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.

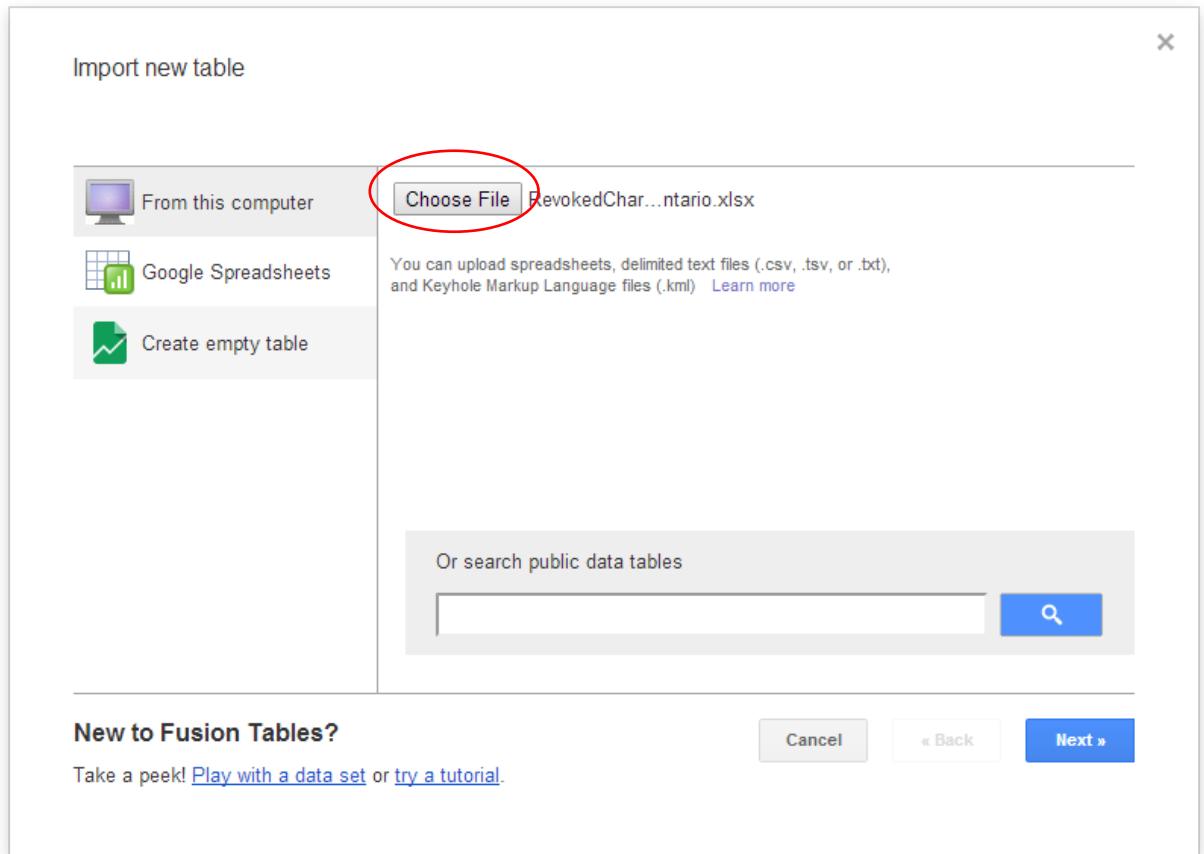1) If you haven't done so already, download the data and save it in a folder.
2) Go to you Google Drive and select the "Create".
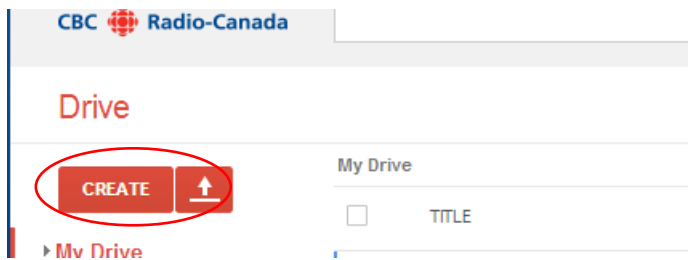
3) Select the green Fusion Table icon, which produces an import dialog box.
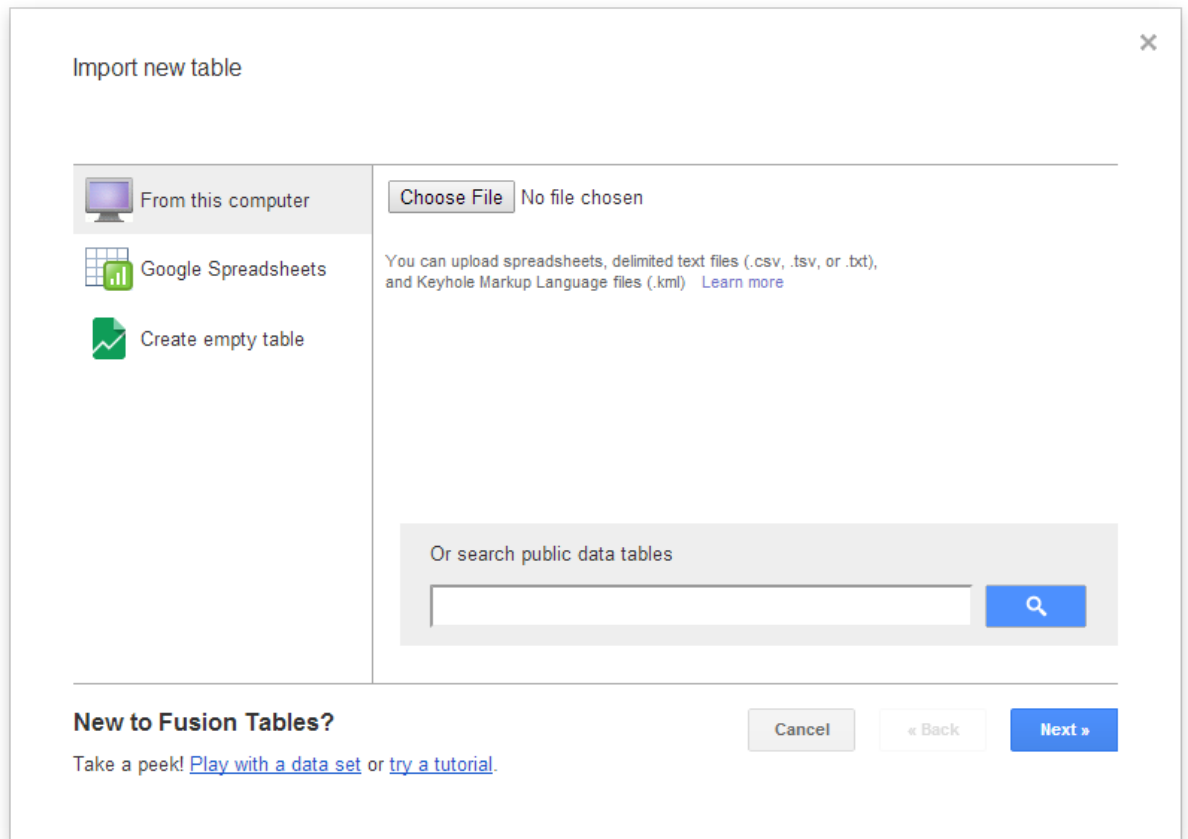
4) Select the "Choose File" tab to upload your Excel table.

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

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.

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.

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.

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.

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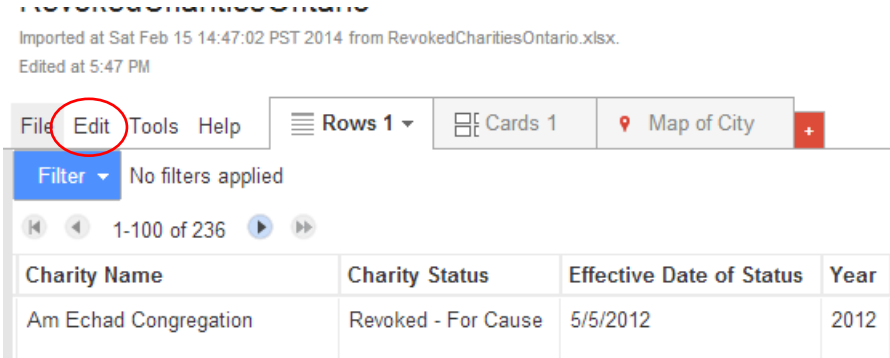
File | Edit | Tools | Help | ≡ Rows 1 ▾ | ⊟ Cards 1 | ● Map of City | +

Filter ▾ No filters applied

⏮ ◀ 1-100 of 236 ▶ ⏭

Charity Name	Charity Status	Effective Date of Status	Year
Am Echad Congregation	Revoked - For Cause	5/5/2012	2012

14) Choose the "Change columns" option.

RevokedCharitiesOntario

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File | Edit | Tools | Help | ≡ Rows 1 ▾ | ⊟

Filt   Add row

ℍ   Edit row

        Duplicate row

Cha   Charity Statu

Am   Delete selected row   Revoked - For

        Delete all rows

Ass   Add column   Revoked - For
Ass
Soli   Add formula column

        Change columns

ARARRANEL SERHARDIC   Revoked   For
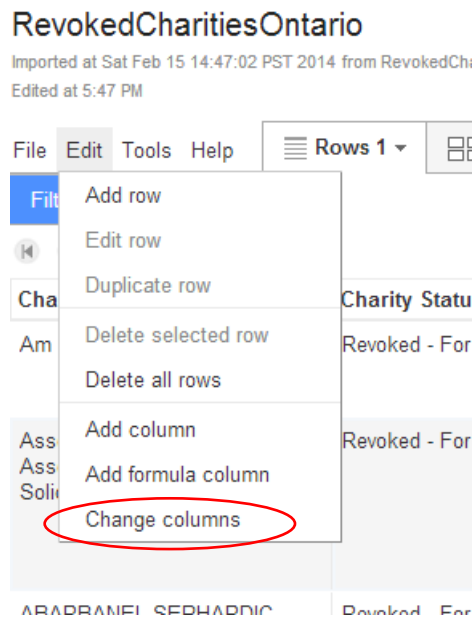
15)

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

Change columns ✕

ID	↑↓✕
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

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

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

18)   Choose "Location"…

….. and then save the result.

