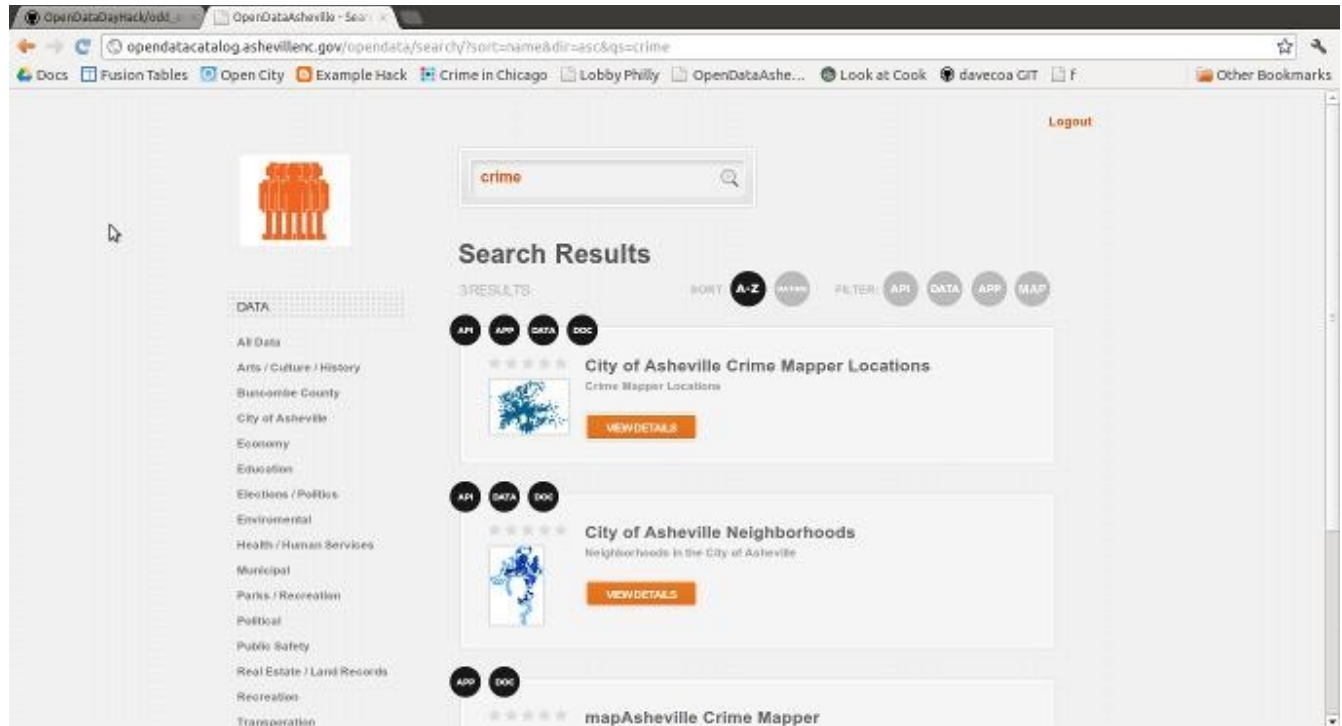


My ODD Sample Hack Directions.

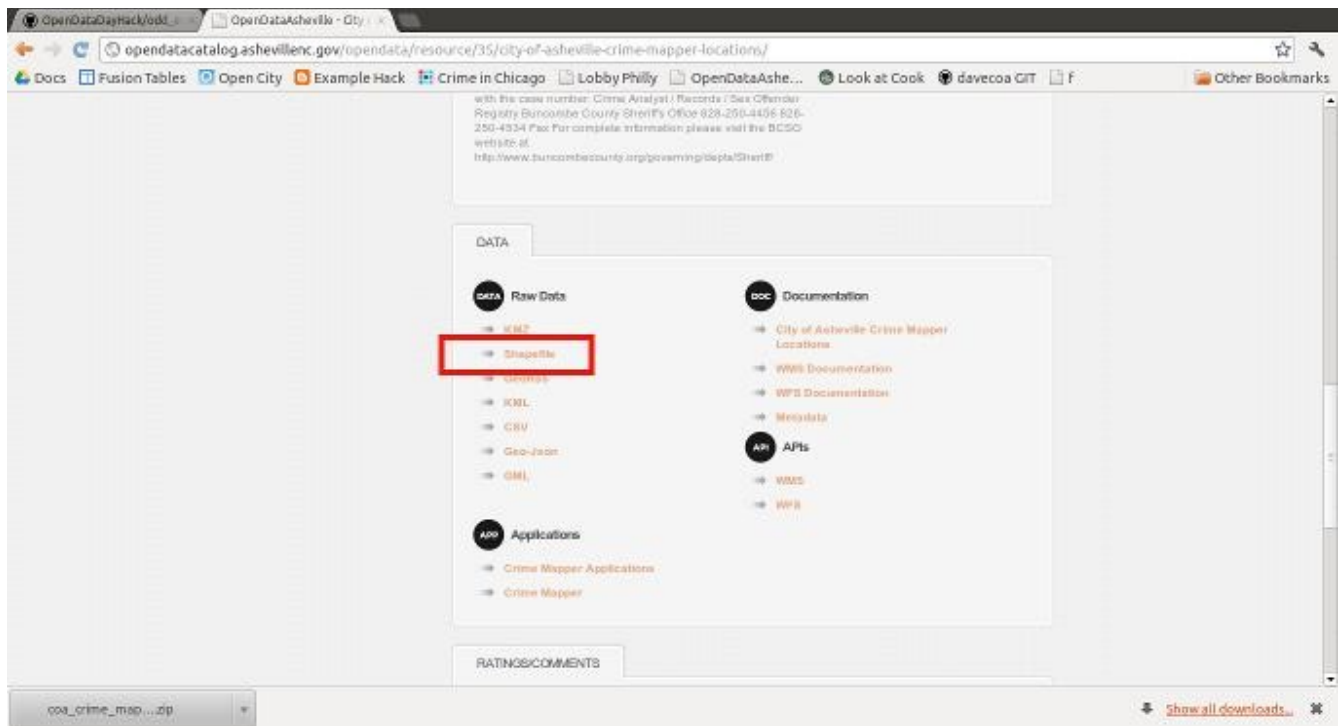
This hack took me about an hour here is what I did. I am sure if several people worked on the different parts then it would only take a 20 to 30 minutes with the potential of adding extra goodies.

