

Guide to Web Research & Writing

By Joe Marren

Table of Contents

Introduction	1
Chapter 1, Writing	2
Thinking creatively 3	
Basic Forms 4	
How to 5	
Style 8	
Chapter 2, Research	11
Easing search engine fears 12	
Newsgroups 20	
Verifying info 22	
Chapter 3, Sites	24
A dozen useful sites 24	
Buffalo sites 25	
New York state sites 25	
Canadian sites 25	
Beats:	
Airlines 26	
Autos 26	
Biographies 26	
Business 26-27	
Calculators 28	
Census 28	
Computers & Tech Stuff 28	
Culture & Entertainment 28-29	
Education 29	
Elections 29	
Energy & Environment 29	
Facts & Date 29-30	
Finding People 30	
Finding Sources 30-31	
Foreign Governments 31	
IRS 31	
Law (including courts, criminal justice, etc.) 31	
Mailing lists & News Filters 31-32	
Media, etc. 32	
Medicine 32-33	
Nonprofits 33	
Patents 33	
Public Records & Databases 33	
Real estate & Property 33	
References (also see Facts & Data) 33-34	
Reporting Tips 34-35	

Search Engines & Directories	35
Speeches & Quotes	36
Sports	36
Stats Stuff & Even More Fun With Numbers	36
Translations & Languages	36
U.S. Gov't. (agencies & misc.)	36
U.S. Gov't. (elected officials)	37
Weather	37
Alphabetical index	37

Introduction

To blatantly steal a phrase, the brave new world of the Web is still evolving. That means the "rules" are still being written, the guideposts are still being painted, and anyone who attends a seminar or three can become an expert fish in their pond of choice. Such is my case, though I humbly submit there is much I do not know and even more out there I don't know that I don't know. Given the obtuseness of the point, stick with me just a little longer.

And yet ... well, and yet I wanted to write this manual to help my colleagues find better and more varied sources quicker and easier on deadline since deadlines are our metier. I also wanted to write this guide to help others understand Web writing theory and nuance and thus make our daily offerings sing. I'm not talking Mormon Tabernacle Choir here, just a small and sweet streetcorner a cappella effort will do.

Decades or centuries from now when the history of Web writing is written, I don't know if there will be a divide between East Coast and West Coast Web, a la hip-hop music. But I do acknowledge there is a bias in this guide. Most of what I learned I learned at seminars at the Poynter Institute and the Columbia University Graduate School of Journalism. My mentors helped an old dog like me learn new media tricks.

So I'd like to thank Sree Sreenivasan, an associate professor at Columbia; Brian Kennedy, an adjunct at Columbia and new media practitioner; Jon Dube, technology editor at MSNBC.com; Jeremy Caplan, senior associate editor at Yahoo! Internet Life; and Al Tompkins, Poynter scholar. All are good guys nonpareil. Every good idea and tip that works in this manual I stole from them. Hosannas and thanks for their time and patience with me. Anything that doesn't work is my fault.

Thanks should also go to all of you, the staff at Business First and the Buffalo Law Journal, for your help, suggestions and efforts to keep me fed and happy while I was writing this during the winter of 2001-02. I need to especially thank Jack Connors, publisher; Jeff Wright and Donna Collins, editors; and Gary Burns, editor and Renaissance man about the newsroom for giving me the time and means to write this.

I've saved the best for last. The person I really need to thank is my wife, Penny. She puts up with me and my projects through thick and then, hell and high water, old and new media. As I've said so often before, she smiles on the life I love. That makes it all worthwhile. I'd like to dedicate this manual to her.

--Joe Marren

Thinking creatively	Page 3
Basic Forms.....	Page 4
“How to”	Page 5
Style.....	Page 8

Writing

In 1988, good ol’ cynical Randy Newman performed a song titled “It’s Money That Matters.” Well, there’s good news and bad news there for Webbies. The bad news is, of course, that many sites (which didn’t exist in ’88) had a short shelf life and went the way of the Edsel. The good news is the sites that aren’t kaput learned a lesson: It’s writing that matters. Sure, bells and whistles impress techies, but you and I want to click on sites that are informative and easy to navigate. So the writing has to be clear and presented in easily digested chunks. Remember, our readers typically read our updates at work, so they are in a hurry and want info jewels without having to dig in the mine and search for them.

How do we help our readers? These sites helped me figure it out as well as I could (I first turned to my brave new media world mentors):

- Columbia University Graduate School of Journalism Associate Professor Sreenath Sreenivasan is one of the administrators of the Online Journalism Awards (www.onlinejournalismawards.org) and he contends the OJAs prove content is still king. In fact, that’s the title of a speech he has posted at www.sree.net/talks/c&w.html. Click on it to see what other lessons he says the OJAs offer.
- Sree also recommends Bob Baker’s newstinking at www.newstinking.com and The Power of Words, a site from The Providence Journal at www.projo.com/words
- The Poynter Institute (www.poynter.org) offers Chip Scanlan, Al Tompkins, Roy Peter Clark and a host of other writing savants.
- I learned how to think (and write) outside the template from Jon Dube at Poynter. His site (www.cyberjournalist.net) is full of tips for the online journalist.
- Brian Kennedy is an adjunct at Columbia who offers many online writing tips. Check it out at <http://home.earthlink.net/~brianakennedy/writingtips.html>
- Though I don’t know him, Jakob Nielsen (www.useit.com) is respected by the online people I respect. He has several tutorials online.
- I-Chun Chen, the Web editor at the Dallas Business Journal, has many good ideas on business coverage that I blatantly stole. Sorry, but thanks.
- And Chad Capellman mused about online style at www.americanpressinstitute.org

Combine those sites and the overriding lesson is basic: Writers must keep their readers in mind and tell stories simply and clearly. That also means old geezer print reporters like us must begin, today, this moment, to think differently. (Even visually and I’ll get to that in a byte.) We must think about the Web – and what to put on it – every day. Let me momentarily play the part of the microchip in the gray flannel suit and say that since we know our beats and our calendars we must give the Web editor an advance on upcoming

events. Then we must write the story for the Web as well as a similar version for print. We no longer work for a weekly newspaper; we work for a daily news provider. This chapter, then, is a brief guide on how to think online and how to write online.

Before we get to specifics, let's have some fun with generalizations: Technology means change. For print journalists, the change is about writing and design. Web writing is like broadcast writing. It must be short and punchy and enhance or amplify text with other elements such as video, audio or still images. So keep in mind a computer screen's dimensions and limitations and don't think in terms of a newspaper's column inches.

Web writing is also like broadcast writing because it is about immediacy. On Sept. 11, as rumors were quickly spreading about what planes crashed where, people turned to broadcast outlets and the Web for information. The quickest way to present such breaking news under that kind of pressure is the ol' reliable inverted pyramid. Jakob Nielsen, an engineer and Web usability expert, says studies show people don't read an entire story. They want to know what's happening now (what planes crashed where) and, if possible, what it means. But suppose you want to stretch your imagination and shun inverted pyramid ledes because you think they're booring? What to do? Take heart, there is room for fresh approaches, innovative ideas and presentations.

Just as Roy Orbison knew about the heartache of the lonely, the Poynter Institute's Chip Scanlan knows Web writing. He says the online writer must inspire the reader to scroll through some of the story, just as the newspaper writer wants a reader to go to the jump page to read his or her deathless prose on the latest sewage plant recycling plans. Scanlan says Web writers do that by adding layers. Living in Buffalo, we know all about dressing in layers, so Scanlan's concept should bring warmth to our hearts. But it's hard because we're not used to dealing with multiple perspectives. Those layers – whether links, or images, or audio, or whatever the imagination conceives – must accurately add new info.

Doing that creative thing

Right now, Business First and the Buffalo Law Journal are not set up to offer video, audio and other elements. But who says we'll always be this way? We may progress, we may regress, but we can still use our imaginations.

Don't think of how a story has been done before or what we can't do. Rather think about what we can do better, even if we aren't capable of doing it that way now. Maybe one day we'll be able to run with imaginative ideas.

- **Meaning:** What is the essence of the story? What's the best way to present it?
- **Break it down:** Determine the elements (text, sound, video, links, stats, interactive questions, etc) and then figure out what tools are needed.
- **30?** Once done, review. Ask yourself what worked, or didn't, and why. What should have been done differently? Then apply your soul-searching lessons to the next story.
- **Learn:** Study others. To do that, click on www.cyberjournalist.net and check out the various links of what has worked – and why – for others.

If we accept the premise that good writing needs good reporting, then links add meaning to a story. For example, if you're writing about curling you might want to add links to Olympic sites, sports sites or various national team sites that could provide rules, history, anecdotes, lingo, etc. That background in a link frees you up to write the story you want to write that may or may not include audio and video, etc.

Giving it form

Write in a way that adds depth to the entire mix of an online story's elements because such a story can merge the best of print and broadcast. Its layers can use text to explain why the story matters (as a print story would), allow the audience to hear or see human drama (broadcast story), and engage readers interactively through links, polls, etc.

For examples on how others do this, click on www.cyberjournalist.net/storyforms.htm. (A synopsis appears below, sans links to the examples. If we do get the capability to do any of these forms, know how you're going to tell the story first, then use the tools to plan the story. That gives your audience a choice of the depth of their involvement.)

- **Print plus:** The basic form that has some elements built around copy (which may have been taken verbatim from a print or broadcast partner – this is called “shovelware”). Or it may just be the text or broadcast clip rewritten for the Web.
- **Clickable interactive:** Graphics or other elements to supplement the story. (My favorite examples on cyberjournalist.net are “Experience a hacker attack” and “Aircraft carrier tour” because the graphics explain the concept better than text.)
- **Slideshows:** A combination of photos and cutlines that tell a story. This is primarily used in covering stories where the pictures are the strongest elements (e.g., how AIDS patients cope with life in a hospital).
- **Narrated slideshows:** Adds audio to the above concept.
- **Audio stories:** This can add a more personal element by letting an audience hear the anguished wails of victims, or the cheers of a winning curling team's fans.
- **Surveys:** Again, a version of the Q&A format that can break up a story into a series of quizzes on a topic that will take the reader deeper into the text. For example, before President Bush's State of the Union address in January 2002, the Christian Science Monitor's online site had a “You write the speech” feature that gave readers options. By clicking on each, the reader could see the likely fallout and spin.
- **Animation:** If there are no photos or video clips, consider using animation to bring graphics to life.

The writing life

Ah, finally, the nitty-gritty of this chapter – and it only took a few pages to get to it (thus ignoring Suggestion 1).

Suggestion 1: Know thyself!

We should be the prime source in Western New York for business news and updates that business people, who are working at their desks when they click on our site, need or want to know. This also includes local angles or updates on big news. For example, on Sept. 11 the main shovelware story on the Web site of The Buffalo News was about a drought in

Erie County. The stories on its Web site did not change during the day. But we repeatedly ran local updates on a compelling global story.

People far away from Buffalo can read online news. Therefore, give every reference a meaning for ex-pats and other strangers. That brings up another point: Online readers are proactive; they hunt for information. If we get seven feet of snow in a week, people from Honolulu to Jamaica will look for us and click on us to see what it was like here.

Suggestion 2: Tight and bright!

When I introduce my newswriting students at Buffalo State College to ledes I always tell them, “First tell your readers what’s happening.” In other words, a functional inverted pyramid lede starts with the ending. (“The butler did it!” “The U.S. men’s curlers are the sport’s new golden heroes.”) That’s followed by the rest of the information in order from most important to least important.

