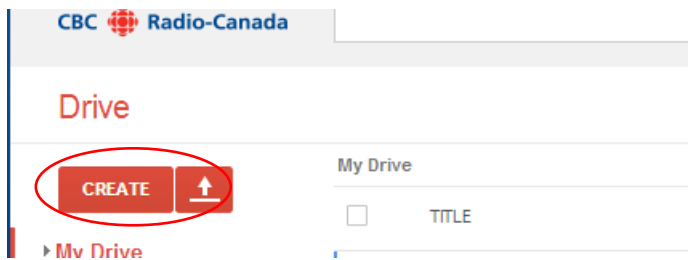


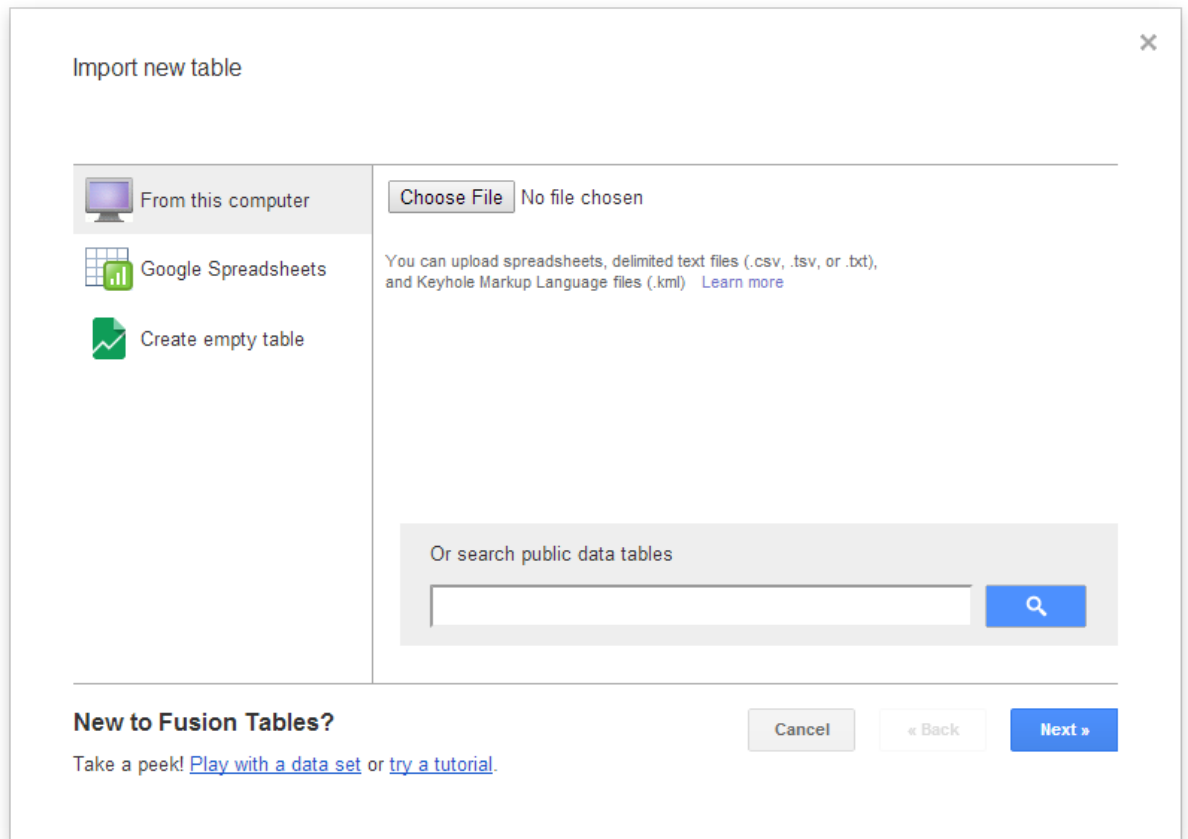
## Tutorial for mapping revoked charities

Learning pivot tables has set us up nicely for visualization and mapping, both of which are different ways of seeing the data you've summarized. For this tutorial, we'll use the [data set](#) of charities that have had their status revoked "for cause". This is the same data set we used during the Feb. 12 class.

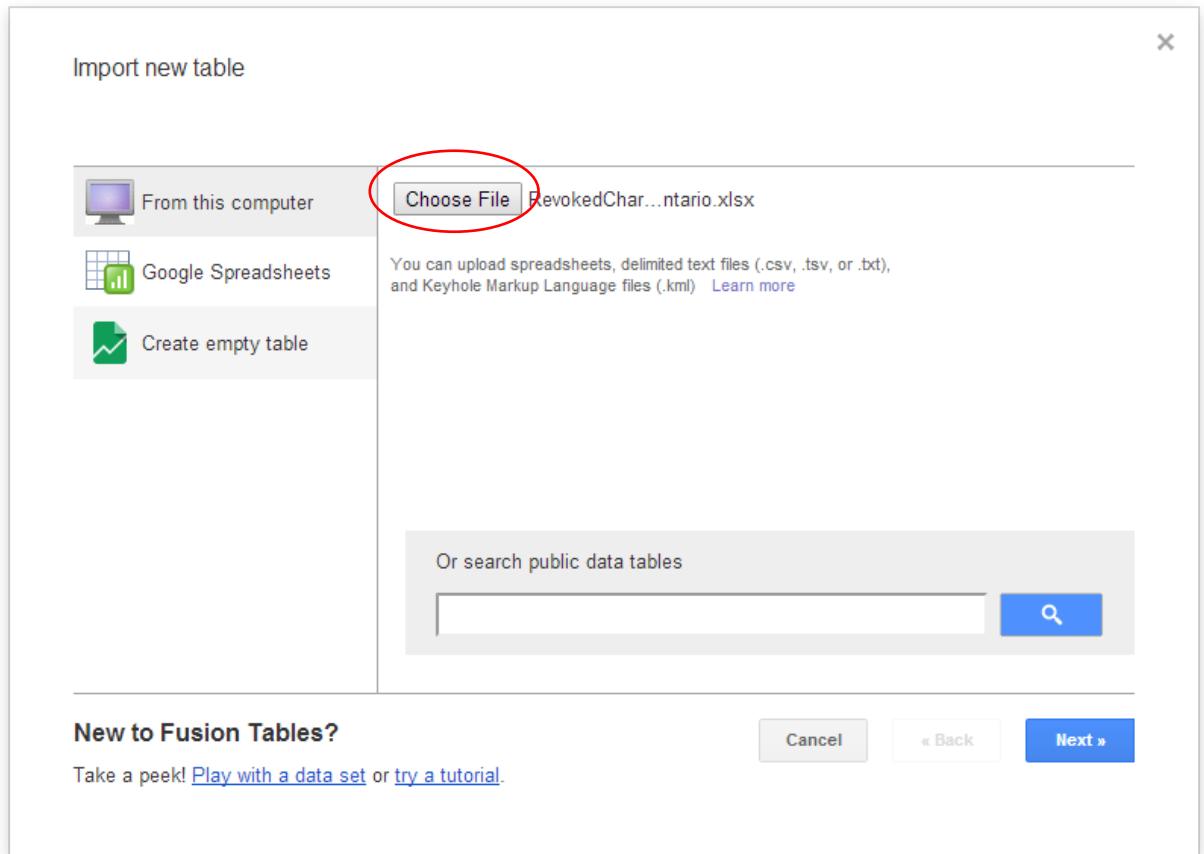
- 1) If you haven't done so already, download the data and save it in a folder.
- 2) Go to your Google Drive and select the "Create".



- 3) Select the green Fusion Table icon, which produces an import dialog box.



4) Select the “Choose File” tab to upload your Excel table.



5) Once you've chosen the file, choose the "Next" tab.

Import new table

Column names are in row 1

1	ID	Charity Name	Charity Status	Effect... Date of Status	Year	Sanct...	Desig... code	Cate... code
2	82078...	Am Echad Congr...	Revoked - For Cause	5/5/2012	2012		C	42
3	86091...	Asso... Nord-Sud solida... / Asso... Nort...	Revoked - For Cause	1/21/2...	2012		C	9
4	11877...	ABAR... SEDH	Revoked For	6/9/2001	2001		C	20

Rows before the header row will be ignored.

**New to Fusion Tables?**  
Take a peek! [Play with a data set](#) or [try a tutorial](#).

Cancel « Back **Next »**

6) You'll notice that Fusion Tables automatically assumes that the table's first row contains the headings. If this is the case ( as it is in this instance ), then leave column row as number one. If not, choose another number from the drop-down menu.

7) Select the “Next” tab.

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?** [Play with a data set](#) or [try a tutorial](#)

Cancel « Back **Finish**

8) To rename the file, plug in a new title to the right of the “Table name” option. You can also put more details into the “Description” box if there is specific reason to do so. You will be the only one to see this description.

9) Select the “Finish” tab to produce the table.

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File Edit Tools Help Rows 1 Cards 1 Map of City

Filter No filters applied

1-100 of 236

ID	Charity Name	Charity Status	Effective Date of Status	Year	Sanction	Designati...	Catego...	Address	City	Province	Count
820787091RR0001	Am Echad Congregation	Revoked - For Cause	5/5/2012	2012		C	42	516 BINNS AVE	NEWMARKET	ON	CA
860919174RR0001	Association Nord-Sud solidarité / Association North-South Solidarity	Revoked - For Cause	1/21/2012	2012		C	9	2743 VICTO PARK AVEN... SUITE 1005	TORONTO	ON	CA
118775899RR0001	ABARBANEL SEPHARDIC LEARNING CENTRE	Revoked - For Cause	6/9/2001	2001		C	20	2 KNED... AVE.	NORTH YORK	ON	CA
891579195RR0001	ACTIVE CHRISTIANS TAKING A STAND	Revoked - For Cause	5/16/2009	2009		C	9	6260 MONT... ROAD, SUITE 1	MISSISSAUGA	ON	CA
874923709RR0001	ADZENA FUND CANADA	Revoked - For Cause	9/15/2007	2007		C	29	358 DANF... AVEN... SUITE 160	TORONTO	ON	CA
896565934RR0001	AFGHAN REFUGEE AID COMMITTEE (ARAC)	Revoked - For Cause	6/14/2003	2003		C	9	BOX 53625 WEST... POSTAL OUTL... KING... ROAD	SCARBOROUGH	ON	CA
863169231RR0001	AFRICA DISASTER RELIEF INITIATIVE	Revoked - For Cause	10/13/2007	2007		C	9	301-310 NISKA ROAD	TORONTO	ON	CA
864779806RR0001	AFRICAN FOUNDATION FOR DEVELOPMENT CANADA (AFFD CANADA)	Revoked - For Cause	11/25/2006	2006		C	9	140 ADAN... DRIVE UNIT	TORONTO	ON	CA

10) The cities in the “City” column are highlighted in yellow because Fusion Tables assumes these are the values you want to geocode.

11) Instead, we want to geocode the Postal Code column.

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File Edit Tools Help Rows 1 Cards 1 Map of City

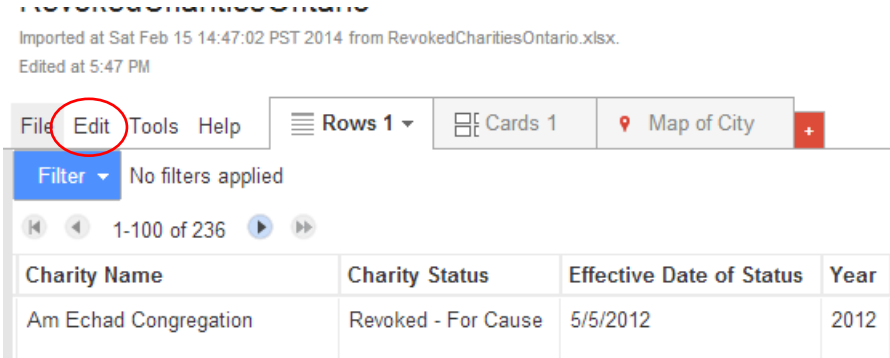
Filter No filters applied

1-100 of 236

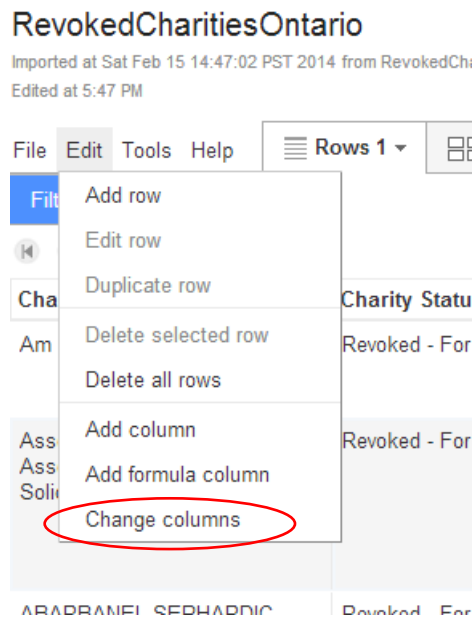
Charity Name	Charity Status	Effective Date of Status	Year	Sanction	Designati...	Catego...	Address	City	Province	Country	Postal Code/Z...
Am Echad Congregation	Revoked - For Cause	5/5/2012	2012		C	42	516 BINNS AVE	NEWMARKET	ON	CA	L3X1T8
Association Nord-Sud solidarité / Association North-South Solidarity	Revoked - For Cause	1/21/2012	2012		C	9	2743 VICTO... PARK AVEN... SUITE 1005	TORONTO	ON	CA	M1T1A8
ABARBANEL SEPHARDIC LEARNING CENTRE	Revoked - For Cause	6/9/2001	2001		C	20	2 KNED... AVE.	NORTH YORK	ON	CA	M6A2G2
ACTIVE CHRISTIANS TAKING A STAND	Revoked - For Cause	5/16/2009	2009		C	9	6260 MONT... ROAD, SUITE 1	MISSISSAUGA	ON	CA	L5N4E9
ADZENA FUND CANADA	Revoked - For Cause	9/15/2007	2007		C	29	358 DANF... AVEN... SUITE 160	TORONTO	ON	CA	M4K1N8
AFGHAN REFUGEE AID	Revoked - For Cause	6/14/2003	2003		C	9	BOX ...	SCARBOROUGH	ON	CA	M1E5G2

12) But first, we have to tell Fusion Tables to identify the values in the postal code column as geographic “location”, rather than a simple text.

