What's new in GIS?

Randall Young, Geographer

What's the same old same old ?

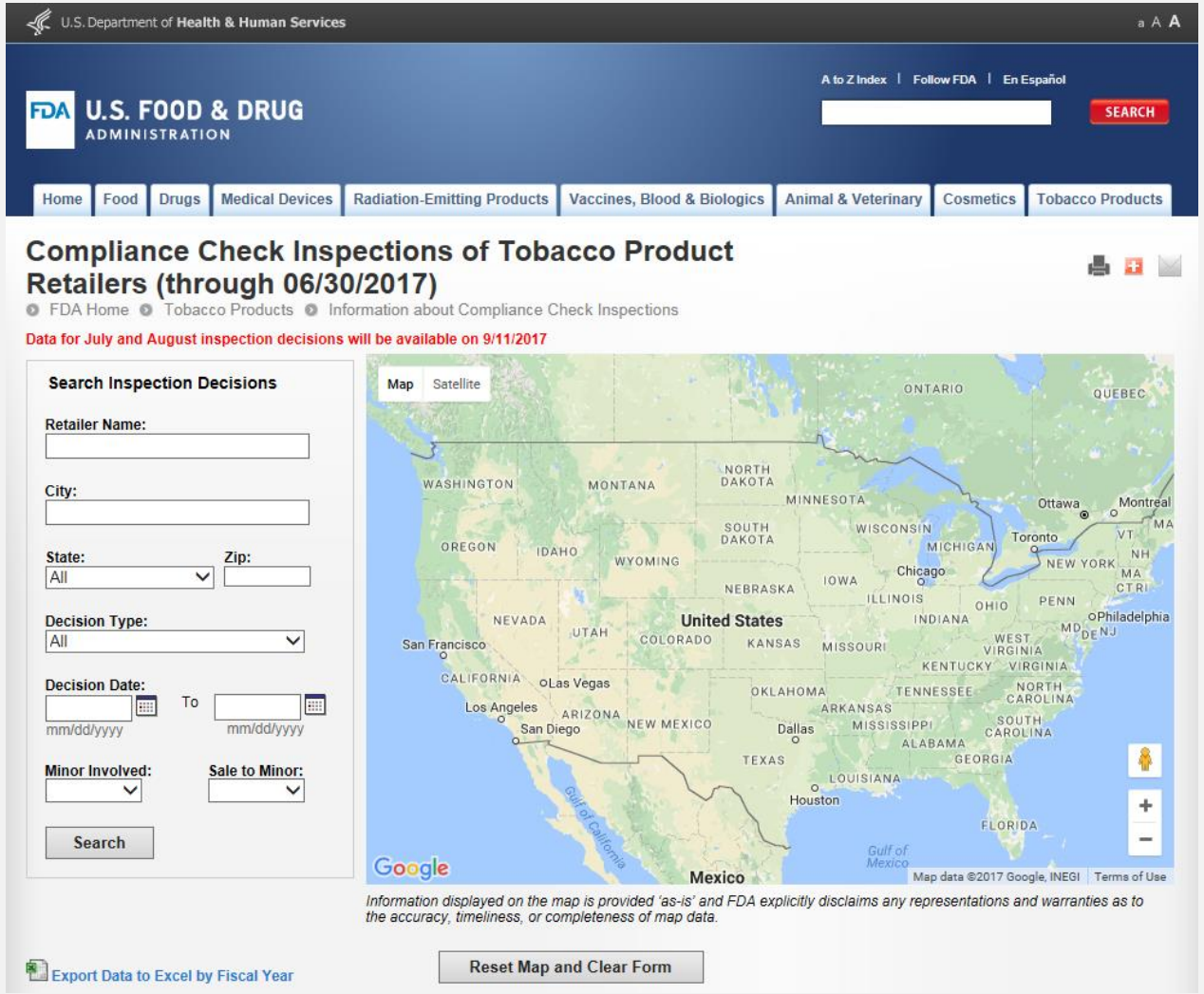
You still need data.

It still takes time and knowledge to use GIS.

Q: What data do you need ?

A: *Spatial* data.