Internet researcher and guru Jakob Nielsen used to design pages for Sun Microsystems. He and others have done studies that confirm a Web reporter’s worst fear: Web readers don’t scroll. Instead, they tend to scan through a story or manual. So this makes an inverted pyramid lede all the more important. Give the people what they want.

The Web is at its best when the writing is sharp and direct, using active verbs with a hint of connotation and that ol’ devil denotation. (e.g. “The market tumbled today ...”) Make the nouns and verbs do the heavy lifting, avoid overusing adjectives and adverbs. Some contend that writers should not strive for clever, humorous or conversational approaches. Jon Dube, the technology editor at MSNBC.com and publisher of cyberjournalist.net, counters that we should inject a distinctive voice in our Web writing. So what to do? Strive for the style that suits you and effectively communicates the story.

Regardless of style, our writing should be punchy AND literate – a rare hybrid of print and broadcast approaches. Write to suit the topic, keeping the story as long or as short as needs be to give it meaning. That means proper attribution (Did some living being actually say the words, or is it from a press release?); a thumbnail description of any business mentioned (What does it do? Where is it based?); and, if appropriate, a comment from those involved. (If no one can be reached, say so.)

Suggestion 3: “You got a lot of ’splaining to do, Lucy!”

Readers want to know not only who, what, when and where, but also why. What does the story mean to them and their businesses? Why is it important? Tell them. If necessary, use links to help explain.

This means don’t bury the lede and don’t pile on when updating.

Summarize the essential element and tell why it is important in the lede. Then amplify it in the rest of the story in an inverted pyramid format. Or think of it as a series of blocks piled on top of one another that a reader has to unpack to get to the bottom.

But be careful, too. Those same blocks can get in the way of a breaking story. With each update, be sure the story is complete. Go back over what was previously written and cut out the superfluous or old items.

Deep thinkers in journalism, from Poynter Institute scholars to independent and academic researchers, say that readers do not scroll through stories. So get to the news immediately. Roy Peter Clark at the Poynter Institute says any story can be told in 800 words or less. To learn how, go to www.poynter.org/offthenews/021302_goodandshort.htm.

Suggestion 4: Banish the boring!

So that means dull and short stories written in an inverted pyramid style should be de rigueur, right? Hardly. Go back to www.cyberjournalist.net and click on the award-winning examples. Those stories are alive because the writers and Web people thought “outside the template.” Remember, it’s writing that matters.

For some good examples of newspaper stories adapted for the Web, check out these Pulitzer Prize winners:

- “The Boy Behind the Mask” won the feature writing prize:
www.oregonlive.com/mask
- “French Fry Connection” won the ’99 prize for explanatory journalism. It’s at www.oregonlive.com/special/series/fries.ssf
- A series on the U.S. Immigration and Naturalization Service won a Pulitzer in 2001. It’s at www.oregonlive.com/ins

Suggestion 5: “Breaking up is hard to do!”

Long gray or black blocks of type are deadly. There should be MEGLO (my eyes glaze over) warning lights at such grafs. So think: Can the copy be better presented in a graph, chart, or table? Can the sentences and grafs be shorter? Punchier? Hey, get my point? Would bullets work? How about subheds? Pulled quotes? Break up that long gray vertical line of text!

Engineer Jakob Nielsen says his research shows people read slower when reading text off computer screens than from newspapers. And there is also an impatience factor. Readers want their info NOW. So Web writing should also be scannable and splitable.

- **Scannability:** Readers usually scan, not read, when confronted with blocks of text. They look for key words or sentences. Highlight words to make a point. Use bullets. Briefly repeat key info from time to time in new ways.
- **Splitability:** Readers want coherent chunks. Break some info off into links, which must also be written in an inverted pyramid style so that there are what Nielsen calls “a set of pyramids floating in cyberspace.” If each linked page is brief and features additional information, the user can decide whether to stay after clicking on it. That’s

also important because it makes printing the stories easier. Combine all these elements and loyal readers will continue to turn to us.

Suggestion 6: Link, link, link!

Use your news judgment to make sure you link to credible sources that can adequately provide any background or other needed information.

Also, since the headline will likely be the first line of a link for others, make sure it is straightforward and succinct. Meaningful heds and subheds will tell a reader exactly what the topic is about and help in the decision to invest the time to go there. Help your readers by letting them know what they're getting for their click.

Don't be afraid to link deep within a site instead of just to its top page. No reader wants to go to the top page and then search. Also make sure to check and see if a site is still up; don't trust someone's word that it is.

The Web is link heaven. Don't think in a linear fashion (a la newspaper writing). Think links. The resulting interlinked package suits the inverted pyramid style

And put this down in the "maybe someday" list. If you link to a specific geographic location, hyperlink to a map to show readers where it is.

Suggestion 7: Speed kills (sometimes)!

Don't let the competition dictate what you will write. Be accurate rather than first. Readers will trust the accurate account; they don't always care who got it first. It's best to be accurate and first, but being right is better.

I attended a workshop at the Poynter Institute led by Andrea Panciera, editor of www.projo.com, in which we came up with a series of accuracy and fairness tips. The first two:

- Go with what you've got.
- When in doubt, go without.

The other tips can be accessed at www.cyberjournalist.net/panciera.htm

Sometimes companies like to release news late in the afternoon after the markets are closed. Rather than blindly putting up their news release, we have to make the calls to verify information and put it in context. If we can't get hold of a source, and if it's crucial to get a comment or clarify a point, that might mean waiting until the morning to file the story.

Suggestion 8: Go to the Web!

For more tips and guidelines, check out these Web sites:

- Jon Dube at www.cyberjournalist.net/writingtips.html

- Brian Kennedy at <http://home.earthlink.net/~brianakennedy/writingtips.html>
- Take a minute every day to read Al Tompkins' Morning Meeting column at www.poynter.org/morningmeeting/index.htm
- Subscribe to the monthly update from Columbia University Graduate School of Journalism Associate Professor Sreenath Sreenivasan at www.sree.net
- Periodically check out the Online Journalism Review from the University of Southern California's Annenberg School of Journalism at <http://ojr.usc.edu>

Checked pants & striped shirts

That's right, I mean style. Follow guidelines from the AP Stylebook and the Business First & Buffalo Law Journal Stylebook. Just be consistent in a story.

Here are some other random and loosely alphabetized thoughts:

Acquisitions

The word "buy" is usually better. Also, a company press release might call an acquisition a merger. But do some checking: Was it a merger or was the company bought or taken over. If so, don't call it a merger.

Bankruptcies

Make sure to give chapter and perspective: What did the company make/lose and what are its liabilities/assets? Were there warning signs? What were they?

Delisting

Why is the company being delisted? What was it last traded at?

Earnings

Put everything in perspective. A story should tell readers what a company's total revenue, total net profit, and earnings per share (diluted) are. Do independent analysts or company officials say if it met, missed or exceeded expectations? (A forecast is sometimes toward the end of a press release on earnings.) What does Wall Street say? (A consensus estimate might be available by typing in the company's stock symbol on Yahoo. Compare that to actual results.) Also be aware that sometimes a company will change a forecast near the end of an earnings season. If so, make sure to report it and include year-to-date results to give readers a clearer idea of a company's health.

Quarterly earnings season reports are usually out in January for the fourth quarter, April for the first, July for the second and October for the third. But if a company uses a fiscal calendar then it has another set of release dates, so say what type of calendar a company uses. (Also be aware that many companies usually release such reports in late afternoon after the stock market closes for the day.)

Industry jargon

Write for a general readership that may not understand techie terms or the lingua franca of your beat.

Initial public offering

Use IPO on subsequent references. Look on the SEC Web site and write how many shares are planned, what's the price, who's the underwriter and when is the planned launch. On the day of the launch write the price the stock opened at, what it closed at and what was the high during the day.

Layoffs (n), laid off (v)

Stories should include not only raw numbers of workers, but also the percentage of the company's total work force, what types of positions (blue and white collar?), when the cuts are coming and when they will end, and what types of severance packages offered.

Losses (see profits)

Don't write that a company's losses are rising or falling. Write that losses narrow or widen. For example, if a company press release says it had a \$10 million loss instead of a projected \$20 million loss, then the company narrowed its losses. If it had a \$20 million loss instead of an anticipated \$10 million loss, it widened its losses.

Marketese

Delete any glib PR claim that can't be independently verified. Whenever I read something is "the most comprehensive," I have to stifle an urge to yell "Oh yeah, then prove it!"

Money

It matters. Use figures and the word cents in all cases. Use figures and a dollar sign in all cases (5 cents, 6 cents, 10 cents, \$1).

Percent

Use numbers when writing about changes. Writing that Web reading is up 10 percent is meaningless unless there is some numerical context.

Profits (see losses)

If a company reports it had a profit compared to previous losses, then write that it "swung" to a profit. It did not post an increase in earnings since it didn't have any previous earnings.

To and from

*"Web readership rose **to** 10 million **from** 5 million."*

Today, tomorrow, yesterday

Banish them from copy. Remember it's the WORLD Wide Web. People anywhere could be reading our stuff. So use the day of the week.

Easing search engine fears.....	Page 12
Newsgroups.....	Page 20
Verifying info	Page 22

Research

This is NOT a chapter on computer-assisted reporting. The Investigative Reporters and Editors organization (www.ire.org) puts on a fine workshop on how to use databases and spreadsheets for such in-depth stories.

Rather, this chapter grew out of a "Smarter Surfing: A Workshop for Better Use of Your Web Time" class taught by Columbia University Graduate School of Journalism Associate Professor Sreenath Sreenivasan (www.sree.net). I am indebted to him for much of the content. Also consulted were two books: Nora Paul's "Computer-Assisted Research: A Guide to Tapping Online Information" and "The Associated Press Guide to Internet Research and Reporting," by Frank Bass. Clicked on were Web sites of the Society of American Business Editors and Writers (www.sabew.org), the University at Albany (www.library.albany.edu), Ithaca College (www.ithaca.edu/library), University of California at Berkeley (www.lib.berkeley.edu), University at South Carolina Beaufort Library (www.sc.edu/beaufort/library/bones.html), and Okanagan University College Library (www.ouc.bc.ca/libr/connect96/search.htm). Christopher Callahan's site at the University of Maryland (www.reporter.umd.edu/strategies.htm), Paul Grabowicz and J.D. Lasica's page at the USC Annenberg Online Journalism Review (www.ojr.usc.edu), Mike Wendland (www.poynter.org/research/biblio/bib_car.htm), and Rich Meislin at the New York Times (www.nytimes.com/library/tech/reference/cynavi.html) were clicked on. The sites of Jonathan Oatis (www.oatis.com), Bill Dedman (www.powerreporting.com), Jeremy Caplan (www.jeremycaplan.com/webtips.htm) and Staci Kramer (www.stlouisspj.org/surf/tips.html) were also consulted.

If the World Wide Web is a giant library with most of the *contemporary* (emphasis added) information we need, we'd still be at the mercy of a reference librarian because everything seems so topsy-turvy. (Let me digress for a moment and define what I mean by "contemporary information." Today, many newspaper and magazine articles automatically get put on a Web site. However, those sites didn't exist in the 1980s or early 1990s. So although we may not have any trouble finding recent articles on historical, scientific or literary figures and events, we have to realize those articles were only posted within the past few years. Some organizations get around this by recruiting volunteers to transcribe articles from past editions. For example, a group affiliated with The Catholic Encyclopedia recently sought out Web-savvy people to retype and then post articles from the past.) OK, now, back to the present: There are billions of sites, but search engines only refer us to a fraction of them. So when approaching Web research it's best to realize the Web may not find the answer, but it can dig up a clue to the answer.

