Disasters in the Making: How I Torture Open Government Systems

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Singapore
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These views are mine; not my employer’s, my publisher’s, etc.

I DO LIKE OPEN DATA!
  I just want to see it done right.

Some of the vulnerabilities shown have been fixed/changed/modified.
  They are still instructive as cautionary tales.

More information is found in:
  www.orbooks.com/technocreep
  decreeping.wordpress.com
Why Open Data?

Governments around the world are joining in. Why?

- Calls for transparency (“it’s the taxpayers money”)
- Sincere desire for innovation (“they’ll come up with some great uses for our data at that Hackathon”)
- Fear (“Wikileaks is going to get this anyway; it looks better if we release it”)
- Cheapness (“we don’t have to pay developers”)
- Positive sentiments about open source; “sunshine laws”; transparency; “data wants to be free”
Some notable examples

- NYC Datamine
- Philadelphia OpenDataPhilly
- Open Data Framework (Vancouver, Edmonton, Toronto and Ottawa)
- Open Data Challenge (EU)
- Data Portal India: 4412 datasets, 51 depts
- Direct input systems like seeclickfix.com
NYC Datamine

On October 6, 2009 NYC released, with great fanfare, 103 municipal data sets. One listed 1100 women’s organizations in the city. Release contained their private email address, secret question like “favorite pet” and answer like “fluffy.”

Problem #1: Neglecting to read and redact data sets before releasing them!
## Toronto’s 311 System

<table>
<thead>
<tr>
<th>Creation Date</th>
<th>Service Request Location</th>
<th>Service Request Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013-12-21 00:16</td>
<td>M1K</td>
<td>Property Standards</td>
</tr>
<tr>
<td>2013-12-21 00:23</td>
<td>Lawrence Ave E/Burnview Cres</td>
<td>Scarborough</td>
</tr>
<tr>
<td>2013-12-21 00:26</td>
<td>Knotwood Cres/Mantis Rd</td>
<td>Scarborough</td>
</tr>
<tr>
<td>2013-12-21 00:30</td>
<td>M6M</td>
<td></td>
</tr>
<tr>
<td>2013-12-21 00:35</td>
<td>M2H</td>
<td></td>
</tr>
<tr>
<td>2013-12-21 01:01</td>
<td>Logan Ave/Danforth Ave</td>
<td>Toronto</td>
</tr>
<tr>
<td>2013-12-21 00:08</td>
<td>M6E</td>
<td></td>
</tr>
<tr>
<td>2013-12-21 00:46</td>
<td>Donlands Ave/Sammon Ave</td>
<td>East York</td>
</tr>
<tr>
<td>2013-12-21 00:48</td>
<td>M6J</td>
<td></td>
</tr>
<tr>
<td>2013-12-21 00:49</td>
<td>Seaton St/Shuter St</td>
<td>Toronto</td>
</tr>
<tr>
<td>2013-12-21 00:52</td>
<td>Military Trl/Old Kingston Rd</td>
<td>Scarborough</td>
</tr>
<tr>
<td>2013-12-21 00:55</td>
<td>Ellesmere Rd/Neilson Rd</td>
<td>Scarborough</td>
</tr>
<tr>
<td>2013-12-21 00:59</td>
<td>M6R</td>
<td></td>
</tr>
<tr>
<td>2013-12-21 01:10</td>
<td>M8W</td>
<td></td>
</tr>
<tr>
<td>2013-12-21 01:23</td>
<td>Kingston Rd/Midland Ave</td>
<td>Scarborough</td>
</tr>
<tr>
<td>2013-12-21 01:24</td>
<td>M1K</td>
<td></td>
</tr>
<tr>
<td>2013-12-21 01:32</td>
<td>M8Y</td>
<td></td>
</tr>
</tbody>
</table>

**SANTA CLAUS**
**NORTH POLE**
**HOH 0HO**
**CANADA**
Why is this a problem?

- The Forward Sorting Area, usually takes into account hundreds of houses
- The “nearest intersection” could potentially identify a single home
- Put it together with e.g. Google Maps and other databases (“data jigsawing”)
- Identify chronic complainers, vigilantes, etc.

