

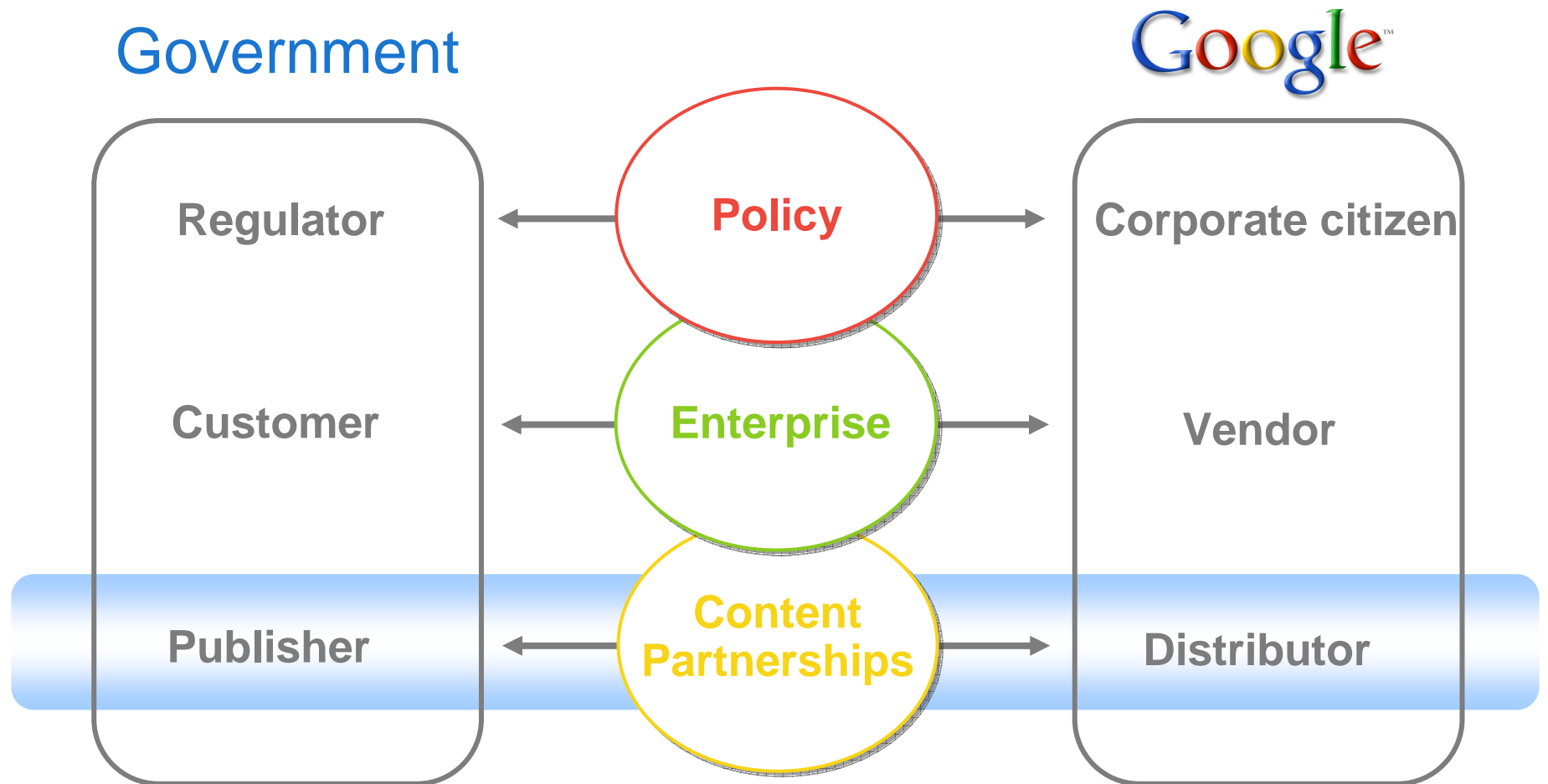
Ensuring government is only
one search away

Implementing the Sitemap Protocol

Ensuring search “just works”

Prioritizing index comprehensiveness

Google's relationships with government



Sitemaps.org

An open, industry standard for search engine crawling



What are Sitemaps?

Sitemaps are an easy way for webmasters to inform search engines about pages on their sites that are available for crawling. In its simplest form, a Sitemap is an XML file that lists URLs for a site along with additional metadata about each URL (when it was last updated, how often it usually changes, and how important it is, relative to other URLs in the site) so that search engines can more intelligently crawl the site.

Web crawlers usually discover pages from links within the site and from other sites. Sitemaps supplement this data to allow crawlers that support Sitemaps to pick up all URLs in the Sitemap and learn about those URLs using the associated metadata. Using the Sitemap [protocol](#) does not guarantee that web pages are included in search engines, but provides hints for web crawlers to do a better job of crawling your site.

Sitemap 0.90 is offered under the terms of the [Attribution-ShareAlike Creative Commons License](#) and has wide adoption, including support from Google, Yahoo!, and Microsoft.

Getting to “It just works”

- Google’s conservative side:
 - The famously spare home page: “32 words”
 - But also the slow evolution in the presentation of search results
 - Universal Search: Years in the making, still in gradual iteration

barack obama - Google Search - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.google.com/search?hl=en&safe=off&q=barack+obama&btnG=Search

Google barack obama Search

Web Images Video News Maps Gmail more

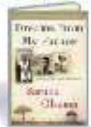
Google

barack obama Search [Advanced Search](#) [Preferences](#)

Web Books News Blog Search Results 1 - 10 of about 3,550,000 for **barack obama**. (0.13 seconds)


Obama for President Sponsored Link
[BarackObama.com](#) Help elect **Barack Obama** President of the United States: Volunteer now

Books by Barack Obama



[Dreams from My Father : A Story of Race and ...](#) - 2007 - 457 pages
[The Audacity of Hope : Thoughts on Reclaiming ...](#) - 2006 - 594 pages
[Barack Obama in His Own Words](#) - 2007 - 224 pages
[books.google.com](#) - [More book results](#) »

News results for barack obama



[Monsters and Critics.com](#)
[John Edwards, Barack Obama Jockey to Be Alternative to Hillary Clinton](#) - 13 hours ago
John Edwards and **Barack Obama** are now in a battle within the battle for the Democratic presidential nomination, trying to get into the best position to ...
[FOX News](#) - 639 related articles »
[Political Gambles Have Paid Off For Obama](#) - [CBS News](#) - 43 related articles »
[Vote for Barack Obama, wife tells blacks](#) - [Telegraph.co.uk](#) - 21 related articles »

Welcome to Obama for America
Official Website of **Barack Obama** 2008 Presidential Campaign.
[www.barackobama.com/](#) - 10k - [Cached](#) - [Similar pages](#)

[Learn](#) [Blog](#)
[Issues](#) [Barack TV](#)
[The Obama Store](#) [Contact Us](#)

Done

start Microsoft Excel 2 Microsoft Of... Google.com - C... Problem loading ... Problem loading ... barack obama - ... iTunes 4 Microsoft Of... Wireless Networ...

12:37 PM
Wednesday
11/14/2007

More aggressive oneboxing

barack obama video - Google Search - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.google.com/search?hl=en&safe=off&q=barack+obama+video&btnG=Search

Google

barack obama video

Web Images Video News Maps Gmail more

Google

barack obama video

Search

Advanced Search Preferences

Web Video News

Results 1 - 10 of about 2,500,000 for **barack obama video**. (0.12 seconds)

Barack Obama Videos Sponsored Link

www.youtube.com Watch videos from each of the 2008 presidential candidates

Barack Obama gets a groupie video - - mathewingram.com/work

Barack Obama gets a groupie video. Posted by Mathew @ 11:43 am on June 14 2007 | I don't post a lot on politics, but this video by someone calling herself ...

www.mathewingram.com/work/2007/06/14/barack-obama-gets-a-groupie-video/ - 50k - Cached - Similar pages

Who Is Barack Obama?, Black State Lawmaker From Illinois Is Rising ...

