

Enabling Use of Government Tabular Data in a Geographic Context

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U.S. Federal Geographic Data Committee
2009 CAP Grant, Category 4
Interim Report - November 3, 2009

Overview

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- Project Status
- Afghanistan Election Monitoring
- Enhancement Plans
- Demo of New Functionality

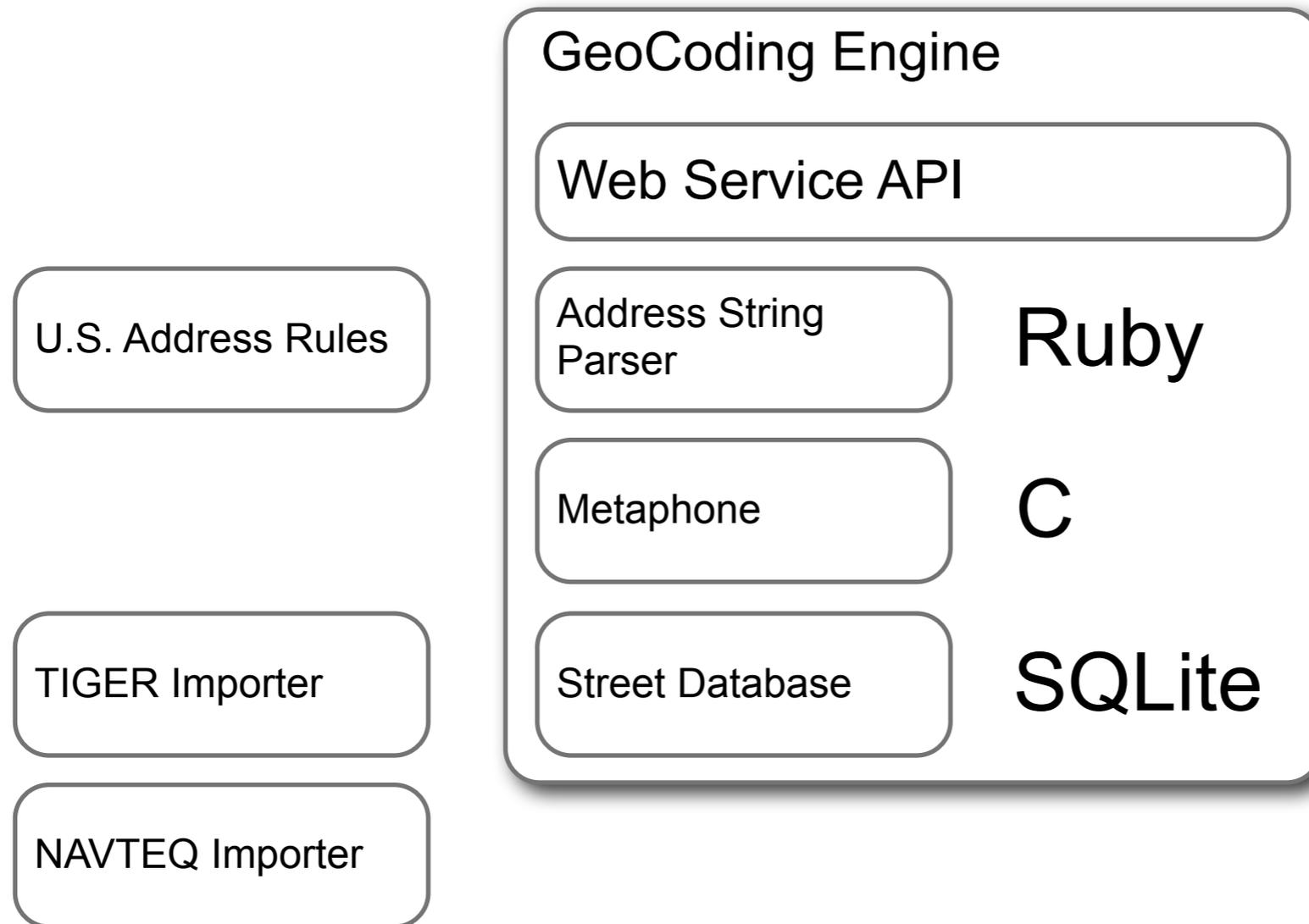
Project Status

3

- Developed and deployed geocoding on GeoCommons
 - ▣ US Street Level geocoding
 - ▣ TIGER/Line data source
 - ▣ Supports NAVTEQ or other data imports
- Adding GeoNames Data to provide International Capabilities
- Enhancing U.S. Geocoding to accept both string addresses and structured address queries (address, city, state, ZIP)

