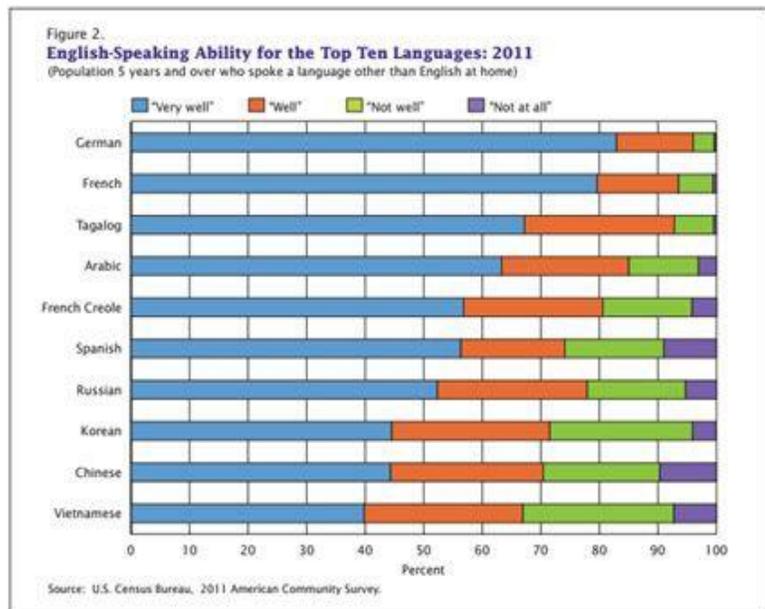


Figure 9

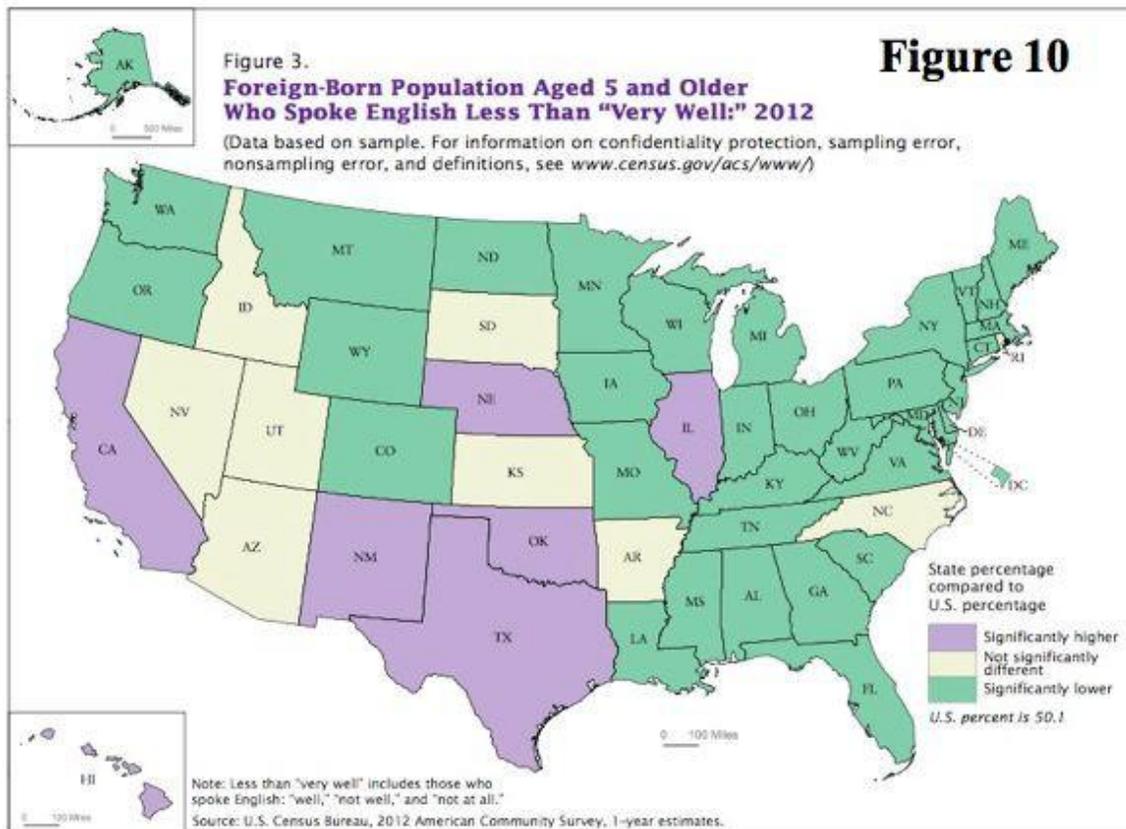
Per U.S. Census Bureau’s *Analysis of the Linguistically Isolated Population in Census 2000*, “Spanish-, Tagalog-, Chinese-, Korean-, and Vietnamese -speaking households represent the fastest growing non-English speaking components of this linguistic isolation universe.”³⁰ Here again, education is a defining factor. In 2000, an estimated 51.91% of linguistically isolated

²⁹ Frederic Allen Lestina, Jr., *Analysis of the Linguistically Isolated Population in Census 2000*, U.S. Census Bureau; September 30, 2003.

³⁰ Id.

households were led by someone with less than a high school education.³¹ Those led by someone with a high school education make up 18.82% of linguistically isolated households.

In 2000, the following five states had the highest percentage of linguistically isolated households included: California (approx. 9.65 percent), New York (approx. 7.74 percent), Texas (approx. 7.22 percent), Hawaii (approx. 7.00 percent), and New Mexico (approx. 6.49 percent). There were eight counties, all in Texas, wherein at least 25 percent of households were linguistically isolated.³² Figure 10 shows that linguistic isolation may be the biggest roadblock in the southwest region currently. More importantly, it highlights one type of behavioral statistic worth tracking when an organization seeks to communicate with as many state residents as possible, both online and offline. For this Report, the statistics for linguistic isolation make online information in multiple languages much more important, because it may be the only source of legal guidance for some visitors. This seems especially important for those programs whose catchment area contains a higher percentage of linguistically challenged or isolated communities.



³¹ Id.

³² Id.

3.2 UNDERSTAND OBSTACLES TO USER COMPREHENSION

Our goal for providing recommendations to reach people with English language obstacles involved considering two groups: those who do not communicate in English and those who communicate primarily in English but have low literacy skills. We decided to review the Google Analytics data through two lenses: (1) how a variety of language options will affect website traffic; and (2) how the difficulty level of the text, regardless of the language the text is written in, will affect website traffic. In addition to analyzing national trends regarding internet and smartphone use and preferred languages, we conducted research on other issues to consider when communicating online: readability and plain language. This section describes the concept of readability and the utility of plain language tools, and their relation to reaching the target audience.

3.2.1 Readability

Improving readability increases the effectiveness of content for all readers. In particular, making a website more readable is crucial to providing meaningful access to the broadest possible audience, be it non-native speakers of English, individuals with low literacy or the well educated. Such an improvement could be achieved through several methods, including writing the text in an easy-to-understand form (by writing in plain language), and using non-textual elements such as widening spaces in between paragraphs, providing greater contrast between titles and paragraphs, etc. This portion of the Report seeks to provide helpful guidance on how online legal service providers can express information in plain language.

The Plain Language Action and Information Network (PLAIN) describes the term plain language as “communication your audience can understand the first time they read or hear it.” PLAIN notes that “[w]ritten material is in plain language if [the] audience can: (1) find what they need; (2) understand what they find; and, (3) use what they find to meet their needs.”³³ All of our sample websites showed an awareness of plain language and readability techniques in their communication choices.

³³ <http://www.plainlanguage.gov/whatisPL/index.cfm>

The average native English-speaking American reads at a 5th grade level.³⁴ Approximately, “50% of Americans are unable to read at the 8th grade level and 20% are functionally illiterate.”

³⁵ Given this baseline, using plain language is critical to communicating important content effectively.

3.2.2 Importance of Readability Improvement

The importance of improving readability in order to provide “access to justice” to a wider client base is well-established.³⁶ For instance, the Plain Writing Act of 2010, signed by President Obama, requires that federal agencies use “clear government communication that the public can understand and use.”³⁷ In January 2011, he issued a new Executive Order, “E.O. 13563 – Improving Regulation and Regulatory Review, which put heavy emphasis on the importance of ensuring that the regulations in the U.S. regulatory system are “accessible, consistent, written in plain language, and easy to understand.”³⁸

3.2.3 Existing Recommendations for Plain Language and Readability

The following is a list of well-established recommendations for writing in plain language and boosting readability generally:³⁹

- Identify and write for your audience;⁴⁰
- Address one person, not a group;

³⁴ Kathleen Caldwell, Low Literacy Resources, *Lstechie e-journal*, February 2004, updated October 2006. https://lsntap.org/LSTechie_Low_Literacy_Resources

³⁵ Id.

³⁶ See Maria Mindlin, Is Plain Language Better? Comparative Readability Study of Plain Language Court Forms (<http://transcend.net/library/legalCourts/PLStudy.pdf>), and Mindlin & McCormick, Plain Language Works for Pro Per Litigants (http://transcend.net/library/legalCourts/PL_ProPerLitigants.pdf) for information with regards to how court forms written in plain language better serves people.

³⁷ <https://www.gpo.gov/fdsys/pkg/PLAW-111publ274/pdf/PLAW-111publ274.pdf>

³⁸ <https://www.whitehouse.gov/the-press-office/2011/01/18/executive-order-13563-improving-regulation-and-regulatory-review>; see also <http://www.plainlanguage.gov/pILaw/>

³⁹ This set of recommendations is mainly derived from the Federal Plain Language Guidelines, which can be found at: <http://www.plainlanguage.gov/howto/guidelines/bigdoc/fullbigdoc.pdf> (2010).

⁴⁰ See [Section 4](#) of this Report for general information about target audiences for online legal aid services, and [Sections 4.1.1](#) and [4.1.2](#) for more specific information on the audience’s linguistic characteristics.

- Use pronouns to speak directly to readers;
- Write short sentences;
- Use active, simple forms of verbs;
- Write short sections;
- Use “must” to indicate requirements;
- Use short, simple words and omit unnecessary words;
- Have a topic sentence in a paragraph; and
- Use examples, lists, and tables to make complex materials easier to understand.

For more recommendations and other readability tools, see the following section of this Report. For general recommendations on how to better optimize online outreach, see [Section 5](#).

3.2.4 Tools for Improving Readability

There are free, easy-to-use readability tools that help convey meaning in simple language. One established method, tracking the Flesch-Kincaid⁴¹ grade level, provides reliable readability scores. The Flesch-Kincaid method judges the comprehension difficulty of a text by providing a readability and education level “score” for that text. The method involves assessing both word and sentence length in the text. Many scientific studies involving readability use the Flesch-Kincaid method or Flesch-Kincaid grade level to check the readability of a given document. Flesch-Kincaid scores can be obtained for free using Microsoft Word.⁴² This free feature on Word lets content providers assess the grade level of proposed web content before they publish it online.

As demonstrated in our analysis of the LSC sample web pages ([Section 4.1.2](#)), using a free readability tool to check the grade level of website text is one way online legal service providers

⁴¹ For more information on Flesch-Kincaid formula, see <http://www.readabilityformulas.com/flesch-grade-level-readability-formula.php>; See, for instance, the following study “Analysis of patient information leaflets provided by a district general hospital by the Flesch and Flesch-Kincaid method,” (2010). <http://onlinelibrary.wiley.com/doi/10.1111/j.1742-1241.2010.02408.x/full>

⁴²<https://support.office.com/en-gb/article/Test-your-document-s-readability-85b4969e-e80a-4777-8dd3-f7fc3c8b3fd2>

can improve the readability of their websites. Our team utilized an online tool called Open Advocate,⁴³ which is a free online tool that allows one to check the Flesch-Kincaid grade level of the text used on the specific web page one views. Our research shows that people engage less with a site when the grade level of the site's text surpasses the range of 4th-5th grade reading ability. This suggests that LSC-supported websites should be generally written for those who read at or below the a 5th grade level ([Section 4.1.2](#)).

It is important to note the following with regards to non-native English speakers and plain language: (1) to the best of our knowledge, there has been no study concluding what the appropriate English grade level would be for this population; and (2) studies in the U.S. (and the English guidance for plain language) remain the most exhaustive internationally in terms of research and tools.⁴⁴ This is further reason to provide content that is at or below the 5th grade reading level. Additionally, instructions on how to check the grade level of documents that are in hard copy are provided by Transcend, a leading organization studying plain language headed by Maria Mindlin: www.transcend.net/library/tools/CheckGrade_Lvl.pdf.

There are other plain language tools available that help to improve the readability of textual portions of websites. Legal Assistance of Western New York ("LAWNY"), the organization that provided the Open Advocate program that we used to analyze readability of the sample LSC websites, has plain language user testing videos that provide instructions for checking whether

⁴³ Courtesy of Legal Assistance of Western New York, Inc., which can be found here: <http://openadvocate.org/writeclearly>; see also <https://sites.google.com/a/lawny.org/plain-language-library/> for information about Legal Assistance of Western New York or plain language generally.

⁴⁴ Sweden, Mexico, the United Kingdom, Australia, Portugal are among the few nations that either have or had implemented some sort of plain language initiatives, but we were unable to locate updated information about these programs. See <http://www.plainlanguage.gov/usingPL/world/index.cfm> and for more information. – It is also worth noting that while we were not able to find readability tools for languages other than English comparable to Open Advocate, the European Union has a "EU Translation and Drafting Resources" page which provides language resources and useful resources for 24 languages, ranging from online dictionaries, glossaries, national sites, and more (http://ec.europa.eu/translation/index_en.htm). Another resource for writers of foreign languages is, "How to Write Clearly", a booklet that provides plain language guidance for more than 20 languages (<http://bookshop.europa.eu/en/how-to-write-clearly-pbHC3010536/>). See also plainlanguagenetwork.org for writing guidance for legal documents and government documents (<http://plainlanguagenetwork.org/plain-language/plain-language-around-the-world/>).

written information is at suitable readability level for the target audience.⁴⁵ LAWNY also provides plain language lessons that help people write in plain language.⁴⁶ These resources can be quite helpful to content providers.

