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DEVELOPMENTS

THE NEXT GENERATION OF LEGAL CITATIONS: A SURVEY OF INTERNET CITATIONS IN THE OPINIONS OF THE WASHINGTON SUPREME COURT AND WASHINGTON APPELLATE COURTS, 1999-2005*

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I. INTRODUCTION

During January 2007, a storm of controversy over Wikipedia use swept across the blogosphere. From a history department banning citations to Wikipedia in student papers,¹ to companies paying for updates to its collaboratively written articles,² to the citation of those articles in federal court

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^{1.} Scott Jaschik, *A Stand Against Wikipedia*, Inside Higher Ed, http://www.inside highered.com/news/2007/01/26/wiki (Jan. 26, 2007) (accessed Aug. 25, 2008; copy on file with Journal of Appellate Practice and Process).

^{2.} Brian Bergstein, Microsoft in Hot Water for Offer to Pay for Wikipedia Edits, Seattle Times (online edition) (Jan. 23, 2007), http://seattletimes.nwsource.com/html/

opinions,³ Wikipedia was being discussed everywhere. In academia at least, the discussion over the appropriate use of the online encyclopedia seemed to overpower even the debate about whether the young quarterback Rex Grossman and the Chicago Bears would overcome the laser rocket arm of Peyton Manning and the Indianapolis Colts in Super Bowl XLI.

Some commentators denounced citing to Wikipedia because entries can be edited anonymously and multiple changes over time make it unstable. They also insisted that primary sources should be cited instead of encyclopedias no matter what the format.⁴ Those supporting the use of Wikipedia articles cited studies showing its reliability of information and claimed that selective use of the website is acceptable.⁵

Controversy of this type is not new: Many similar issues were discussed when information first began appearing on the Internet, but many Internet sources are now widely accepted as reliable. In the legal world, citations to Internet resources have become increasingly apparent. Several surveys and studies on the use of citations to primary and secondary materials in court opinions have included sections on how judges cite to sources available on the Internet.⁶ The New York Times has stated that "[m]ore than 100 judicial rulings have relied on Wikipedia, beginning in 2004."⁷ Law reviews are also increasingly using citations to the Internet.⁸ This should come as no surprise, for information is now often only available online and is much easier to access online than in paper. For example, many

5. Id.

7. Cohen, *supra* n. 3 (noting in addition that, as of the date of the article, the Supreme Court had never cited Wikipedia).

businesstechnology/2003538037_webmsnwiki23.html) (accessed Aug. 22, 2008; copy on file with Journal of Appellate Practice and Process).

^{3.} Noam Cohen, Courts Turn to Wikipedia, but Selectively, 156 N.Y. Times C3 (Jan. 29, 2007).

^{4.} See e.g. comments posted to discussion list following Jaschik, supra n. 1.

^{6.} See e.g. Coleen M. Barger, On the Internet, Nobody Knows You're a Judge: Appellate Courts' Use of Internet Materials, 4 J. App. Prac. & Process 417 (2002); John J. Hasko, Persuasion in the Court: Nonlegal Materials in U.S. Supreme Court Opinions, 94 Law Lib. J. 427, 440-41 (Summer 2002); William H. Manz, Citations in Supreme Court Opinions and Briefs: A Comparative Study, 94 Law Libr. J. 267, 290-91 (Spring 2002).

^{8.} See e.g. Helane E. Davis, Keeping Validity in Cite: Web Resources Cited in Select Washington Law Reviews, 2001-03, 98 Law Lib. J. 639, 644 n. 22 (Fall 2006) (noting that Internet citations in the studied law reviews more than doubled during the relevant years).

government documents once available only in print are now often available only in an electronic format on the issuing agency's website.⁹

As more legal research is conducted online, it is reasonable to conclude that there will be a corresponding increase in citations to the Internet by judges in their opinions. With the widespread public use of the Internet to access information along with the constant changes and impermanence of websites, citing to the Internet should be an issue of increasing concern to the legal community across the country. Appellate courts and appellate judges in the state of Washington are no exception, because while Wikipedia citations have only recently appeared in Washington court opinions,¹⁰ citations to Internet sources have been around for several years.

This paper surveys the types of Internet sources the Washington state Supreme Court and Appellate Court justices are citing. The first section briefly discusses the methodology that was utilized to determine how many Internet citations the justices used in their opinions and what information was being cited. The findings of the study are then followed by a discussion of some of the major issues surrounding Internet citations in judicial opinions and an analysis of the survey results.

II. METHODOLOGY

For the purposes of this study, the survey of court opinions is limited to Washington Supreme Court and Appellate Court decisions issued between January 1999 and December 2005.¹¹ Unpublished cases, which are readily available on Westlaw,

^{9.} U.S. Govt. Printing Off., A Strategic Vision for the 21st Century, http://www.gpo. gov/congressional/pdfs/04strategicplan.pdf, at 1 (Dec. 1, 2004) (reporting that about fifty percent of government documents are published on the web but never printed) (accessed Aug. 25, 2008; copy on file with Journal of Appellate Practice and Process).