Got to the Open Data Asheville Data Portal at <http://opendatacatalog.ashevillenc.gov/>

Search for Crime



Select the City of Asheville Crime Mapper Locations and under the Data area click on the shapefile link



Hit back on the browser and select City of Asheville Neighborhoods

Once again click to download the shapefile from the data area.

Unzip coa\_asheville\_neighborhoods.zip

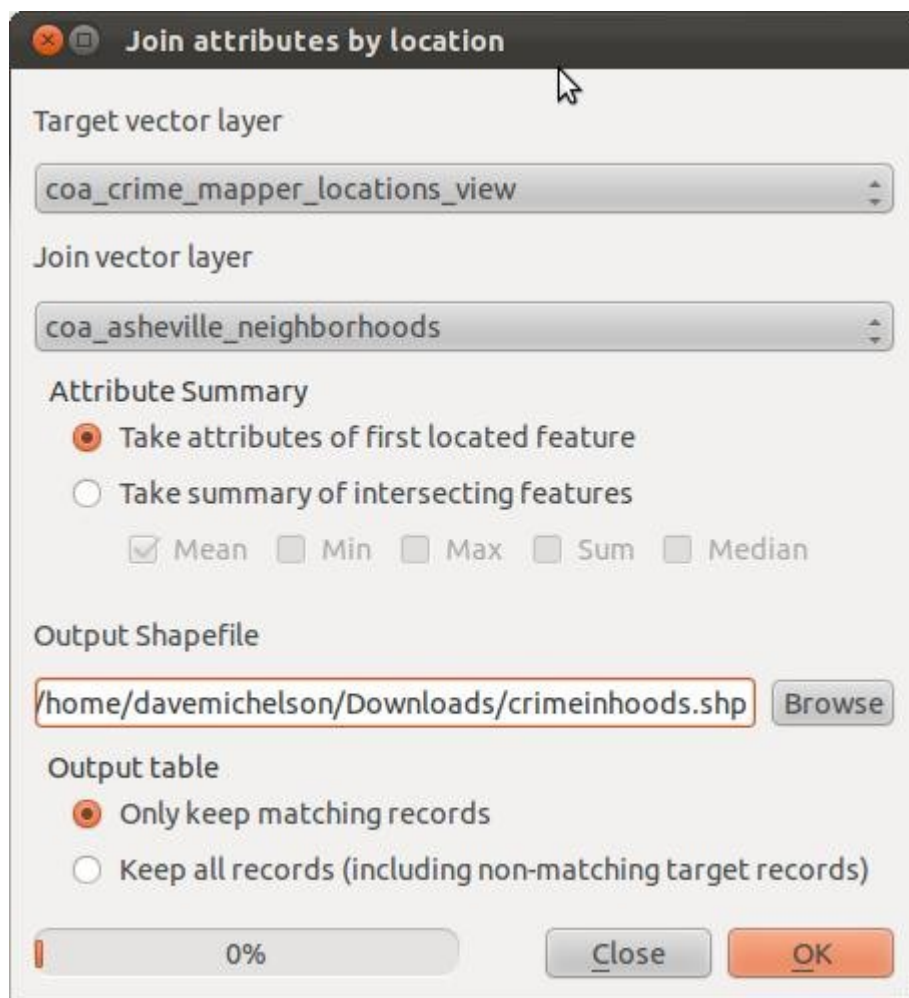
Unzip coa\_crime\_mapper\_locations\_view.zip

Open QGIS.

Add the layers coa\_asheville\_neighborhoods.shp and coa\_crime\_mapper\_locations\_view.shp

Layer – add vector layer –  
navigate to where you downloaded and unzipped the shapefiles

Now goto Vector – Data Management Tools – Join attributes by location  
Select features in coa\_crime\_mapper\_locations\_view  
that intersect features in  
reference is coa\_asheville\_neighborhood



Click apply and when you are asked to add the layer to the TOC choose yes.

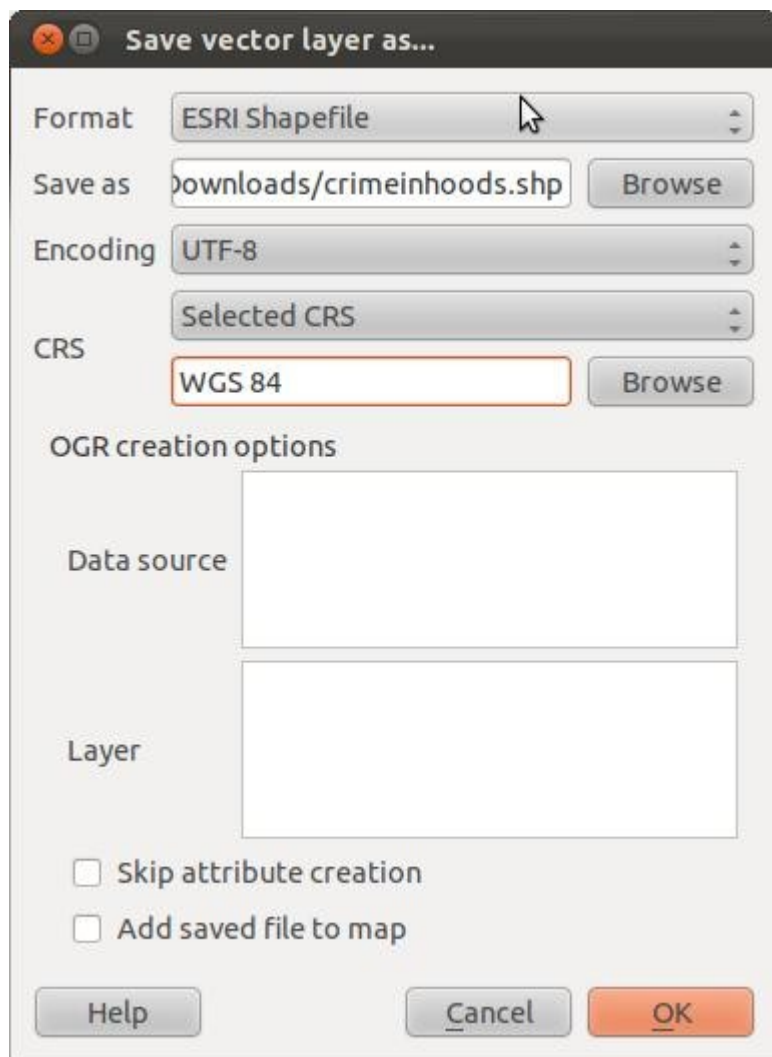
Then close when finished.

