

analytic cartography

master geospatial reporting



SQL Saturday #211

Chicago – Apr 13, 2013

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LobsterPot Solutions

about me

9+ years experience with SQL Server (since SQL Server 2000)

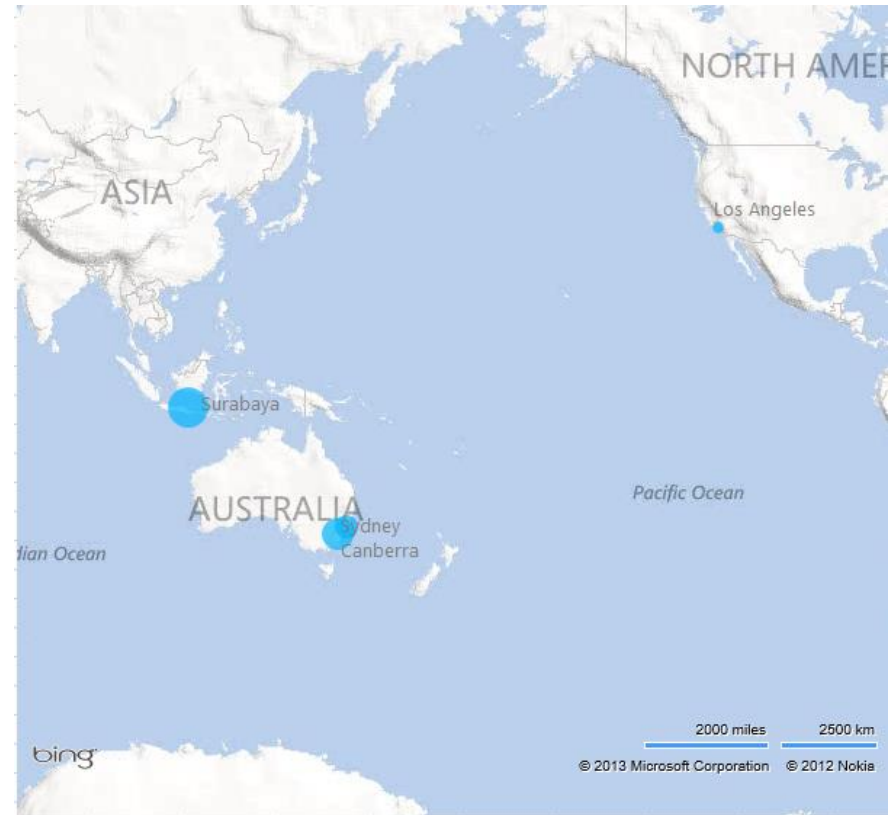
MCSE Data Platform

MCSE Business Intelligence

Current: DW at D&B Credibility Corp in Malibu

Past: BI in SQL Server 2012 using Tabular Model in Sydney

Chapter Leader of SQL Malibu



agenda

reporting
services

power
view

excel 2013
apps

geoflow

sample files

Download: <http://www.mssqlgirl.com/sql-saturday-211-geospatial-reporting.html>

SSRS + EarthquakeIncidents database

Power View

Excel 2013 App

GeoFlow

survey

Which geospatial reporting tool do you like the most?

Tweet: @mssqlgirl #sqlsat211 ...

