

Calculating Line Lengths and Statistics

QGIS Tutorials and Tips



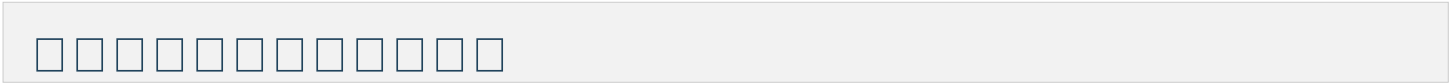
Author

Ujaval Gandhi

<http://google.com/+UjavalGandhi>

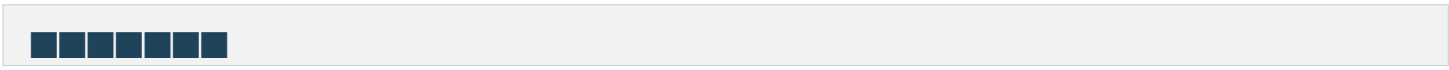
Translations by

Whyjay Zheng



(Unfinished) QGIS □□□□□□□□□□□□□□□□□□□□□□

□□□□□□□□ shapefile □□□□□□□□□□



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Natural Earth □□□□□□□□ □□ □□□□□□□□ □□□□□□□□

[illegible]

ne_10m_railroads_north_america.zip

□□□□ [NATURALEARTH]