Problem #2: Poor choice of data granularity

Large bump/hole in the road - Open
Queen Elizabeth II Hwy Calgary, AB T3N 1C5, Canada - Calgary
On the right hand lane, just as the bend begins to go right onto the Deerfoot, on the left side of the lane there is a huge dip/bubble/hole (hard to describe it) that if you hit it, can cause serious issues. Motorcyclists can actually 'get air' if they hit it dead-on and that could lead to... read more
2011-05-17 - Reported by Ed Reddy (Guest) - Share - Flag

Ed Reddy
The bump on the road is getting worse, and now it looks like it has a friend on the other side of the lane. It will require fixing shortly unless there's an accident first.
2011-11-02 - Flag

Excessive Car Wash Noise - Open
110 89 St Sw Calgary, AB - Calgary
Car wash produces daytime noise exceeding legal limit of 65 dBA. Finally banned from operating at night time but often still violates by opening early on Sundays and Stat Holidays.
2013-01-21 - Reported by Buster (Guest) - Share - Flag

Dangerous Ice on Road from Car Wash - Open
115 89 St Sw Calgary, AB - Calgary
Dangerous ice accumulating on Old Banff Coach Road due to dryer problem from Petro-Canada Glide
2012-12-08 - Reported by Buster (Guest) - Share - Flag
Two buildings collapse, at least 2 dead after Manhattan explosion

By Ray Sanchez, CNN
March 12, 2014 -- Updated 1613 GMT (0013 HKT)

Witness: Big explosion woke me up
Maintenance Residential

missdelicious submitted an issue to Philadelphia, PA 15 days ago

broken windows, heaters do not work, broken doors, mold in walls, ceiling leaks, pipes leak in bathroom, kitchen and ceiling, water heater broken,

Ticket #3409377

1 Supporting

Submitted 02/25/2014
Accepted 02/29/2014
In Progress 02/25/2014
Completed 02/25/2014

Philadelphia Administrator City of Philadelphia 15 days ago

ACTION PT ACTION TYPE 27 JAN-14 SENT NOTICE OF VIOLATION 27 JAN-14 SENT NOTICE OF VIOLATION 27 JAN-14 INITIAL INSPECTION COMPLETED VIOLATIONS UNCOMPLIED 27 JAN-14 INITIAL INSPECTION COMPLETED VIOLATIONS UNCOMPLIED

Please login or signup to comment.

« Back to Philadelphia, PA
Based on natural gas use, we estimate that 227 homes heat an area of 5,832 x 10^5 sq ft and emit 2,249T of CO₂ per year at a cost of $380,761. By following HEAT recommendations, we estimate total community savings per year of $33,759 and a reduction of 1991T of CO₂ per year.
Problem #3: Simply omitting someone's data doesn't make everything OK
When you offer a 20,000 € Open Data prize..

The Open Data Challenge is over!

What was it?
What did people say about it?
Who were the winners?
Who were the judges?
Who was behind it?
Where can I find open data?

If you'd like to keep in touch with other people interested in open data, you can join the open-government and euopendata mailing lists or follow the #opendata hashtag on Twitter.

434 entries from 24 member states
Who Won?

ZnasichDani / From Our Taxes

ZNasichDani.sk uncovers who are influential persons (owners, managers, statutories) standing behind companies successful in securing contracts with the state, thus helping uncover conflicts of interest; it also shows how large are the sums of contracts obtained in this way.

Source: www.fair-play.sk
Who Wouldn’t Agree with Such a Wonderful Application?

Open Data Challenge Winner Ordered To Remove Certain Data

Source: spectator.sme.sk

A court has ordered Slovak NGO Fair-Play Alliance to take down data from their award winning open data application.

