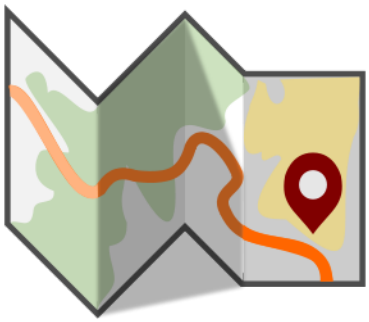
Performing Table Joins

QGIS Tutorials and Tips



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http://google.com/+UjavalGandhi

Translations by
SongHyun Choi

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- CSV□□□□ □ □□□□ □□□□ □□ ***.csvt*** □□□ □□□□.
- QGIS□□ □□□ □□□□ □□□ □□□□ □□ CSV□□□ □□□□□.

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□□ □□□ US Census Bureau □□□□□□ MAF/TIGER □□□□□□□□□ □□□ □□□□□□ □□□ □ □□□□. □□□□□□ □□□□□ shapefile□ □□□□ □□□□ □ □ □□□□.

`Americal FactFinder <http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t>`_□ □□□ □□ □□□ □□□□ □□□□□□. `Advanced Search`□ □□□ □ □□ □□□ CSV□ □□□ □□□□ □□ □□ `Topic - Total Population`□ `Geographies - All Census Tracts in California`□ □□□ □ □□□□. □ □□□□□ `Total Population 2010 Census Summary File 1`□ □□□□□.

□□□ □□ [TIGER] [USCENSUS]

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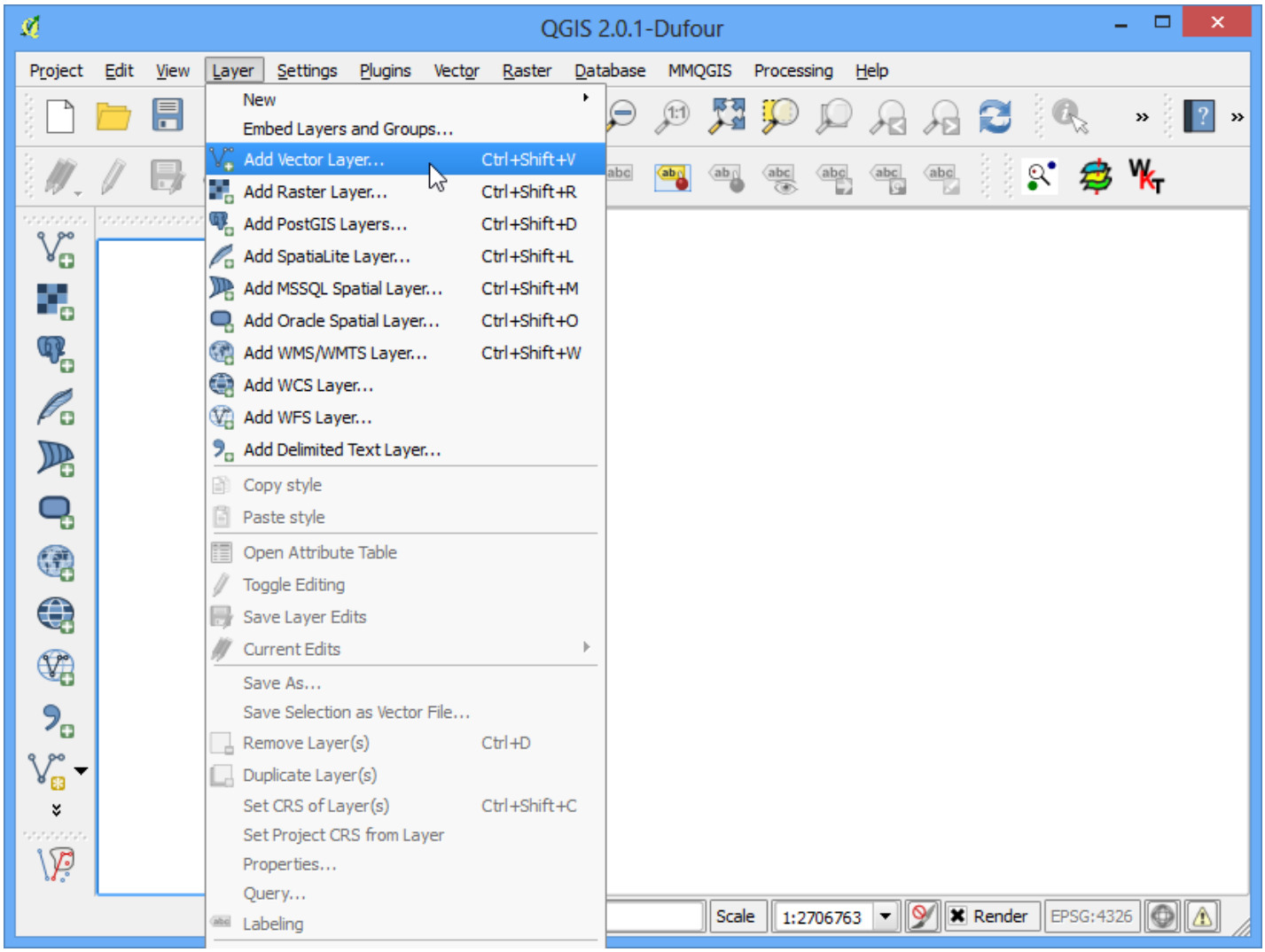
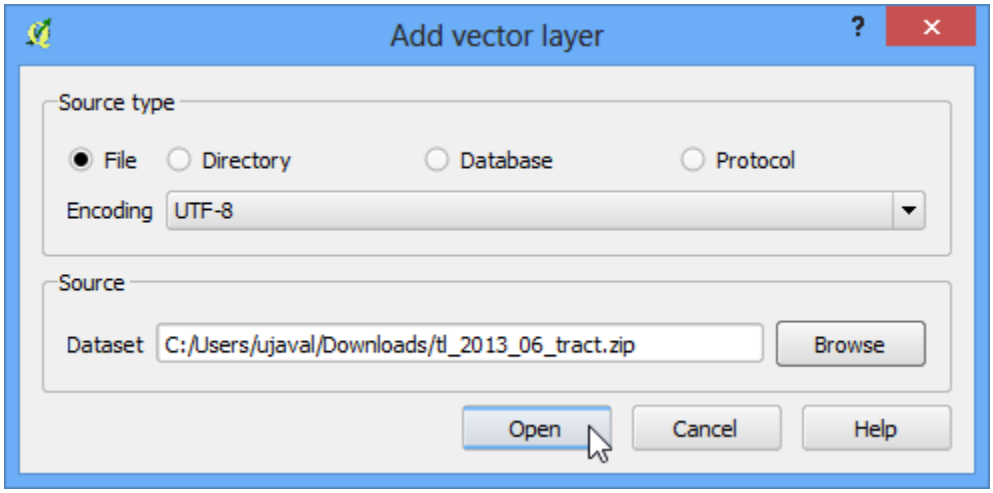
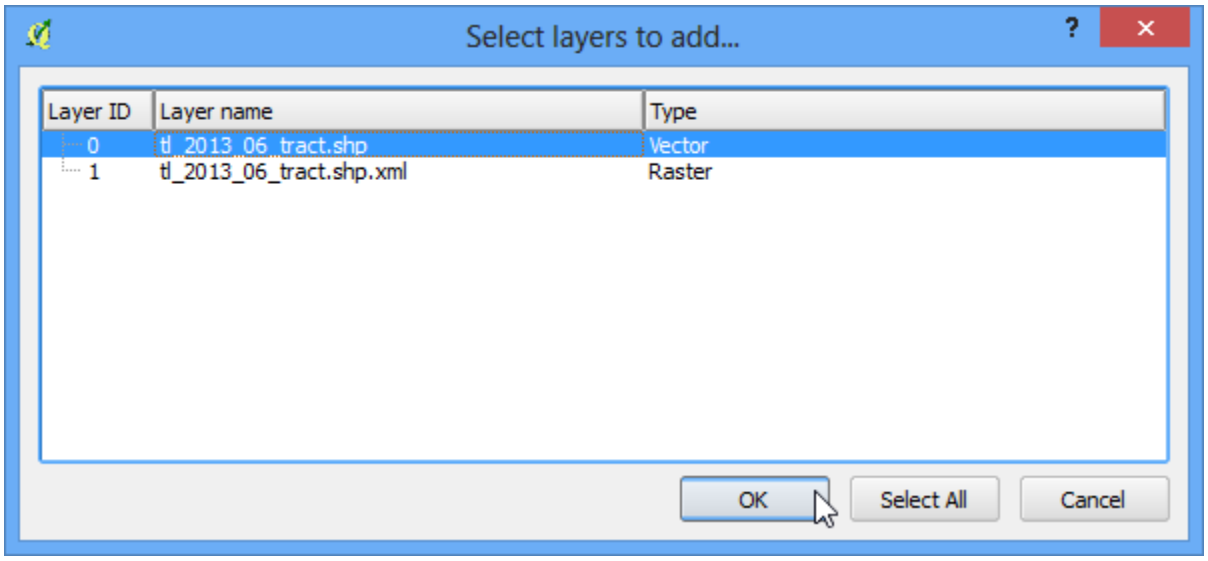
1. □□□□ □□□ □□ shapefile□ □□□□□. □□ □□□ --> □□ □□□ □□ :menuselection:`Layer --> Add Vector Layer`□ □□□.