^{10.} See e.g. Pub. Util. Dist. No. 2 v. N. Am. Foreign Trade Zone Indus., LLC, 151 P.3d 176, 195 n. 1 (Wash. 2007) (Chambers, J., dissenting); State v. O'Neal, 150 P.3d 1121, 1123 n. 2 (Wash. 2007).

^{11.} The survey was initially limited to decisions made in 2004, but was later expanded because of the low number of results.

were also included.¹² To determine the suitability of this topic for exploration, I began with a search on Westlaw using "http" and "www" as search terms and restricted the search to the Washington State Cases database.¹³ I also did a sample search using the cases available on LegalWA.org.¹⁴ Interestingly, my LegalWA results did have one additional case that was not produced in the Westlaw search.¹⁵ Because a LegalWA search proved to be more problematic and time consuming than a Westlaw search, I decided to proceed with the results I obtained from Westlaw. After compiling the data, I copied and pasted each cited URL into a web browser to verify whether the link was still valid and whether it produced the cited material.

^{12.} One unpublished Superior Court case involving the Defense of Marriage Act appeared in the search results. *See Castle v. State*, 2004 WL 1985215 (Wash. Super. Sept. 7, 2004), *rev'd, sub nom. Andersen v. King Co.*, 138 P.3d 963 (Wash. 2006). But because this was not a Supreme Court or Appellate Court case, the information about it was not included in this survey.

^{13.} Based on Ms. Davis's research on Washington Law Reviews and the dearth of nonhttp protocols, I decided to ignore the use of other protocols, as a search for them seemed likely to produce an insignificant number of citations, if any at all. See Davis, supra n. 8, at 645.

^{14.} Municipal Research & Services Center, http://www.legalWA.org (accessed Aug. 25, 2008; copy of homepage on file with Journal of Appellate Practice and Process). I decided to use an alternate way of searching for websites in LegalWA.org because a reference to a website could have been included in a case without a protocol appearing in the address, and the results of a terms-and-connectors search would not include such websites. However, my sample search of LegalWA did not find any citations to website addresses that did not include either "http" or "www." While I still believe that there are Internet citations that are potentially not being produced with an "http" and "www" search on Westlaw, for the purposes of this study, the information gathered by my research is sufficient.

^{15.} Schwendeman v. USAA Cas. Ins. Co., 65 P.3d 1 (Wash. App. Div. 1 2003). In the LegalWA version of the case, there is a citation to the following URL: http://www.insurance.wa.gov/factsheets/autofaq.asp#Can%20they%20use%20non%20brand%20name %20parts%20or%20used%20parts, which turns out to be invalid. This citation does not appear in the Westlaw version of the case. Because of this discrepancy, I consulted with the official Washington reports (printed by Matthew Bender, a member of the LEXIS/NEXIS group) and found that the footnote as published in the official reporter does contain the Internet citation. See Schwendeman, 116 Wash. App. 9, 13 n. 5 (Div. 1 2003). The Pacific Reporter version in print (published by West), like its online counterpart, does not include the URL. I decided to include the Internet citation in the Schwendeman case in my results because it was on LegalWA, and more significantly, because it appears in the official reporter.

III. FINDINGS

I have summarized, and where appropriate, expanded upon, the results of my research results in the tables and the text that follow.

TABLE 1	
The Raw Data: Washington Supreme Court and Appellate Courts 1999-2005	
Number of Opinions Issued	14,209
Total Number of Internet Citations	132
Total Cases with Internet Citations	84
Percentage of Cases with Internet Citations	0.6%
Average of Internet Citations per Case with Internet Citation	1.56
Most Internet Citations in a Case	4

The overall number of Internet citations found during the period of the survey was surprisingly low. Just over one half of one percent of opinions included Internet citations. This calculation was made based on numbers reported annually by the Washington courts.¹⁶ Cases that did have an Internet citation had an average of between one and two URLs. The largest number of Internet citations in a case was four.

TABLE 2	
Types of Internet Materials Cited	Percent of Total
Government Publications	45%
Case Information	15%
Material Not Otherwise Classified	13%
Legislative History	11%
Primary Sources	8%
Non-Government Publications	8%

^{16.} Washington Courts, *Supreme Court Annual Tables*, http://www.courts.wa.gov/ caseload/index.cfm (click "Annual" link under Supreme Court heading) (accessed Aug. 26, 2008; copy of main page on file with Journal of Appellate Practice and Process); Washington Courts, *Court of Appeals Annual Tables*, http://www.courts.wa.gov/caseload/ index.cfm (click on "Annual" under Court of Appeals heading) (accessed Aug. 26, 2008; copy of main page on file with Journal of Appellate Practice and Process).

As Table 2 indicates, the Internet citations revealed by my research were each recorded in one of the categories described below:

• The "Government Publications" category includes general citations to agency websites, reports, pamphlets, and other publications that are not authoritative. Among Internet citations in Washington courts, government agency publications were by far the most cited type of material. The information was generally used to support stated facts in the case.

• The "Case Information" category includes a combination of case exhibits, documents, and reference to records of oral arguments, among them several citations to TVW, Washington's Public Affairs Network,¹⁷ which posts oral arguments on its website.

