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THE EMERGENCE OF INTERNET CITATIONS IN U.S. SUPREME COURT OPINIONS*

WILLIAM R. WILKERSON

This article tracks the use and growth of Internet citations in the decade 1996-2006. The first citation to an Internet reference appeared in a U.S. Supreme Court opinion in 1996. At the end of the 2005 term, all members of the Court had included Internet citations in opinions, and in recent terms, Internet citations appeared in over one-third of cases decided by the Court. Internet citations are found in a disproportionately large number of dissenting opinions. Internet citations are less permanent than other references, although the percentage of live links in Supreme Court opinions is much higher than that found in studies of Internet citation permanence done in other disciplines. The use of Internet citations is compared to larger trends occurring in what is cited by members of the Court in their opinions. The rise in Internet citations has taken place at a time when citations to nonlegal sources have grown and references to law reviews have declined.

A careful reading of judicial decisions shows that Internet references have begun to appear in the written opinions of the Supreme Court of the United States. Through the 2005 term, justices of the Supreme Court have included 200 Internet citations in 114 opinions. The Supreme Court is not alone in this use, as it has also grown rapidly in other federal courts as well as in academic research. A Lexis-Nexis search found that authors of opinions on the U.S. Circuit Courts of Appeals included Internet references in 268 opinions in 2005, up from only 55 opinions in 2000. Similarly, district court judges included Internet citations in 928 published decisions in 2005, up from 183 in 2000. Citations to World Wide Web resources have grown in research of all kinds in recent years, including major science journals (Dellavalle et al., 2003) and law reviews (Rumsey, 2002).

The growth of Internet citations may also be part of a larger trend of what is cited in United States Supreme Court opinions. In mid-century, Chester Newland (1959) found that the number of law-review articles cited in Supreme Court opinions was growing at a rapid pace. Recent research has found a significant decline in the number of law-review citations since 1970 (Sirico, 2000; McClintock, 1998). In comparing the three-year periods of 1971 to 1973 and 1996 to 1998, Sirico found that citations to law reviews in all Supreme Court opinions had declined from 963 to 271. Other researchers have found a rise in the number of nonlegal citations during the same period (Schauer and Wise, 2000). From 1970 to 1998 the number of nonlegal citations increased from 72 to 217. In a study of 1996 United States Supreme Court

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opinions, 18.7 percent (441 of 2,356) of citations in majority opinions were to documents other than judicial opinions (Manz, 2002). While not all Internet citations are to nonlegal sources, with many references to government documents, Internet citations refer to different kinds of secondary sources from what the justices have used before to support their arguments. Internet citations are at least a small part of the trend in which judicial opinions are taking at least a slight turn toward the empirical, citing factual information more.

Given the past experience with the citation of new materials in the Supreme Court, we can expect this usage to increase. For example, use of law reviews was sporadic at first and some justices avoided the practice, but by 1950 all of the justices were relying on law reviews in their opinions (Newland, 1959), with this usage continuing to increase until 1970. Just as with the citation of law reviews in the 1930s and 1940s, only a few citations to the Internet appeared in the mid-1990s, but usage increased greatly by 2002 when all justices began making references to the Internet.

This article is an initial examination of the emergence of Internet citations in the opinions of the U.S. Supreme Court. The first section will describe the trend. Questions to be addressed include: What is the number of citations and when have they appeared? Which justices are incorporating citations into their opinions? What types of cases and types of opinions cite Internet references? To what type of information do justices refer? What are their sources of information? The second section will address whether the information included in the Court's Internet citations is disappearing from the Web, the implications of this problem, and ways that it can be addressed. A few remaining issues will be discussed in a third section, with a focus on questions for future research.

CITATIONS TO THE INTERNET

The data set for this paper was developed from the signed, published opinions of the United States Supreme Court written from the beginning of the 1990 term through end of the 2005 term. The goal was to identify all citations to World Wide Web sources in these opinions. Only signed opinions were used because there has been only one Internet citation in an unsigned opinion, order, or dissent to a denial of certiorari, which occurred in a denial of an application to vacate an order issued by the United States Court of Appeals for the Second Circuit written by Justice Ginsburg (*Doe v. Gonzales*, 2006).