13) Let’s to go to the “Edit” option in the menu.



14) Choose the “Change columns” option.



15)

- 16) The “Change columns” option produces a dialog box with the fields and the “Type” of data they contain.

Change columns

ID	Type
Charity Name	Text
Charity Status	Text
Effective Date of Status	Date/Time
Year	Date/Time
Sanction	Text
Designation code	Text
Category code	Number
Address	Text
City	Location
Province	Text
Country	Text
Postal Code/Zip Code	Text

Name: ID

Description:

Type: Text

Format: None

Data entry [Learn more](#)

Validate data

List of drop-down items:

Save Cancel

- 17) Select "Postal Code/Zip Code", get the drop-down menu in the "Type" section to the right.

Change columns

Column Name	Type
ID	Text
Charity Name	Text
Charity Status	Text
Effective Date of Status	Date/Time
Year	Date/Time
Sanction	Text
Designation code	Text
Category code	Number
Address	Text
City	Location
Province	Text
Country	Text
<b>Postal Code/Zip Code</b>	↑↓×

Name: Postal Code/Zip Code

Description:

Type:

- Text
- Number
- Location
- Date/Time

Data entry [Learn more](#)

Validate data

List of drop-down items:

Save Cancel

- For Cause 10/13/2007 2007 C 9 301-310 NISKA TORONTO



18) Choose "Location"...

Change columns

ID	Text
Charity Name	Text
Charity Status	Text
Effective Date of Status	Date/Time
Year	Date/Time
Sanction	Text
Designation code	Text
Category code	Number
Address	Text
City	Location
Province	Text
Country	Text
Postal Code/Zip Code	↑↓×

Name: Postal Code/Zip Code

Description:

Type: **Location**

Two column location

Latitude: Postal Code/Zip Code

Longitude: ID

Format: None

Data entry [Learn more](#)

**Save** Cancel

.... and then save the result.

19) Now Fusion Tables has highlighted the postal codes in yellow, meaning that it recognizes them as location data.

Filter ▾ No filters applied

1-100 of 236

Charity Name	Charity Status	Effective Date of Status	Year	Sanction	Designati...	Catego...	Address	City	Province	Country	Postal Code/Z
Am Echad Congregation	Revoked - For Cause	5/5/2012	2012		C	42	516 BINNS AVE	NEWMARKET	ON	CA	L3X1T8
Association Nord-Sud solidarité / Association North-South Solidarity	Revoked - For Cause	1/21/2012	2012		C	9	2743 VICTO... PARK AVEN... SUITE 1005	TORONTO	ON	CA	M1T1A8
ABARBANEL SEPHARDIC LEARNING CENTRE	Revoked - For Cause	6/9/2001	2001		C	20	2 KNED... AVE.	NORTH YORK	ON	CA	M6A2G2
ACTIVE CHRISTIANS TAKING A STAND	Revoked - For Cause	5/16/2009	2009		C	9	6260 MONT... ROAD, SUITE 1	MISSISSAUGA	ON	CA	L5N4E9
ADZENA FUND CANADA	Revoked - For Cause	9/15/2007	2007		C	29	358 DANF... AVEN... SUITE 160	TORONTO	ON	CA	M4K1N8
AFGHAN REFUGEE AID COMMITTEE (ARAC)	Revoked - For Cause	6/14/2003	2003		C	9	BOX 53625 WEST...	SCARBOROUGH	ON	CA	M1E5G2

20) Go to the menu's "File" section and select the "Geocode" option from the drop-down menu.

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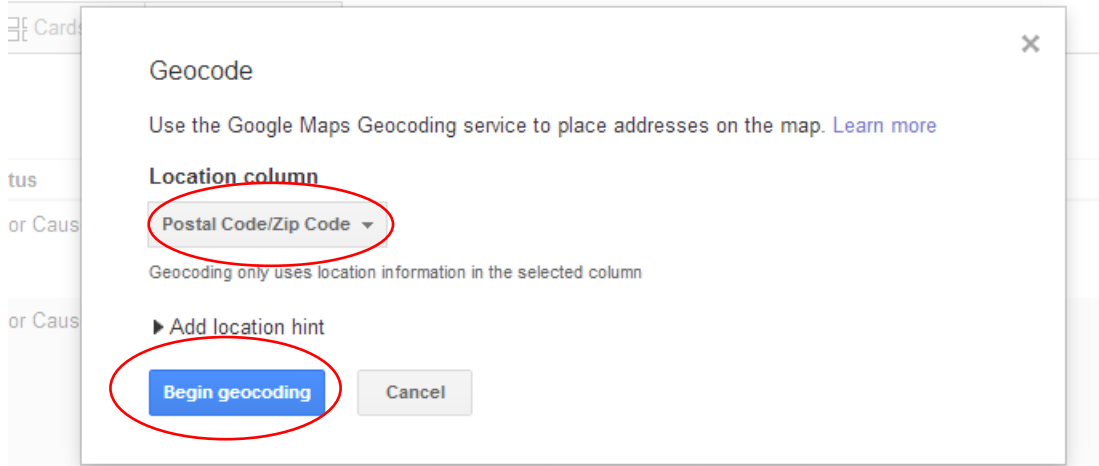
File Edit Tools Help Rows 1 Cards 1 Map of City

- Share...
- New table...
- Open...
- Rename...
- Make a copy
- About this table
- Geocode...**
- Merge...
- Find a table to merge with...
- Create view...
- Import more rows...
- Download...

Charity Status	Effective Date of Status	Year	Sanction	Designati...	Catego...	Address	City	Province	Country	Postal C
Revoked - For Cause	5/5/2012	2012		C	42	516 BINNS AVE	NEWMARKET	ON	CA	L3X1T8
Revoked - For Cause	1/21/2012	2012		C	9	2743 VICTO... PARK AVEN... SUITE 1005	TORONTO	ON	CA	M1T1A8
Revoked - For Cause	6/9/2001	2001		C	20	2 KNED... AVE.	NORTH YORK	ON	CA	M6A2G2
Revoked - For Cause	5/16/2009	2009		C	9	6260 MONT...	MISSISSAUGA	ON	CA	L5N4E9

21) We want Fusion Tables to geocode the post codes, which are among the best geographic locators behind longitude and latitude. Be sure to select the "Postal Code" column from the drop-down menu in the dialogue

box.



- 22) Begin Geocoding. The process will take a few minutes, so be patient.
- 23) Once you're returned to the table view, select the "Map of City" tab to the top right to see the result in a map.

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Edited at 6:01 PM

File Edit Tools Help Rows 1 Cards 1 **Map of City**

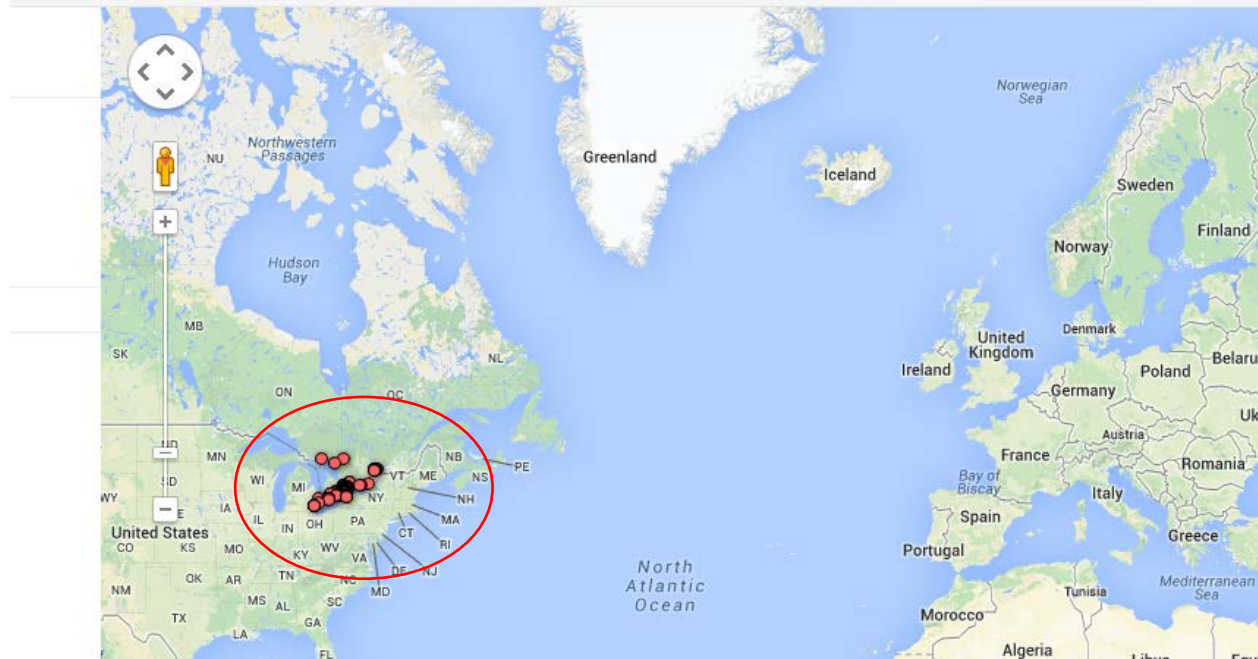
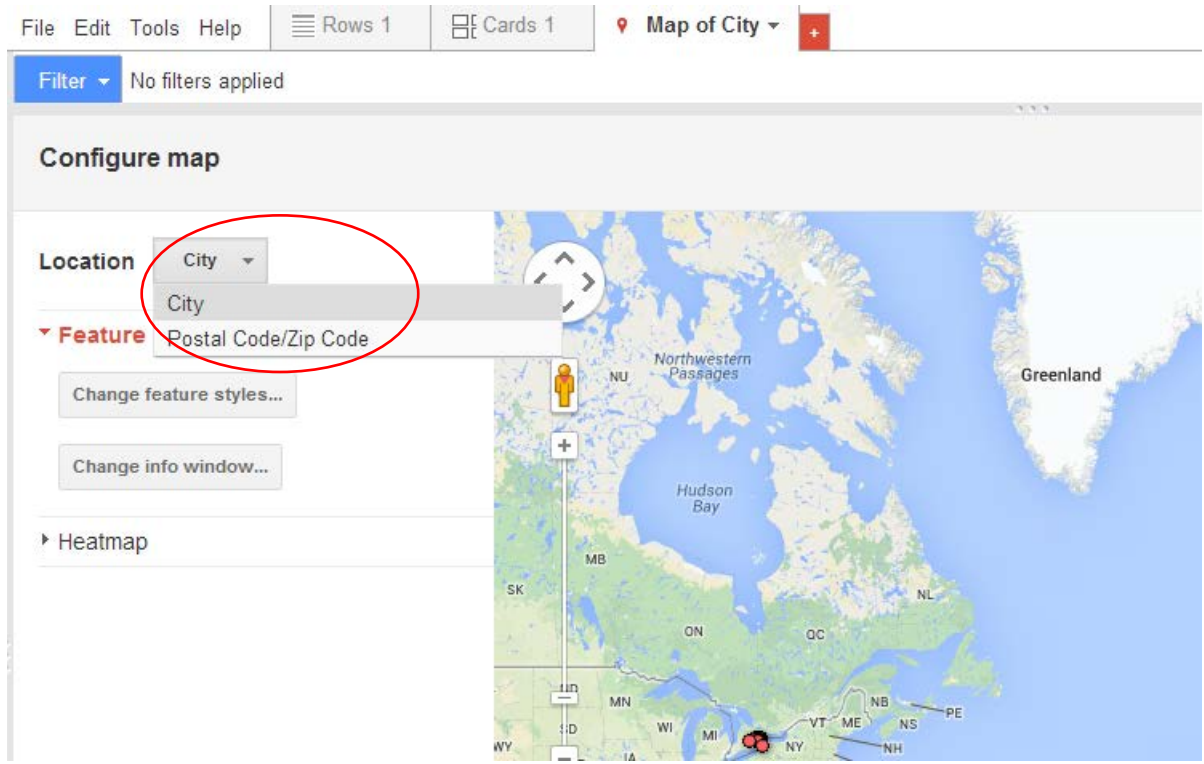
Filter No filters applied

1-100 of 236

Charity Name	Charity Status	Effective Date of Status	Year	Sanction	Designati...	Catego...	Address	City
Am Echad Congregation	Revoked - For Cause	5/5/2012	2012		C	42	516 BINNS AVE	NEWMARKET
Association Nord-Sud solidarité / Association North-South Solidarity	Revoked - For Cause	1/21/2012	2012		C	9	2743 VICTO... PARK AVEN... SI IITE	TORONTO

- 24) Once again, patience is required to allow for a bit more geocoding.