Searching for Mr. Goodengine

Here are some steps when dealing with search engines:

Step 1: Don't use a hammer when a Phillips screwdriver will do.

First, to honor IBM, "Think." What do you want to know? How can you find it? Are you searching for a list of new media journalism faculty at Columbia University? Well, since you already know that Columbia's URL will end in .edu, why not just type out www.columbia.edu instead of doing a search on Google? Want to know the spin the president's pals are putting on a congressional initiative? Try www.whitehouse.gov.

But for the times when a search engine or a subject directory is needed, take a minute to refine your approach before blindly scrolling through a gazillion sites. Let's begin by defining terms:

A **search engine** is a database of Web pages assembled by a "spider" or "robot" ("bot") that goes through links and ranks things according to the keywords or search phrase. So sites with no links could be missed. It's important to know the database search was done at an earlier date. How often the spider refreshes depends on the search engine.

There are two types of search engines:

- Individual (such as Google), which scan their own searchable databases on the Web.
- Meta (e.g. Ixquick), which do not search their own databases but search databases of individual engines simultaneously.

It's a good idea to use more than one search engine since search engines differ in size, speed and content. Also, no two engines rank things the same way, so each one used will return different results.

In the old days going alllll the way back to the 1990s, engines would return results based on where or how often the keywords appeared (e.g. in the title, on the first page, or grouped closely together). That was called a first-generation search engine. But now we have Google, which ranks results according to Web page links. Since this is a merger of spiders with somebody's judgment of what is relevant, it is called a second-generation search engine.

Metasearch engines are fast, but they don't list all the results they find from each search engine. So they're most useful when doing a simple search or looking for a quick synopsis on a specific subject.

Another useful tool is a **subject directory**, which is maintained by human editors (e.g. Yahoo) and organized into subject categories. But many subject directories also have a search engine partner, or have been absorbed by search engines, so the distinction may be moot in the future.

Many subject directories only index a site's top page. Therefore, a list of results would be smaller than a search engine's and categorized by an editor's description of a subject. So a searcher would use a subject directory to find out what information is on the Web on particular topics, organizations, sites or products. Unlike search engines, a subject directory does not contain every word of a Web page, but it does tell a searcher where to find the page. And, since human editors are not as fast as a search engine's spider, dead pages can be a problem.

There are several types of subject directories:

- General directories
- Academic directories
- Commercial directories
- Portals (directories reconfigured by commercial interests for the Web that also offer services such as e-mail, news, etc.)
- Vortals (subject-specific directories for topics such as news, education, sports, etc.)

Experts in a specific field assemble and maintain databases for portals, vortals and library gateways. The advantage is that they scan the so-called "Invisible Web," and include sites not usually found by search engine spiders. (See Step 6) However, the term Invisible Web may give the false belief that anything on it is vital because the name implies it is all secretive and (potentially) essential. Actually, a lot of it is private pages or something that may not be of general interest.

For online tutorials on search engines, metasearch engines, subject directories, the Invisible Web, and more, go to these sites:

- UC Berkeley: www.lib.berkeley.edu/teachinglib/guides/internet/thingstoknow.html
- U. of South Carolina Beaufort Library: www.sc.ed/beaufort/library/lesson1.html
- Okanagan College Library: www.ouc.bc.ca/libr/connect96/search.htm

Step 2: Print out the chart.

One of my daughter's favorite TV shows is "Reading Rainbow," hosted by LeVar Burton every morning on PBS in our market. Near the end of every half-hour show Burton talks about other books dealing with the topic du jour, whether it's AP style or Boolean logic. (The books are then reviewed by kids in three 30-second segments.) Burton's tagline is always "...but you don't have to take my word for it ..." and then they cut to the kids.

Stick with me a moment longer as I honor George Orwell and stretch one of his lines: "All search engines are created equal, but some are more equal than others." Each search engine scans data, but the syntax is different for each. For example, some engines allow wildcard characters for those who can't spell well (i.e. j*m will return jam and Jim). In some the person doing the search has to type in AND, OR, NOT and NEAR to refine the search. Other search engines require plus (+) or minus (-) signs in queries. It's easier for a middle-aged man (like me) to remember all the numbers for phones, addresses and on Social Security cards than to remember what search engine uses what syntax. And that's why the Internet for People Project (www.infopeople.org/search/chart.html) has put together a handy cheat sheet to print out and refer to when using a search engine.

But you don't have to take my word for it. Here's what Columbia University Graduate School of Journalism Associate Professor Sreenath Sreenivasan said about the site in a weekly Web tip column he writes for the Poynter Institute (www.poynter.org/web): "It summarizes the features of each engine and tells you how best to use it ... Think you know Google well? The chart just might show you some ways to improve how you use it."

Step 3: Don't be afraid of people who say Boolean.

British mathematician George Boole (1815-64) had time on his hands one day in 1849 and wrote, "An Investigation of the Laws of Thought, on Which are Founded the Mathematical Theories of Logic and Probability." He obviously had a lousy editor, but his idea of merging logic and algebra flourished and is found today on search engines near and far.

Boole called his logic a "calculus of thought" and a person types in its operators (the words AND, OR, NOT, NEAR) to refine terms to either show more or fewer Web sites.

For example, a search for Marren on Alta Vista will yield 3,260 sites, some of them in foreign languages and some about Marren Motor Sports in Connecticut. (And remember that Web sites are fluid. What shows up today may not show up tomorrow.) But suppose a reporter wants to find a link to my book on Buffalo's literary and artistic history. Then he or she would type Marren AND authors, which shows 91 sites. Included in that list is the much more appreciated and popular book, "Mergers and Acquisitions: A Valuable Handbook," by Joseph H. Marren. Alas, he is not our hero. So the clever reporter then types Marren AND authors AND NOT Joseph H. Marren. Ahh, now we see some links to my book. (And, of course, the astute searcher would have first tried amazon.com.)

But that's Alta Vista. Each search engine is different and some (e.g. Google) automatically default to AND when doing a search with a complex phrase or multiple nouns. Also keep in mind that most people today swear by Google.

So what's a searcher to do? A rule of thumb is to use Boolean operators for complex searches. Use plus (+) and minus (-) signs for simpler searches. Confusing? You bet it is! See Step 2 above.

A good Boolean tutorial is offered by South Carolina's Beaufort Library at www.sc.ed/beaufort/library/lesson8.html. Lesson 7 from the same site is also helpful.

Step 4: Now put the steps together and dance.

You say you're new to Buffalo and you want to know where chicken wings were "invented" to better fit in with the neighbors in the next parish across the crick?

What do you do? Well, first, find out if there is there a book or other resource nearby with the answer. If not, then go to the Web.

(Before searching, though, please remember that all of the references below were valid at the time I wrote this in spring 2002. The Web is fluid and some of the sites I mention may have gone to that great dot-com in the sky.)

If you took a best guess at an Internet domain name, would you likely find it? For example, do you think the Culinary Institute of America would have some info on chicken wings? We know it's a school, so perhaps typing in cia.edu would get us in the front door. Unfortunately, not in this case because cia.edu is the Web site for the Cleveland Institute of Art. How about cia.org? Wrong again, that's some site dealing with Pentagon communications. Don't even bother trying cia.gov, you KNOW where that will take you. OK, what to do?

Is there a distinctive word or phrase that can be put in quote marks? (e.g. "Culinary Institute of America") If so, run it on a search engine (such as Google) and it will take you to a listing of several sites, one of which is the CIA in question (www.ciachef.edu).

But suppose that site only offers chicken wing recipes and doesn't explore the full lore of chicken wing culture and social history. Where to look? How about searching for the concept under a topic in a subject directory, such as Yahoo, which would have titles and descriptions of Web sites.

Or try this: Use one or more distinctive words or phrases in quote marks at a search engine site. Perhaps we could employ some Boolean operators or plus or minus signs (once again, see Step 2). For example, using "chicken wings" on Google returns 93,200 results; "buffalo wings" returns 29,300, including several for a defunct roller hockey team.

It's time to refine our search and think this problem through. We want to find information or links to the history of chicken wings, sometimes called "buffalo wings" in other parts of the country. Here's what we get on a Google search using plus or minus signs:

+buffalo +wings +history = 66,000 sites

+buffalo +wings +food = 53,100

+buffalo +wings +history +food = 16,500

+buffalo +chicken wings +food history = 3,850

That's still too many sites, but near the top is a site for the Anchor Bar, which true fans know is THE home of the wing. And that brings up an important point: DON'T SCROLL. It's better to refine your search since an engine will rank your request based on relevance to the keywords or phrases you typed in. (Even though some engines rank them based on fiscal considerations – but at least Google will say if it is a sponsor site.)

Therefore, the farther down you look, the less your chances are of finding what you want.

What this all means is that the best searches are the ones with fewest results. Remove or add restrictions to refine the search and to get a more manageable field.

One last word. Don't rely on so-called "stop words," which really don't make the spider stop, unless the words are part of a phrase. A "stop word" is a small or common figure of speech (conjunctions, prepositions, some common verbs, adjectives or adverbs) that a spider will pass right by in its quest to get you the results quickly.

More comprehensive (yet still brief) tutorials on searching are available from:

- UC Berkeley www.lib.berkeley.edu/teachinglib/guides/internet/strategies.html
- And the South Carolina Beaufort Library (www.sc.edu/beaufort/library/bones.html), lessons 6, 7 and 8.

Step 5: Go to the head of the class.

There is an “advanced” way to search the Web by doing a field search. A typical Web page contains several fields. For example, the site that hosts my Web page is at <http://www.sree.net/teaching/scrippshoward> and it shows the following fields:

- http is the type of information offered (hypertext transfer protocol)
- www is the server
- sree is the second-level domain name
- net is the top-level domain name
- teaching is the directory name
- scrippshoward is a file name

A savvy searcher can narrow a search considerably by field searching under title, host, URL, etc. See step 2 to see what search engine uses what syntax on a field search.

Doing a **title search**: Suppose you want to know the publisher and formal title of a book written by Joe Marren. What do you do? Well, the first step would be to go to amazon.com or barnesandnoble.com. But let’s say those sites were down and you’re on deadline. Stuck? Nope. Do a title search. (The title is in the banner at the top. Searching for a keyword in the title field, rather than a plain keyword search, can sometimes produce more relevant results.)

For example: Using altavista.com to search **title:”joe marren”** will yield one result and it’s the right result.

Doing a **domain search**: Let’s suppose you’re a real Joe Marren fan and want to find more links to stuff about our hero. Rather than typing the keywords “joe marren” in quotes in an engine, try limiting the search to top-level domains to produce more relevant results.

For example: Using altavista.com to search **domain:com AND “joe marren”** yields 16 results. The first several are about a writer from Buffalo and the rest about a cross country star from the University of Illinois-Chicago.

Still using altavista.com, typing in **domain:edu AND “joe marren”** will yield three results, all about the college cross country runner.

And typing in **domain:org AND “joe marren”** on altavista.com shows six results, including one from the eriebar.org site that has a picture and brief bio of amateur thespian Joe Marren playing the part of photographer Harry Bliss in the Bar Association of Erie County’s recreation of the trial of Leon Czolgosz, the assassin of President McKinley in Buffalo back in 1901.

