[1] "countyid" the 4 digit geoid

[2] "countyname"

[3] "county\_pop2019" from census data

[4] "female"

[5] "male"

[6] "american\_indian\_or\_alaska\_native"

[7] "asian\_or\_pacific\_islander"

[8] "black\_or\_african\_american"

[9] "hispanic\_or\_latino"

[10] "white"

[11] "estimate\_housing\_occupancy\_total\_housing\_units\_occupied\_housing\_units"

[12] "percent\_housing\_occupancy\_total\_housing\_units\_occupied\_housing\_units"

[13] "estimate\_housing\_occupancy\_total\_housing\_units\_vacant\_housing\_units"

[14] "percent\_housing\_occupancy\_total\_housing\_units\_vacant\_housing\_units"

[15] "estimate\_housing\_occupancy\_total\_housing\_units\_homeowner\_vacancy\_rate"

[16] "estimate\_housing\_occupancy\_total\_housing\_units\_rental\_vacancy\_rate"

[17] "estimate\_units\_in\_structure\_total\_housing\_units\_1\_unit\_detached"

[18] "estimate\_units\_in\_structure\_total\_housing\_units\_1\_unit\_attached"

[19] "estimate\_units\_in\_structure\_total\_housing\_units\_2\_units"

[20] "estimate\_units\_in\_structure\_total\_housing\_units\_3\_or\_4\_units"

[21] "estimate\_units\_in\_structure\_total\_housing\_units\_5\_to\_9\_units"

[22] "estimate\_units\_in\_structure\_total\_housing\_units\_10\_to\_19\_units"

[23] "estimate\_units\_in\_structure\_total\_housing\_units\_20\_or\_more\_units"

[24] "estimate\_units\_in\_structure\_total\_housing\_units\_mobile\_home"

[25] "estimate\_units\_in\_structure\_total\_housing\_units\_boat\_rv\_van\_etc"

[26] "estimate\_year\_structure\_built\_total\_housing\_units\_built\_2014\_or\_later"

[27] "percent\_year\_structure\_built\_total\_housing\_units\_built\_2014\_or\_later"

[28] "estimate\_year\_structure\_built\_total\_housing\_units\_built\_2010\_to\_2013"

[29] "percent\_year\_structure\_built\_total\_housing\_units\_built\_2010\_to\_2013"

[30] "estimate\_year\_structure\_built\_total\_housing\_units\_built\_2000\_to\_2009"

[31] "percent\_year\_structure\_built\_total\_housing\_units\_built\_2000\_to\_2009"

[32] "estimate\_year\_structure\_built\_total\_housing\_units\_built\_1990\_to\_1999"

[33] "percent\_year\_structure\_built\_total\_housing\_units\_built\_1990\_to\_1999"

[34] "estimate\_year\_structure\_built\_total\_housing\_units\_built\_1980\_to\_1989"

[35] "percent\_year\_structure\_built\_total\_housing\_units\_built\_1980\_to\_1989"

[36] "estimate\_year\_structure\_built\_total\_housing\_units\_built\_1970\_to\_1979"

[37] "percent\_year\_structure\_built\_total\_housing\_units\_built\_1970\_to\_1979"

[38] "estimate\_year\_structure\_built\_total\_housing\_units\_built\_1960\_to\_1969"

[39] "percent\_year\_structure\_built\_total\_housing\_units\_built\_1960\_to\_1969"

[40] "estimate\_year\_structure\_built\_total\_housing\_units\_built\_1950\_to\_1959"

[41] "percent\_year\_structure\_built\_total\_housing\_units\_built\_1950\_to\_1959"

[42] "estimate\_year\_structure\_built\_total\_housing\_units\_built\_1940\_to\_1949"

[43] "percent\_year\_structure\_built\_total\_housing\_units\_built\_1940\_to\_1949"

[44] "estimate\_year\_structure\_built\_total\_housing\_units\_built\_1939\_or\_earlier"

[45] "percent\_year\_structure\_built\_total\_housing\_units\_built\_1939\_or\_earlier"

[46] "estimate\_rooms\_total\_housing\_units\_median\_rooms"

[47] "estimate\_occupants\_per\_room\_occupied\_housing\_units"

[48] "estimate\_occupants\_per\_room\_occupied\_housing\_units\_1\_00\_or\_less"

[49] "estimate\_occupants\_per\_room\_occupied\_housing\_units\_1\_01\_to\_1\_50"

[50] "estimate\_occupants\_per\_room\_occupied\_housing\_units\_1\_51\_or\_more"

[51] "percent\_new" percentage of house built after 1960

[52] "percent\_old" percentage of house built before 1960

[53] "county\_pop\_2020" population data from California Department of Public Health, should be the most recent pop data, only used for var 56 and 57.

[54] "total\_confirmed\_cases"

[55] "total\_deaths"

[56] "death\_rate" per 100,000 people

[57] "confirmed\_case\_rate" per 100,000 people

[58] "percent\_female" var 58-64 all calculated based on county\_pop2019

[59] "percent\_male"

[60] "percent\_american\_indian\_or\_alaska\_native"

[61] "percent\_asian\_or\_pacific\_islander"

[62] "percent\_black\_or\_african\_american"

[63] "percent\_hispanic\_or\_latino"

[64] "percent\_white"

[65] "total\_housing\_units" total # housing units, sum(var11+var13)