Data Mining Your City

(and other E-Gov stuff)

Hi, I'm Steph!

- I'm from Philadelphia, USA
- Awesome tech scene
- We love open city data
- We love hackathons
- We become cool by making things better
- I know about open city data, hackathons and citizen initiatives (kinda)

Hi, I'm Florian!

- I'm from Fribourg, Switzerland
- Working on web-based forms at be-cause for eGov applications
- I know about collaboration with government for E-Gov initiatives (for real)
- Board member of the Pirate Party Fribourg

What is E-Gov?

- Movement to get more government services running digitally
- Buzzwords like efficiency, transparency, accountability, availability
- Some open, some very closed (sensitive data, privacy protection)
- Share public data, protect private data

Open Data

- Data freely available to everyone to use and republish as they wish
- Leads to a machine readable state
- Us watching them
- Important: no personal data!!!oneoneleven

Open Data

- Benefits
  - Transparency, accountability
  - Economic value
  - Improve public service
  - Crowd
- Challenges
  - Security and Privacy
  - Infrastructure
  - Quality

Compare: http://youtu.be/VmZhMQ-7WrI

Example Hans Rosling

- Ted talk 2006
- Visualisation of UN data via gapminder.org

What useful data do cities have?

What useful data do cities have?

- Transit schedules
- Property stats
- Pay to contractors and public servants
- Public works plans
- History of votes and legislation
- Court records, civic judgements
- Laws, statutes
- Police and crime statistics – track both crime and harassment
- Traffic stats (walkability, traffic accidents)
- Environmental, waste stats

What about federal/state governments?

- Geodata
- Weatherdata
- Budget
- Economic statistics
- Citizen statistics
- Archives
  - Those who control the past, control the future (George Orwell)

Why is it hard to use?

- Difficult formats
- Lack of APIs
- Database troubles: poorly searchable, incomplete, not exportable, hidden
- Poor searchability
- Flat out unavailability
- Inconsistent frequency of updates
- Limited dev budget
- Politics behind data use and retention
- Sometimes there's already an app but the city doesn't want to use it

Why is data important?

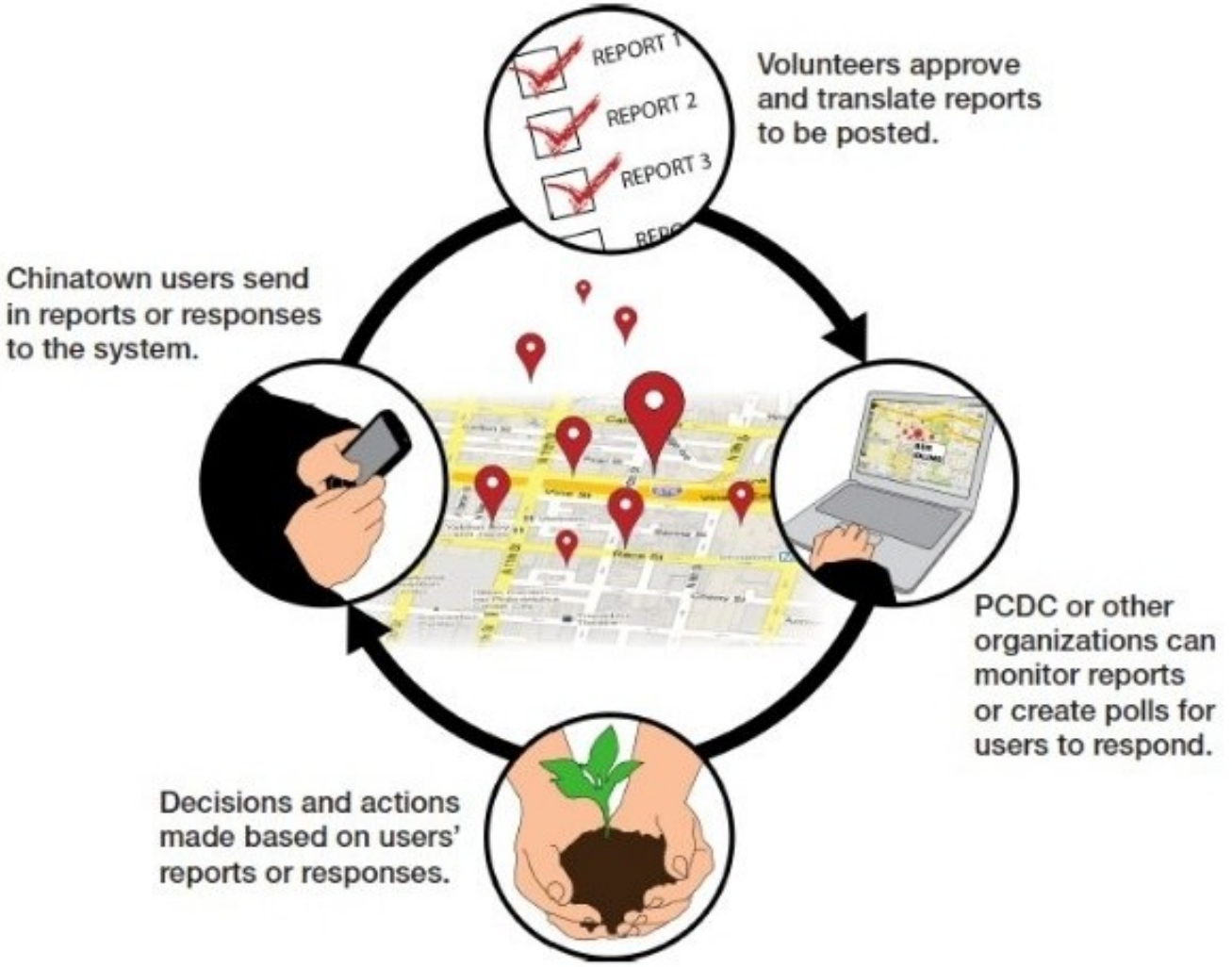
- Data has no value if it isn't used
- Neighbors vs developers
- Transit
- Government transparency and accountability
- Ability to plan capital investments
- Environmental justice
- Walk-, bike-, and live-ability
- Services: emergency housing, food assistance, etc
- Last but not least, WE PAID FOR IT