• The "Material Not Otherwise Classified" category includes anything that was either not easily categorized or unique. I decided that these singular materials did not each warrant an entire category.

• The "Legislative History" category includes mostly citations to a bill's history located on the state legislature's website.¹⁸

• The "Primary Sources" category includes agency decisions and local codes.¹⁹

^{17.} Washington State Public Affairs TV Network, http://www.tvw.org (accessed Aug. 26, 2008; copy of homepage on file with Journal of Appellate Practice and Process).

^{18.} See Washington State Legislature, http://www.leg.wa.gov/legislature (accessed Aug. 26, 2008; copy of homepage on file with Journal of Appellate Practice and Process).

^{19.} Local codes are not available on the major legal databases but are readily available for free on the Internet. This trend will only continue and may expand to other primary sources as they become available for free online in an official and authentic format.

• The "Non-Governmental Publications" category includes reports from non-governmental organizations.

TABLE 3		
Domain Breakdown		
Domain Type Number of Citations		
.gov	70	
.org	22	
.com 21		
.us	11	
.edu	4	
.mil	2	
.uk	1	
.net	1	

The breakdown of data by domain shown in Table 3 reflects and supports the notion that most Internet citations are to government websites. Though seventy websites had a ".gov" domain, there were also eleven that had a ".us" and two with ".mil," both of which are also government domains. This adds up to a grand total of eighty-three citations, or sixty-three percent of the total. Even though my survey is based on a relatively small amount of data, these numbers reflect the courts' comfort with citing to the online version of a government agency publication for supporting facts needed to decide a case.

		TABLE 4	
Breakdown of Cases with Internet Citations (by Court)			
	Supreme	Court of Appeals	Court of Appeals
	Court	Division I	Division II
Citations	55%	26%	19%
Cases	50%	24%	26%

One of the predictions I made prior to engaging in this study was that Division I of the Court of Appeals would have more Internet citations than the other courts. As Table 4 indicates, however, this theory was not realized. There were not an overwhelming number of cases with Internet citations from that court. Instead, I was surprised to discover, most of the Internet citations originated with the Supreme Court. With the overall low numbers from the Court of Appeals, it was not

TABLE 5	
Total Number of Citations by Year	
Year Citations	
1999	4
2000	8
2001	24
2002	7
2003	17
2004	25
2005	47

surprising to me that there were no Internet citations from the Court of Appeals Division III.

The results of this survey show an overall increase in use of Internet citations by the Washington courts. Table 5 reflects a slight increase in Internet citation use in 2001 and a drop in 2002. I have been unable to find an adequate explanation for this change in activity. However, since 2002, there has been a steady increase in citations to the Internet, and I believe that this trend will only continue.

TABLE 6	
Current Availability of Cited Resources	
Availability	Percentage
Parallel Citations (available in print)	43%
Found exclusively on the Internet	17%
Accessed only on the Internet	40%

It is difficult to determine if materials cited in the opinions studied were available both in print and on the Internet when they were cited, or if they were actually only available on the Internet. But assumptions can be made based on the format of the citation: According to both the seventeenth edition²⁰ and the eighteenth edition²¹ of *The Bluebook*,²² the explanatory phrase

^{20.} The Bluebook: A Uniform System of Citation, R. 18.2.1 (Colum. L. Rev. Assn et al. eds., 17th ed., Harv. L. Rev. Assn. 2000) [hereinafter Bluebook, 17th ed.].

^{21.} The Bluebook: A Uniform System of Citation, R. 18.2.2(a) (Colum. L. Rev. Assn et al. eds., 18th ed., Harv. L. Rev. Assn. 2005) [hereinafter Bluebook].

"available at" should be used when an Internet source is being used as a parallel citation, but the sixteenth edition²³ is silent on this issue. According to the seventeenth edition, an explanatory "at" should be used when the material is found only on the Internet.²⁴ The eighteenth edition has discontinued this notion.²⁵ No explanatory phrase, according to the seventeenth edition, signifies that the author accessed the information only online,²⁶ while it is not clear from the directions in the eighteenth edition how the information was accessed or whether it is available in print. Because the seventeenth edition of *The Bluebook* was used for most of the period studied, I based availability on the guidelines used in that edition.

Considering the findings reported in Table 6, and using the rules in *The Bluebook*'s seventeenth edition while assuming that its guidelines were followed, I found that forty-three percent of the online resources cited were also available in print as revealed by the explanatory phrase "available at." Seventeen percent of the sources were available only on line, assuming that the "at" in the citations was used as the then-current *Bluebook* form required. Forty percent of the sites were accessed only through the Internet, with no indication of whether they were available in print.

Table 7	
Validity of Internet Citations	
Invalid 35%	
Valid	65%

As with ascertaining the continued availability of cited sources, establishing the validity of cited links was also difficult. If a URL did not bring up a valid webpage and it was obvious to me that there were unnecessary spaces within the URL, I deleted

^{22.} There were multiple versions of the *Bluebook* in use during the period surveyed, so the different editions must be examined.