<more instructions at the end of session>

case study

Topic: Earthquake

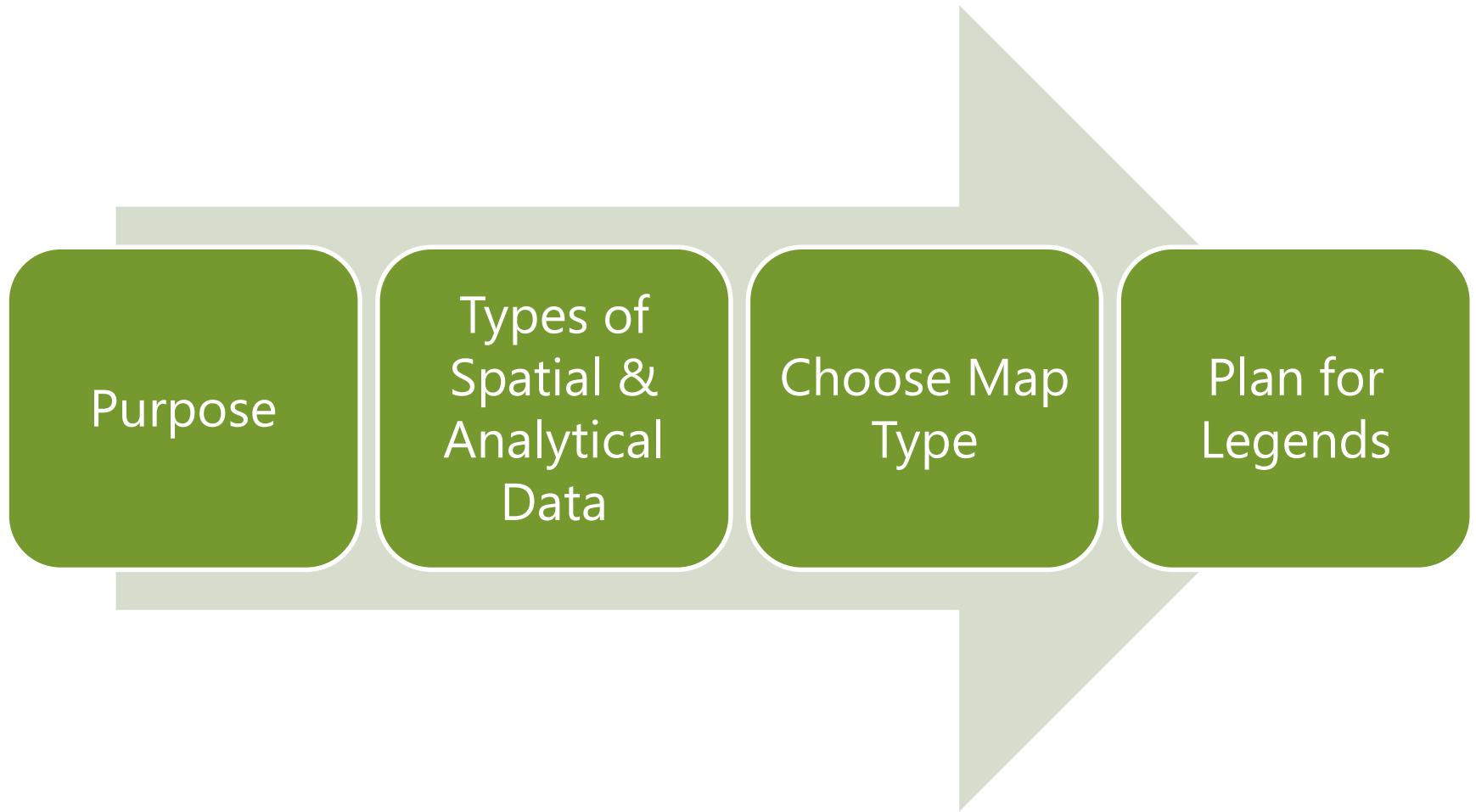
Data Source: USGS Earthquake

- Last 30 days
- Largest / Earliest Deadliest Earthquake

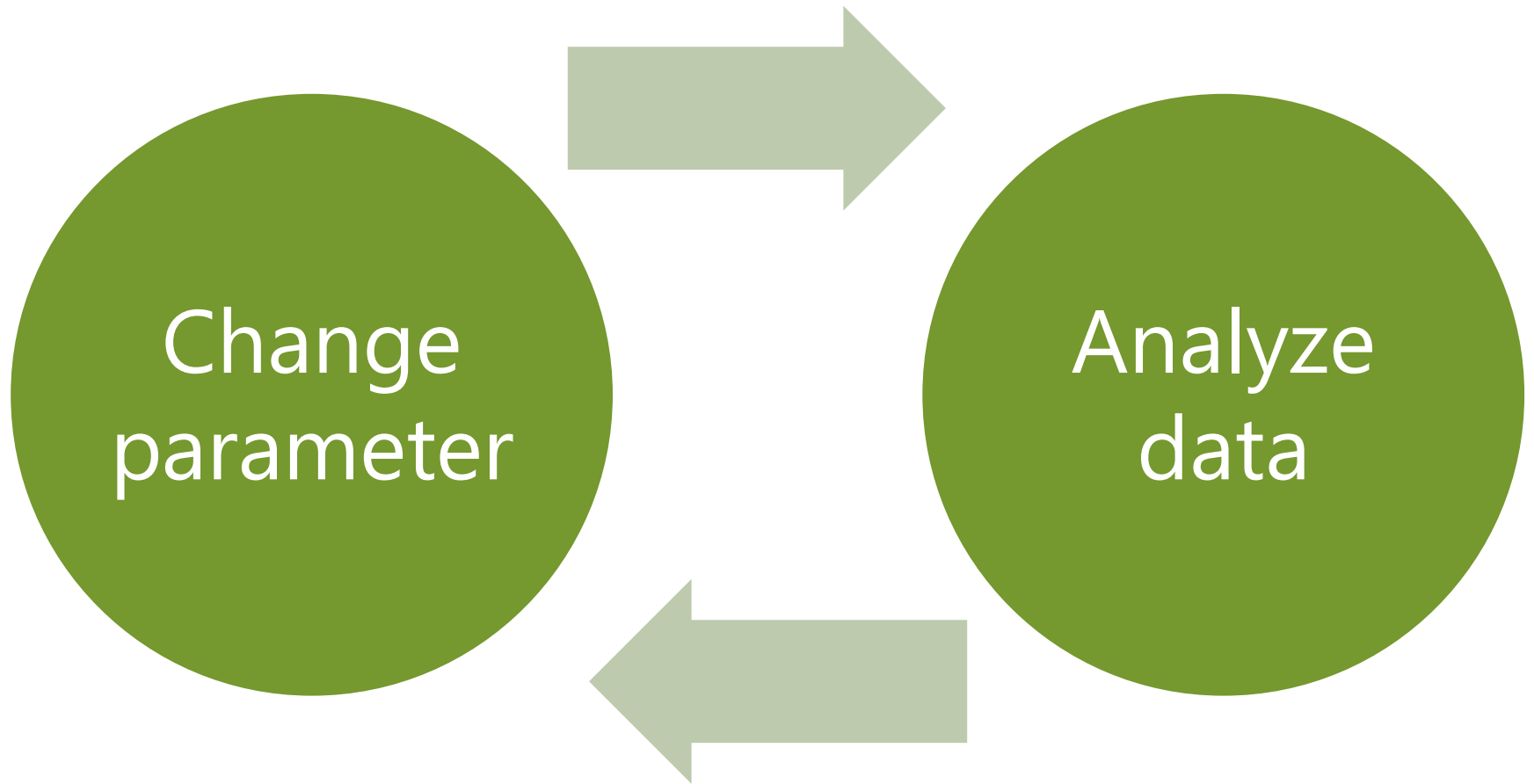
<http://earthquake.usgs.gov/>

reporting
services

development



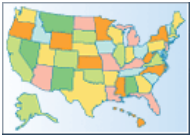
analysis / consumption



spatial data & type of map



source for spatial data



Map Gallery



SQL Server Spatial Data



Third party data source – GIS shape file

analytical data

Connecting the geospatial data with analytical data

Match fields

Representation of value (measure / size)

Representation of category (dimension)

demo 1

Earthquake Analysis using SSRS

power view

maps in power view



Typical Data Sources:

- PowerPivot
- Excel Tables
- Tabular Model
- Data from Azure (datamarket.azure.com)

Data Model in Excel 2013

geography category

- Address
- City
- Continent
- Country/Region
- County
- Postal Code
- State or Province
- Latitude – Longitude
- Place

power view and geography

- Location Hierarchy
- Longitude and Latitude
- Size for Measure
- Color for Categories
- Tiles / Multiplies for Categories

