

1. Data source

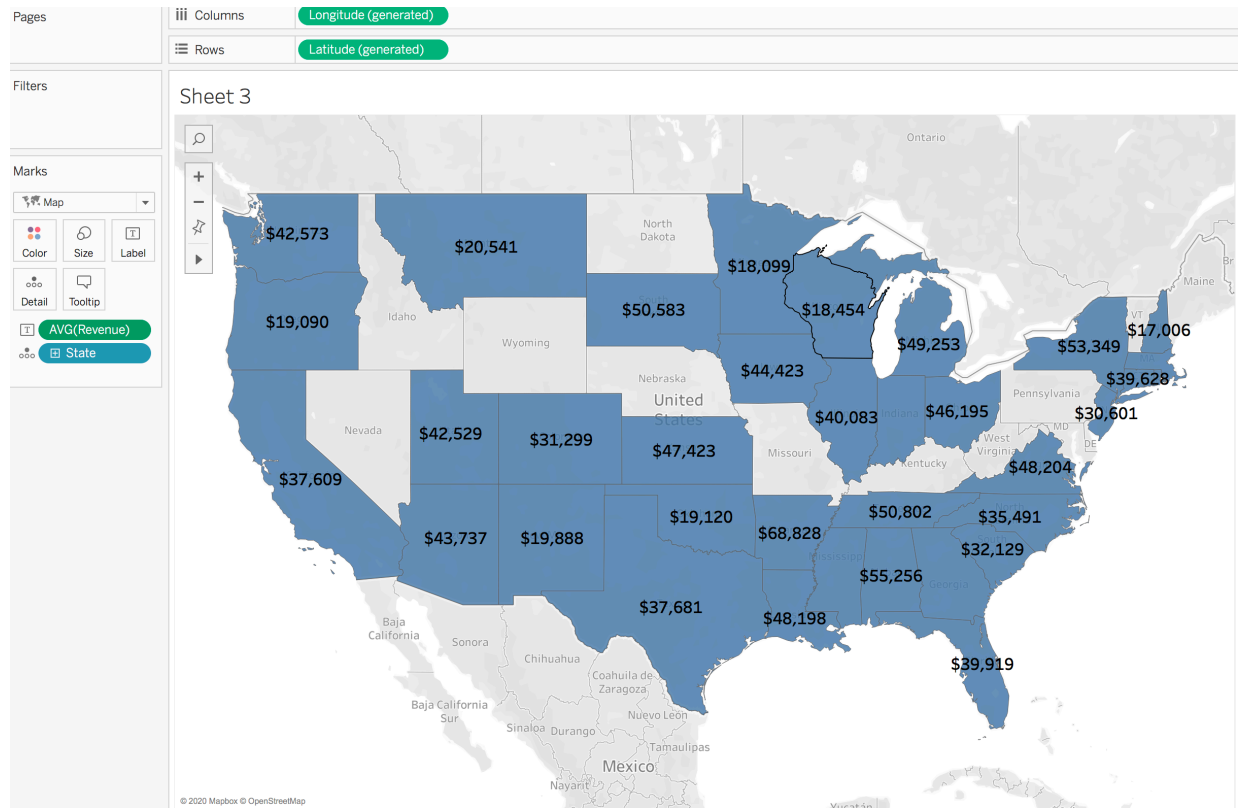
Table1: US Cities populations.csv

# P1-US-Cities-Popul... 2015 Rank	🌐 P1-US-Cities-Popul... City	🌐 P1-US-Cities-Population.csv State	# P1-US-Cities-Population... 2015 Estimate	# P1-US-Cities-Populati... 2010 Census	Abc P1-US-Cities-Popul... Change	Abc P1-US-Cities-Population.csv 2014 Land Area	Abc P1-US-Cities-Population.csv 2010 Population ...	Abc P1-US-Cities-Population.csv Location
1	New York	New York	8,550,405	8,175,133	0.0459	302.6 sq mi	27,012 per sq mi	40.6643°N 73.9385°W
2	Los Angeles	California	3,971,883	3,792,621	0.0473	468.7 sq mi	8,092 per sq mi	34.0194°N 118.4108...
3	Chicago	Illinois	2,720,546	2,695,598	0.0093	227.6 sq mi	11,842 per sq mi	41.8376°N 87.6818°W
4	Houston	Texas	2,296,224	2,100,263	0.0933	599.6 sq mi	3,501 per sq mi	29.7805°N 95.3863°W
5	Philadelphia	Pennsylvania	1,567,442	1,526,006	0.0272	134.1 sq mi	11,379 per sq mi	40.0094°N 75.1333°W
6	Phoenix	Arizona	1,563,025	1,445,632	0.0812	516.7 sq mi	2,798 per sq mi	33.5722°N 112.0880...
7	San Antonio	Texas	1,469,845	1,327,407	0.1073	460.9 sq mi	2,880 per sq mi	29.4724°N 98.5251°W
8	San Diego	California	1,394,928	1,307,402	0.0669	325.2 sq mi	4,020 per sq mi	32.8153°N 117.1350...
9	Dallas	Texas	1,300,092	1,197,816	0.0854	340.5 sq mi	3,518 per sq mi	32.7757°N 96.7967°W
10	San Jose	California	1,026,908	945,942	0.0856	176.6 sq mi	5,359 per sq mi	37.2969°N 121.8193...
11	Austin	Texas	931,830	790,390	0.1789	322.48 sq mi	2,653 per sq mi	30.3072°N 97.7560°W
12	Jacksonville	Florida	868,031	821,784	0.0563	747.0 sq mi	1,120 per sq mi	30.3370°N 81.6613°W
13	San Francisco	California	864,816	805,235	0.074	46.9 sq mi	17,179 per sq mi	37.7751°N 122.4193...