The Lexis-Nexis online database of Supreme Court opinions was used to identify Web sources. The primary search term used was "http," the initials for "hyper text transfer protocol" that begins all uniform resource locators (URLs), the addresses of Web pages. Searches for op-level domain names—.com, .net, and .gov, for example—were also carried out, but no additional Internet references were found using these additional terms.¹ Citations both in the text of opinions *and* in footnotes were includ-

¹ As a cross-check, all of the decisions in the 2003 term were searched using Cornell's Legal Information Institute site (<http://www.law.cornell.edu>). The results of the cross-check matched those from the Lexis search.

ed in the data set. The data set was designed so that Web citations were only counted once in each opinion; in practice, no Web citation was used more than once in any opinion during the period studied.

How Many Citations Are There? The United States Supreme Court as an institution has not traditionally been seen as an early adopter of new technology. While the Court now has several hundred computers and two computer networks (O'Brien, 2005), it has been slow to adopt technological innovations. For example, it did not begin recording its oral arguments until 1955 and continued to record on tape until very recently, despite the long availability of superior technology. As late as 2000, the Court's building had no external e-mail capability, and the Court did not first create its own Web site until April 2000 (Mersky and Percy, 2000). Today the Court has adopted new technologies, aided by their law clerks and the Clerk's Office, and now, for example, litigants file many documents electronically, all the justices have laptops and have the capability of working at home through secure networks, and they now circulate drafts as e-mail attachments (O'Brien, 2005; Mersky and Percy, 2000).

There was no use of citations to Internet references by the Supreme Court of the United States until the mid-1990s and only infrequent use through the remainder of the decade. The Court first cited an Internet source when, in the Supreme Court's 1995 term, Justice David Souter, in *Denver Area Educational Telecommunications Consortium v. FCC* (1996), referenced news and commercial explanations of cable-modem technology. Single opinions cited the Internet in both the 1997 term and 1998 terms after no references were made in the 1996 term (see Table 1). During this period, only five citations were included in three cases. It is not surprising that the Court's use of Internet citations was rather light during this early period. The commercial application of the Internet, the World Wide Web, only began to emerge in 1993, and while it grew remarkably fast in terms of both content and usage, the Web was not widely used, even by specialized groups, for several years after that.

The number of cases and opinions with citations to Internet references, as well as the number of total citations, notably increased beginning with the Court's 1999 term. During this term and the two terms that followed, use of Internet citations increased fivefold but were still modest in number. Citations were found in from four and seven cases per term (between 4.8 percent and 8.2 percent of cases decided by oral argument) and in between five and eight opinions. The number of citations increased in similar fashion. Justices David Souter and Ruth Bader Ginsburg were the first justices to include an Internet citation in their opinions, but during the 1999 term, three more justices—Stephen Breyer, Sandra Day O'Connor, and Antonin Scalia—incorporated Web citations in their opinions for the first time.