Ushahidi in Civics

- Ushahidi
  - Talk of Bicyclemark at 27C3 - Mapping Afghanistan elections
  - Future Chinatown

Ushahidi in Philly

Futurechinatown.com



What US cities are making it easier?

Talked to Robert Cheetham from Azavea.com

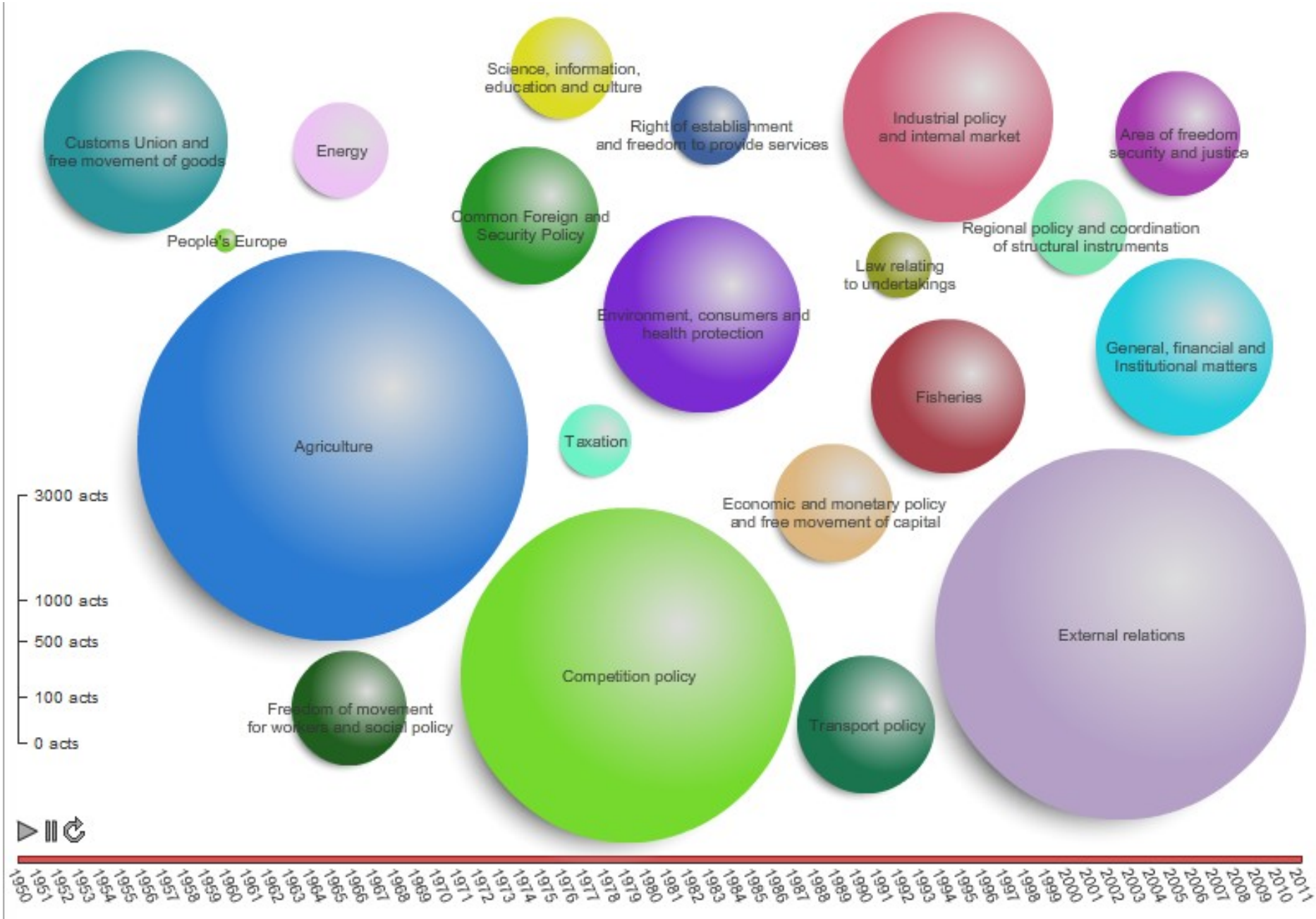
- Washington DC: The leader. Published early, real-time data feeds, re-usable APIs, first apps contest, Apps for Democracy
- San Francisco: SF Data. Very active community, interesting work
- New York: NYC Data Mine. Gov't support, 2 app contexts. Mostly downloadable but working on APIs for live data feeds
- Seattle: Early implementation of commercial Socrata product to manage catalog
- London: Attractive, simple design; more community features (commenting, rating, top 10 lists, etc.) than most. "Inspiring Uses" feature
- Toronto: Attractive, mostly static files