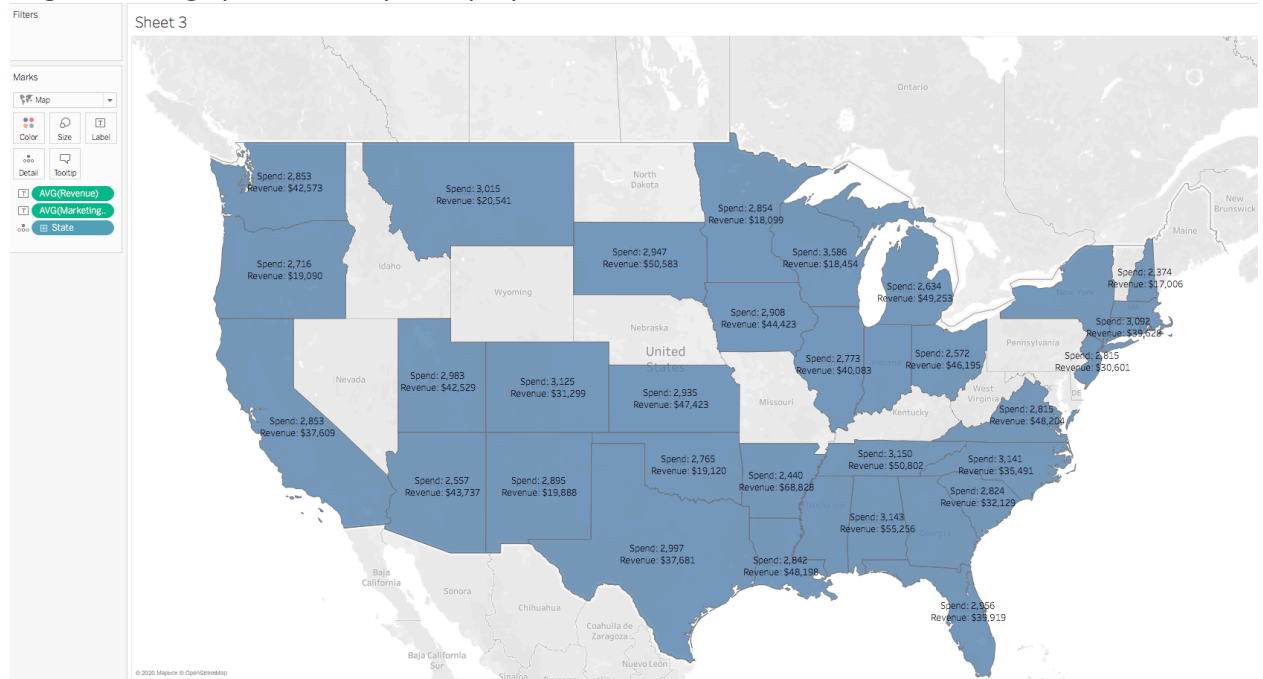
Table2: Startup Expansion.xlsx

# Sheet1 Store ID	🌐 Sheet1 City	🌐 Sheet1 State	Abc Sheet1 Sales Region	Abc Sheet1 New Expansion	# Sheet1 Marketing Spend	# Sheet1 Revenue
1	Peoria	Arizona	Region 2	Old	2,601	48,610
2	Midland	Texas	Region 2	Old	2,727	45,689
3	Spokane	Washington	Region 2	Old	2,768	49,554
4	Denton	Texas	Region 2	Old	2,759	38,284
5	Overland Park	Kansas	Region 2	Old	2,869	59,887
6	Yonkers	New York	Region 1	Old	3,080	53,827
