

Power Bi Resources

Highlighted items are especially good resources. Feel free to suggest.

INTRODUCTION

<https://app.powerbigov.us> - [login here to Power Bi government](#)

<https://app.powerbi.com/> - MSFT Power Bi website

[Latest features and updates](#) - read this to keep informed!

[Power Bi Community](#)

LA CITY - Example Reports

[BCA - PLA Overview Report](#) - user guide [here](#), uses bookmarks & buttons

[BCA - Monthly PLA Report](#) - user guide [here](#)

Subreddit

<https://www.reddit.com/r/PowerBI/> - message board with experts and beginners alike, many links to many resources. Not too active, but a good repository of links and resources there, some of which are found here.

FREE COURSES

[Microsoft Power BI Guided Learning](#) - collection of courses

[EDX: Analyzing and Visualizing Data with Power BI](#)

[Lynda: Create your online City library account here, to access Lynda here.](#)

[Dashboard in a Day/Hour Training](#) - MSFT holds free training, material at GitHub, [here](#).

VIDEOS

[Analyze & Visualize Data with Power BI](#) (playlist of videos from EDX course)

[DAX 101 \(1:51:55\)](#)

[Advanced DAX \(1:55:10\)](#)

[Intro to DAX](#) (from Microsoft, looks like DAX 101 shortened) (101 broken down in sections. 101 is better)

[Query Parameters](#) - way for users to select by project

[Building relationships between tables when both have duplicates](#)

[Power BI Architecture Best practices and Performance Tuning](#)

[DAX/Power Bi Youtube Channels](#)

[Curbal](#)

[Guy in a Cube](#)

[PASS Data Warehousing and Business Intelligence Virtual Chapter](#)

BOOKS

[The Definitive Guide to DAX](#) - read the first 5 chapters

[Power Query M language specification.pdf](#) (Click link to download, this is used in PowerBi using Query Editor)

[Pro Power BI Desktop](#)
[Largest FREE Microsoft eBook Giveaway](#)

GENERAL REFERENCES

[Power Bi Website](#)
[What's the difference between DAX and Power Query \(or M\)?](#)

Introduction

[Getting the Data Into Power BI](#) - good intro to PBI

DAX

[Data Analysis Expressions \(DAX\) Reference](#)
[SQL Bi Reference Site](#)
[Power Bi Tips and Tricks](#) - nice videos and articles

Power Query (M)

[Power Query M Reference](#)
[Power Query Formula Language in Power BI Desktop](#) - helpful article for "basics"

R

[R Script Showcase](#) - other charts you can create using R within PowerBi

USEFUL ARTICLES

Power Query ("M")

[FILTER A TABLE](#)
[Filter a table \(Power Query\) - MSFT](#)

JOIN TYPES - MERGE QUERIES

[How to Change Joining Types in Power BI and Power Query](#)
[Power BI: Merge Query with "M"](#)

LAST REFRESH

[Display Last Refreshed Date in Power BI](#)

MULTIPLE CONDITIONS

[Multi Condition Logic In Power Query](#)
[Multiple conditions for a conditional column in Power Query](#) - pattern and example with ranges

OPERATORS

[Power Query Operators - MSFT](#) - list of all the operators used

DAX (Data Analysis Expressions)

TEXT FUNCTIONS

[Using DAX to Split Delimited Text into Columns](#)
[Power BI: DAX: Text Functions](#)
[From SQL to DAX: IN and EXISTS](#) - if contains text, maybe use for categorizing zip codes

CALCULATE FUNCTION & FILTERING

[Filter Arguments in CALCULATE](#)

[Order of Evaluation in CALCULATE Parameters](#)

[Context Transition and Expanded Tables](#)

[Propagate filters using TREATAS in DAX](#)

[Calculate with OR/ AND/ NOT in filter](#)

FILTER FUNCTION

[Filtering Tables in DAX](#)

[FILTER\(\) – When, Why, & How to Use It](#)

CALCULATETABLE FUNCTION

[CALCULATETABLE Function \(DAX\) - MSFT](#)

[Using calculated tables in Power BI Desktop - MSFT](#)

CUMULATIVE TOTALS “RUNNING/ROLLING TOTALS”

[Cumulative Totals - DAX Patterns](#) - use for running percentages, or “running averages”

USING VARIABLES

[Variables in DAX](#) - note, variable names must be one string, no spaces. Ex. Tier1Hours

[VAR Function \(DAX\) - MSFT](#)

RELATIONSHIPS

[Physical and Virtual Relationships in DAX](#)

[How to relate tables in DAX without using relationships](#)

COUNTING CONDITIONALLY

[DAX Count number of unique values in one column only if frequency is over a certain number](#)

CONDITIONAL CALCULATIONS

[The Magic of IF\(VALUES\(\)\)](#) - if a certain value, then X, else Y.