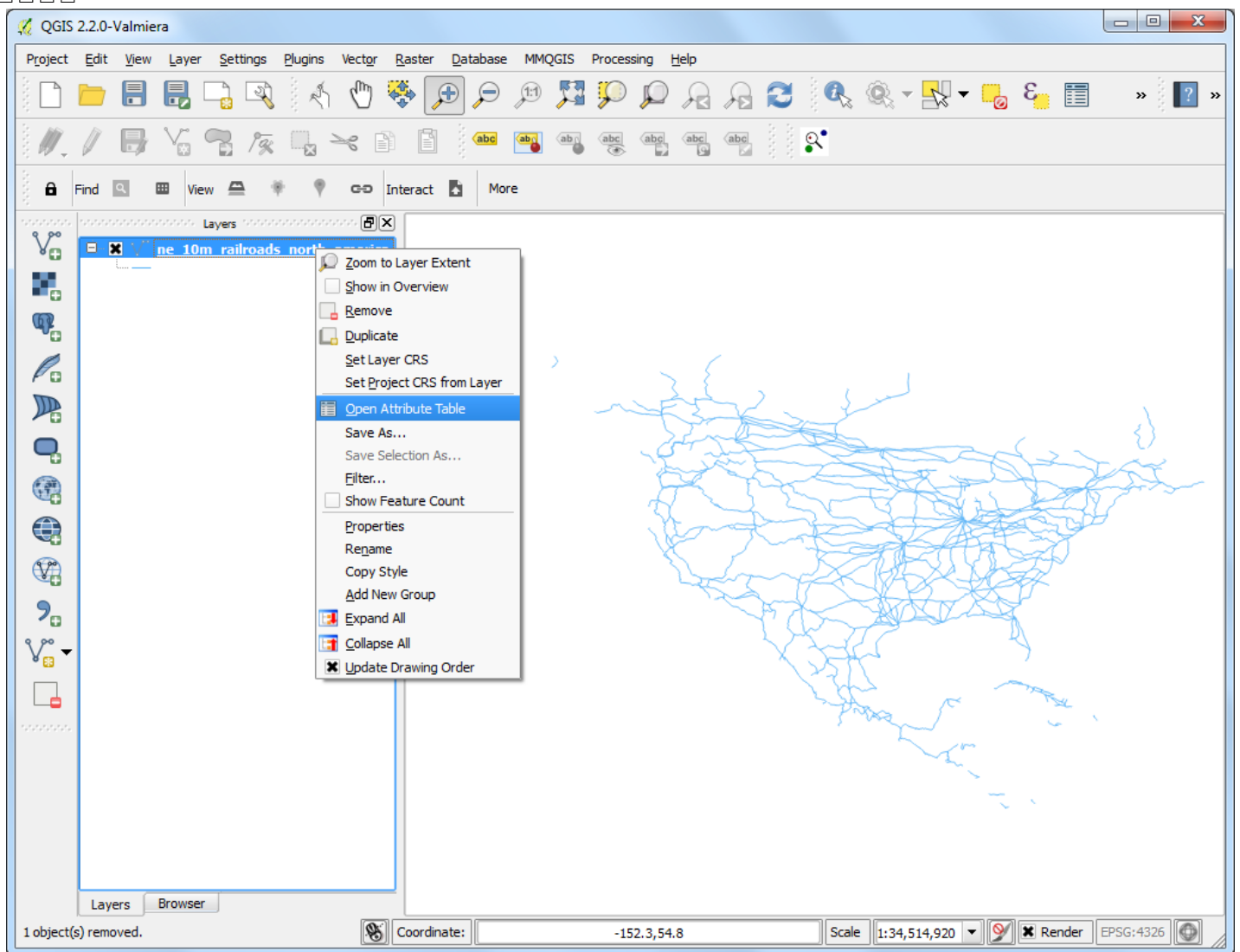
1. □□ □□ ▶ □□□□□□□□



2. `ne_10m_railroads_north_america.zip` □□□ □□□



3. □ □□□□□□... □□□□□□ `ne_10m_railroads_north_america.shp` □□□□□□□□
QGIS □□□□□□□□□□



sov_a3

Attribute table - ne_10m_railroads_north_america :: Features total: 1127, filtered: 1127, selected: 0

	scalerank	featureda	sov_a3	uidnt	add	natrscale	continent
0	8	Railroad	USA	1506	0	0	North America
1	9	Railroad	USA	1606	1	5	North America
2	8	Railroad	USA	1706	0	0	North America
3	8	Railroad	USA	1806	0	0	North America
4	8	Railroad	USA	1906	0	0	North America
5	8	Railroad	USA	2006	0	0	North America
6	8	Railroad	USA	2106	0	0	North America
7	9	Railroad	USA	2206	1	5	North America
8	8	Railroad	USA	2306	0	0	North America
9	8	Railroad	USA	2406	0	0	North America
10	8	Railroad	USA	2506	0	0	North America
11	8	Railroad	USA	2606	0	0	North America
12	8	Railroad	USA	2706	0	0	North America
13	8	Railroad	USA	2806	0	0	North America
14	9	Railroad	USA	2906	1	5	North America
15	9	Railroad	USA	3006	1	5	North America
16	8	Railroad	USA	3106	0	0	North America
17	8	Railroad	USA	3206	0	0	North America
18	8	Railroad	USA	3306	0	0	North America
19	8	Railroad	USA	3506	0	0	North America
20	8	Railroad	USA	3606	0	0	North America
21	8	Railroad	USA	3706	0	0	North America
22	8	Railroad	USA	3806	0	0	North America
23	9	Railroad	USA	3906	1	5	North America

Show All Features

[illegible]

