SQL Queries for Education Budget Dashboard

-- states

-- TABLEAU TABLE 2

select yrdata, state, SUM(ENROLL) as total\_enrollment, SUM(Totalrev) as tot\_revenue, SUM(totalexp) as tot\_expenses, (SUM(Totalrev)-SUM(totalexp)) as gross\_profit

from [Portfolio Project]..districts

group by yrdata, state

order by 1,6

--districts

-- query to determine total enrollment vs gross profit per district

select yrdata, name, SUM(ENROLL) as total\_enrollment, SUM(Totalrev) as tot\_revenue, SUM(totalexp) as tot\_expenses, (SUM(Totalrev)-SUM(totalexp)) as gross\_profit

from [Portfolio Project]..districts

group by yrdata, name

order by 1,6

-- No schools after 2010 have recorded negative profit

select count(\*)

from [Portfolio Project]..districts

where YRDATA > 2010

having (SUM(Totalrev)-SUM(totalexp)) <= 0

-- TABLEAU TABLE 1

select yrdata, state, name, sum(ENROLL) as num\_enrolled

from [Portfolio Project]..districts

group by yrdata, state, name

order by 3 desc

--number of schools that have negative profit prior to 2010.

-- 45,626 schools have recorded negative profit prior to 2010.

-- Top five entries are from California (2007, 2006, 1995) and Texas (2006, 2007)

select yrdata, state, count(\*) as num\_schools

from [Portfolio Project]..districts

where YRDATA < 2010

group by yrdata, state

having (SUM(Totalrev)-SUM(totalexp)) < 0

order by 3 desc

--check by district

-- Regional Management Information Center in Minnesota in 2006 had 7 schools under budget

-- Washington twp school district in New Jersey had five fschools in 1995, 2006-2007.

-- TABLEAU TABLE 3

select yrdata, state, name, count(\*) as num\_schools

from [Portfolio Project]..districts

where YRDATA < 2010

group by yrdata, state, name

having (SUM(Totalrev)-SUM(totalexp)) < 0

order by 4 desc

--Regional managment information cent and Washington Twp sch dist

-- Washington TWP SCH DIST (1995, 2007,2006) had positive gross profit

-- Regional Management Information Cent had one year (2006) where gross profit is 1.

select yrdata, state, enroll, name, totalrev, totalexp, (totalrev-totalexp) as gross\_profit

from [Portfolio Project]..districts

where YRDATA < 2010 and name in ('REGIONAL MANAGEMENT INFORMATION CENT', 'Washington TWP SCH DIST')

-- Clay co sch dist

-- Clay Co sch dist had 7 schools but the district spans a number of different states such as Florida, Kentucky, Missisippi, Tennesee, and West Virginia.

select \*

from [Portfolio Project]..districts

where name = 'Clay CO SCH DIST'

select yrdata, state, name, count(\*) as num\_schools

from [Portfolio Project]..districts

where YRDATA < 2010 and name = 'Clay CO SCH DIST'

group by yrdata, state, name

having (SUM(Totalrev)-SUM(totalexp)) < 0

order by 4 desc

--focus on California and Texas. They have highest enrollemnt

-- Since 2010, Texas (HOUSTON IND SCH DIST 912, KATY IND SCH DIST 914, FRISCO INDEP SCH DISTRICT 905, CYPRESS-FAIRBANKS IND SCHOOL DISTRICT 907) are in top 10 of negative gross profit at district and state level

-- Since 2010, California (IRVINE UNIFIED SCHOOL DIST, SAN BERNARDINO CITY UNIF SCHOOL DIST) are in top 10 of negative gross profit at district and state level

-- many of these schools recorded negative budgets starting in 2013 and going to 2016.

select d.YRDATA, d.STATE, d.name, d.enroll, (d.TOTALREV-d.TOTALEXP) as district\_gross\_profit, (s.TOTAL\_REVENUE-s.TOTAL\_EXPENDITURE) as state\_gross\_profit, s.FEDERAL\_REVENUE

from [Portfolio Project]..districts d

join [Portfolio Project]..states s

on d.STATE = s.STATE and d.YRDATA = s.YEAR

where d.state in ('California', 'Texas') and d.YRDATA >= 2010

order by 5,6 desc