Continuing the same technique on altavista.com under other top-level domain names (aero, biz, coop, gov, info, mil, name, net, museum and pro) yields no results.

OK, time to expand our horizons. The Internet was created in the United States so US was not assigned as a code to U.S. sites, although it is used on state and local government sites, among others. Foreign countries have a two-letter code on a site to let searchers know the country of origin – e.g., China is CN, India is IN, Ireland is IE and Jamaica is JN. (For a list of country codes, go to www.hotbot.lycos.com/help/domains.asp)

Suppose we want to know about small-business conditions in China and we want to use Google as a search engine. Typing in **domain:CN AND small businesses** will yield 15 results. (Notice there are no quote marks around the phrase as there have been in past searches. Originally, I tried it with quote marks and it produced no results. The lesson is to keep trying different approaches.) The top result is a university site in Australia from the late '90s that talks about the possibilities of e-commerce in China. We know this because the URL starts out with ausweb.scu.edu.au – the edu signifies it's an education site (usually a university or college) and au is the country code for Australia. OK, that's another idea for a search. Type in **domain:CN AND "Internet in China"** and you will find a screen full of results, one of which has cn in its URL, which means it is from China itself.

Those are all fairly simple because the needed information was at the top. Remember, though, that a search engine reads every word of a site and sometimes what you want to know is buried. For example, suppose you're involved in a killer Trivial Pursuit game and you need to know the name of the new Northwest Territory in Canada – and suppose Mapquest, National Geographic and all other such sites were unavailable. That's a lot of supposing, but bear with me. Typing **domain:CA AND "Northwest Territories"** on Google will show 23 results. You click on the most likely one but it doesn't mention anything right away about the new territory. In that case, use your find command (usually under the "Edit" menu) and type in the keyword (Northwest Territories). It will take you to the first instance that lists the keyword, and perhaps it, or another instance, will mention that Nunavut was spun off to become the fourth Northwest Territory.

Doing a **host search**: This lets a searcher find information that he or she knows is somewhere on a specific host computer. For example, I know there is a tutorial on field searching on the Beaufort Library site hosted by the University of South Carolina, so typing in **host:www.sc.edu** on Google will take me to a small field of relevant results. By the way, the tutorial is Lesson 9 at www.sc.edu/beaufort/library/bones.html

Doing a **URL search**: Do you recall that I mentioned I had a Web page I made while a Scripps Howard new media fellow? You don't? Hmmm. Go to the first paragraph in Step 5 to refresh your memory. But let's take advantage of your lousy recall: You know it was a Scripps Howard program, but you don't know who taught it or where or when. Since you desperately want to impress me, you need to know that info. Do a URL search on Alta Vista by typing in url:scrippshoward. Among the handful of results is a site that will say I was a fellow at a Columbia University seminar Jan. 4-7, 2002, taught by Graduate School of Journalism Associate Professor Sreenath Sreenivasan.

Doing a **link search**: Sree, as he is popularly known, is my brave new media world mentor. He has a hand in a gazillion things and yet also has a life outside the office! To find out the range of his activities, do a link search. Typing in **link:www.sree.net** on altavista.com will yield more than 200 results; on Google, more than 600 results. Go ahead, be amazed. Be very amazed.

Notes to note:

- Remember, field searching syntax is different with each search engine. (See Step 2) But in each one the searcher has to type the field term or letter followed by a colon and then the first word – all without spaces.
- Also, in each of these exercises I have sometimes used specific numbers or placement references when referring to sites. But the Web is always changing and the numbers and placements were current as of spring 2002. Be aware that things may have changed (and sites may no longer exist) by the time you do a search.

Step 6: It's invisible:

The invisible Web refers to sites that can't be found by search engines because spiders can't or won't go into non-text, PDF (portable document format), or subject-specific databases. Therefore, the only way to find such sites is to go into the databases themselves.

Alta Vista and Google can search some graphic, PDF or non-text databases, but another solution is to try either Gary Price's links or the invisible Web site (see Search Engines & Directories under the subject index).

Step 7: "What if ..."

There are a gazillion results: Think of synonyms, or a way to rephrase the search using different keywords, maybe some uncommon nouns.

There aren't enough results: Add or subtract some keywords or phrases from the search string. Try another engine, try a metasearcher, try a subject directory.

There is a "404 – file not found" message: That means the file has been renamed, removed, etc. Try another search engine. (Google has cached copies of pages.) Do a field search on the title. Try shortening the URL by getting rid of things after tildes (~) and percent signs (%). If there is a date in the URL, check to see if you typed in the right date.

There is a "Server does not have a DNS entry" message: This could also happen with a "server error" message. It means the network is busy or the server is down. Try again later. Or once again check your spelling.

The wrong home page comes up: Not everything ends in .com, so try guessing. For example, www.sree.com is the home page for a chain of hotels in the South. But a searcher who wants to find the home page of Columbia University Graduate School of Journalism Associate Professor Sreenath Sreenivasan has to type in www.sree.net. And

www.georgewbush.com is sponsored by the Republican National Committee; www.gwbush.com is a whole different animal that's NOT endorsed by the GOP.

To find out more, or to learn some rudimentary troubleshooting, go to www.learnthenet.com/english/htm/96error.htm

Step 8: A case study:

Let's tie all this together now by looking at an actual series of events that happened one Sunday morning in May 2000 in Scranton, Pa.

Al Tompkins, the online/broadcast group leader at the Poynter Institute, was giving a seminar at WNEP-TV in Scranton when news filtered in that a plane crashed nearby. Go to www.poynter.org/dj/052600.htm to see how Tompkins used the Web on deadline to help the station get the news out.

Briefly, Tompkins and the reporting staff started with the FAA and National Transportation Safety Board Web sites to track down official phone numbers. But, to be honest, officialdom wasn't much help. So next he went to the Investigative Reporters and Editors site's resources list for some tips. But it all hinged on getting the plane's tail number. Once they had that by making some old-fashioned offline phone calls to sources, they went to the database at landings.com to find out the type of airplane and its possible owners. Also, assignmenteditor.com had links to phone numbers for potential owners. The whole story, including tracking down pictures and making a graphic that showed the plane's route and crash site makes for fascinating reading. Go to the Poynter site for the real story.

Step 9: A review (with no quiz at the end):

If you have a good idea of what you need to know, go to a search engine. If your topic is rather broad, or you just need general information, use a subject directory.

Speaking of search engines:

- Be specific and use nouns as keywords. Remember that so-called "stop words" are often ignored, unless they are part of a phrase. And the more keywords, the better.
- If you don't find what you're seeking, try Boolean operators. See Step 2. Also remember to try several search engines.
- Check your spelling and be aware of variations and alternatives (e.g. organisation for organization; gaol for jail; and bonnet for a car hood, or boot for a car trunk).
- Use phrases in quote marks. This can also be used to find the source of direct quotes. ("second prize is a set of steak knives")
- Use quote marks and capital letters when looking for names, especially if there are variations. ("Jimmy Carter" OR "James Earl Carter") See Step 2, but sometimes the Boolean NEAR, without quote marks, is useful. (Jimmy OR James NEAR Carter)

All that noise

Death be not proud, because Google saved (sorta) Dejanews.com. Dejanews.com was an archive of newsgroups that died a dot-com death in 2001. That was bad news for a lot of people, but let's be myopic and selfish and mourn the loss to the media first. A newsgroup is a collection of messages on topical bulletin boards that millions of people use daily. Reporters can use newsgroups to find info, sources and background related to their beats, or to find out what readers think (for lazy reporters who don't want to leave the office).

After Dejanews.com died, Google wisely bought the archives and now Google Groups (<http://groups.google.com>) has more than 20 years of archives with some 700 million messages. Naturally, there is a lot of junk with the pearls of wisdom. So the best bet to find relevant information would be to look at specific groups and search by date.

The "news" in any group is certainly not the word of God. Try to figure out:

- Who is the list aimed at? What is the topic?
- Is it moderated?
- How much traffic is there on the list? How long is the message thread?
- Is the list open or closed?
- Is it archived?

It's easy to use a Google or a Yahoo newsgroup: Simply e-mail the person who posted the message. But be wary if you post a message on a bulletin board because once posted, always posted. Remember what your mother told you and be polite. However, if you were raised by wolves try the 'Netiquette Web site at www.albion.com/netiquette/index.html, which gently provides pointers on Internet dos and don'ts.

An advanced search, newsgroups can check what people are posting by typing in queries in any of these fields: newsgroup, subject, author, date, or keywords.

There are also discussion groups, trackers, alerts and other assorted mailing lists that can be found in the subject index. A good way to find more is by using Liszt at www.liszt.com

Since everyone can see what you post, don't give away any secrets. The Wall Street Journal reporters know how to delicately mine newsgroups for sources and other information. For a glimpse at how they do it see www.poynter.org/web/020702jon.htm.

Here's another tip: Create a filter or walk-away address so your e-mail inbox isn't filled with hundreds of replies – and not all of them polite. Since the possibility also exists of getting a virus, you should delete anything that makes you suspicious, even if it comes from a known source.

Using a newsgroup and its Internet cousin, the e-mail interview, a reporter can contact virtually anyone at any time, but we don't really know who is writing the reply. Is it the sought-after exec or the PR department? Use your instincts to check and double-check.

But is it art?

OK, we have all this nifty info from various Web sites and newsgroups, but now the question is what to believe. Anybody with some dollars can put anything on the Web. So, as journalist Staci Karmer puts it (www.stlouisspj.org/surf/tips.html): Be cautious. Treat information from the Internet the same way you would information from any other source.

Think about it: Who created the page? Does that person or group have an agenda to push or cause to promote? Is it a joke or hoax site? Just because it looks like a duck and quacks like a duck doesn't mean it is a duck. For example, an "academic" study on how cats react to bearded men is at www.sree.net/stories/feline.html. "Official" media stories about the first male pregnancy are at www.malepregnancy.com. A link to find out about hoax (no kidding) Web sites is at www.museumofhoaxes.com.

But not every site is a hoax. Dig deep to see how unreliable supposedly reliable sites are. The site at www.martinlutherking.org looks like a good site until you click on the links and notice the anti-King sentiments. Be wary of the language and viewpoint of such sites.

Realizing everyone and every group has a spin on everything, a handy rule of thumb can be that a government (.gov), military (.mil), or educational (.edu) page is more reliable than a top-level domain with .net, .org, or .com. But be wary still. Is an edu site written by a prof or a group of students as a class project?

A tilde on a site usually means it is a personal page on the server. It could give seemingly credible info, but check to see if there is an inherent bias.

A brief tutorial may help about now: Many file names, like Caesar's Gaul, have three parts:

- The first section is the name someone gave it (e.g. "curling")
- A dot separates the first section from the third part.
- The third part is the file extension, which is usually three characters that says what kind of file it is. (e.g. "gif," "jpg," "pdf")

So the file "reallyimportantpic.jpg.pif" is a vital picture that you have to open immediately, right? Maybe not. The name is a distraction. Pay attention to the entire file, especially the second extension because sometimes viruses are hidden in that second extension. Be wary and ready to delete any attachments with two file extensions.

Suppose a site's URL mentions a credible source (e.g. CNN.com) and is followed by a series of numbers after the @ symbol (CNN.com@66.70.3.6). Want to know if it is legit? Again, look at the entire URL and don't be fooled by the CNN.com part. Check with the American Registry for Internet Numbers (www.arin.net/whois/index.html) by typing in the numbers to find out about the server.