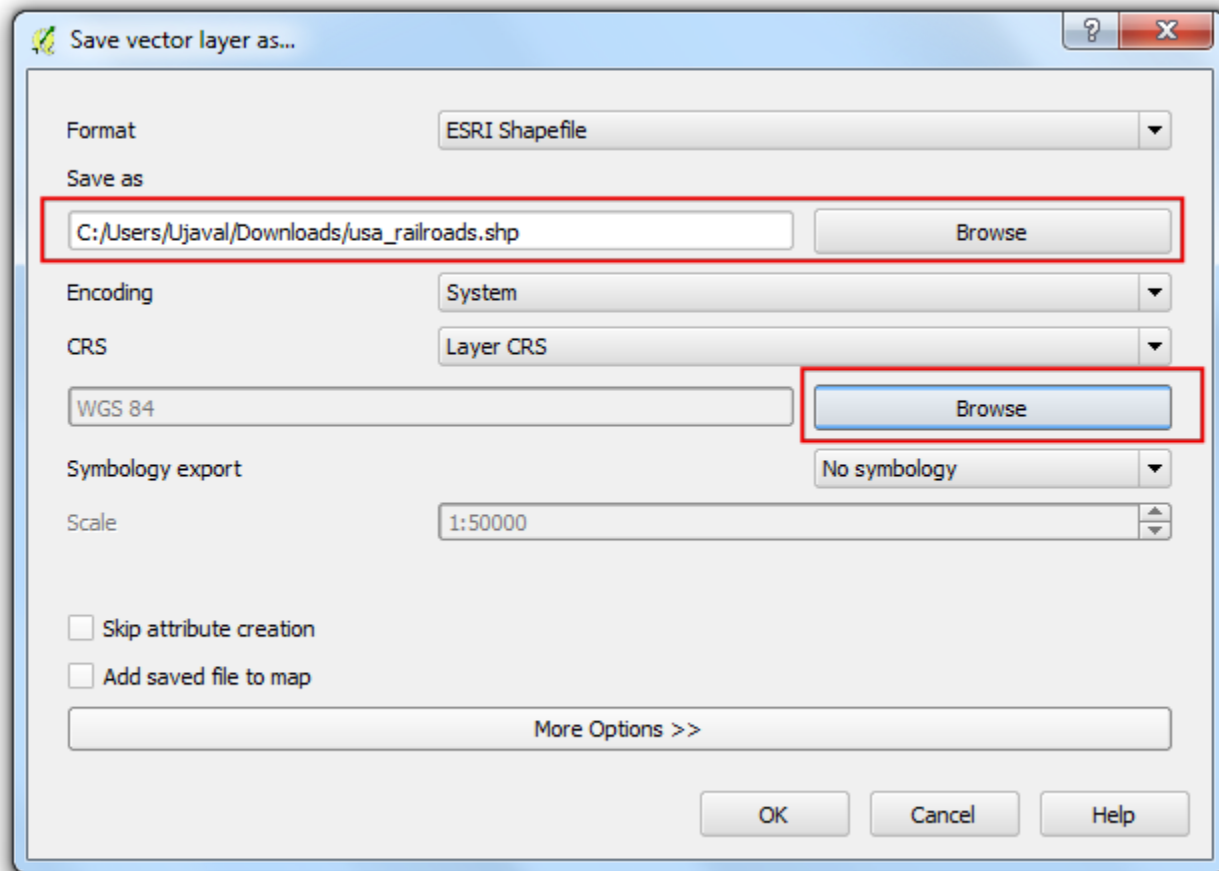
Attribute table - ne_10m_railroads_north_america :: Features total: 1127, filtered: 1127, selected: 0