25) When the map appears, be sure to select the Postal Code field as the "Location".

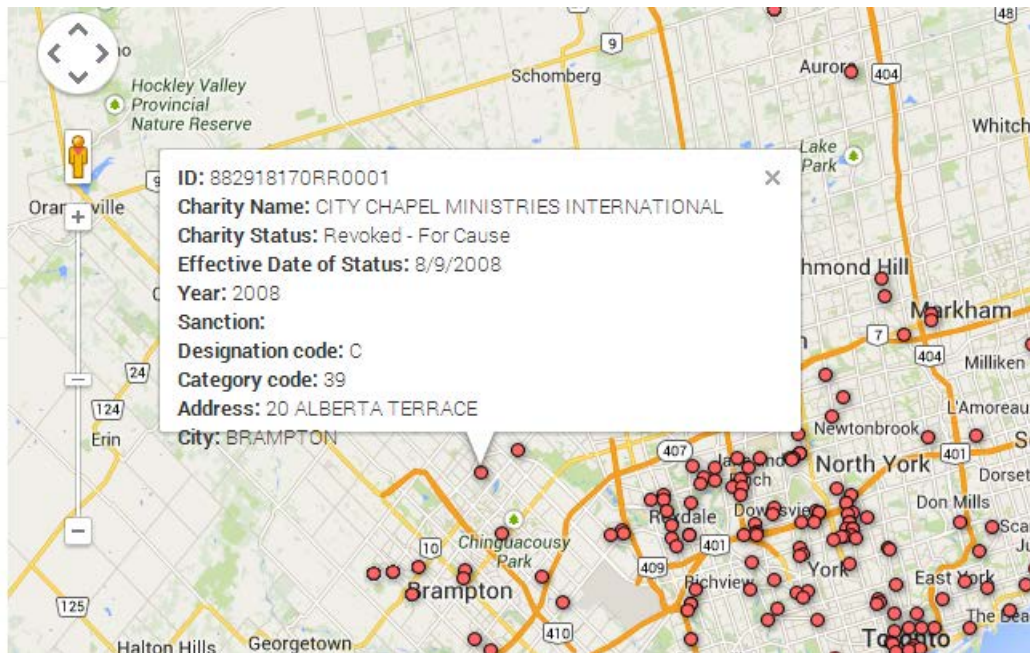


26)

27) Zoom in to see the result.



28) Click on any of the red dots to produce the pop-up box.



29) You'll notice that the data is from one row in the Excel table. The box is too crowded, making it too difficult to read. One of the tricks with mapping is to *only* give people the information they need. In this case, we could de-select some of the columns. To do this, let's go to the "Change



info window” tab to the left of the map.

Location

▼ Feature map

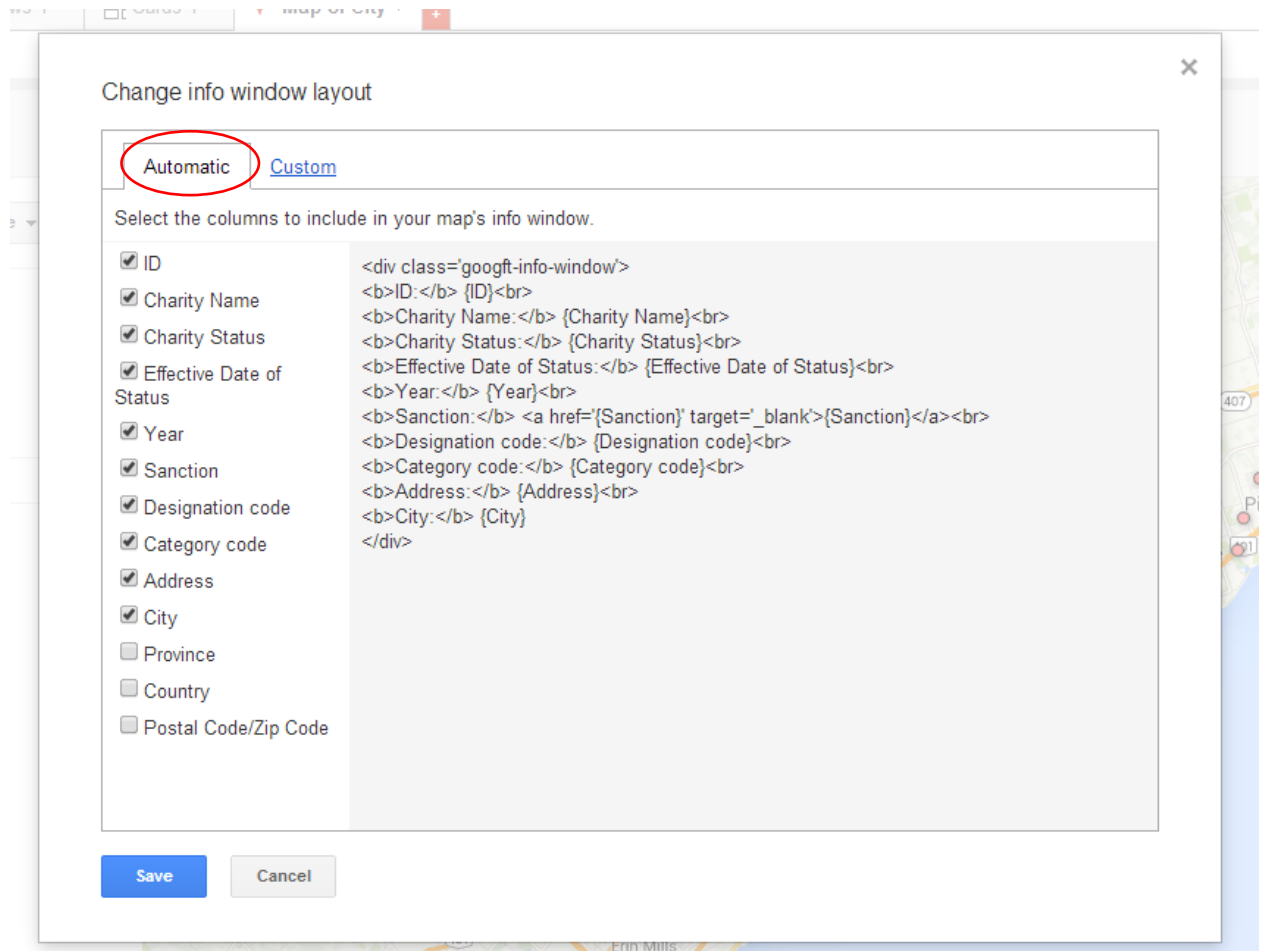
Change feature styles...

Change info window...

► Heatmap

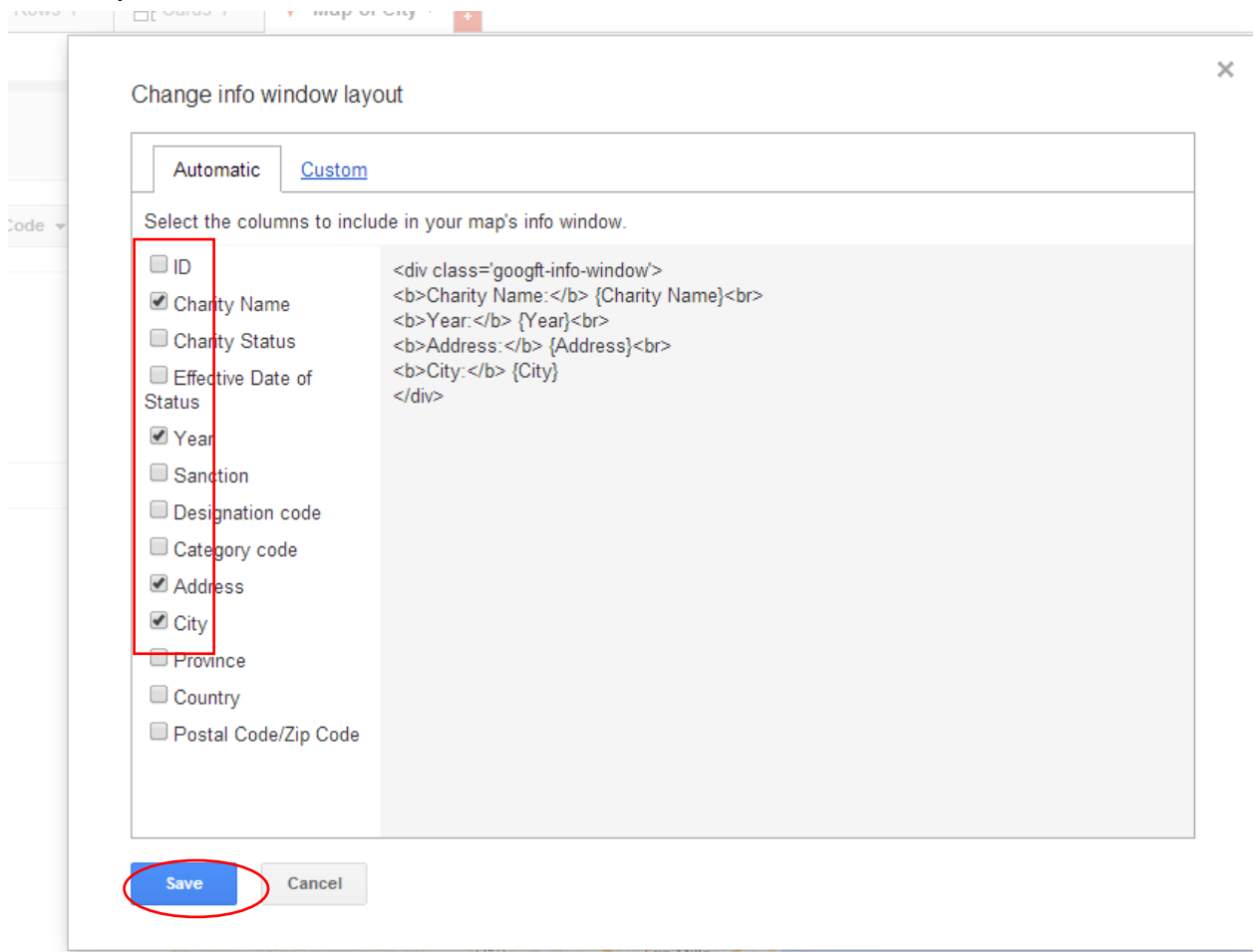
The image shows a map interface with a sidebar on the left and a map on the right. The sidebar has a 'Location' section with a 'Postal Code/Zip Code' input field. Below it is a 'Feature map' section with a red arrow pointing down, containing two buttons: 'Change feature styles...' and 'Change info window...'. The 'Change info window...' button is circled in red. Below the sidebar is a 'Heatmap' section with a right-pointing arrow. The map on the right shows a street view of Brampton, Ontario, with a red pin. An information window is open over the pin, displaying the following text: ID: 882918170RR0001, Charity Name: CITY CHAPEL MINISTRIES INTERNATIONAL, Charity Status: Revoked - For Cause, Effective Date of Status: 8/9/2008, Year: 2008, Sanction:, Designation code: C, Category code: 39, Address: 20 ALBERTA TERRACE, City: BRAMPTON.

30) Selecting the “Change info window” tab will produce a dialog box.