Bratislava, 28 June 2011

(by Ton Zijlstra)

The Slovak NGO Fair-Play Alliance, a transparency watch dog organisation, won the Open Data Challenge with their application Znasichdani.sk during the Digital Agenda Assembly in Brussels on June 16th.

A Slovak judge has now ordered the NGO to take down specific data from their winning application.

The application combines two public registers. The overview of all work contracted by the state, and the company register are combined to show what the total volume of work is that various people, through the businesses they represent or own, do for public bodies.

According to a news article in the Slovak Spectator the statutory representative, Jarmila Povazanova, of the Strabag construction company demanded in court that the total value of all public contracts of companies Povazanova represents be removed from the site. The Bratislava II district court ordered the NGO to remove that information. Director Zuzana
A little technical aside

- This thing runs off multiple open databases all maintained by the Slovak government
- The Fair-Play Alliance has read only access
- How are they supposed to “take down specific data” that they don’t control?
- Fair-Play Alliance has appealed the ruling and is still in operation.

Problem #4: Laws, policies and judges lag behind technology

Problem #5: Data can live in many places!
Of Course, Election Results Should be Open Data (right?)
Did My Wife Vote for Me?

<table>
<thead>
<tr>
<th>City</th>
<th>Ward 11 City Wide Hospital</th>
<th>Votes</th>
<th>Result</th>
<th>Rank</th>
<th>Name</th>
<th>Votes</th>
</tr>
</thead>
<tbody>
<tr>
<td>City</td>
<td>Ward 11 City Wide Hospital</td>
<td>9</td>
<td>FALSE</td>
<td>1</td>
<td>Daryl Bonar</td>
<td>1</td>
</tr>
<tr>
<td>City</td>
<td>Ward 11 City Wide Hospital</td>
<td>9</td>
<td>FALSE</td>
<td>2</td>
<td>David Dorward</td>
<td>5</td>
</tr>
<tr>
<td>City</td>
<td>Ward 11 City Wide Hospital</td>
<td>9</td>
<td>FALSE</td>
<td>3</td>
<td>Dave Dowling</td>
<td>0</td>
</tr>
<tr>
<td>City</td>
<td>Ward 11 City Wide Hospital</td>
<td>9</td>
<td>FALSE</td>
<td>4</td>
<td>Dan Dromarsky</td>
<td>0</td>
</tr>
<tr>
<td>City</td>
<td>Ward 11 City Wide Hospital</td>
<td>9</td>
<td>FALSE</td>
<td>5</td>
<td>Bob Ligertwood</td>
<td>0</td>
</tr>
</tbody>
</table>

Problem #6: People can make inferences about individuals from small numbers
Campaign Finance Disclosure Rules Date Back to 1970s

US Federal Elections Commission laws go back to 1980. Just a reminder of what we had for data mining technology back then:

Source: Wikimedia Commons
Philadelphia’s
OpenDataPhilly.org

Includes Campaign Finance Records, which are generally required to be disclosed.

“Results are freely viewable and printable but not available for download”

“empty searches take too long”

It wasn’t long until I had some .csv files to play with

Problem #7: Controls on downloading are aimed at general public, not data torturers!
What We Can Learn

- Full address provided. Tied to tax receipt so probably chosen with care
- In the US ‘27.6% of households have unlisted (telephone) numbers. In many cities the unlisted rate is over 50%.’
  - Source: http://www.busreslab.com
- People often pay for privacy, and need it for personal and business reasons
- Government went back 7 years without any additional consent.
There are some rather interesting addresses in the file.

I could have plotted these on a map (each with Google Maps API) but didn’t really need to.