Select features using an expression

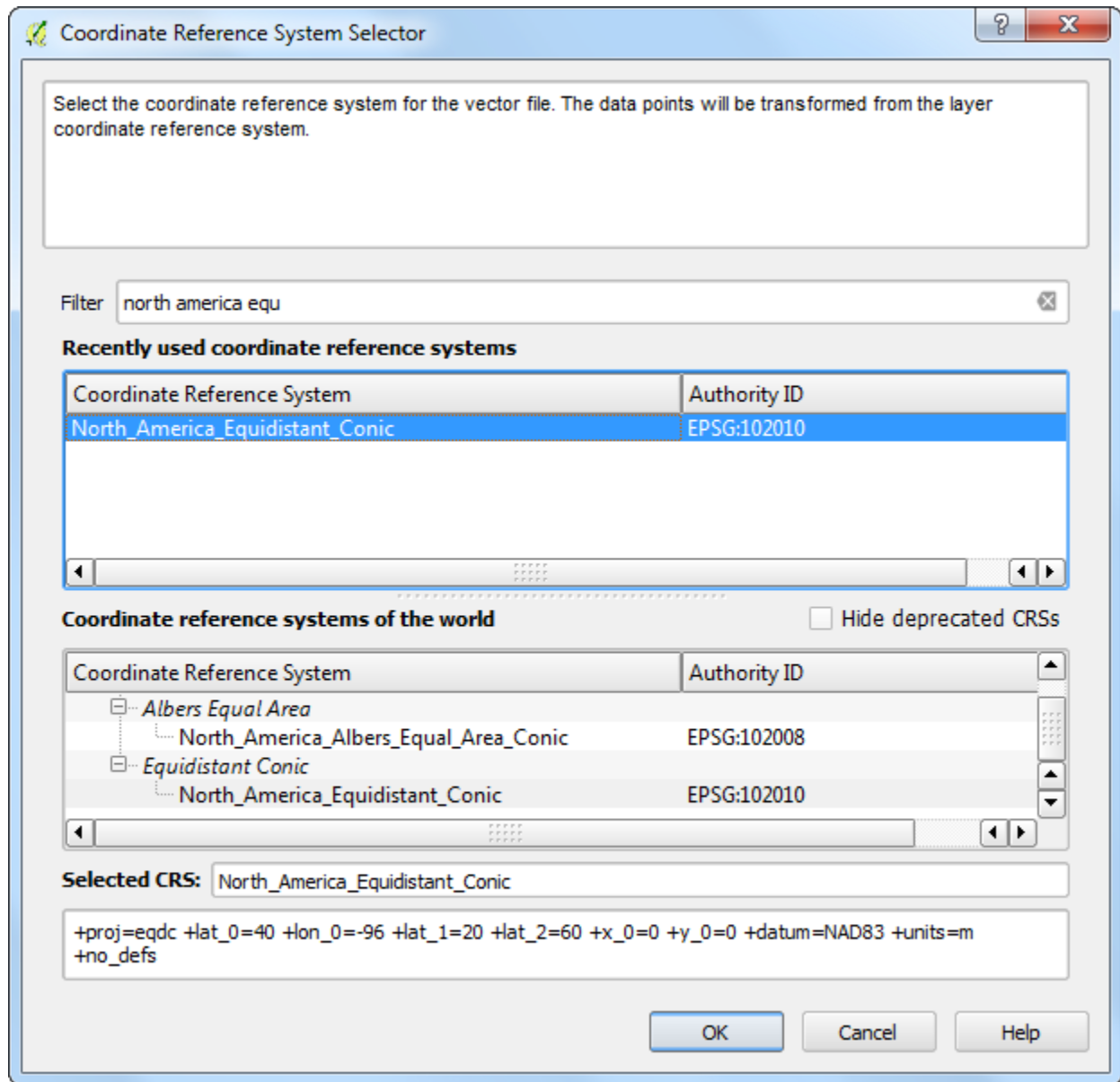
	scalerank		uident	add	natrscale	continent
0	8	Railroad	USA	1506	0	North America
1	9	Railroad	USA	1606	1	North America
2	8	Railroad	USA	1706	0	North America
3	8	Railroad	USA	1806	0	North America
4	8	Railroad	USA	1906	0	North America
5	8	Railroad	USA	2006	0	North America
6	8	Railroad	USA	2106	0	North America
7	9	Railroad	USA	2206	1	North America
8	8	Railroad	USA	2306	0	North America
9	8	Railroad	USA	2406	0	North America
10	8	Railroad	USA	2506	0	North America
11	8	Railroad	USA	2606	0	North America
12	8	Railroad	USA	2706	0	North America
13	8	Railroad	USA	2806	0	North America
14	9	Railroad	USA	2906	1	North America
15	9	Railroad	USA	3006	1	North America
16	8	Railroad	USA	3106	0	North America
17	8	Railroad	USA	3206	0	North America
18	8	Railroad	USA	3306	0	North America
19	8	Railroad	USA	3506	0	North America
20	8	Railroad	USA	3606	0	North America
21	8	Railroad	USA	3706	0	North America
22	8	Railroad	USA	3806	0	North America
23	9	Railroad	USA	3906	1	North America

