Web Mapping Made Easy with Google Fusion Tables
What...Fusion Tables?

- A Fusion Table is a Google spreadsheet that “fuses” data to Google Maps using KML.
Why Fusion Tables?

- Spatially presents tabular data
- Get the functionality of Google Maps
- Familiar “look and feel” people have come to “know and love”
- Dynamic; updates are applied instantly
- Quick and easy to share and embed on a web page
- Collaborators can share and edit data
Why Fusion Tables? Cont.

- An “info-rich” pop up window that can be configured to display a variety of data stylized in HTML (images, links, tables, charts, etc.)

Information-rich window templates

- **Population changes in Florida**
  Use the info windows to show population changes in a region. [See site.](#)

- **Texas drought, October 2011**
  New Scientist uses Fusion Tables to look at drought severity in Texas. [See site.](#)

- **SF Bike Accidents**
  Bay Citizen tracks accidents and fatalities that involved bicycles. [See site.](#)

**Tip:** How to add a chart in the info window
Why (Not) Fusion Tables?

- Restricted to Google format for symbology (somewhat)
- Difficult (but possible) to display multiple layers
- Need to have a Google account
- Subject to mandatory “upgrades”
When to use Fusion Tables?

- When you need a simple map to convey data for public consumption
- When you want to share data with a collaborator for viewing or editing
- When you have a map that is continuously or periodically updated
Where to use Fusion Tables?

- Embedded on a web page
Where else?

- Securely shared via email link for collaboration
How to use Fusion Tables?

- Decide what spatial layer to link data to and create a KML
- Simplify fields to just a unique ID that can be used as a join field for complex data tables
How?... Cont.

- Login to Google and navigate to “Drive”
- Choose “Create – More – Fusion Tables”
- Browse to select KML in Import Table wizard
  - shows a table preview and lets you set table attributes then adds to your “Drive”
How?... Cont.

- Select the table to open
- Make edits directly to the table OR “File – Download” exports a .csv file for extensive table updates that can then be reloaded
- Upload ancillary tables and merge to original fusion table, based on common ID, to create new fusion table
- Under options: “Filter”, “Aggregate”, and “Create View” run queries and organize the data
How?... Cont.

- Select “Visualize – Map” to see data displayed on a Google Map
How?... Cont.

- Symbology is modified within “Configure Styles”
  - Somewhat limited; especially point symbols aka “marker icons”
- A column titled icon can specify symbology if attributed with the name Google recognizes
- “Map Styles” allows for symbology or gradient based on value in a column
How?... Cont.

- Arrange **info-rich** pop up window using “Configure info styles”
- The window can display a dynamic combination of tabular data, links, images, charts all formatted with simple HTML that reads the table columns to fetch data.
How?... Cont.

- Share the table for others to view and/or edit by emailing a link to collaborators.
How?... Cont.

- Permissions can be set to:
  - “Private” which only allows those added to a list access, with sign in required
  - limited to those who have the link, no sign in necessary
  - full public access
How?... Cont.

- Get an embeddable link that plugs right into a web page.
- Or if there is already a Google Map API set up, layer the fusion table data by getting the Fusion Table ID and adding that to the API code.
Fusion Table has a new look!

- The Fusion Tables team has developed a whole new approach to exploring and visualizing your data. It's more powerful and flexible than the classic version of the web application.
- The table name, description, attribution, and row data are the same. The two versions are simply different ways of presenting the same file.
- These new features are only available in the New look:
  - Saving one or more states on the same table
  - Faceted filter creation
  - Row layout improvements
    - Horizontal scroll bar for up to 50 columns
    - Select columns to display
    - Resize column width
    - Drag and drop to re-order columns
  - Customizable card layout
  - Data preview when merging tables
  - Creating a view with a filter
- These classic features are not yet available in the new Fusion Tables:
  - Map charts (a Labs visualization)
  - Intensity maps and heatmaps
  - Comments on rows, cells, or columns
  - Adding or deleting columns
  - Customizing or embedding a chart created from the result of an aggregation (or "summary")
Who?

- YOU!

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