The Architecture

4



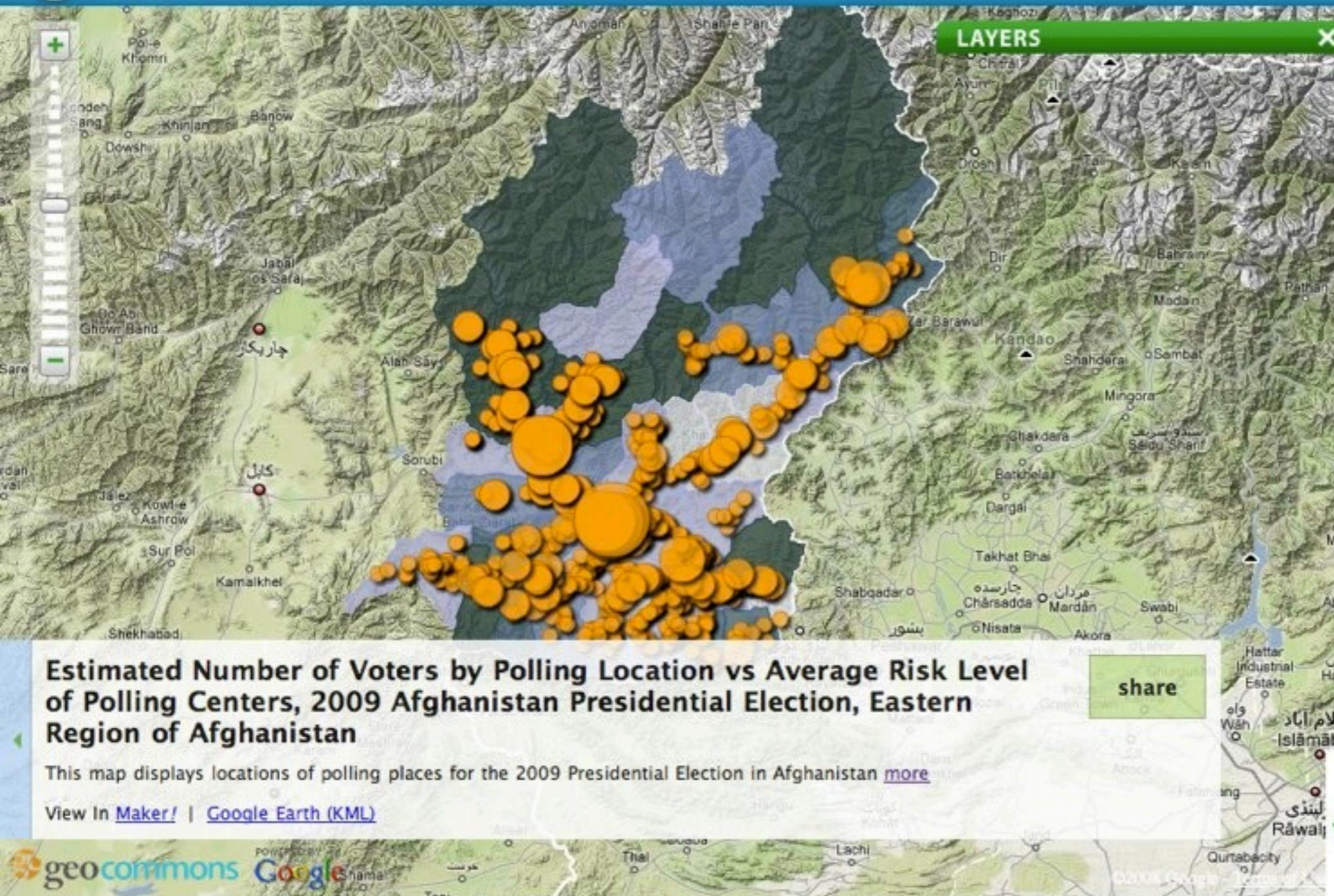
240,000 geocodes / hour

~66.666666667 geocodes / second

Afghanistan Election Monitoring

5

- Afghan Village Data was loaded for use during Afghanistan Elections
- <http://news.geocommons.com/afghanistanelection09>



2009 Afghanistan Presidential Election

2009 Afghanistan Election Results

Possible Election Fraud

Election Day Violence

2009 Polling Locations

MAP Total Estimated Voters per Province with Attacks, Afghanistan Presidential Election 2009