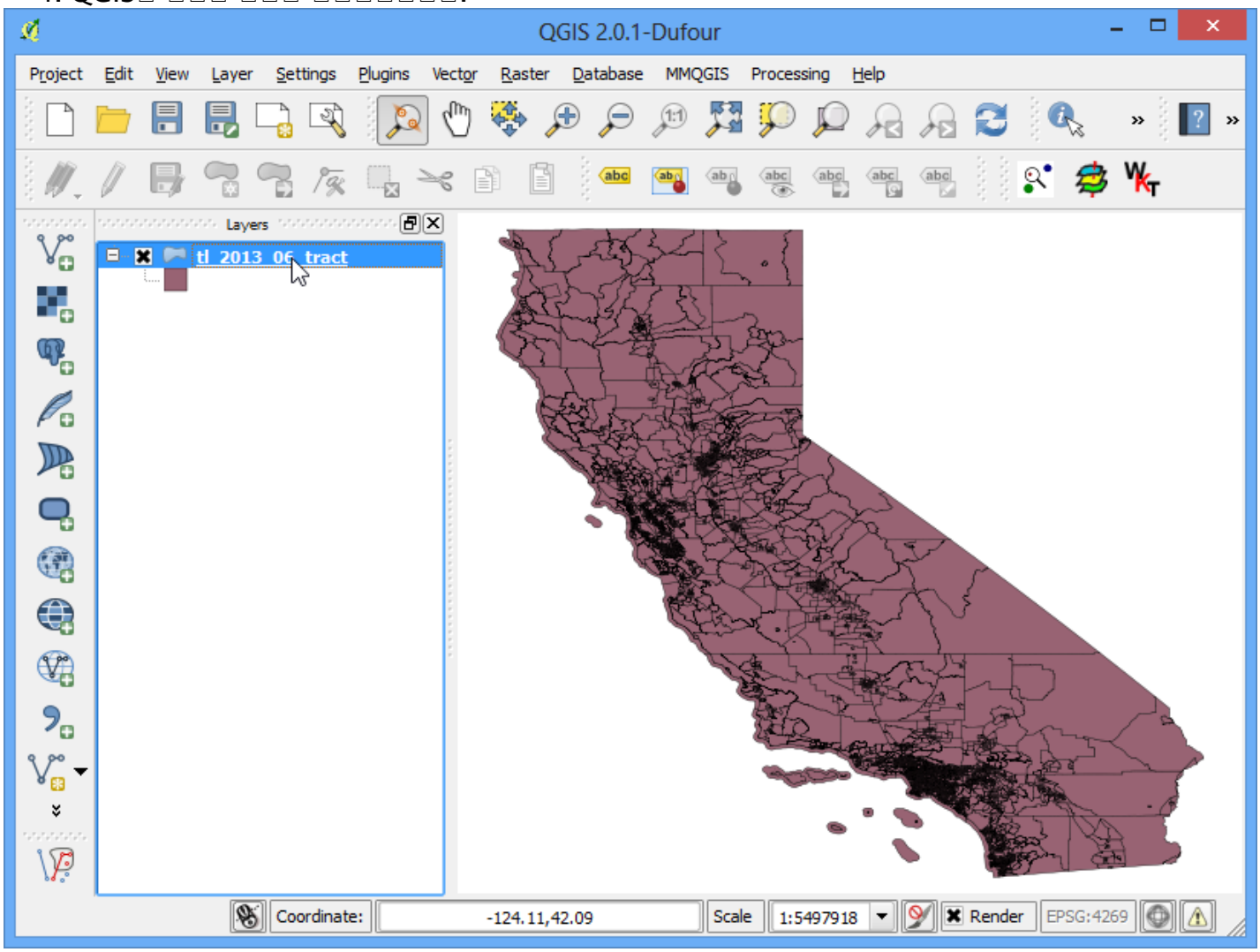
2. □□□□□ □□□□ `tl_2013_06_tract.zip`□ □□□ □□□□□. QGIS□ □□□□□ □□□ □ □ □□□□. □□□ □□ □□□□□ □□ □□□ □□□.



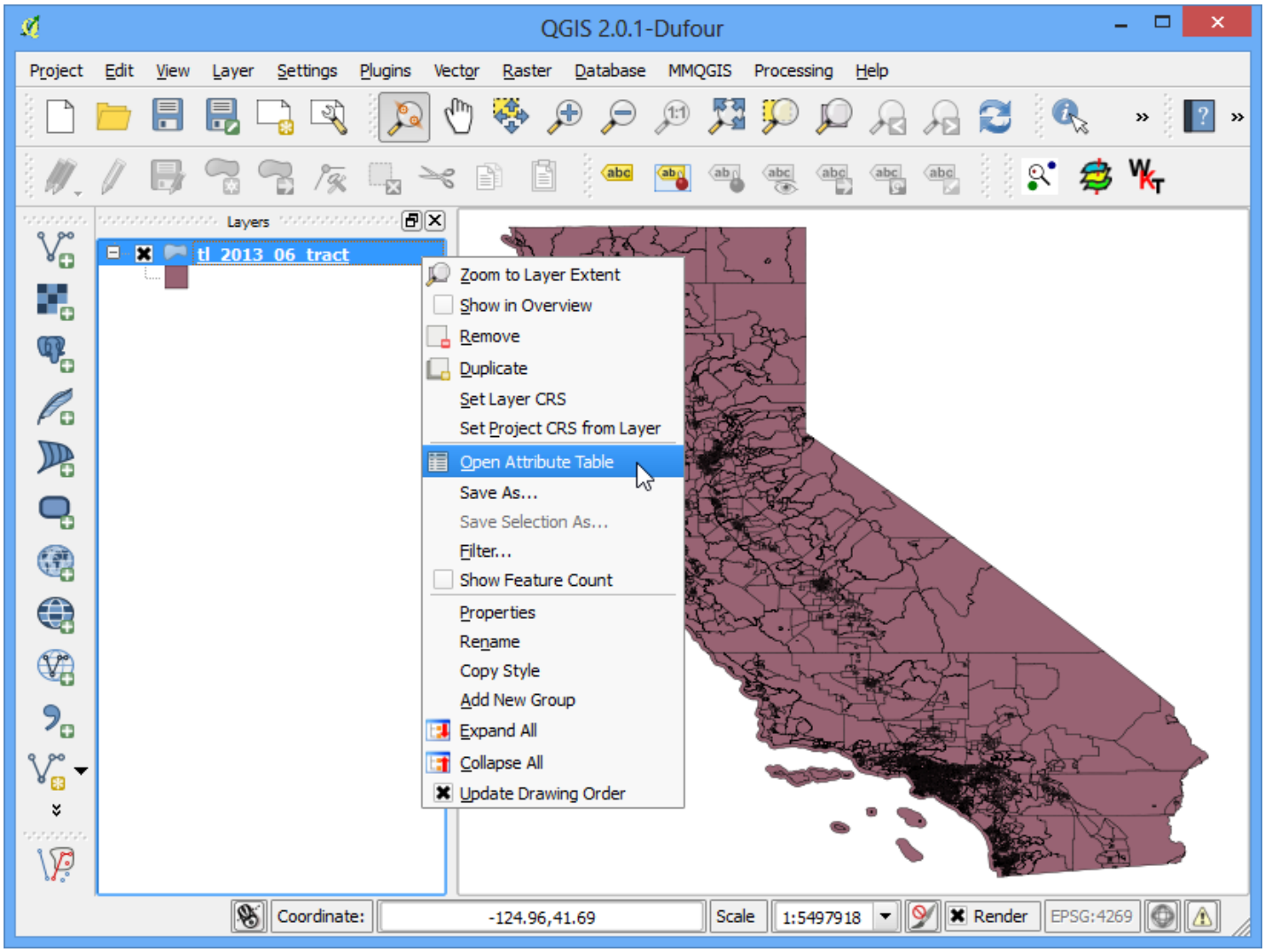
3. `tl_2013_06_tract.shp`□□□□ □□□□ :guilabel:`OK`□ □□□□□.



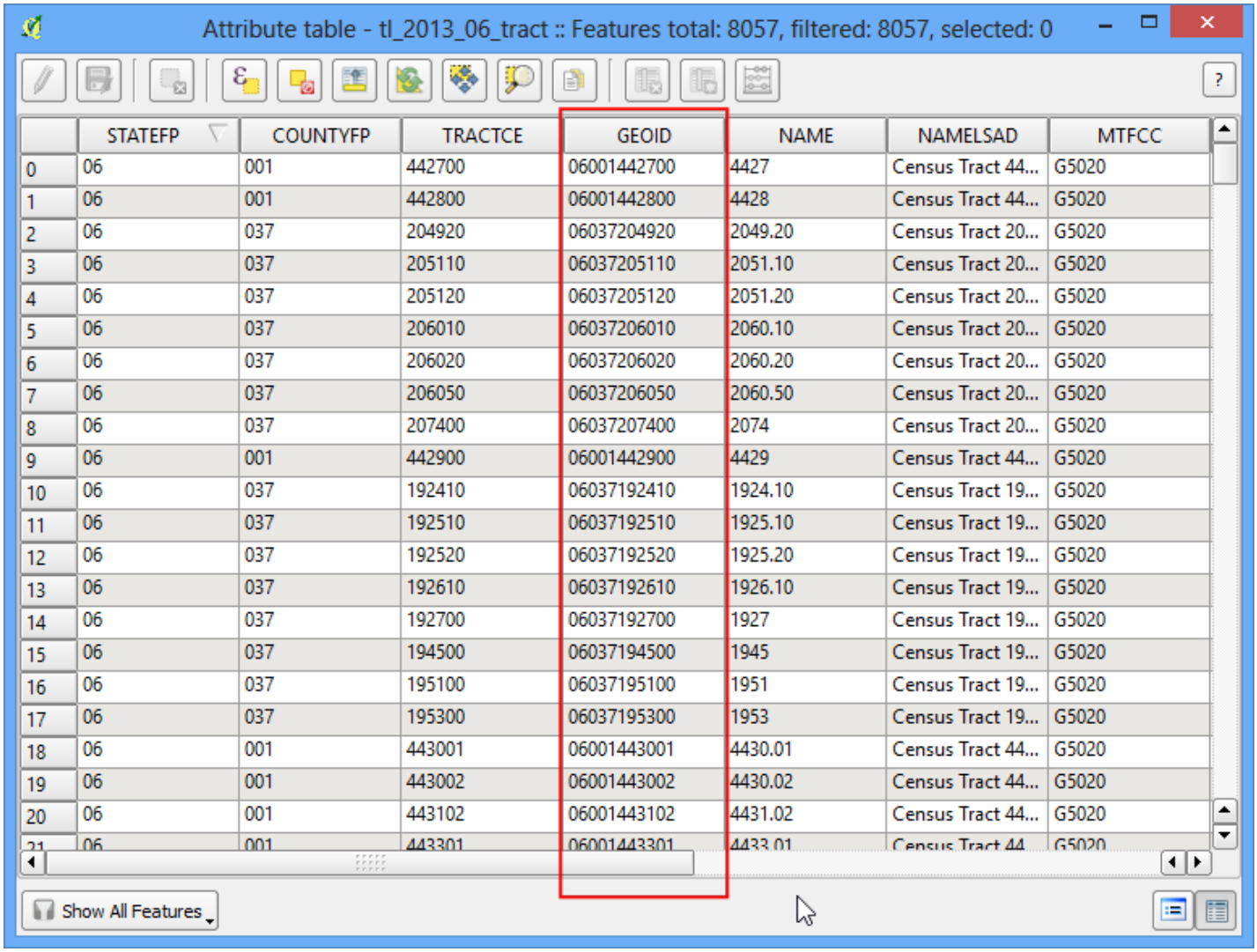
4. QGIS□ □□□ □□□ □□□□□□□.