^{23.} The Bluebook: A Uniform System of Citation, R. 17.3.3 (entitled "Internet Sources") (Colum. L. Rev. Assn. et al. eds., 16th ed., Harv. L. Rev. Assn. 1996).

^{24.} Bluebook, 17th ed., supra n. 20, at R. 18.2.1.

^{25.} See Bluebook, supra n. 21, at R. 18.2.3(a) (providing that the URL for a web-only source should "be appended directly to the end of the citation (i.e., not preceded by 'available at' or 'at')").

^{26.} See Bluebook, 17th ed., supra n. 20, at R. 18.2.1.

the spaces and attempted again to access the cited webpage.²⁷ If a webpage appeared, then I recorded the URL as valid. If even the corrected URL yielded an error message or no page was found, I recorded it as being invalid.

I was surprised by the relatively low percentage of URLs that were valid at the time of testing. I had assumed that because the cases studied were fairly recent, the URLs would be overwhelmingly valid. But as Table 7 shows, a surprisingly large number were invalid. Even so, the majority of results were valid. Sixty-five percent of the websites cited were valid at the time they were last checked.²⁸ At the time, I considered this to be a fairly positive outcome.

TABLE 8	
The Good and the Bad	
Citations Leading to Cited Material	36%
Citations Not Leading to Cited Material	64%

Unfortunately, upon closer examination, most of the Internet citations were not very accurate in retrieving the cited materials. If the URL cited in the opinion did not bring up the cited document or material, then I recorded the citation as being "bad." If the cited materials were brought up, then the URL was recorded as being "good." Utilizing the above criteria, I found that only thirty-six percent of the URLs were good and sixty-

^{27.} There were many URLs that had seemingly random spaces inserted into the address. I did not go back to the official reporters to determine whether these spaces had been inserted by the West editors or were written in the official opinion by the judges. My guess is that they were at some point inserted to break up long URLs that word processors such as Microsoft Word would try to keep together, which can leave large empty spaces in a document.

While it was obvious to me that the spaces did not need to be there, I recognize that some researchers might not realize this, use the URLs as they appear in the opinions, receive error messages from their browsers because of the unnecessary spaces in those versions of the URLs, and conclude that the URLs themselves were bad. However, I believe that this correction was warranted in light of the multiple URLs that would have otherwise have been recorded as invalid and because of the quick and easy—and to a reasonably experienced online researcher, obvious—fix that was required to make each a valid URL.

^{28.} The URLs investigated as part of my research were last checked on August 30 and 31, 2006.

TABLE 9	
Miscellaneous Information	
Pdf files	8%
Doc/txt files	3%
Citations in Footnotes	67%
Citations in Concurring Opinions	3%
Citations in Dissenting Opinions	17%

four percent did not reflect the cited materials, as shown in Table 8 above.

I also collected miscellaneous data that I thought might be of interest to readers who follow appellate courts, summarizing it in Table 9. I was incorrect in assuming that a large number of the documents would be in .pdf format.²⁹ My assumption was based on the trend of distributing documents in .pdf and the *Bluebook* preference to citing .pdfs. While this trend is not reflected in the data, I still believe that future studies will find more .pdfs.³⁰ I was also not surprised to find that most Internet citations were found in footnotes, and that most appeared in majority opinions, not in concurrences or dissents.

TABLE 10	
Judges Using Internet Citations	Most Frequently
Judge (Court)	% of Citations
Sanders (Supreme Court)	12%
Chambers (Supreme Court)	8%
Owens (Supreme Court)	8%
Johnson, J.M. (Supreme Court)	6%
Hunt (Court of Appeals, Division II)	6%
Total	40%

^{29.} There are other possible file extensions that do not seem to be as common or as preferable as the .pdf format such as .doc, .txt, and .rtf, apparently because of the inconsistent view of the materials from computer to computer, which makes it difficult to cite a specific page. In portable document format (that is, in .pdf), documents are viewed with virtually the same pagination as that with which they were published. This makes them more reliable and more permanently fixed in form than documents in other formats, because they are not as easily manipulated, moved, and deleted as the other formats.

30. Software manufacturers have begun to offer new programs—or new functions in old programs—that can more easily alter or edit documents posted on the web in .pdf format. As this sort of alteration or editing is still in its infancy, however, I feel relatively confident in stating that .pdf documents are still more likely than others to remain in their original condition even when posted on the web.

It is interesting to note that of the top five Washington judges citing to the Internet, four are from the Supreme Court³¹ and none are from the Court of Appeals Division I. In addition, Table 10 shows that these five judges (four justices and one appellate judge) account for forty percent of the Internet citations I found.

IV. ISSUES AND ANALYSIS

A. Link Rot and the Impermanence of Web Pages

Despite the questions regarding the reliability of Internet resources, it is unquestioned that there will be an increase in Internet citations in court opinions. This increase will require appellate judges to pay attention to the ways in which they cite Internet sources. As one scholar has noted,

Ironically, authors who cite Web sites instead of paper sources probably think they are making their sources *more* available to readers, rather than less. . . . [H]owever Web citations lack the necessary stability that guarantees access.³²

The current edition of *The Bluebook* states that "printing or downloading copies of Internet sources is encouraged."³³ The basis for this statement—"[b]ecause the content of Internet sites is often transient"³⁴—is important to legal scholarship and the future of the law, particularly if appellate judges continue to use Internet resources in their opinions.