Now we need to re-project the shapefile to wgs84

Right click the crimeinhoods layer in the table of contents and click on save as...

name it crimeinhoods\_4326.shp

now browse for a new project wgs84



Click Ok.

Add the crimeinhoods\_4326.shp layer into qgis.

Open the attribute table and toggle editing on.

Click the field calculate utility and create two numeric (12,10) fields. One name lat on name long and calculate lat to \$y and long to \$x

The screenshot shows the 'Field calculator' dialog box in QGIS. The 'Create a new field' option is selected. The output field name is 'lat', the type is 'Decimal number (real)', the width is 12, and the precision is 10. The 'Function List' on the left shows categories like Operators, Math, Conversions, String, Geometry, Record, and Fields and Values. The 'Selected Function Help' area is empty. The 'Operators' row contains buttons for =, +, -, /, \*, ^, ||, (, and ). The 'Expression' text box contains '\$y'. The 'Output preview' at the bottom shows '35.5946521930014'. At the bottom right are 'Help', 'Cancel', and 'OK' buttons.

**Field calculator**

☐ Only update selected features

☒ **Create a new field**

Output field name:

Output field type:

Output field width:  Precision:

☐ **Update existing field**

Update existing field name:

**Function List**

Search:

- ▶ Operators
- ▶ Math
- ▶ Conversions
- ▶ String
- ▶ Geometry
- ▶ Record
- ▶ Fields and Values

**Selected Function Help**

**Operators**

= + - / \* ^ || ( )

**Expression**

Output preview: 35.5946521930014

**Field calculator**

☐ Only update selected features

☒ **Create a new field** ☐ **Update existing field**

Output field name:

Output field type:

Output field width:  Precision:

**Function List**

Search:

- Operators
- Math
- Conversions
- String
- Geometry
- Record
- Fields and Values

**Selected Function Help**

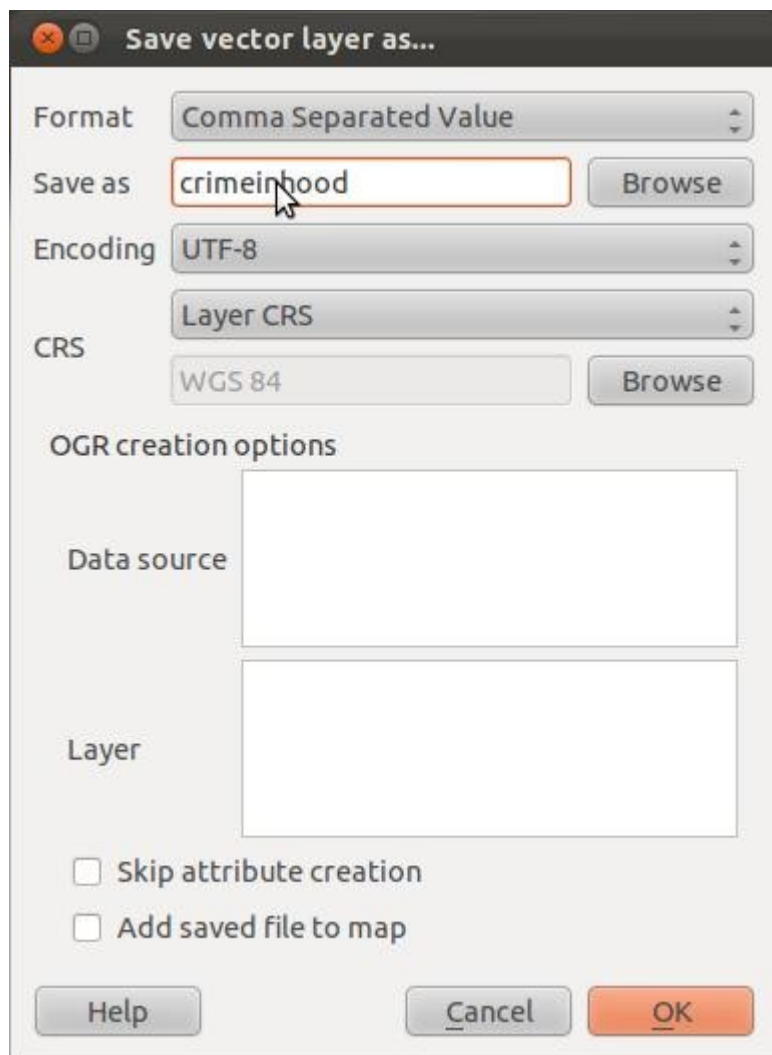
**Operators**

**Expression**

Output preview: -82.5535183673039

Toggle the editing off and save the changes.