5. □□□□ □□□ □□□□ □□ □□□ □□ :guilabel:`Open Attribute Table`□ □□□□□.

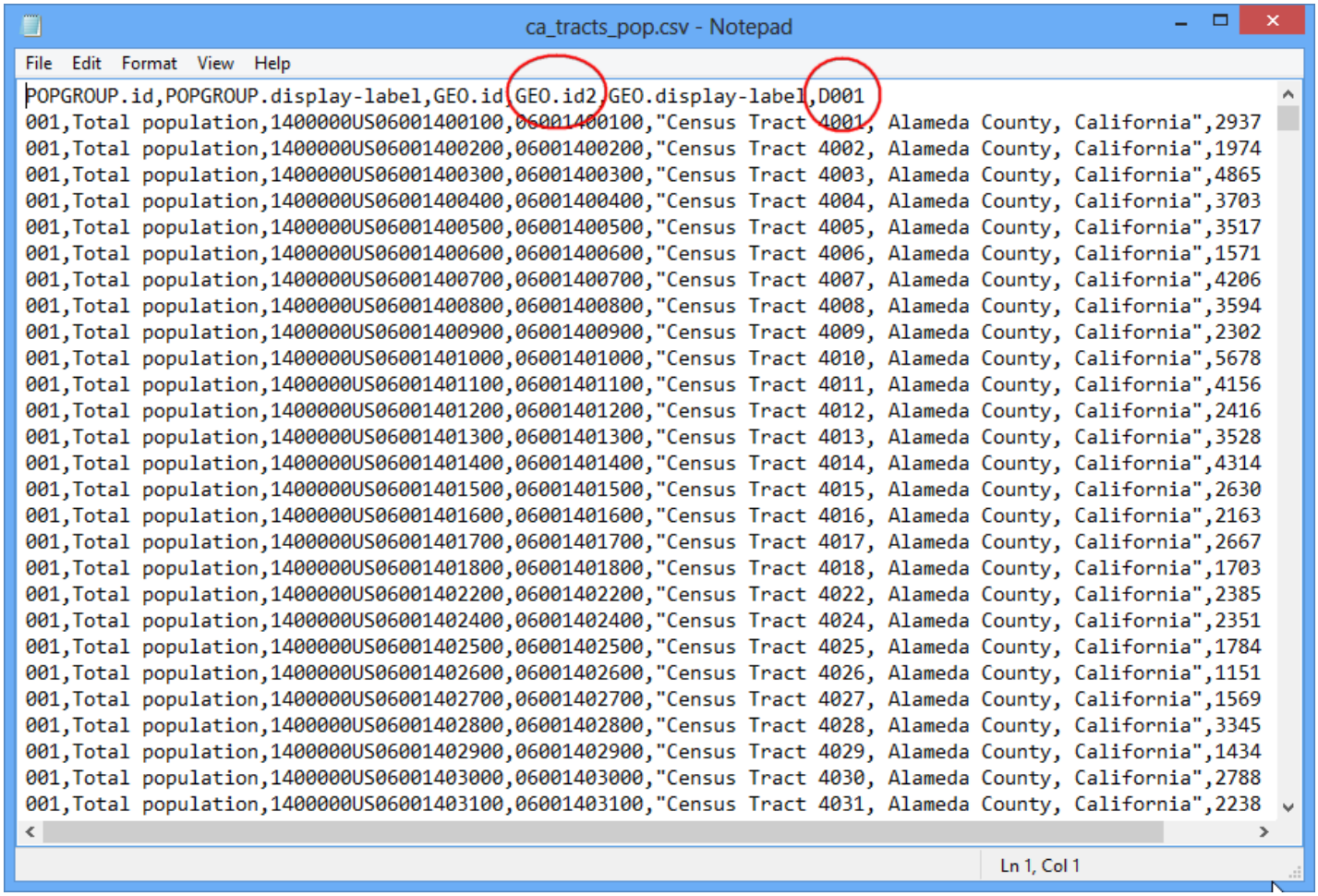


6. □□ shapefile□ □□□ □□□□□□. □ shapefile□ □□□□ □□□□ □□□□ □ □□□ □□□□ □□□□ □□□ □□□□□. □ □□□□ **GEOID**□□□ □ □□□□ □□□ □□□□□ □□ ID□ □□□□ □□ □□ □□□□ □ shapefile□ '□□' □ □ □□□□.

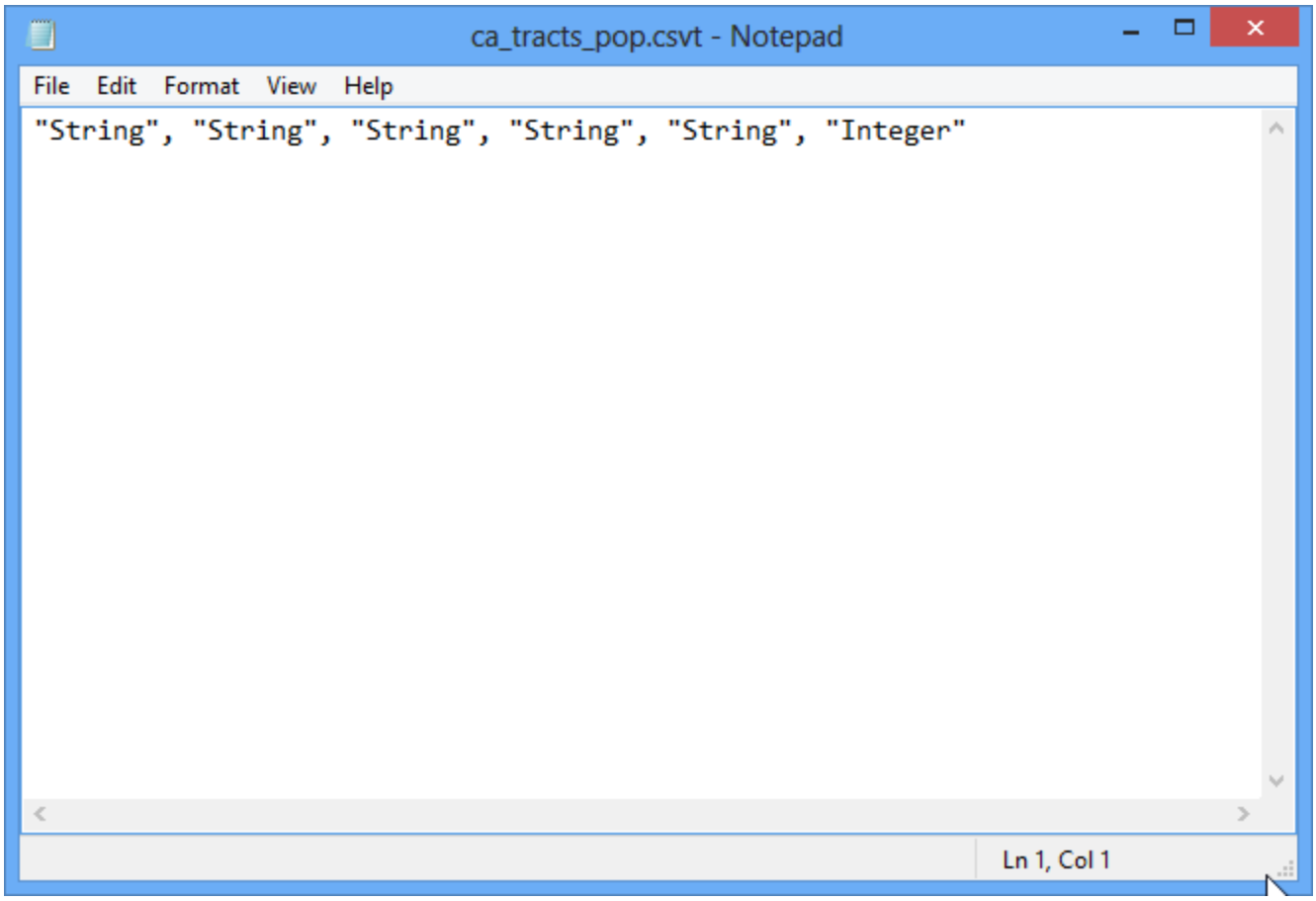


	STATEFP	COUNTYFP	TRACTCE	GEOID	NAME	NAMELSAD	MTFCC
0	06	001	442700	06001442700	4427	Census Tract 44...	G5020
1	06	001	442800	06001442800	4428	Census Tract 44...	G5020
2	06	037	204920	06037204920	2049.20	Census Tract 20...	G5020
3	06	037	205110	06037205110	2051.10	Census Tract 20...	G5020
4	06	037	205120	06037205120	2051.20	Census Tract 20...	G5020
5	06	037	206010	06037206010	2060.10	Census Tract 20...	G5020
6	06	037	206020	06037206020	2060.20	Census Tract 20...	G5020
7	06	037	206050	06037206050	2060.50	Census Tract 20...	G5020
8	06	037	207400	06037207400	2074	Census Tract 20...	G5020
9	06	001	442900	06001442900	4429	Census Tract 44...	G5020
10	06	037	192410	06037192410	1924.10	Census Tract 19...	G5020
11	06	037	192510	06037192510	1925.10	Census Tract 19...	G5020
12	06	037	192520	06037192520	1925.20	Census Tract 19...	G5020
13	06	037	192610	06037192610	1926.10	Census Tract 19...	G5020
14	06	037	192700	06037192700	1927	Census Tract 19...	G5020
15	06	037	194500	06037194500	1945	Census Tract 19...	G5020
16	06	037	195100	06037195100	1951	Census Tract 19...	G5020
17	06	037	195300	06037195300	1953	Census Tract 19...	G5020
18	06	001	443001	06001443001	4430.01	Census Tract 44...	G5020
19	06	001	443002	06001443002	4430.02	Census Tract 44...	G5020
20	06	001	443102	06001443102	4431.02	Census Tract 44...	G5020
21	06	001	443301	06001443301	4433.01	Census Tract 44	G5020