Who are the leaders in Europe?

- data.gov.uk
  - Tim Berners-Lee

Datasets available on publicdata.eu

The evolution of EU legislation



epdb.eu/eulegislation/

wheredoesmymoneygo.org

INCOME

£67,608

SELECT YOUR INCOME

£10,000 £100,000 £1,000,000

YOUR ESTIMATED TAX

£23,243 pa, £63.67 daily

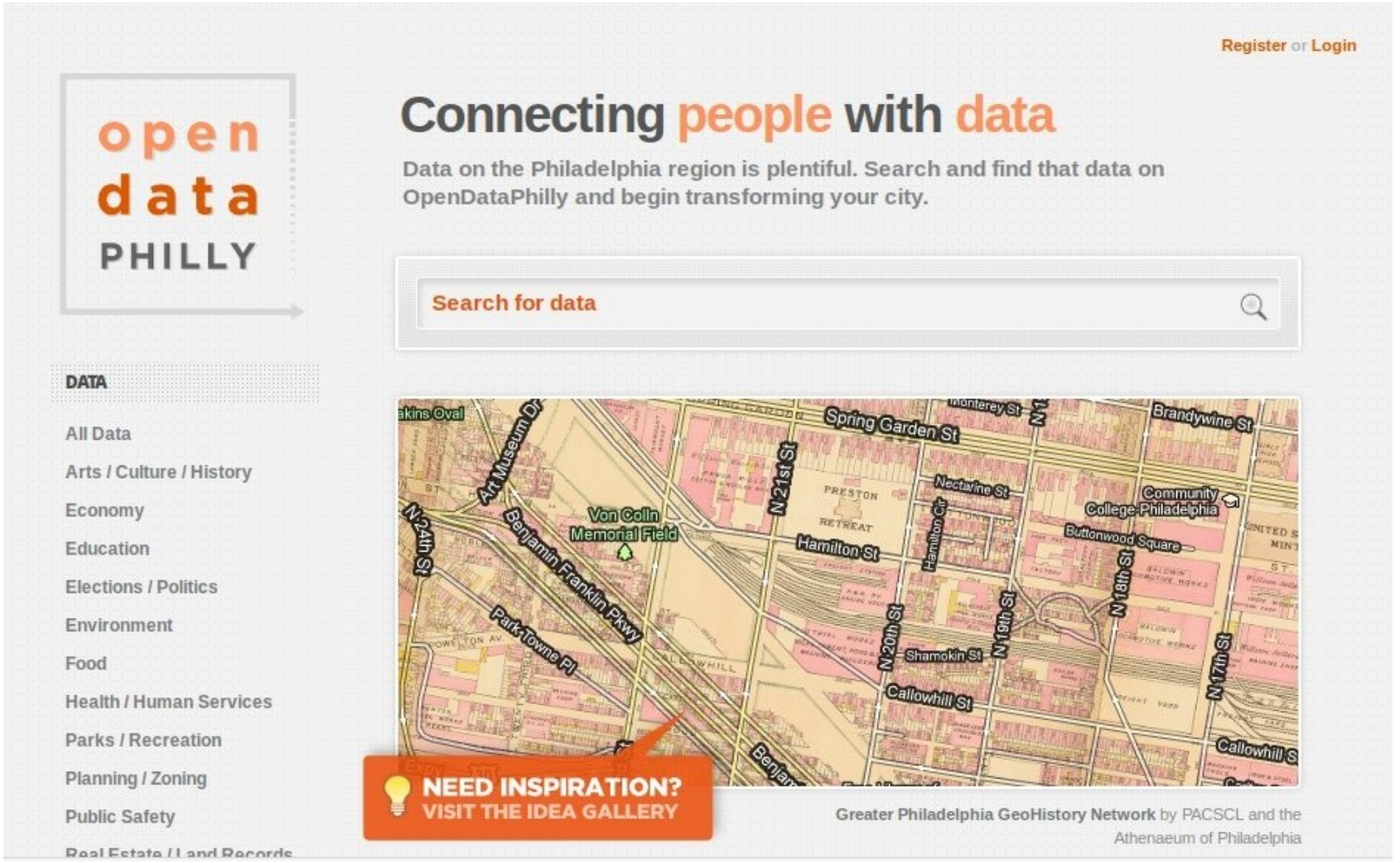