Videos; Photos. **Barack Obama** (AP). Play Video. PlayVideo. Who Is **Barack Obama**? Cynthia Bowers reports on **Barack Obama**, a keynote speaker at the Democratic ...

www.cbsnews.com/stories/2004/07/27/politics/main632210.shtml - 84k - Cached - Similar pages

YouTube - Vote Different

Barack Obama: My Plans for 2008. 03:07 From ...

Watch video - 1 min 14 sec - ★★★★★

www.youtube.com/watch?v=6h3G-IMZxjo

YouTube - Barack Obama YouTube Spotlight

Add Video to QuickList. CBS Evening News: **Barack Obama** in ...

Watch video - 1 min 51 sec - ★★★★★

www.youtube.com/watch?v=Tk3hoVt8Nfk

start

Microsoft Excel

2 Microsoft Of...

Google.com - C...

Problem loading ...

Problem loading ...

barack obama vi...

iTunes

4 Microsoft Of...

Wireless Networ...

12:39 PM

Wednesday

11/14/2007

Other formats interleaved in results

Getting to “It just works”

- Google’s conservative side:
 - The famously spare home page: “32 words”
 - But also the slow evolution in the presentation of search results
 - Universal Search, years in the making
- The ultimate test: “It just works”
 - With a focus on the majority of users and the majority of searches

One of the fundamentals: Index comprehensiveness

- One way to ensure search just works is to provide users search across the broadest possible corpus of content:
 - Broader than they would imagine finding useful
 - Example: Google Scholar

Inclusive and comprehensive



- Commercial publishers and scholarly societies
- Public A&Is and open access journals
- Open web sources and institutional repositories
- All formats, all languages

Google Scholar - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://scholar.google.com/schhp?hl=en&lr=

Google

RTM Gmail Cal Docs Desk Moma SF Simba Docs 2 WebEx PFE Gmail Cal PBI WF Citi GOOG G News Pan

Google agriculture Search Bookmarks Check AutoLink AutoFill Send to agriculture Settings

Google Scholar Quantitative analysis of leptin mRNA u...



[Web](#) [Images](#) [Video](#) [News](#) [Maps](#) [more »](#)

[Advanced Scholar Search](#)
[Scholar Preferences](#)
[Scholar Help](#)

Stand on the shoulders of giants

[Google Home](#) - [About Google](#) - [About Google Scholar](#)

©2007 Google

Done

start

Microsoft Excel 2 Microsoft Of... Google.com - C... Problem loading ... Problem loading ...

Google Scholar - ... iTunes 4 Microsoft Of... Wireless Networ...

12:56 PM Wednesday 11/14/2007

Google quantitative analysis leptin mrna Search Advanced Search Preferences

Web Scholar Results 1 - 10 of about 35,200 for Quantitative analysis of leptin mRNA using competitive reverse transcription polymerase chain. (0.40 seconds)

Scholarly articles for [Quantitative analysis of leptin mRNA using competitive reverse transcription polymerase chain](#)

-  [Quantitative analysis of leptin mRNA using competitive ...](#) - Agriculture - Cited by 15
- [Quantification of mRNA using real-time reverse ...](#) - Bustin - Cited by 560
- [Quantitative analysis of gene expression by reverse ...](#) - Richards - Cited by 22

[Quantitative analysis of leptin mRNA using competitive reverse ...](#)
Quantitative analysis of leptin mRNA using competitive reverse transcription polymerase chain. reaction and capillary electrophoresis with laser- ...
[doi.wiley.com/10.1002/\(SICI\)1522-2683\(20000301\)21:4%3C792::AID-ELPS792%3E3.3.CO;2-D](https://doi.org/10.1002/(SICI)1522-2683(20000301)21:4%3C792::AID-ELPS792%3E3.3.CO;2-D)
- [Similar pages](#)

[Pitfalls of Quantitative Real-Time Reverse-Transcription ...](#)
Quantification of mRNA using real-time reverse transcription PCR (RT-PCR): ...
Quantitative reverse transcription-polymerase chain reaction to study mRNA ...
jbt.abrf.org/cgi/content/full/15/3/155 - [Similar pages](#)

[Absolute quantification of mRNA using real-time reverse ...](#)
Pitfalls of Quantitative Real-Time Reverse-Transcription Polymerase Chain Reaction J. Biomol. Tech., September 1, 2004; 15(3): 155 - 166. ...
jme.endocrinology-journals.org/cgi/content/full/25/2/169/DC1/1 - [Similar pages](#)

[Quantitative Real-Time Polymerase Chain Reaction](#)

One of the fundamentals: Index comprehensiveness

- One way to ensure search just works is to provide users search across the broadest possible corpus of content:
 - Broader than they would imagine finding useful
 - Example: Google Scholar
- Relentless push to expand the index:
 - Not just all books, but all library catalogs
 - Not just all news sources, but all newspaper archives
 - Not just earth, but the weather, sky and visible universe