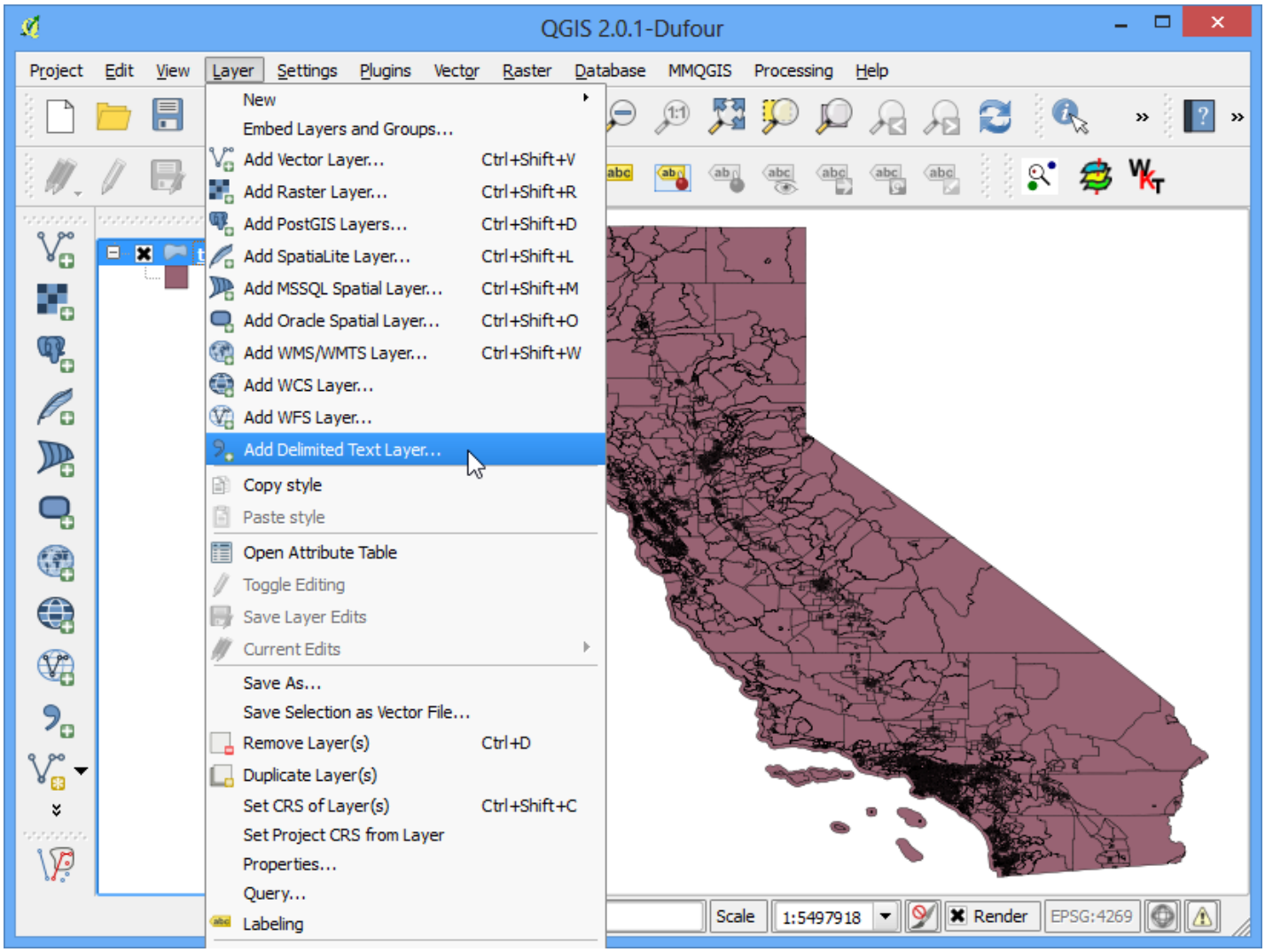
7. □□□ □□□□□ ***ca_tracts_pop.csv*** CSV□□□ □□□. □ □□□□ □□□ □□□ □□□□ □□ □□ □□□ □□ □□□ □□□ □ □□ □□□□ □□□ □□□□□. CSV□□ GEO.id2**□□ □□□ □□□□□□. □□□ **D001 □□ □ □□□ □□□ □□□□ □□ □□□ □□□□ □□□.



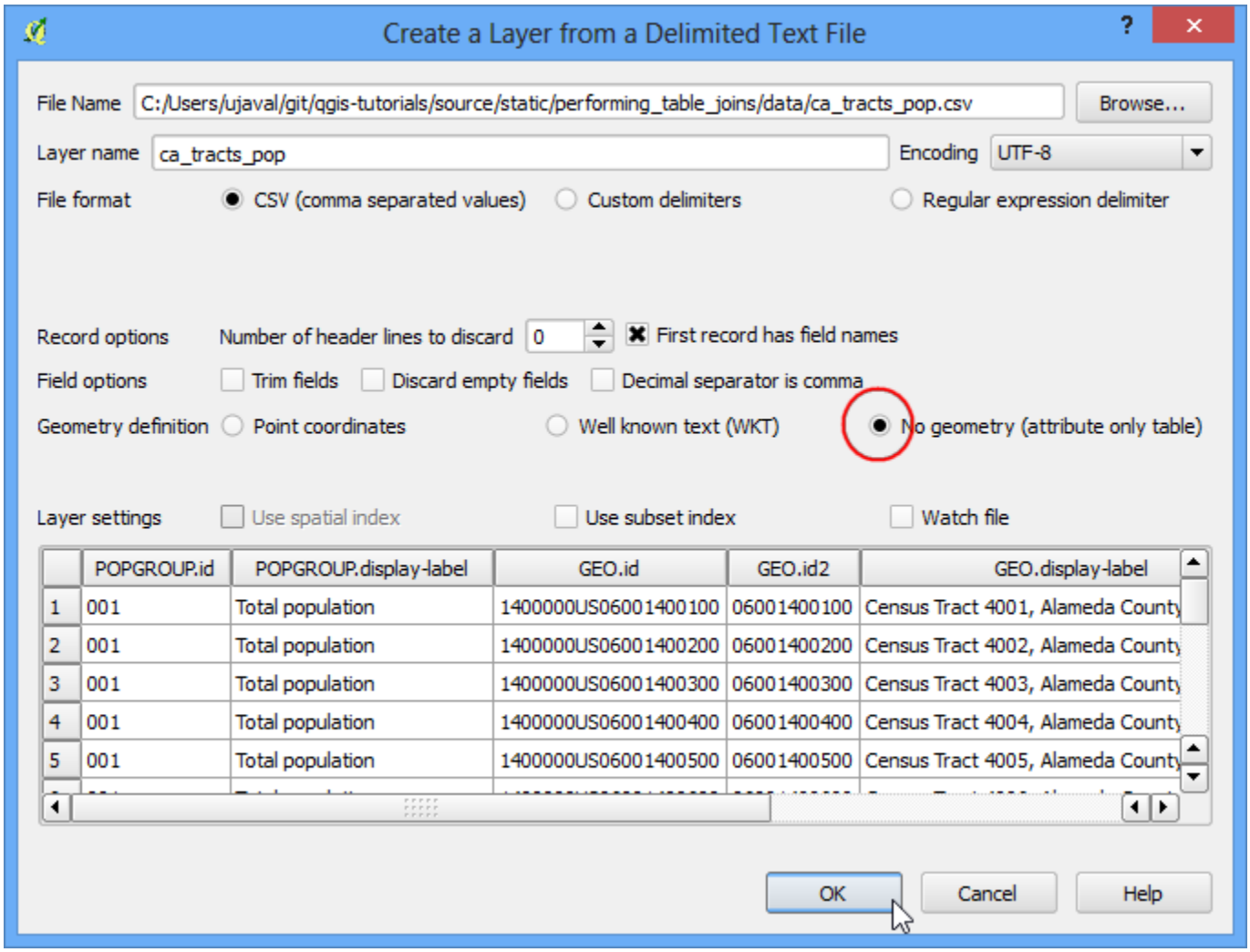
8. □□ □□□□ □□□□ csv□□□ □□□□□ □□ □□□□□ □□□□. □□□ □ □□ □□ □□□ String (text)□□□ □□□. □□□□ □□□□ □□ ***D001***`■■■ ■■■■ ■■■■■■. ■■■■ ■■■■■ ■■■ ■ ■■■ ■■■ ■■■■ ■■■ ■■■■ ■■■■. ***QGIS***■■ ■■■ ■■■ ■■■■■■ ***`.csvt`***■■ ■■■■ ■■ '■■'■■■ ■■■■ ■■■. ■ ■■■ ■ ■■■ ■■■■ ■■■■ ■■■■ ■■■ ■ ■■ ■■■■. ■■■ ***`.csv*** □□□ □□ □□ □□□□□ `ca_tracts_pop.csvt`□ □□□□□. □□ :download:`download the csvt file from here. <../static/performing_table_joins/data/ca_tracts_pop.csvt>`□□ □□□□ □ □ □□□□.