3.2.5 Non-textual Readability Tools

Online communication involves more than the effective use of text. The idea that non-textual content can increase comprehension is not new. However, formal study of the impact of non-textual content on comprehension is still in a nascent stage. It is true that the advertising and graphic design industries have provided plenty of guidance with regards to graphic communication.⁴⁷ Additionally, LSC has already encouraged increased awareness of the effect of non-textual content on civil legal aid websites. LSNTAP provides various trainings and tips for how to better design and implement different graphic communication tools, ranging from its introduction of the “fotonovela”⁴⁸ to its Mobile Web Development Guide for Legal Aid, to its Video Lecture on Visualizing Data Through Dashboards.⁴⁹

However, as mentioned earlier, studies of the quantitative effects of non-textual factors on readability, especially in the legal context, are still in development. Unlike the plain language grade level tools, there is no formula that quantifies the effect of non-textual factors on comprehension (e.g., how much the number of pictures on any given web page changes the readability score for that page). Having such a tool would be of great use to LSC content providers.

⁴⁵ <https://sites.google.com/a/lawny.org/plain-language-library/home/plain-language-user-testing-videos>

⁴⁶ See <https://sites.google.com/a/lawny.org/plain-language-library/home/plain-languauge-online-course>

⁴⁷ See, for example, Melissa Clarkson, Elements of Visual Communication, <http://sites.ieee.org/pcs/communication-resources-for-engineers/visuals/elements-of-visualcommunication>

⁴⁸ LSNTAP defines “fotonovelas” as photos with conversation bubbles; for more information, see slide #41 at the following: <http://lsntap.org/sites/all/files/leplsntapwebinar2014.pdf>.

⁴⁹ <https://lsntap.org/>; also listed on LSNTAP are the followings: 1) 2003 Report from Case Study by LawHelp NY and Literacy Assistance Center, with recommendations on how to improve web content and readability <https://lsntap.org/sites/all/files/Report%20by%20LAC%20-%202003.pdf>

2) Usability and Literacy Issues in Website Content Development, Mindy Cherng, Lstechie e-journal, February 2004. (Source: https://lsntap.org/sites/all/files/TIG04_cherngusability.pdf)

Research in 2015⁵⁰ outlined the importance of online text layout in boosting an audience's readability. The study compared fifth-graders' online reading behavior of two types: (1) web pages using linear text - meaning all concepts and ideas are connected to each other and expressed in a specific order, like in a traditional book; and (2) web pages using hypertext, a common tool that most online articles utilize, in which concepts and ideas are connected to an "endless number of other" ideas, "thus forming a complex web-like structure."⁵¹ The report concluded that, fifth-graders "performed better when reading linear texts than when reading hypertexts" for four reasons:

1. They adjusted their reading speed to suit text content only when reading linear texts and they also slowed down strategically to read the main ideas of texts;
2. They spent more time reading topic sentences when reading linear texts, which increased the likelihood of understanding the main ideas of linear texts;
3. They were more likely to experience disorientation and cognitive overload when engaging in non-linear reading through hypertext; and
4. When reading linear texts, students used more free-browsing and comprehension-monitoring strategies to increase the efficiency of their search for information and to grasp the meaning of text contents.

In short, "[f]ifth-graders are more familiar with linear reading, and so they need[ed] to learn more skills for and acquire more experience of hypertext reading."⁵² This finding is particularly important for LSC content providers, since 5th grade is the optimal grade level for communication with non-native English speakers and low literacy readers (see [4.1.2](#) of this Report). While hypertext remains a useful tool, many of LSC's audiences will be able to focus

⁵⁰ Sung, Wu, Chen, & Chang, Examining the Online Reading Behavior and Performance of Fifth-Graders: Evidence from Eye-Movement Data (2015); <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4446912/>

⁵¹ Id. Here's an excerpt from the research explaining what hypertext is: "[W]hile reading comprehension processes for online and offline reading are similar in many respects, there are also some important differences. For example, hypertexts contain many hyperlinks, and readers must play a more active role in deciding what to read next, instead of reading in the order dictated by the author. In addition, hypertexts lack clear textual context (e.g., a table of contents) as provided in printed books, so readers must determine the relationships between the links for themselves. The hyperlinks in hypertexts can appear in both text and images, and readers also must interpret and integrate these visual cues. The intertextual connections in hypertexts are easily recognizable and accessible, and these further increase the complexity of the texts for the readers."

⁵² Id.

better if the web page content is written primarily in a linear fashion.

Other studies⁵³ reveal important characteristics demonstrated by users' reading on websites. During an average web page visit, people "read only 28% of the words," and usually "scan instead of read" to cope with the enormous amount of information.⁵⁴ Eye tracking studies reveal that users demonstrate a dominant reading pattern that looks like an "F" (Figure 11) and has the following three components: (1) users read in a horizontal movement across the upper part of the content, (2) users move down the page a bit and read across in a second horizontal movement, and (3) users finally scan content's left side in a vertical movement.⁵⁵



Figure 11

This means that in order to increase the readability of online content, it is important to grab users' attention quickly, and "get them interested before they decide to leave,"⁵⁶ by putting clearer headlines and paying special attention to the first few words in the F-shape layout of the page. Here are some ways to grab online users' attention and improve readability using their behavioral patterns⁵⁷ :

⁵³ Jakob Nielsen, <https://www.nngroup.com/articles/legibility-readability-comprehension/> and <https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content/>

⁵⁴ <https://www.nngroup.com/articles/legibility-readability-comprehension/>

⁵⁵ <https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content/>

⁵⁶ <https://www.nngroup.com/articles/legibility-readability-comprehension/>

⁵⁷ Id. See also <https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content/>

- i. Write for how users read on websites: clear headlines, scannable layout.
- ii. Focus on information of interest to users, not on the things you want to promote.
- iii. Communicate immediately at the top of the page that your content is indeed interesting and useful to users.
- iv. The first two paragraphs must state the most important information.
- v. Start subheadings, paragraphs, and bullet points with information-carrying words that users will notice when scanning down.

SECTION 4: REACH BROADER AUDIENCES

4.1 ONLINE AUDIENCE AND BEHAVIOR

Understanding your current and target online audience is crucial in deciding how to present information online. It can, and should, also affect your strategy for building your community education/outreach campaigns and web presence more generally. Moreover, understanding how your online audience interacts with your web content can help you better serve the people you intend to reach. Fortunately, web analytics and language assessment tools can provide us a window to this information.

Our team used Google Analytics data because of the valuable insights it provided into the online behavior of users across different demographics. Google Analytics provided information on users' age, browser language settings, types of browser applications, device, time spent on a website, bounce rate, and number of pages visited on a given website. The usefulness of some of this data is self-evident, while some of it allowed us to make responsible inferences.

It was very important for us to acquire data from a diverse set of LSC-affiliated organizations in order to maximize the predictive value of our aggregate data along national lines. We wanted organizations serving communities of different ethnic makeups, regions, and levels of urbanization. Having Glenn Rawdon on our team was essential to our ability to secure access to a rich cross section of prominent LSC affiliated websites. With Glenn's assistance, we gained access to six organizations' Google Analytics data with limited conditions around privacy and anonymity. Three of the websites also had data from their intake systems, which was especially useful in that it allowed us to get a better sense of how well potential clients across a range of demographics were navigating websites to find and successfully utilize intake systems.

Google Analytics provides insight into the behavior of online users of our sample sites. We sorted the sample site data that we accessed through Google Analytics to a dataset of 50,000

data points. The dataset was based on averages of over 9 million individual user sessions from six LSC grantee sites operating in six different states. Due to the fast-paced nature of the Internet, we typically concentrated on the data from the past year (starting from Sep 30, 2015), and occasionally in the past three years, in order to establish trends (starting from Sep 30, 2013).

It was encouraging to see that a significant set of LSC grantee sites are using web analysis tools such as Google Analytics to understand user engagement. The extensive data generated by Google Analytics allowed us the granular view that was helpful in comparing specific website use with national trends. It was also the only objective way to analyze visitor behavior in websites as specifically as we intended. Finally, by incorporating analytics data into our research, we hope to demonstrate the value these tools bring to knowing your online audience, understanding their behavior and ultimately crafting content that meets the audience's needs.

In this subsection we provide an overview as well as insights into the behavior of online users in our sample sites. Using Google Analytics, we tracked the behavior of users by preferred language ([Section 4.1.1](#)). Using plain language software, we tracked users' activity on the websites and compared it to the websites' readability scores ([Section 4.1.2](#)). We sought to substantiate the claim that boosting the readability of the websites by implementing both textual and non-textual communication devices will improve online communication for all low-English literacy users. Using age as a proxy for comfort with digital technology, we returned to Google Analytics to track visitor behavior by age.

To clarify once more, for the purposes of this Report we identify clients with low English literacy to include: (1) non-native speakers of English with low English literacy ("non-native English speakers"), and (2) native speakers of English with low literacy ("low literacy clients"). While communication problems faced by to these groups differ in detail, they share many of the same challenges.

4.1.1 Google Analytics: Non-Native English Speakers

As mentioned earlier in this Report, the population in the US that speaks a language other than English at home is increasing.⁵⁸ By studying the visitor data of our sample sites, we wanted to examine how well LSC grantees' websites are handling the upward trend in language diversity. Our findings demonstrate that there is room to improve outreach to Spanish, Chinese, and Russian-speaking visitors.⁵⁹

Before we studied the Google Analytics data from LSC grantees' websites, we wanted to create a baseline for what the relative language representation for our sample sites should look like. For our baseline, we selected the rate of language use in homes across the target areas of our sample sites (see Figure 13 below).⁶⁰ Our research is based on six sample sites that are located in the states that can be seen on the map below (Figure 12 below). The linguistic demographics of these sites resemble closely the national language prevalence.⁶¹

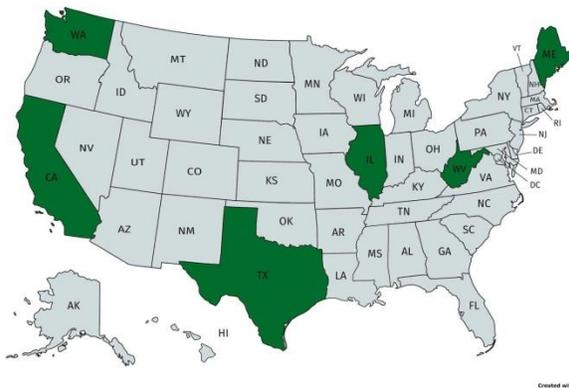


Figure 12

Linguistic Demographics of Six Target Areas

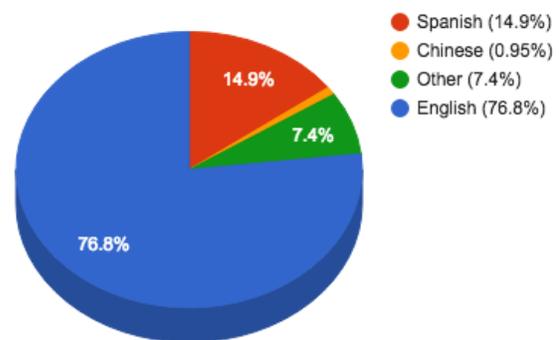


Figure 13

⁵⁸ See [Section 3.1.3](#) of this Report.

⁵⁹ Data on English-, Spanish-, and Chinese speaking visitors is based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged). We had significant enough data from Russian speaking visitors from only three sites in three different states (averaged).

⁶⁰ U.S. Census Bureau, 2009-2013 American Community Survey.

⁶¹ U.S. Census Bureau, 2009-2013 American Community Survey. For comparison, rates for languages spoken at home nationally are: English 79.3%, Spanish 12.9%, Chinese 1.0%, Other 6.9%.

After establishing the baseline, we looked at the website data regarding browser language settings for visitors of our sample sites (Figure 14 below).⁶² We discovered that the rate of non-English language use by site visitors was noticeably lower than the rate of non-English language use in the targeted areas (compare Figures 13 and 14).

In Figure 14, we can see that all languages other than English are below the expected levels for our sample sites.⁶³ Spanish speakers are clearly below our baseline (-56%). Most noticeably, Chinese and other minority languages are significantly lower than what we were expecting – down -78% and -87%, respectively from population data in those geographic areas.⁶⁴

The reasons for this relative non-use by potential non-English speaking visitors is unclear. However, we speculate that reasons might include the lack of site content in these languages, lack of search engine visibility for such content, or something in the online behavior of these minority language speakers that prompted decreased utilization. At any rate, the analytics data confirmed concerns that non-English speakers are disproportionately absent from these sites.

Next, we studied how well the information on the sites met users' needs. To measure this, we studied the length of visits ("visiting time") and return rates of users by their preferred language (see Figure 15 below).