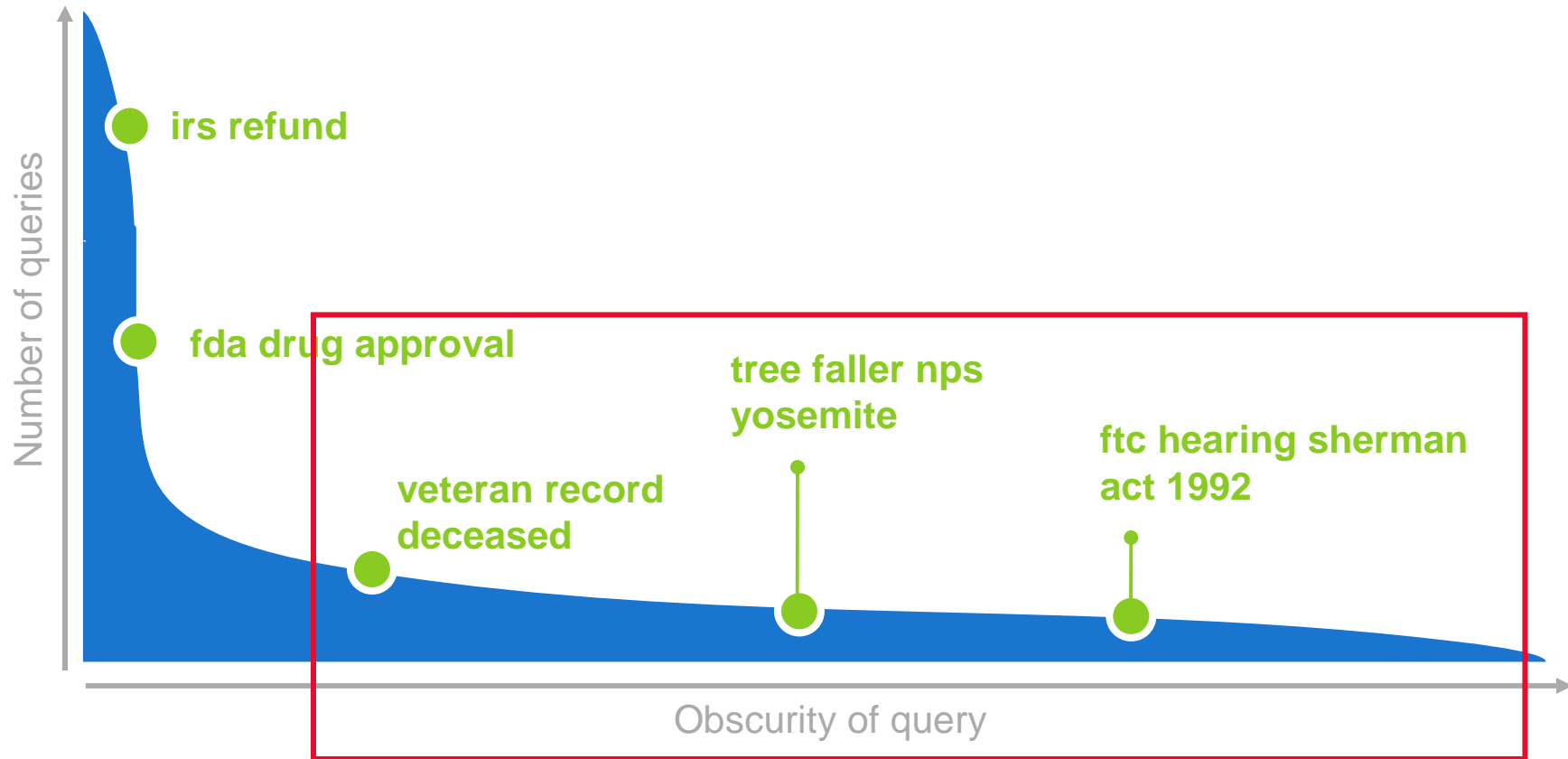
Other fundamentals

- Speed
- Ranking
- Anticipating user intent, e.g. personalization

Behind the white curtain

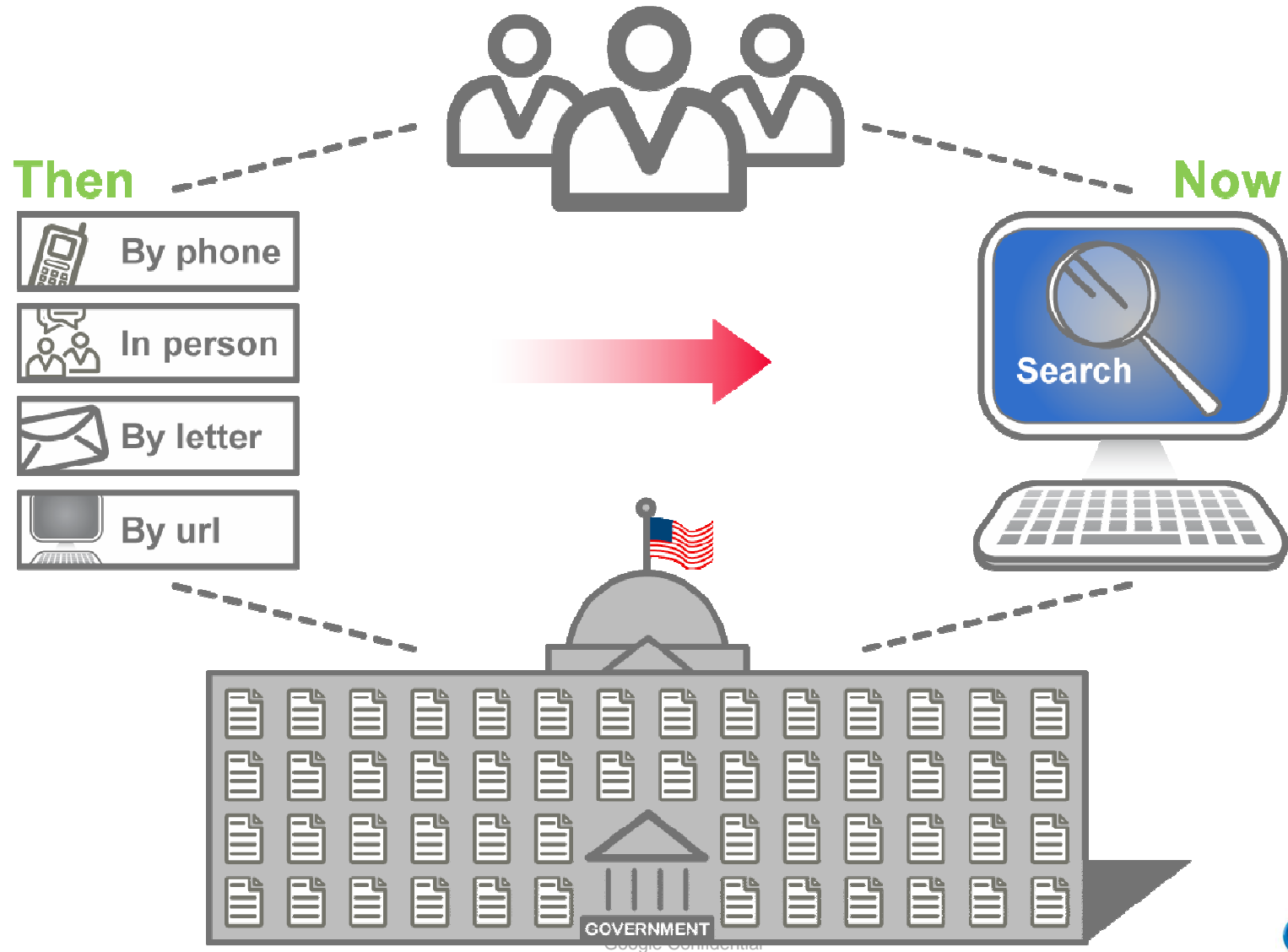
- “Google Keeps Tweaking Its Search Engine,” New York Times, June 6, 2007:
 - “[Google] is also among the world’s biggest teases. Millions of times a day, users click away from Google, disappointed that they couldn’t find the hotel, the recipe or the background of that hot guy. Google often finds what users want, but it doesn’t always.”
 - Continually iterating on the identification of relevance “signals” and development of “classifiers” to refine search results
- Also continually expanding and refining crawling processes:
 - “Crawl coverage” also significantly impacts “search quality”
 - Communicating with website owners about bringing down barriers