- County identifiers
- ZIP codes
- Street addresses
- Latitude/Longitude coordinates
- Census tracts

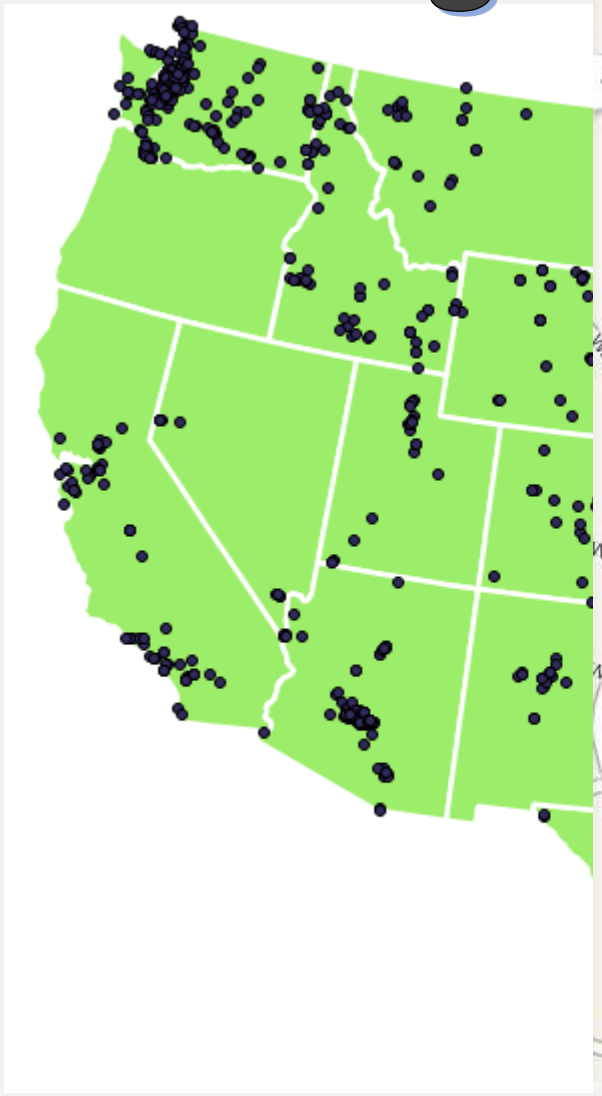


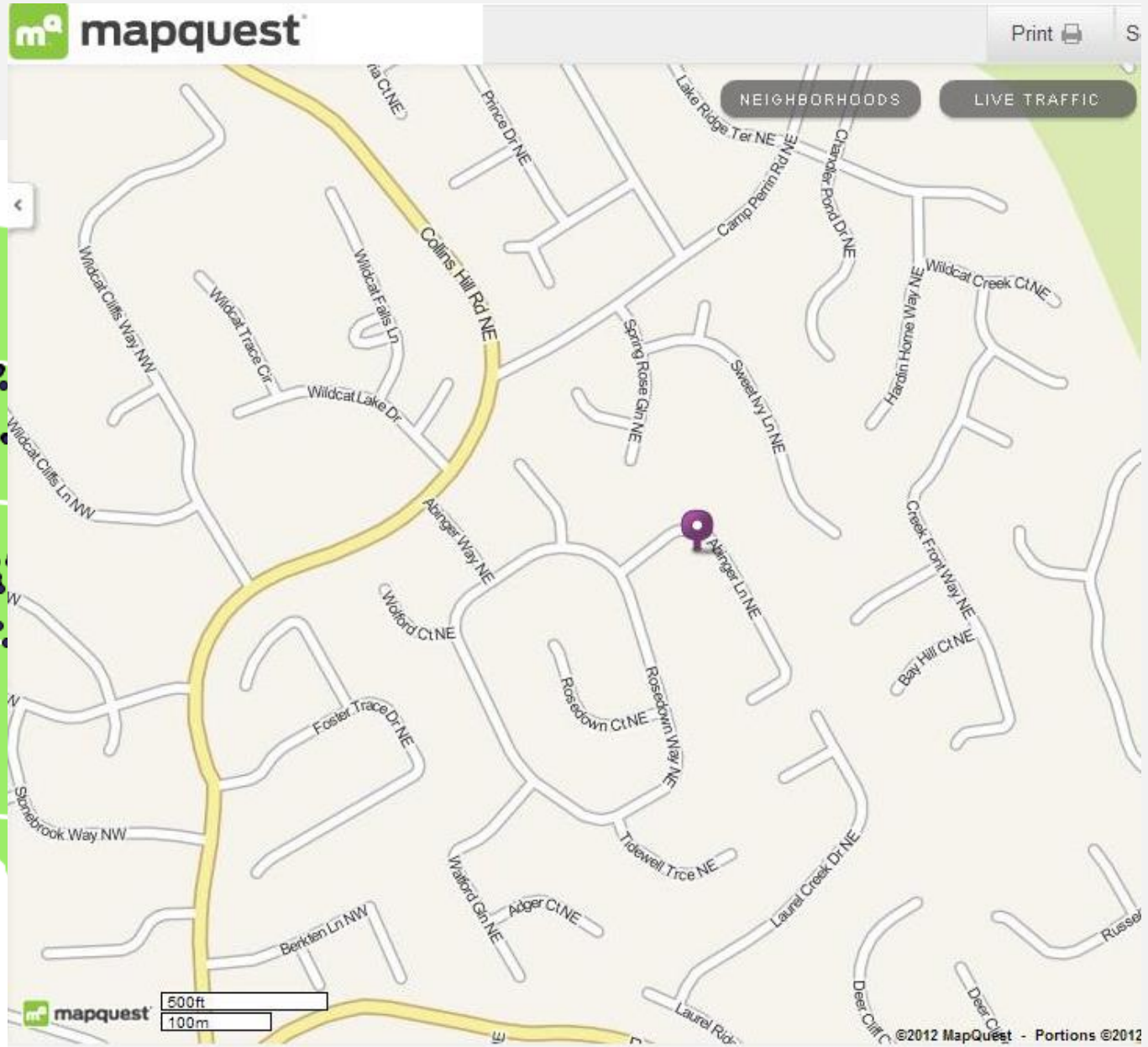
https://www.accessdata.fda.gov/scripts/oce/inspections/oce_insp_searching.cfm