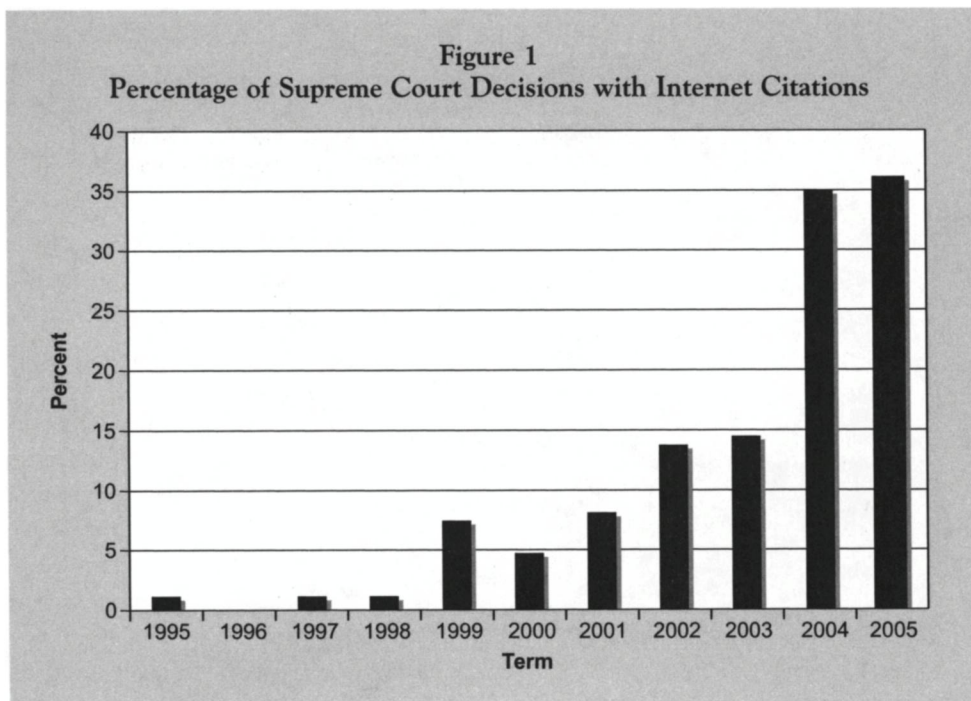
In the Court's 2002 and 2003 terms, use of citations to the Internet increased again when such citations appeared in roughly one-seventh of cases decided after full consideration. In each term, there were approximately 25 references. By the end of the 2002 term, all nine members of the Court had used at least one Web citation in an opinion. After that, there was a significant increase in the percentage of cases in

Table 1
Supreme Court Internet Citations

Term	Number of Opinions with a Citation	Number of Cases with a Citation	Percent of Cases with a Citation	Total Citations for Term
1995	1	1	1.2	2
1996	0	0	0.0	0
1997	1	1	1.1	2
1998	1	1	1.2	1
1999	5	6	7.6	10
2000	5	4	4.8	10
2001	8	7	8.2	13
2002	13	11	13.9	25
2003	15	13	14.6	26
2004	35	26	35.1	66
2005	30	25	36.2	45
Total	114	95		200

which citations to the Internet appear (see Figure 1). The 2004 and 2005 terms showed another significant increase in the use of Internet citations. The total number of Internet citations in the 2004 term increased 2.5 times from the 2003 term, and the number of cases and total opinions that included Internet citations more than doubled in the 2004 term over the 2003 term. Web citations appeared in over one-third of cases decided in the 2004 term, and there are a total of 66 citations in 26 separate opinions. There were 25 cases with Internet citations in the 2005 term, roughly on par with the 2004 term. However, the total number of citations declined significantly from the previous term, dropping from 66 to 45 citations. Over 55 percent of all the Internet references cited in Supreme Court opinions by the Court have appeared since the 2004 term.

Which Justices Are Using Internet Citations? Each of the eleven justices who served during the last eleven terms has cited an Internet reference in at least one opinion, but use has varied noticeably among the justices (see Table 2). The mean use of Internet citations for the nine justices who served through the 2004 term is 17.2 citations in 9.3 opinions per justice. Five justices—Ruth Bader Ginsburg, Antonin Scalia, Stephen Breyer, John Paul Stevens, and David Souter—have cited Internet references over 20 times through the 2005 term. Four of these justices—Ginsburg, Breyer, Stevens, and Souter—are the members of the court regarded as ideologically liberal. Interestingly, Justices Sandra Day O'Connor and Anthony Kennedy, the justices noted to be at the center of the Court ideologically during the last decade, are



in the middle of this range as well. The justices' term of first adoption follows a similar pattern. With the exception of Justice Stevens, frequent users of Internet references first used citations in the 1990s, with less frequent users beginning to cite Internet references in 2001 or later. Two ideological conservatives—Clarence Thomas and especially former chief justice William Rehnquist—have been the least frequent users and latest adopters of Internet citations on the Court.