7	Birmingham	Alabama	Region 1	Old	3,110	60,338
8	Antioch	California	Region 2	Old	2,593	19,569
9	Worcester	Massachusetts	Region 1	Old	2,675	59,840
10	Rochester	New York	Region 1	Old	2,984	64,906
11	Rialto	California	Region 2	Old	2,541	16,860
12	Santa Maria	California	Region 2	Old	2,651	21,988
13	Las Cruces	New Mexico	Region 2	Old	2,895	19,888

2.1. Revenue Per City Group By State



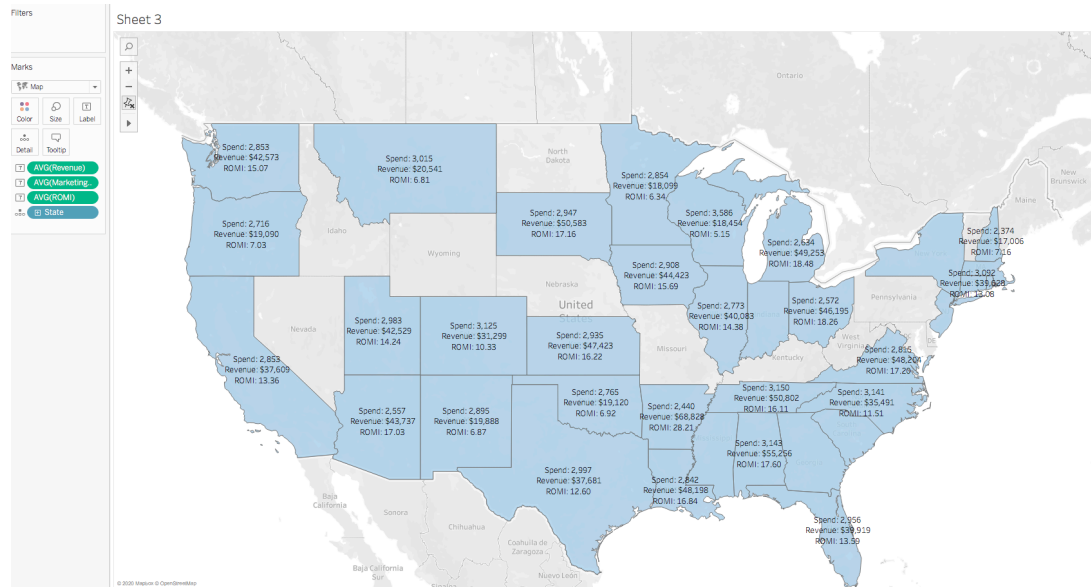
2.2. Avg Marketing Spend Per City Group by State