The permanence of all information on the Internet is in question. It is almost guaranteed that material on a website will result in link rot (a term for the phenomenon of webpages being

^{31.} Justice Chambers of the Washington Supreme Court also happens to be the first justice in Washington to cite to Wikipedia. See Pub. Util. Dist. No. 2, 151 P.3d at 195 n. 1.

^{32.} Mary Rumsey, Runaway Train: Problems of Permanence, Accessibility, and Stability in the Use of Web Sources in Law Review Citations, 94 Law Lib. J. 27, 34 (Winter 2002).

^{33.} Bluebook, supra n. 21, at 18.2.3(f).

^{34.} Id.

regularly changed, moved, or deleted),³⁵ which can prevent researchers from accessing cited materials in the future. Because of evolving and migrating content on the Internet, it is important, if not vital, for judges to keep copies of pages, documents, or other electronic media cited in their opinions and to make that archive available. Without permanent access to this information, link rot may eventually lead to diminished precedential value for their opinions and could potentially lead to the loss of parts of the opinions in which these citations appear.³⁶

Evolving, migrating, and vanishing content presents a series of problems for researchers.³⁷ In each case, researchers are prevented from locating the materials that they are searching for, or at least it is more difficult for them to find cited materials. In this survey, thirty-five percent of the URLs cited in judicial opinions were invalid or produced an error message. An additional twenty-nine percent did not link directly to the cited information. These errors may be partially due to migrating material.³⁸

Updated or changing information also results in errors. For example, a citation to the City of Seattle's website states, "Seattle's population as of 2000 was 563,374."³⁹ This may well have been accurate when the opinion first appeared. However, about a year after the opinion was written, the information on the website was updated to reflect the 2005 population of $573,000,^{40}$ and it has since been updated again to reflect the

^{35.} The term link rot has long been used in this manner. *See* Terry Sullivan, *All Things Web*, http://www.pantos.org/atw/35654.html (last updated May 28, 1999) (accessed Oct. 6, 2008; copy on file with Journal of Appellate Practice and Process).

^{36.} See Kathy Carlson, Digital Attachments Are Here . . . or Are They? 10 Law Librarians in the New Millennium 3 (Sept.-Oct. 2007); see also Robert C. Berring, Losing the Law: A Call to Arms, 10 Green Bag 2d 279 (Spring 2007).

^{37.} Barger, supra n. 6, at 439-43.

^{38.} By "migrating" materials, I mean that the materials may still exist but have been moved to a different location. This would be a different type of hiding web page than those without http or www prefixes mentioned earlier in this paper. In the case of government materials, migration may occur often due to the reorganization or elimination of departments, which can cause materials to be transferred to a new department's or division's website.

^{39.} City of Seattle v. Mighty Movers, Inc., 96 P.3d 979, 991 n. 9 (Wash. 2004).

^{40.} City of Seattle, *The Greater Seattle Datasheet*, http://www.seattle.gov/oir/datasheet /location.htm (accessed Feb. 28, 2007; copy on file with author).

2007 population of 586,200.⁴¹ While this may not be a lawaltering change, it does bring up the question of whether judges should either cite to more stable resources that can be relied upon to accurately reflect the cited information or attach to their opinions copies of at least those cited web pages most likely to be ephemeral.

B. Changes in Government Documents Available in Print and Online

While an increasing amount of information is available on the Internet, not all legal sources are yet available online, particularly valuable secondary resources and older government materials. While most secondary legal information is available online only through expensive subscriptions to Westlaw or Lexis-Nexis, many government documents are beginning to become available only online and for free. This is primarily because of the increasing costs of printing and distributing print materials: "An agency can . . . make that data available to the public at a lower cost and in a shorter period than if the agency collected that information on paper."⁴²

The price of printing has become a major issue in the past several years with the budgets of most government agencies being drastically cut while the costs of printing continue to rise. Information that was once printed and distributed to the public for free is now being distributed for the price of printing and mailing. Or materials are offered via the agency's website with the user bearing any printing costs. "Because the cost threshold of digital publication is so low, public bodies such as courts, legislatures, and administrative agencies have discovered that they need no longer rely on commercial intermediaries for dissemination of their work product."⁴³

^{41.} City of Seattle, *The Greater Seattle Datasheet*, http://www.seattle.gov/oir/datasheet /location.htm (accessed Aug. 28, 2008; copy on file with Journal of Appellate Practice and Process).

^{42.} Stephen M. Johnson, The Internet Changes Everything: Revolutionizing Public Participation and Access to Government Information through the Internet, 50 Admin. L. Rev. 277, 300 (1998).

^{43.} Peter W. Martin, The Internet: Full and Unfettered Access to Law-Some Implications, 26 N. Ky. L. Rev. 181, 193 (1999) (citing Johnson, supra n. 42, at 299).