The 2002 through 2005 terms, those terms since all members of the Court during the period first referenced the Internet in an opinion, includes roughly 80 percent of the total use—161 citations of 200 total citations during the entire period (see Table 2). Comparing the most recent four terms with earlier usage shows that usage patterns have remained relatively consistent over time. The three top users of Internet citations overall—Ginsburg, Scalia, and Breyer—remain so for the last four years alone. A middle group—Justices Stevens, Kennedy, and Thomas—were relatively late adopters, but have consistently incorporated Internet citations since the 2002 term. Justices Souter and O'Connor, relatively early adopters of Internet citations, have been relatively light users in recent years. They surpass only Chief Justice Rehnquist when only the four most recent terms are examined.

The Internet Citation Patterns of Roberts and Alito. Both Chief Justice John Roberts and Justice Samuel Alito served as judges on the U.S. Courts of Appeals before their recent appointment and confirmation. Judge Roberts served for just over two years on the District of Columbia Circuit, during this time he authored 49 pub-

Table 2
Comparison of Internet Citation Use by Supreme Court Justices

Justice	Total Citations	Total Opinions	Term of First Use	2002-2005 Term Use
Ginsburg	33	19	1997	29
Scalia	30	16	1999	27
Breyer	29	16	1999	24
Stevens	23	14	2001	21
Souter	22	11	1995	7
Kennedy	19	13	2002	19
O'Connor (served only part of 2005 term)	18	12	1999	9
Thomas	18	9	2002	18
Rehnquist (died before 2005 term)	4	2	2002	4
Roberts (began service with 2005 term)	3	1	2005	3
Alito (began service during 2005 term)	1	1	2005	1
Total	200	114		161

lished opinions. In one case, *Sioux Valley Rural Valley Television v. FCC* (2003), he included two Internet citations, which were references to the rules and results of FCC spectrum auctions. In contrast, Judge Alito served on the Third Circuit Court of Appeals for fifteen years. He authored over 800 published opinions—714 majority opinions—with just over 400 of his opinions coming since the beginning of 1996. Eight of these opinions, all of which were majority opinions, included a total of thirteen Web references, with the first of these coming in 2000. Of the six “key” opinions he wrote since 2000 that were noted in a *New York Times* profile about him (2006), three included Internet cites: two high-profile immigration cases—*Cai Luan Chen v. Ashcroft* (2004) and *Xiu Ling Zhang v. Gonzalez* (2005)—and a First Amendment decision—*Pitt News v. Pappert* (2004).

In their time on the courts of appeals, both of the new members of the Supreme Court were light users of Internet citations. For comparison, the courts of appeals issued written opinions in 4,782 cases in 2004 and included Internet citations in 310 of those cases (Administrative Office of the U.S. Courts, 2005). Similarly, the two newest justices were light users of Internet citations in their first term on the Supreme Court. Both Chief Justice Roberts, who served the entire term, and Justice Alito, who joined the Court on January 31, 2006, almost four months after the term began, cited

Table 3
Internet Citations by Issue Area

Issue Area	Cases with Citation	Percent of Cases With Citations	Percent of Cases Decided
Criminal procedure	24	25.3	25.0
Economic activity (inc. unions)	22	24.4	19.5
First Amendment	16	16.8	6.5
Civil rights (inc. privacy)	15	15.8	19.2
Judicial power	8	8.4	14.8
Federalism	6	6.3	6.0
Due process	4	4.2	5.2
Other	0	0.0	3.8
Total	95	100.0	

the Internet in one case, with Roberts including three citations to legislation proposed by the Ohio legislature in *DaimlerChrysler Corp. v. Cuno* (2006) and Alito including a reference to federal caseload statistics in his opinion of the Court in *Woodford v. Ngo* (2006).