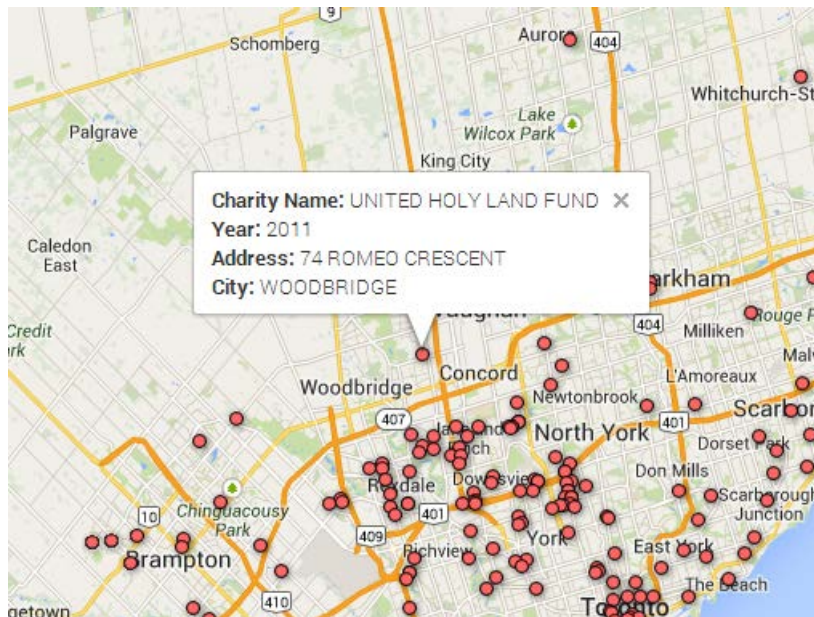


31) De-select the extraneous columns, leaving only the ones you want people to see. I've narrowed my selection to Charity Name, Year, Address

and City.



32) Select save and return to the map to see the result.





- 33) You can also change some of the actual column names. To do this, let's return to the "Change info window" section and choose the "Custom" tab.



Change info window layout x

[Automatic](#) **Custom**

Write the HTML for your info window with column placeholders like {column name}. [Learn more](#)

ID	<code>&lt;div class='googft-info-window'&gt;</code>
Charity Name	<code>&lt;b&gt;Charity Name:&lt;/b&gt; {Charity Name}&lt;br&gt;</code>
Charity Status	<code>&lt;b&gt;Year:&lt;/b&gt; {Year}&lt;br&gt;</code>
Effective Date of Status	<code>&lt;b&gt;Address:&lt;/b&gt; {Address}&lt;br&gt;</code>
Year	<code>&lt;b&gt;City:&lt;/b&gt; {City}</code>
Sanction	<code>&lt;/div&gt;</code>
Designation code	
Category code	
Address	
City	
Province	
Country	
Postal Code/Zip Code	

- 34) The column names that can be changed are located to the left of the colon. All the information to the right must be left as is. So, let's say that we wanted to add more precision to the "Year" field by changing it to "The Year status was revoked". Replace the "Year" with that phrase, save the

result, and return to the map.

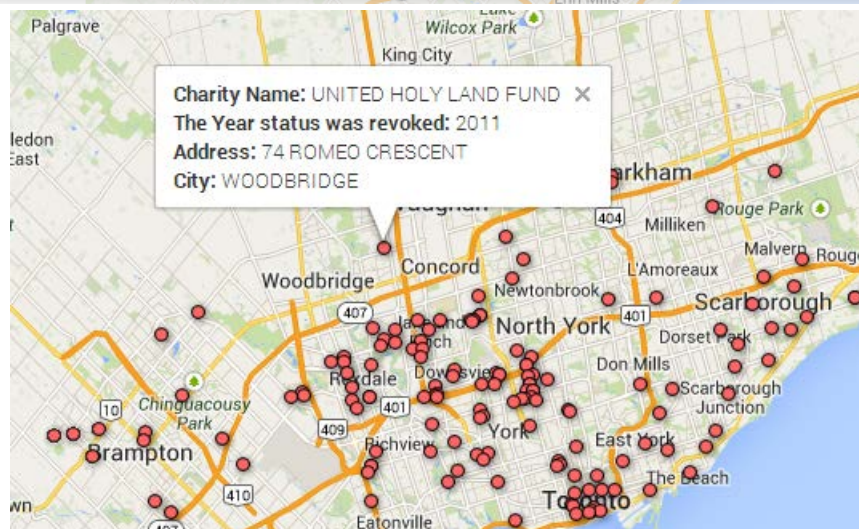
Change info window layout

[Automatic](#) Custom

Write the HTML for your info window with column placeholders like {column name}. [Learn more](#)

ID	<code>&lt;div class='google-info-window'&gt;</code>
Charity Name	<code>&lt;b&gt;Charity Name:&lt;/b&gt; {Charity Name}&lt;br&gt;</code>
Charity Status	<code>&lt;b&gt;The Year status was revoked:&lt;/b&gt; {Year}&lt;br&gt;</code>
Effective Date of Status	<code>&lt;b&gt;Address:&lt;/b&gt; {Address}&lt;br&gt;</code>
Year	<code>&lt;b&gt;City:&lt;/b&gt; {City}</code>
Sanction	<code>&lt;/div&gt;</code>
Designation code	
Category code	
Address	
City	
Province	
Country	
Postal Code/Zip Code	

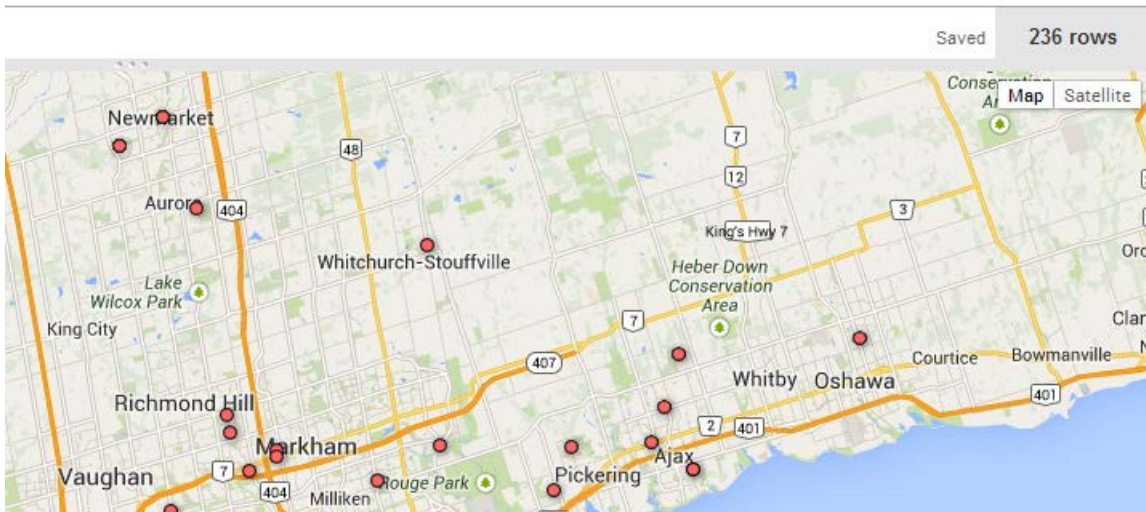
Save Cancel



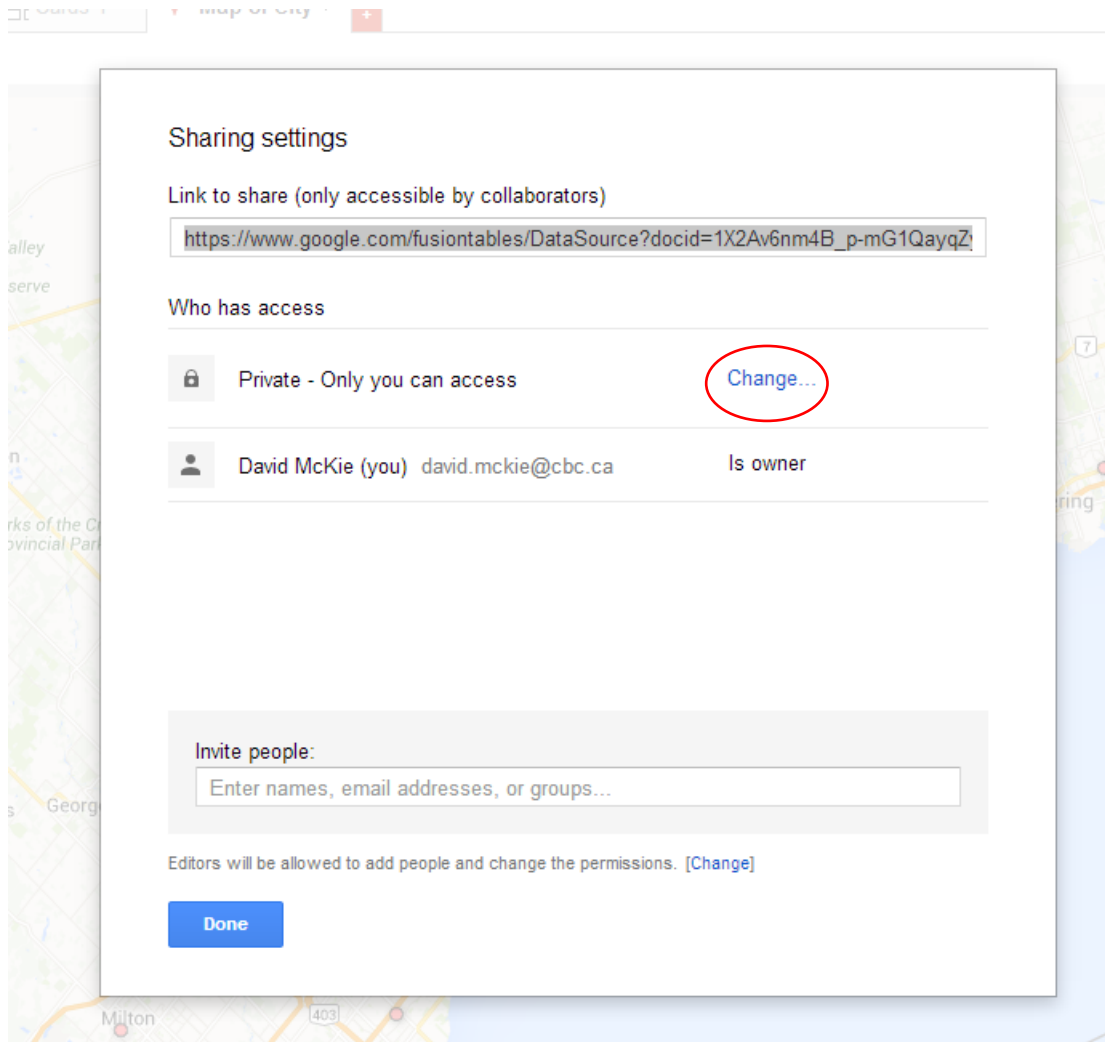
35)

36) If you're happy with the overall result, select the "Done" tab at the top right of the map.

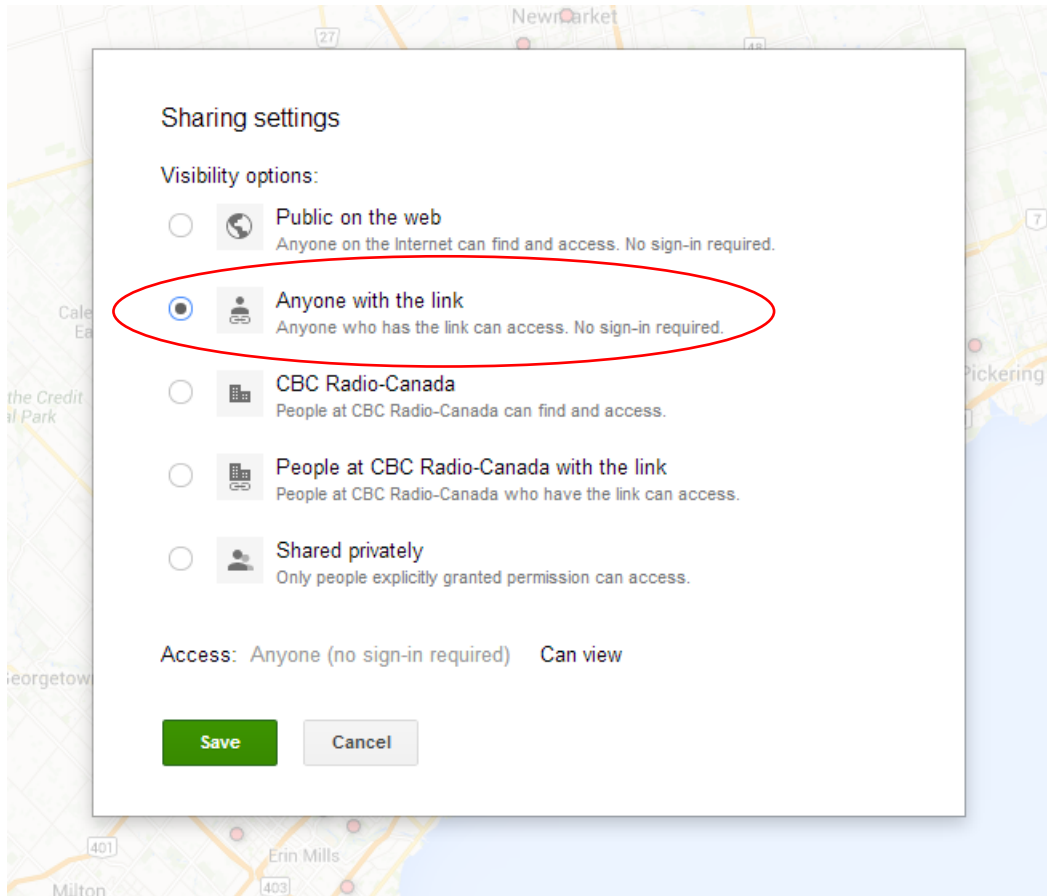
- 37) Now we want others to see this. To make that happen, we'll have to "Share" it.
- 38) Select the Share tab to the top right.