The long tail of US federal government information

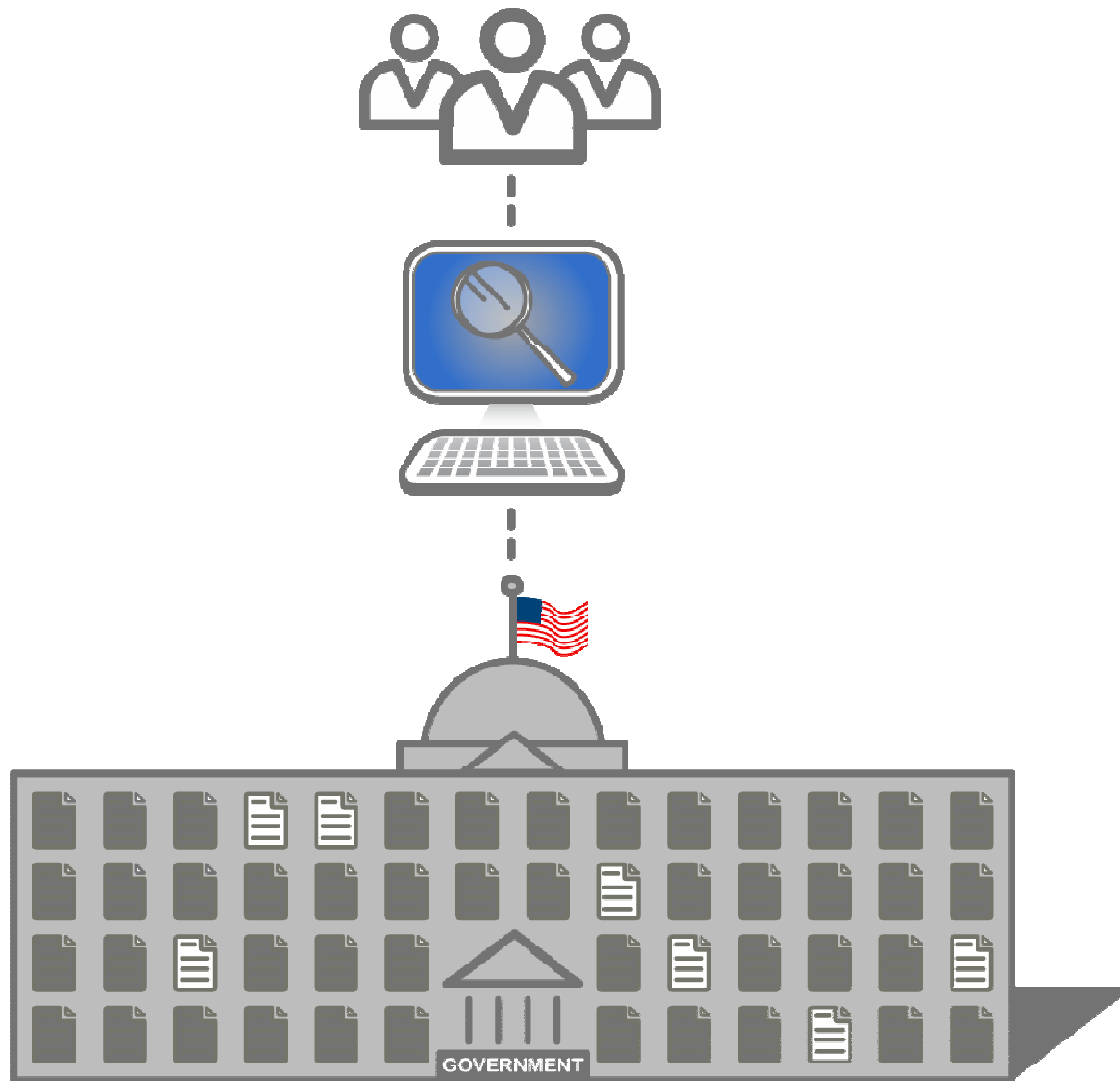


Questions search engines can't completely answer

Citizens expect to find everything through search



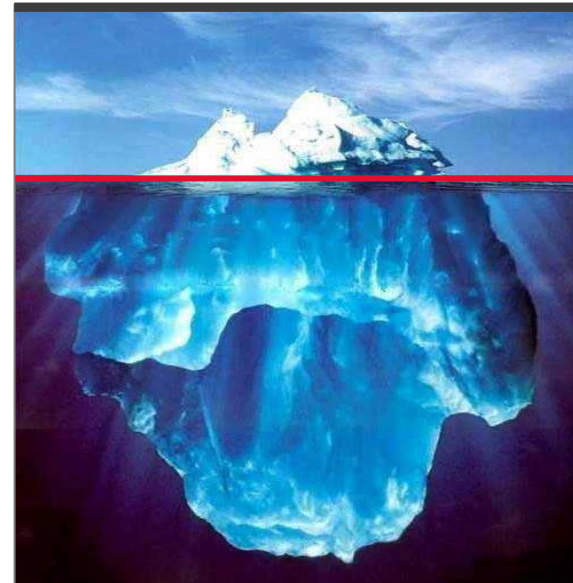
But search engines can only index a fraction of what citizens are looking for



Many government websites are effectively invisible to search engine users

Barriers to search engine crawling:

- Content “hidden” behind search forms
- Non-HTML links
- Outdated robots.txt crawling restrictions
- Server errors
- Orphaned URLs
- Rich media: audio, video
- Paid/subscription-only access



WEB
Searchable

DEEP WEB
Not searchable

Representative barriers to search engine users

- USAJOBS.gov job search (<http://jobsearch.usajobs.opm.gov/>):
 - [statistician jobs federal government]
 - Barriers: Agency information access policy and database structure

Google logo and search bar containing 'statistician jobs federal government' with a 'Search' button and links for 'Advanced Search' and 'Preferences'.

Web Personalized Results 1 - 10 of about 4,160,000 for statistician jobs federal government (0.33 seconds)

Bureau of Labor Statistics Home Page
The Bureau of Labor Statistics is the principal fact-finding agency for the Federal Government in the broad field of labor economics and statistics.
www.bls.gov/ - Jun 18, 2007 - Similar pages - Note this

Sponsored Links
Statistician Jobs
Search for Statistician Jobs
Find your new job today.
www.indeed.com
Statistician Jobs - IRS
Find Statistician Jobs at the IRS.
Search Jobs & Apply Online Today.
www.jobs.IRS.gov

Federal Government, Excluding the Postal Service - Jun 1
For advice on finding a job with the Federal Government and more information ... Suggested citation: Bureau of Labor Statistics, U.S. Department of Labor, ...
www.bls.gov/oco/cg/cgs041.htm - 91k - Cached - Similar pages - Note this

US Department of Labor -- DOL Job Opportunities - Jun 1
Instructions for using DOL's online job application system - Forms to be completed by new ... USAJOBS - Asian Pacific American Federal Career Guide ...
www.dol.gov/dol/jobs.htm - Jun 17, 2007 - Similar pages - Note this

The US Department of Labor Home Page, Secretary of Labor Elaine L ...
... with preparing the American workforce for new and better jobs. DOL is responsible for the administration and enforcement of over 180 federal statutes.
www.dol.gov/ - Jun 17, 2007 - Similar pages - Note this
[More results from www.dol.gov]

US Government Info - Resources

USAJOBS "WORKING FOR AMERICA"

USAJOBS is the official job site of the United States Federal Government. It's your one-stop source for Federal jobs and employment information.

HELP ?

NEW Search Jobs **NEW** My USAJOBS Info Center Veterans Forms Employer Services

Basic Search | Agency Search | Series Search | Advanced Search | Senior Executive

Job Search Results

Refine results with more Keywords...
 statistician Show Jobs Posted: All

Radius/Zip:
 Search within ----select---- of Zip Code [] REFINE

Search Related Job Titles:
 Statistical Analyst, Biostatistician, SAS Programmer/Analyst, SAS Programmer, Quantitative Analyst, more...

Detailed View Brief View

Jobs 1 to 25 of 60 Page: [1] 2 3 Next page >> Map Results Page 1 of 3

Closing	Job Summary	Agency	Location	Salary
6/18/2007	Statistician GS-1530-11/12/13 Do you want to support Americas energy future and a quality environment? We, at the U.S. Minerals Management Service (MMS), do too! The Minerals Management Service is the agency of the U.S. Departme ...[more]	Interior, Minerals Management Service	US-VA-Northern Virginia, VA	55,706.00+

Vacancy Ann.#: MMS-ANT-07-MM141778
 Who May Apply: Public
 Pay Plan: GS-1530-11/13
 Appointment Term: Permanent
 Job Status: Full-Time

USAJOBS - Job Search - Mozilla Firefox

File Edit View History Bookmarks Tools Help del.jcio.us

http://jobsearch.usajobs.opm.gov/

Gmail Cal Desk Docs Moma SF Docs 2 WebEx Gmail Cal PBI Wiki WF ZB Citi GOOG Craigs Netflix Reader

Start Stumbling...

Google atf small busine Search Bookmarks Check AutoLink AutoFill Send to atf small business Settings

New buttons available for your Toolbar!

USAJOBS "WORKING FOR AMERICA"

USAJOBS is the official job site of the United States Federal Government. It's your one-stop source for Federal jobs and employment information.

HELP ?

NEW Search Jobs **NEW** My USAJOBS Info Center Veterans Forms Employer Services

Basic Search | Agency Search | Series Search | Advanced Search | Senior Executive

Keyword Search ?

(e.g.: Job Title, Agency Name, Vacancy Announcement #, Control #) [More Tips](#)

Location Search ?

For multiple selections, hold down **Ctrl (Command for Macs)** while clicking selections.

----- Select all -----

US
AK
AK-Aleutian Islands
AK-Anchorage

Job Category Search ?

For multiple selections, hold down **Ctrl (Command for Macs)** while clicking selections.


----- SELECT ALL -----

Accounting, Budget and Finance
Biological Sciences
Business, Industry, and Procurement
Copyright, Patent, and Trademark

FEATURED JOB

» [IRS Revenue Officer \(Openings Nationwide\)](#)

Become a highly trained tax collection professional in a great location.



FEATURED EMPLOYER

» [Center for Biologics Evaluation & Research \(CBER\)](#)

CBER plays an integral role in the Department of Health and Human Services.