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Amount</th>
<th>Date</th>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHAWN KIRWIN</td>
<td>1719 SPRING GARDEN STREET Philadelphia, PA 19130-3915</td>
<td>$350.50</td>
<td>Jan 25, 2013</td>
<td>International Brotherhood of Electrical Workers Local 98 Committee on Political Education</td>
</tr>
<tr>
<td>HABB WALI BEDD</td>
<td>4939 N FRANKLIN STREET PHILADELPHIA, PA 19123-1306</td>
<td>$5.00</td>
<td>Apr 15, 2011</td>
<td>International Union of Painters and Allied Trades Political Action Committee</td>
</tr>
<tr>
<td>PAULE PROJETTO</td>
<td>691 MILLBROOK RD, RIVER EDGE, NJ 07681-1463</td>
<td>$16.36</td>
<td>Feb 25, 2011</td>
<td>International Union of Painters and Allied Trades Political Action Committee</td>
</tr>
<tr>
<td>Ronald Rivest</td>
<td>41 Academy Street Arlington, MA 02476</td>
<td>$200.00</td>
<td>May 4, 2011</td>
<td>Friends of Stephanie Singer</td>
</tr>
</tbody>
</table>

RSA: Rivest, Shamir, Adleman
Hmmm, is that THE Ron Rivest?
Why Include Address? Laziness? Disambiguation?

The donor files for 2010 were downloaded from OpenDataPhilly as .CSV files, imported into Microsoft Excel and sorted by the contributor name field.

“Potential Duplicates” were defined as additional names that were shown identically as a name in the database, but with a different address.
# Results from most common US names

<table>
<thead>
<tr>
<th>Name</th>
<th>Number of Entries</th>
<th>“Dups”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smith</td>
<td>588</td>
<td>8</td>
</tr>
<tr>
<td>Johnson</td>
<td>426</td>
<td>3</td>
</tr>
<tr>
<td>Williams</td>
<td>400</td>
<td>4</td>
</tr>
</tbody>
</table>

Conclusion: Having an address didn’t do a lot of good in resolving possible duplicates, but may have compromised privacy.
Are those addresses home addresses?

A significant number of contributors (86/588 of Smith, 63/426 of Johnson, 77/400 of Williams) listed the same address, 1719 Spring Garden Street, Philadelphia, PA., 19130.

Viewing this location on Google Maps Streetview shows that it is the office of the I.B.E.W. Electricians Union.
Search for Smith in 2010
Political Contribution Records

<table>
<thead>
<tr>
<th>Contribution By</th>
<th>Address</th>
<th>Amount</th>
<th>Date</th>
<th>Recipient</th>
</tr>
</thead>
<tbody>
<tr>
<td>D. Smith</td>
<td>Two Liberty Place 1601 Chestnut St Philadelphia, PA 19132</td>
<td>$6.63</td>
<td>May 13, 2010</td>
<td>CIGNA Corporation Political Action Committee</td>
</tr>
<tr>
<td>Joseph Smith</td>
<td>1719 Spring Garden Street Philadelphia, PA 19130</td>
<td>$101.20</td>
<td>Nov 25, 2009</td>
<td>Local Union #68 IBEW COPE</td>
</tr>
<tr>
<td>D SMITH</td>
<td>1534 E 80TH ST LOS ANGELES, CA 90001-3404</td>
<td>$40.00</td>
<td>Apr 22, 2010</td>
<td>Communication Workers of America</td>
</tr>
<tr>
<td>LETITIA SMITH</td>
<td>16368 KENSINGTON PLACE MORENO VALLEY, CA 92551-0000</td>
<td>$10.00</td>
<td>Apr 26, 2010</td>
<td>Communication Workers of America</td>
</tr>
<tr>
<td>Mark Smith</td>
<td>Two Liberty Place 1601 Chestnut St Philadelphia, PA 19132</td>
<td>$5.00</td>
<td>Aug 19, 2010</td>
<td>CIGNA Corporation Political Action Committee</td>
</tr>
</tbody>
</table>
Departments - Contact Us

To contact us via Email, please click here.

