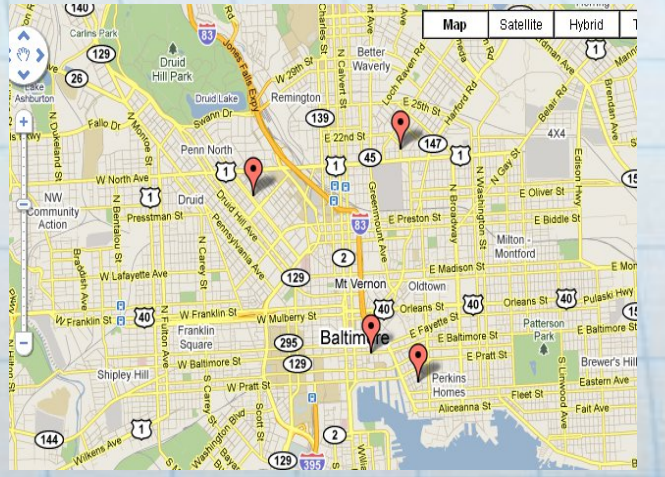
Visualizing Your Data with Google Mapping Tools

City of Baltimore EGIS
Brad Chranko
07.22.2010

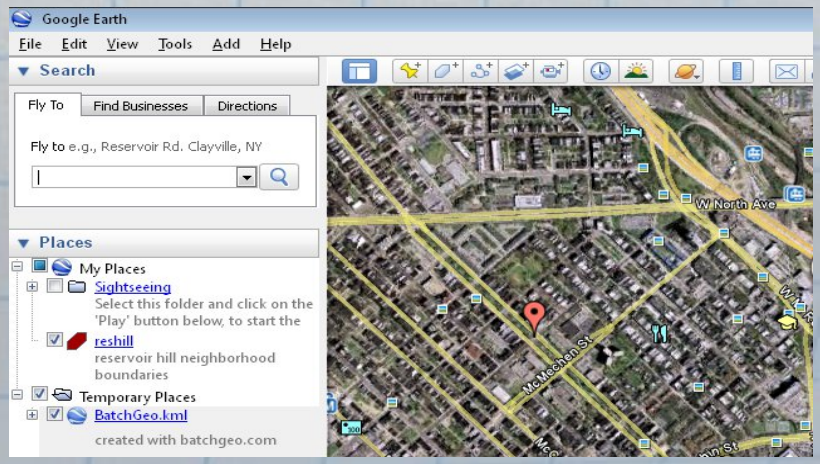
Getting from this to this:

ADDRESS	CITY	STATE	ZIPCODE	NAME
1100 E 20TH ST	BALTIMORE	MD	21218	JOHN BAKER
419 E BALTIMORE ST	BALTIMORE	MD	21202	MARVIN HARRIS
1701 EUTAW PLACE	BALTIMORE	MD	21217	JOY CIANCI
915 FAWN ST	BALTIMORE	MD	21202	DAVID DAY

Google Maps:



Google Earth:



Tools

On your desktop:

Data Input / Maintenance

- Microsoft Excel ($ - Microsoft Office Suite)
- OpenOffice Calc (free - http://www.OpenOffice.org)

Data Visualizing / Mapping

- Google Earth (free - http://earth.google.com)

In the Clouds:

Data Input / Maintenance

- Google Docs (http://docs.google.com/)

Data Visualization / Mapping

- Google Maps (http://maps.google.com/)

Data Visulization / Mapping & Input / Maintenance

- Google Fusion Tables (http://tables.googlelabs.com)

Data Input / Maintenance

It all starts with the data

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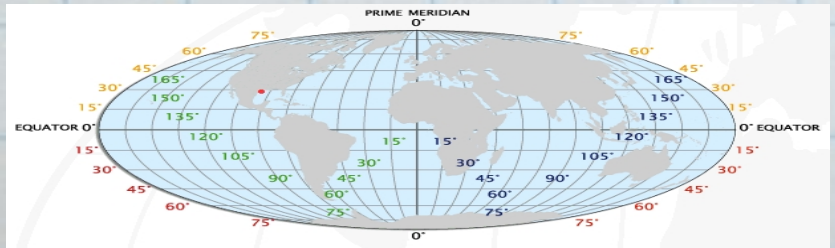
- Create a spreadsheet of address data using either:
  - Microsoft Excel
  - OpenOffice Calc
  - Google Docs Spreadsheets
  - Google Fusion Tables

ADDRESS	CITY	STATE	ZIPCODE	FULLADDRESS	NAME
1100 E 20TH ST	BALTIMORE	MD	21218	1100 E 20TH ST BALTIMORE MD 21218	JOHN BAKER
419 E BALTIMORE ST	BALTIMORE	MD	21202	419 E BALTIMORE ST BALTIMORE MD 21202	MARVIN HARRIS
1701 EUTAW PLACE	BALTIMORE	MD	21217	1701 EUTAW PLACE BALTIMORE MD 21217	JOY CIANCI
915 FAWN ST	BALTIMORE	MD	21202	915 FAWN ST BALTIMORE MD 21202	DAVID DAY

Geocoding

Tranforms addresses to KML with latitude and longitude values.

3rd party applications can be used to acquire latitude and longitude position coordinates so that mapping applications can find locations.



Also, reformats the spreadsheet into KML which uses a tag-based structure with nested elements and attributes and is based on the XML standard.

Visualizing / Mapping

What is:

- **Google Earth** - free downloadable virtual globe that displays satellite images of the Earth's surface, allowing users to see things like cities and houses looking perpendicularly down or at an oblique angle. Users can import their own data using KML files. Can do simple mapping analysis such as distance measurement, and can create recordable presentations of moving from point to point.
- **Google Maps** - Google's geographic search engine. Allows you to save searches / maps and collaborate with others.

Geocoding Resources

- BatchGeo (http://www.batchgeo.com/)
  - geocode, map, and create kml
- Juice Analytics (http://www.juiceanalytics.com/
  - geocoding tool - excel spreadsheet macro (http://www.juiceanalytics.com/writing/excel-geocoding-tool-v2/)

Google Fusion Tables

Currently in development in Google Labs, but usable is Google Fusion Tables. This application is everything all together: data, geocoding, collaboration, and visualization / mapping.

http://tables.googlelabs.com/