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

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

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.
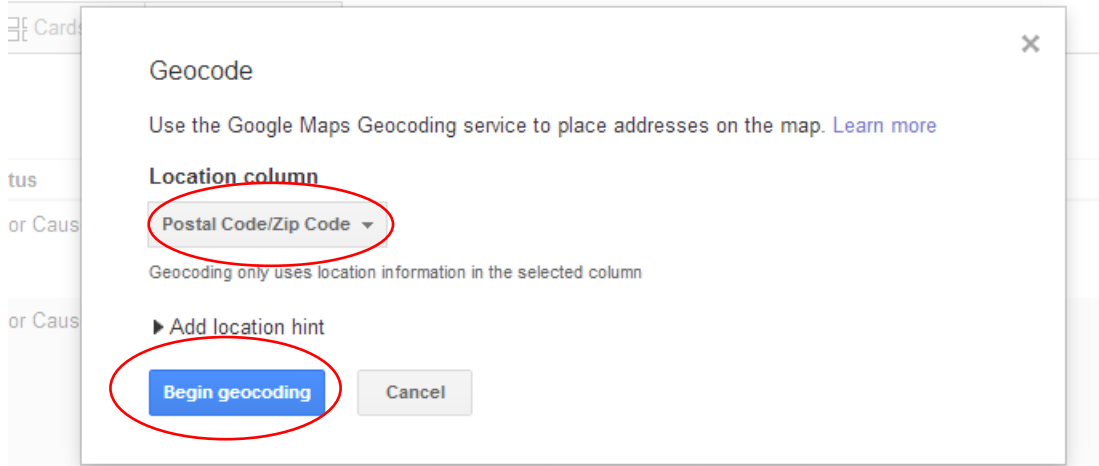
22)   Begin Geocoding. The process will take a few minutes, so be patient.

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.

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".
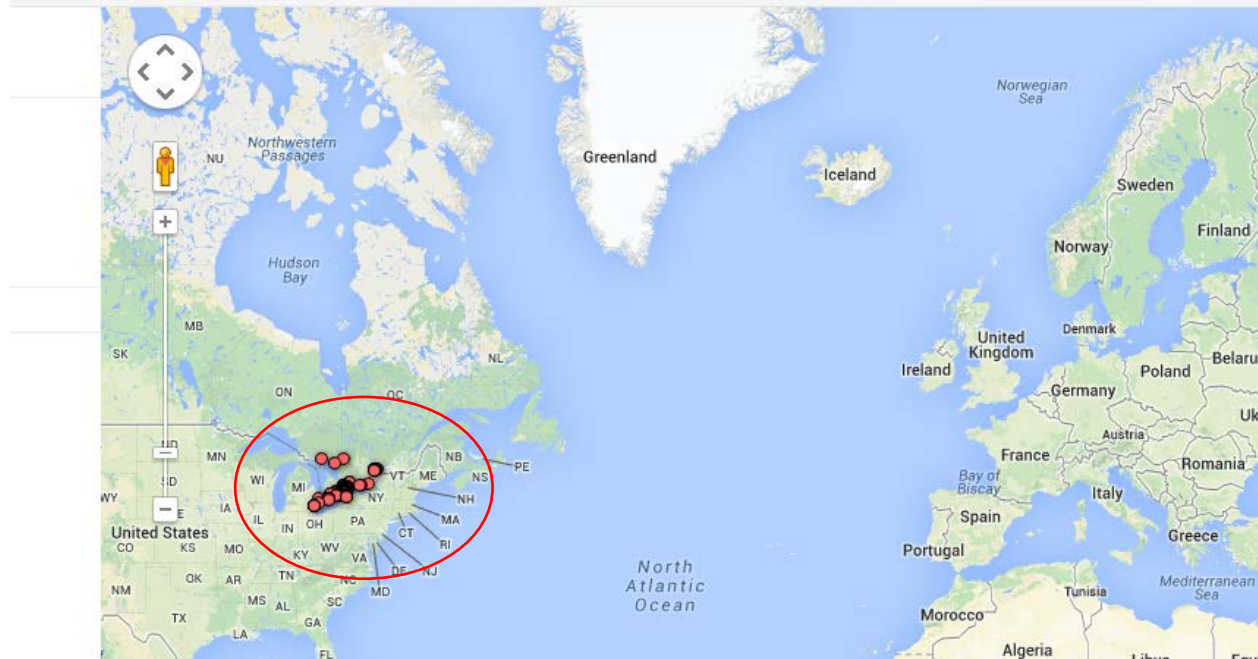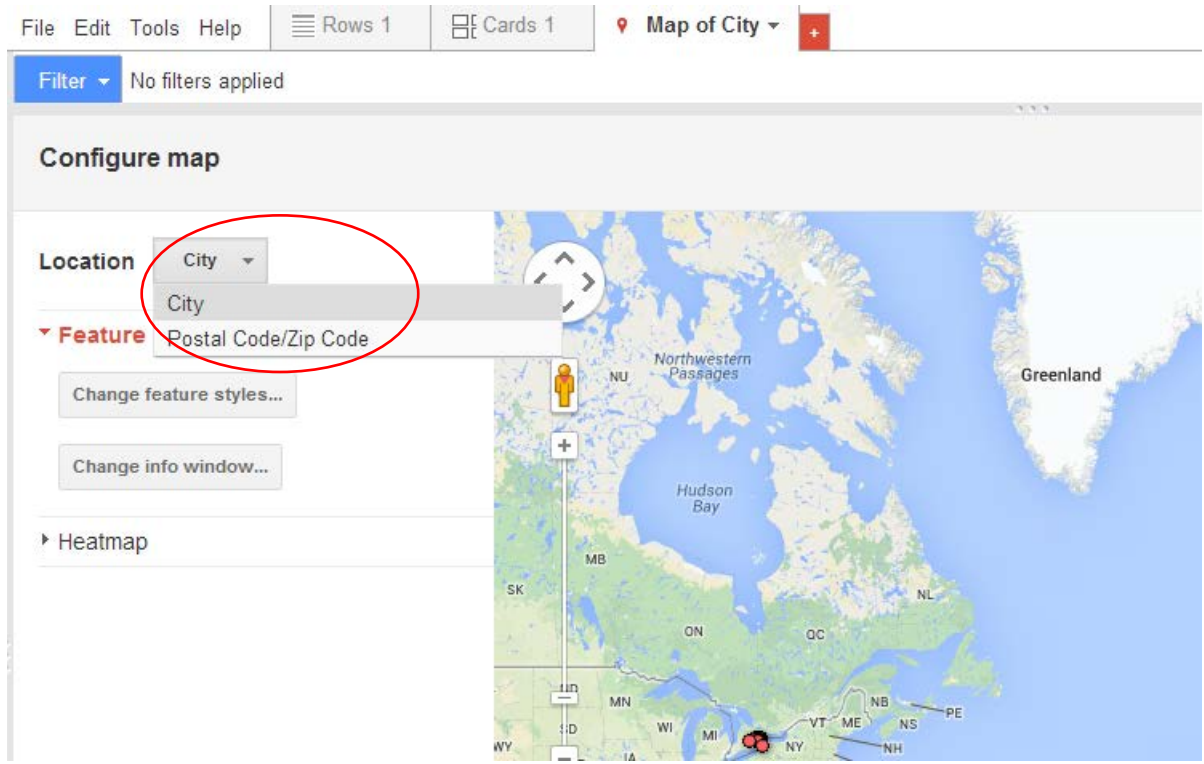
26)

27)   Zoom in to see the result.

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

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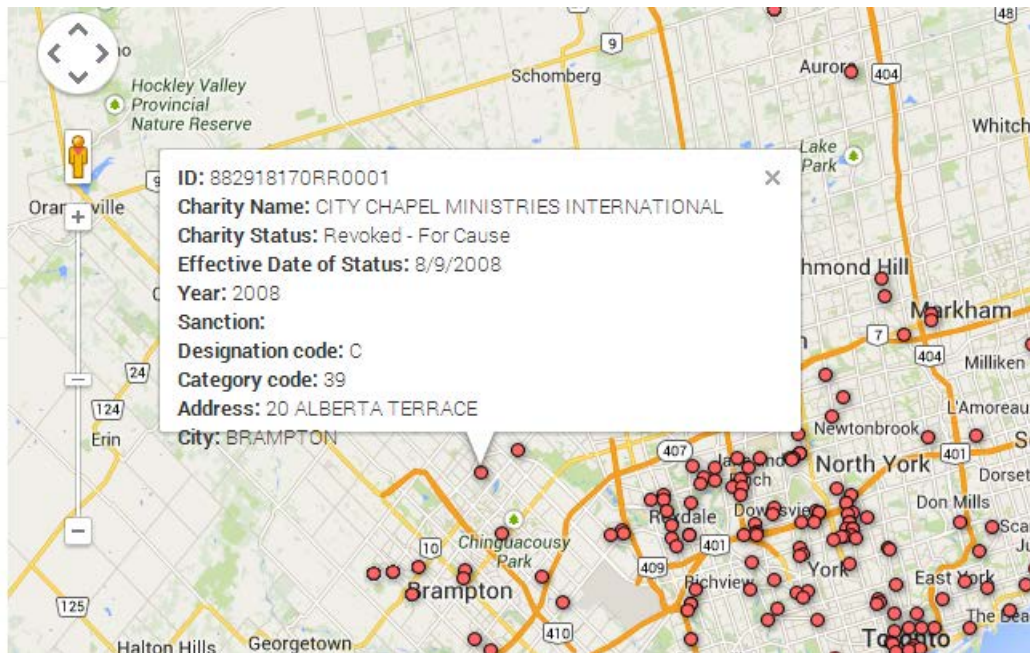
29)   You'll notice that the data is from one row in the Excel table. The box
is too crowded, making it too difficult to read. One of the tricks with
mapping is to *only* give people the information they need. In this case, we
could de-select some of the columns. To do this, let's go to the "Change

info window" tab to the left of the map.

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

Change info window layout

Automatic   Custom

Select the columns to include in your map's info window.