But let's suppose there are no numbers or @ symbol. For example, who owns bytebelt.com Type in the domain name at <http://allwhois.com> for the answer.

Another way to determine a site's authenticity is to look for attribution. Are the facts and sources identified? Are they reliable?

Although we all make mistakes, a page filled with spelling or AP style errors could also be playing fast and loose with the facts. Be wary.

To determine the purpose of a site, try to figure out:

- When the page was last updated.
- The name, address, phone number and e-mail address of the page owner.
- What does it link to? Are there cross checks?
- Are those sources updated?
- Is there unique content?

Even reputable sites can sometimes be suspect. Don't believe something just because it's on a site. Did anyone review or proofread the info? For example, I met Lia Chang, a photojournalist, model, and actor, when I was at Columbia University. Can I trust the bio on her on www.imdb.com? Well, that would depend on who wrote it. Determine if it was written by a fan or by a recognized authority. If it is unsigned, don't use it until you verify it. If the site contains a blurb or two about any of her movies, determine if it was written by a studio PR person or by a legit critic.

Two good sites to help determine a page's accuracy can be found at Poynter (www.poynter.org/dj/011900.htm) and at the Ithaca College library (www.ithaca.edu/library/training.hott.html)

A dozen useful sites	Page 24
Buffalo sites.....	Page 25
New York state sites	Page 25
Canadian sites	Page 25
Beats (alphabetical)	Page 26
Web sites (alphabetical)	Page 37

Sites

There are about 340 sites listed below. It might as well be 340 million for all the good it will do a reporter who doesn't build and update bookmarks for sites about their beats. So the logical question should be: How do I do that? Well, SPJ's Staci Kramer advises journalists not to surf on deadline but to look for Web site information off deadline, when there is time to putter around the 'puter and explore online nooks and crannies. The sites below should help reporters discover info on and off beats during what we could laughingly call our "downtime."

The architecture of what follows is built around those "gotta have" sites, which are repeated in the (non-Kerouac) beat section; specific sites for Buffalo and the region, the state, the feds and oh, Canada; and then a loose topical/beat structure that is (even more) loosely alphabetized within each group. Don't be afraid to browse, but set a time limit per day when browsing to stay fresh.

If the URL is known, but a reporter wants to know if it is included, consult the alphabetical listing first to find out where it may be grouped.

All sites were current as of spring 2002.

A dozen gotta haves

- 10K Wizard offers annual reports and all SEC filings ([www.10kwizard](http://www.10kwizard.com))
- Search for books and authors at www.amazon.com
- "Am I in trouble?" (www.findlaw.com)
- Biz profiles are at www.hoovers.com
- How many movies has your favorite star been in? (www.imdb.com)
- For maps, go to Mapquest at www.mapquest.com
- Refdesk can answer almost anything (www.refdesk.com)
- Niles Guide has to links to stats, etc., at www.robertniles.com/data
- A public records database is at www.searchsystems.net
- To track rumors, go to <http://urbanlegands.about.com>
- "Doc, I got this pain ..." (www.webmd.com)
- Basic data about countries can be found at www.worldskip.com

Shuffle off to Buffalo, et al (12)

- All western New York (www.allwny.com) is a guide to area Web sites.
- The Arts Council in Buffalo and Erie County offers info about grants, funding, work and links for organizations as well as a calendar of events at www.artsbuffalo.com
- Buffalo Free-Net is the 500-pound gorilla of local links with beat-related sites and links to regional, state and U.S. sites (<http://bfnet.org>)
- A good history site is Buffalo History Works (<http://bhw.buffnet.net/welcome.html>). It has links to historic sites and articles as well as “Off the Beaten Cyberpath” for neat links to loads of other things.
- The Buffalo Niagara Convention & Visitors Bureau is at www.buffalocvb.com
- Buffalo and Erie County Public Library is at www.buffalolib.org
- Buffalo Newspaper Guild has info on contracts, meetings, etc., as well as an online newsletter at www.buffalonenewspaperguild.com
- Go to the official City of Buffalo site (www.ci.buffalo.ny.us) for descriptions about various city departments, elected and appointed officials, the Common Council agenda, and procedures for birth and death certificates, licenses and permits.
- The official Erie County site (www.erie.gov) has links to county departments.
- Find the Buffalo Economic Renaissance Corp. at www.growbuf.org/index.html
- Western New York Regional Information Network has links to maps, data, research and can go to official sites of municipalities and Indian reservations. Or click on “choose a source” for beat-related links (www.rin.buffalo.edu)
- Western New York Wired (www.wnywired.net) has links to various helpful sites.

New York state (8) (also check under individual subjects)

- The Empire Page links to news headlines daily: www.empirepage.com
- List of state agencies: www.nysl.nysed.gov/ils/nysserver.html and subject list at: www.nysl.nysed.gov/ils/nystopic.html
- A list of state parks is at www.nysparks.com
- State Telephone Directory: www.ogs.state.ny.us/telecom/
- Piper offers state-level info on many topics: www.piperinfo.com/state/index.cfm
- For an offbeat look at the state of the state, go to www.politicsny.com
- Official state site at www.state.ny.us

Oh, Canada! (4)

- The Niagara Falls, Ont. Site is at www.fallstourism.com
- Niagara Parks has links to services at www.niagaraparks.com
- For border crossing links and other info, try www.ontariotravel.net
- The Regional Municipality of Niagara is at www.regional.niagara.on.ca

Beat index

Airlines (5)

- For commercial aviation photos, as well as data, history, articles and an aviation forum, go to <http://airliners.net>
- Info on all U.S. airports is available at www.airnav.com/airports

- FAA: www.faa.gov
- To track flights, try FlightView: www.flightview.com
- Check out www.landings.com for aviation news.

Autos (2)

- Investigate a car's history (using a VIN): www.carfax.com
- The Kelley Blue Book is at www.kbb.com

Biographies (3)

- Biography.com offers profiles of the famous at www.biography.com
- Determine who's alive or dead at www.dead-or-alive.org
- Quick biographical info: www.s9.com/biography

Business (42)

ANNUAL REPORTS:

- Annual reports gallery: www.reportgallery.com
- How to find annual reports: www.zpub.com/sf/arl/arl-how.html

COMPANY INFO:

- 10kWizard is a pay site that offers publicly traded company info, annual reports and all SEC filings (can also set alerts): www.10kwizard.com
- Bizweb has links to company Web sites, organized by industry: www.bizweb.com
- Business Wire: www.businesswire.com
- Corporate info available at www.corporateinformation.com
- Hoover's Online has business profiles at www.hoovers.com
- PR Newswire: www.prnewswire.com
- Business Web 100: List of the 100 largest corporations on the Web by revenue: American, global and by industry or company division: www.w100.com

CONSUMER CONCERNS:

- Consumer Reports has tips on everything (though it's not all free) for retail reporters: www.consumerreports.com
- Consumer World is a guide to consumer information: www.consumerworld.org

DATA & STATS:

- Economic data that includes a list of Web sites on economic indicators, as well as state level comparisons and rankings is at www.econdata.net
- Louisiana State University has a site with links to the regional Fed offices, journals, stats, organizations, etc. at www.lib.lsu.edu/bus/economic.html

EDGAR (see Securities and Exchange Commission in this listing)

GOVERNMENT:

- Info from government Web sites that also offers online help with taxes, laws, rules and regs, and trade: www.business.gov
- The Federal Deposit Insurance Corp. has data on FDIC-insured institutions: www.fdic.gov/bank/index.html
- The Federal Reserve Board's site has info on the structure and role of the Fed and its activities, as well as links to the 12 regional Fed banks, and info on inter-state banking and minority banks. It's all banks all the time and just a click away at www.federalreserve.gov
- Check safety records at www.osha.gov/oshstats

- For safety info on the state level, go to the NYS Department of Labor's Occupational Safety & Health Administration site at www.labor.state.ny.us/business_ny/employer_responsibilities/safety_health.html

MARKETS:

- Nasdaq: www.nasdaq.com
- Check up on brokers at www.nasdr.com
- New York Stock Exchange: www.nyse.com

MONEY MATTERS:

- Currency converter: www.x-rates.com/calculator.html

PUBLICATIONS AND WATERING HOLES:

- Bloomberg: www.bloomberg.com (For free classes on investing, go to Bloomberg University at www.bloomberguniversity.com)
- Business Week: www.businessweek.com
- CNET: www.news.com
- CNNfn: www.cnnfn.com
- The Financial Times: www.ft.com
- Forbes.com: www.forbes.com
- InternetNews.com: www.internetnews.com
- Motley Fool: www.fool.com
- Reuters: www.reuters.com
- Silicon Investor: www.siliconinvestor.com
- SmartMoney.com: www.smartmoney.com

RESOURCES:

- A good start page to find links and tools to business news and people is provided by www.ceoexpress.com/default.asp
- Biz and finance terms explained: www.moneywords.com
- The New York Times has a very useful list of links of markets, resources, organizations and publications by Rich Meislin at www.nytimes.com/library/cyber/reference/busconn.html

SECURITIES AND EXCHANGE COMMISSION:

- There are several links with filings on initial public offerings, mergers, etc. at www.sec.gov. Using the Edgar Online database (www.edgar-online.com), a pay site, reporters can see SEC documents on publicly traded companies or trace individuals in the corporate world back to 1993. Documents on the SEC site are available for a day after filing at www.sec.gov/cgi-bin/srch-edgar. On Free Edgar, reporters can create a list of companies to track at www.freeedgar.com. Or access Edgar directly at: www.sec.gov/edgarhp.htm

Calculators (8)

- Inflation calculator: www.cjr.org/resources/inflater.asp or try www.jsc.nasa.gov/bu2/inflate.html
- To find out what 50,000 dead presidents in Buffalo converts to in Big Apple cash: www.homefair.com/homefair/cmr/salcalc.html
- Trouble figuring out percentages? To put things in context try: www.newsengin.com/neFreeTools.nsf/PercentChange/formPercentChange And to determine what is 46 percent of 85, try: www.math.com/everyone/calculators/calc_source/percent.htm
- Number-crunch at www.newslab.org/calculatorlinks-1.htm
- Mega-calculators: This site has more than 8,000: www.onlineconversion.com

- Time converter: www.timeconverter.com/cgi-bin/tzc.tzc

Census (2)

- U.S. Census Bureau and demographic data. The bureau also can give e-mail alerts on upcoming reports: www.census.gov
- Poynter links to the 2000 Census: <http://poynter.org/dj/shedden/031901.htm>

Computers & Tech Stuff (8)

- A searchable list of computer acronyms is at www.acronyms.ca
- For a list of Internet country codes: www.hotbot.lycos.com/help/domains.asp
- How Stuff Works (free daily tutorials that can help explain complex stuff for readers): www.howstuffworks.com
- Register.com: Provides names and addresses of owners of non-military, non-U.S. government Web sites: www.register.com/
- Webopedia and What Is are dictionaries of computer and Internet terms: www.webopedia.com and www.whatis.com
- Web site changes can be monitored at NetMind: www.mindit.netmind.com and TracerLock: www.tracerlock.com

Culture & Entertainment (12)

- Ain't it cool news is a good source for entertainment news (www.aint-it-cool.com)
- Amazon: Find author, title and see purchase circles: www.amazon.com/purchasecircles
- National Endowment for the Arts: www.arts.endow.gov
- Barnesandnoble.com: www.barnesandnoble.com (For those so inclined, the site also offers online courses in a variety of areas.)
- Bartleby.com: classic books and poetry online: www.bartleby.com
- Columbia Journalism Review tips: www.cjr.org/resources/lc/lc-printable.asp
- Culturefinder has the schedules for the performing arts around the country at www.culturefinder.com
- Internet Movie Database: www.imdb.com
- New York Times Book Review: More than 50,000 reviews dating back to 1980: www.nytimes.com/pages/books/index.html
- The official site for the Academy of Motion Picture Arts and Sciences is at www.oscars.org
- Shakespeare's Complete Works: www-tech.mit.edu/Shakespeare/
- World Wide Arts Resources: www.wwar.com

Education (3)

- All about college: www.allaboutcollege.com
- UniGuide to U.S. universities: www.aldea.com/guides/gu/attframes3.html
- National Center for Education Statistics: www.nces.ed.gov

Elections (13)

- Campaign contributors: FECInfo www.tray.com/fecinfo is a nonprofit that uses Federal Election Commission data to track federal campaign contributions. The National Institute on Money in State Politics www.followthemoney.org/database/index.html does it on the state level.