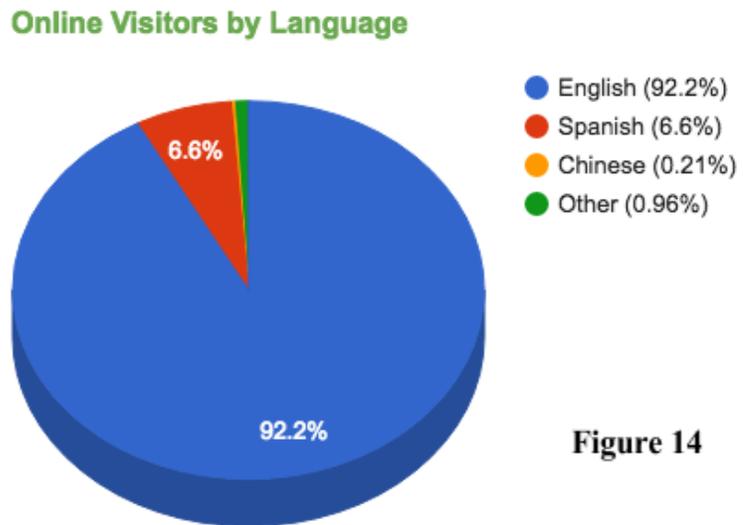


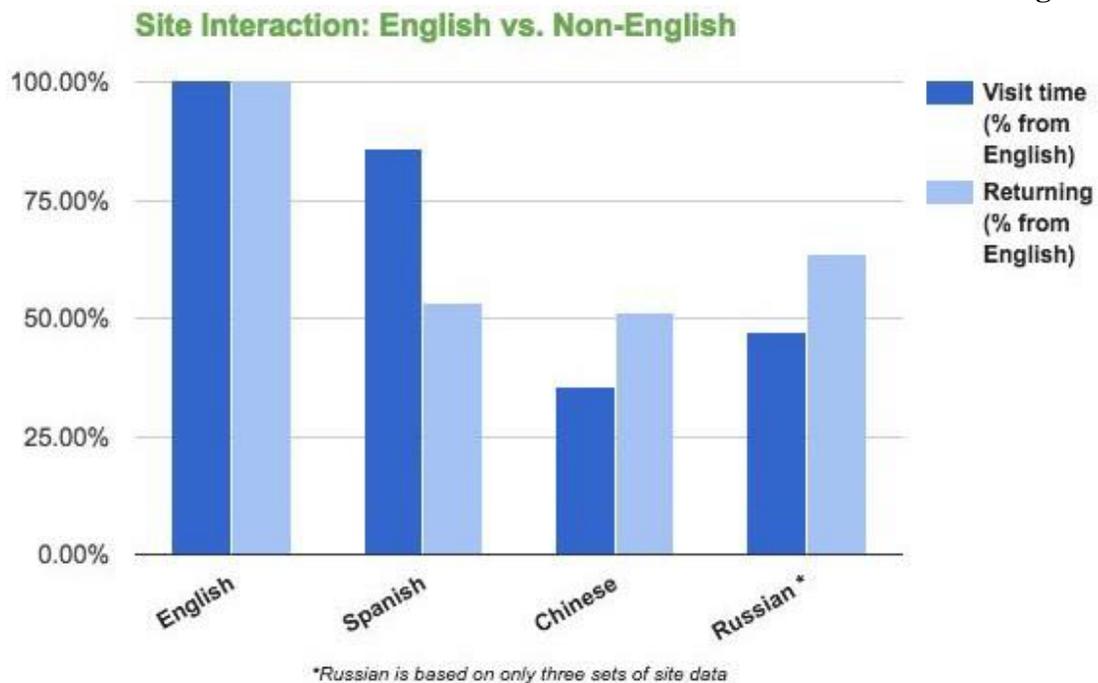
Figure 14

⁶² Note that we don't have national data on browser language settings used by different demographics. However, even though exceptions are easy to point out, the visitor's choice of language for their web browser is a fairly good indication of their language preference on average.

⁶³ Based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged).

⁶⁴ Note that these are percentage changes, not percentage points.

Figure 15



The data demonstrated that Spanish, Chinese, and Russian speaking visitors returned to the websites between 25% and 50% less frequently than English speaking users (light blue bars above). The data also tells us that, compared to their English-speaking counterparts, users of other listed languages visited our sample sites for shorter time periods (dark blue bars). Spanish-speaking visitors spend only 86% of the time spent by English-speaking visitors on our sample sites. Russian speakers spend less than 50% and Chinese speakers spend 36% of the time English speakers do on these sites.⁶⁵ This suggests that non-English speakers may be less successful than English speakers at finding what they are looking for, and therefore do not return to the sites as frequently. The data also emphasizes the importance of insuring that website content is accessible across different languages.

⁶⁵ Data on English- Spanish-, and Chinese speaking visitors is based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged). We had significant enough data from Russian speaking visitors from only three sites in three different states (averaged). Smaller minority languages did not provide significant enough sample size for our site interaction data.

4.1.2 Plain Language: Low Literacy Clients

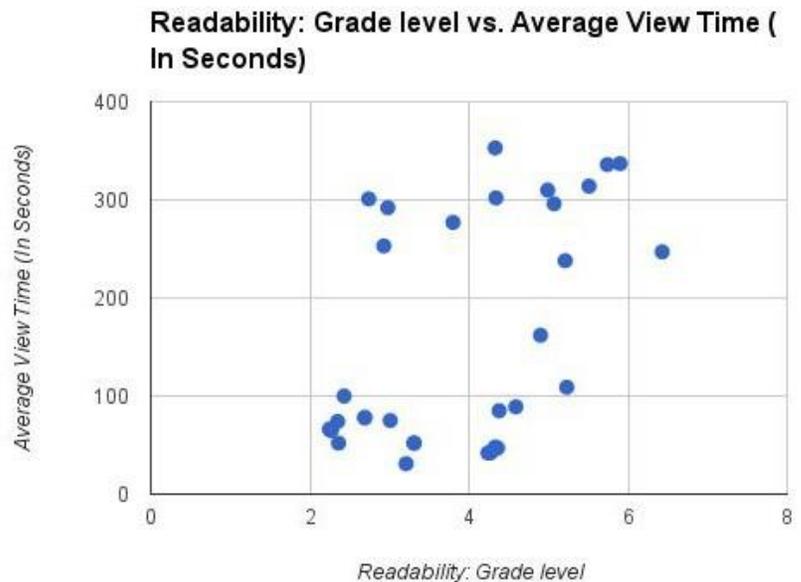
Figure 16

As mentioned earlier regarding readability and plain language ([Section 3.2.1](#)), about 50% of Americans are unable to read at the 8th grade level, and about 20% are functionally illiterate.⁶⁶

According to a 2014 publication by the U.S. Department of Education,⁶⁷ about 50% of adults between the age 16 to 65 are either at or below level 2 of proficiency on the PIAAC literacy scale.⁶⁸ Readers either at or below level 2 of proficiency on

PIAAC scale will have trouble “navigating through a digital text and [understand] web conventions,” and will find difficult the task of identifying and/or locating specific information on a website.⁶⁹ These trends demonstrate the need for simple and clear language when communicating with the target audience through written text.

To measure the effect of English language difficulty on user activity, we observed the relationship between the average time users spend on a given web page and the grade level score of the text content on that web page. We created a chart (Figure 16) where each dot



⁶⁶ Kathleen Caldwell, Low Literacy Resources, *Lstechie e-journal*, February 2004, updated October 2006. https://lsntap.org/LSTechie_Low_Literacy_Resources

⁶⁷ Skills of U.S. Unemployed, Young, and Older Adults in Sharper Focus: Results from the Program for the International Assessment of Adult Competencies (PIAAC) 2012/2014, available at <http://nces.ed.gov/pubs2016/2016039rev.pdf>

⁶⁸ Id. at Figure 2-A; level ranges from 0 to 5. See also Appendix B of the PIAAC report for descriptions of the PIAAC scales and proficiency-level. The 2004 National Adult Literacy Survey findings also confirm that more than 47% of U.S. adults have difficulty understanding information in written texts with accuracy and consistency. See Nielsen-Bohlman L, Panzer AM, Kindig DA, eds. *Health Literacy: A Prescription to End Confusion*. Washington, DC: The National Academies Press, 2004

⁶⁹ Id.

represents one web page, with the average view time of all visitors on the Y-axis and the Flesch-Kincaid grade level representing the grade level in which the web page is presented on the X-axis. For context, users across our sample websites spent an average of two minutes and three seconds on the website, and spending more than three minutes and sixteen seconds on a web page would be considered substantially long while spending less than fifty-seven second would be considered unusually short. The longest average time spent on any of our sample web pages was a little less than seven minutes, and the shortest was about 30 seconds.

To be clear, there are various non-textual elements that are known to boost the readability of content that we did not consider in this analysis because analytic tools that measure these more subjective elements do not exist.⁷⁰ That said, the general trend seems to be that people spend more time on a web page as the grade level of the web page increases, but as the grade level reaches a certain high point, people spend less time than expected and move on from the web page. For instance, on a fair number of web pages written at a grade level above 4.5, people lingered for less than 30 seconds. While definitive conclusions cannot be drawn, we suspect this occurs because when written text reaches too high a comprehension level, people give up on understanding the information provided. As mentioned earlier, ([Section 3.2.4](#)), the optimal reading level is 5th Grade or below.

4.1.3 Google Analytics: Tech-Averse Clients

To measure the activity of users less comfortable with technology, we needed to find a metric from the Google Analytics data that would represent this tech-averse group of users. We found statistics supporting our assumption that age is an indicator of how people have adapted to everyday technology. According to a 2014 Gallup report, Americans fall into four groups when divided by ownership of electronic devices.⁷¹ At one end of the spectrum are "Super Tech Adopters," who report broad ownership of all the major computing devices on the market. At the

⁷⁰ See [Section 3.2.5](#) of this Report; there has not been any standard available for us to quantify the non-textual elements and the degree to which they boost readability that is comparable to that in plain language analysis.

⁷¹ Lydia Saad, "Three in 10 in U.S. Own and Array of Consumer Electronics"; GALLUP, January 8, 2014. <http://www.gallup.com/poll/166760/three-own-array-consumer-electronics.aspx> (Last visited December 17, 2016).

other end are "Tech-Averse Olders," who own little more than a basic cellphone. Figure 16 shows that only 11% of people 18 to 34 years old consider themselves as tech-averse, whereas 29% of respondents from 35 to 54 years old describe themselves as such. In the group of 55 years of age and older, 60% of respondents consider themselves tech-averse.

Figure 17

Demographic Profile of Consumer Electronics Owners in the U.S.

Based on four special consumer electronics groupings

	Super Tech Adopters	Smartphone Reliants	Mature Technophiles	Tech-Averse Olders
% of U.S. adults	31%	19%	22%	28%
	%	%	%	%
Men	51	42	52	49
Women	49	58	48	51
18 to 34 years	41	48	20	11
35 to 54 years	43	26	39	29
55 and older	15	27	41	60
Average age	39	40	50	58
Less than \$30,000	12	30	18	56
\$30,000 to \$74,999	34	46	50	36
\$75,000 or more	53	23	33	8
College graduate	54	27	37	10
Some college	31	33	28	21
No college	25	39	34	68
Employed	72	48	45	35
Retired	6	10	29	40
Homemaker	5	11	13	9
Student	13	17	6	1
Unemployed/Disabled	4	13	7	14

Based on Dec. 5-8, 2014, Gallup poll with 1,031 national adults, aged 18 and older

We compared this information with the data we have gathered from our sample sites using Google Analytics.⁷² We used metrics such as *visiting time*, *returning visitors*, *pages viewed per session*, and *bounce rate* (the rate at which users do not interact with the site by clicking, etc.). We expected the bounce rate to go up and the other metrics to go down with increased age.

⁷² Based on Google Analytics data from 2.8 million sessions from three sites in three states (averaged). We had data available from three sites none of which were inconsistent with the aggregated data depicted in the graph. Websites that had the online age demographics data available to us were administered by offices that have a non-overlapping theoretical catchment area of 39 million people.

This would have indicated that older people struggled to use the site. Surprisingly, we found that the bounce rate steadily decreased as user age increased and that older users also visited more pages per session. Figure 18 shows the relationship between visiting time and return rate across different ages. The data is represented as the percentage difference from the average of all users.⁷³ Figure 18 aggregates data from three sites to give us the most accurate picture of user behavior by age.

Figure 18

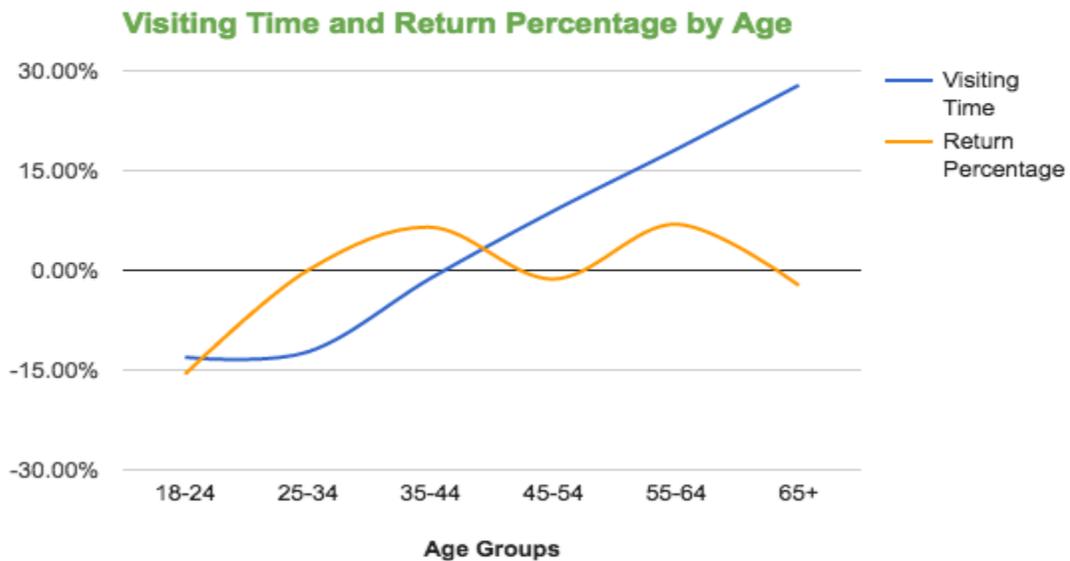


Figure 18 above shows that after the 35–44 age group the visit time dramatically increases above the average while the return percentage remains fairly consistent with where it is from the age group 25–34 on. There are two ways to interpret the longer visiting times we see from older users: it could be that some of these users are having a more difficult time navigating the site, and it could also be that they are willing to spend more time engaging with the website because they find it comfortable for their level of tech savviness.