Done

Open Notebook

start

Microsoft Excel Microsoft Word 20 Firefox W3C 6-18-07 EIG 2 4-4-07

iTunes FranklinCovey Pl... Google Talk My Documents

3:24 PM Monday 6/18/2007

Representative barriers to search engine users

- ATF website (<http://www.atf.gov>):
 - Sample search: [atf small business program]
 - Barrier: Robots.txt (tacit agency information access policy)

Google [Advanced Search](#) [Preferences](#)

Web Personalized Results 1 - 10 of about 522,000 for [atf small business program](#). (0.25 seconds)

Did you mean: [ato small business program](#)

[PDF] ["BUSINESS DEVELOPMENT" <a href="http://www.atf.gov/acquisition ...](#)
 File Format: PDF/Adobe Acrobat - [View as HTML](#)
Program. ATF's Small Business Program is the focal point. of contact within the organization to provide. advice and guidance on matters relating to the ...
[www.sba.gov/idc/groups/public/documents/wy_casper/wy_busdev.pdf](#) -
[Similar pages](#) - [Note this](#)

[PDF] [1 July 7, 2003 James P. Ficaretta Program Manager Room 5150 ...](#)
 File Format: PDF/Adobe Acrobat - [View as HTML](#)
 that these comments will help accomplish both the regulatory goal of ATF and the goal of the President's **small business** plan, to create an environment ...
[www.sba.gov/advo/laws/comments/atf03_0707.pdf](#) - [Similar pages](#) - [Note this](#)
 [[More results from www.sba.gov](#)]

ATF : Small Business Counseling Session : OSDBU
 From June 7, 2005 Information Technology **Small Business** Counseling Session ... accurate, informative communications on ATF initiatives, **programs**, ...
[www.usdoj.gov/jmd/osdbu/presentations/atf.html](#) - 7k - [Cached](#) - [Similar pages](#) - [Note this](#)

CIO : **Small Business Counseling Session : OSDBU**



Bureau of Alcohol, Tobacco, Firearms and Explosives Acquisition and Business Opportunities

- What's New
- ATF Buyers
- What Does ATF Buy?
- ATF Contracting Opportunities
- ATF Small Business Program
- Federal Regulations
- ATF Internet
- Home

ATF Small Business Program

Anne D. Hudson, Chief Acquisition Management Branch
(202) 927-8200

Updated: 10/26/06

ATF's Small Business Program is the focal point of contact within the organization to provide advice and guidance on matters relating to the socio-economic programs. ATF maintains a positive role in participating in vendor outreach sessions.

Small Business Services

- ◆ Counseling available to small business concerns;
- ◆ Conduct capability briefings for customers seeking opportunities with small businesses;
- ◆ Link prime contractors to small businesses for subcontracting opportunities;
- ◆ Organize small business workshops and seminars; and
- ◆ Provide advice in small business issues.

Useful Links

SBA Ombudsman - www.sba.gov/ombudsman
SBA Programs - www.sba.gov/aboutsba/sbaprograms.html

Mozilla Firefox

File Edit View History Bookmarks Tools Help del.jcio.us

http://www.atf.gov/robots.txt

Gmail Cal Desk Docs Moma SF Docs 2 WebEx Gmail Cal PBI Wiki WF ZB Citi GOOG Craigs Netflix Reader

Start Stumbling...

Google atf small busine Search Bookmarks Check AutoLink AutoFill Send to atf small business Settings

```
User-agent: *  
Disallow: /
```

Done

Open Notebook

start

Microsoft Excel Microsoft Word 20 Firefox W3C 6-18-07 EIG 2 4-4-07

iTunes FranklinCovey Pl... Google Talk My Documents

3:23 PM
Monday
6/18/2007



Alcohol & Tobacco Diversion | Firearms | Arson & Explosives | Laboratories

- Home
- FAQs
- About ATF
- Business Opportunities
- Field Divisions
- FOIA
- Forms
- Jobs
- Kids Page
- Most Wanted
- Other Programs
- Pressroom
- Publications
- Regulations
- Related Sites
- Statistics
- Training
- What's New

FEATURED STORIES

Indictment Handed Down In Plot To Overthrow The Government Of Laos

United States Attorney McGregor W. Scott, Special Agent in Charge of the San Francisco Field Division of the Bureau of Alcohol, Tobacco, Firearms, and Explosives Stephen K. Martin, and FBI Special Agent in Charge Drew Parenti announced today that a federal grand jury in Sacramento today issued a five-count indictment against 11 individuals stemming from a thwarted plot to overthrow the government of Laos. [More.](#)

ATF P 3312.11 – ATF Disclosure Of Firearms Trace Data

A key component of ATF's enforcement mission is the tracing of firearms on behalf of thousands of Federal, State, local and foreign law enforcement agencies (LEA). Firearms trace data is critically important information developed by ATF to assist state and local law enforcement in investigating and solving violent crimes. [More.](#)

ATF, FBI Announce \$5,000 Reward In Missouri Explosives Theft

The Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF), the FBI and the St. Charles County Sheriff's Department announced today a joint reward of up to \$5,000 for information leading to the arrest and conviction of those responsible for the theft of explosives from an explosives storage bunker at the St. Charles County Sheriff's Department training center. [More.](#)

U.S. Indicts 38 In Cleveland On Drugs And Weapons Violations

Gregory A. White, United States Attorney for the Northern District of Ohio; Christopher Sadowski, Special Agent-in-Charge, Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF); Robert L. Corso, Special Agent-in-Charge, Drug Enforcement Administration (DEA); and Michael McGrath, Chief, Cleveland Division of Police; announced today that a federal grand jury returned 17 indictments charging 38 individuals with various federal drug and weapons violations. [More.](#)

Representative barriers to search engine users

- US Census Bureau Question & Answer Center (<https://ask.census.gov/>):
 - [census america's largest minority group]
 - Barrier: Database structure

Google census america's largest minority group Search Advanced Search Preferences

Personalized Results 1 - 10 of about 1,070,000 for census america's largest minority group. (0.09 seconds)

[Hispanics Now Largest U.S. Minority, Census: Now 37 Million ...](#)
 Hispanics have surpassed African-Americans as the **largest minority group** in the United States, says the **Census** Bureau. There are now 37 million Latinos in ...
www.cbsnews.com/stories/2003/01/21/national/main537369.shtml - 90k - Jun 17, 2007 -
[Cached](#) - [Similar pages](#) - [Note this](#)

[Nation's minority numbers top 100M - USATODAY.com](#)
 Hispanics remain the **largest minority group** at 44.3 million and ... "The melting pot in **America** is really bubbling at the younger age," says William Frey, ...
www.usatoday.com/news/nation/census/2007-05-17-minority-numbers_N.htm - 43k -
[Cached](#) - [Similar pages](#) - [Note this](#)

[USATODAY.com - 39 million make Hispanics largest U.S. minority group](#)
 WASHINGTON — Hispanics outnumber blacks as the **largest minority group** in Source:
 The Hispanic Population in the United States March 2002, **Census** Bureau ...
www.usatoday.com/news/nation/census/2003-06-18-Census_x.htm - 64k -
[Cached](#) - [Similar pages](#) - [Note this](#)

[The Pew Charitable Trusts: Informing the Public: Hispanics in America](#)
 In the 2000 **Census**, some 35306000 persons living in the United States ... percent of the U.S.
 population and making it the nation's **largest minority group**. ...
www.pewtrusts.com/ideas/index.cfm?issue=25 - 32k - [Cached](#) - [Similar pages](#) - [Note this](#)

U.S. Census Bureau

Question & Answer Center

Find Answers

Ask a Question

My Stuff

Login

Help

Search

Browse

Search by Keyword

Search Tips

Search

ID	1046
Category	About the Census Bureau
Date Created	02/06/2006 07:41
Last Updated	02/28/2007 07:40

- Print Answer
- Email Answer

Top 10 questions

Question

What are the top 10 questions people ask the Census Bureau?