☑ ID
☑ Charity Name
☑ Charity Status
☑ Effective Date of Status
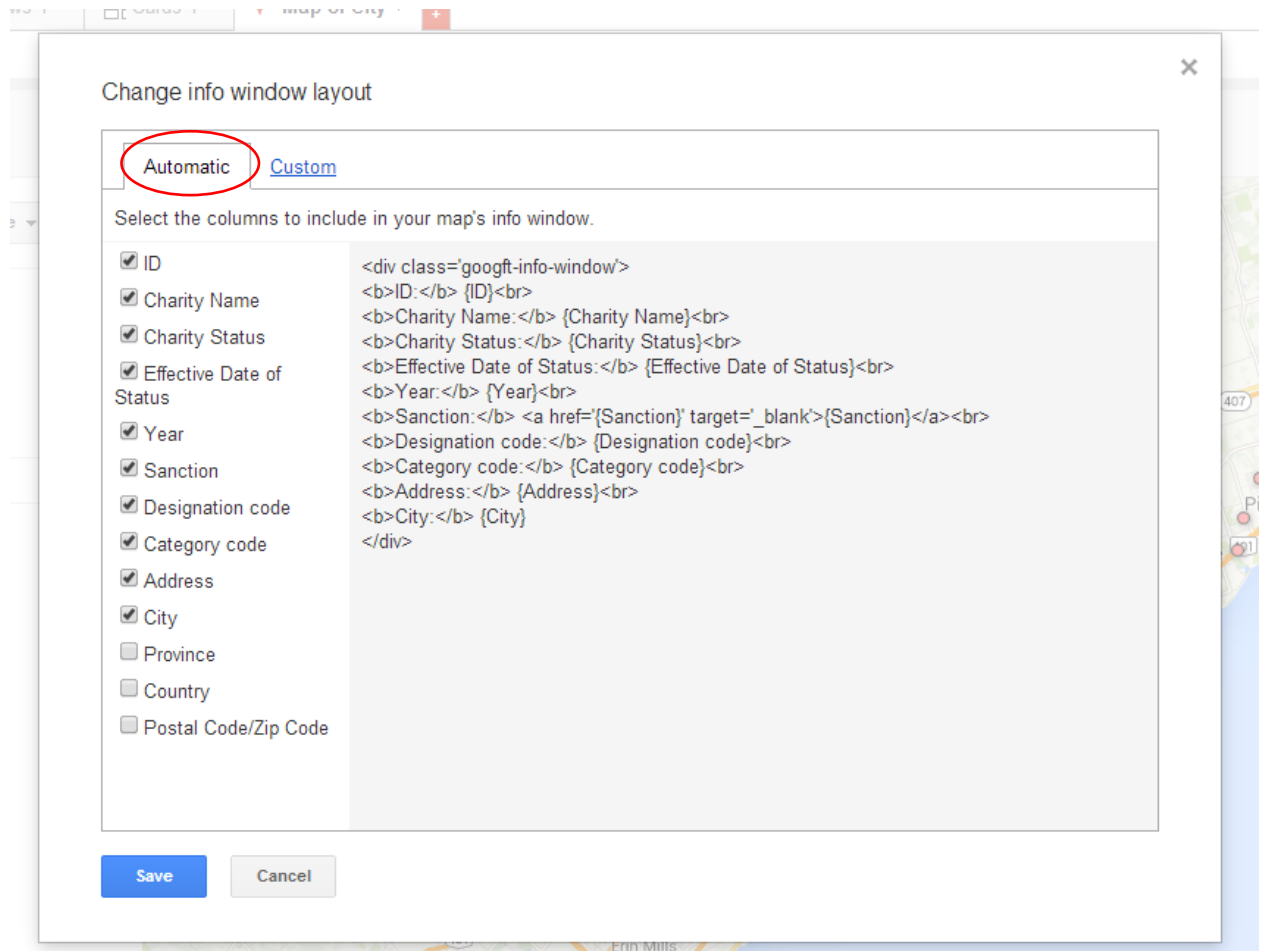☑ Year
☑ Sanction
☑ Designation code
☑ Category code
☑ Address
☑ City
☐ Province
☐ Country
☐ Postal Code/Zip Code

```
<div class='googft-info-window'>
<b>ID:</b> {ID}<br>
<b>Charity Name:</b> {Charity Name}<br>
<b>Charity Status:</b> {Charity Status}<br>
<b>Effective Date of Status:</b> {Effective Date of Status}<br>
<b>Year:</b> {Year}<br>
<b>Sanction:</b> <a href='{Sanction}' target='_blank'>{Sanction}</a><br>
<b>Designation code:</b> {Designation code}<br>
<b>Category code:</b> {Category code}<br>
<b>Address:</b> {Address}<br>
<b>City:</b> {City}
</div>
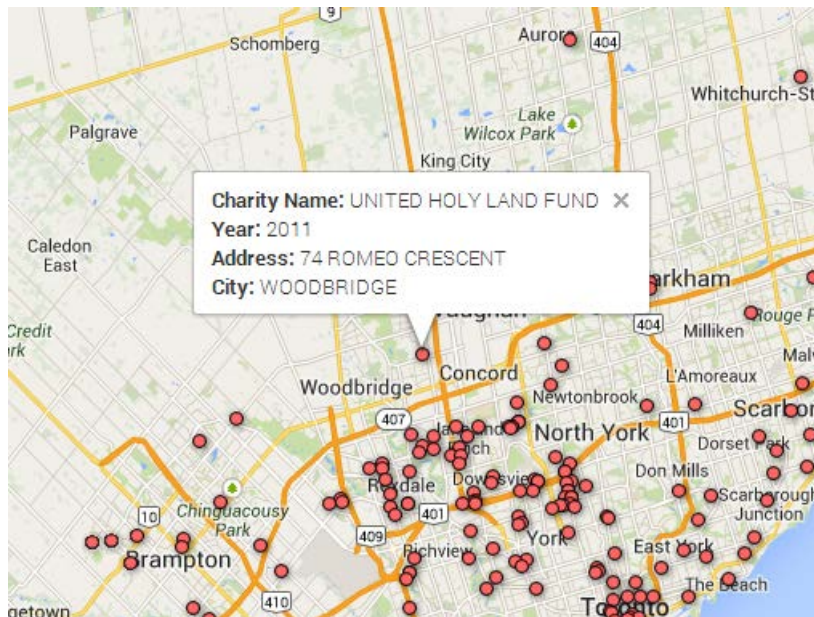```

Save        Cancel

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.
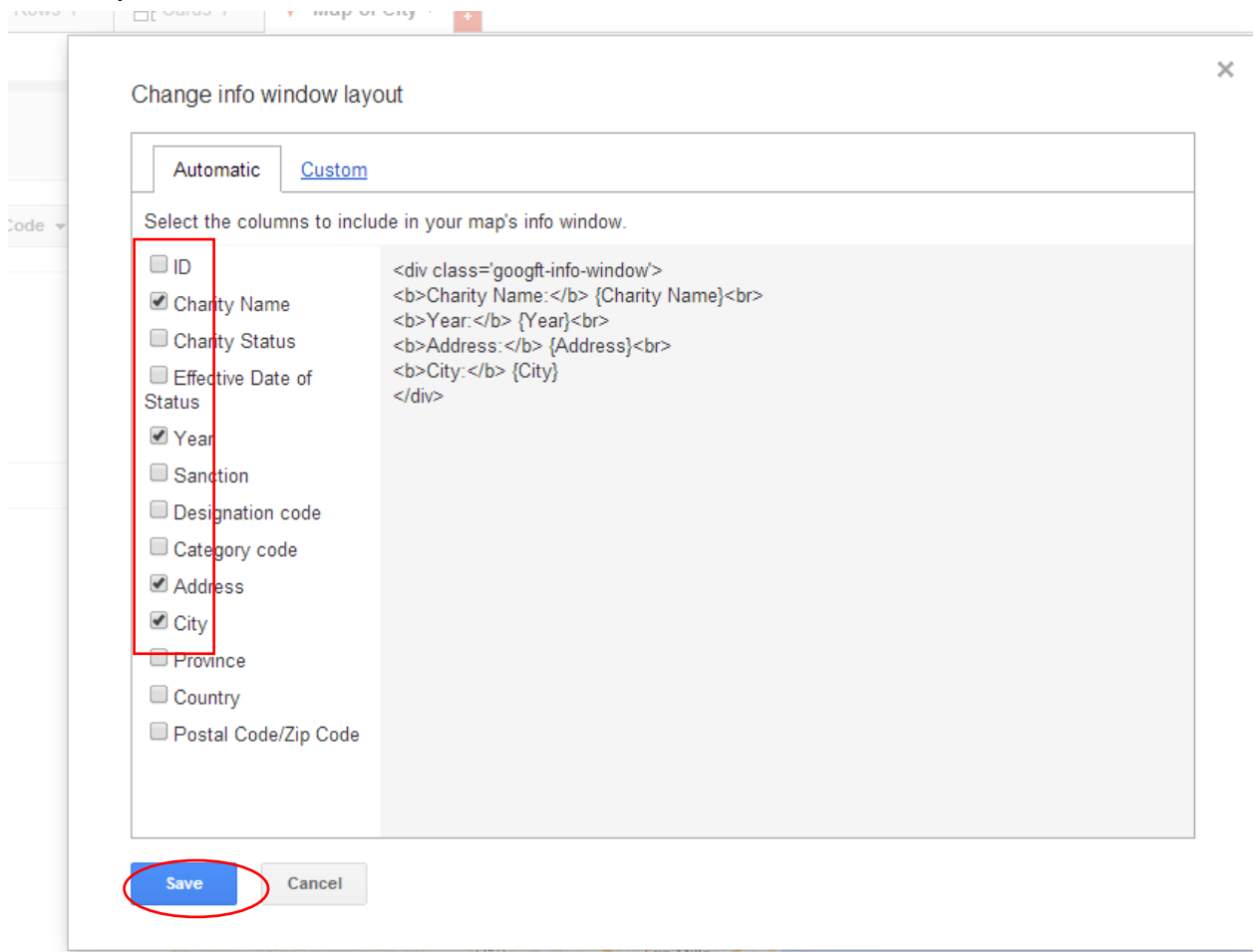


32) Select save and return to the map to see the result.

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.



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
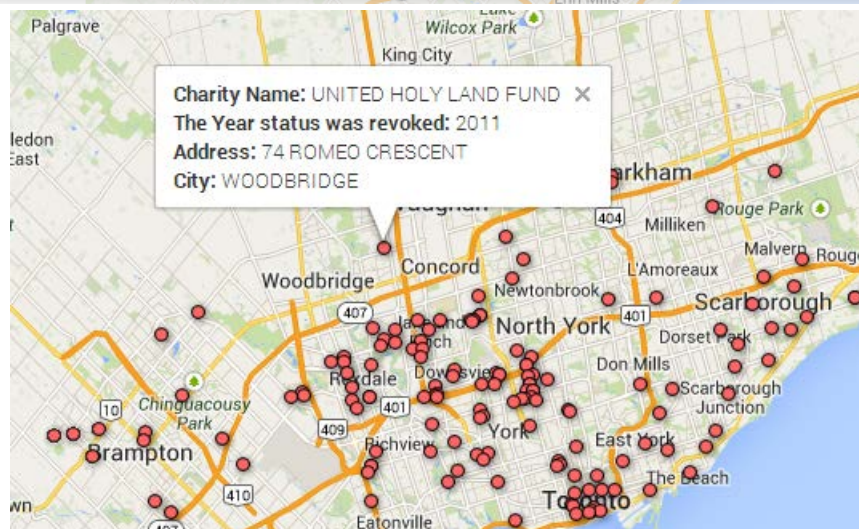
result, and return to the map.



Change info window layout

Automatic    Custom

Write the HTML for your info window with column placeholders like {column name}.  Learn more

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

