

Changing top speeds in the OSM map

The term OSM stands for Open Street Map. In the OSM database, it is possible to enter the speed information for all passable roads. A big advantage with OSM is that virtually all interested people can participate in the data update. To be able to use this information while driving with a vehicle, I developed the Android app "Tempomaster". Details can be found here:

http://www.g-daehling.de/tempomaster_en/

https://play.google.com/store/apps/details?id=gd.tempomaster_pro

Of course, this app is very dependent on the timeliness of the collected data. Parallel to the app development, I have therefore concerned myself with how you yourself can capture this data most effectively and register in the OSM database. I tried different methods. Most operate on the principle while driving the places where there is speed information by tapping a button in an app store. For me the app "OSM-Tracker for Android" worked best.

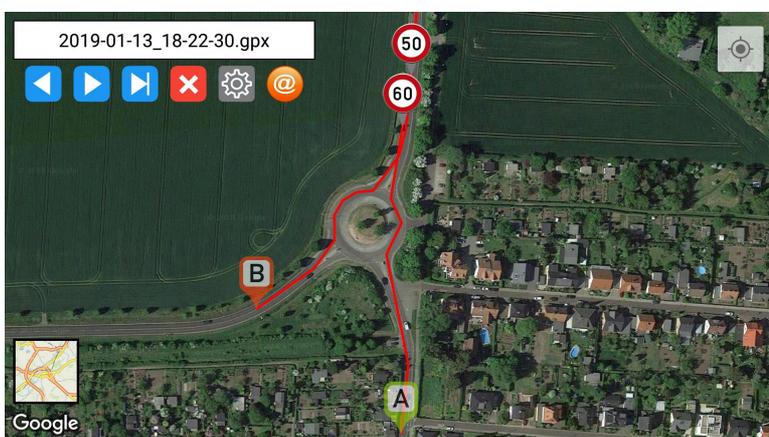
My Tempomaster app now has a built-in feature that saves the track as a GPX file. That happens automatically. These files can be viewed on the home screen via the blue button with the two markers.

In the map view you can also send the individual files to an eMail address. For this you have to enter an eMail address as destination in the map mode (gear symbol) in the setup. At the first sending you have to give your own Gmail account for sending.

While driving, the Tempomaster can save points at top speeds. How this is done I show in the video for the app:

https://www.youtube.com/watch?time_continue=2&v=Cu9YEdVjYEs

These points are stored in the GPX file and can thus be visualized in suitable programs. For editing the OSM card you can also use the integrated map display of Tempomaster. In this the points are represented as markers in the form of speed signs. I show here an example where I would like to explain the editing of the OSM data:



For a route with different different speeds in the different directions was turned in the example and driven back again. To better recognize the exact location of the points then you must of course continue to zoom into the map.

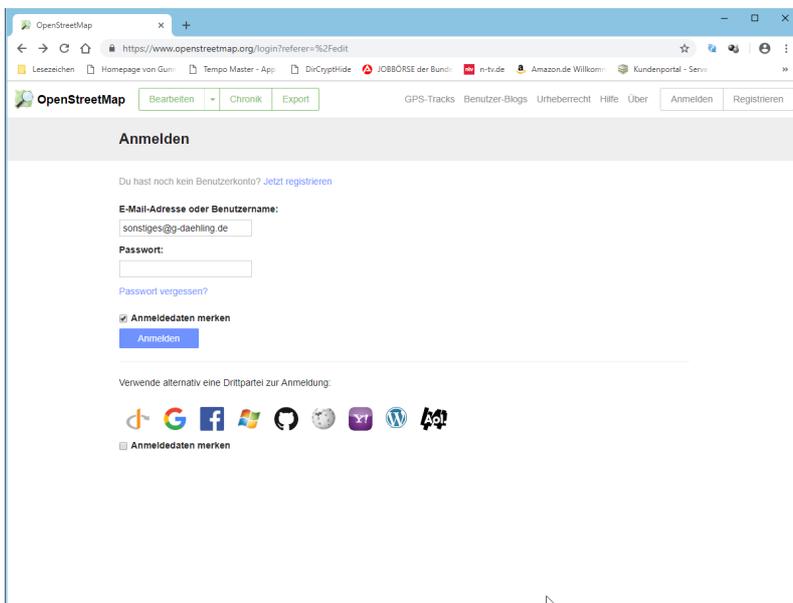
In the following I will explain how to check this information in the OSM map. If they are faulty they can also be changed very easily. There are many ways to do that. For users who are a little more experienced, I recommend the free editor JOSM. With it you can realize practically everything that is possible with OSM. The download is available here:

<https://josm.openstreetmap.de/>

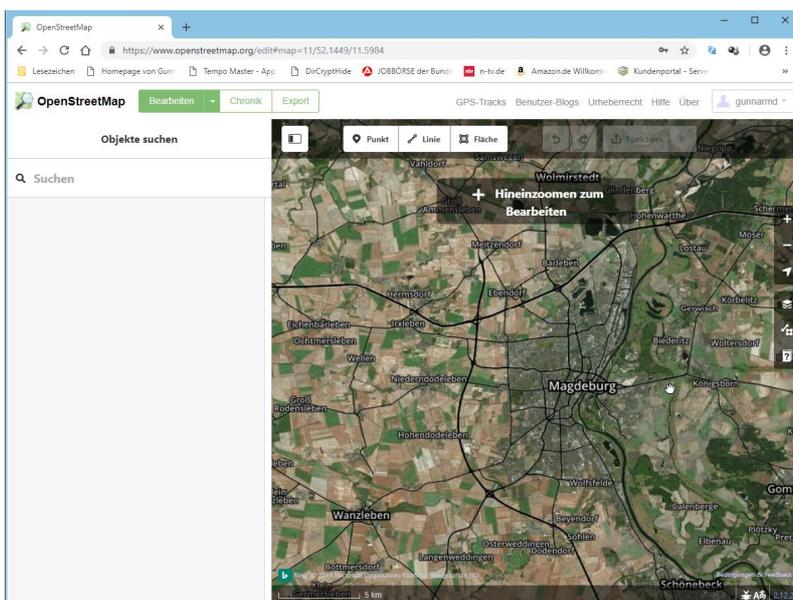
A slightly easier way requires just any internet browser. There you first open the following address of the OSM:

<https://www.openstreetmap.org/edit>

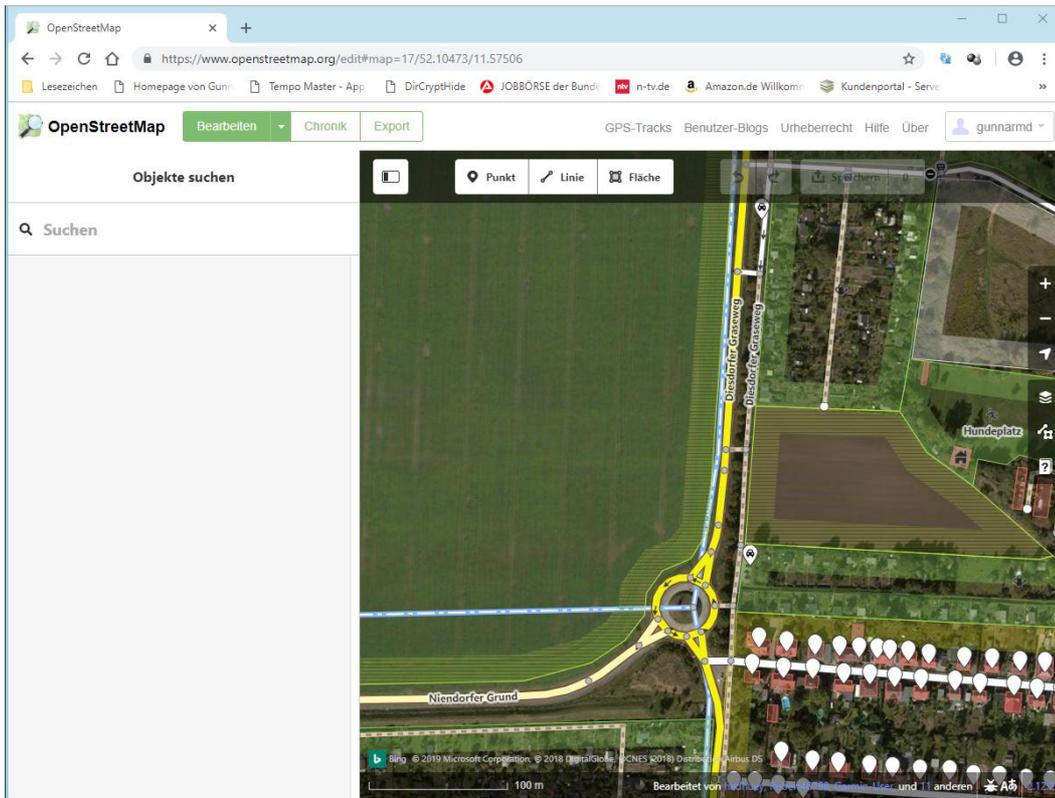
Registration is required the first time. This is free. The login data does not have to be reentered each time you check the box.