IBEW Local 98 Business Office
All Divisions

1701 Spring Garden Street
Philadelphia, PA 19130

Phone: 215-563-5592  
Fax: 215-561-2168

Financial Office &
Electrical Apprentice Training

1719 Spring Garden Street
Philadelphia, PA 19130

Financial Office
Phone: 215-563-8991  
Fax: 215-563-9149

Apprentice Training
Phone: 215-567-6405  
Fax: 215-567-6477
Problems

#8 Inconsistent data. Providing contributor’s “address” is a legal requirement but some people use non-home, e.g. union office

#9 Policy issues. The “why” e.g. of requiring “address” needs to be re-examined in the light of new “hows” -- tools like mapping APIs, big data, jigsawing of public and private databases
This is an old (6 years ago) jigsawing experiment I did... Some things have gotten better, many have gotten worse!

Clive Beddoe, then-CEO of WestJet Airlines
www.canada411.ca

BEDDOE, C
Calgary, AB T1X 1E1
(403) 255-2686
Check out C Beddoe with Web Detective!
Search School Yearbooks in Calgary AB
Find Romance in Calgary at Date.ca

BEDDOE, CLIVE
1-2 Ave SW
Calgary, AB T2V 0R2
(403) 255-...
Check out Clive Beddoe with Web Detective!
Search School Yearbooks in Calgary AB
Find Romance in Calgary at Date.ca

BEDDOE, J
Calgary, AB T1X 1E1
(403) 521-2260
Check out J Beddoe with Web Detective!
Search School Yearbooks in Calgary AB
Find Romance in Calgary at Date.ca

BEDDOE, K & S
Calgary, AB T1X 1E1
(403) 212-2352
Check out K & S Beddoe with Web Detective!
Search School Yearbooks in Calgary AB
Find Romance in Calgary at Date.ca

BEDDOE, O
5 of 6

Censored...phone number is still valid!
City of Calgary Property Tax Assessment Site in 2007

Assessment Search

You may search all residential, multi-residential, and non-residential property types in The City of Calgary. Please select from the following options:

- SEARCH BY MAP
- SEARCH BY ADDRESS

Works best using cable modem or (A)DSL and using Microsoft IE or Netscape versions 4 and up.

Assessment Information Last Updated: April 19, 2006
Your property assessment is based on The City of Calgary's estimate of the market value December 31, 2005.

Roll number: 11
Property Location: 12 AV SW
Property Assessment: 710,500
Assessment Class: Residential
Property Type: Land and Improvement
Property Use: Single Residential
Taxation Status: Taxable
Community Name: Kelvin Grove
Land Use Designation: RESIDENTIAL SINGLE-DETACHED DISTRICT
Parcel Area: 8,095 sq. ft. / 752 sq. m.
Building Description: House/2 Storey
Garage: Yes
Fireplace(s): Yes
Walkout Basement: No
Now “addressed” by a combination of data changes, technical and legal safeguards

Problem #10: “Data Jigsawing” of public and private databases
Don’t get arrested in Florida

Hernando County Sheriff’s Office

Hernando County is located on the West coast of Central Florida. The Sheriff’s Office provides law enforcement services to a population of approximately 173,000. This is an increase of nearly 330% since 1980, and Hernando continues to be regarded as one of the fastest growing counties in the United States.