Spatial data !

Street Address	City	State	Zip	Decision Type	Minor Involved	Sale to Minor	Decision Date
211-01 JAMAICA AVE	QUEENS VILLAGE	NY	11428	No Violations Observed	Yes	No	6/30/2017
212 15 JAMAICA AVENU	QUEENS VILLAGE	NY	11428	No Violations Observed	Yes	No	6/30/2017
219 28 HILLSIDE AVE	QUEENS VILLAGE	NY	11427	No Violations Observed	Yes	No	6/30/2017
197?02 HILLSIDE AVE	QUEENS	NY	11423	No Violations Observed	Yes	No	6/30/2017
90?39 SPRINGFIELD BOULE	QUEENS VILLAGE	NY	11428	No Violations Observed	Yes	No	6/30/2017
21917 HILLSIDE AVE	QUEENS VILLAGE	NY	11427	No Violations Observed	Yes	No	6/30/2017
21701 JAMAICA AVE	QUEENS VILLAGE	NY	11428	No Violations Observed	Yes	No	6/30/2017
184?27 JAMAICA AVE	QUEENS	NY	11423	No Violations Observed	Yes	No	6/30/2017

Geocoding




mapquest
Print
NEIGHBORHOODS
LIVE TRAFFIC
Collins Hill Rd NE
Prince Dr NE
Lake Ridge Ter NE
Camp Perrin Rd NE
Chandler Pond Dr NE
Wildcat Creek Ct NE
Hardin Home Way NE
Wildcat Cliffs Way NW
Wildcat Trace Cir
Wildcat Falls Ln
Wildcat Lake Dr
Spring Rose Gln NE
Sweet Ivy Ln NE
Wildcat Cliffs Ln NW
Abinger Way NE
Abinger Ln NE
Creek Front Way NE
Wolford Ct NE
Bay Hill Ct NE
Rosedown Ct NE
Rosedown Way NE
Foster Trace Dr NE
Stonebrook Way NW
Tidewell Trce NE
Laurel Creek Dr NE
Wallford Gln NE
Adger Ct NE
Berkten Ln NW
500ft
100m
©2012 MapQuest - Portions ©2012