On the federal level, over half of government sources are available only in digital form.⁴⁴ Jim Bradley, the Government Printing Office's Managing Director of Customer Services, has predicted that "[n]ot only will fewer titles be printed, but the quantities will drop as more government information is accessed through the [I]nternet."⁴⁵ It appears that to a certain extent, the trend established by the federal government is reflected at the state level as well. Most Washington state primary materials, for example, are available through the Washington courts'⁴⁶ and legislature's websites,⁴⁷ although official versions of these materials are available only in print. The online versions, while easily accessible, are not considered official or authentic.⁴⁸

With less than one percent of the total cases examined in my study having Internet citations, it appears that citation to print resources is still overwhelmingly the accepted practice. However, the trend is slowly changing, especially with respect to government documents. Of the 132 Internet citations counted in this survey, forty-five percent were to government publications available on the Internet. If the trend continues, as appears likely, we should look forward to an increase in the numbers of Internet citations by judges and an increase in government materials being available solely on the web.

C. The Bluebook and Citation in Washington

The Washington courts generally follow the eighteenth

^{44.} According to Bruce James, a past public printer of the United States, "More than 50% of our documents are born digital and will never be printed, except on demand and as needed." *The Government Printing Office Forges Ahead with Transformation to Digital Age*, U.S. Govt. Printing Off. News Rel. 1 (Mar. 4, 2004), http://www.gpoaccess.gov/pr/media/2004/04news05.pdf (accessed Sept. 3, 2008; copy on file with Journal of Appellate Practice and Process).

^{45.} GPO Proposes 21st Century Digital Information Factory, U.S. Govt. Printing Off. News Rel. 2 (Dec. 13, 2004), http://www.gpo.gov/news/2004/04news33.pdf (accessed Sept. 3, 2008; copy on file with Journal of Appellate Practice and Process).

^{46.} Washington Courts, http://www.courts.wa.gov (including links to court opinions and court rules) (accessed Sept. 1, 2008; copy on file with Journal of Appellate Practice and Process).

^{47.} Washington State Legislature, http://www.leg.wa.gov/legislature (including links to laws and agency rules) (accessed Sept. 1, 2008; copy on file with Journal of Appellate Practice and Process).

^{48.} See infra nn. 51-62 and accompanying text.

edition of *The Bluebook* citation format, including the *Bluebook* rule on citing to the Internet.⁴⁹ Thus, "[e]ven when a source is available in a traditional printed medium, a parallel citation to an Internet source with identical content may be provided if it will substantially improve access to the source cited."⁵⁰ This rule reflects *The Bluebook*'s longstanding preference for print materials by requiring a citation to the print source and allowing—but not requiring—an Internet citation if available. Often, the result is a citation to proprietary publications containing Washington statutes and case law, when instead a citation could point to a free website produced by the state government.⁵¹ However, this change will not be made until sources available online become official, authentic resources.

If a writer does decide to use a parallel citation to an Internet source, The Bluebook states that "[a] site's Internet address (known as a 'Uniform Resource Locator' or 'URL') should point readers directly to the source cited rather than to an intervening page of links."52 In this survey, while sixty-five percent of the cited URLs were valid, only thirty-six percent directly linked to the cited materials. In some cases, this may have been due to migrating content or link rot, but many of the citations simply listed the homepage of the website rather than the page on which the cited materials reside. This overbroad citation makes it difficult for a researcher to locate the materials cited in the opinion, because citations are designed to direct a researcher to the cited materials, not send her on a hunt for the cited passage.⁵³ Even though a homepage is likely to be in existence longer than a pinpoint page, citing just to a homepage is not good citation practice because of the vast number of pages that may be available on a website.

^{49.} Wash. Ct. R. 14(d), app. 1.

^{50.} Bluebook, supra n. 21, at R. 18.2.2.

^{51. &}quot;A vendor-neutral citation contains no proprietary data elements and makes no reference to a proprietary publication." Citation Formats Comm., Am. Assn. of L. Libraries, *The Universal Legal Citation Project: A Draft User Guide to the AALL Universal Case Citation*, 89 Law Lib. J. 7, 8 n. 3 (1997) (also available at http://www. aallnet.org/committee/citation/case.html ¶ 3 n. 3).

^{52.} Bluebook, supra n. 21, at Rule 18.2.1(a).

^{53.} See Barger, supra n. 6, at 439 (noting "the basic function of a citation—to permit readers to easily locate the precise source referenced by an author").

The issue of preferring citation to print resources when the materials are freely available on the Internet deserves wider discussion in the appellate community.⁵⁴ My survey shows that while there were a few online agency decisions and local codes cited, case law and statutes were cited most often, and the cited sources—agency decisions, local codes, cases, and statutes—could in many cases have been cited using online vendor-neutral citations. Court opinions and statutes are already available for free on court and legislative web sites. However, the disclaimers on many websites note that the materials available on these sites are not considered official and should not be relied upon as authoritative sources.⁵⁵ And of course the citation issue is in this respect also intimately connected to the authentication and preservation of electronic legal information, which is addressed in the next section.