In What Types of Cases Do Justices Apply Internet Citations? Citations have appeared in the wide range of cases that the Supreme Court has decided over the last decade (see Table 3). Criminal procedure, economic activity, First Amendment, and civil rights are the most common case subjects where Internet citations appear. For the most part, the distribution of all cases with Internet citations is similar to the distribution of cases decided by the Court during the 1995 through 2001 terms (Epstein et al., 2003). Internet citations are overrepresented in First Amendment cases, as 16.8 percent of all the cases with Internet citations are First Amendment decisions whereas only 6.5 percent of the overall cases decided are in the same category. Internet citations are proportionally underrepresented in judicial-power cases, with Internet citations making up only 8.4 percent of the total while 14.8 percent of the total cases decided are judicial-power cases, and to a lesser extent, in civil-rights cases—15.8 percent of such cases had Internet citations, whereas civil-rights cases make up 19.2 percent of all cases decided.

In What Types of Opinions Do Internet Citations Appear? The largest group (44 percent) of the references appear in dissenting opinions, 37 percent appear in opinions announcing the ruling in cases, and the remaining 19 percent appear in concurring opinions (see Table 4). The number of dissents with Internet citations is impressive, especially considering the fact that the percentage of Internet citations in dissents declined in the 2005 term, along with the overall decline in the number of dissenting opinions, from 64 in the 2004 term to 55 in the 2005 term (Cady, 2006).

Table 4
Internet Citations by Type of Opinion

Type of Opinion	All Terms		2004 and 2005 Terms Only		
	Total Internet Citations	Percent of Citations	Opinions with Internet Citations / % of Total	Total Citations / % Percent of Total	Total Opinions Authored
Dissent	88	44.0	28 / 43.1	51 / 45.9	119 / 33.1
Opinion of the Court or Plurality	74	37.0	27 / 41.5	36 / 32.4	143 / 39.8
Concurrence	38	19.0	10 / 15.4	24 / 21.6	97 / 27.0
Total	200	100.0			

Is the appearance of many Internet references in dissenting opinions noteworthy? Does their frequency vary from the proportions of each type? There is evidence that this variation is real (see Table 4). In the 2004 and 2005 terms, the Court's 359 signed opinions were close to evenly divided between majority or plurality opinions (39.8 percent), concurring opinions (27 percent), and dissenting opinions (33.1 percent). In contrast, 45.9 percent of the total Internet citations were found in dissenting opinions, and 43.1 percent of the dissenting opinions included an Internet citation. The number of majority or plurality opinions with Internet citations is roughly proportional to the number of opinions written, but a much lower percentage of concurring opinions have Internet citations than might be expected based on the proportion of total opinions that are concurring opinions.

To What Do Internet Citations Refer? There are two ways of thinking about the content to which Internet citations refer—top-level domain names of the citations and the nature of the information. Over one-half (107 of 200) of Internet citations refer to a government domain name of some kind (see Table 5). Of those, the greatest number (75) refer to federal government domains (.gov or .mil). A new range of government documents—from financial disclosure statements to the Bureau of Labor Statistics online inflation calculator—are entering Supreme Court opinions. There are also a significant number of references to nonprofit organizations (.org) and commercial domains (.com), but at 44 and 29 citations, respectively, they trail behind government domains. Somewhat surprisingly, the academic domain (.edu) is only cited in 7.5 percent (15) of Internet references. Law-review academic work is cited by the Court regularly, if less frequently in recent years (Sirico, 2000), and non-law-review academic research is regularly cited by the Court (Schauer and Wise, 2000). For example the *American Political Science Review* is cited regularly as are other academic journals (Schauer and Wise, 2000). However, the final form of academic work consists of books and journal articles, which are found in specialized databases, and

Table 5
Internet Citations by Domain Name and by Whether Currently Live

Top-Level Domain	Citations	Percent of Citations	Percent of Citations Live
.gov (or equivalent federal – .mil)	75	37.5	93.3
.org	44	22.0	88.6
.com (or equivalent international)	29	14.5	79.3
State government (e.g., oh.us or michigan.gov)	28	14.0	71.4
.edu	15	7.5	73.3
Non-US-government	4	2.0	100.0
.net	4	2.0	75.0
unknown	1	0.5	100.0
Total	200	100.0	85.5

for the most part, the Internet is home to drafts of work, not the final products. This may account for the lack of .edu citations in Supreme Court opinions.