Right click the crimeinhoods layer and select save as....



save as crimeinhood.csv

next in qgis select the neighborhood DARN – right the neighborhood and select query

Query Builder

coa\_asheville\_neighborhoods

Fields

name
nbhd_id
abbreviati
narrative
edit_date
edit_by

Values

Claxton Community
Cloister Condominiums
Crowfields Condominiums
DARN
Deaverview
Deer Run
Deerwood
Devonshire
East End/Valley Street
East View Association

Sample All

Operators

=	<	>	LIKE	%	IN	NOT IN
<=	>=	!=	ILIKE	AND	OR	NOT

SQL where clause

"name" = 'DARN'

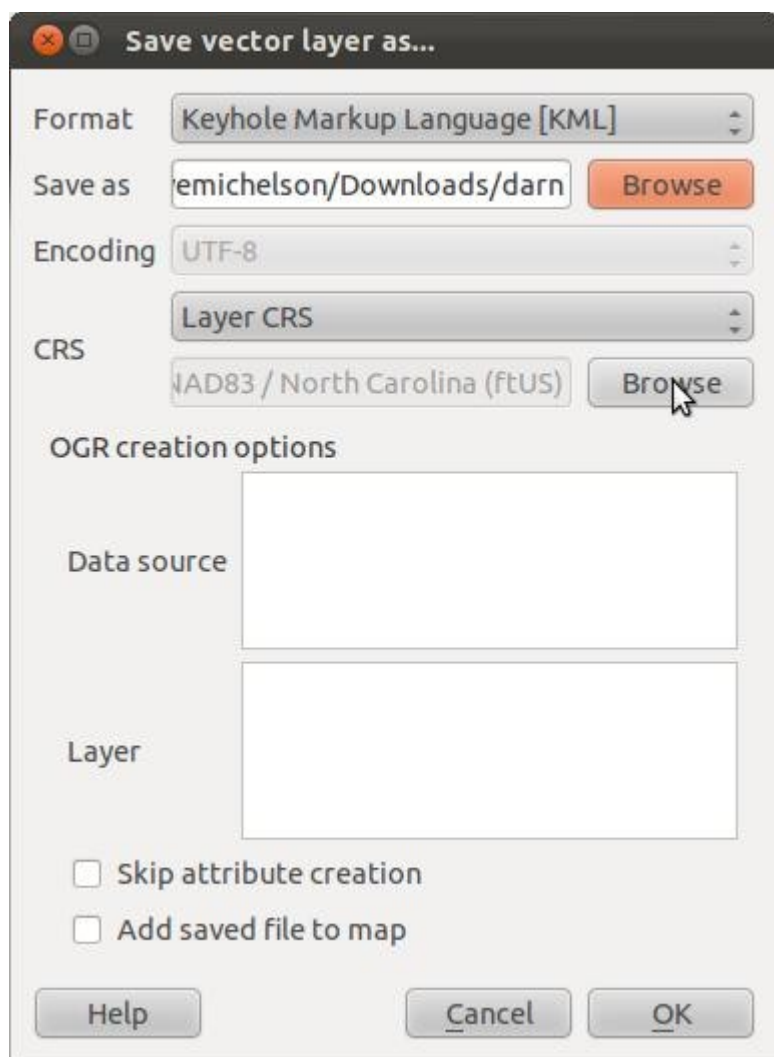
Help Test Clear Cancel OK

Then hit okay

right the neighborhood layer and choose save as...

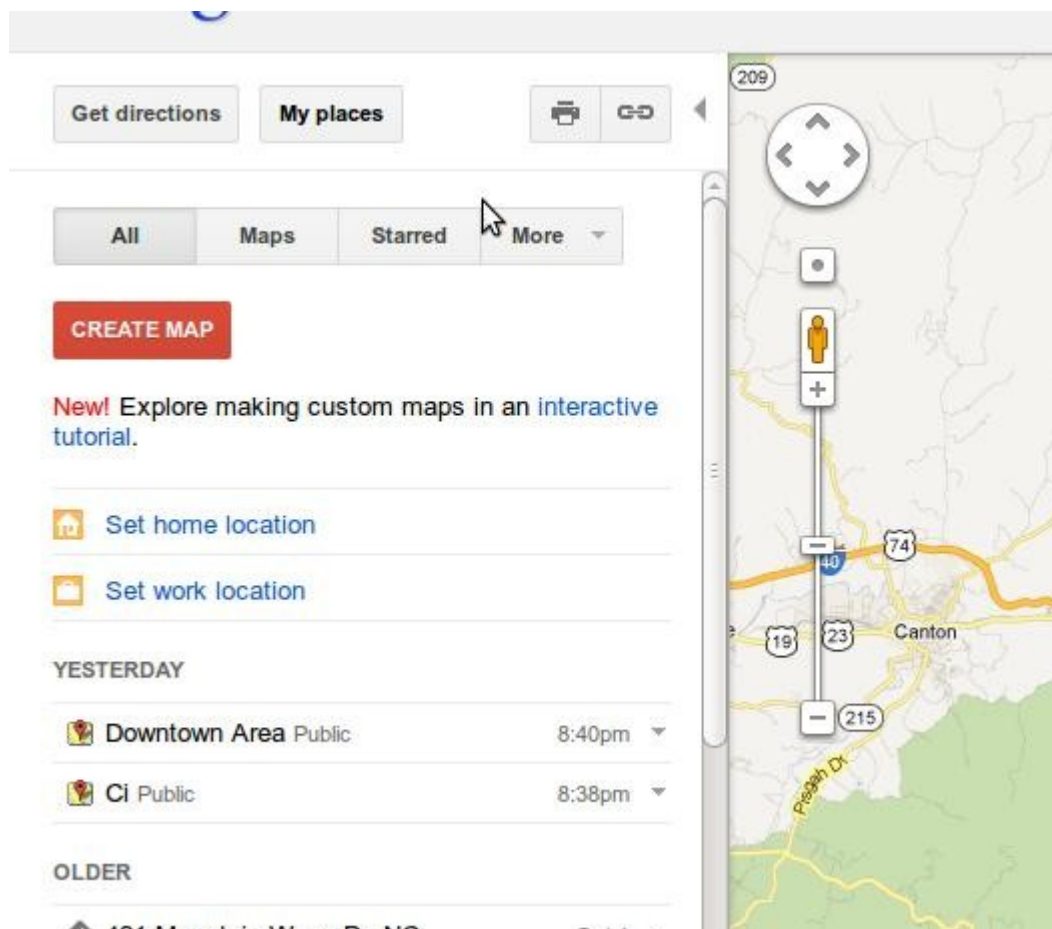
choose the type as kml and name it darn.kml