D. Authentication and Preservation of Online Electronic Legal Information

Authentication is a necessary step towards acceptance of online legal materials as official sources worthy of citation. "Authentication ties together the official status, certification, and recognition of online legal sources. . . . It allows online official legal resources to function in law and everyday use just as print official resources do."⁵⁶ But in the state of Washington, as is still

^{54.} This is an issue on which law librarians have been advocating for over a decade, now with support from judges and attorneys in various states. The thirteen states that have adopted the Universal Citation System are Louisiana, Maine, Mississippi, Montana, New Mexico, North Dakota, Ohio, Oklahoma, South Dakota, Utah, Vermont, Wisconsin, and Wyoming. See Bluebook, supra n. 21, at Bluepages T. 1, 198-239 (setting out preferred citation forms for every state). See also Peter W. Martin, Neutral Citation, Court Web Sites, and Access to Authoritative Case Law, 99 Law Lib. J. 329, 334 n. 27 (2007).

^{55.} For a typical disclaimer of this type, see that of the Washington State Legislature, which appears on its website at http://www.leg.wa.gov/Legislature/disclaimer (accessed Sept. 3, 2008; copy on file with Journal of Appellate Practice and Process), and provides that "[n]either the State of Washington nor any agency, officer, or employee of the State of Washington warrants the accuracy, reliability, or timeliness of any information in the Public Access System and shall not be liable for any losses caused by such reliance on the accuracy, reliability, or timeliness of such information. Any person or entity who relies on information obtained from the System does so at his or her own risk."

^{56.} Steven Anderson et al., State by State Report on Authentication of Online Legal Resources, http://www.aallnet.org/aallwash/authen_rprt/AuthenFinalReport.pdf at 30

the case in many other jurisdictions, none of the primary materials available on the courts' or state legislature's websites have been deemed official or authentic publications. Even the statutes made available on the Washington state legislature's own website come with a disclaimer,⁵⁷ and cases published on the court's website are also deemed to be simply slip opinions.⁵⁸ Case law available through LegalWA is also not considered official.⁵⁹ All this hedging about these unofficial and unauthenticated materials makes it look like Washington's courts and legislature want to make legal researchers use the bound volumes after all.

This lack of initiative in making its electronically available government materials official or authentic is not unique to the state of Washington. According to the American Association of Law Libraries, while most states have begun to make their primary materials available for free online, only "[t]en states, plus the District of Columbia, have deemed as *official* one or more of their online primary legal resources"⁶⁰ and none provide authenticated resources on line.⁶¹

In contrast, the federal government has started to take steps towards the authentication of its electronic documents. Selected documents are currently available in a beta release as

60. See State by State Report, supra n. 56, at 10 (emphasis in original).

61. Id. at 7.

⁽Richard J. Matthews & Mary Alice Baish eds., Am. Assn. of L. Lib., Access to Elec. Leg. Info. Comm. & Washington Affairs Off. Mar. 2007) (emphasis in original) (accessed Sept. 3, 2008; copy on file with Journal of Appellate Practice and Process) [hereinafter *State by State Report*].

^{57.} See supra n. 55.

^{58.} Washington Courts, *Washington State Court Opinions*, http://www.courts.wa.gov/ opinions (accessed Sept. 3, 2008; copy on file with Journal of Appellate Practice and Process). (stating that the website's database "contains slip opinions," warning that "[s]lip opinions do not necessarily represent the court's final decision in the case since they are subject to reconsideration, modification orders, editorial corrections, and withdrawal," and noting that "[t]he official reports[,] advance sheets[,] and bound volumes supersede the slip opinions").

^{59.} *Id.* The section of the webpage entitled "Opinions Filed More Than 90 Days Ago" includes this warning: "Historical Washington case law from 1854 forward is available at www.legalWA.org. **Note:** The data at this site does not mirror the report of the opinions in the official reports of the Washington Supreme Court (Wn. 2d) and the Court of Appeals (Wn. App.). The Washington official reports are the sole authoritative source of Washington judicial opinions. To ensure accuracy, all data at www.legalWA.org should be checked carefully against the opinion in the official reports, which can be found at all county law libraries in the state of Washington." (boldface emphasis in original).

authenticated Adobe[®] .pdf files⁶² that are digitally signed and certified.⁶³ This Government Printing Office "authentication initiative" ⁶⁴ recognizes that

[i]n the 21st century, the increasing use of electronic documents poses special challenges in verifying authenticity, because digital technology makes such documents easy to alter or copy, leading to multiple non-identical versions that can be used in unauthorized or illegitimate ways.⁶⁵

This program uses digital signatures for authentication in order to "establish GPO as the trusted information disseminator," and also to "provide the assurance that an electronic document has not been altered since GPO disseminated it."⁶⁶ In short, the GPO's digital signature "verifies document integrity and authenticity on GPO online Federal documents."⁶⁷

However, at the state level it appears that while there is a huge savings in cost for publishing government documents on line, the price of authentication technology has been a huge barrier to states' authenticating the information that they publish on their websites. Currently, the Washington Code Reviser is looking into the possibility of authenticating .pdf documents.⁶⁸ Along with primary electronic materials being deemed the state's official source (which should be an inevitable progression from the current state of affairs), we should see a significant increase in citation to electronic materials available on state websites and possible changes—or at least clarification—in

66. Id.

^{62.} Govt. Printing Off., *GPO Access, Authenticated Public and Private Laws: Main Page—Beta Release*, http://fdlpdev.gpo.gov/plaws/index.html (accessed Sept. 3, 2008; copy on file with Journal of Appellate Practice and Process).

