

# How far a truck can go if it could use the fuel from its tanker.

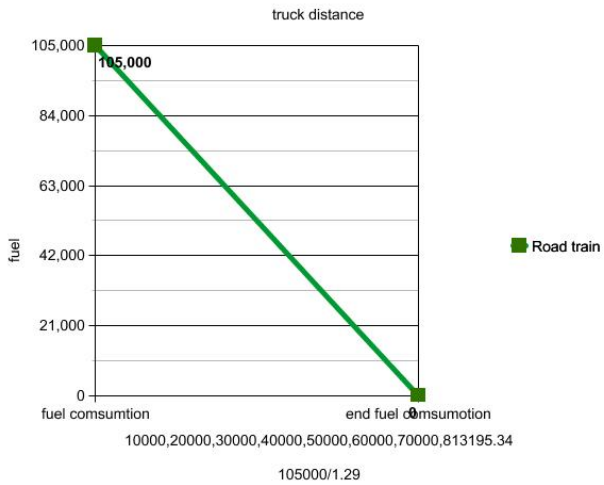
How the research will be done:

I will conduct research on how much fuel the truck will use at multiple speeds while unloaded, loaded with a tanker or multiple if the truck goes farther. The truck that will be used is a base model Kenworth T909 this truck is designed for long distance hauling so it's fitting for this application. The Kenworth T909 can carry up to 140 tons with a fuel consumption of 1.29km/l in a B-triple (meaning three trailers) road train form which is what I'll be going off in terms of weight, so I'll match that and measure the fuel economy. Now each triple axle fuel tanker weighs 8 tons unloaded loaded it weighs 38 tons with 35000 liters. In total the truck is going to weigh 114 tons with 105000 thousand liters of fuel at the truck's disposal.

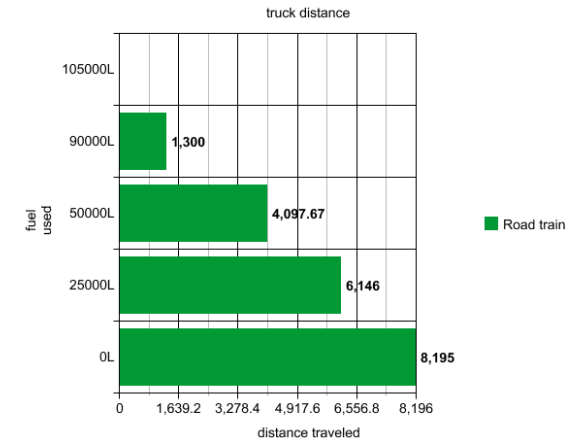
If we calculated how far the truck goes on 105000 thousand liters of fuel, we can go a theoretical distance of 81395.34 km.

# Graphs on distance

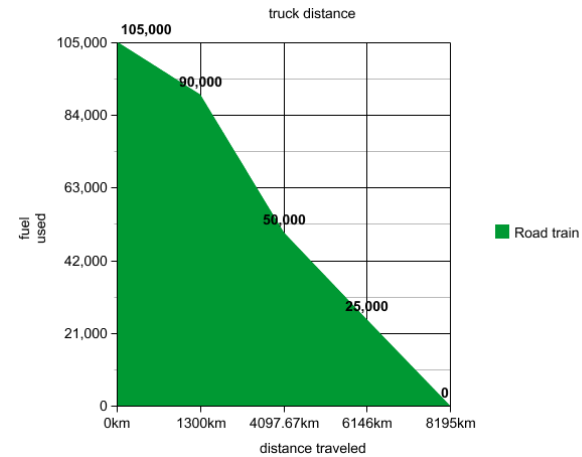
Line graph



Bar Graph representation.



Area graph



# Resources

- <https://www.kenworth.com.au/wp-content/uploads/2023/03/Kenworth-T909-Spec-Sheet-2021-WEB.pdf>
- <https://www.kenworth.com.au/wp-content/uploads/2023/03/Kenworth-T909-Model-Brochure-2021-WEB.pdf>
- <https://www.fullyloaded.com.au/cummins-powered-kenworth-t909-truck-video-review/#:~:text=The%20ISXe5%20returned%20a%20fuel,for%20a%20triple%20road%20train.>
- <https://trucken.en.made-in-china.com/product/jmJphNEUuYcT/China-3-Axles-35-000-Liters-Stainless-Steel-Tanker-Semi-Trailer-Fuel-Oil-Carriage-Semi-Trailer.html>
- <https://www.aqua-calc.com/calculate/volume-to-weight>
- <https://nces.ed.gov/nceskids/createagraph/default.aspx?ID=a0985a5bb1e84e0aaf8071b7a222415a>