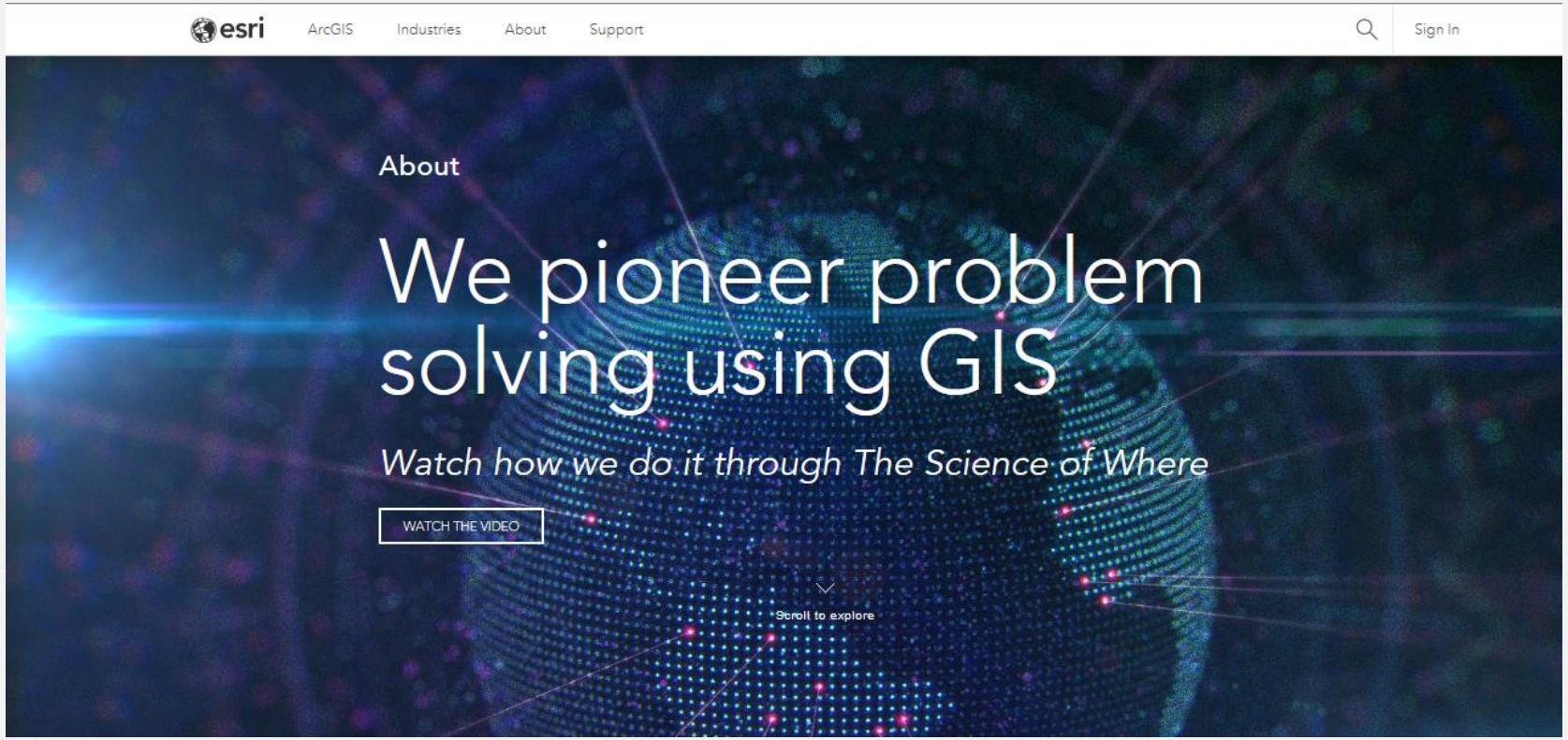
What's the same old same old ?

- Census data
- FIPS codes
- JOIN operation

STATEFP10	COUNTYFP10	TRACTCE10	GEOID10	NAME10	NAMELSAD10
25	015	821300	25015821300	8213	Census Tract 8213
25	015	821100	25015821100	8211	Census Tract 8211
25	015	822401	25015822401	8224.01	Census Tract 8224.01
25	015	822300	25015822300	8223	Census Tract 8223
25	013	812002	25013812002	8120.02	Census Tract 8120.02
25	013	812001	25013812001	8120.01	Census Tract 8120.01
25	013	812104	25013812104	8121.04	Census Tract 8121.04
25	013	812101	25013812101	8121.01	Census Tract 8121.01
25	013	811900	25013811900	8119	Census Tract 8119
25	013	811800	25013811800	8118	Census Tract 8118
25	013	811700	25013811700	8117	Census Tract 8117

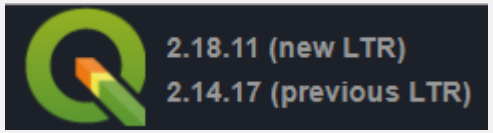
What's the same old same old ?

ArcGIS (ESRI) is still the most often used GIS on the market. www.esri.com



What's new in GIS?

ESRI has introduced many new products



There are some great products
not made by ESRI.