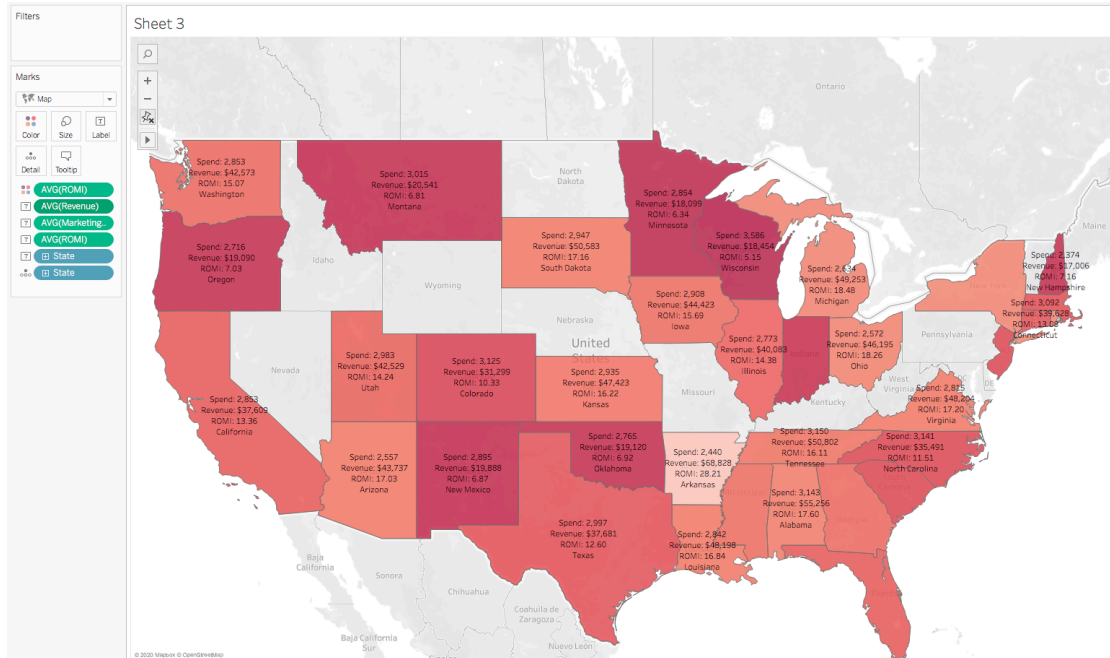
2.3. ROMI Per City Group by State

Create calculated filed *Return On Marketing investment(ROMI)* by:
[Revenue]/ [Marketing Spend]