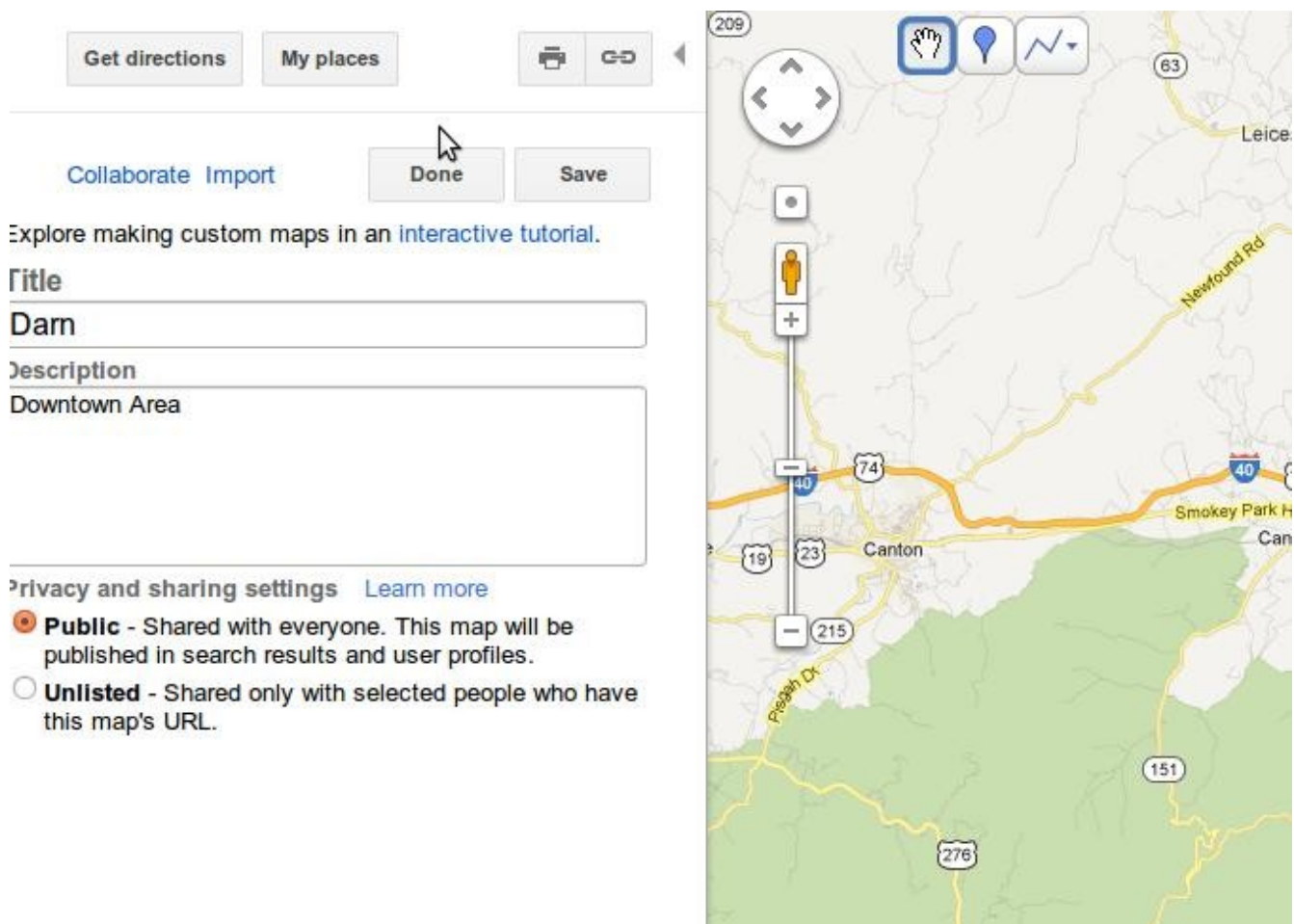


Next you will have to use a Google account to create a custom map...

In the menu of you Google account find maps and click on that – use the my places and choose create map

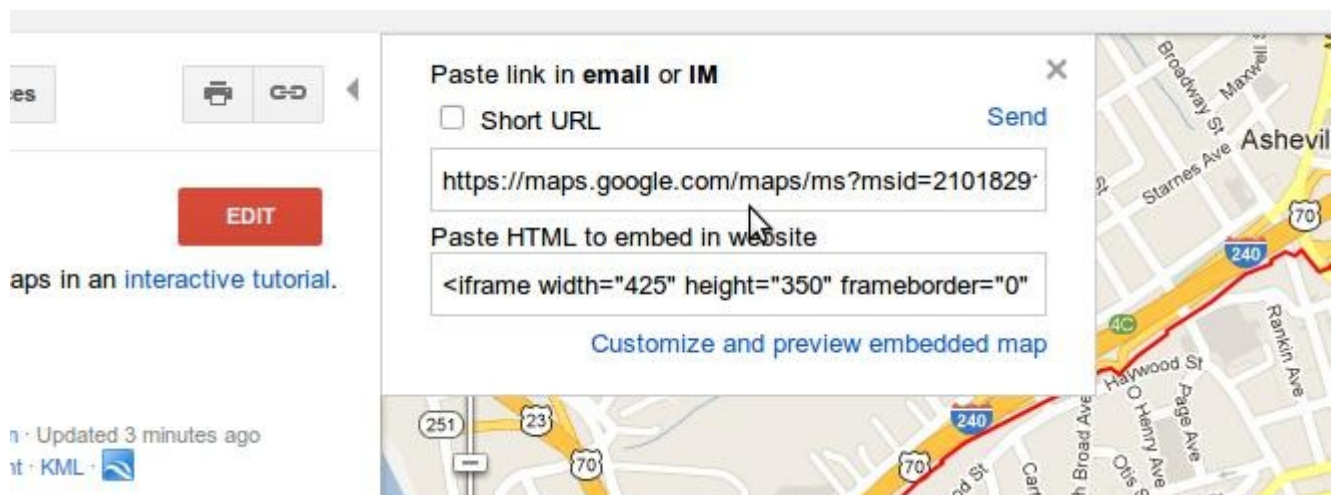


Then title in something meaningful and import the KML



Click save then down

Click the embed link then customize and preview embedded map.