Although we see general uniformity between the sites, there is also variety in both visiting time and return rate for different age groups using different sites. For example, one of our sample

⁷³ Based on Google Analytics from approximately 750,000 users for whom we have age data.

sites had considerably higher return rates across age groups (30–40%) compared to the other sites (20–28%).⁷⁴ A website’s design and search engine visibility are some plausible reasons contributing to these differences, but other factors might be at play as well.⁷⁵

In Figure 19 below, we have compared the visitors’ age distribution in our sample sites (blue bars) to the national age demographics by U.S. census (orange line).⁷⁶

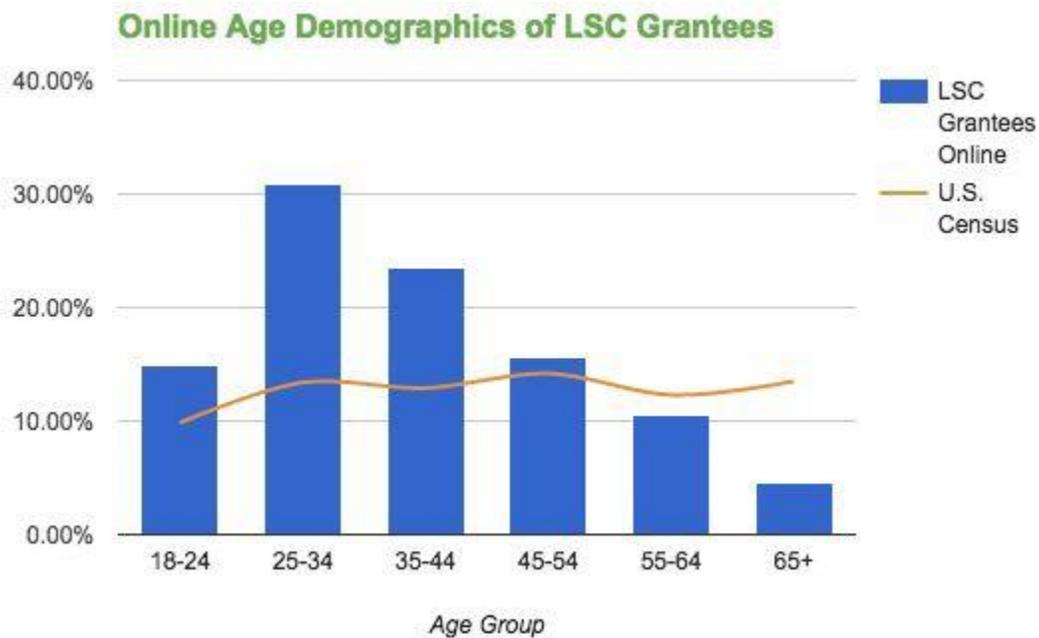


Figure 19

In Figure 19 above we can see that the greatest difference between the three of our sample sites that were able to provide us their age demographics and the general population is in the age groups of 25–34 and 35–44.⁷⁷ Our data shows a significant decrease in the number of user

⁷⁴ Another site had more varied visit times across age groups, spanning from 2 minutes 3 seconds for the youngest age group (18–24) to 3 minutes 19 seconds for the oldest (65+), compared to other sites that had around 30 seconds difference between age groups at most.

⁷⁵ Based on Google Analytics data from 2.8 million sessions from three sites in three states. We had data available from three sites none of which were inconsistent with the aggregated data depicted in the graph. Websites that had the online age demographics data available to us were administered by offices that have a non-overlapping theoretical catchment area of 39 million people.

⁷⁶ The average age of the population in the target area of our sample sites is close to the national average.

⁷⁷ Google Analytics data of our sample sites is based on 2.8 million sessions from three sites in three states (averaged). Websites that had the online age demographics data available to us were administered by offices who have a non-overlapping theoretical catchment area of 39 million people. Source for national age demographics: *U.S. Census Bureau, Current Population Survey, Annual Social and Economic Supplement, 2012.*

sessions in the age group of 65+. This can be partly explained by the rate of internet use in this age group.⁷⁸ People within the age group might have preferences for finding the information they need that exclude online sources, or they might struggle to find the sites.⁷⁹

4.2 ONLINE INTAKE SYSTEMS

4.2.1 How Are Intake Systems Found

Online intake systems in LSC grantees' websites are an important feature that broadens the scope of people who can receive legal services. Psychological barriers for seeking legal aid online might also be lower compared to reaching out over the phone or in person. Moreover, online intake systems streamline managing client information and can reduce delays in service. That said, and considering the resources put into these systems and their utility, it is important that online intake systems can be easily found.

As demonstrated in the previous section, Google Analytics can be extremely helpful to LSC site administrators in analyzing the success of their outreach efforts. However, some of our sample sites faced challenges of access to their own Google Analytics data. For example, only three of the five sample websites that had intake systems had the intake system on a page that was under their own domain.⁸⁰ These sites provided the user data in our intake system analysis.⁸¹ Other site administrators were unable to access the data without third-party approval. This points to a wider problem, because lacking access to user data means that the website administrators cannot fully understand their user base and adapt to their needs. This seems to be a common challenge facing many LSC grantee sites that use third-party applications for their intake systems.⁸²

⁷⁸ See Figure 2, which shows that only 64.3 percent of people 65 years of age or older live in a house with a subscription to an internet service provider.

⁷⁹ In Figure 19 we see the age breakdown of visitors of three sites compared to the age breakdown of the American population. Please note that the variance between age groups, however, might differ significantly site by site, even though consistent through our sample sites.

⁸⁰ Note that only one of our sample sites did not have an online intake system.

⁸¹ Our Google Analytics data is from 2.8 million sessions from three sites in three states.

⁸² Common third party intake systems are the a2j application, a system developed and administered by Neota Logic, or an application administered by a statewide site. While these third-party applications serve

Based on three of our sample sites that had the intake system data available to us, we determined the percentage of people who found the online intake systems when they visited the sites in Figure 20 below.⁸³

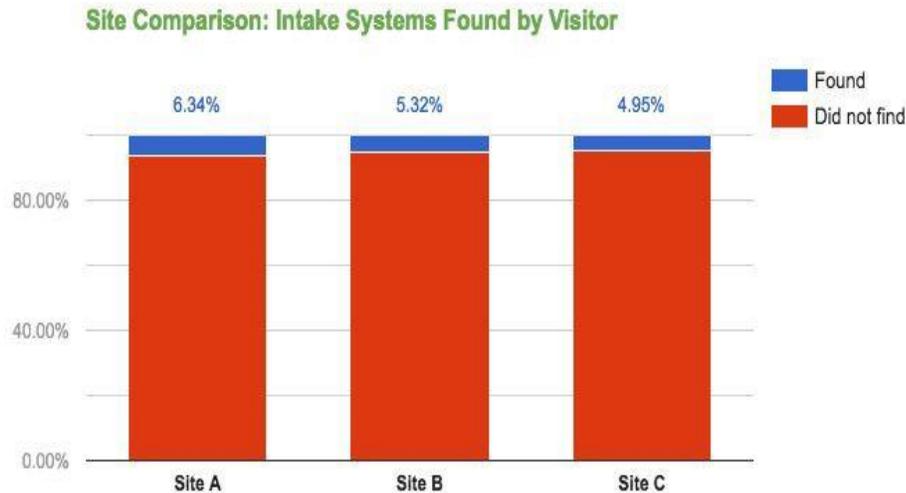


Figure 20

Website visitors faced a challenge when trying to find the online intake systems. Figure 20 above shows the percentage of overall visitors that found the intake systems.⁸⁴ Only 5–6% of visitors found the online intake systems. There are numerous possible explanations for this, including that users had no need to apply for legal aid. Another possible explanation is that users tend *not to visit more than two pages per session* and the intake systems are often (not just in our sample sites) on a subpage, more than a couple of clicks away from the homepage. Moreover, this universally common “click-averse” behavior that is also present in our sample sites seems to disproportionately affect non-English speakers, as we can see in Figure 21 below.⁸⁵

laudable purposes, it will be important to LSC program administrators that they have ready access to all analytics.

⁸³ Site comparisons are based on Google Analytics data from 2.8 million sessions from three sites in three states.

⁸⁴ Based on Google Analytics data from 2.8 million sessions from three sites in three states.

⁸⁵ Based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged).

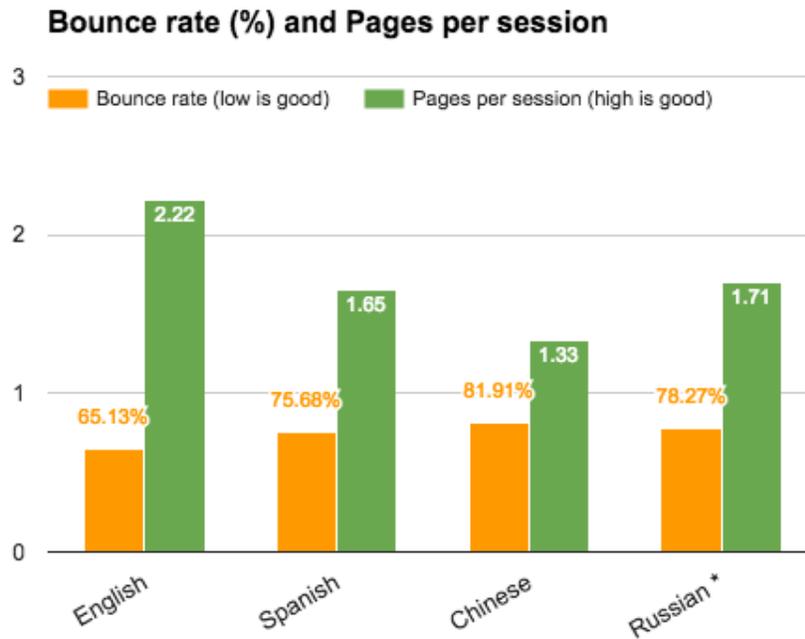


Figure 21

Figure 21 above demonstrates that the number of pages visited per session (green bar) differs significantly by user's browser language preference. English-speaking visitors are the only group that clicks more than once per session.⁸⁶ This might also explain why users do not find the intake system pages, which are often more than a couple of clicks away from the homepage.⁸⁷

Figure 22 below compares the three sample sites according to the visitor's method of locating the intake systems. The graph shows us that there are a variety of ways that users find intake systems. Three channels are dominating how the traffic is directed to the intake systems: *organic search* such as Google search (blue), *direct traffic* to the site from a bookmark or a URL (red), and *referral links* from other sites (orange).⁸⁸ In Figure 22 below, percentages on the Y-axis are based on real percentages of traffic generated by the channel.

⁸⁶ Based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged).

⁸⁷ This theory is further supported by comparing average visiting times for users by language preference. On average, users who prefer a non-English language spend less time on our sample sites than English users, which limits the likelihood that those non-English speaking users will find the sites' intake systems as often as English speaking users will. (See Figure 15.)

⁸⁸ Based on Google Analytics data from 2.8 million sessions from three sites in three states.

Figure 22

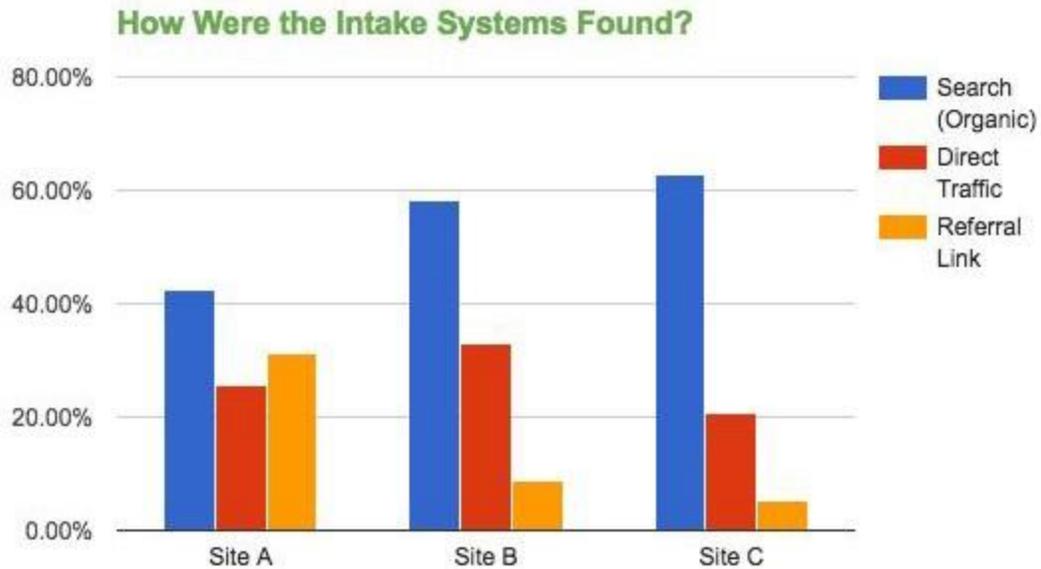


Figure 22 demonstrates the different strategies available to websites for attracting visitors. Sites B and C seem to benefit most from search engine visibility, whereas Site A's intake system was found through a link from other sites.⁸⁹ The referral sites are often websites of other legal aid organizations, or from a local court's website.⁹⁰ When we compare the sites in Figure 22, we can conclude that each of our sample sites' intake systems could be either more visible or accessible in at least one of the three main traffic channels.