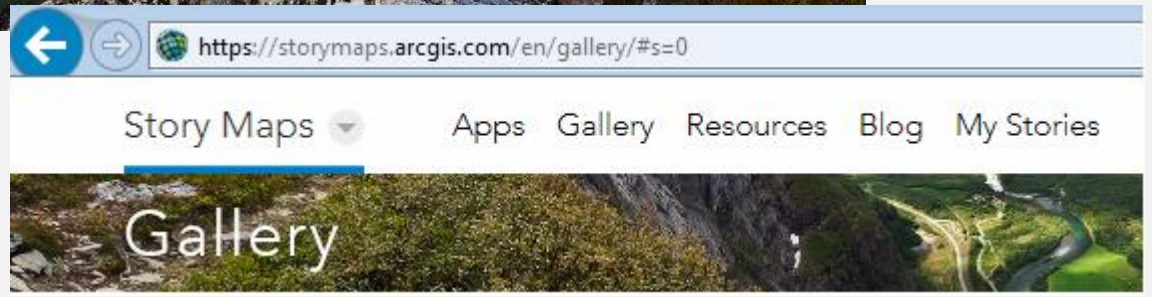
Pro is a new part of Desktop

ArcMap continues!

ArcMap and Pro run side by side

https://www.slideshare.net/Esri_UK/getting-to-know-arcgis-pro-62307626

ESRI Story Maps



https://storymaps.arcgis.com/en/gallery/#s=0

https://phl.maps.arcgis.com/apps/MapJournal/index.html?appid=2f139f9db50a47c99bd5c13bfb4a9d2b

Get Healthy Philly - July 2016

By Deadly Design: The Tobacco Industry in Your Neighborhood

Philadelphia has the highest adult smoking rate of the ten largest cities. In the United States, about 17% of adults smoke, but in Philadelphia it's about 23%. That's almost 1 in 4 Philadelphians lighting up. Every year in Philadelphia, smoking is responsible for the deaths of more than 2,000 people or about 53 SEPTA buses full. The large number of tobacco retailers helps to drive these numbers. Philadelphia has almost twice as many tobacco retailers per capita as other major cities.

http://dphhs.mt.gov/Portals/85/Documents/MTUPPapp/index.html

Montana Tobacco Retailer Mapper

DPHHS

Point-of-Sale | Youth Access | Retailer Density | Reports | Youth Population | Retailers Near Schools | Retailers Compliance

Point of Sale

Most tobacco products are bought in convenience stores, gas stations and grocery stores where the industry focuses the majority of its marketing efforts. Point-of-sale strategies can reduce exposure to tobacco products and advertising in stores as detailed in the following sections:

1. Implement Prevention & Cessation Messaging
2. Restrict Point-of-Sale Advertising
3. Restrict Product Placement
4. Prohibit the Sale of Flavored Products
5. Reduce Tobacco Retail Outlets

STORY MAP TEMPLATES

A Sequence of Place-enabled Photos or Videos

A Rich Multimedia Narrative

Presenting a Series of Maps

A Dynamic Collection of Crowdsourced Photos

A Curated Set of Places of Interest

Comparing Two Maps

https://storymaps.arcgis.com/en/app-list/

An alternative to ESRI Story Maps

knight lab

StoryMap JS

Maps that tell stories.

Make a StoryMap

https://storymap.knightlab.com/

https://www.minnpost.com/stroll/2014/06/hockey-hip-hop-and-other-green-line-highlights