It is also clear that the overwhelming majority of information being cited by the Court is, broadly defined, legal in nature (see Table 6). Coding rules for this information were defined and based on rules developed by Schauer and Wise (2000:497-500), whose definition of legal documents is broad. Not surprisingly, court opinions, secondary legal sources, and textbooks aimed at lawyers are defined as legal. So too are government documents of any kind, as is any other type of information that would be traditionally found in a law library. Work done by non-law-school academics, even if the topic is the law, as well as news sources and other information of any type, are defined as nonlegal. While most of the coding was straightforward, some choices had to be made. For example, are citations to death-penalty statistics legal or nonlegal? They were coded nonlegal, but a case could be made that these statistics are legal.

On the basis of these strict definitions, 74.5 percent of the 200 citations to Internet resources are legal in nature. Federal government documents of some sort account for the overwhelming majority of legal information cited. Government documents have long appeared in Supreme Court opinions. While constituting only a small subset of citations, sources such as the *Congressional Record*, congressional hearings, legislative language, and administrative decisions have long appeared in opinions, but their numbers have increased over time, and the growing acceptance of Internet citations will likely increase this trend (Manz, 2002). Many of these are documents that would eventually appear in the government documents section of the library but appear on the Internet more quickly. In other instances, this information appears only on the Web. The immediacy of information is likely an important reason why Internet citations have begun to appear in judicial opinions.

Table 6
Supreme Court Internet Citations by Subject

Subject of Data	Citations	Percent of Citations
Legal	149	74.5%
Federal government documents	95	47.5
State government documents	29	14.5
Non-US-government documents	13	6.5
Nonprofit and academic research	9	4.5
Local government document	3	1.5
Nonlegal	51	25.5%
Nonprofit and academic research	29	14.5
Commercial and nonprofit information	8	4.0
News	6	3.0
Popular culture	5	2.5
Other	3	1.5
Total	155	100.0%

Examples of government documents cited include a Government Accountability Office report on four states' experiences with medical marijuana laws, the *Internal Revenue Manual*, the Bureau of Labor Statistics inflation calculator, a report on mineral-lease revenues produced by the Department of Interior, and a Bureau of Justice Statistics report on correctional facility populations. Citations to nonfederal government documents are common as well. These citations include 29 of the total references to state government documents (14.5 percent) and 13 citations to non-United States government documents (6.5 percent). State government documents include the *Illinois Police Law Manual*, admissions criteria from the University of Michigan Law School, and the *Legislative Guide to Redistricting* from the Iowa General Assembly's Legislative Service Bureau. Non-US citations include references to a European Union report on a US-EU summit, a British government document outlining the pricing of telecommunications bandwidth, and a reference to the Vienna Convention from the United Nations Web site.

Nineteen percent of Internet citations were to research by nonprofits and academics, such as studies from Harvard's Civil Rights Project and death-penalty data, with most of these citations being to nonlegal research. One interesting citation in the 2005 term was a reference by Justice Scalia in *Hudson v. Michigan* (2006) to a Cato Institute commentary in anticipation of the Court's decision in the case. There have been several citations to public-opinion data. Finally, there have been some interesting popular-culture citations. Lines from the television show *M*A*S*H* and

the film *The Magnificent Seven* were quoted, as was information about the Ten Commandments scrolls.

THE PERMANENCE OF CITATIONS: ARE THEY BEING LOST?

Internet citations are unlike other citations in an important way: they lack permanence. As Wallace Koehler (2004) puts it, “The World Wide Web is still not a library.” Web sites are not unique in this feature, as unpublished conference papers present a similar problem, but lack of permanence is an important issue. This lack of permanence undermines one of the goals of a citation, to provide “the information necessary to find and read the cited material” (Axel-Lute, 1982:148). Unlike the documents found in traditional legal citations—judicial opinions in bound volumes, legal treatises and other legal research aids, printed government documents, and legal and nonlegal scholarly literature are common examples—World Wide Web pages are not as stable as traditional printed references. This lack of permanence, sometimes referred to as “linkrot,” may result from at least one of three problems: 1) a cited URL may have disappeared; 2) a page may be unavailable without registration or subscription, even though it may have been freely available at an earlier date; or 3) the content of the page may have changed since the author accessed it (Rumsey, 2002). Previous research has found that Web pages have a short life (Koehler, 2004, 1999), and studies examining the use of Internet citations in law reviews (Rumsey, 2002), as well as in major science journals (Dellavalle, 2003), have found a quick erosion of Web sites referenced in scholarly work. For example, Rumsey found that 37 percent of Web citations in law reviews were dead within a year and a half and 70 percent of cites that were four and one half years old were no longer live.