MAP Unverified Afghanistan Election Results, Eastern Afghanistan 2009

MAP Estimated Number of Voters by Polling Location vs Average Risk Level of Polling Centers, 2009 Afghanistan Presidential Election, Eastern Region of Afghanistan

2004 Presidential Election

Threat Assessments

Demographics

Opium Poppy Cultivation

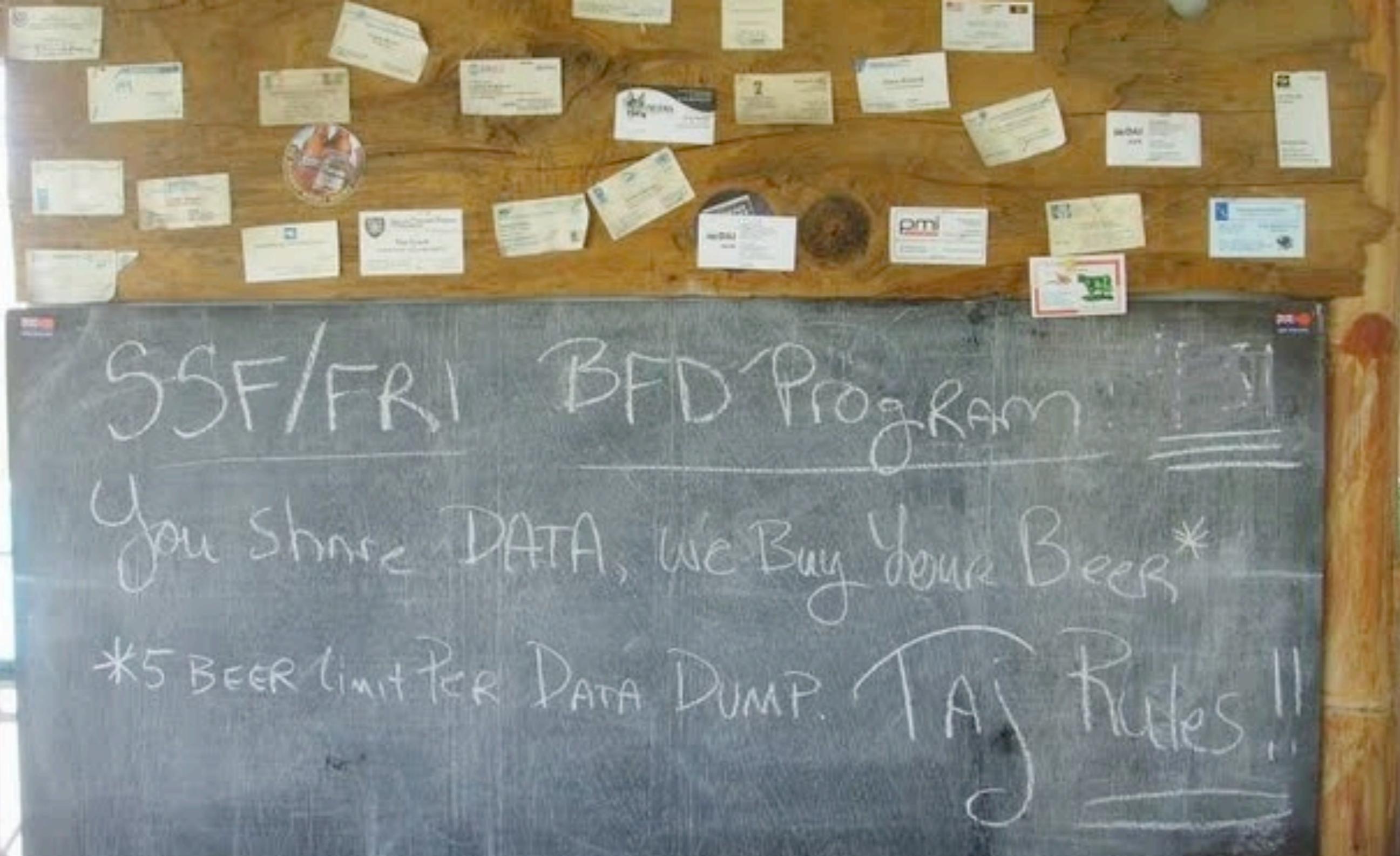
Afghanistan Election Monitoring



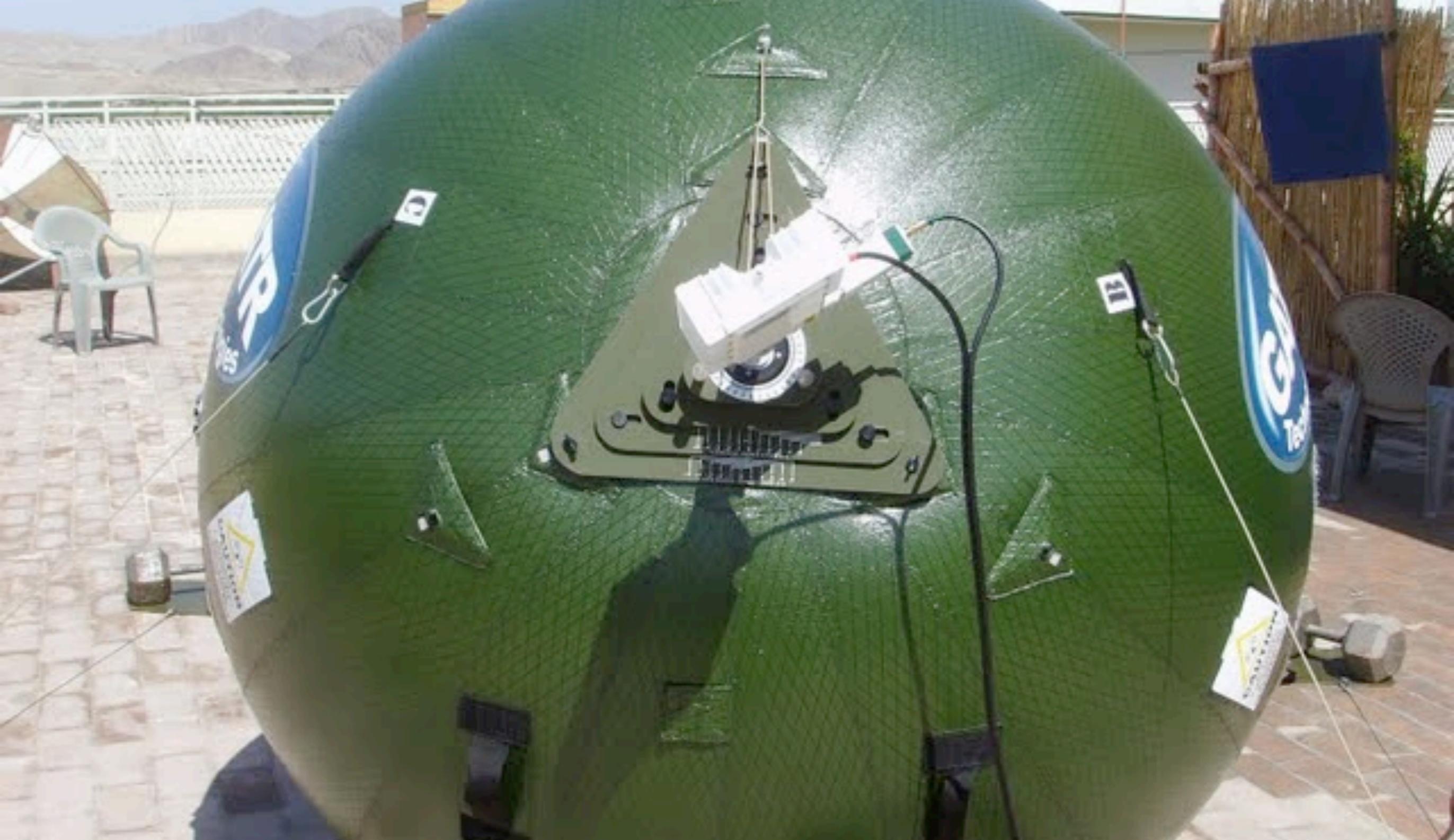
<http://picasaweb.google.com/fobtaj/StarTidesJbad#519739688512450930>

Jalalabad Taj Bar

FORTIUSONE



BFD Program



Afghanistan Data Link

FORTIUSONE

alive in AFGHANISTAN

Spreadsheet

KML

SMS

Sensors Feeds

Federation

Federation



Open-Sourced GeoCoder

11

- Technical Discussion Group
 - <http://groups.google.com/group/geocommons-geocode>
- Source Code Location
 - <http://github.com/geocommons/geocoder/>
 - 59 Repository Watchers and 6 Forks

GeoJoin

12

No, geolocate my data using another overlay. [\(explain\)](#)