This decade will bring new challenges to our county, but the commitment of the Hernando County Sheriff’s Office will not change. We will continue to provide our community with professional, efficient law enforcement through well-trained employees, technology, crime prevention and a proactive approach to public safety.
<table>
<thead>
<tr>
<th>Report#:</th>
<th>ArrestDate:</th>
<th>Name:</th>
<th>DOB:</th>
<th>Offense:</th>
<th>Arrest Location:</th>
<th>Latest Photo Available:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-04928/1</td>
<td>02/06/2009 11:44 PM</td>
<td>SIMMONS, CATHY L</td>
<td>02/19/1961</td>
<td>831.02 -UTTERING FORGED INSTRUMENT</td>
<td>6242 CALIFORNIA ST</td>
<td></td>
</tr>
<tr>
<td>2009-04923/1</td>
<td>02/06/2009 11:05 PM</td>
<td>WILBUR, WILLIAM LEO III</td>
<td>01/26/1941</td>
<td>88.231 - CONTEMPT COURT/CHILD SUPPORT</td>
<td>16160 APPENNINE DR</td>
<td></td>
</tr>
<tr>
<td>2009-04913/1</td>
<td>02/06/2009 09:41 PM</td>
<td>LEDE, JEANETTE MICHELE</td>
<td>10/01/1981</td>
<td>322.34 - DRIVER'S WITH LICENSE REVOKED OR SUSPENDED</td>
<td>16425 SPRING HILL DR</td>
<td></td>
</tr>
<tr>
<td>2009-04912/1</td>
<td>02/06/2009 09:41 PM</td>
<td>LEDE, JEANETTE MICHELE</td>
<td>10/01/1981</td>
<td>948.06 - VIOLATION OF PROBATION</td>
<td>16425 SPRING HILL DR</td>
<td></td>
</tr>
<tr>
<td>2009-04909/1</td>
<td>02/06/2009 08:55 PM</td>
<td>ASKEW, ROBERT JARMAN</td>
<td>10/31/1959</td>
<td>784.03 - DOMESTIC BATTERY</td>
<td>16096 MEDRICK RD</td>
<td></td>
</tr>
</tbody>
</table>
What if this was Your Son?

- 01/08/2010 04:00PM
- COU***EY, BOBBY
- DOB 11/10/1997
  (age = 12 yrs. 2 mos)
- 810.02 - BURGLARY DWELLING
- 18900 CORTEZ BV

Problem # 11: What used to be acceptable as “Public Information” needs to be viewed differently.
DISCLAIMER: ALL ARE PRESUMED INNOCENT UNTIL PROVEN GUILTY IN A COURT OF LAW. EVERY EFFORT IS MADE TO ENSURE THE ACCURACY OF INFORMATION POSTED ON THIS WEBSITE. HOWEVER, MUGSHOTS.COM DOES NOT GUARANTEE THE ACCURACY OR TIMELINESS OF THE CONTENT OF THIS WEBSITE. NAMES MAY BE SIMILAR OR IDENTICAL TO OTHER INDIVIDUALS. FOR LATEST CASE STATUS, CONTACT THE OFFICIAL LAW ENFORCEMENT AGENCY WHICH ORIGINALLY RELEASED THE DATA

Edward Snowden  Aaron Swartz  Ashley Renee Duduk  Gloria Arroyo  James Holmes
Newest Vulnerability: Your Face!

www.nametag.ws

Problem #12: Facial recognition has come of age
Well, we could let it stop there — knowing this is a homeowner you shouldn’t mess with.

But, let’s face it, we have tools like Spokeo and Maltego. Even without paying a fee, Spokeo confirms the poor fellow’s street, gives us his middle initial (E), his approximate age (early 50s) and the value of the property he’s defending with that handgun ($457K). In all probability he’s also the same person who owns a post office box in the same zipcode.
Portsmouth's Guildhall Walk among 'violent' streets

A new online crime map has revealed a street in Portsmouth had one of the highest amounts of violent crimes in England and Wales in December.

Thirty-eight offences were reported in Guildhall Square, while Glovers Court in Preston was highest with 44.

The www.police.uk website allows the public to search for crime and anti-social behaviour reported last month for their street or postcode.

Hampshire Police said they had targeted the area over the past few years.

The new crime map also revealed Surrey Street in Portsmouth saw a total of 136 crimes reported last month, with Glovers Court in Preston was top with 152.

'Complete farce'

Councillor Eleanor Scott, member for community safety at Portsmouth City Council, questioned the figures for the small street which is only home to a "respectable pub".

She said: "It's a tiny street, there's a few flats, a car park and a nice respectable pub where the postal workers from the nearby postal depot stop for a drink.

"If Portsmouth is anything to go by, this website is a complete farce, it's identifying wrong crime epicentres."

