

# Calculating Line Lengths and Statistics

QGIS Tutorials and Tips



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Translations by

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`Natural Earth  
<<http://www.naturalearthdata.com/downloads/10m-cultural-vectors/railroads/>>`\_□□□  
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1. □□□□ :menuselection: `Layer --> Add Vector Layer` □ □□□□.



2. ``ne\_10m\_railroads\_north\_america.zip`` □□□ □□□ :guilabel: `OK` □ □□□□□.



3. In the Select layers to add... dialog, choose *ne\_10m\_railroads\_north\_america.shp* layer.



4. 이 레이어를 추가한 후, 레이어 목록에서 'ne\_10m\_railroads\_north\_america.shp' 레이어를 선택하고, 레이어 속성 대화 상자에서 'Open Attribute Table' 버튼을 클릭합니다.



5. `guiabel: `sov_a3`` 00 000 0000 0000. 000 00 300 000 00 000 000  
 00 00000 0000 00 00000. 0 0000 0000 000000 000 000 0 0000.

Attribute table - ne\_10m\_railroads\_north\_america :: Features total: 1127, filtered: 1127, selected: 0

	scalerank	featurecla	sov_a3	uident	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

6. ☐ ☐ ☐ Attribute Table` ☐ ☐ ☐ ☐ ☐ :guilabel:`Select features using an expression ☐ ☐ ☐ ☐.





8. Back in the main QGIS window, you will see that all lines that fall in USA are selected and appear in yellow.





9. `ne_10m_railroads_north_america`, `Save Selection As...`



10. `:guilabel: 'Browse'` `usa_railroads.shp` `:guilabel: 'CRS'` `:guilabel: 'Browse'`

## Note

CRS `EPSG:4326` `**degrees**` `**degrees**` `square degrees` `**meters` `**feet**`



11. `Filter` north america equ` CRS` :guilabel: `North_America_Equidistant_Conic EPSG:102010` OK``



12. □ □□□ □ □□ □□□ Save vector layer as... □□□□□ □□ □□ □□ □□  
 :guilabel: `Add saved file to map` □ □□□ :guilabel: `OK` □ □□□□.



13. □□ □□□□ □□□ □□□ □□□□ □□□□  
 usa\_railroads`~□□□□ QGIS□ □□□□. □□□□ ``ne\_10m\_railroads\_north\_america  
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14. ``usa\_railroads`` 〇〇〇〇 〇〇〇 〇〇〇 〇〇〇〇 〇〇 〇〇〇 〇〇 :guilabel: ``Open Attribute Table`` 〇 〇〇〇〇〇.









17. 属性表 Attribute Table 中 新建 字段 :guilabel: `length\_km` 数据类型 为 数字。 勾选 :guilabel: `Toggle editing` 选项 即可 编辑 数据。





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