Finder/ Express

LIBRARY

» Reference Layers

» Your Layers

» Agriculture

» Business and Labor

» Demographics

» Economics and Financial

» Education

» Geographical Boundaries

» Government and Politics

» Health and Medicine

» Infrastructure

» Law Enforcement

» Military and Defense

» Real Estate

» Retail

» Science and Environment

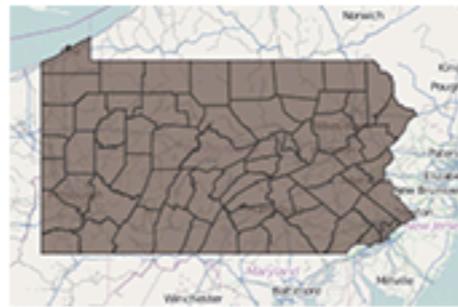
» Sports and Culture

» Technology

» Travel

[← Back to Search Results](#)

Pennsylvania Department of Health, Pennsylvania Licensed Hospitals, Pennsylvania, 2001



This layer shows the positions of hospitals within the borders of Pennsylvania that are licensed by the Pennsylvania Department of Health.

Purpose: The dataset was developed by the Pennsylvania Department of Health to plot points representing licensed hospitals.

[Open the complete description and stats in another window](#)

Excellent. 267 of 267 features match. Click continue to preview the results.

Continue

Your Data

Labels

City

Beds

Typserv

County

Zip

X Coord

Bassints

Selected Layer

Facility

Ltc

County

Id

Objectid 1

State

Typorg

Street

Enhancement Plans

13

- Building out Hierarchical Boundary definitions
- ‘Fuzzy’ join matching
- Test with Grants.gov, Recovery.gov, FPDS, and FCC datasets
- Add catalog and service standards support
 - ▣ OGC Catalog Services for the Web (CSW versions 2 and draft 3)
 - ▣ Web Feature Services (WFS)
- GeoCommons.gov

Demo

14

No, geolocate my data using another overlay. [\(explain\)](#)

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State

Typorg

Street



Finder! Open the World's Data.

- 1 Upload
- 2 Locate
- 3 Review
- 4 Describe
- 5 Map

Success! We detected 74 rows and 11 attributes in your data.

Now, help us geolocate your data

We could not detect any columns with geographic data. Your data doesn't have any attributes with common geographic names (such as Address, State, Zipcode, etc.)

Yes, locate my data using the following fields:

Continue

No, locate my data using another boundary definition:

Finder!

Upload, organize and share your Geographic Data. Then use Maker! to map it.

Maker!

Create and share interactive maps made from data stored in Finder!

Enterprise

GeoIQ delivers the capabilities seen here paired with our advanced analytic engine.

Learn More

Need Help?

Dive into the User Manual. You'll find plenty of useful tips and creative ideas.

Learn More

We ♥ Feedback

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Demo



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Yes, locate my data using the following fields:

Continue

Attribute	Data Format	
<input type="text" value="name"/>	Plain Text	edit
<input type="text" value="carbon_2007"/>	Decimal Number	edit
<input type="text" value="energy_2000"/>	Decimal Number	edit
<input type="text" value="carbon_2000"/>	Decimal Number	edit
<input type="text" value="carbon_nextdecade"/>	Decimal Number	edit
<input type="text" value="intensity_2007"/>	Decimal Number	edit
<input type="text" value="plant_id"/>	Whole Number	edit
<input type="text" value="intensity_nextdecade"/>	Decimal Number	edit
<input type="text" value="energy_2007"/>	Decimal Number	edit
<input type="text" value="energy_nextdecade"/>	Decimal Number	edit

Demo

Yes, locate my data using the following fields:

No, locate my data using another boundary definition:

[Continue](#)

Finder/ Express

LIBRARY

- » My Layers
- » Agriculture
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- » Demographics
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- » Sports and Culture
- » Technology
- » Travel

[Search](#)

Utah Power Plants [Details](#)

Utah Power Energy Usage [Details](#)

Demo

Yes, locate my data using the following fields:

No, locate my data using another boundary definition:

[Continue](#)

Finder/ Express

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[« Back to Search Results](#)

Utah Power Plants

[Open the complete description and stats in another window](#)

To continue, choose a matching attribute for both datasets

Your Data	Selected Layer
name	Latitude
carbon_2007	County
energy_2000	Parent Company
carbon_2000	Plant ID
carbon_nextdecade	Company
intensity_2007	City
plant_id	State
intensity_nextdecade	Name

Demo

Yes, locate my data using the following fields:

No, locate my data using another boundary definition:

[Continue](#)

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[« Back to Search Results](#)

Utah Power Plants

[Open the complete description and stats in another window](#)

Now click Continue to see the results.