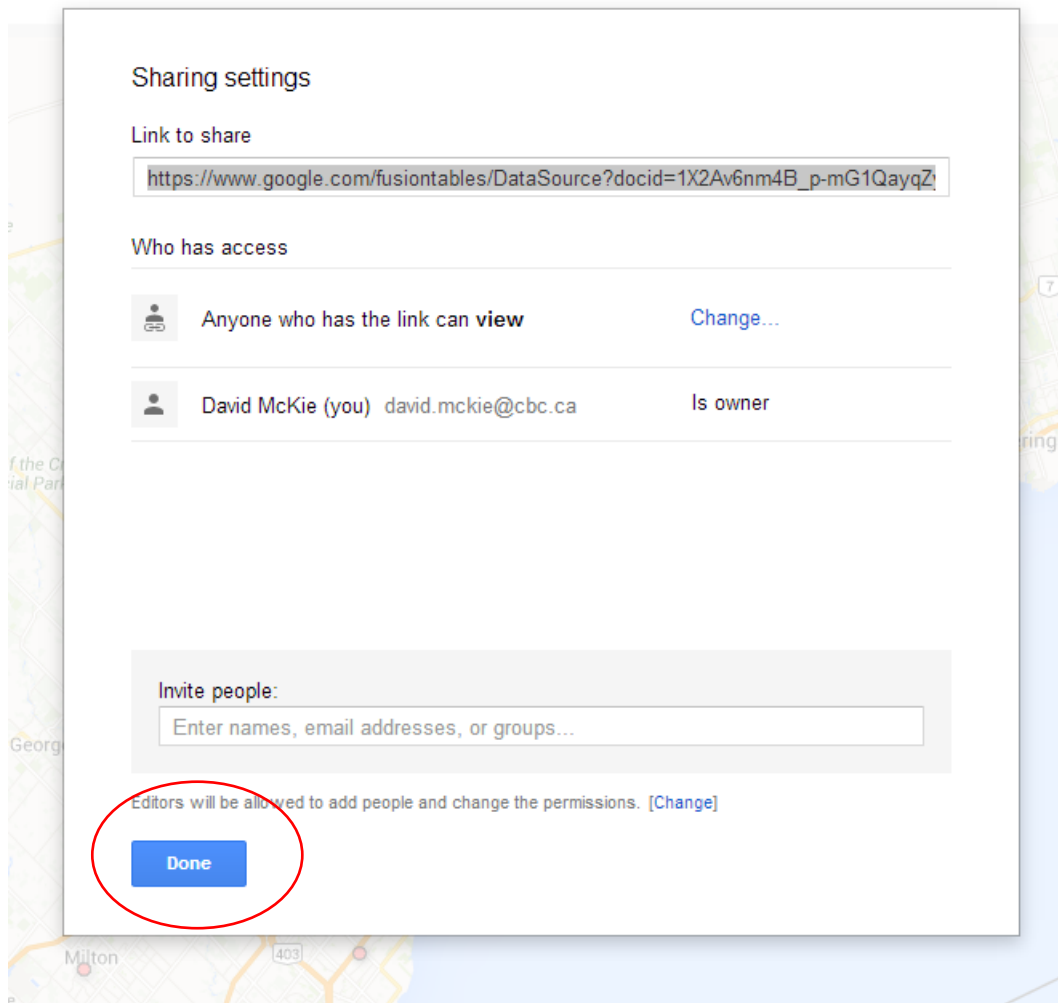
39) You'll see a dialog box.



40) Select the “Change” link to find an alternative setting to “Private”.

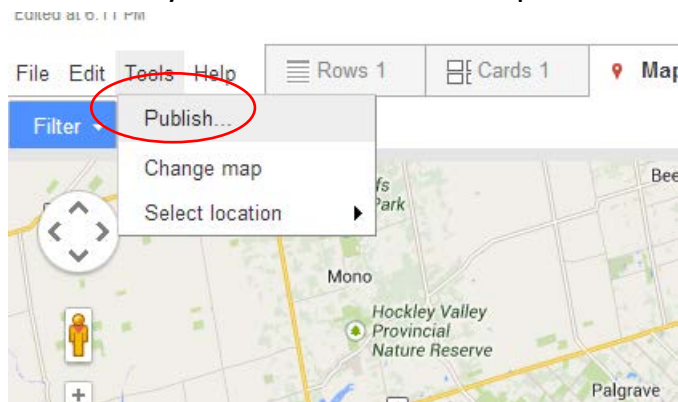


- 41) Select “Anyone with the link” option and save the result.

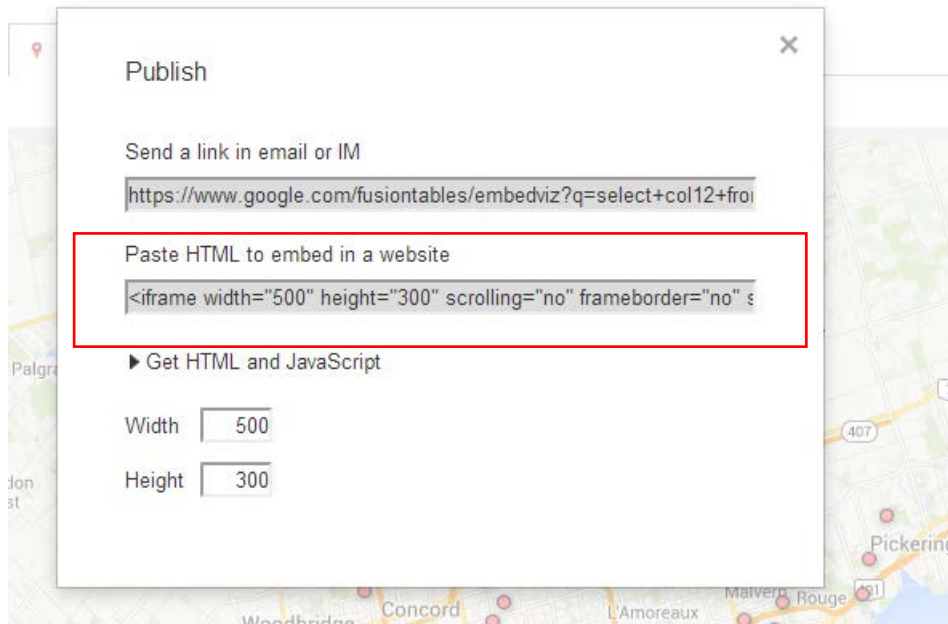


- 42) Select the “Done” tab to return to the map.

- 43) To obtain the embed code to place the map in your blog post, go to “Tools” in your menu cross the top.



44) Select the “Publish” option.

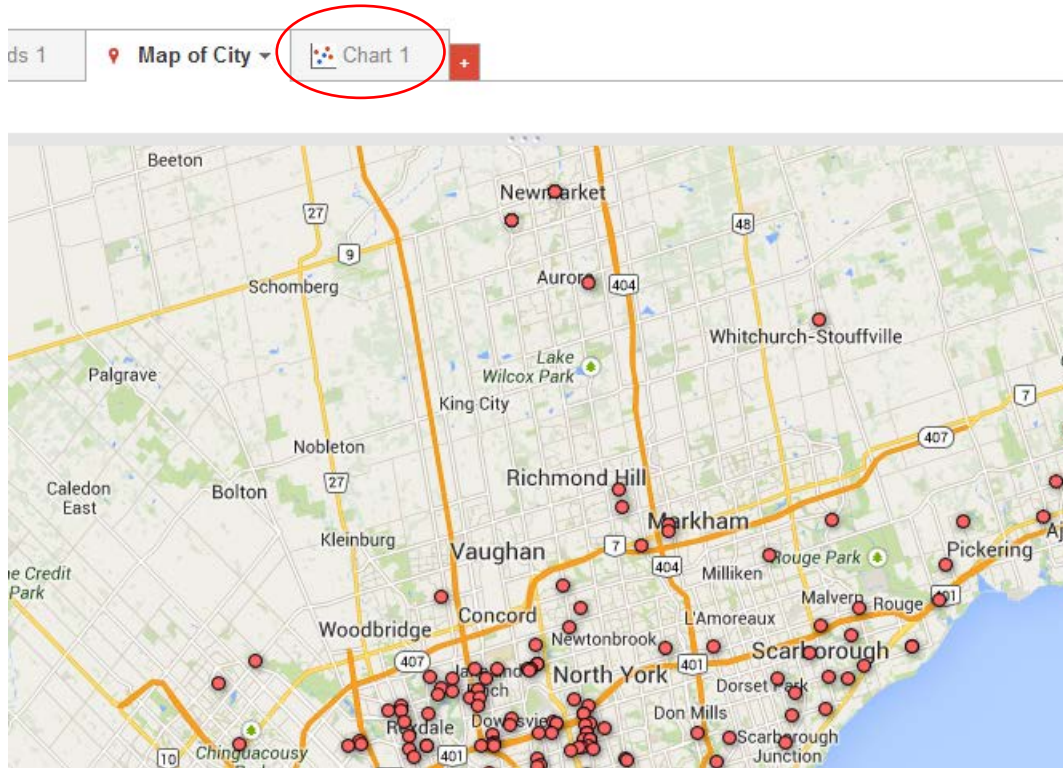


45) You can change the map’s dimensions. But if you’re happy with the default dimensions, select the embed code and paste it into your blog post’s page with the html code.

46) So that’s it for a map. What if we also wanted to produce a chart? This is also an option, and an important one because Fusion Tables also uses charts to visualize data, which is handy, especially for tables that don’t have geographic coordinates.

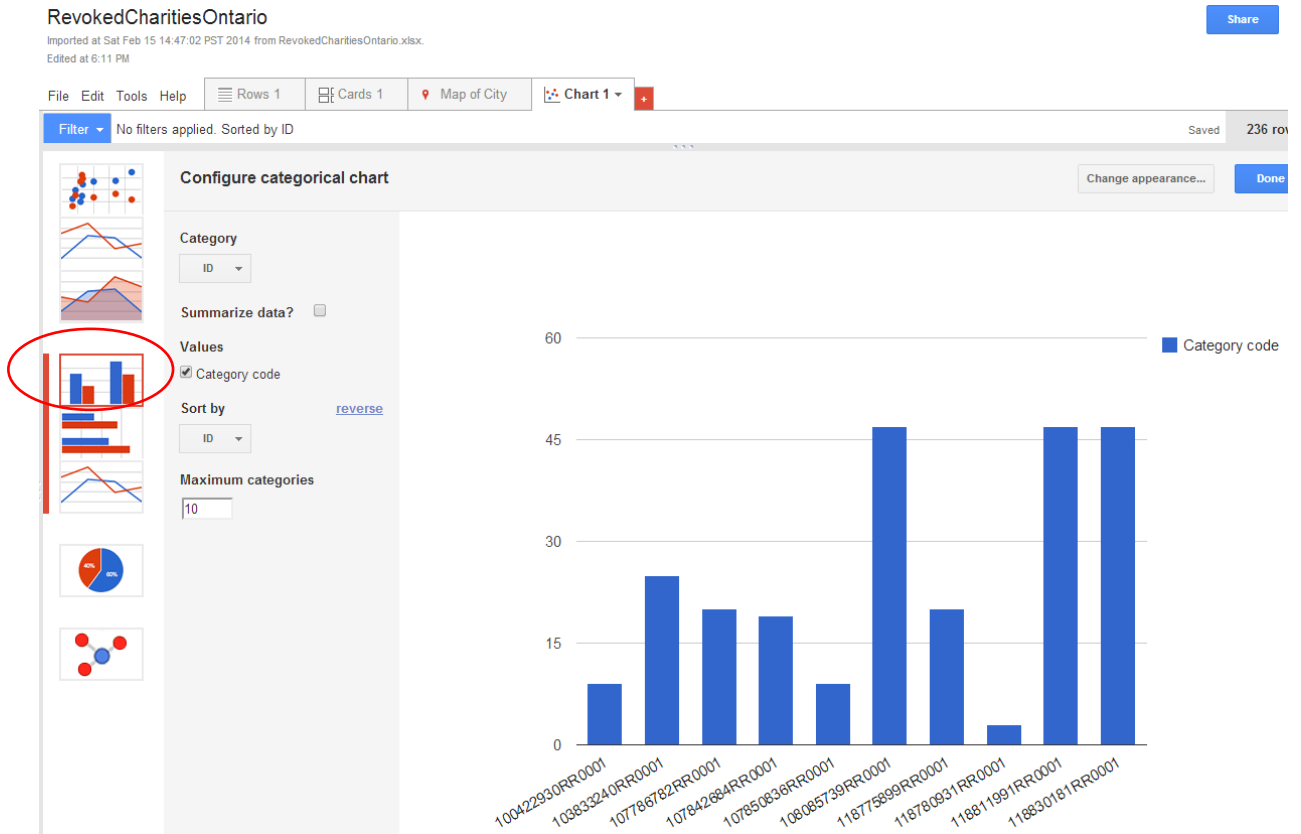


47) Click on the red box with the cross to the bottom right of the Map of City tab, and select Chart.