KEY AREAS

HELPING OTHERS	HEALTH	EDUCATION	RUNNING GOVERNMENT	RUNNING THE COUNTRY, SOCIAL SYSTEMS	DEFENCE	ORDER & SAFETY	OUR STREETS	CULTURE	THE ENVIRONMENT
£21.49	£11.70	£8.95	£5.63	£4.45	£3.85	£3.63	£1.47	£1.37	£1.08

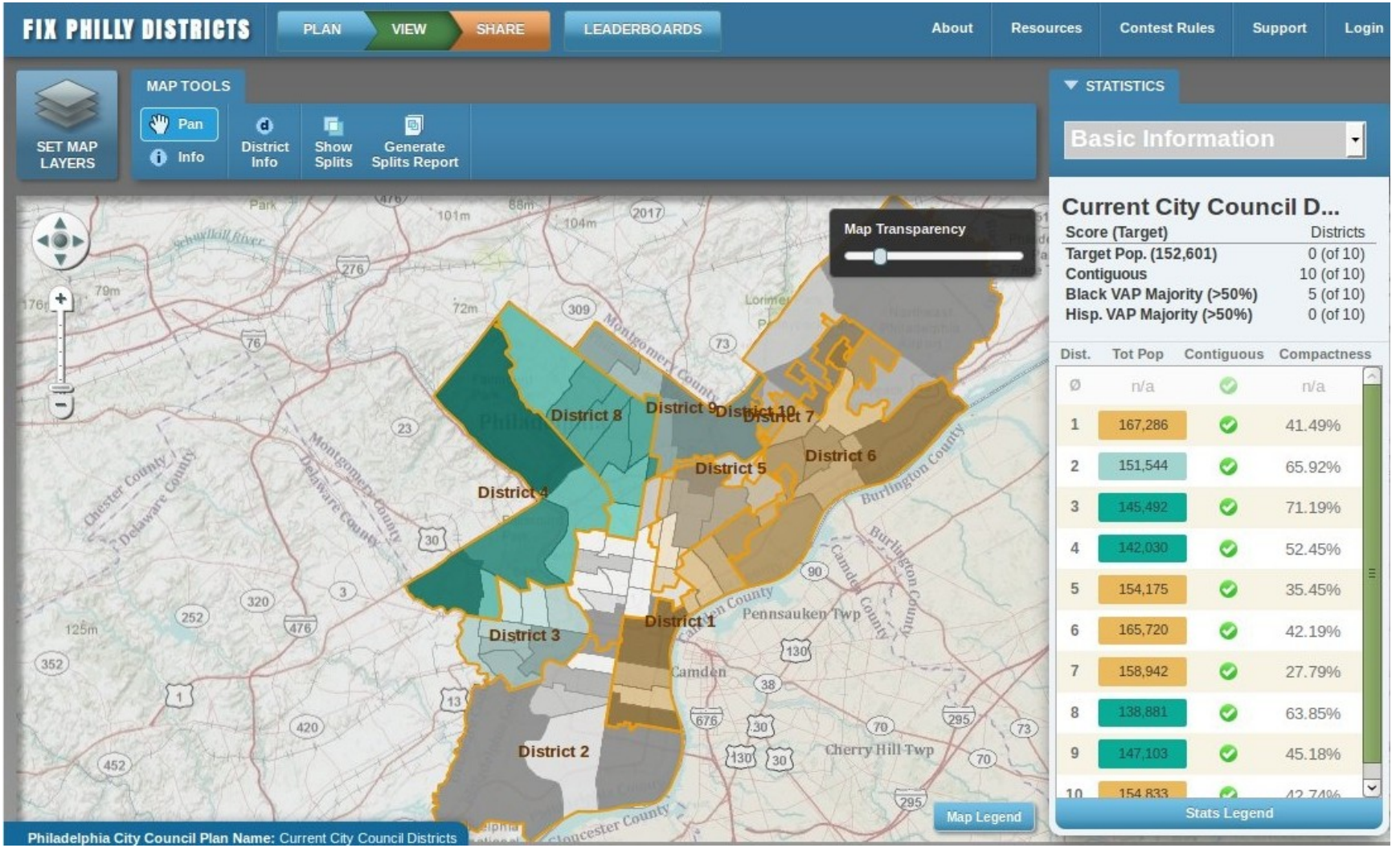
What is Philly's data history and current projects?