```
<div class='googft-info-window'>
<b>Charity Name:</b> {Charity Name}<br>
<b>The Year status was revoked</b> {Year}<br>
<b>Address:</b> {Address}<br>
<b>City:</b> {City}
</div>
```

Save   Cancel

Charity Name: UNITED HOLY LAND FUND ✕
The Year status was revoked: 2011
Address: 74 ROMEO CRESCENT
City: WOODBRIDGE
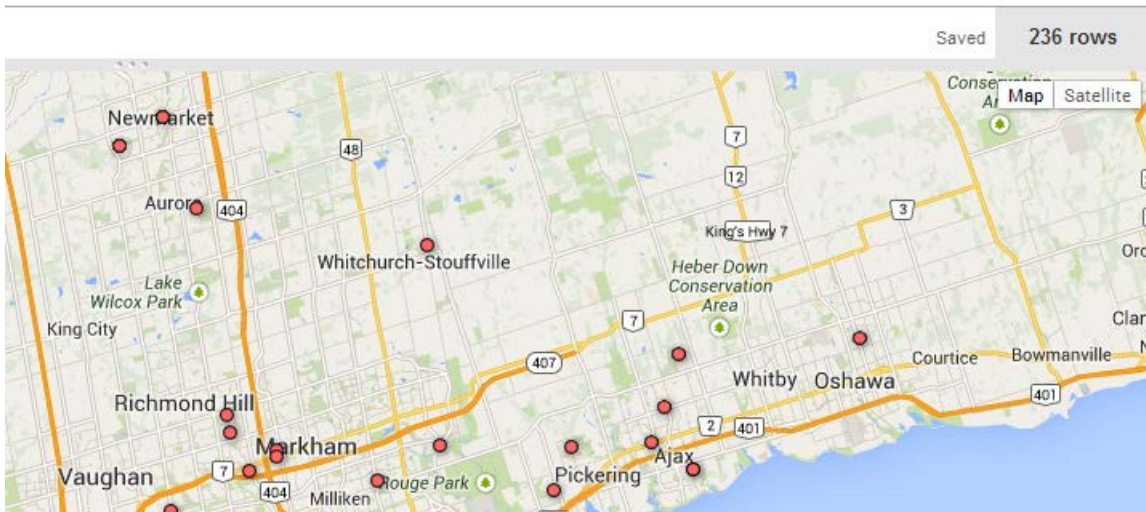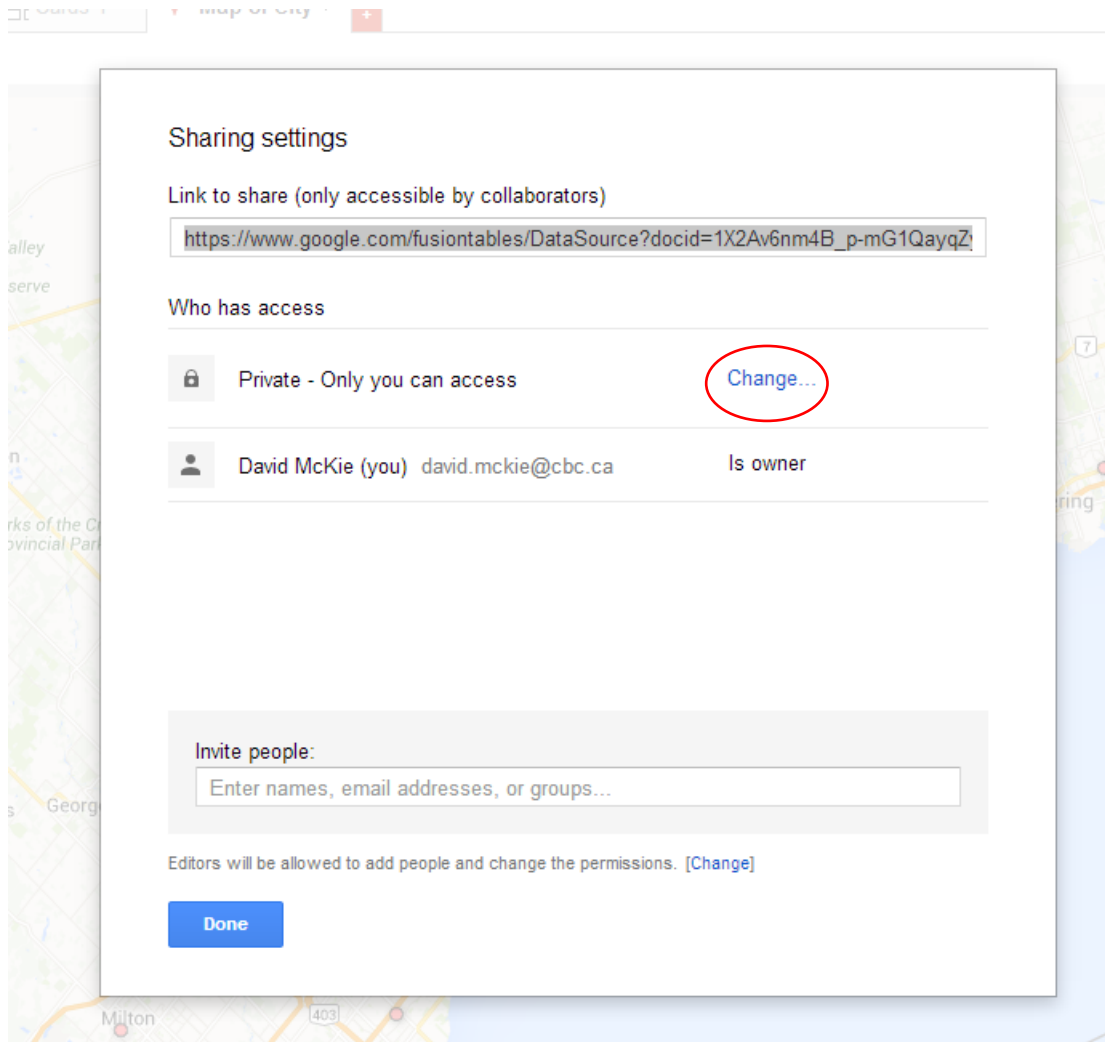
35)
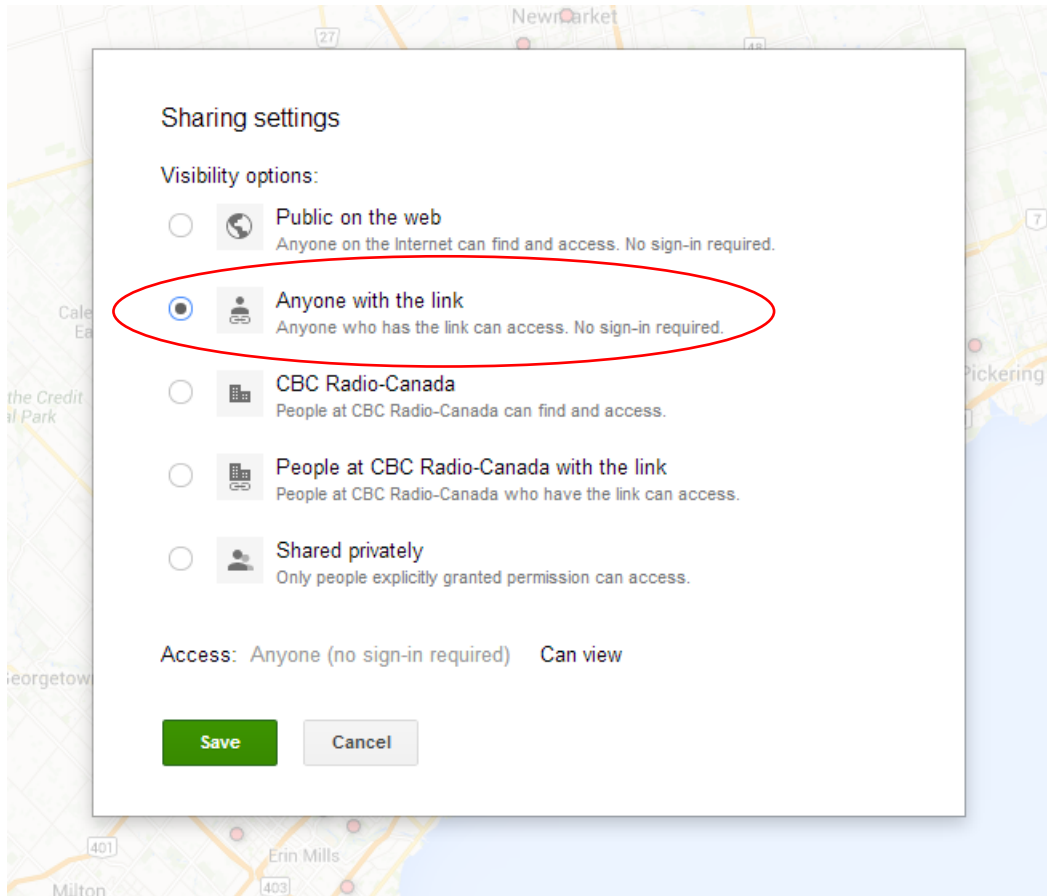36)   If you're happy with the overall result, select the "Done" tab at the top right of the map.

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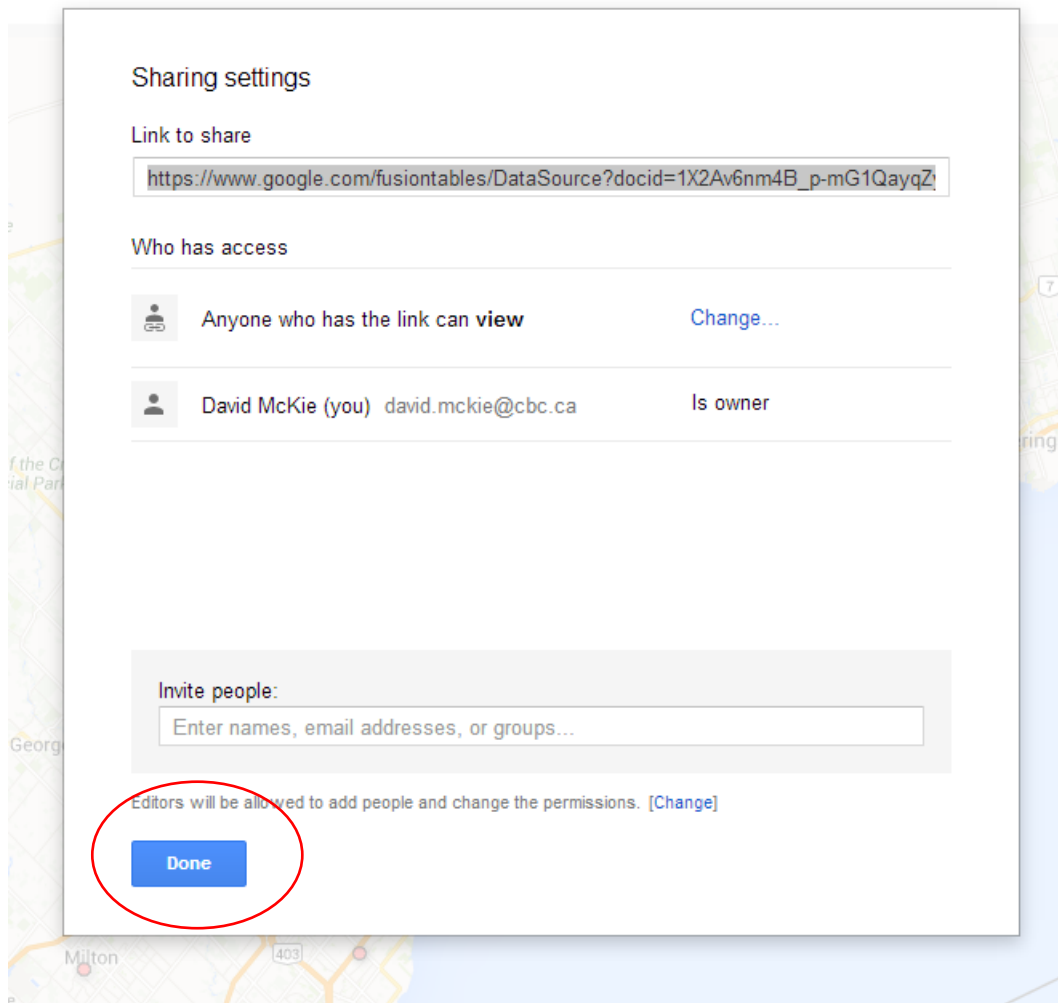
38)	Select the Share tab to the top right.