Answer

	Question	Answer	More
1	What is the U.S. population?	300,888,812 (January 1, 2007 estimate)	Population clock, estimates for other areas and years
2	Which is the largest state?	Population – California with 36,132,147 on July 1, 2005. Land Area – Alaska at 571,951.26 square miles.	Other state populations Other state land areas
3	Which is the fastest growing state?	Arizona with a 3.6 percent growth rate.	For information on numerical increases , fastest growing counties , etc.

Answer - Mozilla Firefox

File Edit View History Bookmarks Tools Help del.jcio.us

https://ask.census.gov/cgi-bin/askcensus.cfg/php/enduser/std_adp.php?p_faqid-

statistician jobs federal >>

3	Which is the fastest growing state?	Arizona with a 3.6 percent growth rate.	For information on numerical increases, fastest growing counties, etc.
4	What is the poverty threshold?	There is not one number. As an example, the poverty threshold is \$10,160 for a person under 65 years of age with no related children under 18 years of age.	Other poverty data including the poverty rate.
5	Which state has the highest income?	The highest median household income is New Jersey, with \$59,989, based on a 3-year average.	Other income data
6	Which is America's largest city?	New York is still tops, at 8.1 million. Los Angeles is second at 3.8 million.	Other city populations
7	Which is America's largest minority group?	Hispanics, numbering 42.7 million as of July 1, 2005, are now America's largest minority.	Race and ethnic data
8	What is the American FactFinder?	A free online tool for accessing key Census Bureau data sets: the population and housing census, the economic census, the American Community Survey, and others.	American FactFinder
9	Do you do genealogical research?	Although genealogists use census records in their research, we do not do genealogical research. Census records are available from the National Archives and Records Administration (1930 census and earlier censuses).	Genealogical research
10	What do you do the other 9 years?	Though the decennial census is a very important activity, we are the nation's factfinder on the economy as well as providing important up-to-date information through our survey programs.	Business , American Community Survey , Hurricane Data , Home page

Contact Me If This Answer Changes

Done ask.census.gov Open Notebook

start

Microsoft Excel Microsoft Word 22 Firefox W3C 6-18-07 EIG 2 4-4-07

PowerPoint Slide... iTunes FranklinCovey Pl... Google Talk My Documents

3:28 PM Monday 6/18/2007

U.S. Census Bureau

Question & Answer Center

Find Answers Ask a Question My Stuff Login Help

Search Browse

Search by Keyword [Search Tips](#)

864 Answers Available

Page: 1 of 44 Go

- 781 [FAQs: American Community Survey: Important respondent questions](#)
- 870 [Business Forms](#)
- 642 [American Community Survey: Must I respond?](#)
- 1410 [Planning database](#)
- 1202 [Local Update of Census Addresses \(LUCA\)](#)
- 188 [American Community Survey / Puerto Rico Community Survey: What is it?](#)
- 976 [HELP - I am looking for a number!](#)
- 1046 [Top 10 questions](#)
- 368 [State & county population estimates](#)
- 320 [Population profiles](#)
- 198 [Data profile by state or county](#)
- 1215 [Population pyramids](#)
- 709 [Crime statistics](#)

Scope of the issue



Completely searchable



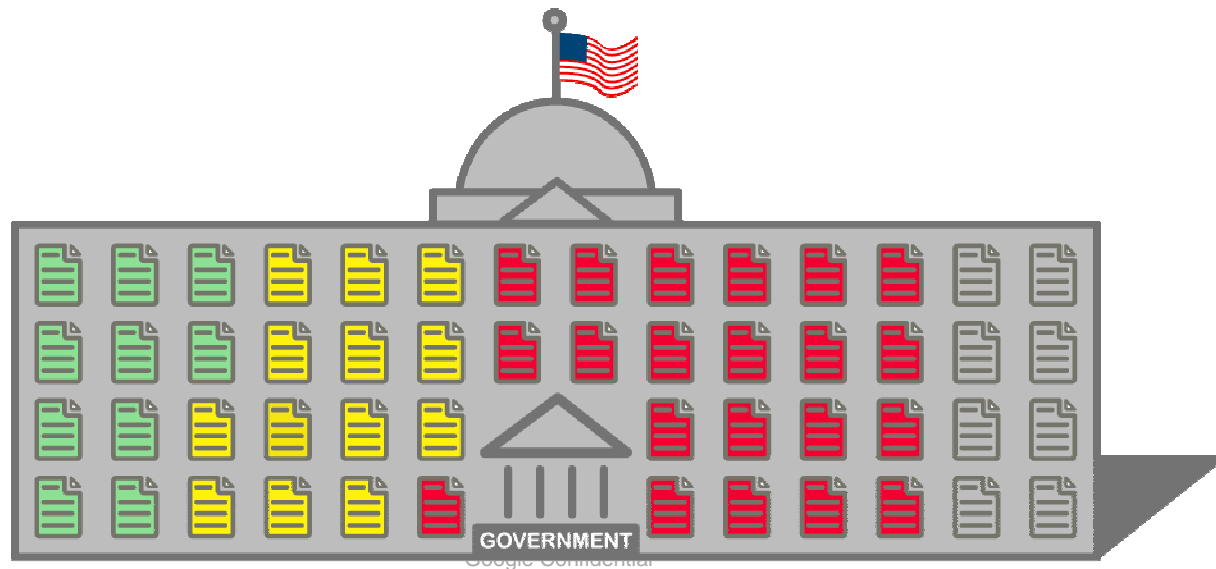
Partly indexed for search



Not yet indexed for search



Unknown



Scope of the issue

- Most US federal agencies operate one or more “invisible” or un-indexable websites (e.g. databases):
 - Up to 2,000 sites
 - Over 1 billion documents
 - DTIC, EPA, NASA, USGS

	A	B	C	D
1	EPA sites to sitemap			
2				
3	Agency	Site/database name/description	Issue	URL
4			Uncrawable--to sitemap	
5			Blocked by robots.txt	
6			Crawable	
7				
8	EPA	EPA Online Library System (OLS)	Blocked by robots.txt; uncrawable--to sitemap	http://www.epa.gov/natlibra/ols.htm
9	EPA	Enforcement and Compliance database (enforcement penalties)	Uncrawable--to sitemap	http://www.epa.gov/echo/complianc
10	EPA	Enforcement Case Reports Database	Uncrawable--to sitemap	http://www.epa.gov/echo/complianc
11	EPA	Compliance database (Hazardous Waste section)	Uncrawable--to sitemap	http://www.epa.gov/echo/complianc
12	EPA	EPA: Beach Watch: http://oaspub.epa.gov/beacon/beacon_national_page.main	Uncrawable--to sitemap	http://oaspub.epa.gov/beacon/beac
13	EPA	Environmental Information Mangement System (Document sub category in the advanced search)	Uncrawable--to sitemap	http://oaspub.epa.gov/eims/query.p
14	EPA	EPA: RadNet Database (Radiation levels)	Uncrawable--to sitemap	http://oaspub.epa.gov/enviro/erams
15		Database of single chemical toxicity for plant and animal	Blocked by robots.txt;	

Scope of the issue

- Most US federal agencies operate one or more “invisible” or uncrawlable websites (e.g. databases):
 - Up to 2,000 sites
 - Over 1 billion documents
 - DTIC, EPA, NASA, USGS
- State of Texas: Up to 250 uncrawlable sites
- Issue common to governments worldwide (but not the commercial web)

The good news

- The Sitemap Protocol provides a solution:
 - Can make all pages, documents, and records on a website accessible to search engine crawlers
 - Does not require redevelopment or redesign, just a comparably modest time investment
 - Keeps the site's owner in control

XML Sitemap

- A comprehensive list of a site's URLs tagged with:
 - Location
 - Last modification date
 - Change frequency
 - Priority