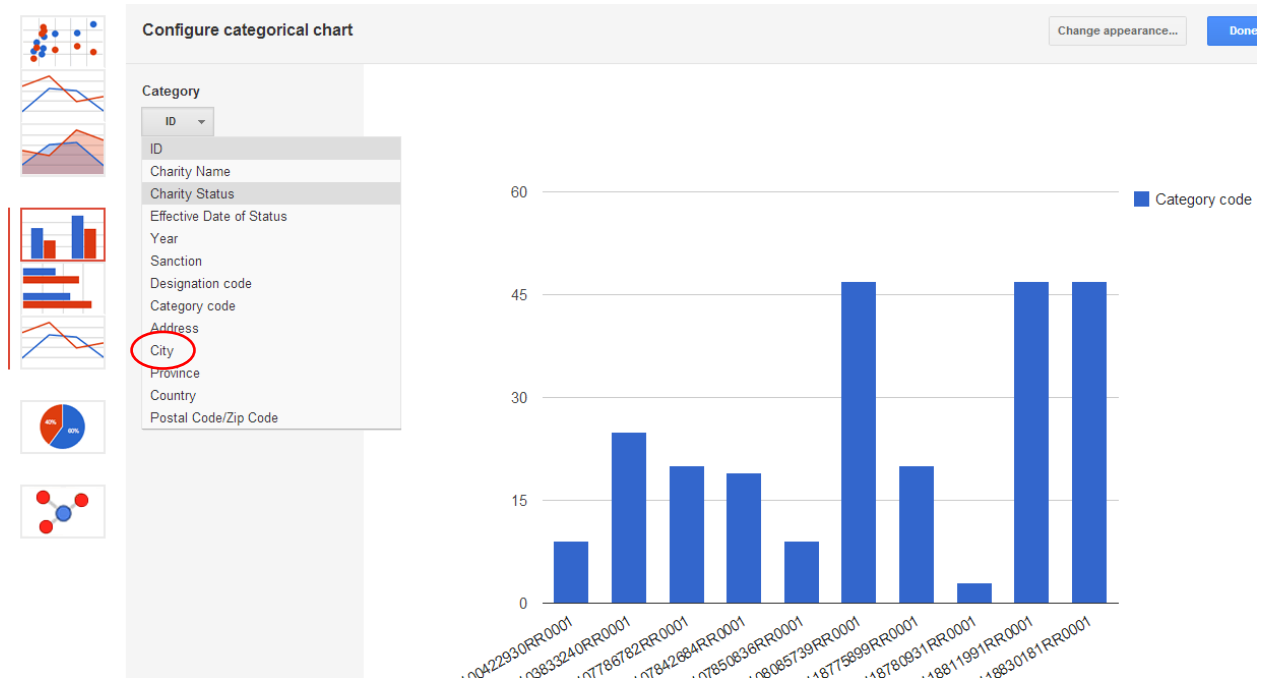


48) Let's select a column chart.

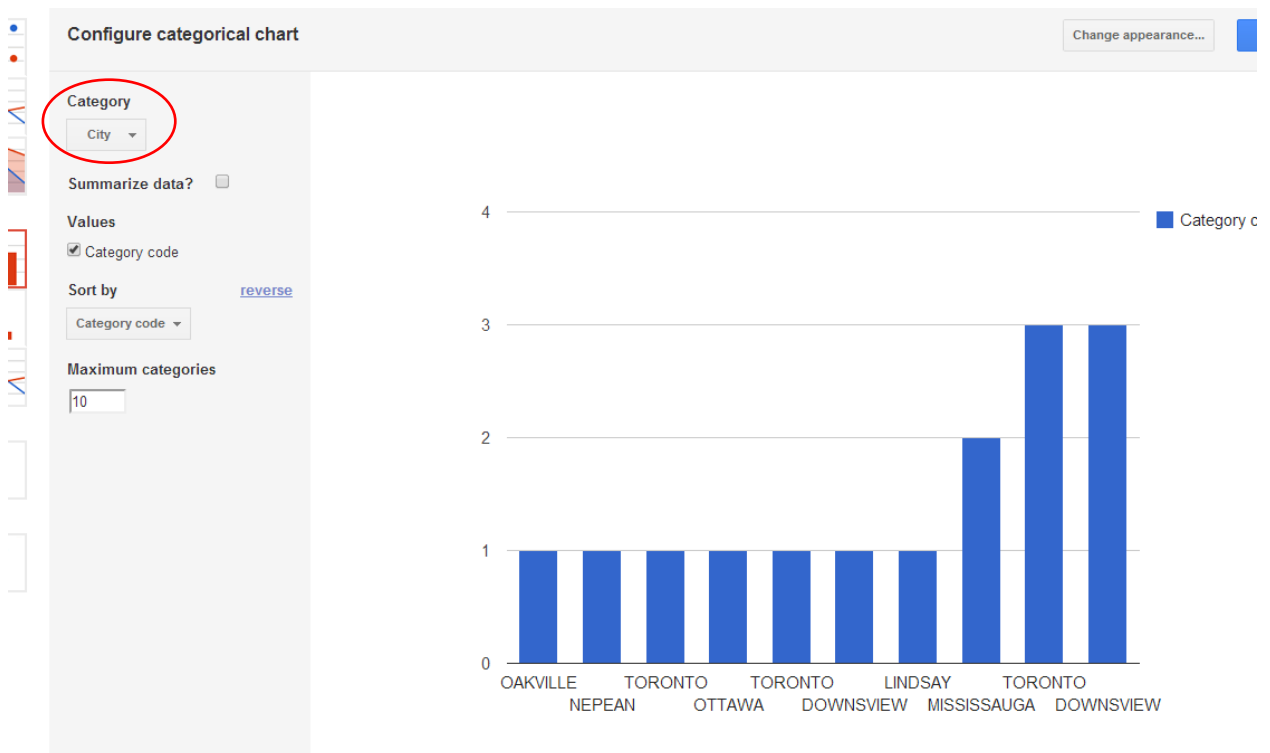


49) We need to modify this chart, beginning with the values on the X-axis across the bottom. Fusion Tables has counted and grouped the data by the ID numbers. What we want is to group by city to determine which one has the highest number of revoked charities. To do this, select the drop-down

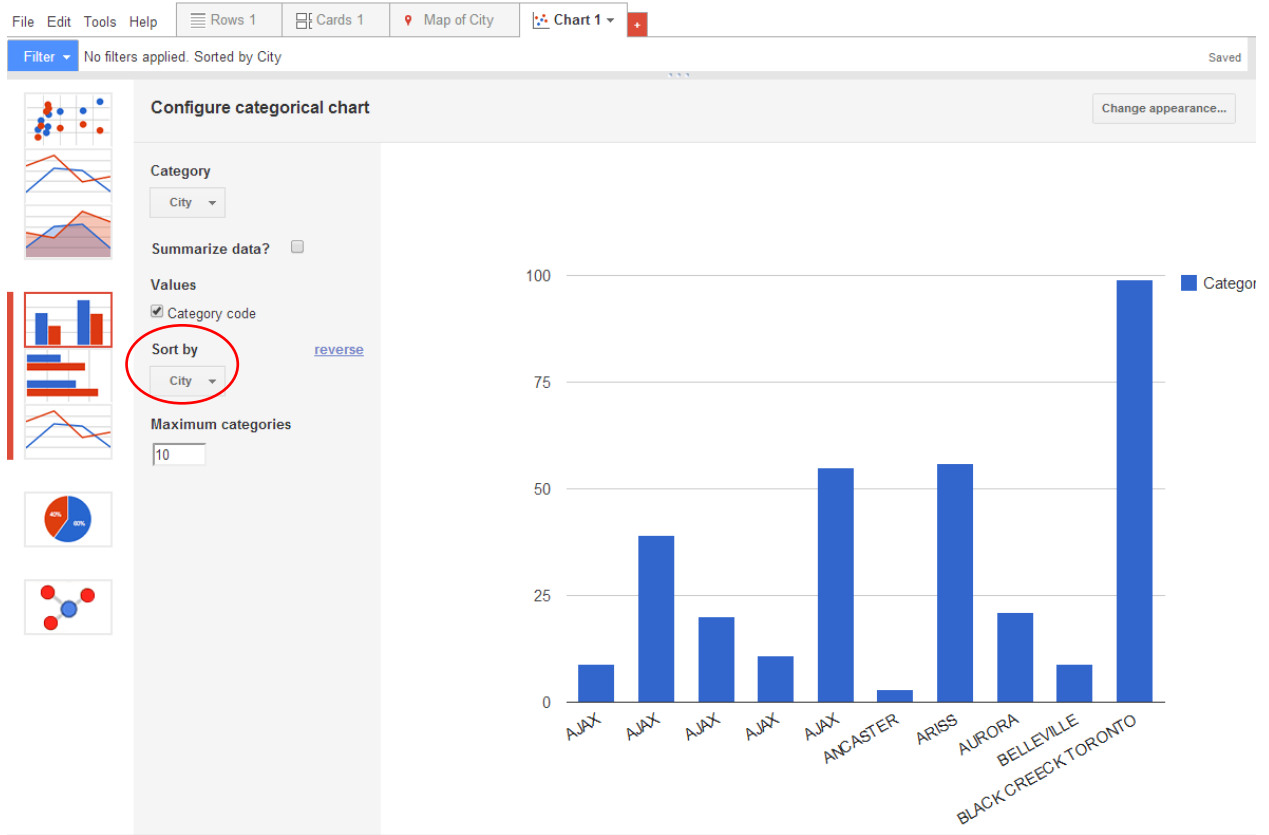
menu under the "Category" label.



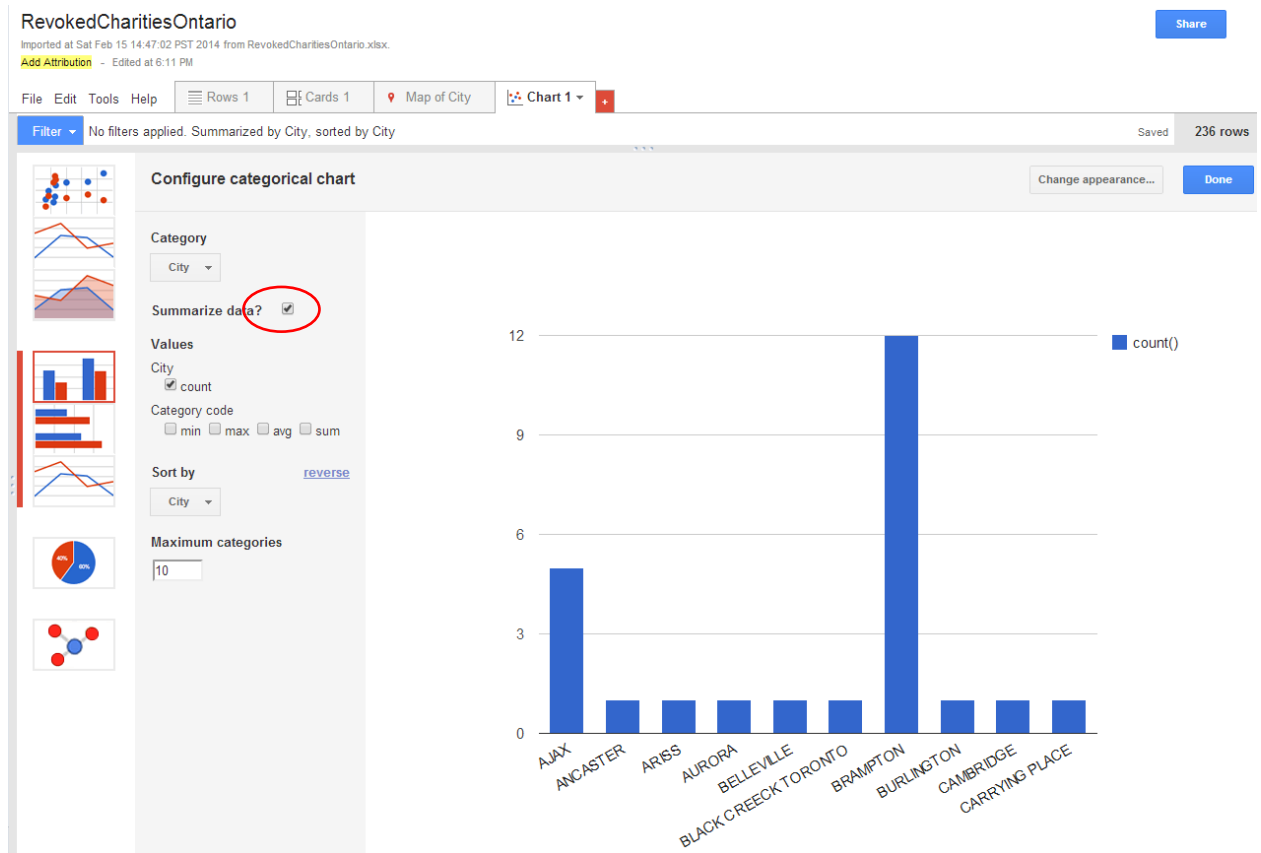
50) Choose the "City" field.