39)   You'll see a dialog box.

40)   Select the "Change" link to find an alternative setting to "Private".
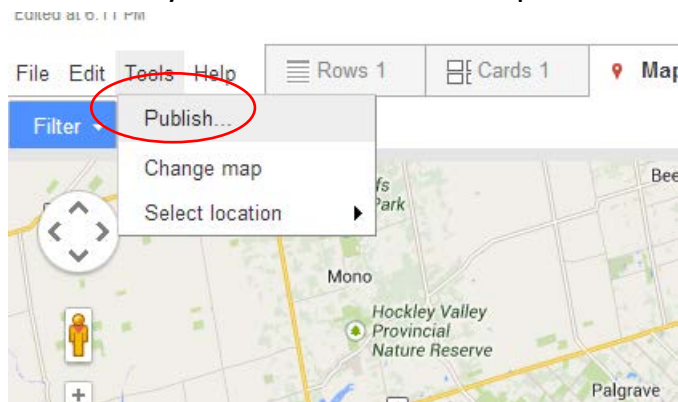
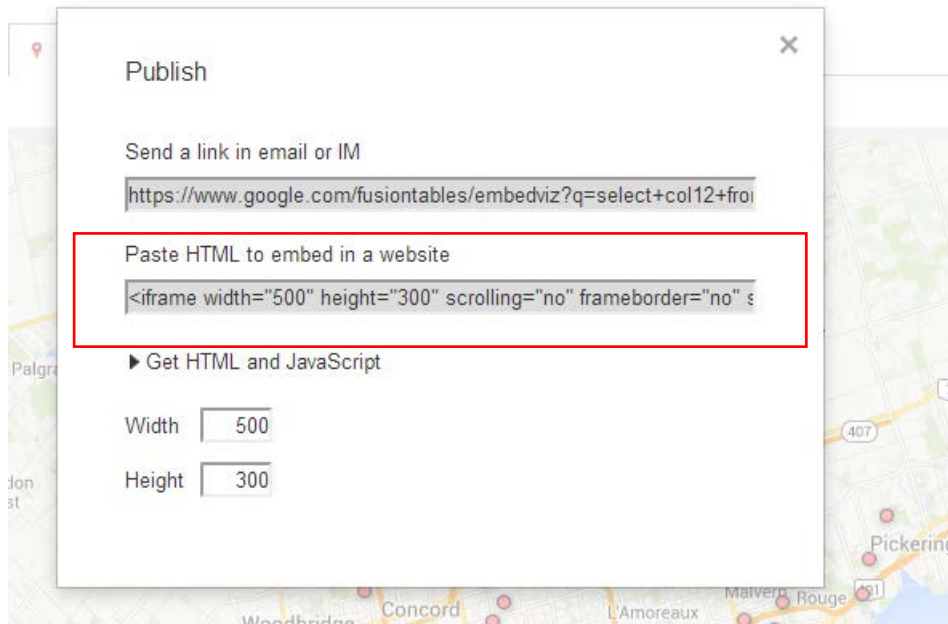41)   Select "Anyone with the link" option and save the result.

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.
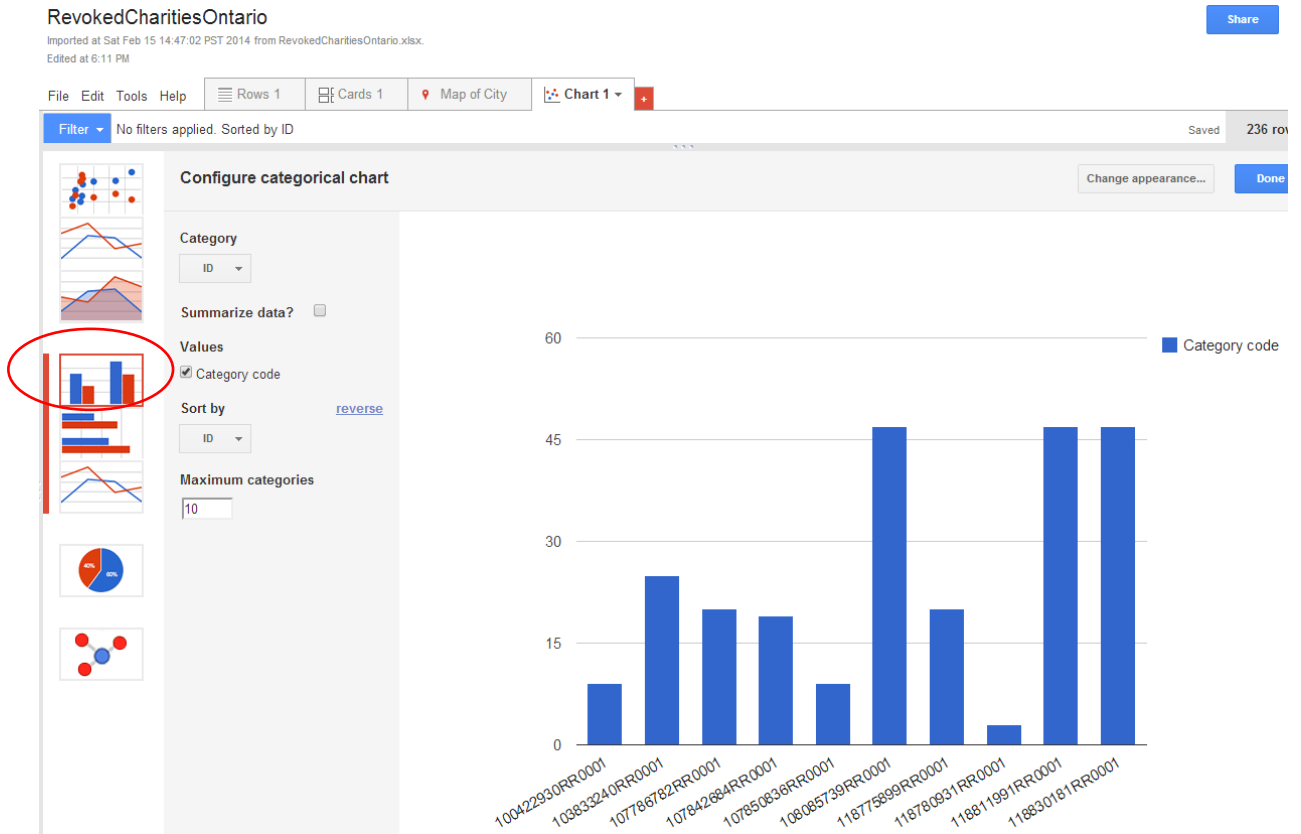
47)   Click on the red box with the cross to the bottom right of the Map of City tab, and select Chart.
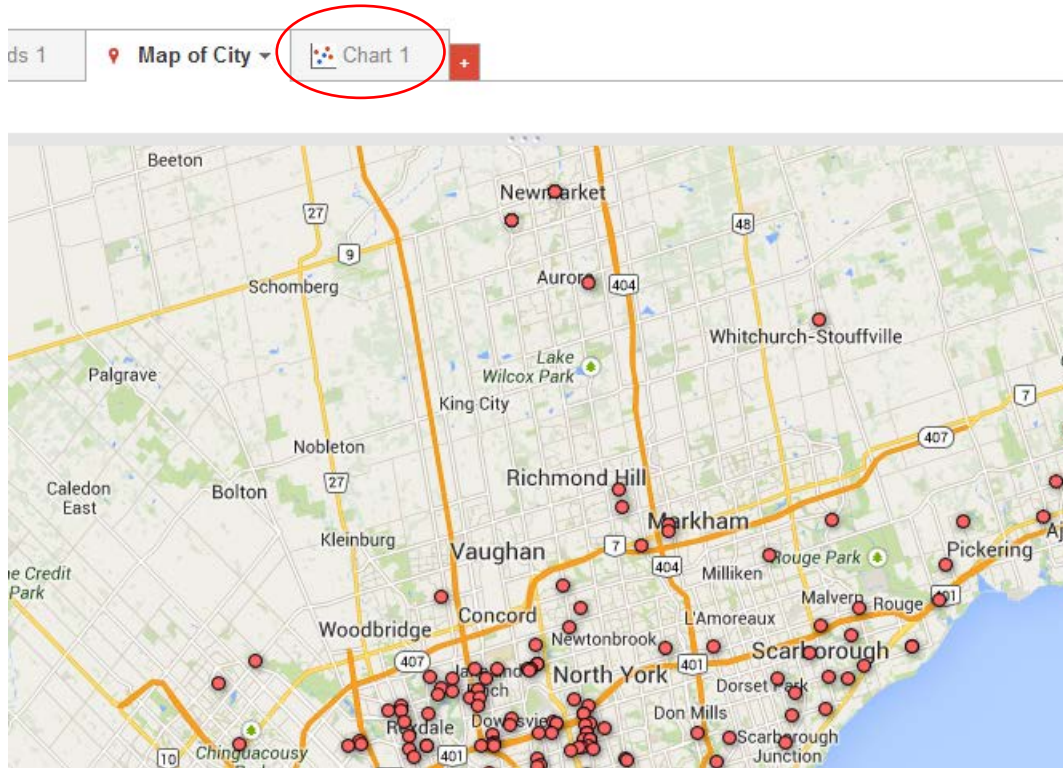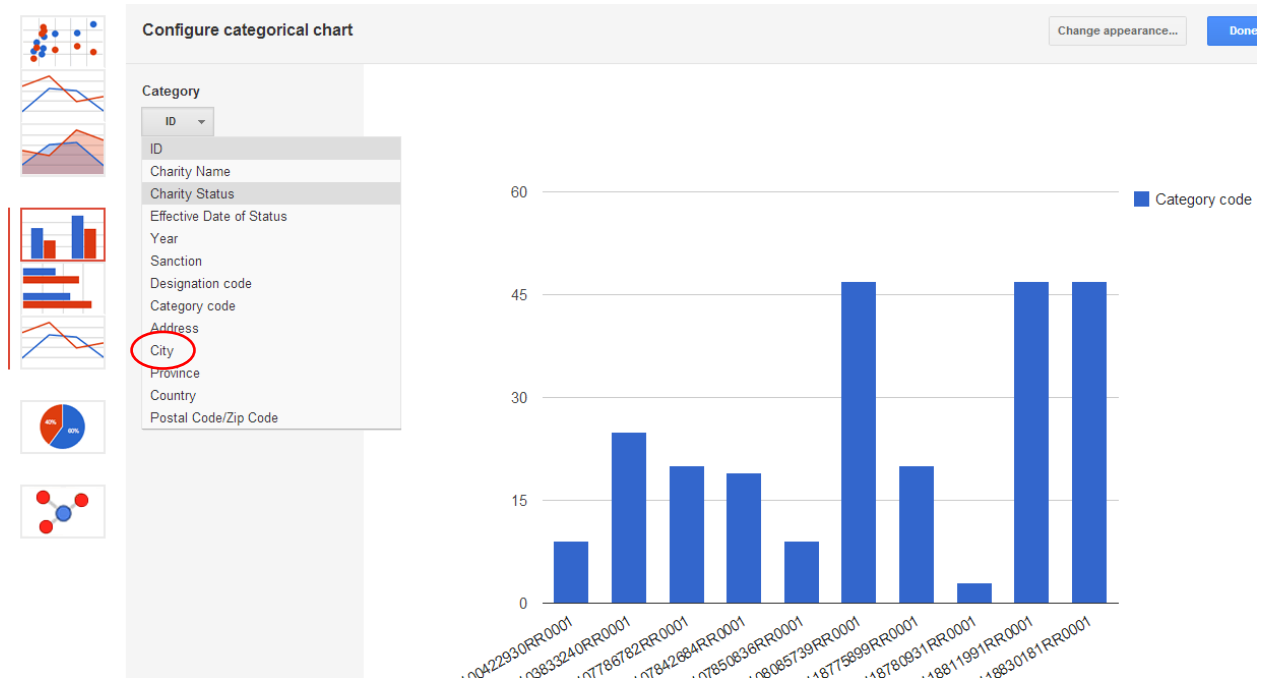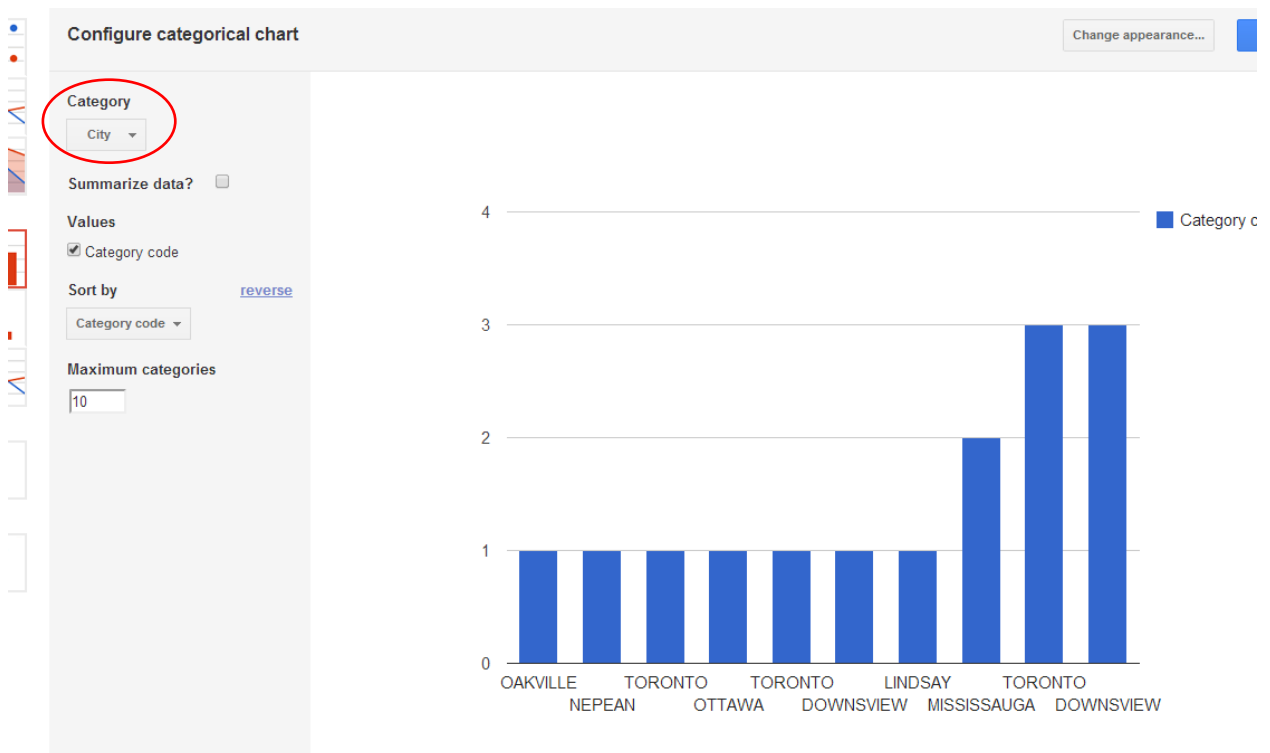
48)   Let's select a column chart.