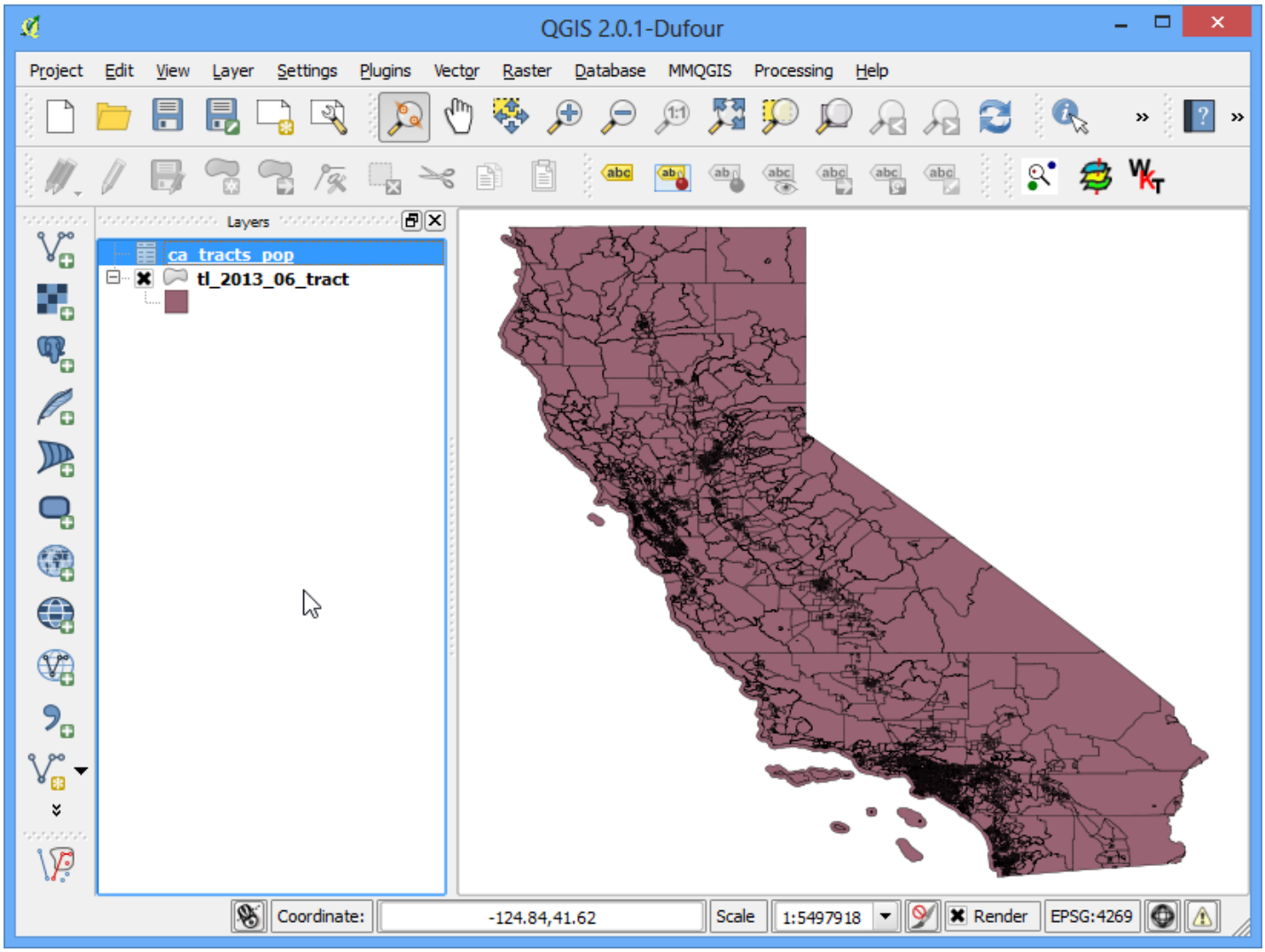
9. □□ QGIS□ CSV□□□ □□□□ □□□ □□□□□. □□ □□□ --> □□□□ □□□ □□□ □□□□ □□ :menuselection:`Layer --> Add Delimited Text Layer`□ □□□.



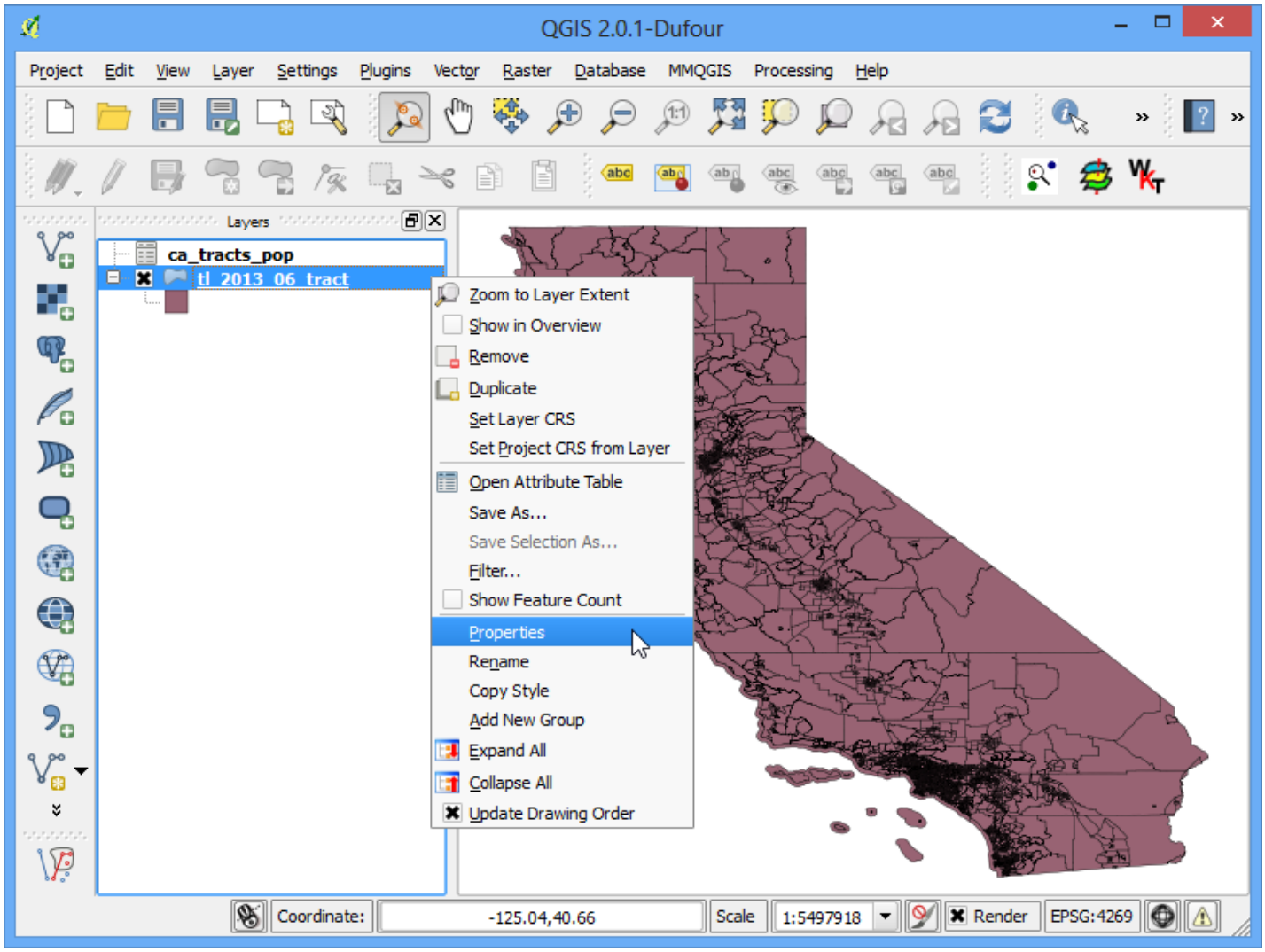
10. CSV□□□ □□□□ □□ □□□ □□□ □□□□□. □□ □□ :guilabel:`File format`□ :guilabel:`CSV (comma separated values)`□ □□□□□ □□□□□. □□ □ □□□ □□□□□ □□□ □□□ □□□□□□ □□□ □□□ □□□□ □□□. □□□□□□ □□ :guilabel:`No geometry (attribute only table)`□□□ □□□□□. :guilabel:`OK`□ □□□□□.


Create a Layer from a Delimited Text File
File Name
C:/Users/ujaval/git/qgis-tutorials/source/static/performing_table_joins/data/ca_tracts_pop.csv
Browse...
Layer name
ca_tracts_pop
Encoding
UTF-8
File format
CSV (comma separated values)
Custom delimiters
Regular expression delimiter
Record options
Number of header lines to discard
0
First record has field names
Field options
Trim fields
Discard empty fields
Decimal separator is comma
Geometry definition
Point coordinates
Well known text (WKT)
No geometry (attribute only table)
Layer settings
Use spatial index
Use subset index
Watch file
POPGROUP.id
POPGROUP.display-label
GEO.id
GEO.id2
GEO.display-label
1 001 Total population 1400000US06001400100 06001400100 Census Tract 4001, Alameda County
2 001 Total population 1400000US06001400200 06001400200 Census Tract 4002, Alameda County
3 001 Total population 1400000US06001400300 06001400300 Census Tract 4003, Alameda County
4 001 Total population 1400000US06001400400 06001400400 Census Tract 4004, Alameda County
5 001 Total population 1400000US06001400500 06001400500 Census Tract 4005, Alameda County
OK
Cancel
Help