51) Now select "City" from the drop-down menu under the "Sort by" section.

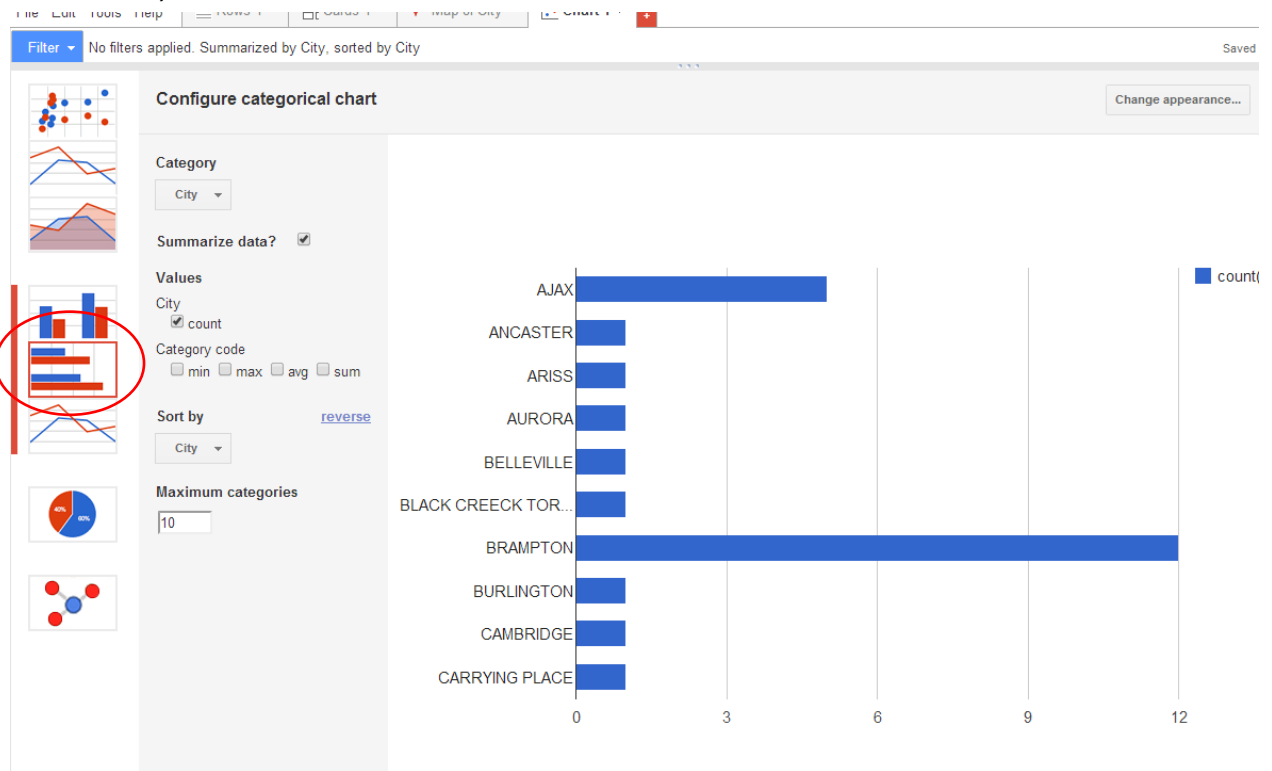


52) Finally, let's "summarize" the data by checking the box to the right of the "Summarize data" label.



53) Not bad. However, it's difficult for the reader to figure out what's going on with this graphic. Remember, good graphs help tell the story. They shouldn't confuse people. It would be a lot better to have a graph that sorts the cities in descending order, allowing us to perhaps do a story about the city with the highest number of charities that have had their status yanked.

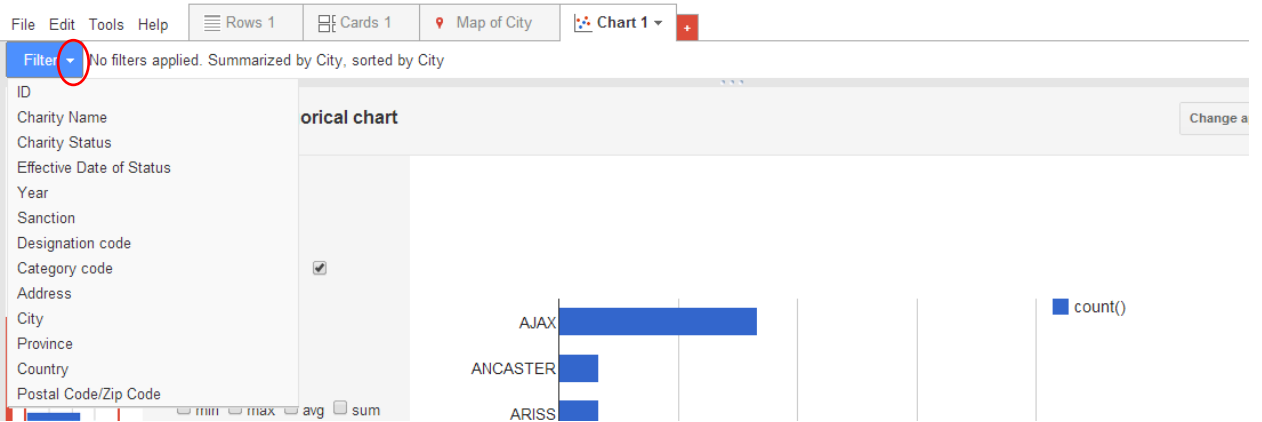
To do this, let's first of all select the bar chart.



54) Sort the bar chart in descending order. Click on the downward arrow to the left of the "Filter" tab.

RevokedCharitiesOntario

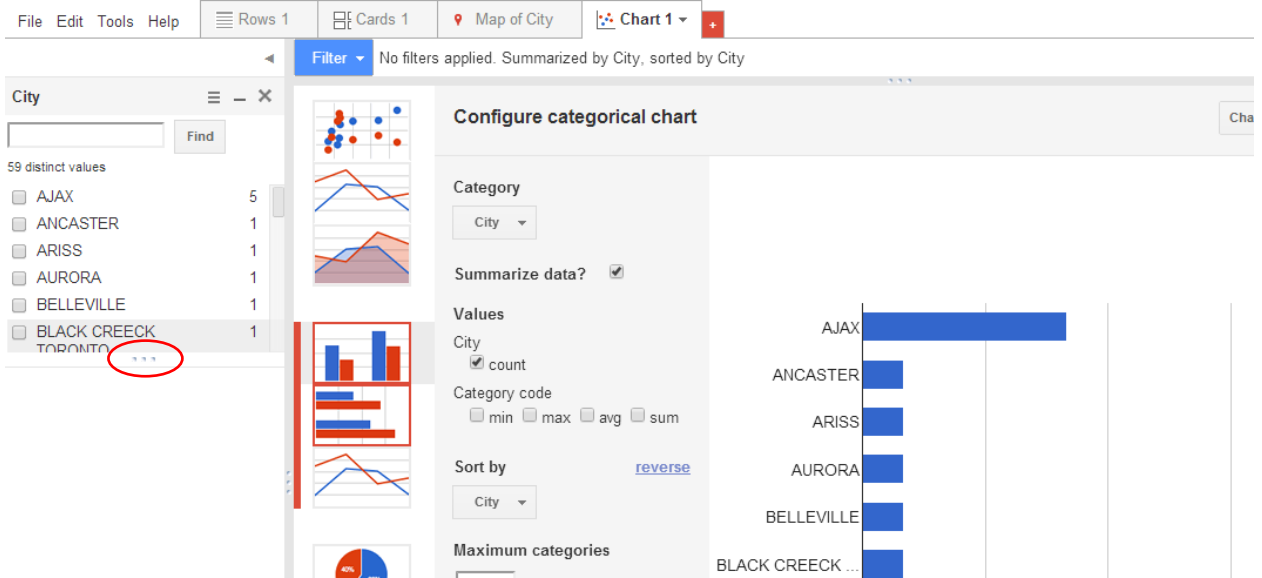
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55) Choose "City".

RevokedCharitiesOntario

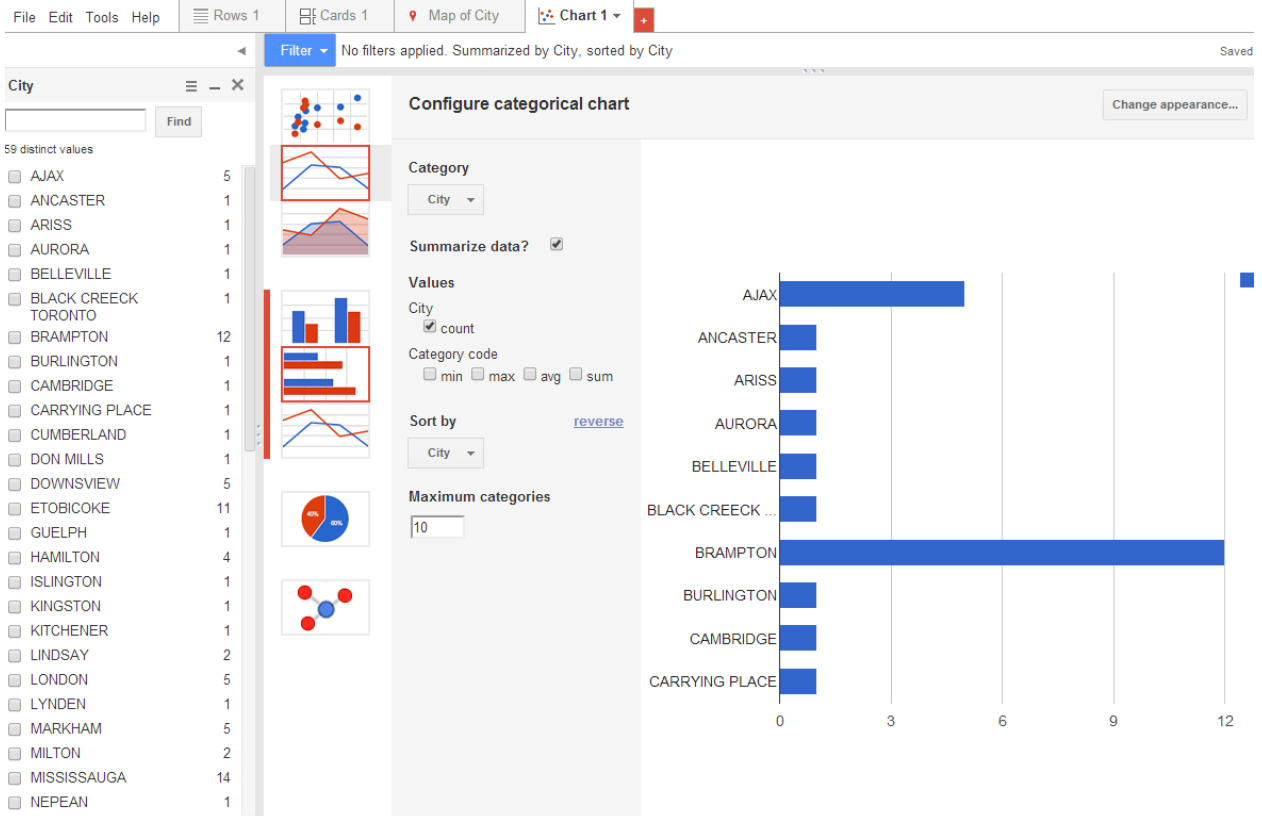
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56) To see the rest of the cities, mouse over the three dots at the bottom of "Black Creek Toronto", and pull down the menu's bottom edge.

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57) Click on the icon to the left of the “X” icon, containing the parallel lines to produce a drop-down menu.