Show All Features

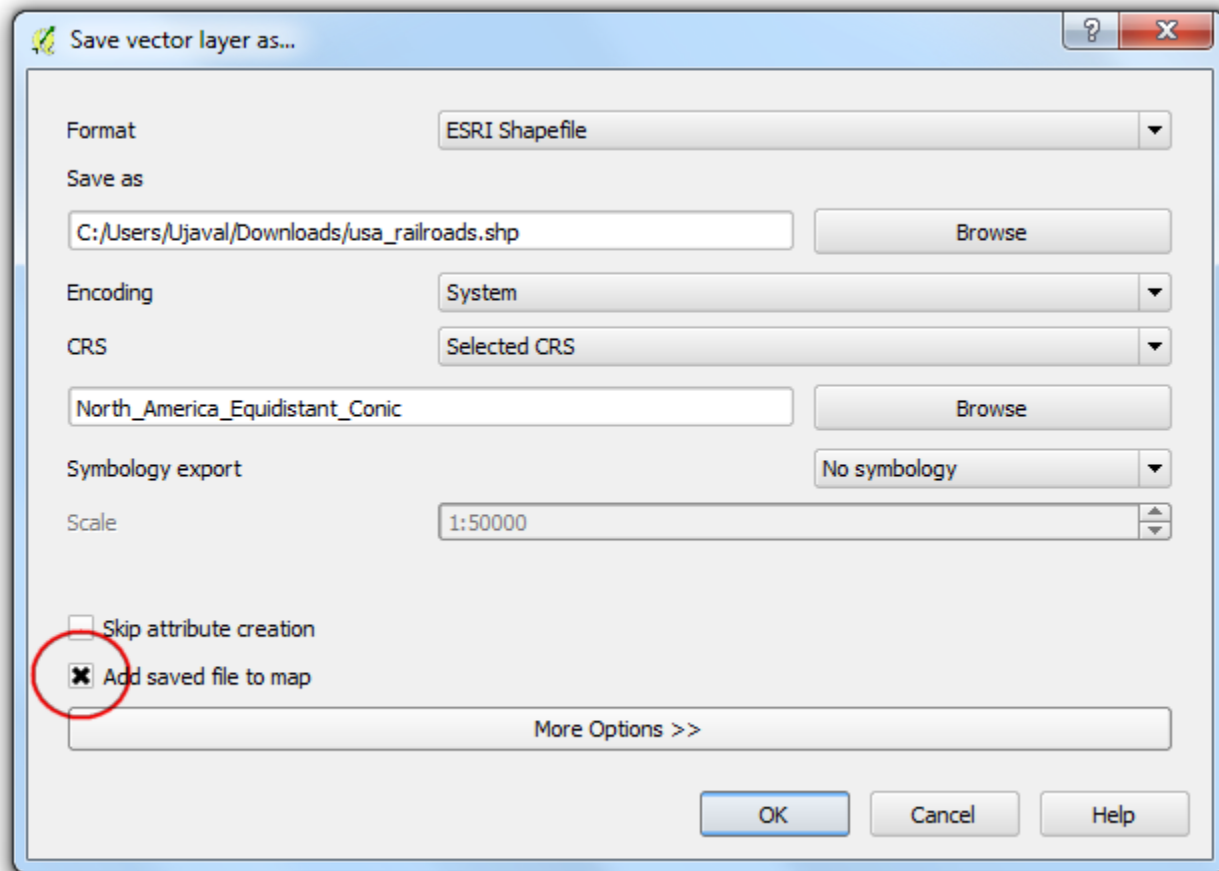
7. `sov_a3 = 'USA'`



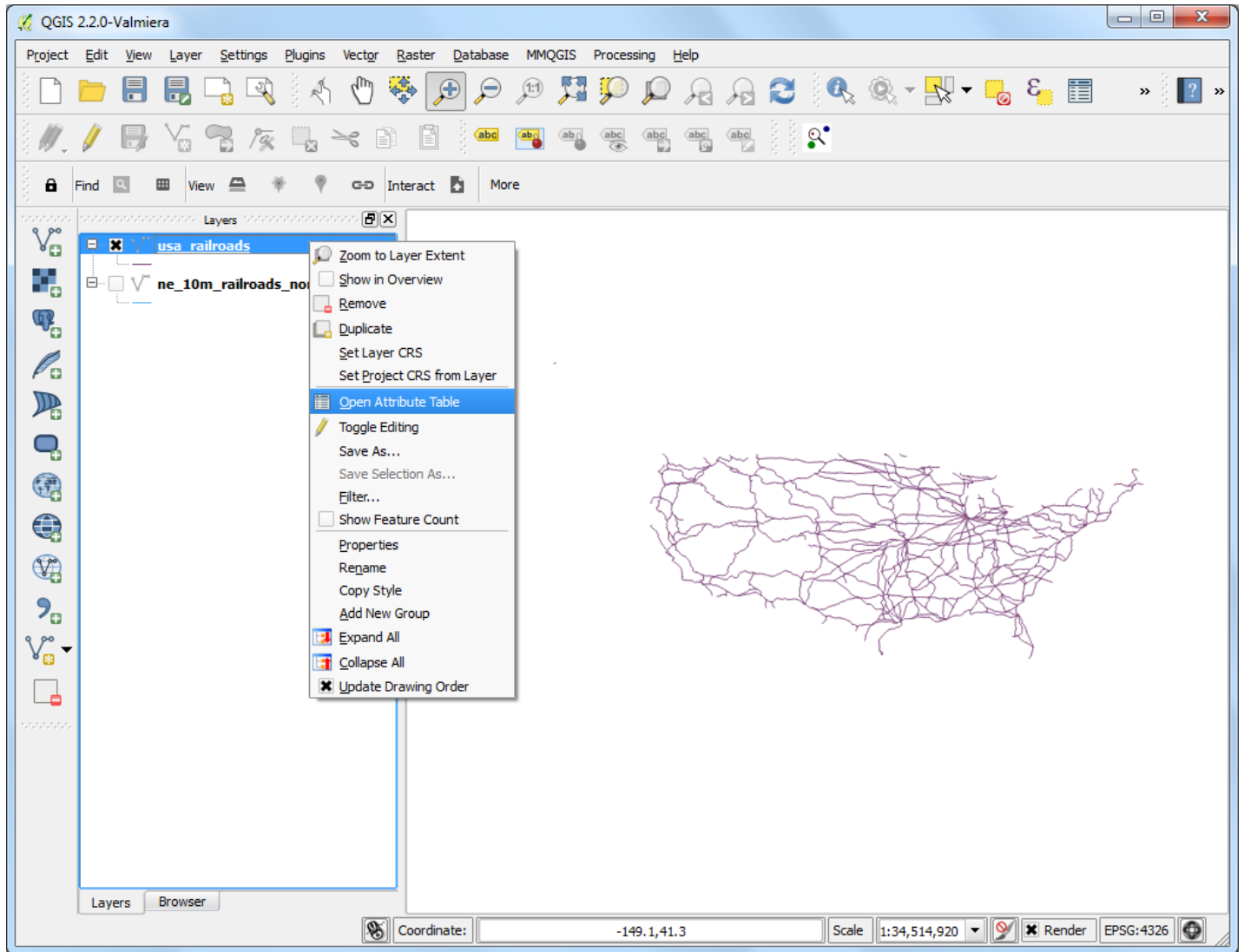
11. `QGIS -> Project -> Properties -> CRS -> Custom CRS -> New -> Name: North_America_Equidistant_Conic -> CRS: EPSG:102010 -> OK`



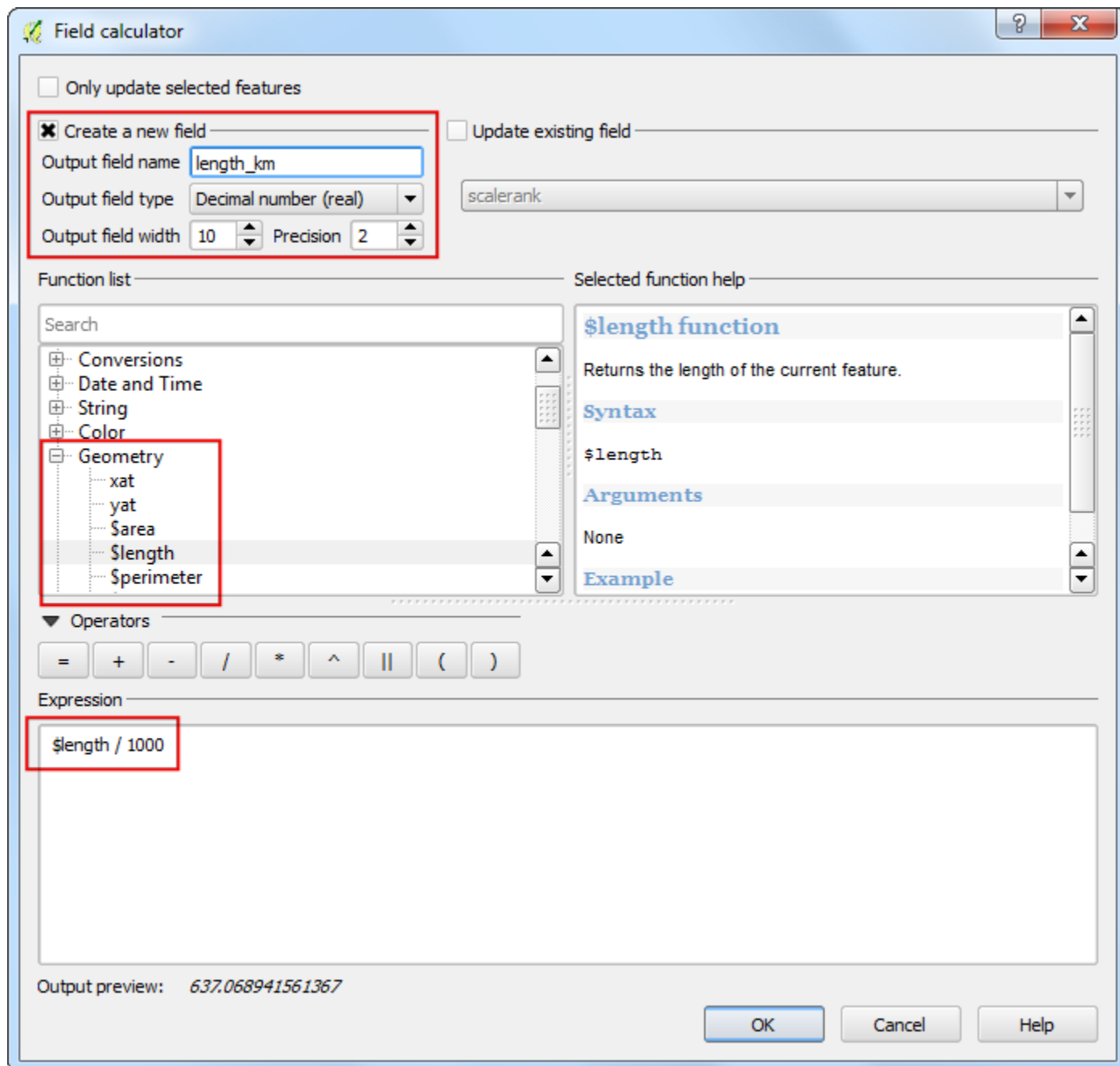
12. `guiabel: 'north america equ' ...` `guiabel: 'north america equ' ...`