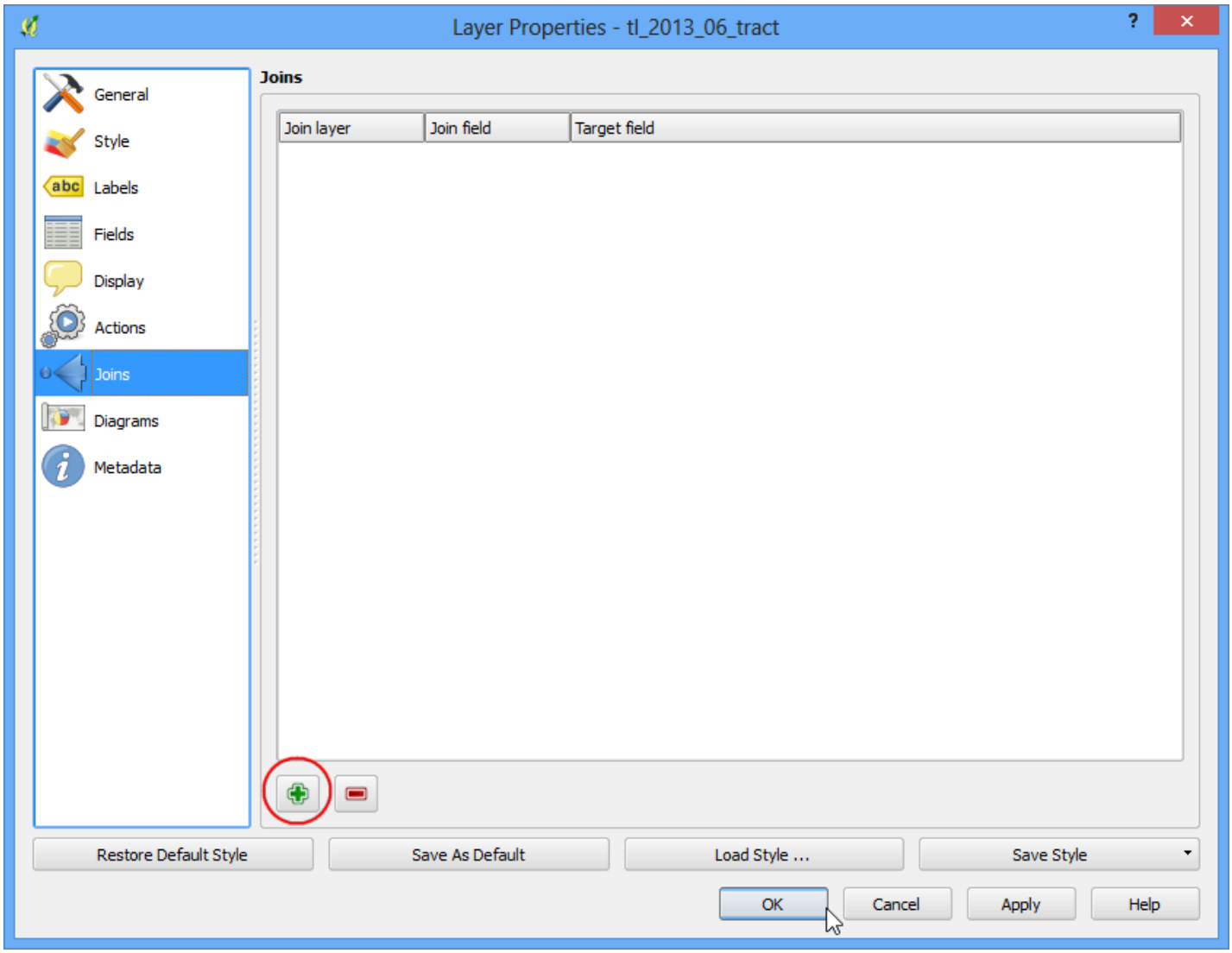
11. CSV□ □□ QGiS□ □□□□ □ □□□□.



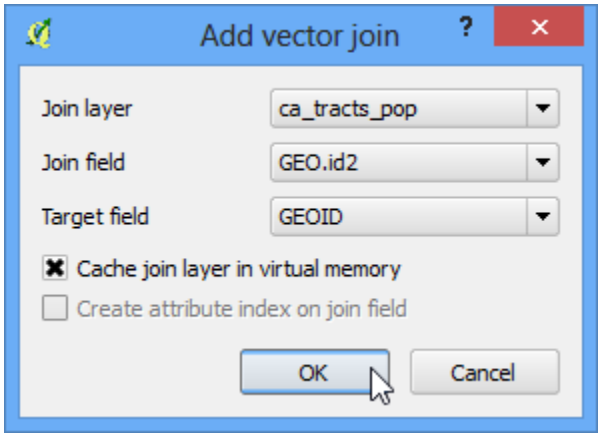
12. Select the ***tl_2013_06_tract*** layer. Right-click on it and select Properties.



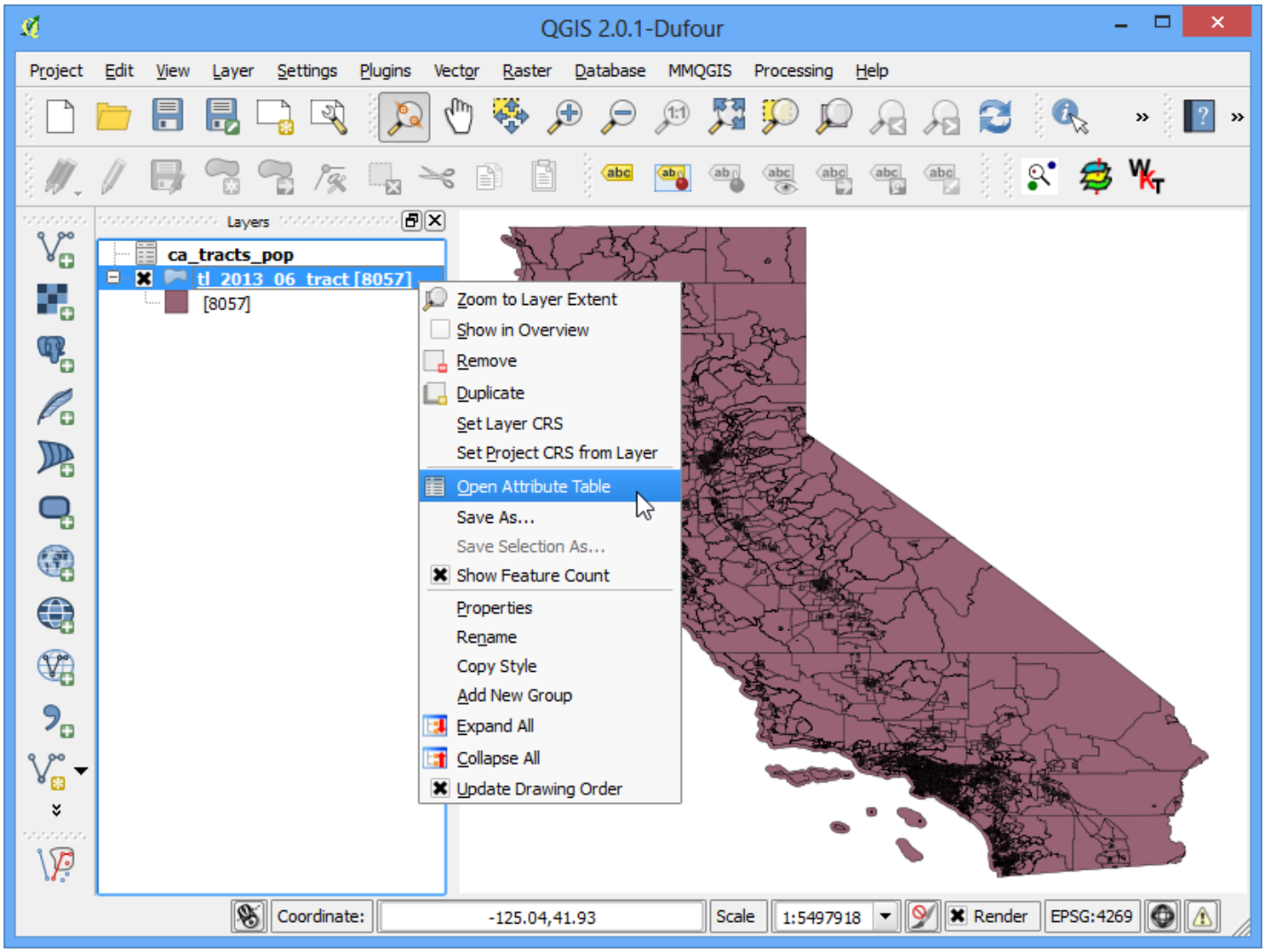
13. □□□ □□ Layer Properties □□□□□□□□ □□ Joins □□ □□□□□□. □□□□ □□ □□□□□□ □□□□ □□□□□ + □□□□ □□□□□□.



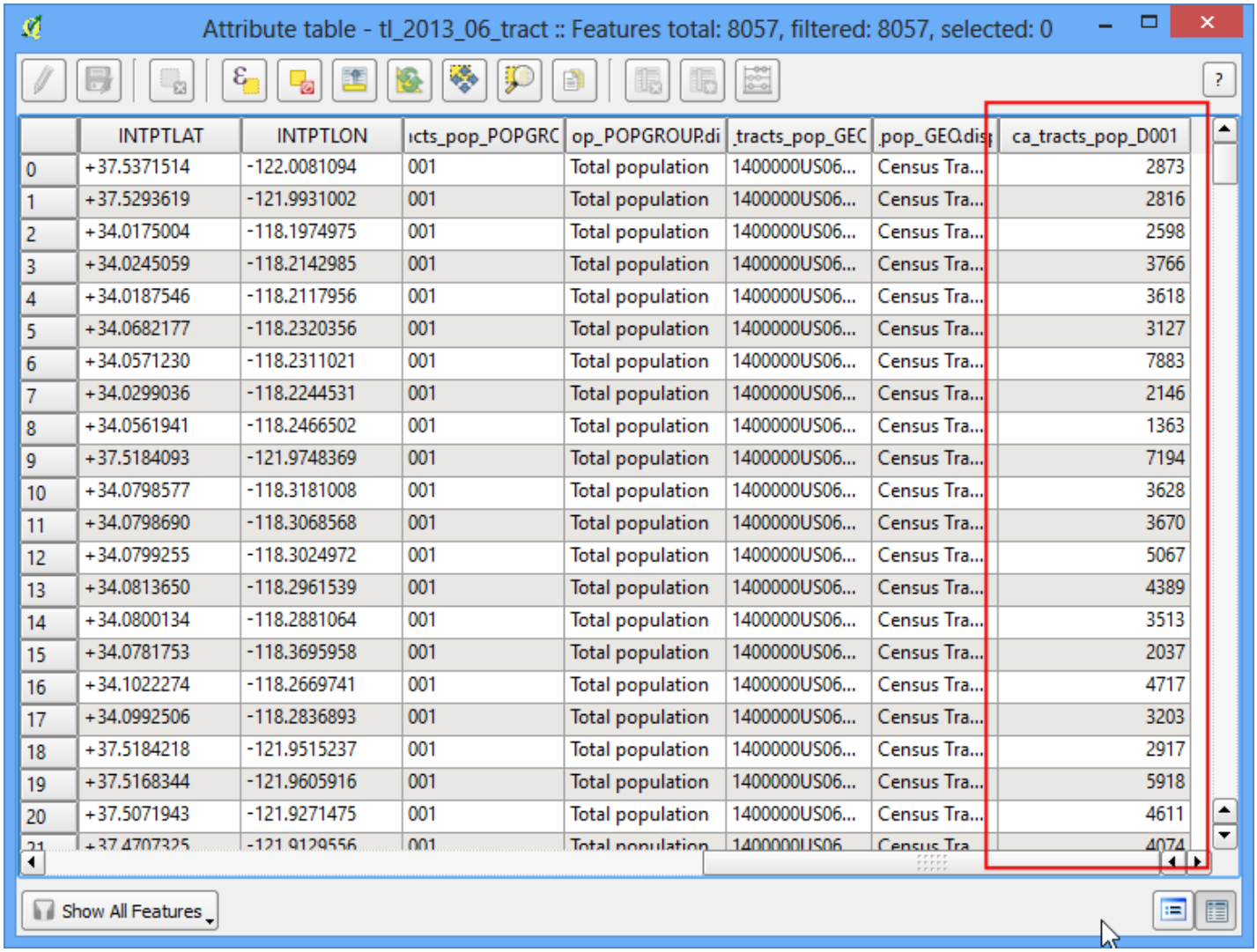
14. □□ □□ □□ Add vector join □□□□□□□ □□ □□□ Join layer`□ `ca_tracts_pop`□ □□□□□. □□ □ shapefile□ CSV□□ □□□ id□ □□ □□□ □□□□ □□□. □□ □□ :guilabel:`Join field □ □□ □□ :guilabel:`Target field`□ □□ `GEO.id2`□ `GEOID`□ □□□□□. :guilabel:`OK`□ □□□□□.