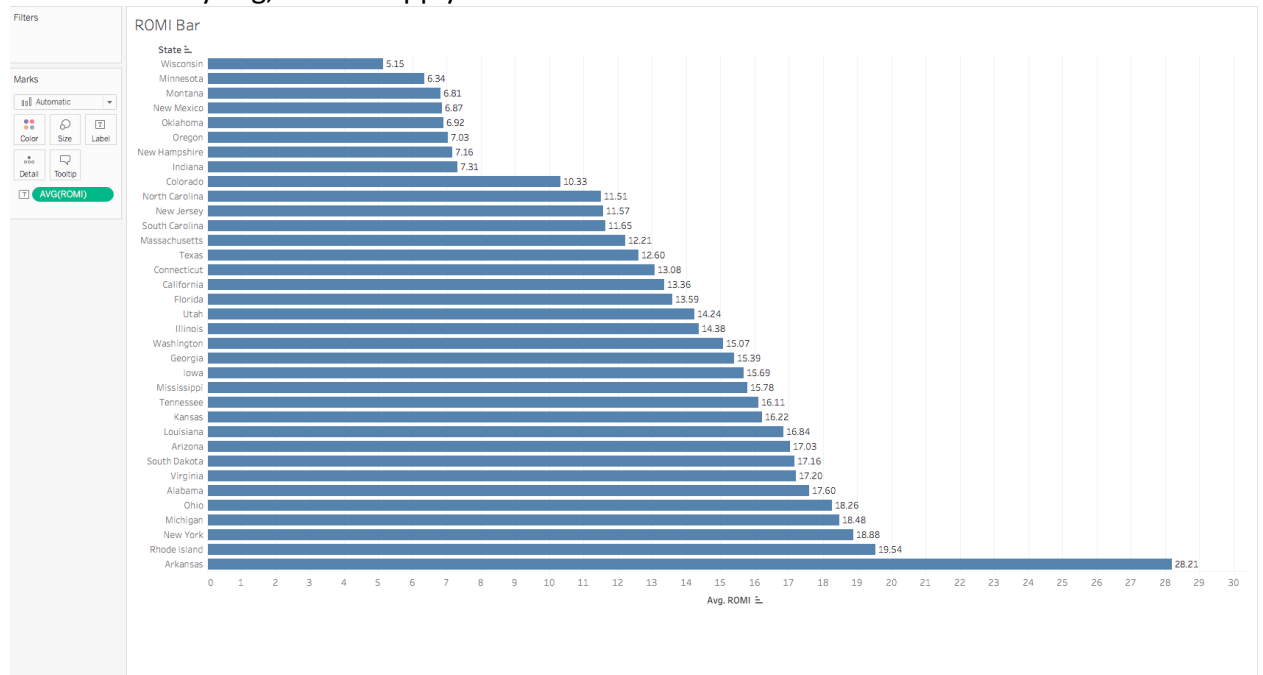
Add calculated filed ROMI into the map, and change the measure method into AVG