XML sitemap

```
<?xml version="1.0" encoding="UTF-8"?>
<urlset xmlns="http://www.google.com/schemas/sitemap/0.84">
  <url>
    <loc>http://www.example.com/</loc>
    <lastmod>2005-01-01</lastmod>
    <changefreq>monthly</changefreq>
    <priority>0.8</priority>
  </url>
  <url>
    <loc>http://www.example.com/catalog?item=12&desc=vacation_hawaii</loc>
    <changefreq>weekly</changefreq>
  </url>
  <url>
    <loc>http://www.example.com/catalog?item=73&desc=vacation_new_zealand</loc>
    <lastmod>2004-12-23</lastmod>
    <changefreq>weekly</changefreq>
  </url>
  <url>
    <loc>http://www.example.com/catalog?item=74&desc=vacation_newfoundland</loc>
    <lastmod>2004-12-23T18:00:15+00:00</lastmod>
    <priority>0.3</priority>
  </url>
  <url>
    <loc>http://www.example.com/catalog?item=83&desc=vacation_usa</loc>
    <lastmod>2004-11-23</lastmod>
  </url>
</urlset>
```


One solution for all search engines

Once implemented, Sitemaps can be made available to all major search engines



“The launch of Sitemaps is significant because it allows for a single, easy way for websites to provide content and metadata to search engines”

— Tim Mayer, Senior Director of Product Management, Yahoo Search

“We are 100% behind this protocol -- this kind of collaboration will help improve the search experience for all of our customers”

— Ken Moss, General Manager, Live Search

Success stories

- US federal government:
 - GAO
 - GPO
 - LOC
 - NAL, USDA
 - NARA
 - NIH, HHS
 - NTIS, Commerce
 - OSTI, Department of Energy
- States of Arizona, California, Michigan, Virginia, Utah
- District of Columbia and other localities
- Central governments in Europe and Asia Pacific

yag zircon refractory - Google Search - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.google.com/search?hl=en&safe=off&q=yag+zircon+refractory&btnG=Search

Google yag zircon refractory Search Advanced Search Preferences

Web Images Video News Maps Gmail more Sign in

Web Results 1 - 10 of about 587 for [yag zircon refractory](#). (0.15 seconds)

[Materials Characterization : YAG laser surface densification of a ...](#)
A **zircon refractory** zirconium silicate was surface melted with a pulsed **YAG** laser to introduce AlN nanoparticles, with the aim of improving its surface ...
[linkinghub.elsevier.com/retrieve/pii/S1044580305002627](#) - [Similar pages](#)

[Applied Surface Science : CO2 laser-induced structure changes on a ...](#)
A **zircon** (ZrSiO₄) **refractory** was treated by CO₂ laser surface melting in order The surface of the **zircon refractory** was highly densified and an m-ZrO₂ ...
[linkinghub.elsevier.com/retrieve/pii/S016943320301290X](#) - [Similar pages](#)

[Energy Citations Database \(ECD\) - - Document #20833198](#)
Description/Abstract, A **zircon refractory** zirconium silicate was surface melted with a pulsed **YAG** laser to introduce AlN nanoparticles, with the aim of ...
[www.osti.gov/energycitations/product.biblio.jsp?osti_id=20833198](#) - 13k -
Cached - [Similar pages](#)

[Patents in Class 501/103](#)
The **zircon refractory** material has a composition w. ... titania, zirconia, yttria, zirconium phosphate, or yttrium aluminum garnet (**YAG**) are doped with one ...
[www.freepatentsonline.com/CCL-501-103.html](#) - 67k - [Cached](#) - [Similar pages](#)

[Patents in Class 501](#)
A glass manufacturing system is described herein that has a forming device (e.g., isopipe) which is made from a **zircon refractory** material that has an ...

Done

start

Microsoft E... 2 Microso... Google.co... Problem loa... Problem loa... Google Sch...

yag zircon ... Google - M... iTunes 7 Microso... Wireless N...

1:03 PM Wednesday 11/14/2007

Recent development

- As part of reauthorization of the E-Gov Act, Senate committee considering amendment adding requirements in support of web search:
 - OMB to offer “guidance and best practices to ensure that publicly available online Federal Government information and services are made more accessible to external search capabilities...”
 - Agencies to “ensure compliance with guidance” within two years and report annually

SEC. 4. IMPROVING SEARCHES OF GOVERNMENT DOCUMENTS ON THE WORLDWIDE WEB.

(a) Findings- Congress finds that--

- (1) members of the public and governments commonly rely on commercial search engines to locate relevant information on the worldwide web, including information made available by government agencies; and
- (2) some Federal agencies have not taken actions to make all of the information available through their websites readily accessible to commercial search engines.

(b) Searchability of Government Websites- Section 207(f) of the E-Government Act of 2002 (44 U.S.C. 3501 note) is amended by adding at the end the following:

^ (4) SEARCHABILITY OF GOVERNMENT WEBSITES-

^ (A) FUNCTIONS OF THE DIRECTOR-

- ^ (i) GUIDELINES- Not later than 1 year after the date of enactment of the E-Government Reauthorization Act of 2007, the Director shall promulgate guidance and best practices to ensure that publicly available online Federal Government information and services are made more accessible to external search capabilities, including commercial and governmental search capabilities. The guidance and best practices shall include guidelines for each agency to test the accessibility of the websites of that agency to external search capabilities.
- ^ (ii) REVIEW- The Director shall ensure periodic review of any guidance and best practices promulgated under clause (i) to ensure that the guidance and best practices are consistent with any advances made in information technology.
- ^ (iii) REPORTS- The Director shall report annually to Congress, through the report established under section 3606 of title 44, United States Code, on--

Google Public Policy Blog

Google's views on government, policy and politics



Senate helping make gov't more searchable

Tuesday, November 13, 2007 at 4:16 PM
Posted by Liz Eraker, Policy Analyst

Let's say you're looking for some publicly available government information online. Maybe you're searching for property records or background on your local school district. Chances are, you'll start your quest not by typing in the URL of a government agency website, but by visiting Google or another search engine. Unfortunately, that may not produce the results you're looking for. In fact, much of the content that government agencies make available on the web (about [half](#), by our estimates) doesn't appear in search results because of the way many government websites are structured.

Google has been working to make publicly available government information more accessible to the public. We're doing so by helping government agencies implement the [Sitemap Protocol](#), a technical standard that makes it easier for search engines to crawl and index pages on a website. Tomorrow, a Senate committee will take another important step toward