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File Edit Tools Help Rows 1 Cards 1 Map of City Chart 1

Filter No filters applied. Summarized by City, sorted by City Saved

City

Sort by value  
Sort by count  
Include selections  
Exclude selections

59 distinct values

- AJAX
- ANCASTER
- ARISS
- AURORA
- BELLEVILLE
- BLACK CREECK TORONTO
- BRAMPTON
- BURLINGTON
- CAMBRIDGE
- CARRYING PLACE
- CUMBERLAND
- DON MILLS
- DOWNSVIEW
- ETOBICOKE
- GUELPH
- HAMILTON
- ISLINGTON
- KINGSTON
- KITCHENER
- LINDSAY
- LONDON
- LYNDEN
- MARKHAM

Configure categorical chart

Category: City

Summarize data?

Values: City  count

Category code:  min  max  avg  sum

Sort by: City [reverse](#)

Maximum categories: 10

City	Count
AJAX	5
ANCASTER	1
ARISS	1
AURORA	1
BELLEVILLE	1
BLACK CREECK TORONTO	1
BRAMPTON	12
BURLINGTON	1
CAMBRIDGE	1
CARRYING PLACE	1

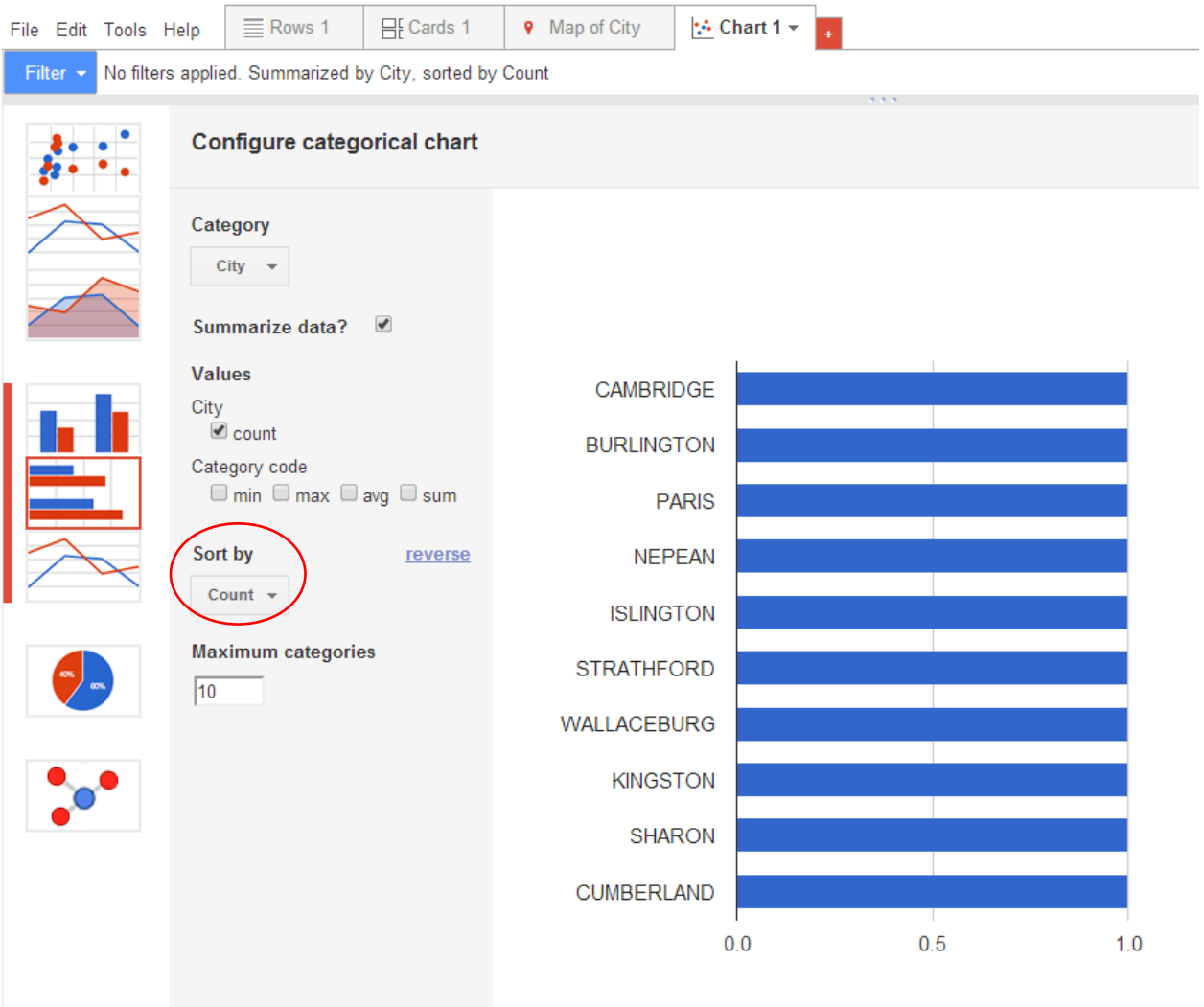
58) Sort by Count, and close the menu.

59) Go to the “Sort by” section, and change it from “City” to “Count”.

### RevokedCharitiesOntario

Imported at Sat Feb 15 14:47:02 PST 2014 from RevokedCharitiesOntario.xlsx.

Add Attribution - Edited at 6:11 PM



60) This graph has produced the tables lowest values, which contain similar counts. We can to sort cities from highest to lowest. To do so, click



on the “reverse” link, which will sort the values from highest to lowest.

### RevokedCharitiesOntario

Imported at Sat Feb 15 14:47:02 PST 2014 from RevokedCharitiesOntario.xlsx.

[Add Attribution](#) - Edited at 6:11 PM

File Edit Tools Help

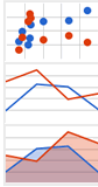
Rows 1

Cards 1

Map of City

Chart 1

Filter No filters applied. Summarized by City, sorted by Count



#### Configure categorical chart

Change

##### Category

City

Summarize data?

##### Values

City

count

Category code

min  max  avg  sum

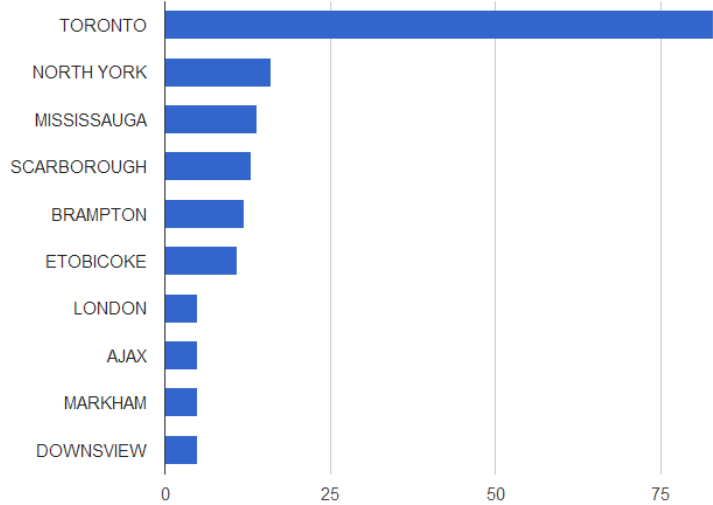
##### Sort by

Count

reverse

##### Maximum categories

10



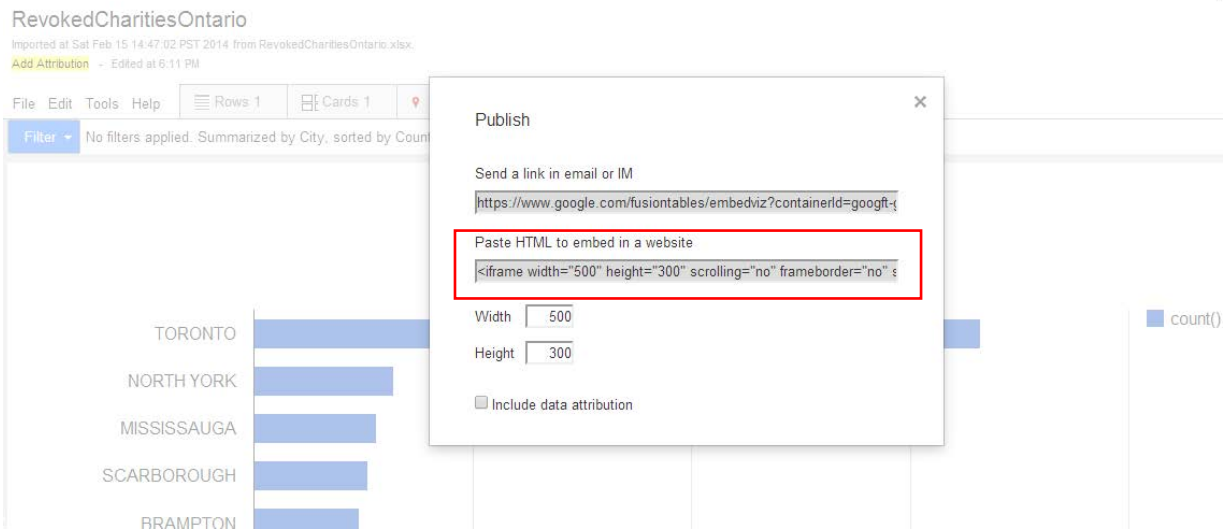
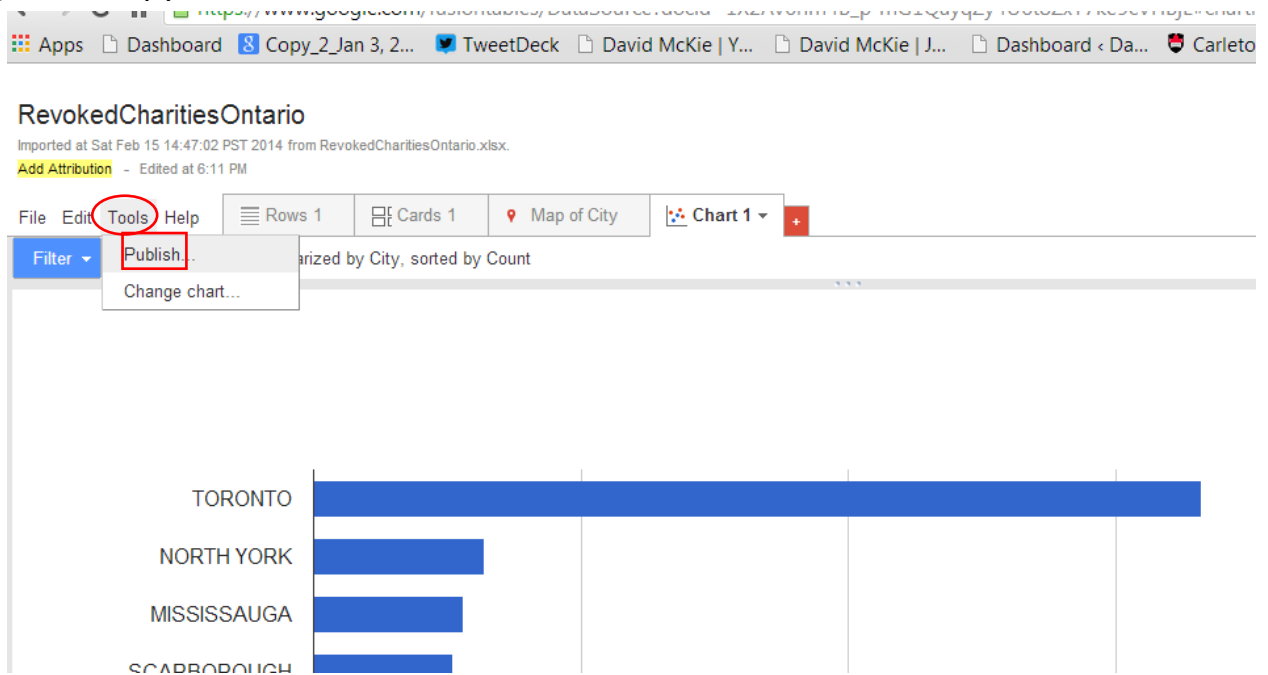
61) Once you're happy with this, result select the "Done" tab, and share the bar graph, just like we did with the map.

The screenshot shows a Google Fusion Tables interface with a sharing settings dialog box open. The dialog box is titled "Sharing settings" and contains the following elements:

- Link to share:** A text field containing the URL `https://www.google.com/fusiontables/DataSource?docid=1X2Av6nm4B_p-mG1QayqZ`, which is highlighted with a blue selection box.
- Who has access:** A list of access settings. The first entry is "Anyone who has the link can view" with a "Change..." link circled in red. The second entry is "David McKie (you) david.mckie@cbc.ca" with the role "Is owner".
- Invite people:** A section with a text input field containing the placeholder text "Enter names, email addresses, or groups...".
- Footer:** A note stating "Editors will be allowed to add people and change the permissions. [Change]" and a blue "Done" button circled in red.

The background of the dialog box shows a partial view of a bar chart with blue bars of varying heights, and a top navigation bar with tabs for "Cards 1", "Map of City", and "Chart 1".

62) Copy the embed code.



63)

64) Now you've mapped out the revoked charities, and then created a bar graph to illustrate the city with the highest number.

65)