Citations in all disciplines are critical to the work of scholarship. They provide a record of research, and it is not unusual that the references may be as important as the work itself. These issues are especially important in legal scholarship, where law reviews and judicial opinions are known for their exhaustive use of citations. *The Bluebook: A Uniform System of Citation*, the guide to citation for legal writers, encourages citations to the most widely accessible and permanent form of material available. So, for example, the *Blue Book* encourages citations to official opinion citations rather than to commercial or online database counterparts and states a preference for online databases to the Web (Rees, 2001).

The permanence of the Internet citations in Supreme Court opinions was determined by checking each reference in mid-July 2006 on two separate occasions. Two different browsers—Safari and Firefox on a Macintosh—were used to search for each citation if necessary to ensure that browser compatibility was not the reason why a Web site was not found.² If a reference was no longer live, the link was checked using archive.org’s Wayback Machine, which archives Web pages periodically and now has archived over 55 billion Web pages since 1996.

² While many Web sites are optimized for Windows compatibility, in practice it is rare that a Web page is not accessible on a Macintosh using either the Safari or Firefox Web browsers.

This examination revealed that 85.5 percent of citations were “live” at the time. Almost 98 percent of citations in the last year (all but one) were still live as of July 2006. Eighty-six percent of Web citations from the 2004 term were live, as well. The citations from the 1995 through 2004 terms were also checked in August 2005. Only four citations have been totally lost since this earlier survey in which the citations from the 1995 through 2004 terms were checked in August 2005; another seven disappeared from the Web, but can still be found using archive.org’s Wayback Machine.

Other studies have shown significant loss of references in a relatively short time. In a study of Internet references in major science journals published in the journal *Science*, 13 percent of links were lost 27 months after publication (Dellavalle et al., 2003). The most commonly vanishing links were those in the .com and .edu domains. Forty-six percent of .com and 30 percent of .edu references disappeared in 27 months; in contrast, only 10 percent of .gov and 5 percent of .org references were no longer live.

The small data set of Court Internet citations revealed slightly different behavior. Of the top-level domains most commonly cited (see Table 5), citations to federal government Web sites were still active at a high rate, 93.3 percent. Nonprofit (.org) and commercial (.com) citations had live links at rates similar to the data set as a whole. Only citations to state government and educational institution sites had a notably higher percentage of lost references (28.6 percent and 26.7 percent, respectively) than did the data set as a whole. The high percentage of live citations is likely because 1) many of the citations are to government Web sites, which may well value Web-site stability more than other information providers, and 2) many of the citations are recent, with approximately 80 percent of Internet citations in Supreme Court opinions having been placed since the October 2002 term. However, the percentage of older Internet citations still live is remarkably high in comparison to what has been found in earlier studies; 71.1 percent of citations from before the 2002 term were still live or available on archive.org.

Although the Web sites and documents cited by the Supreme Court were relatively permanent, 14.5 percent of these citations had disappeared by mid-July 2006. This is a significant loss of reference material in a relatively short time. In recognition of this problem, the Supreme Court undertook a new policy beginning with the October 2003 term. Each citation is to include a note that reads “all Internet materials as visited [month day, year], and available in Clerk of Court’s case file.” Such a policy does not solve all potential problems, however. Noting the date of access does not preserve data, but it does give the reader the ability to assess whether a Web page or Web document has changed since the author used the information. Similarly, the clerk’s case file is not readily accessible and the Clerk’s Office must still be contacted by mail, but the policy does preserve the record of citations used in an opinion in a way that was not done in the past. At least one other court, New York’s highest court, the court of appeals, has developed a similar policy. The New York Court of Appeals style manual allows for Internet citations if the information is unavailable in another form, and it requires the New York Law Reporting Bureau to archive the material

(Section 2.2(c)2 2002; Graffeo, 2005). Yet the New York Court of Appeals uses Internet citations sparingly. Since their first use in 1999, the court has cited such references only 43 times in 22 cases. In almost all instances, the references are to government documents or government-produced data.