Search powered by Google™

Site Feed
Add to Google

3773 readers
BY FEEDBURNER

Get Blog Posts by E-mail

Subscribe

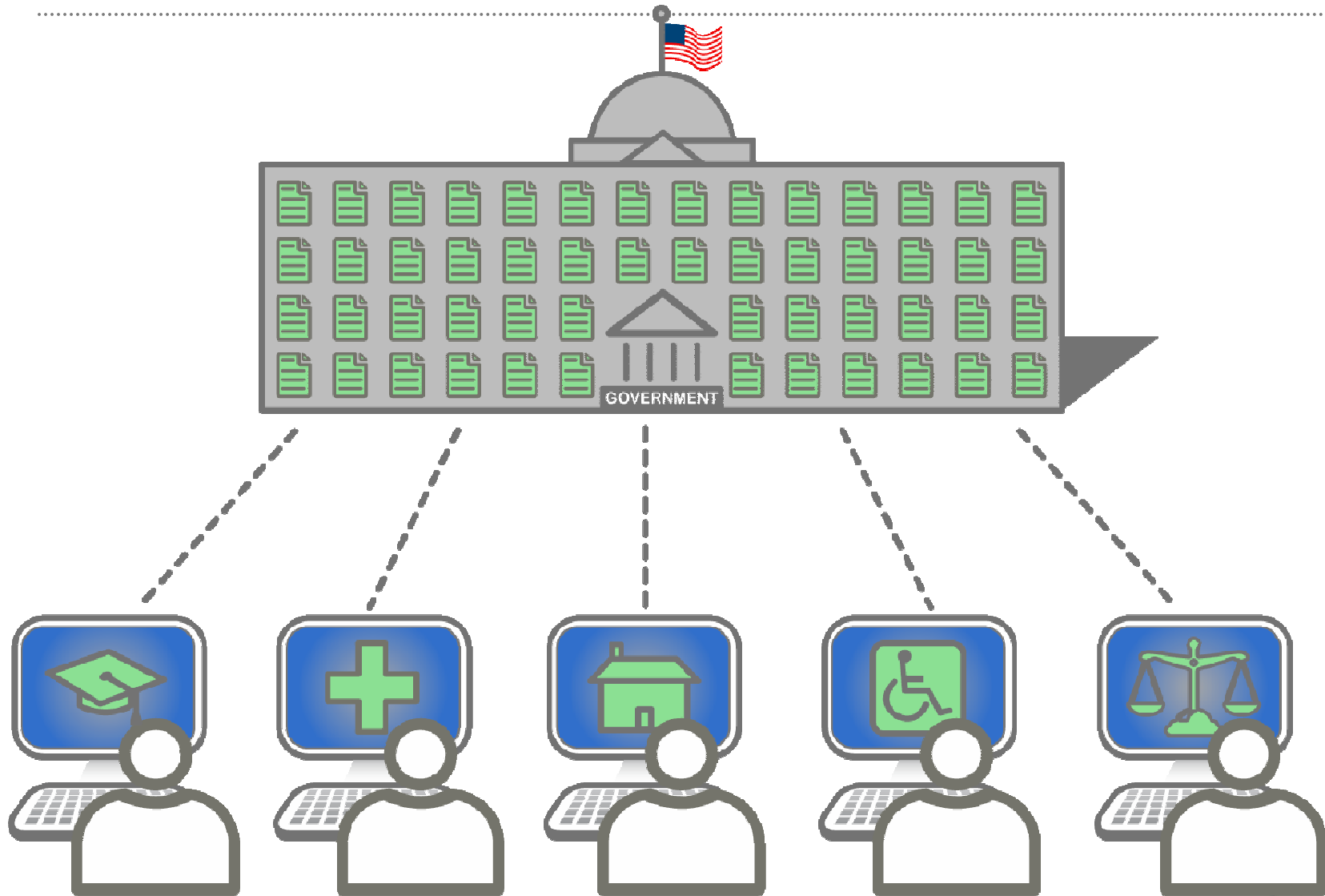
Archive

Public sector information is a pillar of the web

Generally authoritative, unbiased, free and trustworthy

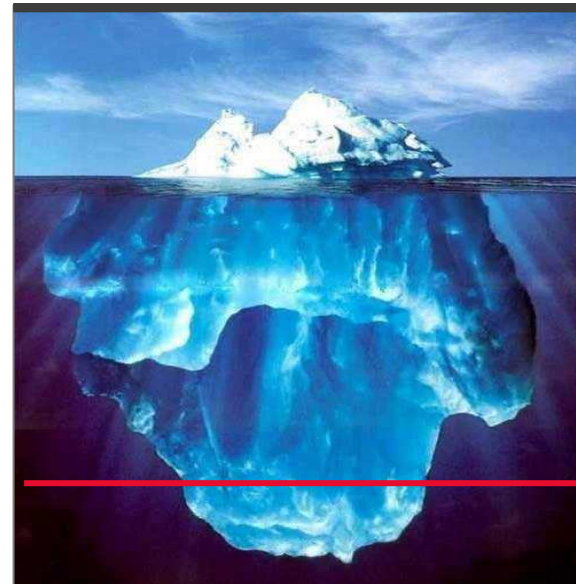


Meeting citizens' expectations of government



Join in

- Get informed:
www.google.com/publicsector
- Advocate for the Sitemap Protocol at your agency/organization
- Query: John Lewis (JL) Needham, Manager, Public Sector Content Partnerships, jlneedham@google.com

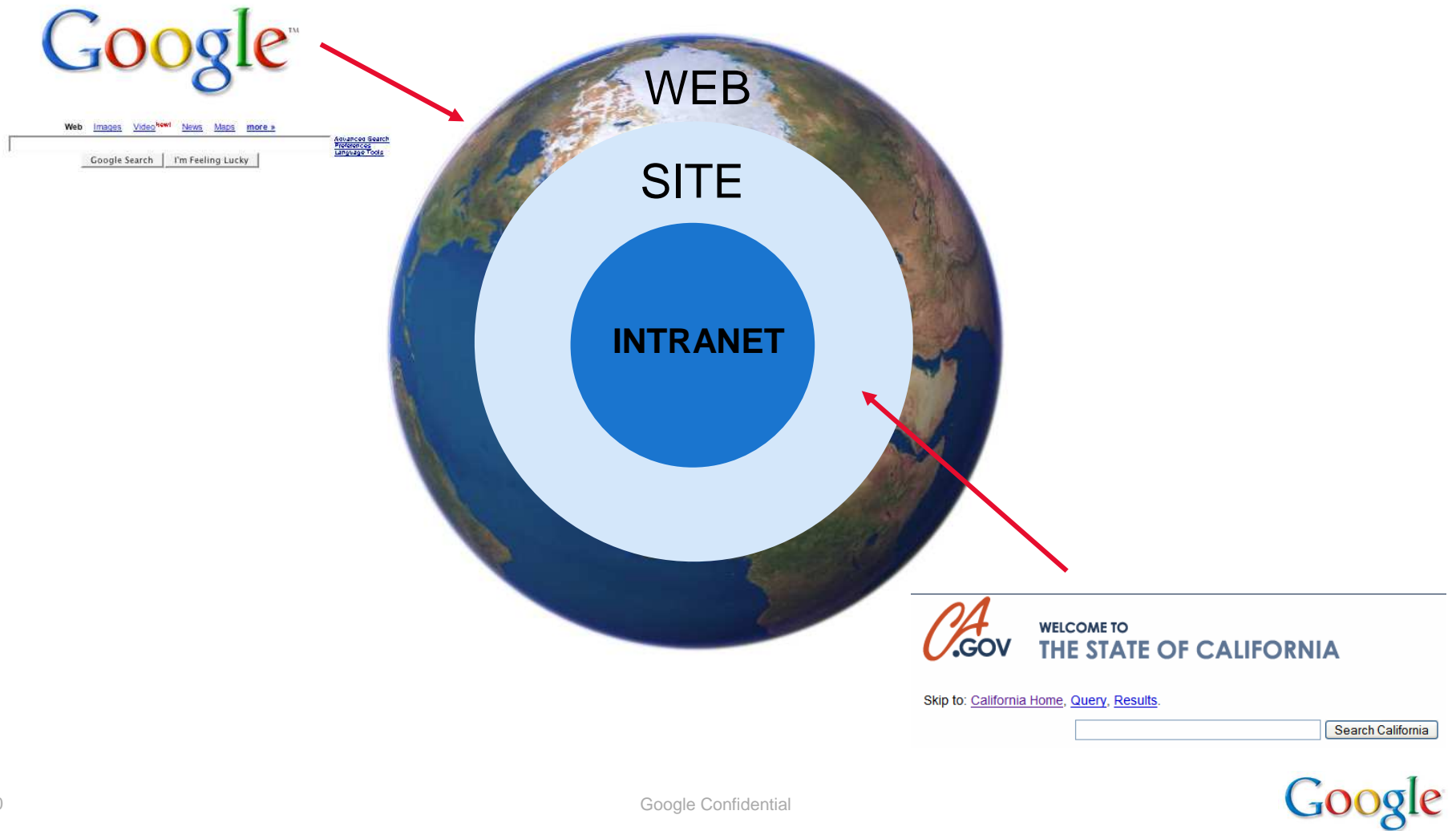


WEB
Searchable

DEEP WEB
Searchable

Appendix

The three levels of search



Web search vs. site search

Supporting the two levels of search



All of the open and crawlable deep web	Search scope	A segment of the website's content
Citizens and professionals	User	Professionals and citizens
Search engine crawling intervals	Freshness	Customizable
Limited barriers to crawling, including by robots.txt	Crawling	Limited by server capacity and cost
High-level stats	Reporting tools	More detailed, all facets
Free	Cost	Varies