MinnPost photo by Andy Sturdevant

West Bank

Alley between Acadia Café and Bailey Building

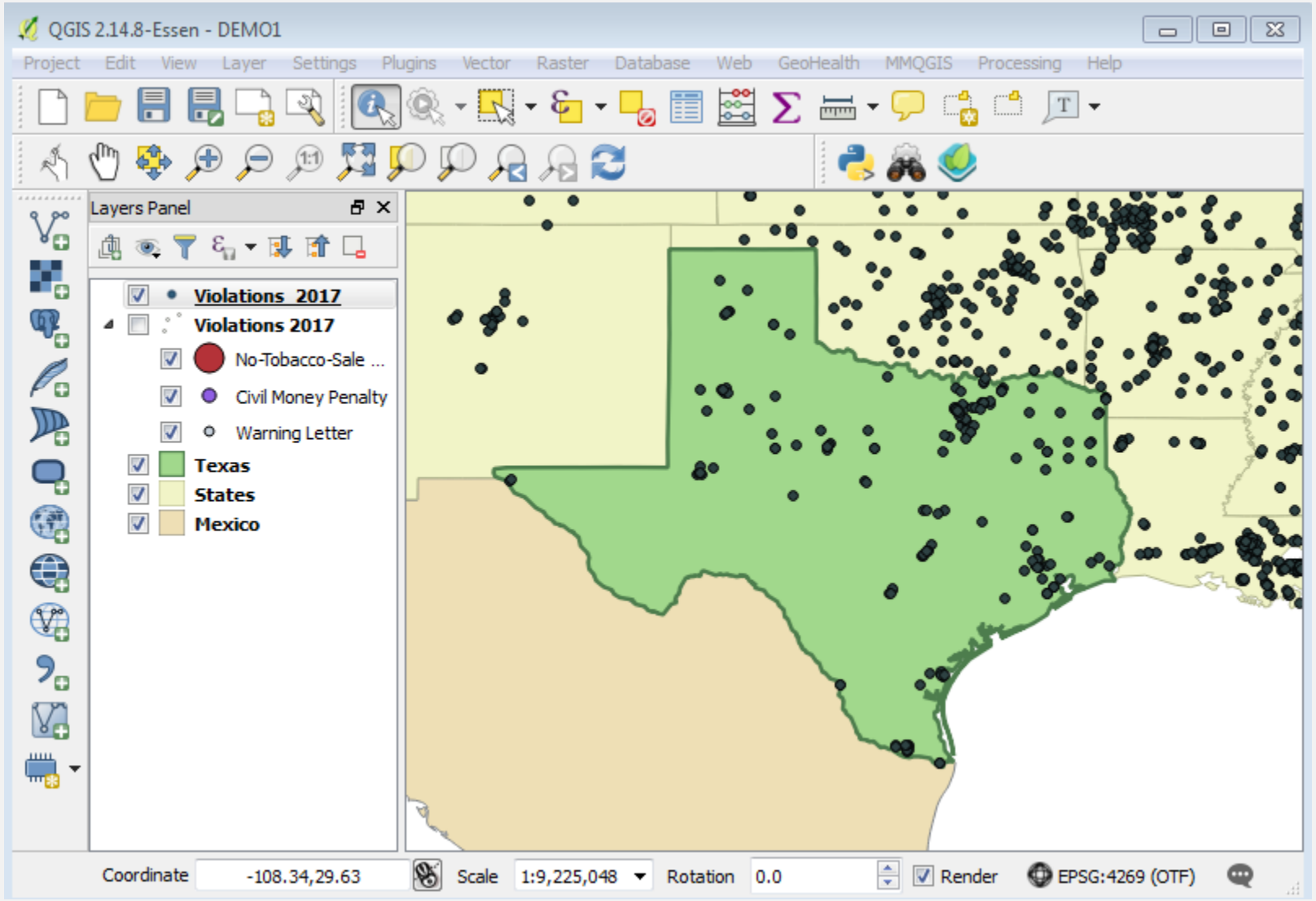
QGIS

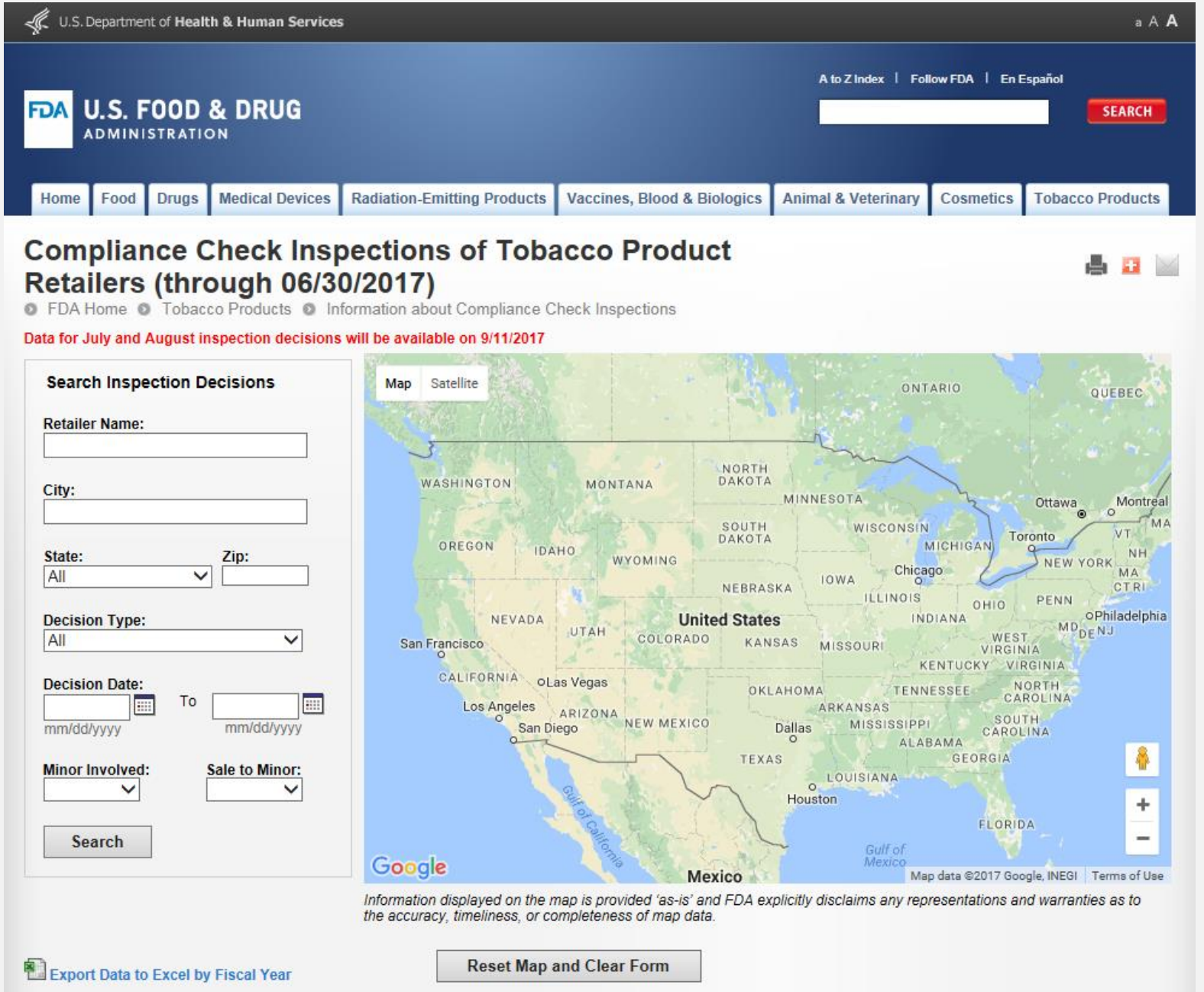
WWW.QGIS.ORG

http://gisgeography.com/qgis-arcgis-differences/

http://monde-geospatial.com/arcgis-vs-qgis-10-most-important-differences-between-arcgis-and-qgis/

QGIS demo


QGIS 2.14.8-Essen - DEMO1
Project Edit View Layer Settings Plugins Vector Raster Database Web GeoHealth MMQGIS Processing Help
Layers Panel
Violations_2017
Violations 2017
No-Tobacco-Sale ...
Civil Money Penalty
Warning Letter
Texas
States
Mexico
Coordinate -108.34,29.63
Scale 1:9,225,048
Rotation 0.0
Render
EPSG:4269 (OTF)



