



Visualizing Open Data with +tableau++public

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Objective

Learn how to use Tableau Public to create engaging open data visualizations

High-Level Agenda

➤ Tableau Public Overview

➤ Case Study

- 2016 Municipal Census Data
- Edmonton Neighbourhood Boundaries
- EPS Crime Data



Tableau Public Overview

➤ **Software tool** for creating interactive, sharable visualizations from a variety of data

➤ Quick

➤ Easy

➤ Sharable

➤ **Free!** (with some restrictions)



Tableau Public Overview

- **Web-based platform for sharing visualizations created with Tableau Public software**

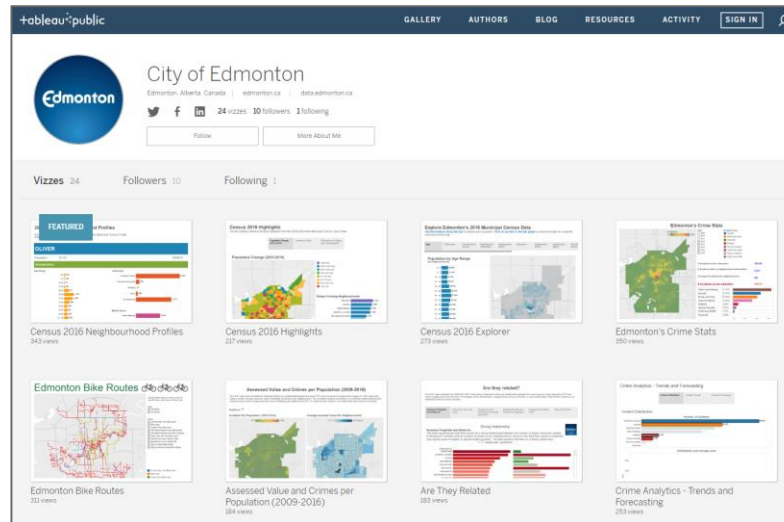


Tableau Public vs Tableau Desktop

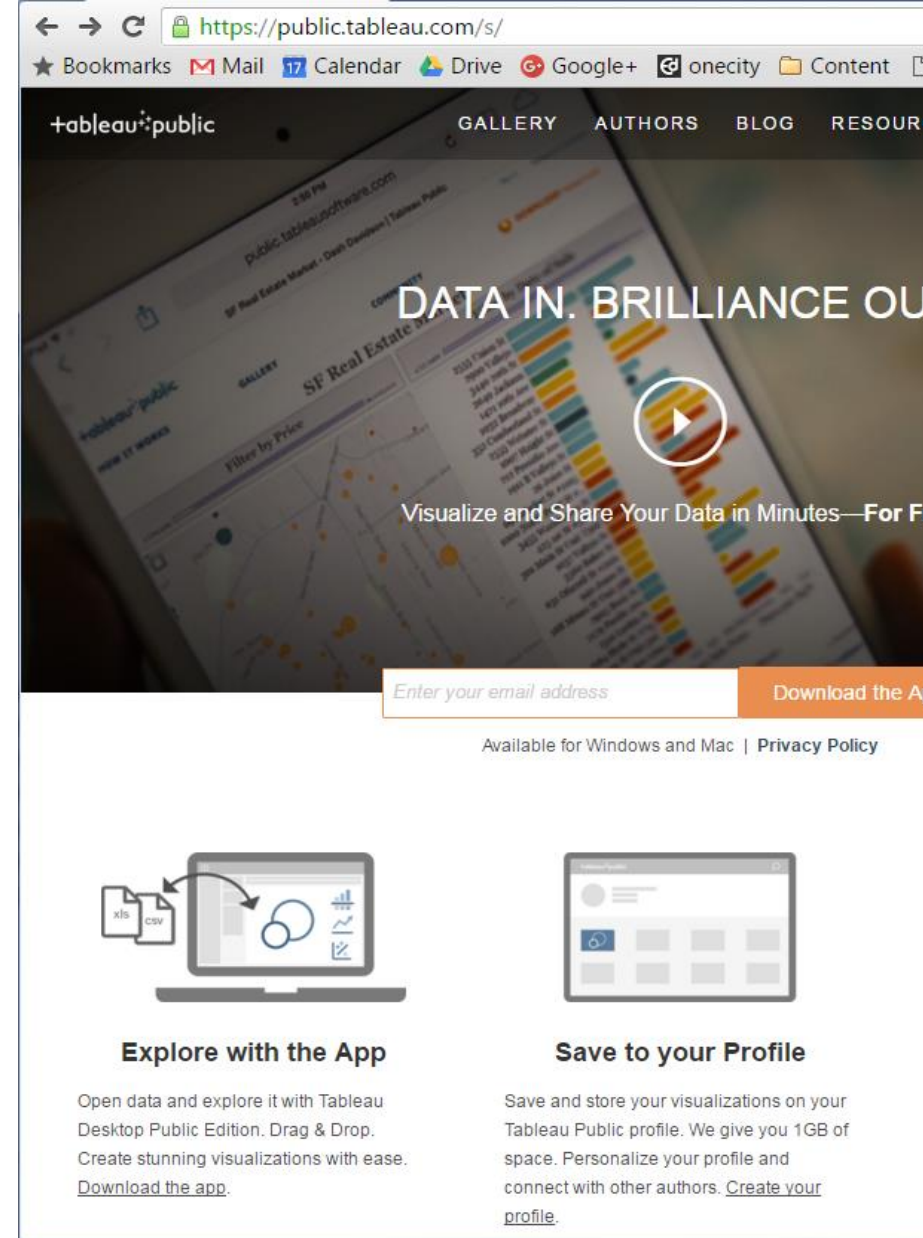
	Tableau Desktop	Tableau Public
Platform	Desktop (Windows/Mac)	Desktop (Windows/Mac)
Pricing	\$999 USD for Personal \$1999 USD for Professional	Free
Features	<p>Save locally or publish to the web</p> <p>Connect to: Google Sheets, Excel, CSV, oData, most databases</p> <p>No data source size limits</p>	<p>Publish to the web only. Workbooks and data are freely accessible to the world.</p> <p>Connect to: Google Sheets, Excel, CSV, OData,</p> <p>Data sources have limit of 1 millions rows.</p>



Activity

Create a Tableau Public Account

<https://public.tableau.com/>



← → ↻ <https://public.tableau.com/s/>

★ Bookmarks 📧 Mail 📅 17 Calendar 📁 Drive 🍷 Google+ 🏠 onecity 📁 Content

+tableau:public GALLERY AUTHORS BLOG RESOUR

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Explore with the App

Open data and explore it with Tableau Desktop Public Edition. Drag & Drop. Create stunning visualizations with ease. [Download the app.](#)

Save to your Profile

Save and store your visualizations on your Tableau Public profile. We give you 1GB of space. Personalize your profile and connect with other authors. [Create your profile.](#)



Activity

Download and open an existing workbook

[http://public.tableau.com/profile/city.of.edmonton#!/vizhome/EdmontonStrathconaSt AlbertSchoolExplorer/SchoolExplorer](http://public.tableau.com/profile/city.of.edmonton#!/vizhome/EdmontonStrathconaStAlbertSchoolExplorer/SchoolExplorer)




The Tableau Workspace

The screenshot shows the Tableau interface with the following components and their corresponding labels:

- Columns shelf:** Contains 'AVG(Longitude)' and 'AVG(Latitude)'.
- Rows shelf:** (Empty)
- Pages shelf:** (Empty)
- Data window:** Shows the 'Schools' data source.
- Dimensions shelf:** Contains 'City/Town', 'E-mail Address', 'Fax Number', 'Grades Offered', 'Phone Number', 'Postal Code', 'Province', 'School District', 'School Name', 'School Number', 'Street Address', and 'Website'.
- Filters shelf:** Contains 'Grades Offered', 'Action (City/Town)', and 'SUM(Total Enrolment)'. A 'Filter' label points to the 'Grades Offered' pill.
- Marks card:** Set to 'Automatic'.
- Pills:** 'School District' (Color), 'SUM(Total E...)' (Size), 'School Number' (Label), 'ATTR(School N...)' (Detail), and 'ATTR(Grades...)' (Tooltip).
- Measures shelf:** Contains 'Latitude', 'Longitude', 'Latitude (generated)', 'Longitude (generated)', 'Number of Records', and 'Measure Values'.
- Colour legend:** Shows 'School District' with color swatches for Edmonton Catholic, Edmonton Public, Elk Island Catholic, Elk Island Public, and St. Albert Catholic.
- Size legend:** Shows 'SUM(Total Enrolment)' with size swatches for 10, 500, 1,000, 1,500, and 2,000.
- Worksheet:** The main visualization area showing a map of schools with colored and sized markers. A 'Worksheet' label points to this area.
- Grades Offered:** A list of grade levels with checkboxes, including (All), Preschool to 6, K to 1, K to 3, K to 4, K to 6, K to 8, K to 9, K to 12, 1 to 6, 1 to 9, 1 to 12, 2 to 6, 2 to 12, 5 to 8, 7 to 9, 7 to 12, 7 to 12 & Adult, 9 to 12, 10 to 12, and Special.

Anatomy of a Tableau Workbook

Story  (contains a sequence of worksheets or dashboards)

Dashboard  (displays one or more worksheets)

Worksheet 
(where you create visualizations)



Case Study

- ▷ **EPS Crime Data**
- ▷ **Edmonton Neighbourhood Boundaries**
- ▷ **2016 Municipal Census Data**

For each step

1. You'll be shown how to do it
2. You'll have additional time to complete the work yourself



Key Concepts

- Connecting to text files and oData
- Text tables, bar graphs
- Mapping co-ordinates and polygons
- Data blending
- Subtotals
- Number format
- Calculated Fields
- Filters

Case Study Manual:

<http://bit.ly/iods2017>



Case Study - Step A

Connecting to a text file

Case Study - Step B

Creating a text table

Case Study - Step C

Adding subtotals

Case Study - Step D

Creating a bar graph

Case Study - Step E

Adding a filter

Case Study - Step F

Displaying a value by colour

Case Study - Step G

Connecting to a text file

Case Study - Step H

Mapping coordinates

Case Study - Step I

Mapping polygons

Case Study - Step J

Blending data

Case Study - Step K

Displaying a value by colour

Case Study - Step L

Connecting to oData

Case Study - Step M

Creating a calculated field

Case Study - Step N

Blending data

Case Study - Step 0

Creating a calculated field

Case Study - Step P

Displaying a value by colour

Case Study - Step Q

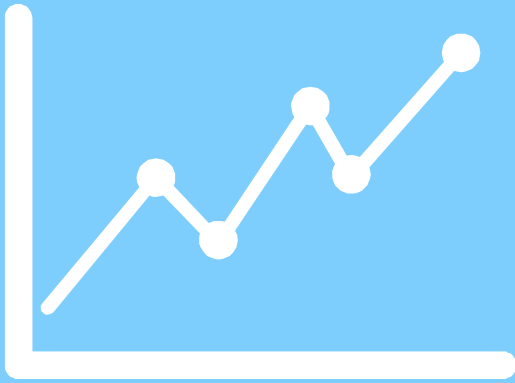
Adding a filter

Case Study - Step R

Creating dashboards

Case Study - Step S

Publishing to Tableau Public



Q & A

Use this time to ask questions and further explore the data

Thanks!

More questions?

Reach our team at ace@edmonton.ca

Check out our work at <http://ace.edmonton.ca>