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
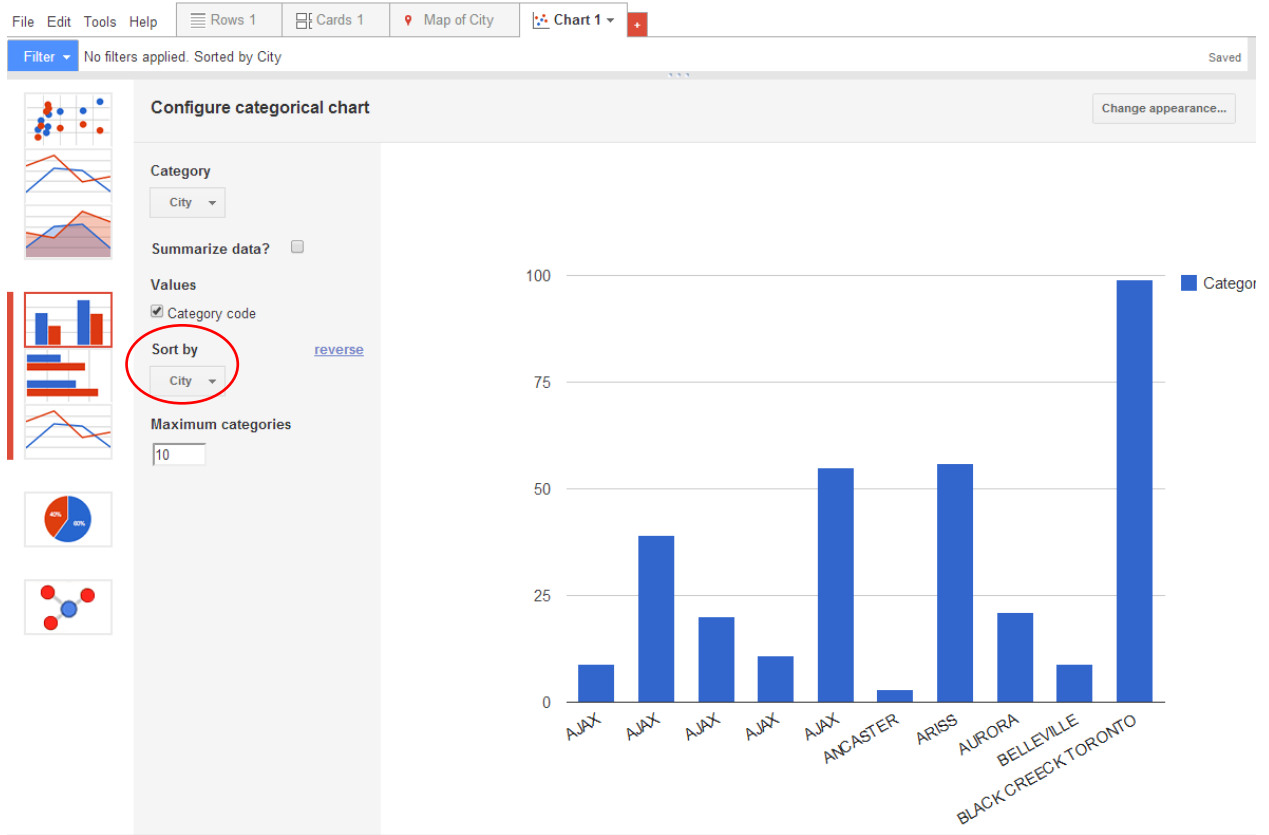
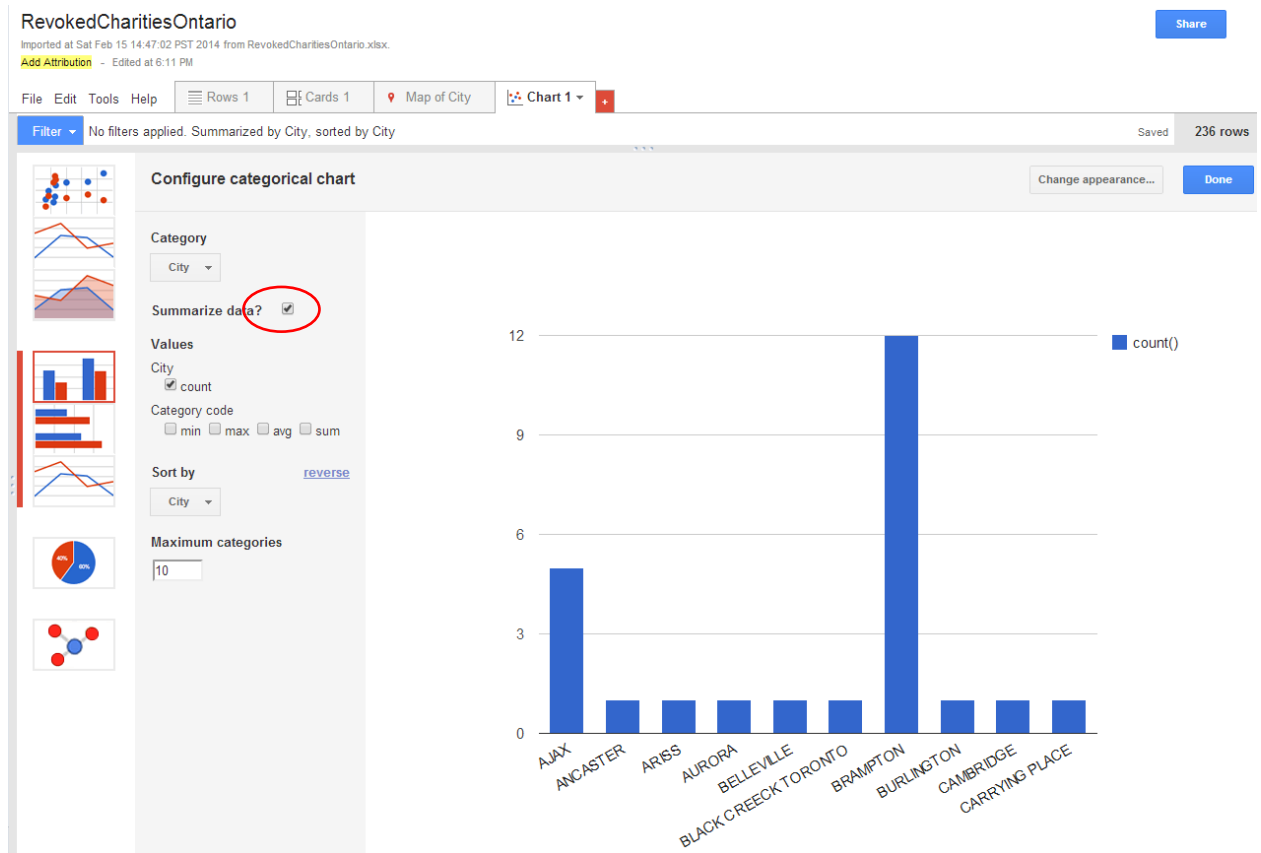menu under the "Category" label.

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.
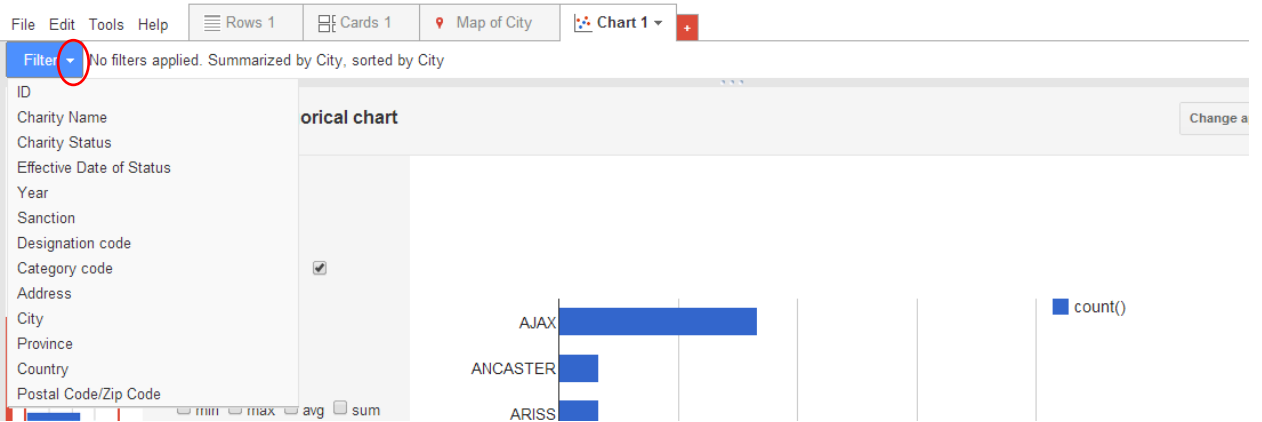
To do this, let's first of all select the bar chart.
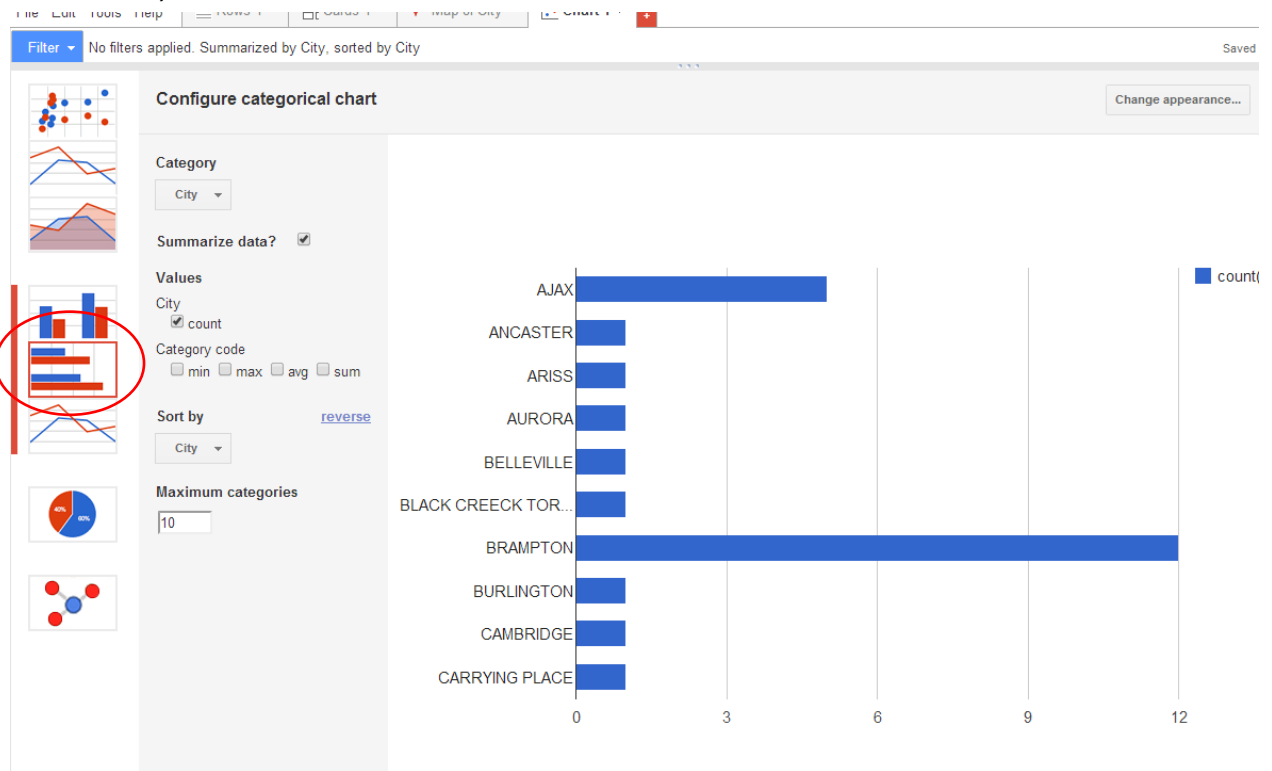
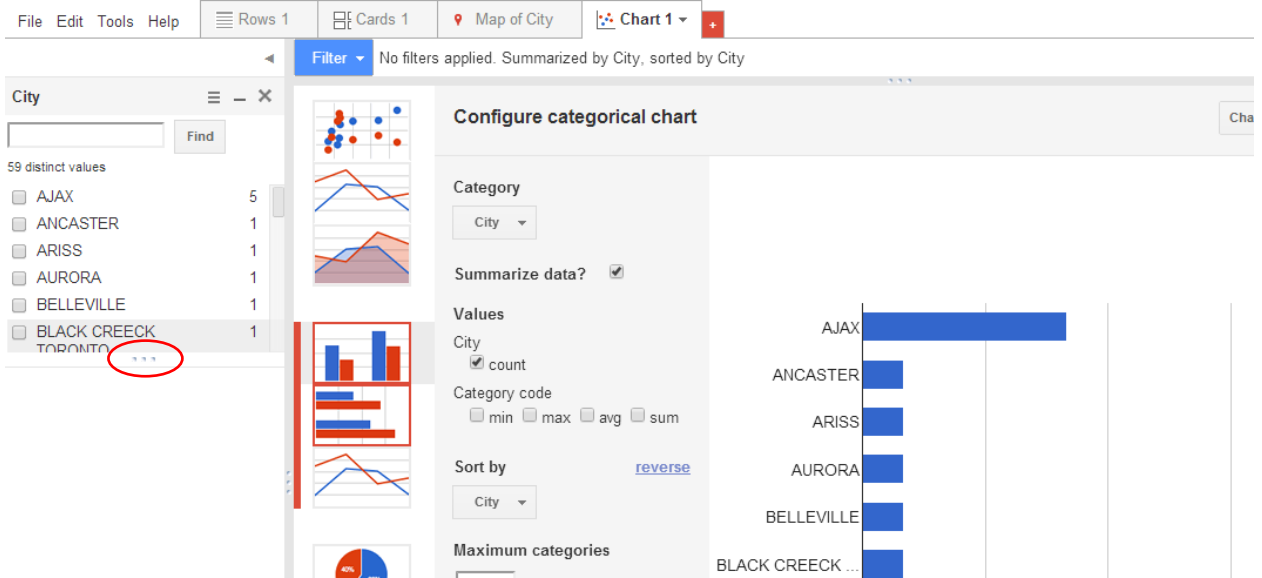54)   Sort the bar chart in descending order. Click on the downward arrow to the left of the "Filter" tab.

55) Choose "City".

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.

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

58) Sort by Count, and close the menu.

