Where to find data
Find data through Google

- Google has a bunch of advanced functions that can help you find data and/or documents quickly.
- Search for specific phrases with quotes “”
  - Example: “new york population”
- Exclude search words with a hyphen -
  - Example: “new york population” -city
- Search for something either/or with OR
  - Example: budget OR appropriations
- Find websites that are similar to others by using related:
  - Example: related:propublica.org
Find data through Google

- Search only within a certain domain by using site:
  - Example: site:propublica.org; site:nyc.gov

- Search for a specific file type by using filetype:
  - Example: filetype:pdf
  - Other useful filetypes:
    - filetype:ppt (PowerPoint)
    - filetype:xls (pre-Excel 2007)
    - filetype:xls (post-Excel 2007)
      - Note: check for both xls and xlsx!
    - filetype:doc (Word documents)
    - filetype:txt (text files)
    - filetype:csv (comma-delimited text files)
Find data through Google

● You can use this to find data or documents from specific agencies
  ○ For example, searching `filetype:doc site:nyc.gov` will bring up any Word documents on the New York City government website.

● And you can use the operators we discussed earlier to further drill down your search
  ○ Example: `subway OR bus filetype:pdf site:nyc.gov` will bring up any PDF on the New York City government website that mentions the word “subway” or “bus.”

● There’s plenty more where that came from
  ○ Find a full list of advanced search operators at `https://www.google.com/advanced_search`
Getting data from the government

- Your first step: calling the agency
  - Never send out a “blind” records request

- Describe what you’re looking for, or what you’re trying to find
  - Get specific names of database or documents that you want

- Filing a formal records request should be your last resort
  - The easiest route is to ask the agency for the records
  - “Let’s cut down on the paperwork here.”
  - Formal requests take time!
Getting data from the government

- Laws govern the release of data and information to the public

- Federal: Freedom of Information Act (FOIA)

- State: Each state has its own open records law.
  - **Know your state’s law!**
  - What’s allowable in one state might not be in another.
  - Different states might have different response deadlines.
  - States often have First Amendment coalitions/advocacy groups. Find yours.
Getting data from the government

- For both federal and state records requests, save time and make sure you’re requesting documents from the correct agency before filing.

- Since you’ve done your homework, you should have a specific name or description of the document(s).

- Be sure to ask for electronic fulfillment, unless there’s a reason you need paper.
Getting data from the government

- Some tips on filing a records request:

- Ask that your request be fulfilled on a “rolling basis,” i.e. release the documents as they come

- It never hurts to ask for a fee waiver
Getting data from the government

- Agencies have a deadline to respond to you. Set an alarm or reminder for that date
  - Example: FOIA law says the agency has to send you a response within 20 business days
  - Keep track of requests with a website like FOIA Machine

- Toe the line between specific and vague
  - Too specific and you might inadvertently exclude some records. Too vague and you run the risk of the agency saying the request is too vast to fulfill
  - This is where your previous phone calls come into play
  - Limit time periods. 5 years of records is easier to fulfill than 50

Source: Jack Gillum, Associated Press, [IRE tipsheet](https://www.oth-ire.org/tipsheet). Reprinted with permission from IRE.
Getting data from the government

- If you are charged fees, always negotiate
  - Agencies might overcharge as a denial/stalling tactic
  - Per-page reproduction fee? Don’t need it if it’s electronic.
  - “It will take $10,000 for 50 hours to fulfill this request...”
    - How much is that employee getting paid an hour?

- Know your rights
  - Denied? You can (and should) appeal
  - Be polite, but don’t take “no” for an answer
  - Public shaming

Source: Jack Gillum, Associated Press, IRE tipsheet. Reposted with permission from IRE.
Foiled by FOIL: How One City Agency Has Dragged Out a Request for Public Records for Nearly a Year

After eight proposed delivery dates, the Administration for Children’s Services still has not provided public records we asked for almost a year ago.

by Joaquin Sapien
ProPublica, April 21, 2016, 2:18 p.m.
Getting data from the government

Pursuant to the Alabama Open Records Law § 36-12-40 et seq., I am requesting the following documents:

The equity/revenue-and-expenses report completed by the athletic department for the National Collegiate Athletic Association for the 2014 fiscal year. This report is a multi-page document that had to be submitted to the NCAA by Jan. 15, 2015. It contains 38 revenue and expense categories, followed by specific breakdowns of each of those categories, by sport and gender. I am requesting the full report, including the detail tables and the Statement of Revenues and Expenses that appear at the end of the report.