- Campaign Finance Information Center has links to federal and state campaign financing information: www.campaignfinance.org
- Federal Election Commission: www.fec.gov
- Lobbyists: The Center for Responsive Politics tracks Washington lobbyists and offers an alert service for journalists at www.opensecrets.org/lobbyists/index.asp Lobbyist directory does the same thing on the state level at www.lobbyistdirectory.com
- Major political parties are at www.dnc.org (Democrats) and www.rnc.org (Republicans).
- Polls: www.gallup.com and www.people-press.org
- Project Vote Smart is a guide to candidates and issues www.vote-smart.org
- Special interest groups: www.associationcentral.com
- Track political spin at www.spinsanity.com

Energy & Environment (5)

- The Environmental Defense Fund has toxic release data: www.scorecard.org/env-releases
- An alert service from the Environmental Protection Agency: www.epa.gov/epahome/listserv.htm
- Federal Energy Regulatory Commission: Impacts natural gas, oil, electricity and hydroelectric projects: www.ferc.fed.us
- Nuclear Regulatory Commission has info on nuke plants, radioactive waste, etc: www.nrc.gov
- U.S. Energy Information Administration: Info on forms of energy, environment, forecasts, conservation links: www.eia.doe.gov

Facts & Data (9)

- Encyclopedia Britannica (pay site now, but some free features): www.britannica.com
- Find pix and other images: www.ditto.com
- Mapquest: www.mapquest.com
- National Geographic maps (sometimes has a loooong download time): <http://plasma.nationalgeographic.com/mapmachine>
- Niles Guide to Data on the Internet, by Robert Niles from LATimes.com, is chock full o'links, has stats tutorials, and offers back columns from Niles: www.robertniles.com/data
- Refdesk (many useful links maintained by Bob Drudge -- Matt's dad): www.refdesk.com
- Satellite maps: www.teraserver.com and www.spaceimaging.com
- Xrefer (based in London): www.xrefer.com

Finding People (18)

- AnyWho can find phone numbers by address & distance: www.anywho.com/wp.html
- Big Yellow: Yellow pages links to businesses by name, subject or location: www.bigyellow.com
- Infospace offers a reverse lookup as well as other options: www.infospace.com
- Phone directories: www.teldir.com
- Switchboard has business and personal phone numbers: www.switchboard.com
- Yahoo people: www.people.yahoo.com
- WhoWhere?: www.whowhere.lycos.com
- ZIP Code and ZIP+4 Finder www.semaphorecorp.com/cgi/form.html.

- *E-MAIL ADDRESSES*
- Congressional e-mail directory: www.webslingerz.com/jhoffman/congress-email.html
- Infobel: www.infobel.be/internet/email.asp
- Internet address finder: www.iaf.net
- MESA is a worldwide e-mail search: <http://mesa.rrzn.uni-hannover.de/>
- Sam Spade: www.samspade.org/t/
- Offering a free reverse directory is www.whitepages.com
- Whois.net looks for current and past domain names (also good for campaign season): www.whois.net

DEAD OR ALIVE?

- Keep track of the dead – and living – celebs at www.dpsinfo.com/dps.html
- How about politicians (and where buried)? Try www.politicalgraveyard.com/index.html
- Another site puts the departed into categories at www.whoisaliveandwhoisdead.com

Finding Sources (11)

- Facsnet: for news background and sources: www.facsnet.org
- GuestFinder (also used by broadcasters for talk shows): www.guestfinder.com/
- Resources: www.ibiblio.org or experts: www.ibiblio.org/slanews/internet/experts.html
- To find national associations try www.marketingsource.com/associations
- Media Link: www.medialin.com/
- MediaMap uses PR pros (updated weekly): www.mediamap.com/media
- Megasources for a Canadian perspective: www.ryerson.ca/~journal/megasources.html
- Profnet's Experts Database to get a list of academics: www.profnet.com
- Usenet Archives: Archives and searches: <http://groups.google.com/>
- Yearbook of Experts: www.yearbook.com

Foreign Governments (6)

- CIA World Factbook: www.cia.gov/cia/publications/factbook
- Foreign government officials: www.odci.gov/cia/publications/chiefs
- Foreign wire: www.foreignwire.com
- International Political Resources: www.politicalresources.net
- United Nations – www.un.org
- WorldSkip (links to news, biz, etc. of more than 200 countries): www.worldskip.com

IRS (2)

- Internal Revenue Service: www.irs.gov (To set up an alert for IRS issues, go to: www.irs.ustreas.gov/help/newmail/maillist.html)

Law (includes courts, criminal justice, etc.) (14)

COPS & ROBBERS STATS & STUFF

- Bureau of Justice Statistics (www.ojp.usdoj.gov/bjs) has federal stats on crime and justice. Its Sourcebook of Criminal Justice Statistics is courtesy of SUNY Albany: www.albany.edu/sourcebook
- FBI's Uniform Crime Reports: www.fbi.gov/ucr/ucr.htm
- National Criminal Justice Reference Service: www.ncjrs.org
- Police links at www.officer.com

- Regina Schekall's Organized Crime site has links to other federal, state and local crime data sites at www.crime.org
- TRAC: Transactional Records Access Clearinghouse (<http://trac.syr.edu/>) gathers data from such agencies as the FBI, IRS, DEA, ATF, INS, Customs, etc.

LAW & LEGAL STUFF

- FindLaw has links from bar associations to state laws and court decisions at www.findlaw.com A companion site, West Legal Directory, has addresses, phone numbers and (if available) e-mail links to U.S. corporate, criminal and government attorneys at www.lawoffice.com
- Law Guru links to search engines and the Internet Law Library: www.lawguru.com
- Legal Information Institute: The Cornell University Law School site has recent and historic Supreme Court decisions, NYS Court of Appeals, and other federal, state, foreign and international legal information at www.law.cornell.edu
- The National Archives and Records Administration has full text of the Federal Register, Code of Federal Regulations, presidential orders and other federal legal sources at www.access.gpo.gov/nara/index.html
- The official Supreme Court site: www.supremecourtus.gov
- Northwestern University sponsors another Supreme Court site at www.oyez.com

Mailing Lists & News Filters (7)

- About.com: www.about.com
- Newsindex: www.newsindex.com/delivered.html
- Quickbrowse: www.quickbrowse.com
- Tile.net: www.tile.net
- Totalnews: www.totalnews.com
- Topica: www.topica.com
- Yahoo Groups: www.yahogroups.com

Media, etc. (19)

- Wayback Machine looks at billions of past sites: www.archive.org
- Buffalo Newspaper Guild has info on contracts, meetings, etc., as well as an online newsletter at www.buffalonewspaperguild.com
- Track the news stories of the day at <http://dailynews.yahoo.com/fc> This link not only gives top U.S. stories, but also international events and world views of U.S. stories.
- The Electronic Frontier Foundation has stories on encryption and Internet free speech issues: www.eff.org
- Electronic Privacy Information Center: Advocates of privacy on the Internet and other areas such as cell phones: www.epic.org
- Online story archives from (mostly) mags at www.findarticles.com
- For archives of U.S. newspapers: www.ibiblio.org/slanews/internet/archives.html
- I Want Media: Media info & layoffs tracker: www.iwantmedia.com
- Latest articles on a breaking news story, try www.moreover.com
- A pay site (www.newsblues.com) offers promos and teasers about the broadcast news biz. People have to join to get the rest of the story.
- News Directory: Search for a publication by name, or by state, region, country at www.newsdirectory.com/news/search
- The National Institute for Computer-Assisted Reporting (www.nicar.org) has a huge database of stories.

- An “alternative” site with good items on the state of journalism and an open forum for rants and raves is at www.poisonkitchen.com
- Jim Romenesko's MediaNews: Useful for insight on the biz and for media junkies: www.poynter.org/medianews
- Names of media outlets are in www.publist.com
- TVSpy: Inside stuff on broadcasters: www.tvspy.com
- Vanderbilt Television News Archive has recorded all network news programs for 25 years: <http://tvnews.vanderbilt.edu/>

FOI

- FOI letter generator at www.rcfp.org/foi_lett.html
- SPJ's FOIA Resource Center: all about the Freedom of Info Act: www.spj.org/foia

Medicine (12)

- Health sites and topics at www.Achoo.com/main.asp
- Centers for Disease Control: www.cdc.gov and the National Center for Health Statistics: www.cdc.gov/nchs/fastats/default.htm
- The Centers for Disease Control also publishes a weekly morbidity and mortality rate at www.cdc.gov/mmws
- The Hardin Library for the Health Sciences: www.lib.uiowa.edu/hardin/md/index.html
- Get back to basics at www.healthcarefordummies.com
- Healthfinder: www.healthfinder.gov
- Healthsquare is marketed as “helping women and their families lead healthy lives.” It has a link to the Family Guide to Prescription Drugs, which is sort of a user-friendly Physicians’ Desk Reference: www.healthsquare.com
- Merck Manual: www.merckhomeedition.com/home.html
- National Institute of Health (www.nih.gov) offers links to data about conditions.
- RxList is the site of the Internet Drug Index and has info on prescription and over-the-counter drugs at www.rxlist.com
- WebMD for medical and drug refs: www.webmd.com

Nonprofits (3)

- The BBB Wise Giving Alliance: www.give.org
- GuideStar (www.guidestar.org) has financial data from IRS 990 filings on 501(c)(3) organizations, searchable by name, town or type of organization.
- The Internet Nonprofit Center (www.nonprofits.org) also has IRS data on nonprofits.

Patents (1)

- The U.S. Patent and Trademark Office (www.uspto.gov/patft) has a database of all U.S. patents since 1790.