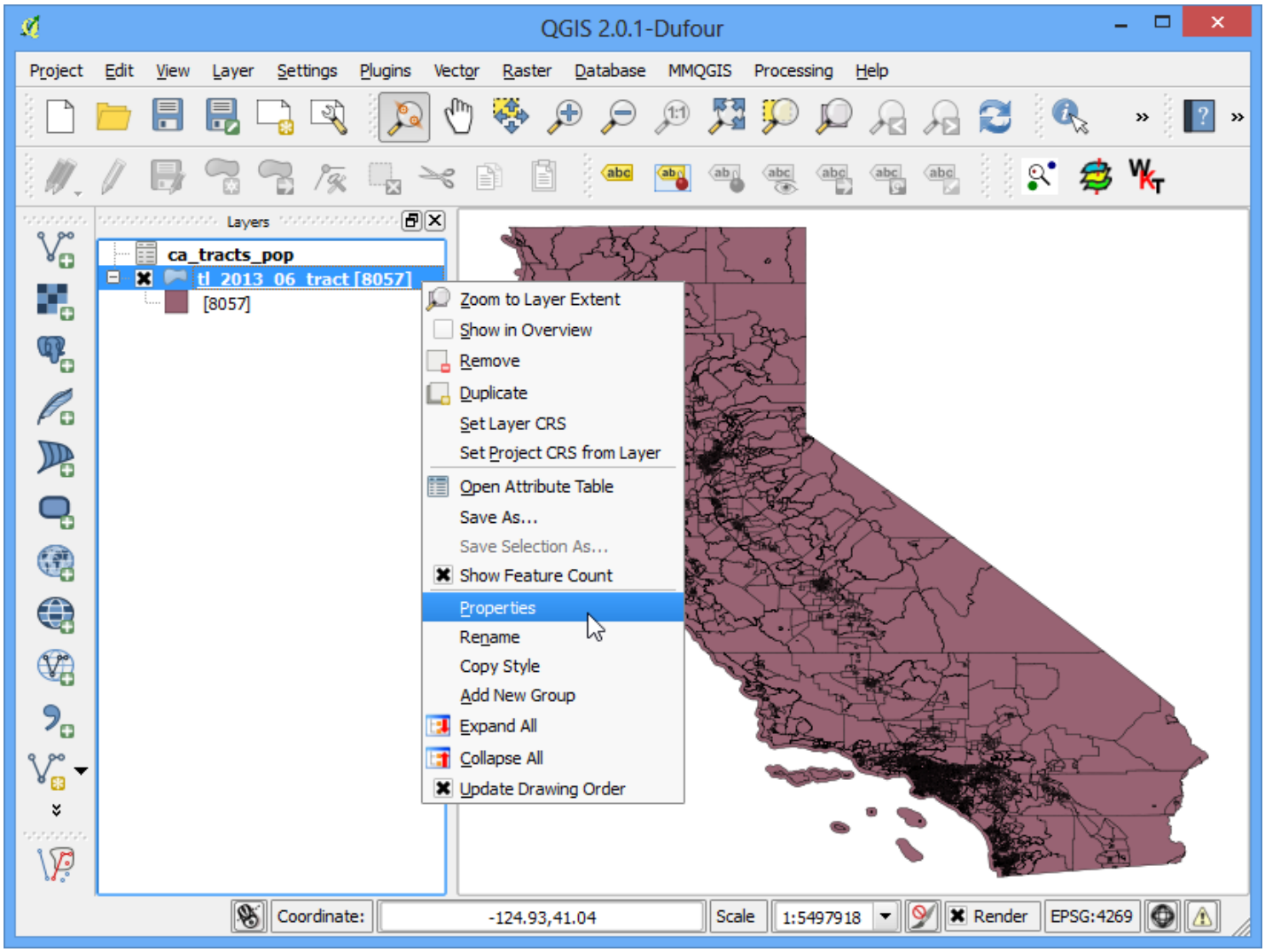
15. □□□ □□ Layer Properties □□□□□□ □□ QGIS□ □□□□□. □□ CSV□□□ □□□ shapefile□ □□□□ □□□□. `tl_2013_06_tract`□□□□ □□□□□□ □□ □□□ □□ :guilabel:`Open Attribute Table`□ □□□□□.



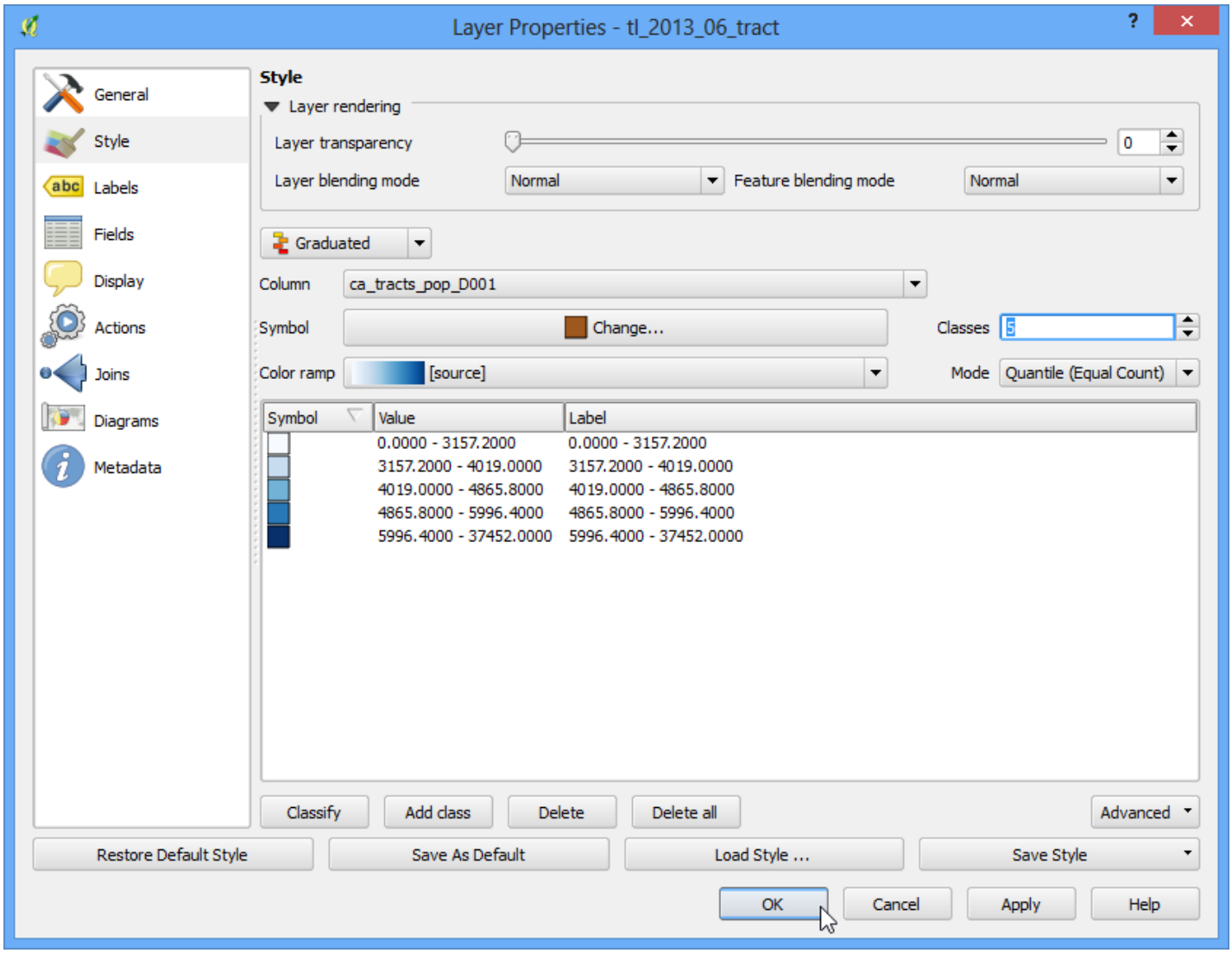
16. □□ ca_tracts_pop_D001 □□□ □ □□□ □□□ □□□ □□□ □ □ □□□□. □□ CSV□□□□□ □ □□□ □□□□ □□□□□. □□ □□□□ □□ QGIS□ □□□□□.