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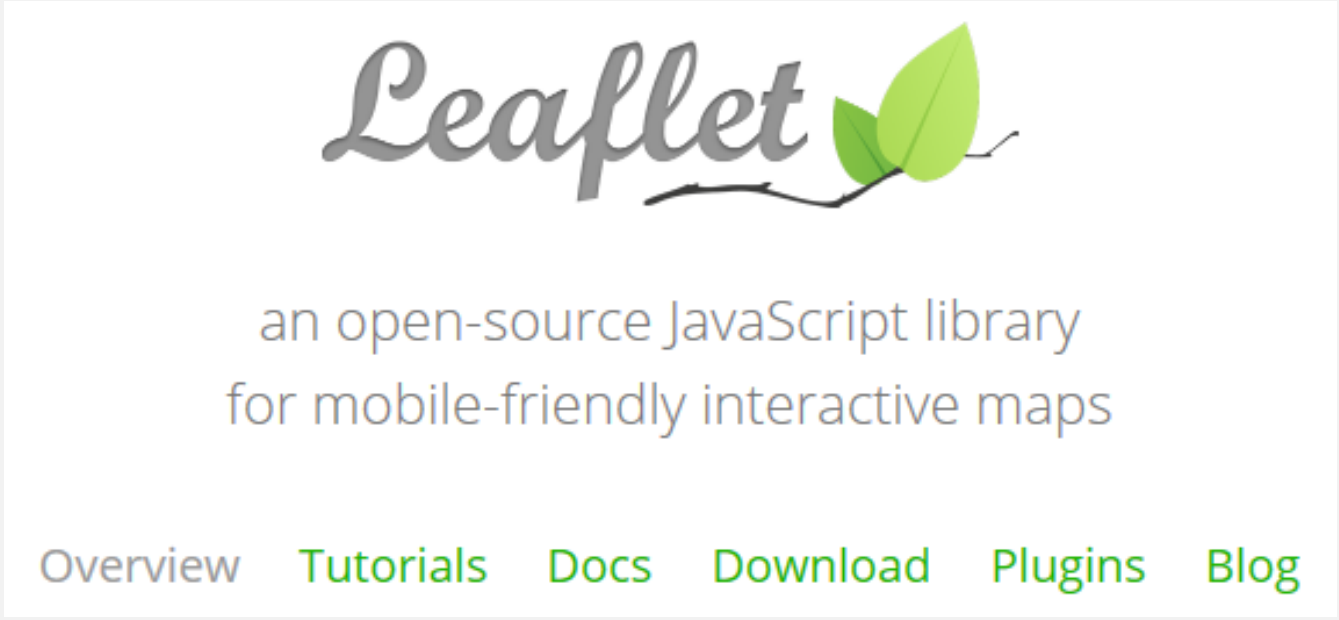
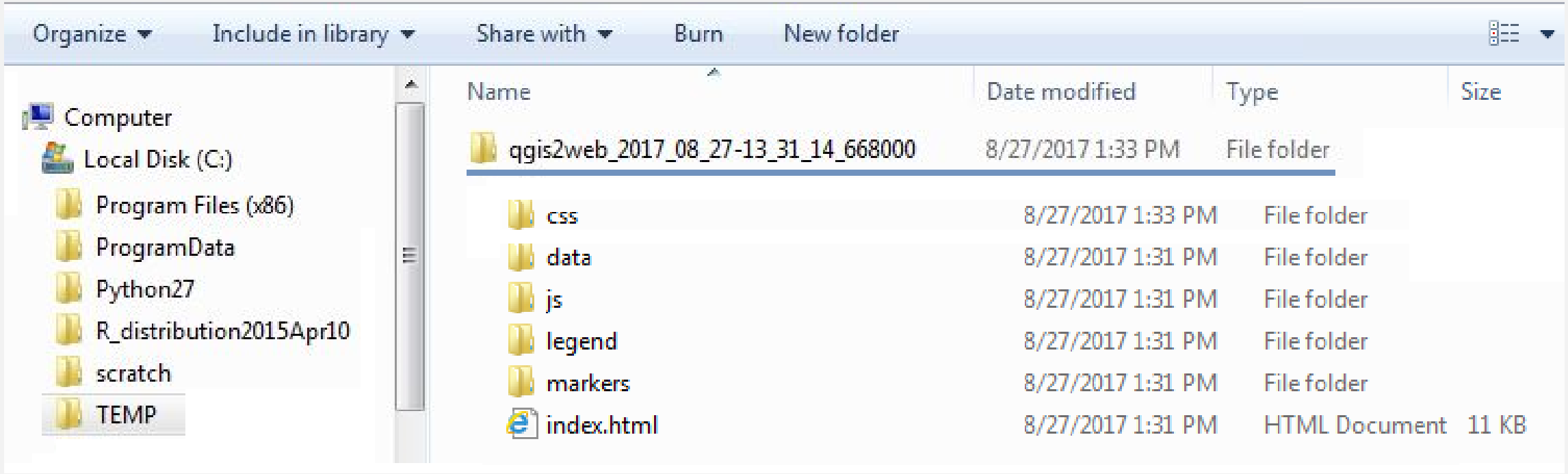
qgis2web plugin



http://leafletjs.com/

Output from qgis2web plugin



Total space ~ 1 Mb

Overview of the process

1. Downloaded the data from the FDA website (CSV format).
2. Geocoded the address list using the Centrus geocoder (Pitney Bowes).
3. Converted LATITUDE/LONGITUDE coordinates into a point layer (shapefile).
4. Added base layers such as states, Mexico etc. to QGIS.
5. Symbolized all the layers to my liking.
6. Got rid of some extemporaneous fields.
7. Ran the Create Web Map tool in QGIS.
8. Tweaked some of the javascript code.

Need ideas?

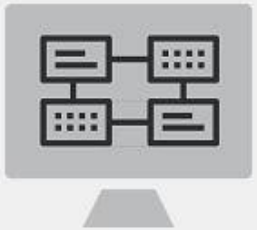
https://www.cdc.gov/dhdsp/maps/gisx/index.html

Chronic Disease GIS Exchange

Map Gallery

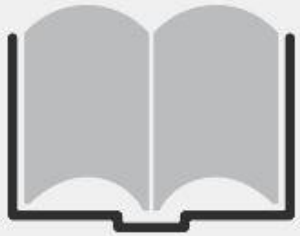
View an evolving series of maps designed to address chronic diseases, and submit your own map to the gallery.

GIS Resources



Explore an expansive set of GIS resources, blogs, tools, on-line mapping websites, and more.

GIS Training



Tutorials designed for novice to advanced GIS users working in chronic disease.

Thank you!

Questions
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