Then choose custom and width of 1000 and height of 350

Google Maps - Mozilla Firefox

google.com https://maps.google.com/maps/empw?url=https:%2F%2Fmaps.google.com%2Fmaps%2Fms%31

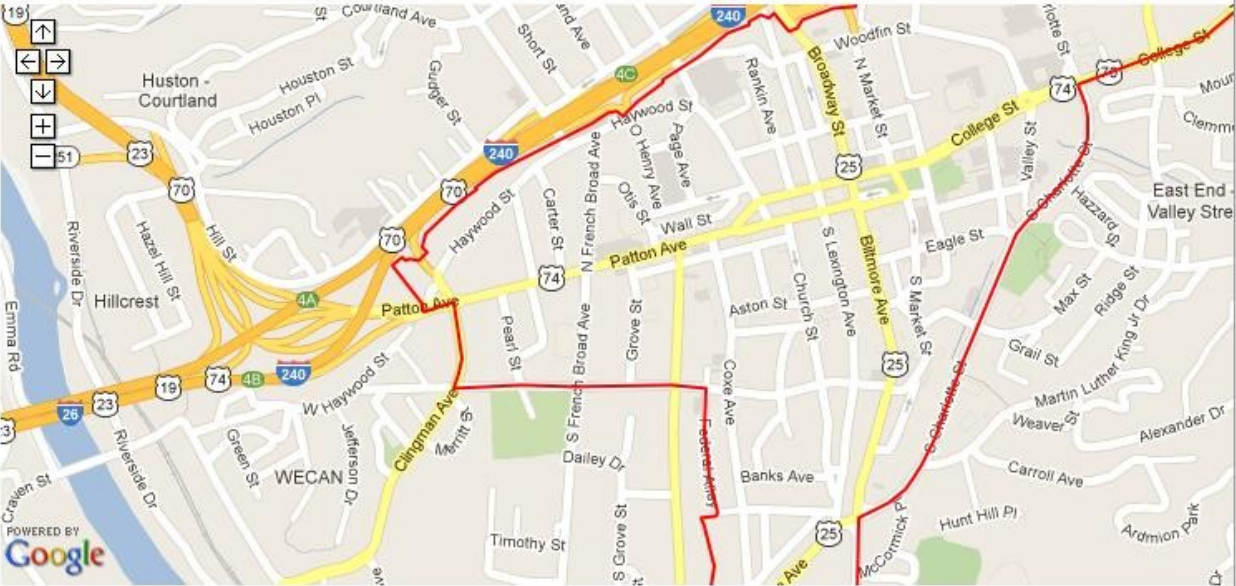
**Customize**

**Map size**

☐ Small  
☐ Medium  
☐ Large  
☒ Custom

Width  Height

**Preview**



View Larger Map

**Copy and paste this HTML to embed in your website**

```
<iframe width="1000" height="350" frameborder="0"
scrolling="no" marginheight="0" marginwidth="0"
src="https://maps.google.com/maps/ms?msa=0&
amp;msid=210182910501613504435.0004cc0985b00ae884aa5
```

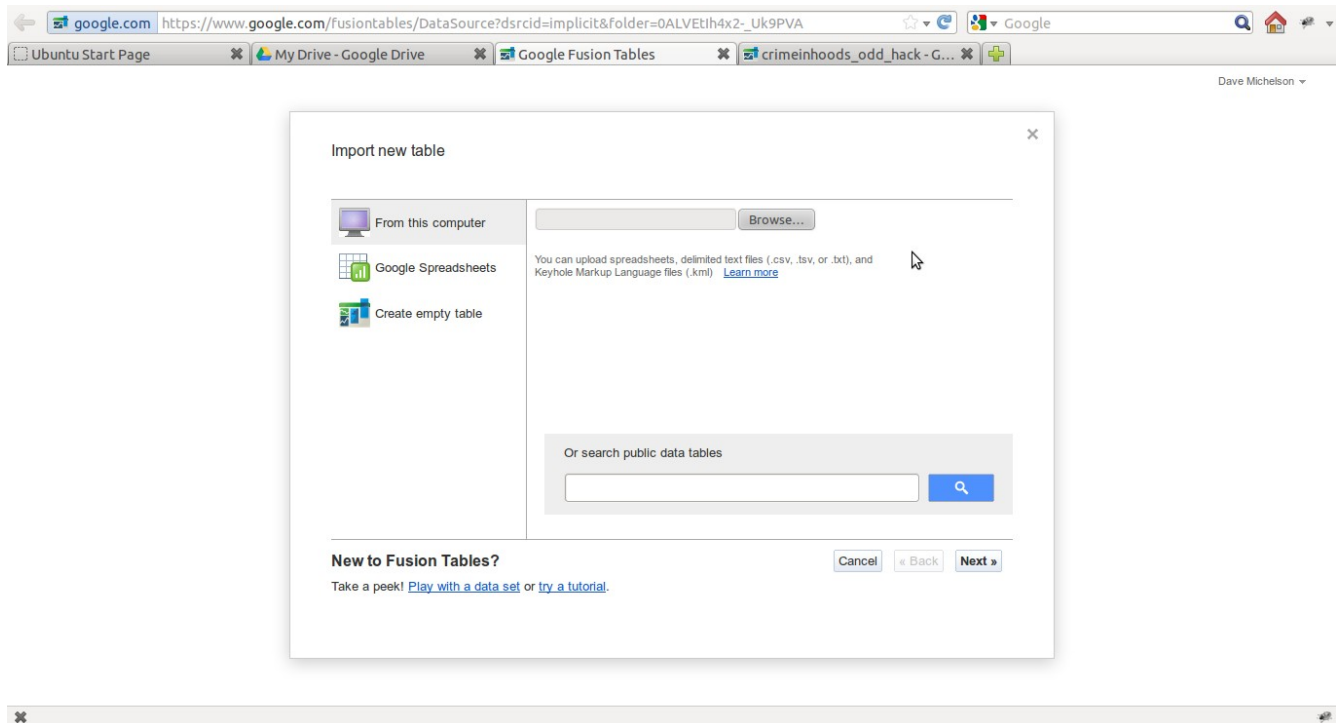
Copy and past the HTML at the bottom

```
<iframe width="1000" height="350" frameborder="0" scrolling="no" marginheight="0"
marginwidth="0" src="https://maps.google.com/maps/ms?
msa=0&msid=210182910501613504435.0004cc0985b00ae884aa5&hl=en&ie=UTF8&
amp;t=m&ll=35.593076,-
82.552428&spn=0.012214,0.042915&z=15&output=embed"></iframe><br
/><small>View <a href="https://maps.google.com/maps/ms?
msa=0&msid=210182910501613504435.0004cc0985b00ae884aa5&hl=en&ie=UTF8&
amp;t=m&ll=35.593076,-
82.552428&spn=0.012214,0.042915&z=15&source=embed"
style="color:#0000FF;text-align:left">Darn</a> in a larger map</small>
```