R

[Using R in Query Editor - MSFT](#) - for data transformations

[Create Power BI visuals using R](#)

DATA ANALYSIS TECHNIQUES

[Correlation, Seasonality and Forecasting with Power BI](#)

MAPS! GEOGRAPHIC INFORMATION SYSTEM (GIS)

[ArcGIS \(ESRI\)](#)

[How to create geographic maps in Power BI using ArcGIS](#)

Shape Maps

[GeoHub: Council Districts \(Adopted 2012\)](#)

[Mapping L.A. Boundaries API](#) - instructions in the next link to get the shape map within PBI

[Create Your Own Custom Map for Power BI](#)

[Shape Map Better than the Filled Map](#)

[Distance between two points](#)

[Power BI Routing Visual with Two Lines of R](#)

MACHINE LEARNING/ CORTANA

[Enable Cortana to access Power BI reports \(and their underlying datasets\) - MSFT](#)

QUERY PARAMETERS

[Using Parameters in Power BI](#)

[Deep Dive into Query Parameters and Power BI Templates - MSFT](#)

Q & A

[Create featured questions for Power BI Q&A - MSFT](#)

[Tips for asking questions in Power BI Q&A - MSFT](#)

[Now in preview: Conversational BI with Q&A on Power BI mobile apps \(iOS\) - MSFT](#)

CODE FORMATTERS

[Online DAX Code Formatter - helpful code formatter that's online. Helps you debug code!](#)

[DAX Studio](#) - Getting started with DAX Studio (incorporates above & more features)

[Notepad++ and DAX – Guest Post from Colin Banfield](#)

BOOKMARKS, BUTTONS, AND LAYOUTS

Bookmarks

[Use bookmarks to share insights and build stories in Power BI - MSFT](#)

[Bookmarking Feature Contest - MSFT](#) - immersive experiences for end users to interact with data

[Whisky Experience](#)

[Team Performance vs Target](#)

[Power Bi Quest](#), details [here](#) and material on GitHub [here](#)

Buttons

[Buttons - MSFT April 2018 Feature Summary](#)

[Pushing the Power BI buttons 👉 - Curbal](#) - Buttons! From April 2018 update

[Power Tricks, Tips and Tools - PowerBI.Tips](#) - 51:10 “no-filters” button, see Layouts below

Layouts - putting it all together

[Layouts - PowerBi Tips](#) - layout templates

[Cool Blue Layout - PowerBi Tips](#) - side toolbar feature, reverse engineer to apply

COLORS & REPORT THEMES

[Color palettes](#) - really good site to pick colors (hex codes)

[Make your own theme using a JSON file](#)

[Power BI Template to create Report Themes with the JSON template](#) - Curbal

[Link to Curbal's PBI template guide](#)

[Link to Curbal's JSON file \(for editing\)](#)

[Report Theme Generator - PowerBi Tips](#) - go with Curbal to understand how it works first

FREE ICONS/PICS

[Free Flat Icons](#)

[Database of free icons](#) - available in PNG, SVG, EPS, PSD and BASE 64 formats

[Royalty free stock photos and videos](#)

[14 Best Places To Get Free Images For Your Website](#)

EMBED REPORTS

[Microsoft Power BI Embedded Samples](#) - examples of PBI embedded into applications

[Embedding with Power BI](#)

[Tutorial: Embed a Power BI report, dashboard or tile into an application for your customers](#)

[Embed your Power BI dashboards, reports and tiles - Power Bi Pro](#)

[Embed Reports into Applications - US Gov Cloud](#)

DATA SECURITY OPTIONS

[Row-level security \(RLS\) with Power BI](#) - define user roles and rules within Power Bi Desktop

ON-PREMISES DATA

[On-premises data gateway](#)

[On-premises data gateway in-depth](#)

[Introducing Power BI Report Server for on-premises Power BI report publishing](#)

GREAT DASHBOARDS AND REPORTS

[Data Visualization Gallery - Fairfax County, VA](#)

[Climate Change - MSFT](#)

[Partner Showcase - MSFT](#) - filtered for "United States" and "Government", some good examples

[Data Stories Gallery - MSFT](#) - see how others create reports

ASPIRATIONS

[LA City Mayor](#)

[Mayor's Dashboard](#)

[Geohub](#)

[Esri 2016 UC: City of Los Angeles GeoHub](#)

[City of Los Angeles Open Data Homepage](#)

[Location is Driving the Value of L.A.'s Open Data](#)

[LA City Controller - lots of tableau visualizations](#)

[Control Panel LA - Financial & Performance Data](#)

[Utility Panel LA - DWP Financial & Performance Data](#)

[GeoPanel LA - City Data Mapped](#)

[Economy Panel LA - Snapshot of City's Economy](#)

[Property Panel LA - Properties Mapped](#)

[Style Guide](#) - some style ideas

ADDITIONAL STUDY MATERIALS

[SQL Database Fundamentals](#) - why relational databases are normalized

INTERESTING SAMPLE DATA

[Enigma Public](#) - "The world's broadest collection of public data"