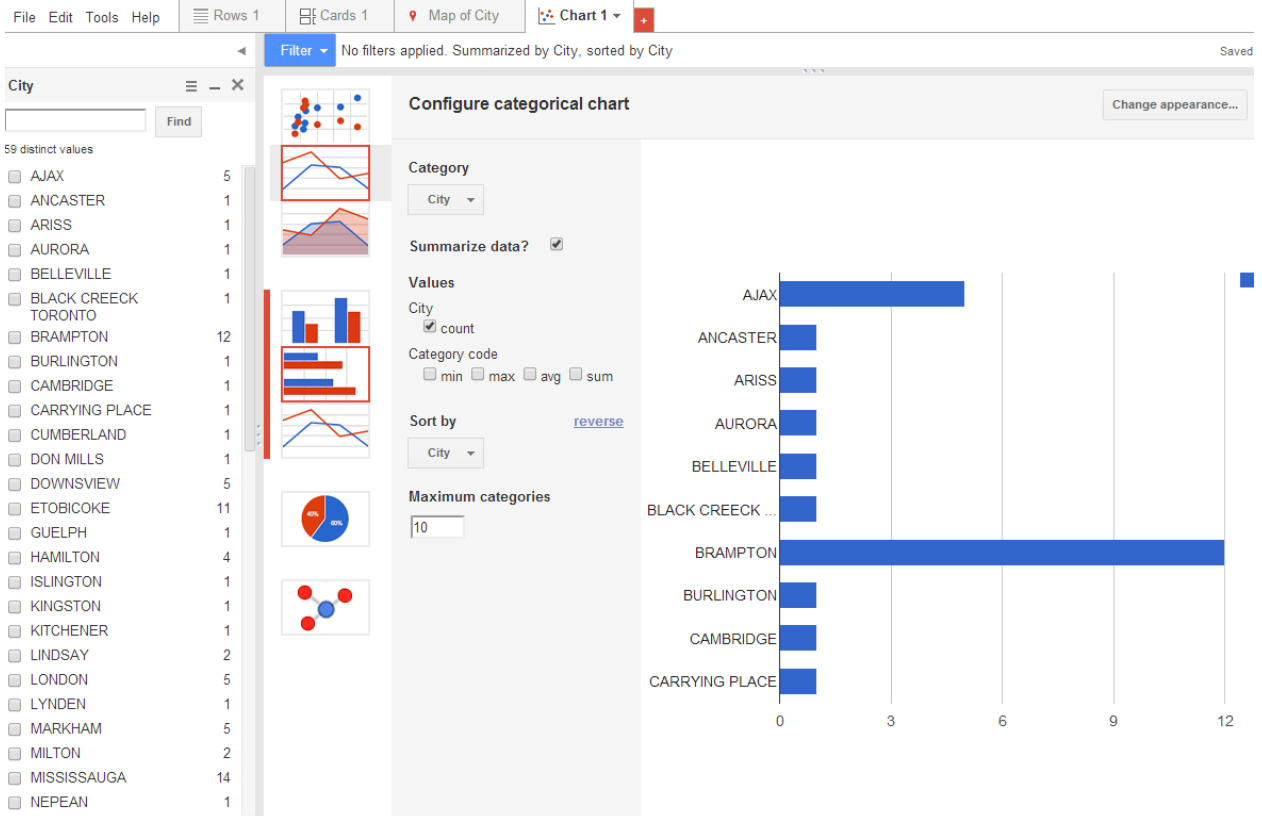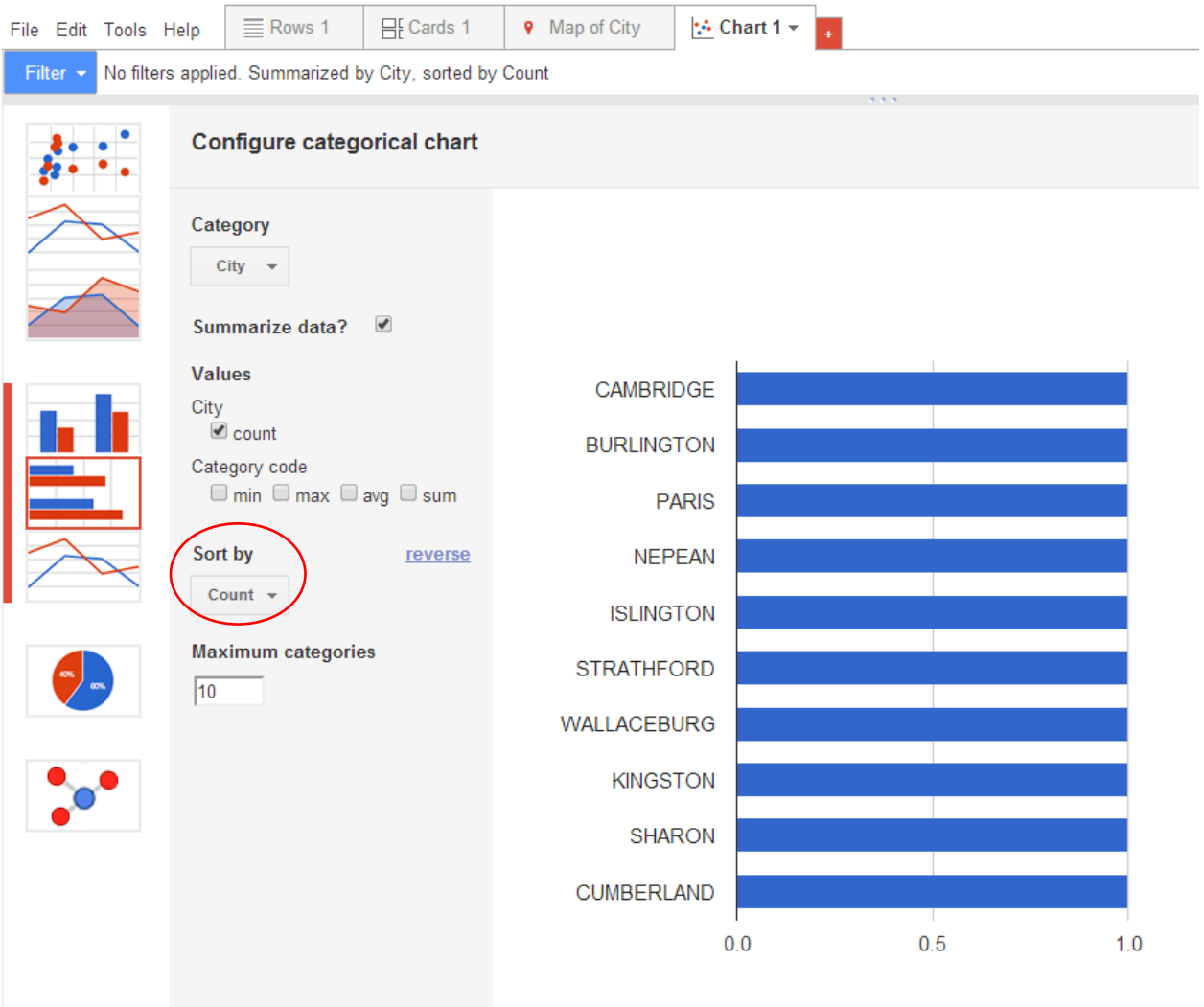59)   Go to the "Sort by" section, and change it from "City" to "Count".

RevokedCharitiesOntario

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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 Count

Configure categorical chart

Category

City ▾

Summarize data? ☑

Values

City
  ☑ count
Category code
  ☐ min ☐ max ☐ avg ☐ sum

Sort by   reverse

Count ▾

Maximum categories

10

	0.0	0.5	1.0
CAMBRIDGE			
BURLINGTON			
PARIS			
NEPEAN			
ISLINGTON			
STRATHFORD			
WALLACEBURG			
KINGSTON			
SHARON			
CUMBERLAND			

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.