Police said the postcode of Surrey Street was used to record incidents of retail crime such as shoplifting from the adjacent commercial centre and violent crime from the bars and clubs of nearby Guildhall Walk.
Crime on or near Nightclub

24 crimes were reported here in January 2014.

- Anti-social behaviour: 13
- Bicycle theft: 1
- Burglary: 1
- Criminal damage and arson: 1
- 8 more crimes

Source: www.police.uk
Crime Rate and Real Estate Values

admin / January 4, 2014

Crime rates and real estate values are strongly correlated. High crime areas tend to be less desirable areas and low crime areas tend to be more desirable. We’ve noticed that this trend applies for both residential and commercial real estate. Both types of property will be largely impacted by their location.

Our data shows that crime rates in the area can effect real estate values by up to 500%. From what we’ve seen, residential values are impacted more than commercial values. If you think about it, this makes sense. Middle to upper middle class people do not find high crime areas desirable. As a result, people are willing to pay significantly more for nice neighborhoods in good areas. On the other hand, a convenience store or auto parts store may do surprising well in high crime area. The demographics of typical high crime areas are a good fit for some stores. It’s important to distinguish
Indirect Risks of Government Disclosure

- You can’t get it back. Companies like ChoicePoint Systems (now part of Lexis/Nexis) are grabbing and storing it.
- Databases are cross-referenced.
- New technologies will emerge. Criminals are now being prosecuted for old crimes through DNA technology.
Ancestry.com

- 14 years of operation
- 6,000,000,000 records, mostly from public sources
- 20,000,000 family trees
Family history is in your DNA

Get personalized details about your unique ethnic origins. Discover more about your story with advanced DNA science from the experts in family history.

Now $99  Get AncestryDNA

Discover Your Ethnicity
Find out if you're part Irish, Native American, or maybe Cameroonian.

Connect with new relatives
Imagine meeting a 3rd cousin for the 1st time.

Family history is in our DNA
Even more powerful when combined with Ancestry.com.

6. Can my DNA information ever be disclosed without my consent? — Generally no. But there are some very limited circumstances where your DNA test results could be disclosed to third parties without your express consent. For example:

- As may be required by law with regulatory and law enforcement authorities;
- To prevent fraud or cybercrime (i.e.) to protect the rights or property of AncestryDNA or other Users (including outside your country of residence);
- To enforce our terms and conditions; to protect our rights, privacy, safety, confidentiality, reputation or property, and/or that of Ancestry family of companies, you or others.
- For more information please see the AncestryDNA Privacy Statement.
Implications of being in a genome database

**Adoptees use DNA to find surname**

By Paul Rincon
Science reporter, BBC News

Male adoptees are using consumer DNA tests to predict the surnames carried by their biological fathers, the BBC has learned.

They are using the fact that men who share a surname sometimes have genetic likenesses too.

By searching DNA databases for other males with genetic markers matching their own, adoptees can check if these men also share a last name.

This can provide the likely surname of an adoptee's biological father.

The genetic similarities between men who share surnames occur on the Y chromosome, a package of genetic material passed on, more or less unchanged, from father to son - just like a last name.

Because of this pattern of inheritance, men with the same surname may also share a similar complement of genetic markers on the Y chromosome.
Or try the mobile service
Problem #13: Beware of Time Travelling Robots from the Future

“If it happened in the past 10 years, it might be online. If it happened in the past 5 years, it’s probably online. And if it happened in the past 2 years, it’s almost certainly online.” (Wild West 2.0)

Data that used to be “public” but buried in a dusty courtroom basement is now instantly available, searchable, storable

How will it be used, now and in the future?
FREE TO GOOD HOME

Beautiful 6 mo.
old male kitten -
orange &
caramel tabby,
playful, friendly,
very affectionate.
Ideal for family
w/kids.

Handsome 32 yr.
old husband -
personable,
funny, good job,
but doesn’t like
cats. Says he
goes or
cat goes.

Call Jennifer - 265-5543 - come
see both & decide which you’d like.
Thank you!

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