- GIS info open for a long time through the Pennsylvania state government: PASDA http://www.pasda.psu.edu/ PA Spatial Data Access
- Hallwatch: Recent predecessor of citizen initiatives
- Current mayor has introduced many reforms and data-driven initiatives
  - Some have worked, some haven't
  - Philly Stat: broadcast city meetings on public access TV
  - Councilman Bill Green wrote an Open Government proposal

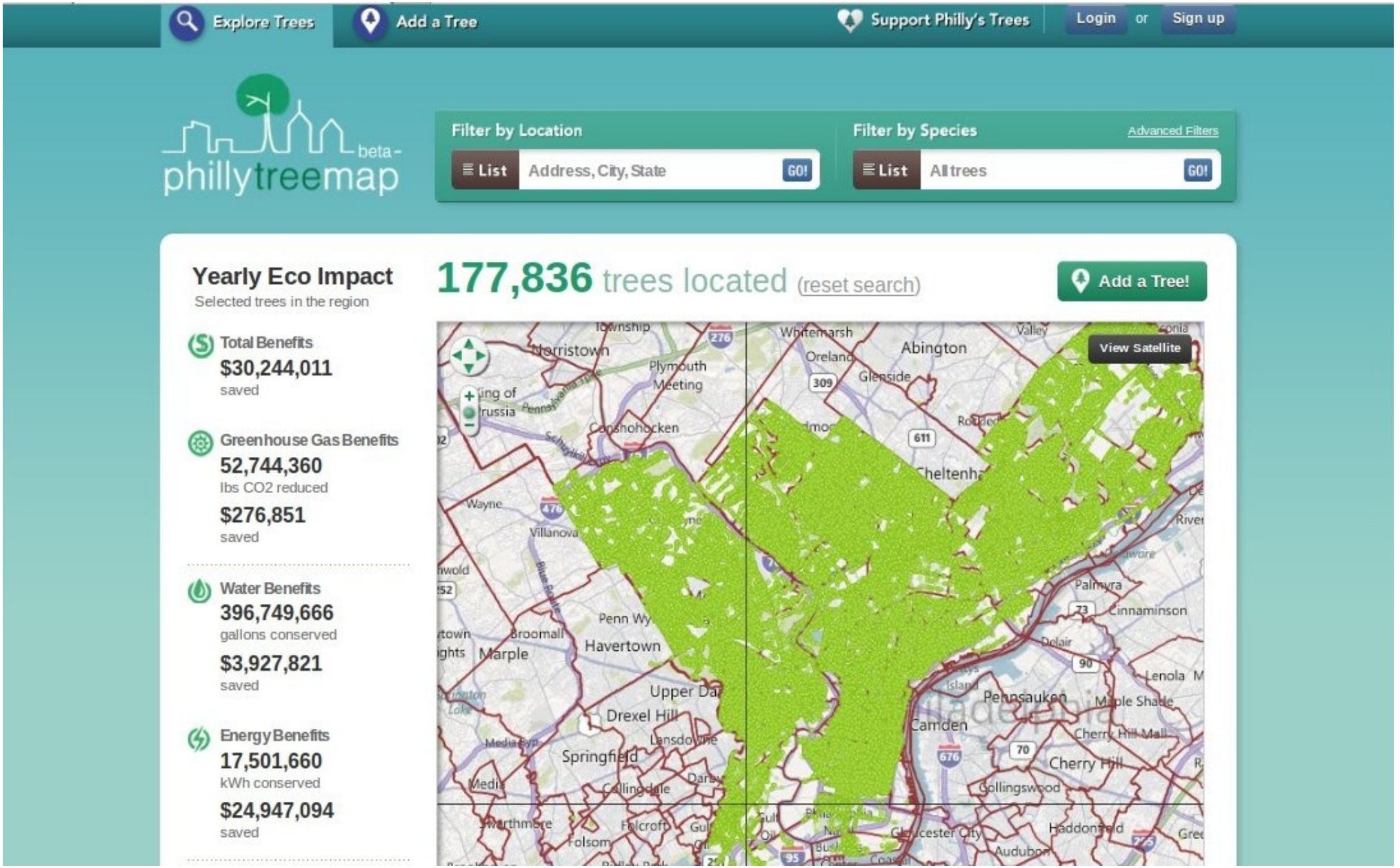
Open Data Philly



Fix Philly Districts



Philly Tree Map



Philly SNAP

PhillySNAP

powered by SMSIFIED

Try It! Address: Search

The United States Supplemental Nutrition Assistance Program (SNAP), historically and commonly known as the Food Stamp Program, is a federal-assistance program that provides assistance to low- and no-income people and families living in the U.S. Though the program is administered by the U.S. Department of Agriculture, benefits are distributed by the individual U.S. states.

Text your street address to **267-293-9387** and receive the nearest Farmers Market address, dates of operation and hours, the closet two SNAP-participating retailers, and information on how to maximize your SNAP dollars through local fresh food initiatives.