When paint states according to their Avg ROMI per city

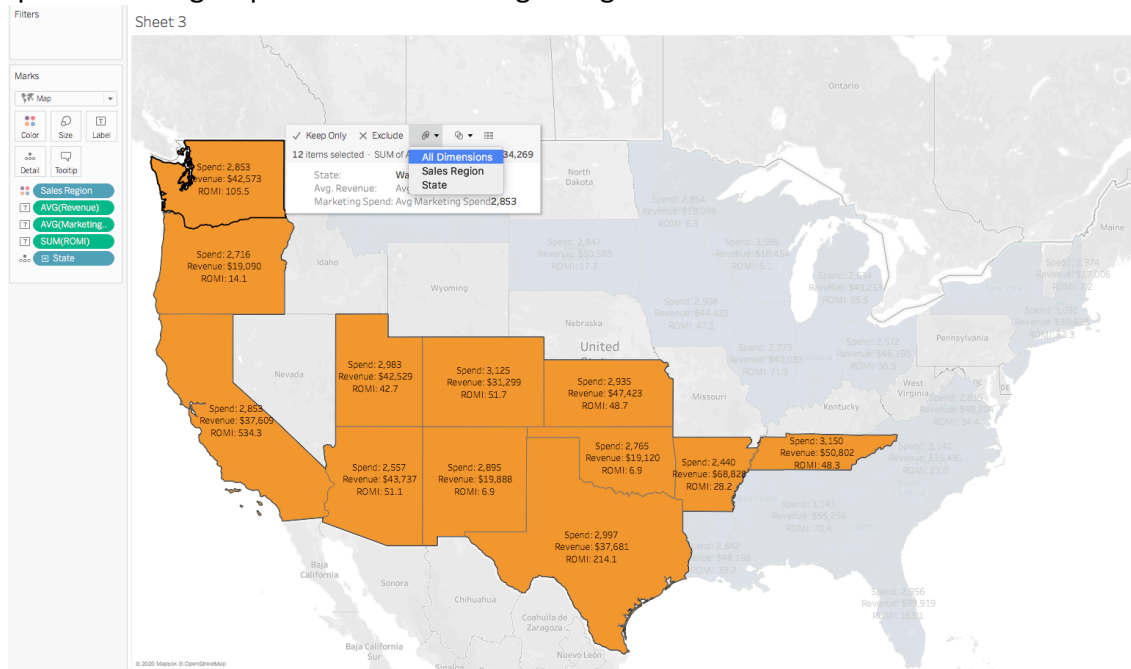


For easier analyzing, we can apply bar chart

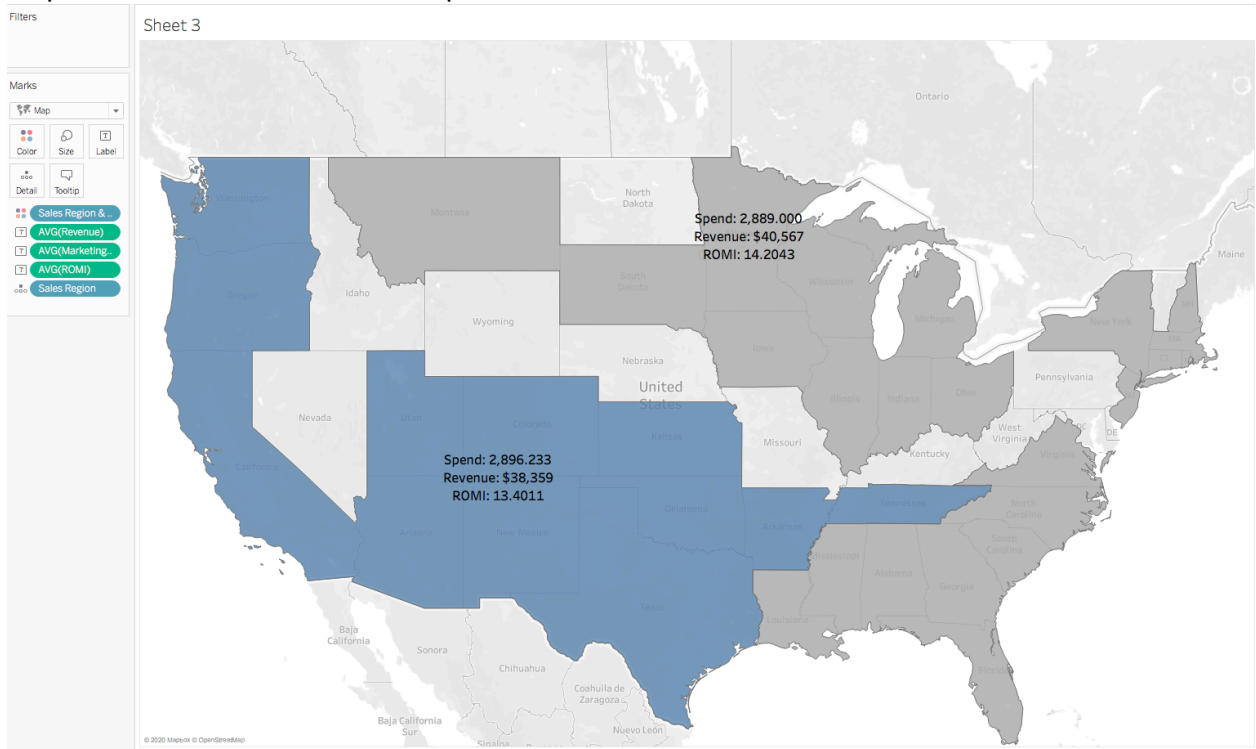


3. Analyzing by Region

Step1: Combine group members according to region



step2: Remove *State* from the map



We can see that the Avg ROMI for sales region2 is lower than the region1, which means that sales regions 2 has more potential for investment.