Given the reality that every user does not need to navigate the intake system in order to satisfy their particular goals, the extent of the challenge with online intake systems is unclear. However, our research does illuminate some areas of improvement. For example, intake systems should be prioritized on each website's homepage to account for the large number of users that do not navigate further than two web pages. Additionally, the first steps of the intake application (or at least a link) could be placed on self-help pages that people often access directly through the search engines.⁹¹

⁸⁹ Based on Google Analytics data from 2.8 million sessions from three sites in three states.

⁹⁰ Based on Google Analytics data from 4.1 million sessions from six sites in six states.

⁹¹ Based on Google Analytics data from 4.1 million sessions from six sites in six states.

4.2.2 How Are Intake Systems Used and by Whom

To create a close approximation of the expected audience for our sample sites, we found the linguistic demographics of the target areas for the three sample sites (See Figure 23). We then compared this census data to our sample website analytics. Compared to Figure 23, Figure 24 tells us that the rate of intake system use by Spanish-speaking visitors is 87% lower than expected. The rate of use by visitors using “other” languages (than Spanish or English) is 91% lower than expected.⁹² Much like the conclusions we reached by reviewing website users by language, studying intake users by preferred language reveals that non-English speakers utilize online intake systems on the legal services websites we reviewed significantly less frequently than one might expect from the census data.

Expected Audience for Online Intake Systems

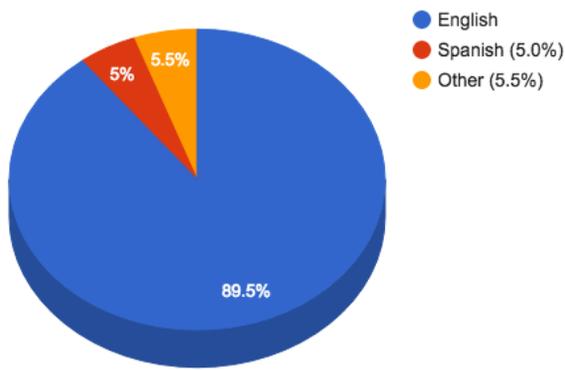


Figure 23

Intake System Visitors by Language

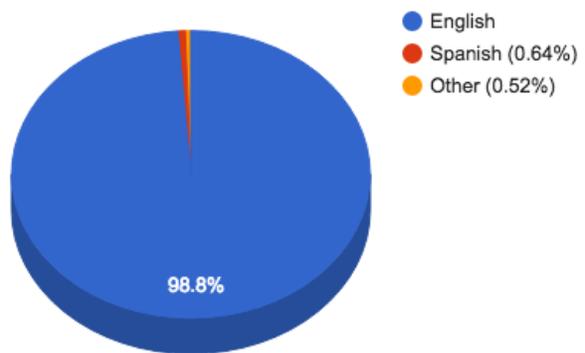


Figure 24

In sum, some of the non-English language utility issues that apply to our sample websites generally are exacerbated when reviewing the online intake systems.

⁹² Based on Google Analytics data from 2.8 million sessions from three sites in three states. If we averaged these three sites, the non-English speakers would have been even less represented, as their percentage of overall visitors would go down 50 percent or more. This graph is based on a small sample size of different sites; it is not nationally representative (merely indicative of a phenomenon that might apply to other intake systems in other sites).

Another issue with intake systems is that they are often found with mobile devices (see Figure 25 below).⁹³ We have encountered intake applications that do not fully support handhelds or in some cases do not support them at all. This can be seen in a higher bounce rate for mobile devices than for desktops (See Figure 26 on the next page).⁹⁴

Figure 25

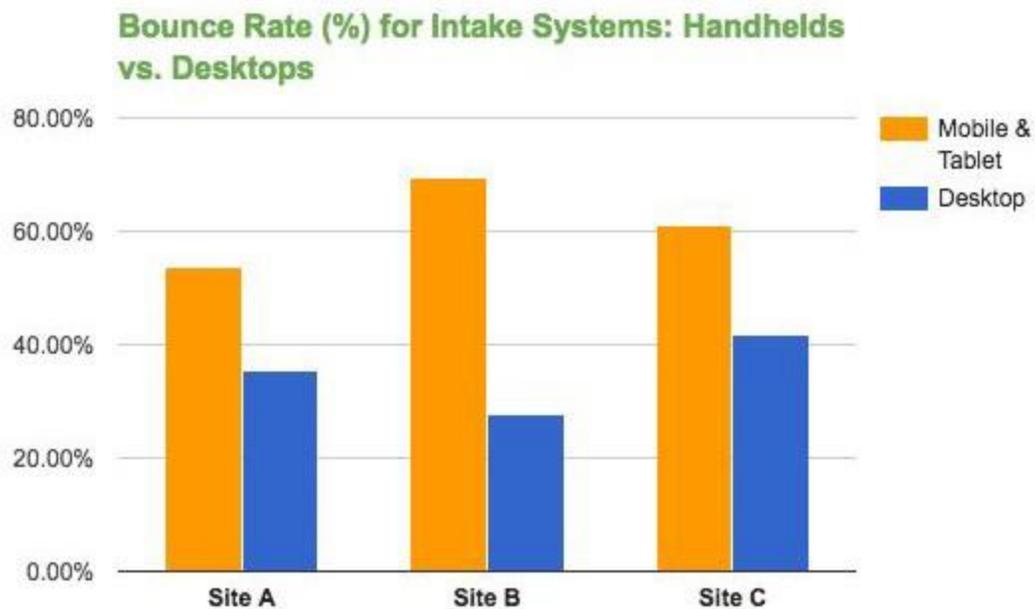
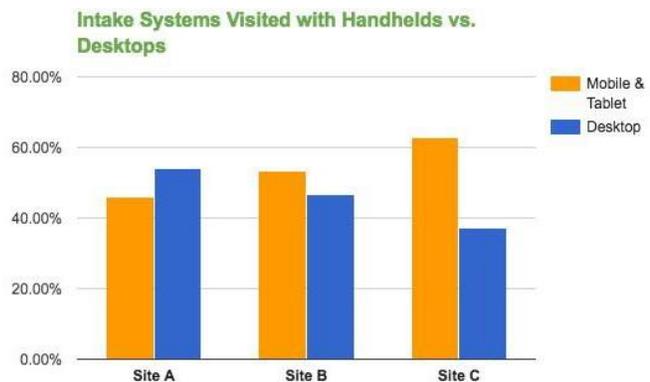


Figure 26

As we can see in Figure 26 above, bounce rate - which means that the user did not interact with the intake system page at all - is often considerably higher among mobile users. The graph also shows that there is significant variance between the different sites.⁹⁵ We should also note that many young and Spanish speaking people use mobile devices to access these sites. However, neither observation fully explains the graph above (Figure 26). Most likely, we are seeing some

⁹³ Based on Google Analytics data from 2.8 million sessions from three sites in three states.

⁹⁴ Based on Google Analytics data from 2.8 million sessions from three sites in three states.

⁹⁵ Note that all the three sites we reviewed use a different intake application.

degree of compatibility issues with mobile devices that discourages users from interacting with the intake system applications.⁹⁶

4.3 CURRENT TRENDS

4.3.1 Trends in Devices Used

In this section, we discuss the Google Analytics data in relation to certain technological trends that have emerged in recent years. We use the empirical data supplied by Google Analytics to highlight and compare general technological trends and assumptions with data gleaned from an in-depth review of our sample of prominent LSC-affiliated websites. The goal is to offer a more focused analysis and set of recommendations based on both national trends and LSC-oriented measures. Figure 27 shows how often each type of device was used to access our sample sites over the past year.⁹⁷

Devices Used in the Past Year

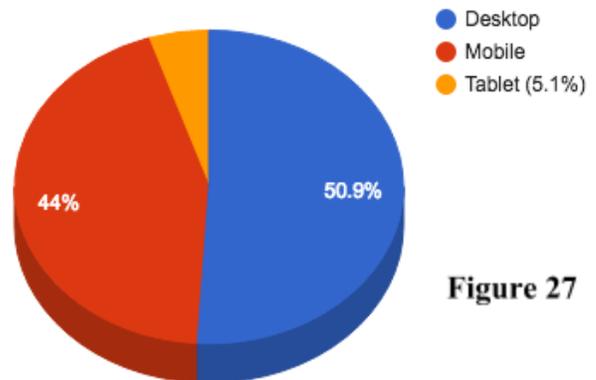


Figure 27

In Figure 27, we can see that desktops (including laptops) are still the most used devices to browse our sample sites (50.9%), while mobile devices are already a close second (44.0%). Additionally, tablets have a 5% share of all the devices used. We also compared this to the data we have collected from an analysis of Google Analytics from our sample sites over the past three years (See Figure 28).⁹⁸

Devices Used in the Past 3 Years

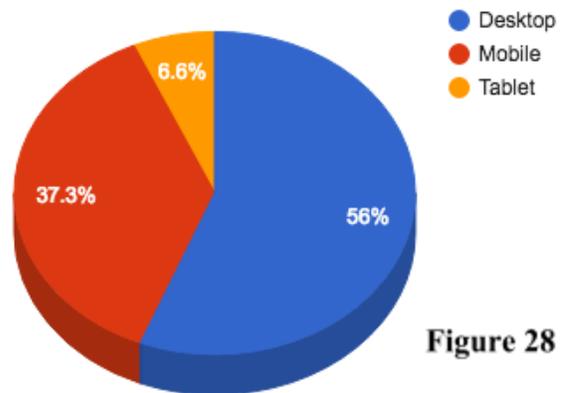


Figure 28

⁹⁶ Legal aid organizations may also refer to readability guidelines in [Section 3.2](#) to make sure that intake systems are usable at different literacy levels across multiple languages.

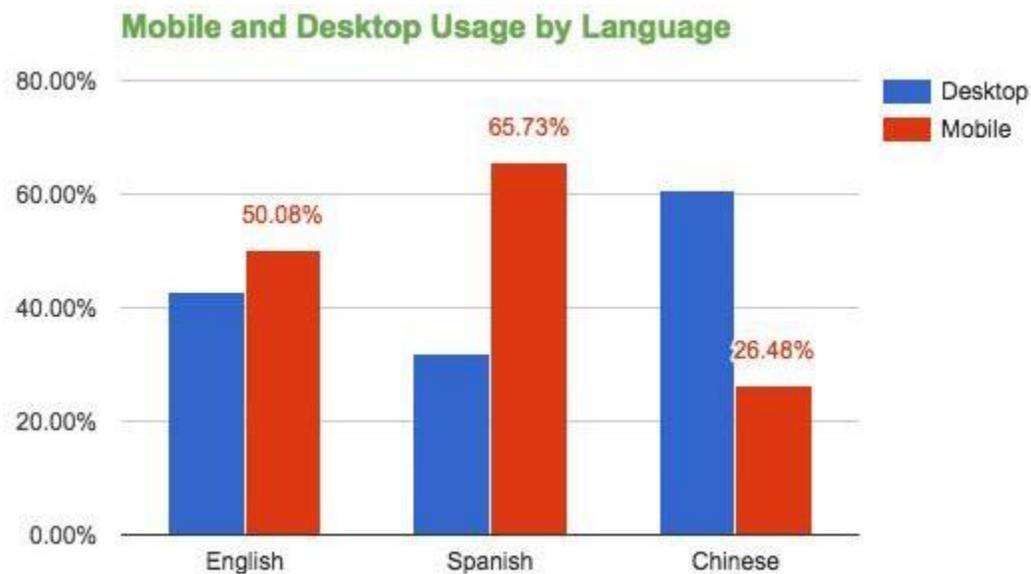
⁹⁷ Based on Google Analytics data from 4.1 million sessions from six sites in six states.

⁹⁸ Based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged).

The three-year trends are based on a smaller sample size, yet they appear consistent across all the three sites. Comparing the past year to the previous two years, the desktop use has decreased more recently (-12%) while mobile users have increased significantly (+53%). This confirms our belief that internet use through mobile devices has increased over the years. Perhaps unexpectedly, tablet use is also down (-35%). These percentage⁹⁹ increases also reflect the overall increasing trend of online visitors in our sample sites. As the rate of internet use has gone up, so has both the number of sessions and users (both 16–17%) in our sample sites in the past three years.¹⁰⁰

We were also able to break down device usage by language. Most strikingly, we can see that Spanish speaking people tend to use mobile devices to access LSC sample websites significantly more often than English speaking clients (see Figure 29 below).¹⁰¹

Figure 29



⁹⁹ Note, not *percentage point* differences.

¹⁰⁰ The 1- and 3-year data is based on Google Analytics data from 9.1 million sessions from three sites in three states (averaged). For the trend comparison, because the past 3-year statistics include the numbers from the past year, we have excluded that past year from the 3-year data – in effect comparing the past year to the previous 2 years. Note that the timeframe for all the 1-year data from Google Analytics is from Sep 1, 2015–Sep 1, 2016. If not otherwise mentioned the data is from that 1-year timeframe. All the 3-year data is from Sep 1, 2013–Sep 1, 2016.

¹⁰¹ Based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged). The data on Chinese speaking visitors is based on a limited amount of data, but it is clear that it does not follow a similar trend to Spanish speaking visitors.

