



Registration Number 2019/354/639 PSIRA:3098611

■ Website: www.capetowntracking.com ■ Email: info@capetowntracking.com ■ Cell:0724059640

The platform will identify Assets that are over the speed limit. It does this by using the lower of map road speed limits, **zone** speed limits (if set), and **Asset Event Triggers** (Max Speed and Tolerance) to generate speeding events. The platform will apply the lower limit, with the tolerance added on, as the speed limit.

The platform does not know what type of vehicle you are tracking - it could be a Caterpillar Grader, a 10Ton Truck, or High-Performance car. Each of those vehicles have different maximum speeds allowed on roads, and the map road speed limits may not apply. For example, a Caterpillar Grader may only be allowed to go maximum of 30 with 0 tolerance, and would be speeding if doing any speed above 31, for example 40 on a road with a 40-speed limit, 50 on a road with a 50 speed limit etc. Any speed limit above 30 is ignored.

The platform contains map sets with road speed limits for individual roads.

Accuracy & Limitations

There are a number of limitations when using individual road speed limits. Where possible, the platform will err on the side of caution to prevent excessive speeding events. The platform uses the higher speed limit when there is any uncertainty, and temporarily suspend speed checking when there is no data available. The following 3 factors need to be taken into account regarding accuracy:

Data Accuracy

The road speed data is provided by GPS navigation mapping companies and is usually updated bi-annually. This data is available for most countries but may be missing in some countries. Key Telematics cannot guarantee that there will be access to road speed data for any specific country, nor guarantee the accuracy of such data.

GPS position accuracy

Modern GPS receives can have inaccuracies in recorded co-ordinates (based on multiple factors, like installation and canyon effects). This means that determining which road a vehicle is travelling on is usually a best-guess effort. As such, the platform has to take surrounding roads into account when trying to determine the local speed limit. For example, if there is a road within 100 meters of the current position, and this has a higher speed limit than the one that the platform believes the asset is on, the platform will use the higher speed limit instead of the closest road's limit. This eliminates any issues caused by GPS inaccuracies. In the example below, the asset is on a road with a speed limit of 60, intersecting an area where higher speed roads are within 100 meters. The platform will use the higher speed limit (120) when checking this position.



Position Logging Interval

■ Director: Kevin James De Heer Kloots ■ Kera Reynolds BAppSocSci



The road speed limit feature is platform based, which means that the platform is using data from the Device to determine speeding. The platform can use the positions that the Device sends it and cannot know what speed the vehicle reached in between any of these data positions. The accuracy is determined by the update frequency for the Device.

We recommend a update frequency of at least every 15 seconds and 15-degree turn for the best results, without incurring unnecessary data costs.