Public Records & Databases (3)

- Public records online: www.pac-info.com
- Search Systems' Public Records has links to more than 5,500 databases, many of them free (not the databases themselves): www.searchsystems.net
- Vital records: www.vitalrec.com

Real Estate & Property (3)

- Check home prices in a neighborhood at www.domania.com

- Housing issues from the Department of Housing and Urban Development: www.hud.gov
- The University of Virginia has links to state, county and municipal governments with property records online at www.indorgs.virginia.edu/portico/personalproperty.html

References (also see Facts & Data) (17)

- Acronym Finder: (from a database of 117,600 acronyms): www.acronymfinder.com
- To ask questions about words and writing, try www.askoxford.com (This is NOT the online OED site that costs more than \$500 per year.)
- Links to dictionaries and other languages at www.dictionary.com
- Electric Library's Encyclopedia has about 17,000 articles from The Concise Columbia Electronic Encyclopedia at www.encyclopedia.com
- Encarta Encyclopedia: www.encyclopedia.msn.com
- Guinness World Book of Records (with lots of bells and whistles) is at www.guinnessrecords.com
- Information Please Almanac (links to other reference works): www.infoplease.com
- Internet Public Library has links to online reference works. Also, if you have a day or so before deadline, you can e-mail online reference librarians: www.ipl.org/ref/que/pf
- Research-It offers a dictionary, thesaurus, foreign-language translator, ZIP codes, currency converter, etc. at www.itools.com/research-it
- The Journalist's Toolbox, by Mike Reilley, has links and resources to current topics, sports and teaching at www.journaliststoolbox.com/
- LibrarySpot is a mega-guide to reference works: www.libraryspot.com
- Merriam-Webster: dictionary, thesaurus, etymology guide and audio pronouncers: www.m-w.com
- Looking for rhymes? Similar spellings? Synonyms, antonyms, homonyms? Want to find words or consonants that sound like a word you're searching for? Then try www.rhymezone.com
- Martindale's Reference Desk: www-sci.lib.uci.edu/HSG/Ref.html
- Keep track of time in multiple localities at www.timeanddate.com
- VOA pronunciation guide (helps with spelling names and has links to other stuff like embassies, etc.): www.voa.gov/pronunciations
- A perpetual calendar is at www.vpcalendar.net

Reporting Tips (15)

- <http://209.8.151.142/vlj.html> a Web classic maintained by John Makulowich that has tips and links on beats.
- Al Tompkins at Poynter posts a daily morning meeting full of ideas on topics du jour (www.poynter.org/morningmeeting/index.htm)
- AssignmentEditor: (charges for major sections): www.assignmenteditor.com
- Drill once through the Argus Clearinghouse (www.clearinghouse.net) by clicking on communication, then journalism and writing, then journalists, then the "toad" link. Bookmark the pages you like and you won't have to drill again.
- Click on "Direct Search" on the list of lists by Superlibrarian Gary Price to search the so-called hidden Web at <http://gwis2.circ.gwu.edu/~gprice/listof.htm> Price also offers U.S.-Canadian business links at the site.
- Investigative Reporters and Editors (have to be a member for some info): www.ire.org
- JournalismNet: with a Canadian flavour: www.journalismnet.com

- JournalistExpress: think of it as a "desktop" for reporters: www.journalistexpress.com
- Broadcast writing coach Mervin Block offers tips and links at www.mervinblock.com
- The New York Times has a guide, by Rich Meislin, with resources for business and political journalists at www.nytimes.com/library/tech/reference/cynavi.html
- PowerReporting.com arranges links by beat: www.powerreporting.com
- For info and tips on state issues, try www.stateline.org
- Debunk urban legends and computer virus hoaxes: www.urbanlegends.about.com
Another such site is www.snopes2.com/rumors/rumors.htm
- For an incredibly useful site that is full of handy links and tutorials, visit this one by Yahoo! Internet Life: www.yil.com/daily/useful/archive.asp

Search Engines & Directories (33)

- Abuzz People is from New York Times Digital: www.abuzz.com
- Alta Vista: www.altavista.com
- Ask Jeeves: (multiple engines in one place): www.askjeeves.com
- Copernic: free download for this metasearcher for PCs, not Macs: www.copernic.com
- Cyberjournalist SuperSearch: www.cyberjournalist.net/supersearch/index.htm
- Daypop searches 5,800 weblogs and news sites for news: www.daypop.com
- Dogpile: multiple engines: www.dogpile.com
- Fagan Finder offers several search options at www.fagan.f2s.com
- Google: www.google.com (Track trends at www.google.com/press/zeitgeist.html)
- HotBot searches the Web and newsgroups: www.hotbot.com
- A weekly column called "The Missing Link" offers a mix of offbeat and practical info at http://info.alexa.com/data/destination_site/missing_link
- InfoPeople (cheat sheet guide to search engines): www.infopeople.org/src/chart.html
- InfoSeek: www.infoseek.com
- Ixquick (www.ixquick.com) searches multiple search engines.
- Liszt: guide to listservs and newsgroups: www.liszt.com
- The Lycos 50 will track search trends: <http://50.lycos.com>
- ProFusion (www.profusion.com) searches multiple search engines.
- Savvy Search: See what others are searching for at www.savvysearch.com
- Search for information about the military in www.Searchmil.com
- Teoma is a new search engine at www.teoma.com
- Guide to webring at www.webring.org A webring links sites of similar content. Also handy for reporters who want to learn about the searches of others.
- Yahoo has links for beats compiled by human indexers: www.yahoo.com

BACKGROUND

- Research sites at Search Engine Watch: www.searchenginewatch.com

LIBRARY GATEWAYS

- Academic info at www.academicinfo.net
- Digital Librarian has a huge business database link: www.digital-librarian.com
- Librarians' Index to the Internet: www.lii.org
- WWW Virtual Library: www.vlib.org

SEARCH THE INVISIBLE WEB

- Gary price's HUGE database: <http://gwis2.circ.gwu.edu/~gprice/direct.htm>
- Directory of databases: www.invisibleweb.com
- Topic-based databases from CNET at www.search.com

SUBJECT-SPECIFIC DATABASES

- For general info, try Beaucoup.com: www.beaucoup.com

- Indexed education pages: www.searchedu.com

Speeches & Quotes (4)

- Speeches and transcripts: <http://gwis2.circ.gwu.edu/~gprice/speech.htm> (Price is a gold mine of info with links everywhere, but there are navigation problems at times.)
- National Archives and Records Administration: www.nara.gov
- Quotes: www.quotationspage.com/search.php3
- The White House (texts of prez and vice prez speeches): www.whitehouse.gov

Sports (2)

- For links to sports news, etc: www.sportsearch.com
- Links to leagues and media at www.sportspages.com

Stats Stuff & Even More Fun With Numbers (5)

- Stats and links to the Consumer Price Index, international info and stuff that can be found by job or region: www.bls.gov/bls/other.htm
- Fed stats: www.fedstats.gov
- Distance between cities: www.indo.com/distance
- Distance between ZIP codes: www.link-usa.com/zipcode
- Stats lessons and links for writers by Robert Niles: www.robertniles.com/stats/

Translations & Languages (3)

- Want to learn Gaelic? Then go to: www.contemporarypoetry.com/brain/lang/index.htm
- FreeTranslation.com has instant translation: www.freetranslation.com
- Another choice: <http://world.altavista.com>

U.S. Gov't. (agencies & misc.) (16)

- Commerce Department (partial pay site): <http://home2.doc.gov>
- Defense Department briefings at www.defenselink.mil/news
- FedWorld Information Network: www.fedworld.gov/
- FirstGov: link to the bureaucracy: www.firstgov.gov/
- GAO alert service: www.gao.gov/faq/faq.htm#2.2
- Federal agencies: www.gksoft.com/govt/en/us.html
- Federal Web Locator: www.infoctr.edu/fw1
- Government Printing Office has links to the Congressional Record, congressional bills and other documents the day they are published: www.access.gpo.gov/su_docs
- Library of Congress: www.loc.gov
- National Library of Medicine: www.nlm.nih.gov (or medline at www.ncbi.nlm.nih.gov/PubMed)
- NASA: Events, background info, research, and pictures and movies: www.nasa.gov
- The U.S. Postal Service is at www.usps.com (A link will also help find ZIP codes.)
- Smithsonian Institution: www.si.edu
- The State Department has a feed to daily news briefings (click on Outreach) and access to travel advisories and foreign policy guidance: www.state.gov
- Follow a bill through Congress, or find out who sponsored it &/or voted for it at www.thomas.loc.gov

U.S. Gov't. (elected officials) (7)

- Bio guide to Congress: <http://bioguide.congress.gov/biosearch/biosearch.asp>
- The official Web sites of the House (www.house.gov) and Senate (www.senate.gov)
- To keep track of daily proceedings in the House of Reps (to track progress of bills, debates, etc.) go to www.clerk.house.gov/floorsummary/floor.php3
- For Senate votes, click on www.senate.gov/legislative/legis_act_rolcall_today.html
- If you don't have the patience to do either of the above two steps (or don't want to click on the Thomas link to follow a bill), subscribe to the e-mail alert maintained by the University of North Carolina at Chapel Hill (<http://ils.unc.edu/crfilter>)
- White House: www.whitehouse.gov

Weather (3)

- National Weather Service: www.nws.noaa.gov
- The Northeast Regional Climate Center has stuff on droughts, trends and even looks at the economic impact of storms, etc. Also, you can e-mail them to set up phone interviews (<http://met-www.cit.cornell.edu>).
- Weather Channel: www.weather.com

Alphabetical index:**#'s**

10kwizard.com (business)
 209.8.151.142/vlj.html (reporting tips)
 50lycos.com (search engines)

A

about.com (mailing lists)
 abuzz.com (search engines)
 academicinfo.net (search engines)
 access.gpo.gov -- Government Printing Office (U.S. gov't., agencies)
 achoo.com (medicine)
 acronymfinder.com (references)
 acronyms.ch (computers)
 aint-it-cool.com (culture)
 airliners.net (airlines)
 airnav.com/airports (airlines)
 albany.edu/sourcebook (law)
 aldea.com/guides -- UniGuide to U.S. universities (education)
 allaboutcollege.com (education)
 allwny.com (Buffalo)
 altavista.com (search engines)
 amazon.com (culture)
 anywho.com (finding people)
 archive.org (media)
 arts.endow.gov -- National Endowment for the arts (culture)
 artsbuffalo.com (Buffalo)

askjeeves.com (search engines)
 askoxford.com (references)
 assignmenteditor.com (reporting tips)
 associationcentral.com (elections)

B

barnesandnoble.com (culture)
 bartleby.com (culture)
 beaucoup.com (search engines)
 bfn.org – Buffalo Free-Net (Buffalo)
 bh.w.buffnet.net – Buffalo History Works (Buffalo)
 bigyellow.com (finding people)
 biography.com (biographies)
 bioguide.congress (U.S. gov't., elected officials)
 bizweb.com (business)
 bloomberg.com (business)
 bloomberguniversity.com (business)
 bls.gov -- Bureau of Labor Statistics (stats stuff)
 britannica.com (facts & data)
 buffalocvb.com (Buffalo)
 buffalolib.org (Buffalo)
 buffalonewspaperguild.com (media & Buffalo)
 business.gov (business)
 businessweek.com (business)
 businesswire.com (business)

C

campaignfinance.org (elections)
 carfax.com (autos)
 cdc.gov -- Centers for Disease Control (medicine)
 cdc.gov/mmws – morbidity and mortality rates (business)
 cdc.gov/nchs -- National Center for Health Statistics (medicine)
 census.gov (census)
 ceoexpress.com/default.asp (business)
 ci.buffalo.ny.us (Buffalo)
 cia.gov (foreign gov'ts.)
 cjr.org/resources -- Columbia Journalism Review (calculators)
 cjr.org/resources/lc -- CJR (culture)
 clearinghouse.net (reporting tips)
 clerk.house.gov/floorsummary/floor.php3 (U.S. gov't., elected officials)
 cnfn.com (business)
 consumerreports.com (business)
 consumerworld.org (business)
 contemporarypoetry.com (translations & languages)
 copernic.com (search engines)
 corporateinformation.com (business)
 crime.org (law)
 culturefinder.com (culture)
 cyberjournalist.net (search engines)