Additionally, as we described earlier, our findings indicate that mobile visitors are more frequently younger people, whereas older people tend to use desktop devices more often (see Figure 30 below). This is consistent with national behavioral trends.¹⁰²

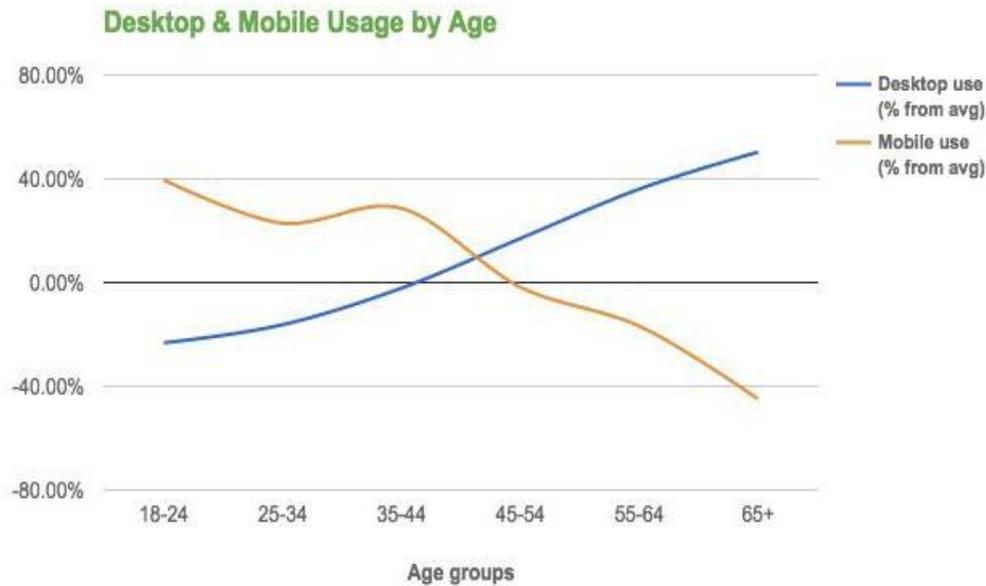


Figure 30

In sum, the rate of mobile use on our sample sites is significant and increasing. The two groups that use mobile devices to access LSC grantee websites most frequently are Spanish speakers and young people.¹⁰³ The usage rates of both desktop and tablet devices are trending downward.¹⁰⁴ That said, successful sites must be increasingly mobile-friendly, which would cater to both younger and Spanish speaking visitors.¹⁰⁵

¹⁰² See Figure 17, Gallup results on adaptability to technology for different age groups.

¹⁰³ Data on devices by language is based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged). Data on devices per age group is based on Google Analytics data from 2.8 million sessions from three sites in three states (averaged). We had data available from three sites none of which were inconsistent with the aggregated data depicted in the graph. Websites that had the online age demographics data available to us were administered by offices who have a non-overlapping theoretical catchment area of 39 million people.

¹⁰⁴ Trends within age groups are based on Google Analytics data from 2.8 million sessions from three sites in three states (averaged). We had data available from three sites none of which were inconsistent with the aggregated data depicted in the graph. Websites that had the online age demographics data available to us were administered by offices who have a non-overlapping theoretical catchment area of 39 million people. Other device trends are based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged).

¹⁰⁵ Mobile compatibility is more necessary than ever to reach all potential clients. The LSC Technology Summit Report also anticipated the need for compatibility with as many devices as possible, and sought to

4.3.2 How Users Utilize Mobile Devices

Due to the upward trend in mobile usage, we explored how people with different devices behave on our sample sites. Figure 31 below reveals that the bounce rate (i.e. user not interacting with the site) for mobile users is higher than the bounce rate for desktop users, and the chance of mobile users returning to the site is less compared to desktop users.

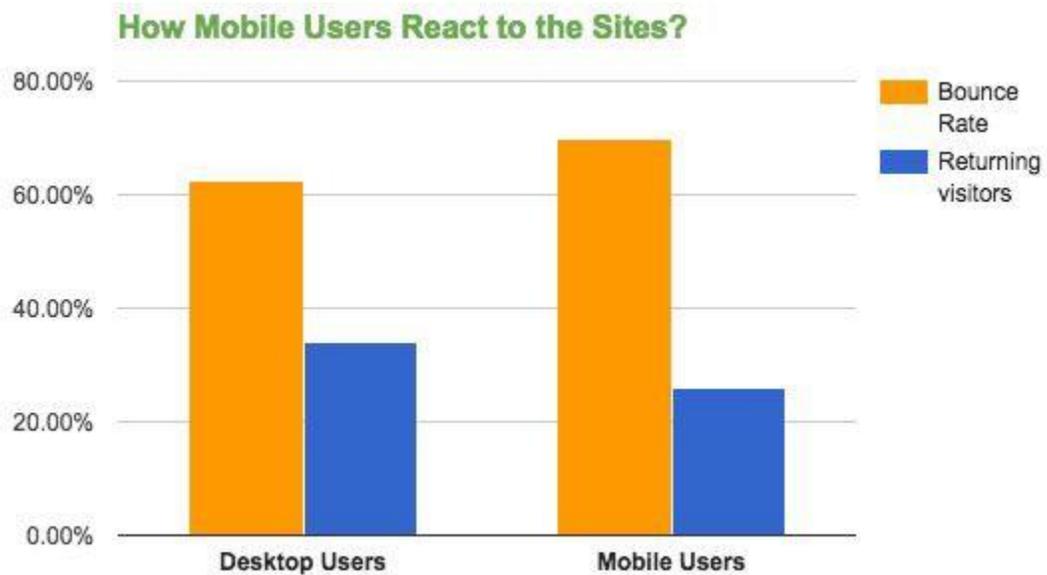


Figure 31

In Figure 31 above, the higher bounce rate (i.e. no interaction) suggests that our sample sites were less accessible through handheld devices. The users also chose not to return to the sites with the same device.

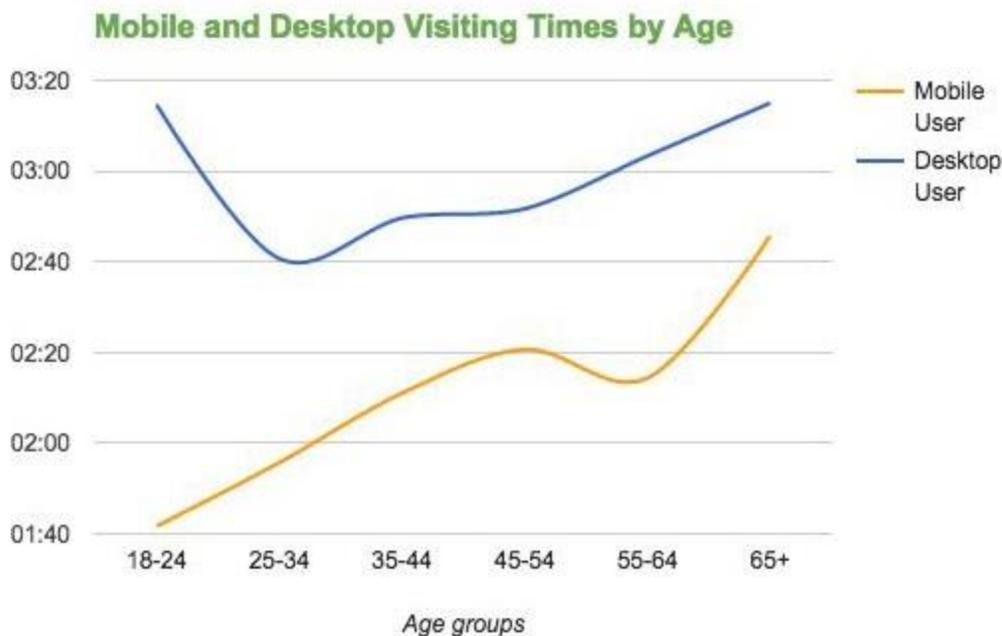
Earlier in the Report we saw a relationship between older age groups and longer visiting time.¹⁰⁶ We also know that desktop users visited our sample sites longer than mobile users, 2 minutes

establish a “website accessible through computers, tablets, or smartphones that provides sophisticated but easily understandable information...”

¹⁰⁶ This is related to Figure 18, which revealed that older users spent more time on our sample sites in general.

19 seconds compared to 1 minute 42 seconds, respectively.¹⁰⁷ That said, it was not possible for us to definitively conclude whether visitor age or visiting device had a greater effect on time spent on the sample sites. In other words, we cannot be certain whether lower time spent visiting LSC sample sites is a function of how people use mobile devices in general or how younger people find and use information with their smartphones. That said, in Figure 32 below we compared how both age and device correlate with the visiting time (Y-axis represents minutes and seconds visited; X-axis the age groups. The blue line represents desktop users and the orange line mobile users).¹⁰⁸

Figure 32



In Figure 32 above there is a clear difference in visiting times with older and younger mobile users (orange line) in our sample sites. On the other hand, there is no consistent correlation with desktop usage by age and visiting time (blue line).¹⁰⁹ As an explanation for shorter visiting

¹⁰⁷ Average session time on our sample sites is just 2 minutes 3 seconds. Returning visitors spend longer time on our sample sites (2 min 51 s) compared to new visitors (1 min 49 s). Visiting time averages are based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged).

¹⁰⁸ Based on Google Analytics data from 2.8 million sessions from three sites in three states (averaged). Websites that had the online age demographics data available to us were administered by offices who have a non-overlapping theoretical catchment area of 39 million people.

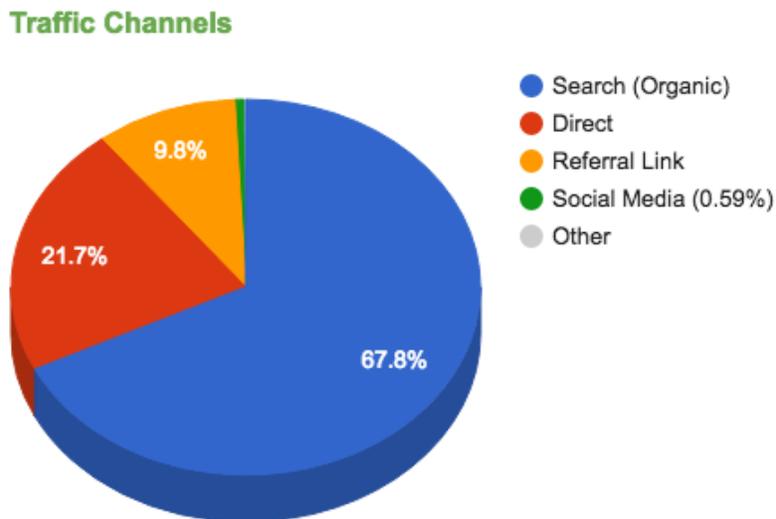
¹⁰⁹ Based on Google Analytics data from 2.8 million sessions from three sites in three states (averaged). Websites that had the online age demographics data available to us were administered by offices who have a non-overlapping theoretical catchment area of 39 million people.

time in our sample sites, Figure 32 suggests a combination of age- and device-related behavioral patterns, rather than a single factor. The data is also consistent with the theory that younger mobile users are more likely to spend less time on the sites and move on quickly unless they immediately find what they need.¹¹⁰ However, the graph also indicates that in the youngest age group (18–24) there is more of a difference in visiting time between the mobile and desktop users than in any other age group. In that age group of 18–24, mobile users visit our sample sites only half of the total time compared to desktop users. Whatever the underlying reason for this behavior, it is a trend that might become even more pronounced in the future. The data also underscores the need for LSC affiliated websites to be mobile-friendly and constructed so that the most important information can be quickly found, especially if you want to reach younger audiences.

4.3.3 Online Outreach Channels

We used the Google Analytics data of our sample sites to determine what are the most used channels to reach these LSC grantee sites (see Figure 33 below).

Figure 33



¹¹⁰ We were also looking for differences in how many pages per session users visit, which we divided by device and age. There was only a slight difference in how many pages younger mobile users visited per session compared to older users (-11%). Information on pages per session by age was based on Google Analytics data from 2.8 million sessions from three sites in three states (averaged). Websites that had the online age demographics data available to us were administered by offices who have a non-overlapping theoretical catchment area of 39 million people.

Search engines, namely Google, dominate as the source of incoming traffic. Direct traffic from clicking bookmarks and entering URLs on the address bar come as a distant second (21.7%). Referral links from other websites are the third and last noticeable source of traffic (9.8%). Social media generates less than a percent (0.59%) of all the traffic of our sample sites.¹¹¹

Social media has taken our lives by storm. Many organizations have taken advantage of the viral nature of social media and have allocated resources to build their social media presence. However, as indicated by the data from our sample sites, this source of web traffic either has not fully materialized or simply is not a suitable platform to generate web traffic for legal aid sites, at least not yet. If we dissect the specific source of social media traffic we get the following picture (Figure 34 below, left). See *a/so*, the language breakdown for site traffic via social media (Figure 35, right).¹¹²

Figure 34

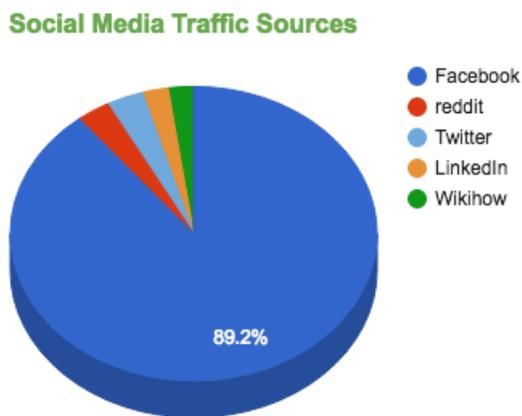
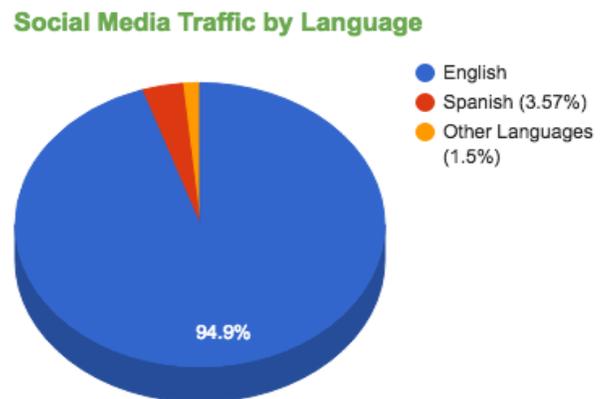


Figure 35



In a nutshell, Facebook generates almost 90% of all the social media traffic but it counts only as 0.5% of the total site traffic. Furthermore, almost 95% of that traffic consists of English speaking visitors (see Figure 35 above).¹¹³ This data supports further research into the feasibility of optimizing online outreach through social media platforms.