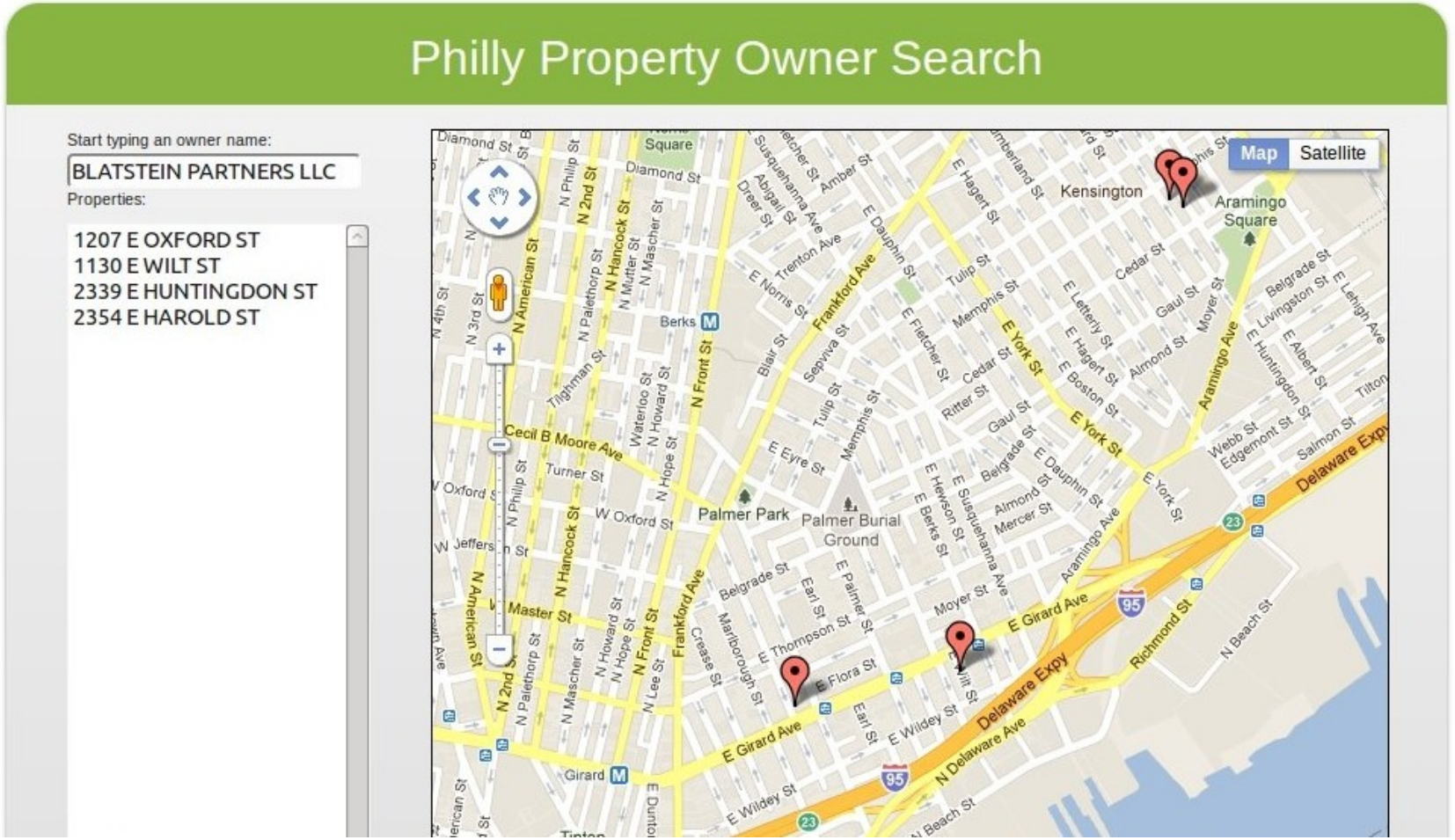
Did you know most of Philadelphia's Farmer's Market accept SNAP benefits for payment? Many of Philadelphia's Farmers' Markets even give out additional bonus coupons for SNAP spending in their markets.

Giving Philadelphians the information to spend SNAP benefits at local fresh markets brings healthy food to our tables and supports local businesses and farms.