PLEASE NOTE: The NCAA report is different than the equity report that is sent to the U.S. Department of Education for Title IX compliance.

Please advise me in advance of the estimated charges associated with fulfilling this request.

In the interest of expediency, and to minimize the research and/or duplication burden on your staff, please send records electronically if possible. If this is not possible, please notify me by phone at 415-323-5830 before sending to the address listed below.

- Cites the law
- Is specific (reporter has done his/her homework)
- Asks for electronic records
Now that you’ve got ‘em...
A note on Socrata

- Many government agencies use Socrata as an online clearinghouse for their data
  - Example: https://nycopendata.socrata.com/
- Socrata has limited functionality (sorting/filtering), but it’s just as easy to download the data on your own
- Just choose “Export” in the upper right-hand corner of the screen

- A drop-down menu will appear, allowing your pick of data formats (text files, Excel, PDF)
Bust through PDFs with Tabula

- PDFs are terrible files for storing data

- As long as the PDF is machine-readable, online tools like Tabula can help

- Machine-readable means the underlying data in the PDF is still intact
Bust through PDFs with Tabula

- How can you tell?
  - If you can highlight the data in the PDF, you’re good to go
  - If you can’t highlight it, i.e. it looks like a scanned document or a photo, Tabula can’t recognize the data

- If your PDF of data is not machine-readable, you will need OCR (optical character recognition) software to convert into machine-readable data.
  - Or go back to your data source and ask for a machine-readable file
How to load data
Types of data files

- Data can be stored in a myriad of file types

- Text files -- the simplest data storage type. Basically a text document of data

- File type is usually .txt
  - Obviously a 10,000-page document of data isn’t useful. We have to separate it somehow
  - Generally two ways to do this
Types of data files

- Check the file name extension (.csv, .txt, etc.)

- Open the file up in a text editor and browse

- Do you have a header row?

- What’s separating each field?
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</table>
Types of data files

- Fixed width

- You must manually put breaks in the data to tell your computer where a new field ends and another begins.

- If you have a fixed width file, make sure your source gives you a guide or schema that tells you where to put the breaks. Don’t guess!
  - Example
Types of data files

- Delimited -- the data fields are separated by a delimiter (often punctuation) that tells our computer where a new field ends and another begins
  - This is the more common of the two
  - Common delimiters
    - Commas (also known as CSV files, or comma-separated values)
    - Most common delimiter
    - This file type can be .csv instead of .txt
  - Tabs
  - Pipes (|)
Types of data files

- But what if you have commas in a field?
  - We use a text qualifier (usually quote marks) to tell the computer to ignore any commas in the field
  - Example: AT&T, Inc. will look like “AT&T, Inc.” in the text file
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<th>Number of Services</th>
<th>Number of Unique Beneficiary/Provider Interactions</th>
<th>Number of Distinct Medicare Beneficiary/Per Day Services</th>
<th>Average Submitted Charge Amount</th>
<th>Minimum Submitted Charge Amount</th>
<th>Maximum Submitted Charge Amount</th>
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</tbody>
</table>
Types of data fields

- Just like there are different types of data files, there are different types of data fields, and how you upload them can make a huge difference

- Text/characters
  - Short, alphanumeric values. Things you aren’t going to need to calculate
    - Names, addresses, descriptions
    - Zip codes -- they’re numbers but we won’t ever need to add them together

- Numeric/decimals
  - Numeric values. Things we will want to calculate
    - Counts, sums, dollar amounts
Types of data fields

- Dates/times
  - Stating the obvious. If you have a date or time, selecting this option should make it easier to calculate date/time differences in Excel/Google Sheets

- Important! Text vs. numeric will affect sorting order
Types of data fields

- Don’t just double-click your data file to open it!

- Excel thinks it’s being helpful by automatically uploading your data and guessing at the data types
  - It’s almost always wrong.
Types of data fields

- This can cause trouble like dropping leading zeroes
  - Example: New England zip codes.
    - They almost always start with zero, i.e. 02901 (a zip in Providence, Rhode Island).
    - Unless you specifically choose text for a zip code field, Excel assumes it’s numeric and “helpfully” drops that leading zero.
    - Thus, 02901 becomes 2901 and can cause problems down the line.

- It will also unhelpfully reformat your number to a date!
  - Example: Say there’s a value in your data that is 11-53
  - Excel assumes this is a date (November 1953) and uploads it as 11/1/1953 or Nov-53.