¹¹¹ Based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged).

¹¹² Based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged).

¹¹³ Based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged).

4.3.4 Browser Trends

The online user's browser choice largely affects the look and usability of websites. Even though there are third party tools to test browser and device compatibility, it's also good to have the basic knowledge of current browser use trends. Some of our sample websites have varying appearances and utility depending on which web browser is used. Figure 36 below compares the data from the past year to three-year data on browsers used.¹¹⁴

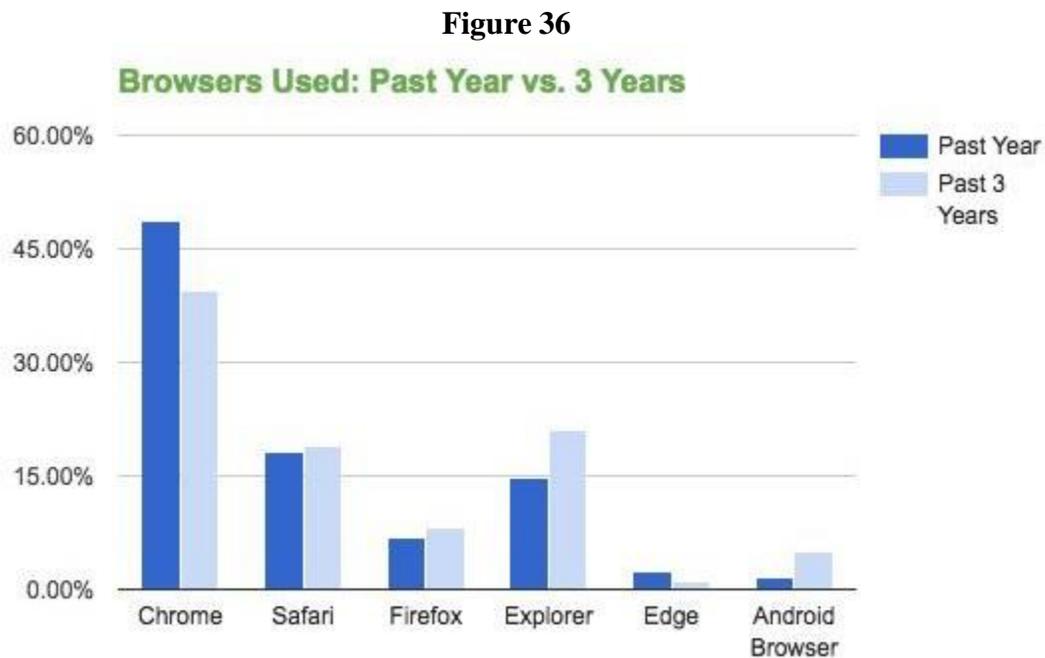


Figure 36 above reveals that Google's Chrome has been the most popular browser for visitors to our sample sites. It also shows that the now discontinued Internet Explorer is still the third-most used browser. Microsoft's Edge browser, which replaced Explorer, is seeing gradually increased use. Apple's Safari is the second-most popular browser among visitors to our sample sites.¹¹⁵ Browser data encourages compatibility across all web browsers to ensure maximum

¹¹⁴ Based on Google Analytics data from 4.1 million sessions from six sites in six states (averaged).

¹¹⁵ Based on data from Sep 30, 2015–Sep 30, 2016. As we can see, *discontinued* does not mean that the browser is not in use anymore, just that it is not widely supported by different applications and does not receive software updates by the developer, Microsoft. Also, use of Apple's Safari and Internet Explorer are

exposure and utility for legal services websites.¹¹⁶ It also emphasizes the importance of tracking user data in order to identify the strengths and weakness of online outreach strategies as well as choices in web technology.

SECTION 5: RECOMMENDATIONS

In this section, we recommend a list of best practices to address the communication challenges related to each of the three target audiences that LSC struggles to reach: non-native English speakers, low literacy English speakers, and “tech-averse” users. We were fortunate to have obtained data from a broad cross-section of LSC sites in terms of geography and demographics. As we formulated our recommendations, we appreciated the benefits and limits of the predictive value of our empirical data.

Before diving into the more detailed recommendations, here are some general guidelines: First, we encourage all organizations to access and use their own Google Analytics data (or other empirical metrics) to monitor website users’ behavioral trends (See [Section 4.1](#) for more information). Second, we encourage LSC grantees to compare their analytics with our sample site data and applicable national trends so that they can view their findings in context. Third, given the value we found in the website analytics, we recommend that legal service organizations across the country share data to allow for larger data sets with even more predictive value. Perhaps LSC and their data analytics group could coordinate and have a role in that effort.

above global averages, which are at 10.4% and 8.8%, respectively. Use of Mozilla’s Firefox browser is significantly lower than the global average (14.4%). Source: <http://gs.statcounter.com/> as of 12/2016.

¹¹⁶ We also tested the theory that changes in browser technology would change the way people find the websites. Compared to the other popular browsers, Chrome introduced one merged address and search bar, called Omnibox, when it was launched. The feature has now been implemented on other browsers as well. In theory, this might have changed how people access the sites. However, we couldn’t find any indication of change in behavior that wasn’t within the margin of error.

5.1 Improve Readability

Below is a list of recommendations for improving website readability. As discussed in [Section 3.2.1](#), readability improvement is critical for effective legal outreach, as it will boost comprehension for both non-native English speakers and low literacy English speakers. To provide wider access to justice to many individuals, here are some quick guidelines website administrators should consider:

Identify and write for your audience. The first step in successful online legal outreach is to identify your target. Run a plain language grade level test using Open Advocate (<https://sites.google.com/a/lawny.org/plain-language-library/>) or a comparable tool to check the grade level of the web pages' text. Compare grade levels across the web pages with the user visiting time data for each web page to find the appropriate grade level for your site users (See [Section 3.2.4](#) for more information on Open Advocate, and [Section 4.1.2](#) for an example of grade level analysis).

Write in plain language. This means: (1) address one person instead of a group; (2) use pronouns that directly speak to readers; (3) use words, sentences, and paragraphs that are short and simple; (4) include topic sentences in paragraphs; and (5) use “must” to indicate requirements (See [Section 3.2.3](#) for more information).

Use non-textual elements to improve readability. Using examples, lists, and tables to make complex materials easier to understand is one way to help readers comprehend. Another non-textual method to improve communication is using fotonovelas, which work like comic books (See [Section 3.2.5](#) for more information).

Pay special attention to users' online reading behavior. Online users scan, rather than read, and tend to demonstrate a F-shaped reading pattern in which they pay attention to the first few words of first two paragraphs more than the rest of the content. Start subheads, paragraphs, and bullet points with information-carrying words, and state the most important information in the first two paragraphs. And communicate at the top of the page that the content is interesting and useful to users (See [Section 3.2.5](#) for more information).¹¹⁷

¹¹⁷ <https://www.nngroup.com/topic/writing-web/> (Nielsen Norman Group)

Use scroll analysis to determine how approachable your self-help pages are. To analyze visitor engagement with your site pages, the SumoMe Content Analytics¹¹⁸ is one helpful tool in looking at how many of your site visitors scroll down until the very end of the page. From the data, you can also find out which part of your page marks where 50% of your visitors leave.¹¹⁹

5.2 Communicate with Non-Native English Speakers

Below is a list of recommendations to address challenges in online outreach to non-native English speakers. All legal service organizations should track rates of non-English use in their target regions. Furthermore, all legal aid websites should translate their text content to at least the three non-English languages most used in their target areas. This is especially important for information about online intake systems. The following is a list of more specific suggestions for optimizing online outreach to non-native English speakers:

Make links to non-English language options visible and conveniently located on the front page of the website. This makes it easier for visitors to navigate between languages as necessary (See [Section 4.1.1](#) for more information).

Use readability analysis, non-lawyers, and plain language legal dictionaries¹²⁰ to improve your site’s readability across all applicable non-English languages. We interviewed some of the people administering the LSC grantees’ websites. One practitioner who plays a role in designing his organization’s web presence shared some very helpful strategies and tools his organization uses to close the language gap. One technique involves using non-lawyers in the community to help translate information to make the language less “technical.” The practitioner warned that the process is not quick or easy and we recognize that this may be difficult for organizations facing especially challenging financial constraints. Plainlanguage.gov also has great resources to improve the readability of your site.

¹¹⁸ <https://sumome.com/app/content-analytics>. This tool is not free – there are five different plans, including the more modest \$29 per month plan that lets content providers to check up to 5k website visits per month. More details on pricing information can be found here: <https://sumome.com/pricing>.

¹¹⁹ See also <http://www.smartinsights.com/search-engine-optimisation-seo/seo-strategy/top-seo-tips-2016/>

¹²⁰ See e.g. <http://www.plainlanguage.gov/howto/wordsuggestions/simplewords.cfm> and other resources at <http://www.plainlanguage.gov>

For general website and intake system navigation, include analysis of text, image use, and clean spacing. Several of our sample sites had significantly different web page layouts for each text language. In some cases, non-English text was displayed unaccompanied by any visual aids.

Here are two ways to get feedback on the comprehension level of your non-English text:

- **Create an online survey.** Your survey can appear at any moment during a user's session, or upon completion of an online intake form. Your survey can ask a user to evaluate how accessible the website is for someone with his/her language preference. This option would likely provide the most accurate assessment because it engages users who are currently using your site. However, it is possible that only satisfied users will complete the survey, creating an incomplete picture of the site's usability for non-native English speakers.
- **Ask in-person clients who report navigating the website.** This can be done both formally through a survey and/or informally through intake or a counseling session. Both options will likely generate a higher percentage of user responses, yet risk inaccuracy because the client would not be currently using the website. Still, it can be helpful to gather information regarding use and comprehension even if the process isn't perfect.

Create more recognizable real-time help features. Assist clients currently navigating your website in three possible ways:

- **Add a "HELP" button in all relevant languages.** When users click on the help feature, a message can appear that either provides more succinct directions through a multi-lingual FAQ, or a phone number users can call for assistance. This option also provides users positive reinforcement about their decision to seek free legal services.
- **Provide an online chat option.** This was implemented on one of our sample sites, and offered assistance in either English or Spanish.
- **Designate an intake liaison to answer questions by phone or in-person.** Provide

contact information so that those seeking assistance through the online intake process can get help navigating the website or be guided to additional resources.

5.3 Improve Your Website's Usability

This section provides a list of recommendations for improving online outreach to users who lack technological skills and/or confidence with digital technology. These recommendations especially reinforce the benefits of web analytical data to guide decision making and implement web page improvements:

Make all web pages compatible with major web browsers. Our findings show that visitors use several browsers to access legal services websites. It is important to make all website features compatible with all browsers, because users will not know what they are missing if they use a browser which skews the formatting or content of your site.

Make all web pages and intake systems compatible with mobile device browsers. More people use mobile browsers to access the internet each year. Moreover, an increasing portion of the population uses *only* mobile browsers to access the internet. This means that desktop browser compatibility is no longer enough to reach the target audience (See Sections [3.1.2](#) and [4.3.1](#)). Finally, mobile users can have data, time and resource constraints that place a premium on helping them find what they need quickly.

Control the domain of your online intake system. Access to web analytics for intake systems is very beneficial to legal services organizations because they provide information about those users seeking to communicate directly with the organization. If your online intake system will remain with a third-party host, request access to the user analytics data.

Place clear links to your website's online intake system on your homepage. Our findings show that English speakers on average visit up to two pages on our sample sites. The average is even lower for Spanish, Chinese, and Russian speakers. Intake systems that are difficult to locate or that require more than one click to reach are not likely to be found by website visitors (See [Section 4.2.1](#)).

5.4 Target the Right Audience

Identify your target audience on your site. One of our sample sites experienced a high volume of traffic to their website from users well outside of their catchment area.¹²¹ Here are some ideas about how to limit this problem and to optimize your website for your target audience:

Indicate that the site is primarily for users within your target area. This will decrease the number of ineligible users that submit intake applications or call the wrong organization. Ideally, each website could direct users outside of the target area to appropriate resources. One organization that faced this challenge found success in mentioning their target area in as many programs and features as possible, in order to serve as a consistent reminder to visitors about who that organization aimed to serve. Since Google released its “Pigeon” update in 2014, the importance of location for search engines has gained significant prominence in their rankings.¹²² Therefore, include location-specific keywords and personalize content based on your target audiences’ location on your website.¹²³

Limit your intake system to accept applications only from a specific list of zip codes.

Having your intake settings limit applications by zip code can also serve as an easy first step to make sure your system isn’t overwhelmed with ineligible applicants.

Let search engine providers know your physical address. Naturally, you should inform Google and others if either your web domain¹²⁴ or physical address changes to another location.¹²⁵ Therefore, if you haven’t already, make sure your physical address is listed in Google so it appears on Maps, Search, and other services.¹²⁶

¹²¹ Some of our sample sites had more out-of-state visitors than others. E.g. one of the sites had 49% of their visitors coming from outside of their catchment area. Another site had 28% of their online visitors coming from outside the area they serve.