Goto your Google account and find Documents or Google Drive and add a new fusion table for the crime in hoods....

Fusion tables are under Create then the more choice (my screen shots refused to capture some of this stuff sorry)

Choose to browse a file from computer. It should be named crimeinhoods.csv you may have named it differently which is fine



Use defaults and click next

when the upload is complete click next again

then rename it something like crimeinhoods\_odd\_hack



Import new table

Table name

Allow export ☒

Attribute data to

Attribution page link

Description

For example, what would you like to remember about this table in a year?

New to Fusion Tables?

Take a peek! [Play with a data set](#) or [try a tutorial](#).

Cancel Back Finish

you will have to wait till it uploads to work with it...

after import is complete start you analysis by clicking on the options link

crimeinhoods\_odd\_hack

File View Edit Visualize Merge Labs

Showing all rows [options](#)

1 - 100 of 3774 [Next](#)

pid	source	idnum	casenumber	severity	thedata	ucr
25071544	Arrest	438312	12020076	Felony	2012/10/12	16
25071545	Arrest	438315		Felony	2012/10/12	16
25071546	Arrest	429880	12010919	Felony	2012/04/16	16
25071552	Arrest	430074	12011117	Felony	2012/04/20	16
25071555	Arrest	430140	12011213	Felony	2012/04/22	16
25071560	Arrest	430266	12005140	Felony	2012/04/25	16
25071561	Arrest	430286	20120032	Felony	2012/04/25	16
25071562	Arrest	430365	12011514	Felony	2012/04/25	16
25071567	Arrest	432022	12014480	Felony	2012/05/30	16
25071568	Arrest	432036	12014961	Felony	2012/05/31	16
25071568	Arrest	432081	12015052	Felony	2012/05/31	16
25071570	Arrest	432111	2012-0069	Felony	2012/06/01	16
25071571	Arrest	432151		Felony	2012/06/02	16
25071573	Arrest	432153	12013566	Felony	2012/06/02	16
25071576	Arrest	432196	12015350	Felony	2012/06/03	16
25071576	Arrest	432251	12015463	Felony	2012/06/04	16
25071580	Arrest	432324	12015369	Felony	2012/06/06	16
25071581	Arrest	436225		Felony	2012/06/26	16

add filters for name(neighborhood) = DARN

and agency = APD

crimeinhoods\_odd\_hack

Showing name = 'DARN' AND agency = 'APD' [hide options](#) 1 - 100 of many [Next](#)

Filter Aggregate Create view

name = DARN  
agency = APD

Add condition  
Apply Clear filter

pid	source	idnum	casenumber	severity	thedata	ucr
25071544	Arrest	438312	12028676	Felony	2012/10/12	18
25071548	Arrest	429980	12010919	Felony	2012/04/18	18
25071562	Arrest	430305	12011514	Felony	2012/04/25	18
25071571	Arrest	432151		Felony	2012/06/02	18
25071578	Arrest	432251	12015483	Felony	2012/06/04	18
25071580	Arrest	432324	12015589	Felony	2012/06/06	18
25071588	Arrest	436590	12024561	Felony	2012/06/04	18
25072235	Arrest	429790		Felony	2012/04/14	18
25072237	Arrest	429856	12-009901	Felony	2012/04/18	18
25072258	Arrest	432684	12016349	Felony	2012/06/13	18
25072275	Arrest	433753	12006679	Felony	2012/07/06	18

Then add an aggregate for offense

crimeinhoods\_odd\_hack

Showing name = 'DARN' AND agency = 'APD' [hide options](#) 1 - 100 of many [Next](#)

Filter Aggregate Create view

Show aggregate:

- pid: ☐ sum ☐ average ☐ maximum ☐ minimum
- idnum: ☐ sum ☐ average ☐ maximum ☐ minimum
- casenumber: ☐ sum ☐ average ☐ maximum ☐ minimum
- thedata: ☐ maximum ☐ minimum
- ucr: ☐ sum ☐ average ☐ maximum ☐ minimum
- x: ☐ sum ☐ average ☐ maximum ☐ minimum
- y: ☐ sum ☐ average ☐ maximum ☐ minimum
- edit\_date: ☐ maximum ☐ minimum
- long: ☐ sum ☐ average ☐ maximum ☐ minimum

Aggregated by:

- ☐ pid ☐ source ☐ idnum ☐ casenumber
- ☐ severity ☐ thedata ☐ ucr ☒ offense
- ☐ address ☐ x ☐ y ☐ crimemappe
- ☐ agency ☐ name ☐ nbhd\_id ☐ abbreviati
- ☐ narrative ☐ edit\_date ☐ edit\_by ☐ lat
- ☐ long

Apply Clear aggregation

pid	source	idnum	casenumber	severity	thedata	ucr
25071544	Arrest	438312	12028676	Felony	2012/10/12	18

From the fusion table menu choose visualize pie

Click the get embeddable code button, then the change visibility link, then choose share, and then the level of sharing you want. Open data day would lean towards public!