^{63.} Id.

^{64.} Id.

^{65.} Govt. Printing Off., *GPO Access, Authentication*, http://origin.www.gpoaccess.gov/ authentication (accessed Sept. 3, 2008; copy on file with Journal of Appellate Practice and Process).

^{67.} *Id.* Interestingly, the GPO also notes that "[t]he visible digital signatures on online PDF documents serve the same purpose as handwritten signatures or traditional wax seals on printed documents." *Id.*

^{68.} Marcus Hochstetler, L. Librarian & Dir., King Co. L. Library, & Member, Wash. Statute L. Comm., *Notes* (Nov. 14, 2007) (attached to email from Marcus Hochstetler, L. Librarian & Dir., King Co. L. Library, & Member, Wash. Statute L. Comm., to Author et al., *Statute Law Committee meeting notes* (Nov. 15, 2007, 11:05 a.m. PST)) (copy on file with Author).

citation format. We should also look forward to access to an archival system that will make older versions of these government materials reliably and persistently available.

Because "[a]uthentication and permanent public access affirm the profound value to a democratic society of effective access to government information,"⁶⁹ states must ensure that archived materials will always be available no matter what future format changes may occur. This availability will require funding, staffing, technological expertise, and long-term strategic planning. All government agencies must be involved in plans for preservation and authentication of their electronic materials. No government publication should be ignored when creating these long-range plans, as these documents may be vital to supporting existing and future case law.

V. CONCLUSION

As one law professor stated in that online discussion about Wikipedia, "Clearly, as our information technology evolves, the rules for citation will have to evolve with them."⁷⁰ The problem is not citing to Wikipedia or other specific online resources. The problem is balancing the appellate courts' need for citing reliable resources against the instability of the Internet. By their very nature, websites are constantly changing, are subject to errors, and are often ephemeral, no matter how reliable the information that they contain. This problem has been around for several years, and there is no clear solution in sight.

Citation format is not a sexy topic. However, as members of the legal profession who focus on the work of the appellate courts, we should all be aware of the impermanence of the materials we are citing. With the increase in materials, particularly government materials, that will soon become available solely on the web will come the inevitable increase of Internet citations in judicial opinions. The impermanence and ever-changing characteristics of the Internet present alarming issues that demand widespread changes to citation formats and

^{69.} State by State Report, supra n. 56, at 33.

^{70.} Art Leonard, Professor, N.Y. L. Sch., comment, *A Stand Against Wikipedia*, Inside Higher Ed, http://insidehighered.com/news/2007/01/26/wiki (Jan. 26, 2007, 11:05 a.m. EST) (accessed Sept. 3, 2008; copy on file with Journal of Appellate Practice and Process).

also to the preservation and availability of cited materials. While legal scholars may not press for this change, as evidenced by the current sentiment to maintain liberal Internet citation rules,⁷¹ it may have to be insisted upon by practicing lawyers, who rely on the interpretations and rules set by court opinions. The appellate courts should also be concerned with preservation issues that relate to the materials on which they base their opinions.

Preservation must be considered on a greater scale in conjunction with availability issues and must be dealt with on multiple fronts. Creators of web pages and publications on the Internet, especially creators of government websites, must consider how to publish the materials so that future researchers will be able to access the same information cited today. Forwarding links should be mandatory if a webpage is reorganized. And as many concerns as there are about Wikipedia, perhaps other web pages should be more like it: If older versions are still available even when pages are updated, a particular version mentioned in an appellate opinion can be cited and can continue to be accessed.

Availability issues must be addressed so that researchers will be able to readily access government, legislative, and court materials on the Internet. It is not enough that a clerk or judge keeps cited materials on file. Researchers from out of state, or from an in-state jurisdiction far from a particular clerk's or judge's office, may need access to materials cited in a particular appellate opinion. Libraries should also be given the resources to maintain digital copies of online-only government publications, just as they currently maintain print materials, so that they can allow the public greater access to all materials that are now used to support case law.

Though this study was done in the appellate courts of Washington state, the issues raised here are relevant to the work of the appellate courts in every state. Many Internet sources cited in judicial opinions become inaccessible shortly after those opinions are published, so we must construct ways in which to make them more consistently available. Current citation practices for Internet sources diminish the value of the appellate precedents in which Internet authorities are cited, and in some

^{71.} See nn. 20-26, supra, and accompanying text.

cases, can lead to actual loss of the very law stated in those opinions. These practices must be changed—not only to strengthen our laws, but also to make them more reliably available to the people of every state.