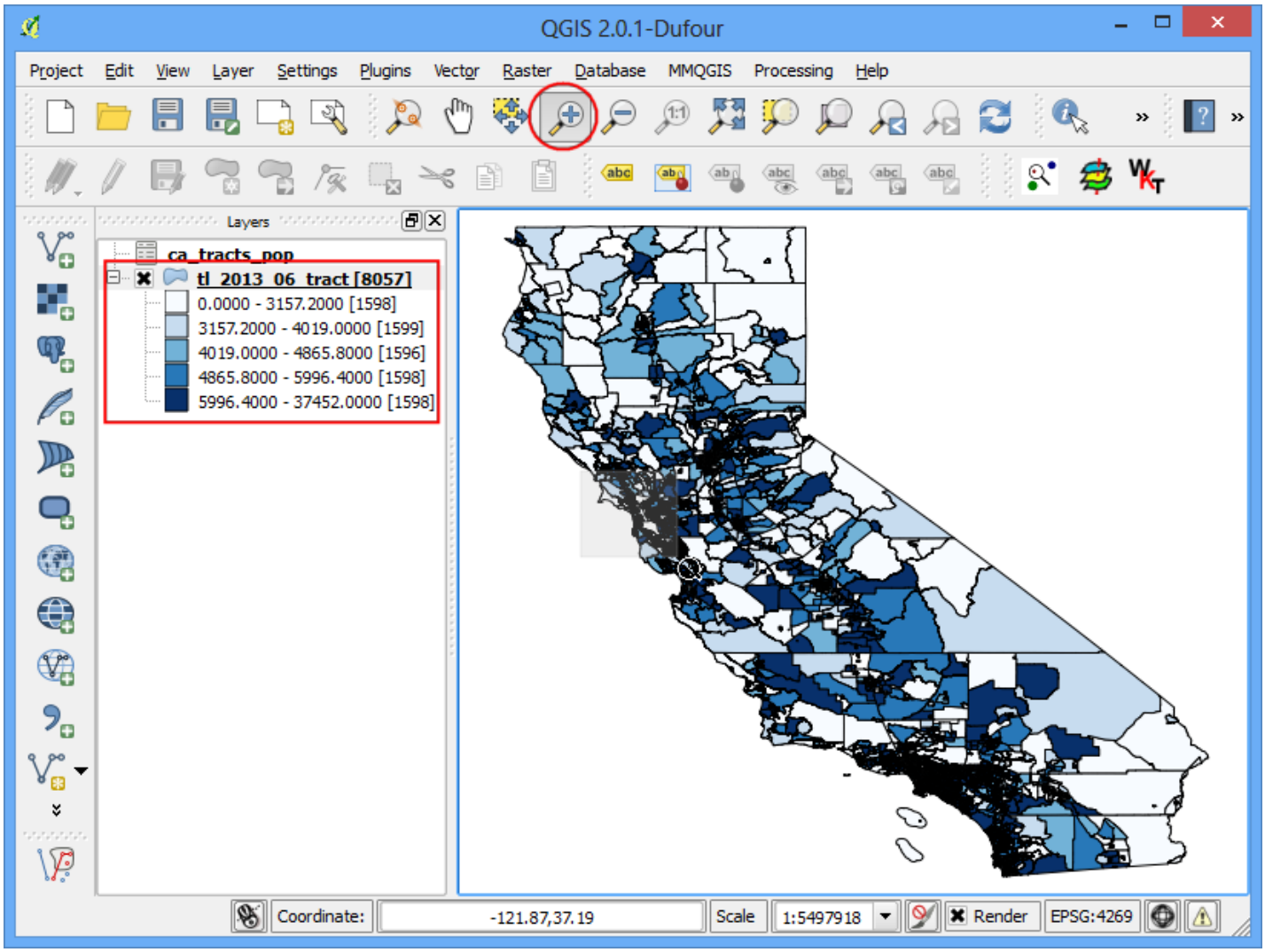
17. ***tl_2013_06_tract*** □□□□ □□ □□□□ □□ :guilabel:`Properties`□ □□□□□.



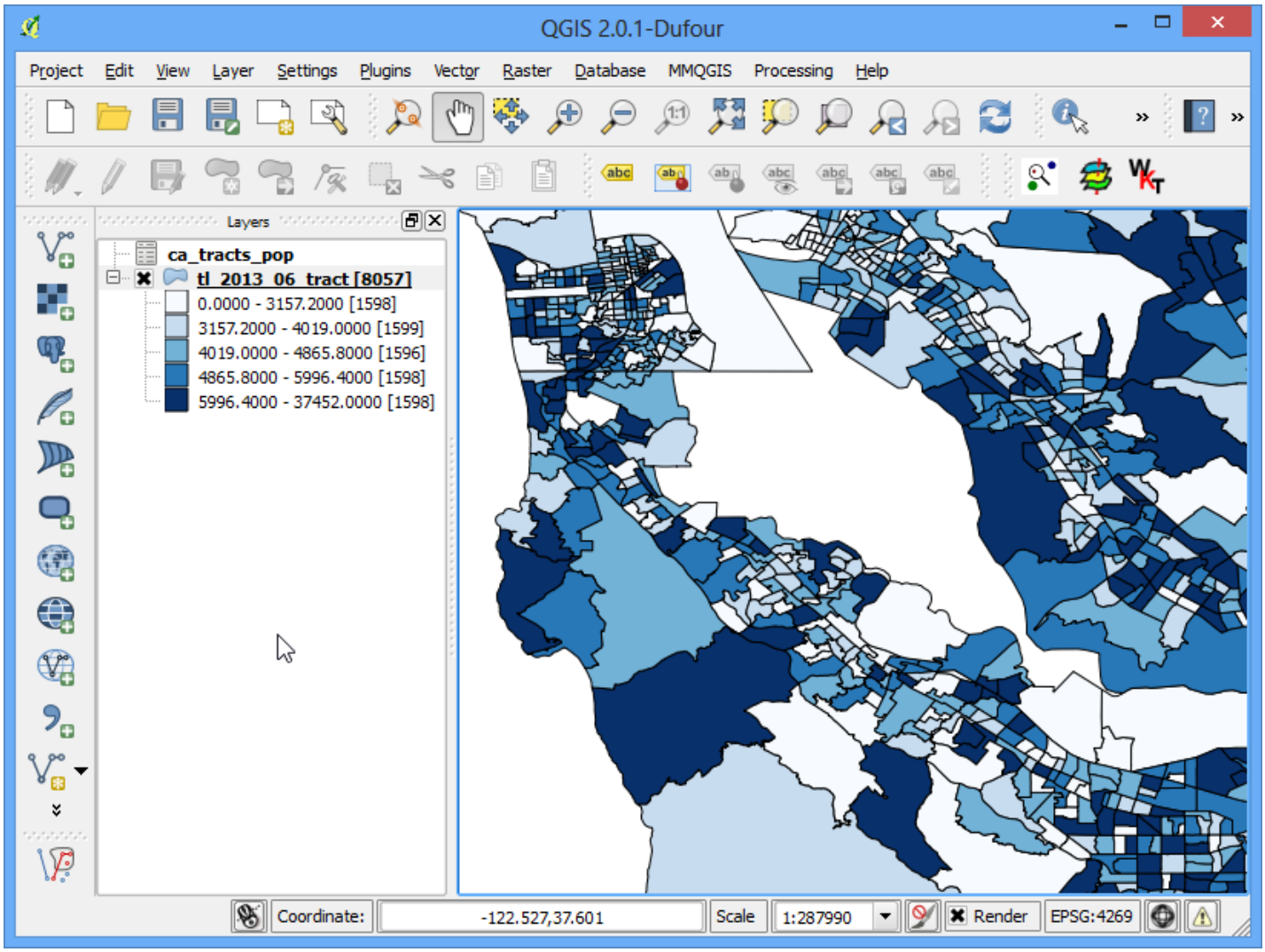
18. □□□ Style □□ □□□□□. □□□□ □□□□ □□□ □□□□ :guilabel:`Graduated`□ □□□□□. □□□□□ □□□□ □□ □□□ □□□□ □□□□ □ □□□ □□ □□□ □□ □□□ □□□□□. □□ :guilabel:`Column`□ :guilabel:`ca_tracts_pop_D001`□ □□□□□. □□□ :guilabel:`Color ramp`□ □□□□□□ □□□□ □□□□ □□□□□. □□ :guilabel:`Mode`□□ □□□□□□□ :guilabel:`Quantile (Equal Count)`□ □□□□□. □□ □□ :guilabel:`Classify`□ □□□□□. □□□ □□□ □□ □□ □□ □□□ □□ □ □ □□□□. :guilabel:`OK`□ □□□□□.



19. □□ □□□□ □□□□ □□□□□ □□□ □□□ □□□ □ □ □□□□. □□□□ □□ □□ □□□ □□□□ □□ □□ :guilabel:`Zoom in`□□ □□□□□.


QGIS 2.0.1-Dufour
Project
Edit
View
Layer
Settings
Plugins
Vector
Raster
Database
MMQGIS
Processing
Help
Layers
ca_tracts_pop
tl_2013_06_tract [8057]
0.0000 - 3157.2000 [1598]
3157.2000 - 4019.0000 [1599]
4019.0000 - 4865.8000 [1596]
4865.8000 - 5996.4000 [1598]
5996.4000 - 37452.0000 [1598]
Coordinate:
-121.87,37.19
Scale
1:5497918
Render
EPSG:4269

20. [illegible]


QGIS 2.0.1-Dufour
Project
Edit
View
Layer
Settings
Plugins
Vector
Raster
Database
MMQGIS
Processing
Help
Layers
ca_tracts_pop
tl_2013_06_tract [8057]
0.0000 - 3157.2000 [1598]
3157.2000 - 4019.0000 [1599]
4019.0000 - 4865.8000 [1596]
4865.8000 - 5996.4000 [1598]
5996.4000 - 37452.0000 [1598]
Coordinate:
-122.527,37.601
Scale
1:287990
Render
EPSG:4269