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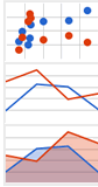Add Attribution - Edited at 6:11 PM

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   Chang

Category

  City ▾

Summarize data? ☑

Values
City
  ☑ count
Category code
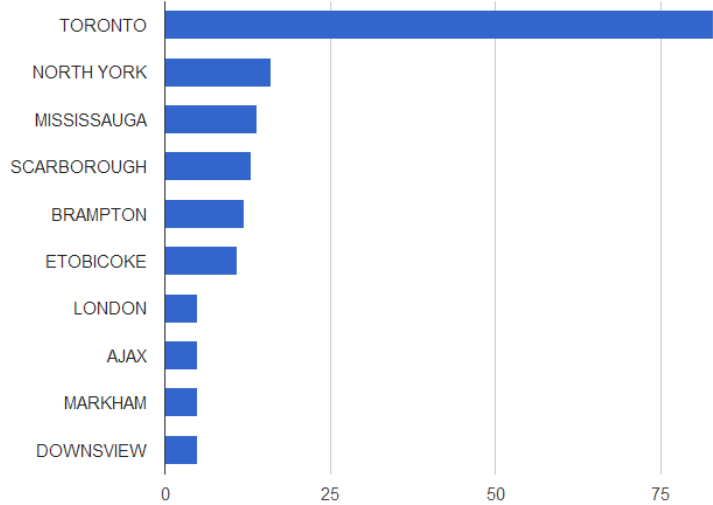 ☐ min ☐ max ☐ avg ☐ sum

Sort by   reverse

  Count ▾

Maximum categories

  10
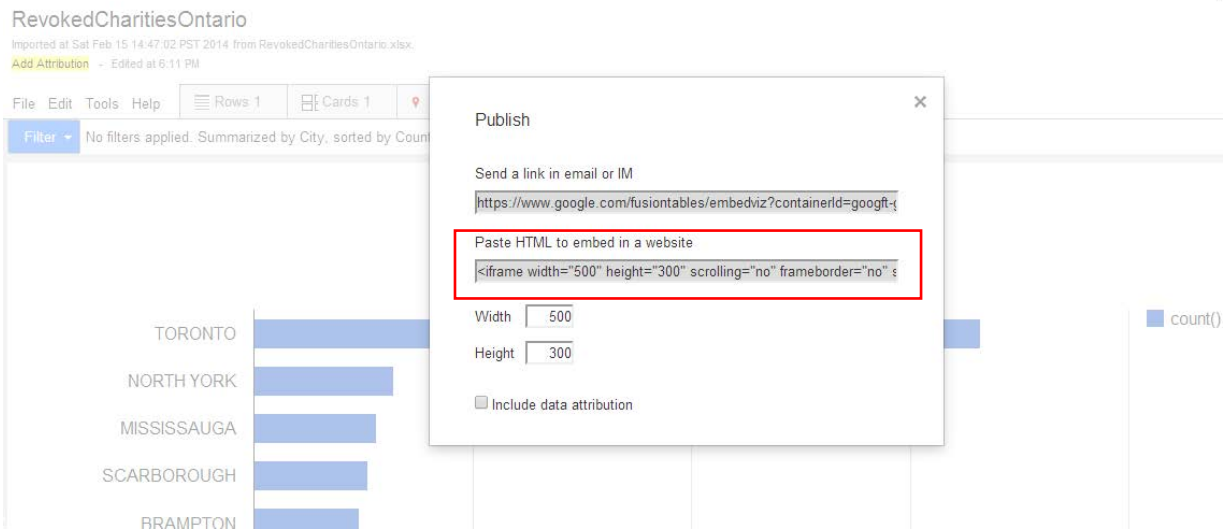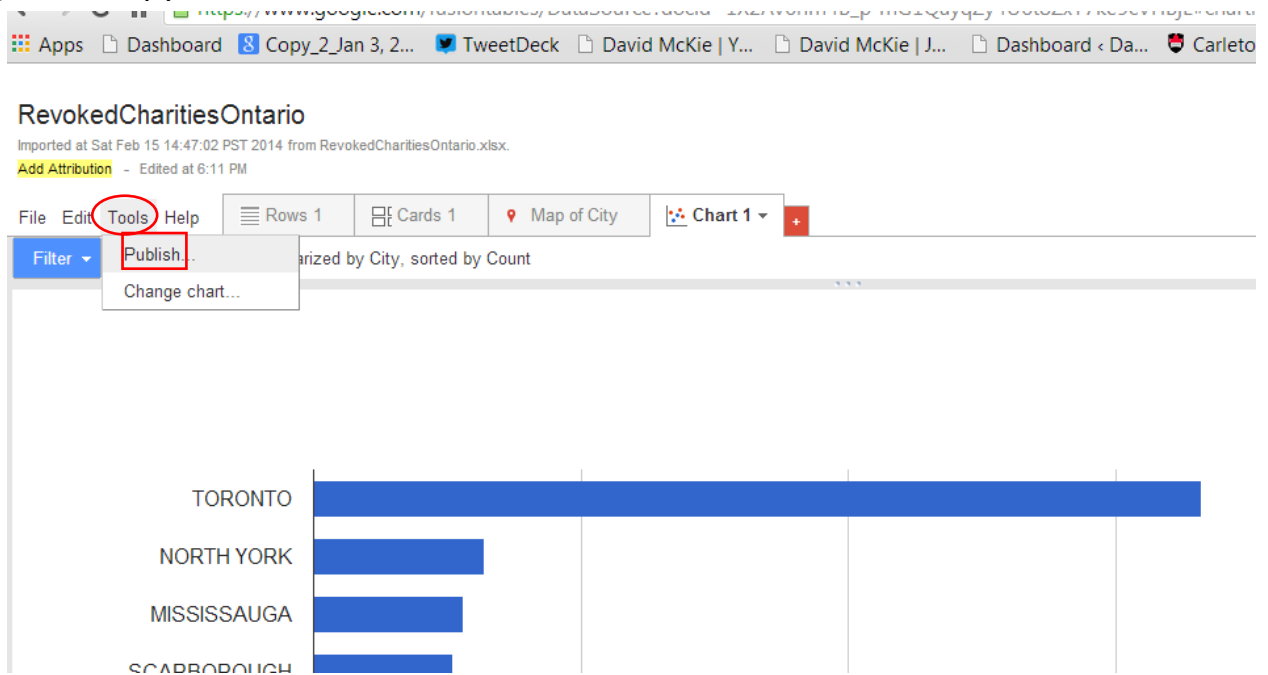
61)   Once you're happy with this, result select the "Done" tab, and share
        the bar graph, just like we did with the map.

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)