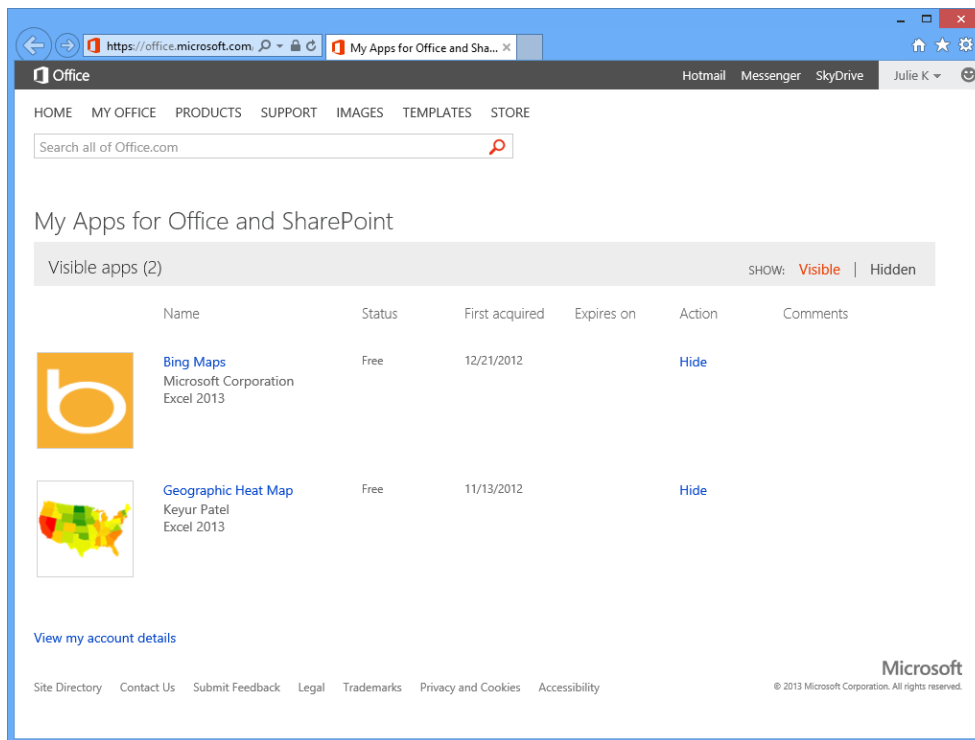
demo 2



Earthquake Analysis in Power View

excel 2013 apps

my apps

office.microsoft.com

A screenshot of the 'My Apps' page on Office.com. The browser address bar shows 'https://office.microsoft.com'. The page has a navigation bar with links: HOME, MY OFFICE, PRODUCTS, SUPPORT, IMAGES, TEMPLATES, STORE. Below the navigation bar is a search bar labeled 'Search all of Office.com'. The main heading is 'My Apps for Office and SharePoint'. Below this, it says 'Visible apps (2)' and 'SHOW: Visible | Hidden'. There is a table with two apps listed. The first app is 'Bing Maps' by Microsoft Corporation, with a status of 'Free', first acquired on '12/21/2012', and an action link 'Hide'. The second app is 'Geographic Heat Map' by Keyur Patel, with a status of 'Free', first acquired on '11/13/2012', and an action link 'Hide'. At the bottom, there is a link 'View my account details' and a footer with 'Microsoft' and '© 2013 Microsoft Corporation. All rights reserved.'.

Name	Status	First acquired	Expires on	Action	Comments
 Bing Maps Microsoft Corporation Excel 2013	Free	12/21/2012		Hide	
 Geographic Heat Map Keyur Patel Excel 2013	Free	11/13/2012		Hide	



demo 3

Earthquake using Excel 2013 apps

sharing geospatial

SkyDrive –

Largest Earthquake in the World



geoflow

geoflow

geoflow for excel 2013



demo 4

Earthquake Analysis with GeoFlow

analysis &
visualization

geospatial reporting

SSRS

- Advanced Mapping Type
- Data Savvy Developer
- Not interactive*
- Easily distributed/scheduled

GeoFlow

- Public Preview
- Interactive 3D + Tour display
- Temporal Data Display
- Data Savvy Users
- File share**