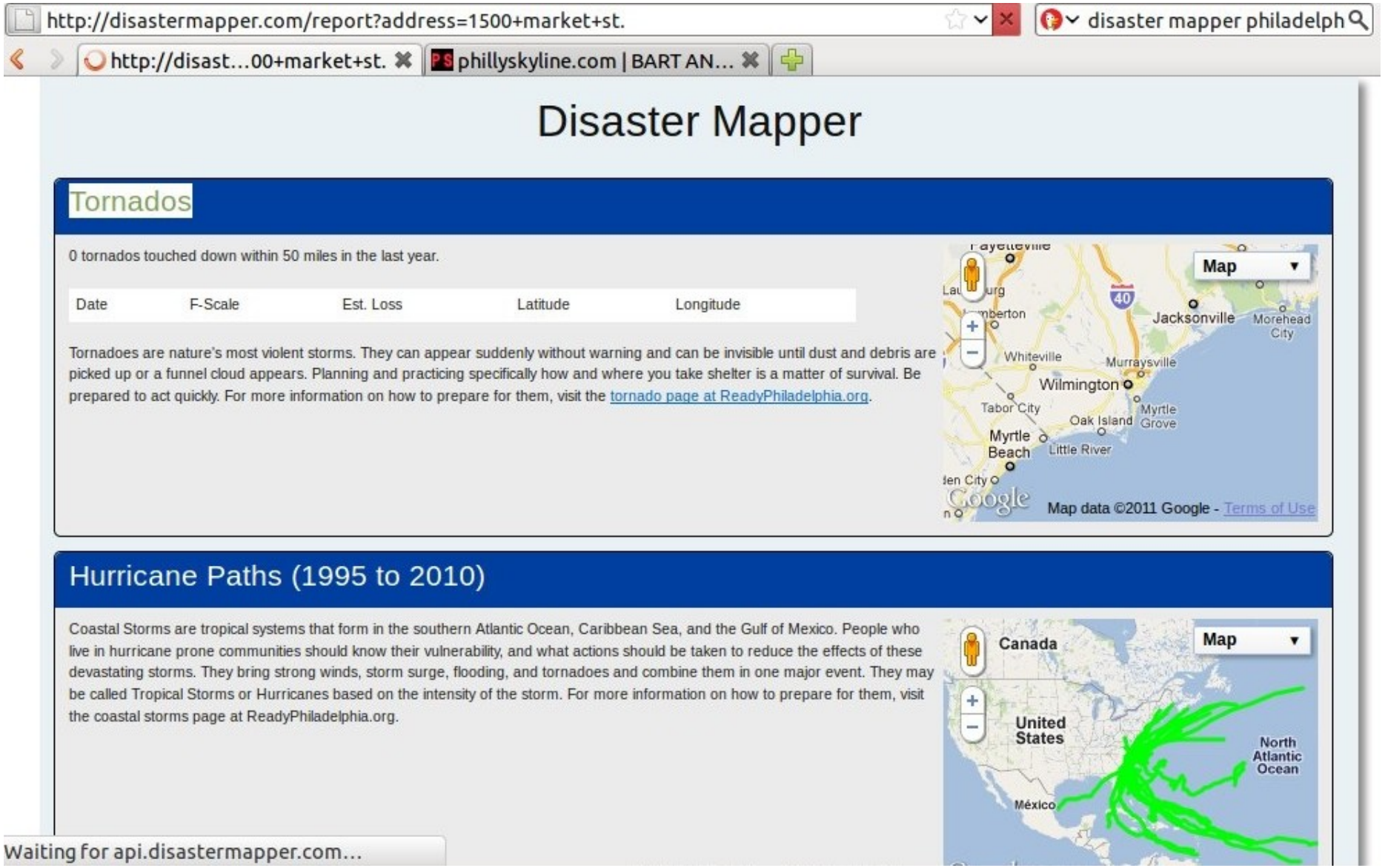
PhillySNAP

powered by SMSIFIED

OPA Liberator (Office of Property Assessment)



Disaster Mapper



More

- Civic Atlas http://maps.newsworks.org/
- MuralApp.mobi
- **SIX** SEPTA (transit) apps!!
- Legislation introduced proposing all data go into a data warehouse

Who builds this stuff?

- Governments, contractors
- Universities
- Private companies
- Concerned citizens
- Code For America
- Hackathon participants!

Philly Hackathons

- What's a Hackathon?
  - Random Hacks of Kindness
  - Tropo Open Gov hackathon (part of BarCamp NewsInnovation)
  - Data Camp Philly
- More outcomes
  - Ground Data Satellite imagery
  - Splash, a decision engine for donating to efficient nonprofits
  - Councilmatic Scrapes PDFs from legislation.phila.gov, tries to parse
  - Philly API, Phlapi.com

Lessons Learned

- What hackthons can do, what governments can do
- Adoption and ongoing support can be problematic
- Critique: provides data for a small, tech-literate elite—SMS gateways help
- Washington, D.C. “Apps for Democracy” competition: “$50,000 prize money -> 47 new iPhone, Facebook, and web applications in 30 days. The competition yielded $2.3 million worth of new applications”
- Similarities to apps for crisis management

What makes governments nervous?

- Fear that automation will eliminate jobs
- Suspicion about why people develop apps and how they might use data
- Preferences for their own forms, designs, work flow
- Fearful work culture: Nobody wants to be a guinea pig
- Losing income by giving out data for free
- Losing control over anything

What can hackers and citizens do to make open data the new normal?

- Hackathons, Code For America, ask for services, develop sample apps to show what's possible
- Show use of available data, show that it can provide valuable services for a good value, or make more use of data that's already paid for
- Blog about data you've dug up
- Newish breed of data/stat-driven journalism, even fact checkers
- Go around the city, collaborate with non-profits and service orgs

Where to get data

- Europe
  - lod2.okfn.org/eu-data-catalogues
  - publicdata.eu
  - wiki.ckan.net/API
- USA
  - opendataphilly.org
  - data.gov

Ideas: Bugtracker for streets

- Citizen: Report potholes with picture and GPS coordinates
- Gov: inspecting the issue and give a time to fix
- Make it national and create comparative statistics, who has the most open tickets
- Guerillia aproach: fixmystreet.com
- ushahidi.com ?

Ideas:

- reducing the electricity bill
  - Turn off the street lamps in your town
  - Turn them on by value txt
- eGov Github
  - Laws
  - Government contracts
  - Diff
- Further ideas: opendatachallenge.org

Thanks!

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