¹²² Google still has a dominant market share among search engines with around 65% market share in the US. However, Yahoo’s and Microsoft’s searches (incl. Bing) also have a respectable combined market share of around 30%. See more detailed statistics on:

<https://www.statista.com/statistics/267161/market-share-of-search-engines-in-the-united-states/>

¹²³ <http://www.seonick.net/7-simple-seo-tricks-to-improve-your-2016-seo/>;

<https://moz.com/google-algorithm-change>

¹²⁴ See Google’s instructions: <https://support.google.com/webmasters/answer/83106?hl=en>

¹²⁵ See the instruction on how to change your address on Google:

<https://support.google.com/webmasters/answer/83106?hl=en>

¹²⁶ Instructions on Google’s business listing: <https://support.google.com/business/answer/3039617?hl=en>

5.5 Increase Your Website's Visibility

The following is a list of recommendations for increasing the likelihood that your site is discovered when internet users search for free or low-cost civil legal services online:

Search Engine Optimization (SEO). Historically, the recommendations around SEO focused on keywords, but now original content is more important.¹²⁷ As search engines are getting smarter every day¹²⁸, it is no longer about getting the click, or the right keyword – it's more and more about how people are interacting with your website. It's about the post-click activity, meaning that not only do you have to get the clicks, but you also have to satisfy user intent after they enter your site.¹²⁹

Focus on mobile use and readability to improve your site's visibility. The total number of web searches on mobile devices has seen a 43% increase year-over-year.¹³⁰ Google and other search engine providers know this. According to an August 2015 study on the future of search engine optimization (SEO), the most important factors for search engine visibility in 2016 will be mobile-friendliness, which will increase in impact by 88%;¹³¹ analysis of a page's perceived value (81% increase); the amount of time the user is on a page (67% increase); and readability/design (up 67%).¹³²

Consider having videos on your site and in social media. Remember that not only do you have to get the clicks, but you have to satisfy user intent.¹³³ For example, videos are up to 50

¹²⁷ Especially since Google's Penguin and Panda search engine algorithm updates in 2011 and 2012, respectively. See list of changes: <https://moz.com/google-algorithm-change>

¹²⁸ Google is using more and more machine learning in its searches and it's also making 500 smaller algorithm changes a year. Sources: SEO Specialist Martin Laetsch's interview on <https://www.ama.org/publications/MarketingNews/Pages/seo-rules-2016.aspx> and <https://www.wired.com/2016/02/ai-is-changing-the-technology-behind-google-searches/>

¹²⁹ <https://www.ama.org/publications/MarketingNews/Pages/seo-rules-2016.aspx> (see Interview of Cyrus Shepard, SEO specialist at Moz)

¹³⁰ *Optimizing and Marketing Your Business - The 2016 Ultimate Guide*. See also <http://neilpatel.com/>

¹³¹ *Optimizing and Marketing Your Business - The 2016 Ultimate Guide*. See also Neilpatel.com; <http://www.seonick.net/7-simple-seo-tricks-to-improve-your-2016-seo/>

¹³² <https://www.ama.org/publications/MarketingNews/Pages/seo-rules-2016.aspx>

¹³³ <https://www.ama.org/publications/MarketingNews/Pages/seo-rules-2016.aspx> (see Interview of Cyrus Shepard, SEO specialist at Moz)

times more visible in Google than plain, static text.¹³⁴ With videos you can also have a multi-channel approach as you can also easily post them in social media.

Aim high on search engine visibility, i.e. on the top three. Use Google Analytics to track which keywords and search terms your visitors use to find your site or specific pages and make sure the pages appear high on Google's and other search engines' result pages. In the Figure 38 below you can see that the top three results get over 60% of all the clicks and top five get as much as 75%. After that, search results get clicked only 2–4% of the time.¹³⁵ See also the eye-tracking heatmap of search engine users below, which helps explain the percentages.¹³⁶



Figure 37

Google Result Page Rank	Average Traffic Share
1	32.5%
2	17.6%
3	11.4%
4	8.1%
5	6.1%
6	4.4%
7	3.5%
8	3.1%
9	2.6%
10	2.4%

Figure 38

Consider advertising less visible pages in search engines. If you have resources allocated for advertising, consider advertising specific pages in certain languages or aimed at certain target areas.¹³⁷ Especially, consider allocating resources if you want to serve underrepresented minority languages and make them find you in search engines.¹³⁸ On the heat map above

¹³⁴ www.quicksprout.com/2012/03/19/how-to-rank-on-the-first-page-of-google-through-videos, www.seonick.net/7-simple-seo-tricks-to-improve-your-2016-seo

¹³⁵ <https://www.nngroup.com/articles/f-shaped-pattern-reading-web-content/>

¹³⁶ searchenginewatch.com/sew/study/2276184/no-1-position-in-google-gets-33-of-search-traffic-study. See also [Section 3.2.5](#) for information on the eye-tracking heat maps.

¹³⁷ Learn more about Google advertising: <http://www.wordstream.com/blog/ws/2012/07/17/google-advertising>

¹³⁸ Instructions for language targeted ads on Google: <https://support.google.com/adwords/answer/1722078>

(Figure 37), you can actually see how the advertisement on the right upper corner gets more attention from the search engine user than the results ranked 4, 5 or below.¹³⁹

Make sure your subpages show up on Google's results page in the "Sitelinks" portion. In the chart below, you can see how the subpage links, called Sitelinks, show up on Google's search results page. See, Figure 40, area "2", right below the main link to your site (area "1"). The Sitelinks are meant to help users navigate your site. Google analyzes the link structure of your site to find these shortcuts to your subpages. Sitelinks save users' time and allow them to quickly find the information they're looking for. Indexing the pages on your site accordingly would be helpful generally and particularly helpful for indexing pages targeted for non-English speakers.¹⁴⁰ Additionally, index your intake system in a way that prompts Google to create a Sitelink for it so that visitors can more easily find the online intake portion of your site.¹⁴¹

Figure 39



¹³⁹ There is another reason you might want to open a Google AdWords account: After an update on Google Analytics in late 2011, Google stopped providing reliable access to organic search query data other than their AdWords advertising platform clients. See <http://www.wordstream.com/blog/ws/2012/07/17/google-advertising>

¹⁴⁰ At the moment, sitelinks are automated. If the structure of your site doesn't allow Google's algorithms to find good sitelinks, or Google doesn't think that the sitelinks for your site are relevant for the user's query, it won't show them. There are best practices you can follow to improve the quality of your sitelinks. For example, for your site's internal links, make sure you use anchor text and alt text that's informative, compact, and avoids repetition. Instructions on how to index pages on your site in Google:

<https://support.google.com/webmasters/answer/6259634?hl=en>

¹⁴¹ Note that this might be more difficult if the intake system is not under your own domain.

Consider providing “Rich Answers” for Google. Although aiming for the top positions in Google search results for your keywords is still important, you can also optimize for Rich Answers. A Rich Answer is a separate box providing an instant answer to a search that can be seen on top of the Google’s search result page (see Figure 40 below).¹⁴² This is a great way to provide information to the public and your clients without them having to visit your site – and when they do visit, it helps them to locate the information in your site faster.

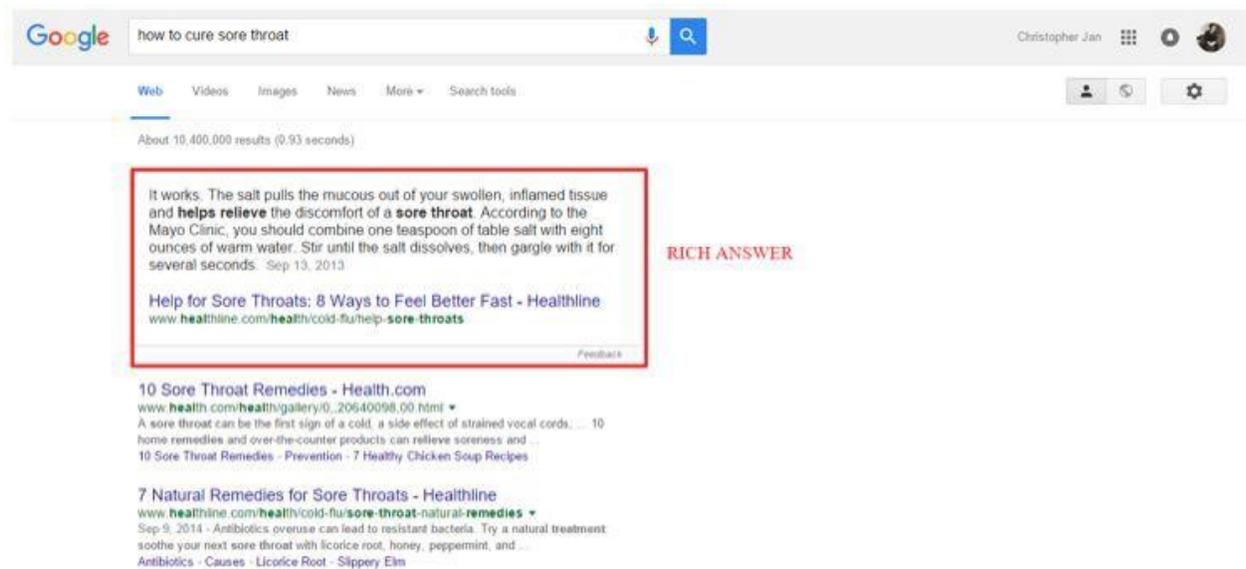


Figure 40

Find out which websites you are getting referrals from. You can use web analytics to see where you get your referral traffic from. Referral links on other websites do not only direct traffic to your site but they also improve your ranking on search engines’ and make your pages show up higher on the result pages.

¹⁴² <http://www.smartinsights.com/search-engine-optimisation-seo/seo-strategy/top-seo-tips-2016/> At the moment, Rich Answers appear on 19.45% of Google search results out of the 850,000 different keywords that are set to trigger these answers (Source: <http://searchengineland.com/study-google-now-displays-rich-answers-19-45-queries-215456>).

SECTION 6: CONCLUSION

Here, we summarize some of the major points revealed by our research and pull together a list of topics that merit further research by those who might build upon our work. The questions we answered address some of the key issues relevant to closing the justice gap. However, our questions answered do not represent the full range of useful insights we included in this report.

6.1 QUESTIONS ANSWERED

6.1.1 Non-Native English Speakers Are Relatively Absent Online

Within our data set we have confirmed that there is a substantial variance between the visiting times of English-speaking and non-English-speaking users. Non-native English speakers used our sample sites less, found their online intake systems less frequently, returned to the sites less frequently, and interacted with pages less frequently.

6.1.2 Older Users Are Active and Engaged

We have also discovered that there is more online activity among older users than expected. In fact, from what our data can project, older users are quite successful in navigating legal services websites. Older users stayed on our sample sites longer and returned less frequently, suggesting that they found adequate information to satisfy their needs.

6.1.3 Mobile Compatibility Is Key

Perhaps the clearest conclusion derived from our research is that mobile browsers will play a significant role in bridging the digital divide. Visitors to our sample sites used mobile browsers almost as often as they used desktop browsers, although on average the mobile users interacted with the web pages less frequently and returned to the websites less frequently. We expect that the trend towards greater use of mobile devices will continue.

6.2 QUESTIONS REQUIRING MORE RESEARCH

6.2.1 How to Properly Analyze the “Tech-Averse”

Our analysis of internet users that lack technical skill and/or comfort was relatively limited because of the limitations of our data sources. We used age as a proxy for technological comfort but we wonder whether this is a fair substitute, even though it has been established that age and tech-aversion have strong correlation. It was also impossible to use Google Analytics data to differentiate between users who had help browsing our sample sites and those who did not.

6.2.2 How to Properly Analyze Online Intake Systems

Some of our data suggests that visitors to our sample sites had trouble finding the online intake systems. We are not certain how accurate this conclusion is, given our uncertainty about how many visitors needed/searched for an online intake system. Additionally, the data suggests that intake systems were largely useless to non-native English speakers. We are not certain whether the poor showing of non-native English speakers is irregular for the participating organizations, given the lack of cultural diversity in the target areas of the sample sites. A comprehensive study of more LSC grantee websites will provide a better understanding of how users of non-English languages behave online.

6.3 OUR INTENDED IMPACT

We hope that our recommended best practices will help civil legal services organizations reach not just a broader audience, but the correct audience. We aimed to help legal service organizations lessen the disparity between the proportion of English and non-English speaking users that successfully navigate their websites and receive assistance. We want to assist legal services organizations in better reaching potential clients across the spectrum of technological savviness. We also tried to help legal services organizations articulate their services more clearly so that users at all literacy levels can take advantage of the rich reserves of essential legal information that LSC-affiliated organizations make available.

We believe this report lays a foundation upon which future research can build by recognizing and recording the informational constraints we encountered over the course of our project. We want to play a part in encouraging legal services organizations to rely increasingly on analytics in making decisions about their web presence. Our advantage of having access across many different websites will ideally yield a more reflective sample from which organizations are comfortable drawing conclusions. We encourage more organizations to come together and invest in similar projects to aggregate even more data so they can make even more refined assessments.

6.4 NEXT STEPS

Based on our research, we recommend investing time and resources in optimizing online outreach to target audiences by: (1) studying national trends for your target audience; (2) reviewing web analytics data from your websites and online intake systems; and (3) discovering and using the most up-to-date digital technology to implement changes to your site informed by your target audience's online behavior. In December 2013, the Summit on the Use of Technology to Expand Access to Justice proposed a series of nationwide unified "legal portals" that could direct visitors to appropriate legal assistance resources including pro se materials.¹⁴³ It is exactly this type of forward thinking that will keep civil legal services organizations at the forefront of digital outreach optimization.

¹⁴³ Legal Services Corporation, *Report of The Summit on the Use of Technology to Expand Access to Justice*, December 2013.