Click OK

Go back to the embeddable code and change the width to 1000 and height to 350

Copy and paste the HTML to a text editor or HTML editor and make the HTML look nice. I copied to the blog post.

```
<iframe width="1000" height="350" scrolling="no" frameborder="no"
src="https://www.google.com/fusiontables/embedviz?
viz=GVIZ&t=PIE&containerId=gviz_canvas&q=select+col7%2C+count()
+from+1gPnBv0M53W_O3KBY8SwfSaQaGfS7ohZSkEUfpGE+where+col13+
%3D+&#39;DARN&#39;+and+col12+%3D+&#39;APD&#39;&qrs=+and+col7+%3E
%3D+&qre=+and+col7+%3C
%3D+&qe=+group+by+col7+limit+9&width=1000&height=350"></iframe>
```

repeat the copy and paste to the HTML editor or blog post

Go back to the visualize and choose bar.

Repeat the embeddable code process width 1000 and 350 width

```
<iframe width="1000" height="350" scrolling="no" frameborder="no"
src="https://www.google.com/fusiontables/embedviz?
viz=GVIZ&t=BAR&containerId=gviz_canvas&q=select+col7%2C+count()
+from+1gPnBv0M53W_O3KBY8SwfSaQaGfS7ohZSkEUfpGE+where+col13+
%3D+&#39;DARN&#39;+and+col12+%3D+&#39;APD&#39;&qrs=+and+col7+%3E
%3D+&qre=+and+col7+%3C
%3D+&qe=+group+by+col7+limit+9&att=true&width=1000&height=335"></ifra
me>
```

I found that the bar code did not sort by the count so I hacked it and added the syntax. See the addition in red below.

```
<iframe width="1000" height="350" scrolling="no" frameborder="no"
src="https://www.google.com/fusiontables/embedviz?
viz=GVIZ&t=BAR&containerId=gviz_canvas&q=select+col7%2C+count()
+from+1gPnBv0M53W_O3KBY8SwfSaQaGfS7ohZSkEUfpGE+where+col13+
%3D+&#39;DARN&#39;+and+col12+%3D+&#39;APD&#39;&qrs=+and+col7+%3E
%3D+&qre=+and+col7+%3C%3D+&qe=+group+by+col7+order+by+count()
+limit+9&att=true&width=1000&height=335"></iframe>
```

repeat the copy and paste to the HTML editor or blog post

Go to the aggregate again and change the aggregate from offense to the date. Change the visualize to line and get the embeddable code the same way



```
<iframe width="1000" height="350" scrolling="no" frameborder="no"
src="https://www.google.com/fusiontables/embedviz?
viz=GVIZ&t=LINE&containerId=gviz_canvas&isXyPlot=true&q=select+col5%2
C+count()+from+1gPnBv0M53W_O3KBY8SwfSaQaGfS7ohZSkEUfpGE+where+col13+
%3D+&#39;DARN&#39;+and+col12+%3D+&#39;APD&#39;&qrs=+and+col5+%3E
%3D+&qre=+and+col5+%3C
%3D+&qe=+group+by+col5+order+by+col5+asc+limit+250&att=true&width=1000&a
mp;height=335"></iframe>
```

Again I noticed that the syntax did some things I did not like - it left out some months at the end of the graph. I hacked it like below. Change is in red.

```
<iframe width="1000" height="350" scrolling="no" frameborder="no"
src="https://www.google.com/fusiontables/embedviz?
viz=GVIZ&t=LINE&containerId=gviz_canvas&isXyPlot=true&q=select+col5%2
C+count()+from+1gPnBv0M53W_O3KBY8SwfSaQaGfS7ohZSkEUfpGE+where+col13+
%3D+&#39;DARN&#39;+and+col12+%3D+&#39;APD&#39;&qrs=+and+col5+%3E
%3D+&qre=+and+col5+%3C
%3D+&qe=+group+by+col5+order+by+col5+asc+limit+10000&att=true&width=1000
&height=335"></iframe>
```

repeat the copy and paste to the HTML editor or blog post

Now add a new filter for offense. Start with Drug Arrest then Larceny, and then Vandalism

in each instance I hacked the limit to 10000 to force the graph to show all dates. ...

For the maps remove the aggregates you need the lat and long fields, which aggregation leaves off. Fusion tables auto-magically recognizes the field lat and long fields as location so you should be good.

You will also need to add another filter for date. Dates are formatted like 2011/10/29 in the data to replicate may maps. Then visualize and map. It should be auto-magic.

I followed the same principle for each map as the charts. I changed the width to 1000 and height to 350. Got the embedded link and repeated the copy and paste to the HTML editor or blog post.

For the map notice the check box that says display as heat map and click it. The embedded link will use that option. Got the embedded link and repeated the copy and paste to the HTML editor or blog post.

For the blog I used the blogger simple template and removed all the extra stuff. And made the the width 1200. Since this is a hack you should hack it to what you want and do exactly what I did!

Then I added the pasted HTML from above into the blog. Saved and published viola, somewhat simple hack on Open Data from Asheville.

My complete HTML that I am using on the blog post is on git hub at:

[https://github.com/davecoa/OpenDataDayHack/blob/master/odd\\_example\\_hack\\_post.html](https://github.com/davecoa/OpenDataDayHack/blob/master/odd_example_hack_post.html)

feel free to use it and play with the settings and hack you own!