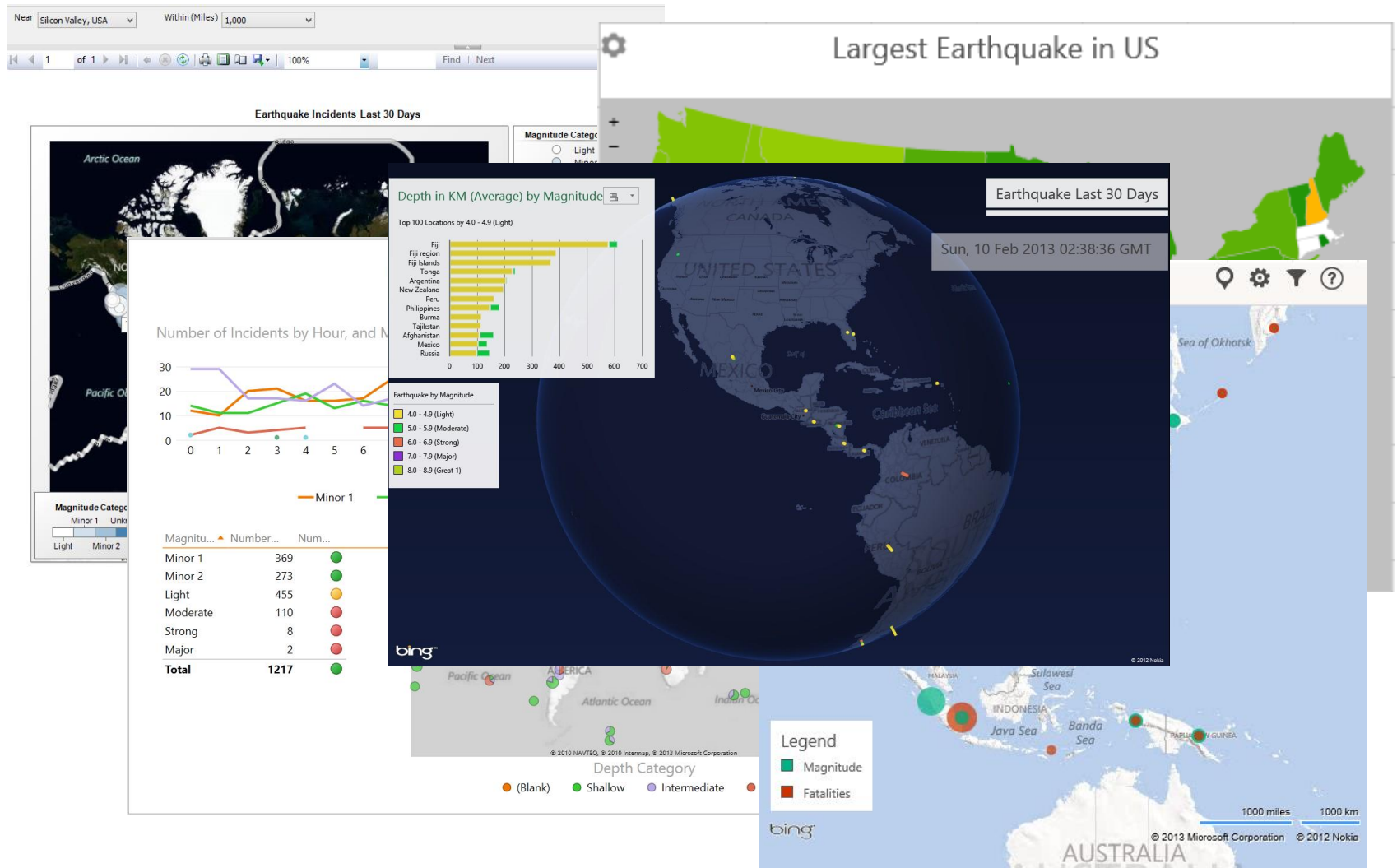
Power View

- Data must be good/ready
- Data Savvy Users
- Interactive data exploration
- File share / Sharepoint

Excel 2013 Apps

- Basic
- Free
- Data Savvy Users
- Can share via SkyDrive

geospatial reporting



the keys to success

Data quality

Data model

Story

Tools

Creativity

survey

Which geospatial reporting tool do you like the most?

Tweet: @mssqlgirl #sqlsat211 #geospatial

With one or more of these

#geoflow

#ssrs

#bingapp

#powerview

#heatmap

wrap up

wrap up

summary

- Understand requirements
- Different tools for different purposes
- Data must be good!
- Evolution to Self Service BI and personal BI

further reading

[Power View Map in Excel 2013 Preview](#)

by Julie Koesmarno

[Plan a Map Report \(Report Builder and SSRS\)](#)

by Technet Microsoft

[Introduction to GIS](#)

by University of Missouri – St. Louis

[Public Preview GeoFlow for Excel 2013](#)

by Julie Koesmarno

[Shape2SQL](#)

by Morten Nielsen

[Spatial Data Series \(SSRS\)](#)

by Jeffrey Verheul

q & a

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thank you
chicago!