An informal survey by the author of decisions using Internet citations by other federal courts shows that they have not thus far taken steps to preserve the Internet material they cite. This survey found that beginning in January 2006, opinions authored by U.S. Courts of Appeals identified the dates Internet sites were accessed, but that judges of the U.S. Courts of Appeals have not thus far taken the step of archiving information, while U.S. District Courts do not even consistently note the date Internet material is accessed. Another informal survey of state courts of last resort found no policy similar to that of the U.S. Supreme Court or the New York Court of Appeals.

All federal courts and state appellate courts should consider adopting policies similar to that of the U.S. Supreme Court. While the insertion of Internet citations is new, and there are workload and information technology issues inherent in such a policy, a clear policy on both citation style and storage will work to protect referenced information for future use.

DISCUSSION

The data presented here give rise to a number of questions worthy of further exploration. The data show that citations to Internet references are a growing trend. While still minor parts of Supreme Court opinions, the citations have grown in number in the last four terms of the Court and there is every reason to expect that this increased use will continue.

As noted earlier, the rise of Internet citations is part of a growing reliance on nonlegal materials. At the same time, there has been a decline in the use of law-review citations. Why has this occurred? Schauer and Wise (2000:510-13) speculate that the increased use of nonlegal materials is in part a function of ease of access, because legal research services now also include large amounts of nonlegal data in their online databases. And certainly the Internet is easily accessible and searchable. On the other hand, Sirico speculates that a more conservative Court finds less of interest in predominantly liberal law reviews (2000:1012).

More potential questions present themselves. Only two will be briefly addressed here. First, what are the sources of these citations? One possibility is that they come from the briefs filed by the parties and amicus curiae participants. In a review of all decisions from the 1996 term, William Manz found that the vast majority in case citations (74.5 percent) in Supreme Court opinions were also found in briefs, but a lower percentage (50.3 percent) of secondary authorities came from briefs (2002:271-75). Does a similar pattern hold for Internet citations? If so, why is this the case, given that as early as 1996, Supreme Court briefs began to include Internet references? Manz notes that Supreme Court briefs included seven such cites in the 1996 calendar year,

and 144 in calendar year 2000 (2000:291, n.85). A second question is why Internet citations are significantly more likely to appear in dissenting opinions. Previous work on citations has shown that dissenting opinions typically include fewer, not more citations (Merryman, 1977). Why would the pattern of references to the Internet be different? Is this pattern true for other kinds of secondary resources as well?

Finally, and perhaps most important, do these citations matter, and if so, how? Those who have studied citations in political science and the law assume, implicitly and sometimes explicitly, that they do. That research is based on the notion and that citations are purposeful choices, and that citations are not simply lists of cases and other materials used as window dressing (Landes and Posner, 1977). Many studies have urged that citations are signals as to the reputations of both judges (Landes, 2000) and scholars (Shapiro, 2000). Others have urged they are important for inter-court communication (Harris, 1985; Caldeira, 1983) and have a role in legitimizing decisions (Friedman et al., 1981). Still others have argued that citation patterns potentially indicate changes in the law over time (Spriggs and Hansford, 2001; Merryman, 1977). While at least one author cautions against too much reliance on these factors and argues that citations are only meaningful some of the time (Johnson, 1986), the changes that are taking place in the citation patterns of the U.S. Supreme Court are definitely worthy of further study. While the impact of citations on the decisions that the Court makes may be limited, justices still choose to refer to the work of others in their opinions. Understanding why patterns in this usage have changed over time is important in its own right. **jsj**

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