Your Data	Selected Layer
name	Latitude
carbon_2007	County
energy_2000	Parent Company
carbon_2000	Plant ID
carbon_nextdecade	Company
intensity_2007	City
plant_id	State
intensity_nextdecade	Name

[Continue](#)

We will combine your data with the selected layer's geometry using the **plant_id** and **Plant ID** fields.

Demo



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Success! We found 74 geocode matches out of 74 records.

Review Your Geodata

Continue

Below is a summary of the geocode results. Tip: Click 'expand' to see a fullscreen preview.

Results Expand View

name	carbon_2007	energy_2000	carbon_2000	carbon_nextdecade	intensity_2007	plant_id	intensity_nextdecade	energy_2007	energy_nextdecade
DAVIS COUNTY (UT) WTE	536.1138	6981.3701	534.7642	536.1138	153.2336	10343	153.2336	6997.3408	6997.3408
DEER CREEK (UT)	0	14216.9902	0	0	0	10463	0	13860.8496	13860.8496
DESERT POWER (UT)	901.461	0	0	901.461	2171.0979	10650	35.0987	830.4194	51367.2109
EAGLE MOUNTAIN WWTP	0	0	0	2268.0439	0	11639	1647.574	0	2753.1931
ECHO DAM	0	3151.2161	0	0	0	11779	0	3072.2781	3072.2781
EPHRAIM	0	1873.042	0	0	0	12604	0	1826.1219	1826.1219
FLAMING GORGE	0	238997.2031	0	0	0	13580	0	233010.2969	233010.2969
FOUNTAIN GREEN	0	919.0782	0	0	0	13935	0	896.0551	896.0551
GADSBY	204091	213867.9062	153519	204091	1405.5861	14479	1405.5861	290399.9062	290399.9062
GATEWAY WEBER	0	6921.3809	0	0	0	14760	0	6747.999	6747.999
GRANITE	0	8865.873	0	0	0	15775	0	8643.7812	8643.7812
GUNLOCK RESERVOIR	0	1005.242	0	0	0	16356	0	980.0603	980.0603
HEBER CITY	0	731.2449	0	0	0	17314	0	712.9271	712.9271
HOBBLE CREEK	0	861.6359	0	0	0	18032	0	840.0518	840.0518
HUNTER	10600000	10200000	10500000	15200000	2068.189	18905	2000.394	10200000	15200000
HUNTINGTON	6169905	6388416	6163818	6169905	1930.413	18913	1930.413	6392317	6392317
HYRUM	0	1436.0601	0	0	0	19039	0	1400.0861	1400.0861

Demo



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Your overlay is almost ready to use...

Describe and Share your Data

To make this data easy to find, organize and share, provide as much information as you can to help others make the most of this data.

What should we name this data? ✓

Organize this with tags: ✓

Hint: click a tag below to add it.

Share

Who can see this data? Only you Anyone

Describe this data:

Originally published on: ✓

Type a date such as "today", "two weeks ago" or "3/24/08" and we'll interpret it as you type.

About this step



Improve your credibility. In this video our Data Guru explains how to help others make the most of the data you share with the community.

Demo



Finder! Open the World's Data.

← home ← your layers • edit • remove

Utah Power Energy Usage

This dataset provides information about Power Plant emissions in the USA in the state of Utah. Power Plant emissions from all power plants in Utah were obtained by CARMA for the past (2000 Annual Report), the present (2007 data), and the future. CARMA determine data presented for the future to reflect planned plant construction, expansion, and retirement. The dataset provides the name, company, parent company, city, state, zip, county, metro area, lat/lon, and plant id for each individual power plant. The dataset reports for the three time periods: Intensity: Pounds of CO2 emitted per megawatt-hour of electricity produced. Energy: Annual megawatt-hours of electricity produced. Carbon: Annual carbon dioxide (CO2) emissions. The units are 'short' or 'U.S.' tons. Multiply by 0.907 to get metric tons. Carbon Monitoring for Action (CARMA) is a massive database containing information on the carbon emissions of over 50,000 power plants and 4,000 power companies worldwide. Power generation accounts for 40% of all carbon emissions in the United States and about one-quarter of global emissions. CARMA is the first global inventory of a major, sector of the economy. The objective of CARMA.org is to equip individuals with the information they need to forge a cleaner, low-carbon future. By providing complete information for both clean and dirty power producers, CARMA hopes to influence the opinions and decisions of consumers, investors, shareholders, managers, workers, activists, and policymakers. CARMA builds on experience with public information disclosure techniques that have proven successful in reducing traditional pollutants. Please see carma.org for more

All the data for this dataset is provided from CARMA: Data from CARMA (www.carma.org)

Attributes	Range	Median	Mean	Standard Deviation
name	Text column (no statistics available)			
carbon 2007	0.00 -	0.00	565166.76	2368440.23

Create



MAKE A MAP
Use GeoCommons Maker! to build a map.