D

dailynews.yahoo.com/fc (media)
daypop.com (search engines)
dead-or-alive.org (biographies)
defenselink.mil -- Defense Dept. (U.S. gov't., agencies)
dictionary.com (references)
digital-librarian.com (search engines)
ditto.com (facts & data)
dnc.org -- Democratic Party (elections)
dogpile.com (search engines)
domania.com (real estate)
dpsinfo.com/dps.html (finding people)

E

econdata.com (business)
edgar-online.com (business)
eff.org -- Electronic Frontier Foundation (media)
eia.doe.gov -- Energy Info. Admin. (energy & environment)
empirepage.com (NYS)
encarta.msn.com (references)
encyclopedia.com -- Concise Columbia Electronic Encyc. (references)
epa.gov -- Environmental Protection Agency (energy & environment)
epic.org -- Electronic Privacy Info. Ctr. (media)
erie.gov (Buffalo)

F

faa.gov (airlines)
facenet.org (finding sources)
fagan.f2s.com (search engines)
fallstourism.com (Canada)
fbi.gov (law)
fdic.gov -- Fed. Deposit Insurance Corp. (business)
fec.gov -- Fed. Election Comm. (elections)
federalreserve.gov (business)
fedstats.gov (stats)
fedworld.gov (U.S. gov't., agencies)
ferc.fed.us -- Fed. Energy Reg. Comm. (energy & environment)
findarticles.com (media)
findlaw.com (law)
firstgov.gov (U.S. gov't., agencies)
flightview.com (airlines)
followthemoney.org -- Nat. Instit. On Money in State Politics (elections)
fool.com -- Motley Fool (business)
forbes.com (business)
foreignwire.com (foreign gov'ts.)
freedgar.com (business)
freetranslation.com (translations & languages)
ft.com -- Financial Times (business)

G

gallup.com (elections)
 gao.gov (U.S. gov't., agencies)
 give.org -- BBB Wise Giving Alliance (nonprofits)
 gksoft.com (U.S. gov't., agencies)
 google.com (search engines)
 groups.google.com (finding sources)
 growbuf.org (Buffalo)
 guestfinder.com (finding sources)
 guidestar.org (nonprofits)
 guinnessrecords.com (references)
 gwis2.circ.gwu.edu -- Speech & Transcripts Ctr. (speeches & search engines)
 gwis2.circ.gwu.edu/~gprice/listof.htm (reporting tips)

H

healthcarefordummies.com (medicine)
 healthfinder.gov (medicine)
 healthsquare.com (medicine)
 home2.doc.gov -- Dept. of Commerce (U.S. gov't., agencies)
 homefair.com (calculators)
 hoovers.com (business)
 hotbot.com (search engines)
 hotbot.lycos.com/help/domains.asp (computers)
 house.gov -- U.S. House of Rep. (U.S. gov't., elected officials)
 howstuffworks.com (computers)
 hud.gov (real estate)

I

iaf.net -- Internet Address Finder (finding people)
 ibiblio.org (finding sources)
 ibiblio.org/slanews/internet/archives.html (media)
 ils.unc.edu/crfilter (U.S. gov't., elected officials)
 imdb.com -- Internet Movie Database (culture)
 indo.com/distance (stats)
 indorgs.virginia.edu -- U. of Virginia (real estate)
 info.alexandria.com/data/destination_site/missing_link (search engines)
 infobel.be (finding people)
 infoctr.edu (U.S. gov't., agencies)
 infopeople.org (search engines)
 infoplease.com (references)
 infoseek.com (search engines)
 infospace.com (finding people)
 internetnews.com (business)
 invisibleweb.com (search engines)
 ipl.org/ref/que/pf -- Internet Public Library (references)
 ire.org -- Investigative Reporters & Editors (reporting tips)
 irs.gov (IRS)
 iTools.com (references)

iwantmedia.com (media)
ixquick.com (search engines)

J

journalismnet.com (reporting tips)
journalistexpress.com (reporting tips)
journaliststoolbox.com (references)
jsc.nasa.gov (calculators)

K

kbb.com -- Kelley Blue Book (autos)

L

labor.state.ny.us – NYS Labor Department (business)
landings.com (airlines)
law.cornell.edu (law)
lawguru.com (law)
lawoffice.com (law)
lib.lsu.edu -- Louisiana State (business)
lib.uiowa.edu -- Hardin Lib. For Health Sciences (medicine)
libraryspot.com (references)
lii.org (search engines)
link-usa.com/zipcode (stats)
liszt.com (search engines)
lobbyistdirectory.com (elections)
loc.gov -- Library of Congress (U.S. gov't., agencies)

M

mapquest.com (facts & data)
marketingsource.com/associations (finding sources)
math.com (calculators)
medialin.com (finding sources)
mediamap.com (finding sources)
merckhomeedition.com (medicine)
mervinblock.com (reporting tips)
mesa.rzrn.uni-hannover.de (finding people)
met-www.cit.cornell.edu – Northeast Regional Climate Center (weather)
moneywords.com (business)
moreover.com (media)
m-w.com -- Merriam-Webster (references)

N

nara.gov -- National Archives (speeches)
nasa.gov (U.S. gov't., agencies)
nasdaq.com (business)
nasdr.com (business)
ncbi.nlm.nih.gov (U.S. gov't., agencies)
nces.ed.gov – Nat. Ctr. For Ed. Stats. (education)
ncjrs.org -- Nat. Crim. Just. Ref. Service (law)

[news.com](#) -- CNET (business)
[newsblues.com](#) (media)
[newsdirectory.com](#) (media)
[newsengin.com](#) (calculators)
[newsindex.com](#) (mailing lists)
[newslab.org](#) (calculators)
[niagaraparks.com](#) (Canada)
[nicar.org](#) (media)
[nih.gov](#) (medicine)
[nlm.nih.gov](#) -- Nat. Lib. of Medicine (U.S. gov't., agencies)
[nonprofits.org](#) (nonprofits)
[nrc.gov](#) -- Nuke Reg. Comm. (energy & environment)
[nyse.com](#) (business)
[nysl.nysed.gov](#) (NYS)
[nysparks.com](#) (NYS)
[nytimes.com/library/cyber/reference/busconn.html](#) (business)
[nytimes.com/library/tech/reference/cynavi.html](#) (reporting tips)
[nytimes.com/pages/books/index.html](#) -- NY Times Book Review (culture)
[nws.noaa.gov](#) -- Nat. Weather Service (weather)

O

[odci.gov](#) (foreign gov'ts.)
[officer.com](#) (law)
[ogs.state.ny.us](#) (NYS)
[ojp.usdoj.gov](#) -- Bureau of Justice Stats. (law)
[onlineconversion.com](#) (calculators)
[ontariotravel.net](#) (Canada)
[opensecrets.org](#) (elections)
[oscars.org](#) (culture)
[osha.gov](#) (business)
[oyez.com](#) (law)

P

[pac-info.com](#) (public records)
[people.yahoo.com](#) (finding people)
[people-press.org](#) (elections)
[piperinfo.com](#) (NYS)
[plasma.nationalgeographic.com/mapmachine](#) (facts & data)
[poisonkitchen.com](#) (media)
[politicalgraveyard.com/index.html](#) (finding people)
[political.resources.net](#) (foreign gov'ts.)
[politicsny.com](#) (NYS)
[powerreporting.com](#) (reporting tips)
[poynter.org/dj/shedden/031901.html](#) (census)
[poynter.org/medianews](#) (media)
[poynter.org/morningmeeting](#) (reporting tips)
[profnet.com](#) (finding sources)
[profusion.com](#) (search engines)
[publist.com](#) (media)

Q

quickbrowse.com (mailing lists)
 quotationspage.com (speeches)

R

rcfp.org (media)
 refdesk.com (facts & data)
 regional.niagara.on.ca (Canada)
 register.com (computers)
 reportgallery.com (business)
 reuters.com (business)
 rhymezone (references)
 rin.buffalo.edu – Regional Info Network (Buffalo)
 robertniles.com/data (facts & data)
 robertniles.com/stats (stats)
 rnc.org -- Republican Party (elections)
 rxlist.com (medicine)
 ryerson.ca (finding sources)

S

s9.com (biographies)
 samspace.org (finding people)
 savvysearch.com (search engines)
 sci.lib.uci.edu -- Martindale's Ref. Desk (references)
 scorecard.org -- Envir. Def. Fund (energy & environment)
 search.com (search engines)
 searchedu.com (search engines)
 searchenginewatch.com (search engines)
 searchmil.com (search engines)
 searchsystems.net (public records)
 sec.gov (business)
 sec.gov/cgi-bin/srch-edgar (business)
 sec.gov/edgarhp.htm (business)
 semaphorecorp.com (finding people)
 senate.gov (U.S. gov't., agencies)
 senate.gov/legislative/legis_act_rollcall_today.html (U.S. gov't., elected officials)
 si.edu-Smithsonian (U.S. gov't., agencies)
 siliconinvestor.com (business)
 smartmoney.com (business)
 snopes2.com (reporting tips)
 spaceimaging.com (facts & data)
 spinsanity.com (elections)
 spj.org (media)
 sportsearch.com (sports)
 sportspages.com (sports)
 state.gov -- State Dept. (U.S. gov't., agencies)
 stete.ny.us (New York state)
 stateline.org (reporting tips)

supremecourtus.gov (law)
switchboard.com (finding people)

T

tech.mit.edu -- Shakespeare (culture)
teldir.com (finding people)
teoma.com (search engines)
terraserver.com (facts & data)
thomas.loc.gov (U.S. gov't agencies)
tile.net (mailing lists)
timeanddate.com (references)
timeconverter.com (calculators)
topica.com (mailing lists)
totalnews.com (mailing lists)
trac.syr.edu -- Transactional Records Access Clearinghouse (law)
tracerlock.com (computers)
tray.com-FEC (elections)
tvnews.vanderbilt.edu (media)
tvspy.com (media)

U

un.org -- United Nations (foreign gov'ts.)
urbanlegands.about.com (reporting tips)
usps.com -- U.S. Postal Service (U.S. gov't. agencies)
uspto.gov (patents)

V

vitalrec.com (public records)
vlib.org (search engines)
voa.gov (references)
vote-smart.org (elections)
vpcalendar.net (references)

W

w100.com -- Business Web 100 (business)
weather.com (weather)
webmd.com (medicine)
webopedia.com (computers)
webring.org (search engines)
webslingerz.com -- congressional e-mail directory (finding people)
whatis.com (computers)
whitehouse.gov (speeches & U.S. gov't., elected officials)
whitepages.com (finding people)
whois.net (finding people)
whoisaliveandwhoisdead.com (finding people)
whowhere.lycos.com (finding people)
wnywired.net (Buffalo)
world.altavista.com (translations)
worldskip.com (foreign gov'ts.)

wwar.com -- World Wide Arts Resources (culture)

XYZ

x-rates.com (business)

xrefer.com (facts & data)

yahoo.com (search engines)

yahogroups.com (mailing lists)

yearbook.com (finding sources)

yil.com/daily/useful/archive.asp (reporting tips)

zpub.com (business)