13. In QGIS, save the *usa_railroads* layer as *ne_10m_railroads_north_america* and add it to the map.




15. □□□□□□□□□□□□□□□□□□□□ □□□□□ □□□□□□□□□□□□□□□□ □□□□□□
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17. □□ □□□□□□ length_km □□□□□□□□□□ □□□□□ □□□□□□□□□□

Attribute table - usa_railroads :: Features total: 752, filtered: 752, selected: 0



	scalerank	featurecla	sov_a3	uident	add	natlscale	continent	length_km
0	8	Railroad	USA	1506	0	0	North America	637.07
1	9	Railroad	USA	1606	1	5	North America	16.27
2	8	Railroad	USA	1706	0	0	North America	96.22
3	8	Railroad	USA	1806	0	0	North America	20.15
4	8	Railroad	USA	1906	0	0	North America	0.01
5	8	Railroad	USA	2006	0	0	North America	79.95
6	8	Railroad	USA	2106	0	0	North America	67.00
7	9	Railroad	USA	2206	1	5	North America	196.45
8	8	Railroad	USA	2306	0	0	North America	60.61
9	8	Railroad	USA	2406	0	0	North America	20.03
10	8	Railroad	USA	2506	0	0	North America	147.21
11	8	Railroad	USA	2606	0	0	North America	68.33
12	8	Railroad	USA	2706	0	0	North America	1.62
13	8	Railroad	USA	2806	0	0	North America	4.34
14	9	Railroad	USA	2906	1	5	North America	60.92
15	9	Railroad	USA	3006	1	5	North America	157.26
16	8	Railroad	USA	3106	0	0	North America	131.39
17	8	Railroad	USA	3206	0	0	North America	58.84
18	8	Railroad	USA	3306	0	0	North America	432.74
19	8	Railroad	USA	3506	0	0	North America	29.55
20	8	Railroad	USA	3606	0	0	North America	94.90
21	8	Railroad	USA	3706	0	0	North America	577.78
22	8	Railroad	USA	3806	0	0	North America	223.04
23	9	Railroad	USA	3906	1	5	North America	143.94

Show All Features

18. □□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□ □□ ▸ □□□□ ▸ □□□□□

Basics statistics

Input Vector Layer
usa_railroads

☐ Use only selected features

Target field
length_km

Statistics output

Parameter	Value
Mean	127.751569149
StdDev	125.80562595
Sum	96069.18
Min	0.01
Max	936.6
N	752.0
CV	0.984767755...
Number of unique values	743

Press Ctrl+C to copy results to the clipboard

0% OK Close