Download



KML
Google Earth, Microsoft Virtual Earth and others.



Shapefile
ESRI, uDig and others.



Spreadsheet
CSV format, Excel, OpenOffice and others.

Other formats... BETA

[Atom](#)

[JSON](#)

[Spatialite](#)

Metadata

[FGDC](#)

[ISO 19115](#)

Tags (hint: click to search)

[energy](#)

74 Features **11** Attributes

Uploaded by: Andrew Turner

When: Tuesday, November 03, 2009

Demo

Type your map title here... Save Add Data Layers Basemap Details

MAP BREWER X

2 CHOOSE DATA
Select the data you want to Map.

Utah Power Energy Usage

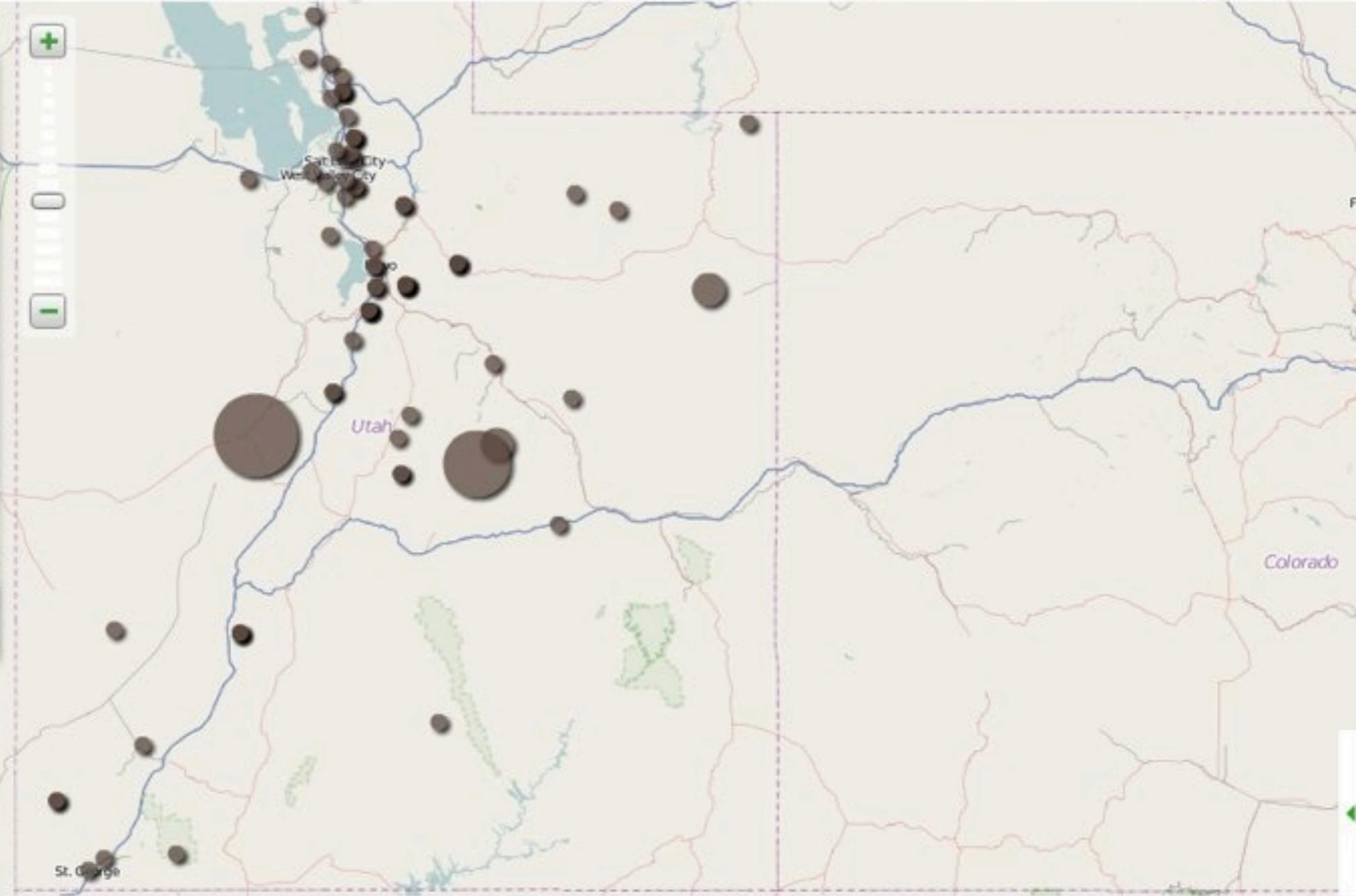
Map a single attribute

Selected Attributes
 carbon_2007

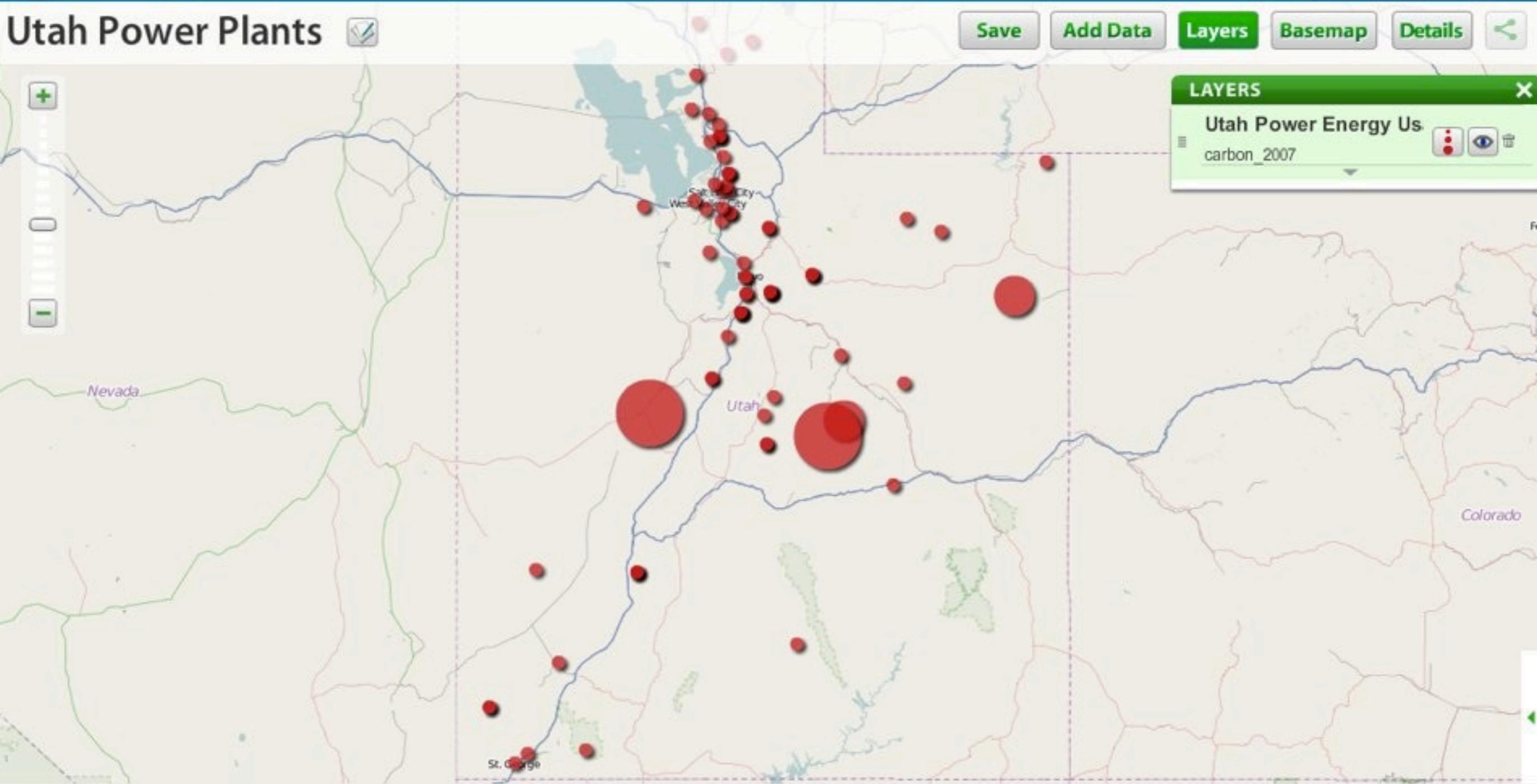
Available Attributes
 carbon_2000
 energy_2000
 energy_2007

Learn More

Back Next



Demo



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