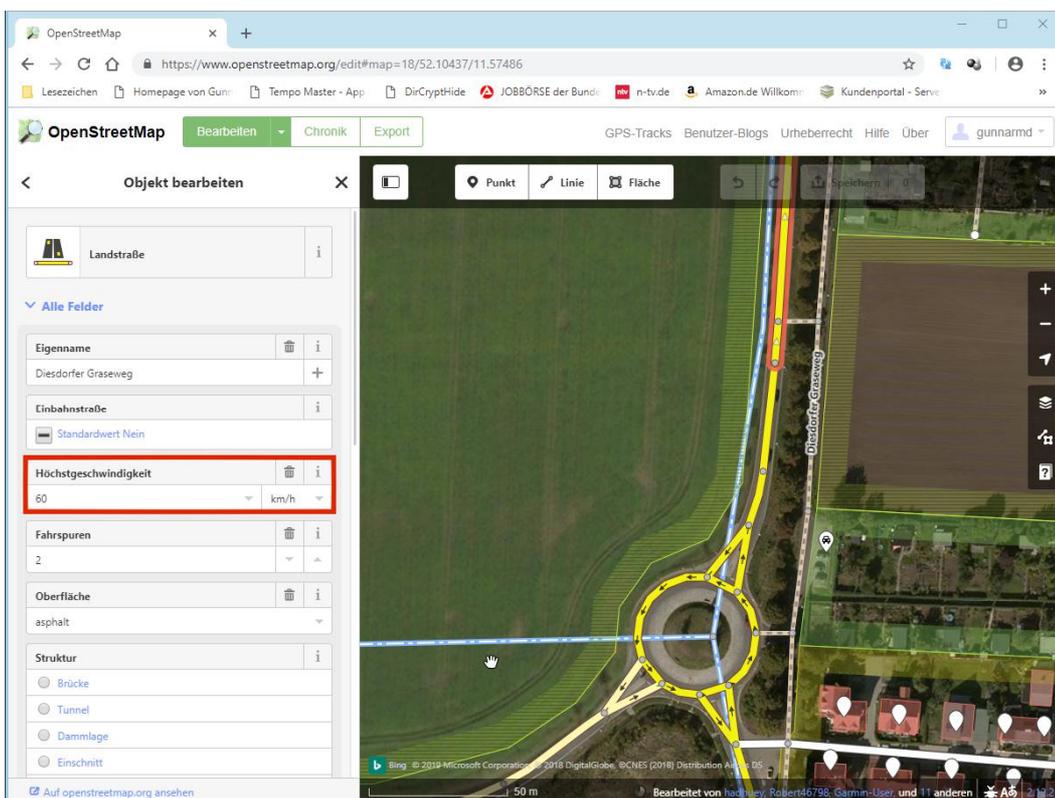
After logging in you get directly to the map:



In the map you first open the map section in which you want to edit. A hint in the map will also indicate if you need to zoom in further to make the editor switch to edit mode. In the next picture I did that for my example:

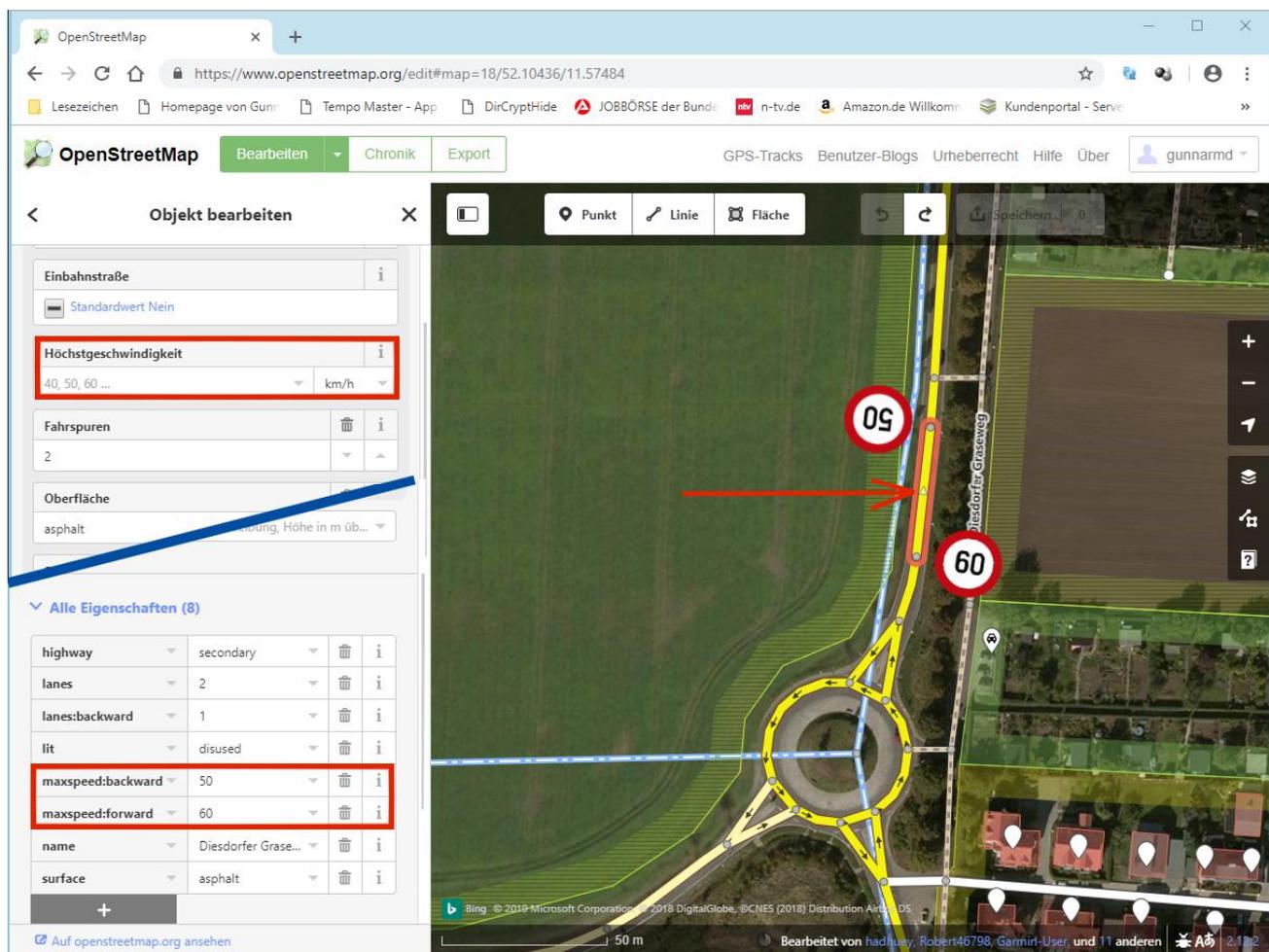


You can see the editing mode very well on the now visible details of the elements to be edited. For the app Tempomaster only the roads are important. In the next picture I zoomed in a bit further:



The road element to be edited is simply clicked on. It then becomes active and starts flashing. The maximum speed of the segment marked in this picture is 60 km/h in both directions of travel. There is a field for the entry in the list on the left side. You either re-enter the value or correct a wrong one. This value applies to the entire colored line segment. If the value for the speed changes between the two endpoints, the road element still needs to be split. This is done by double-clicking on the appropriate place on the road element. This will split the segment. Subsequently, the two newly created segments must be marked one after the other and the speed values must be checked separately and changed if necessary.

The next picture shows the case that different speeds apply in both directions of travel (the two signs have been added for better understanding, they do not exist in the editor):

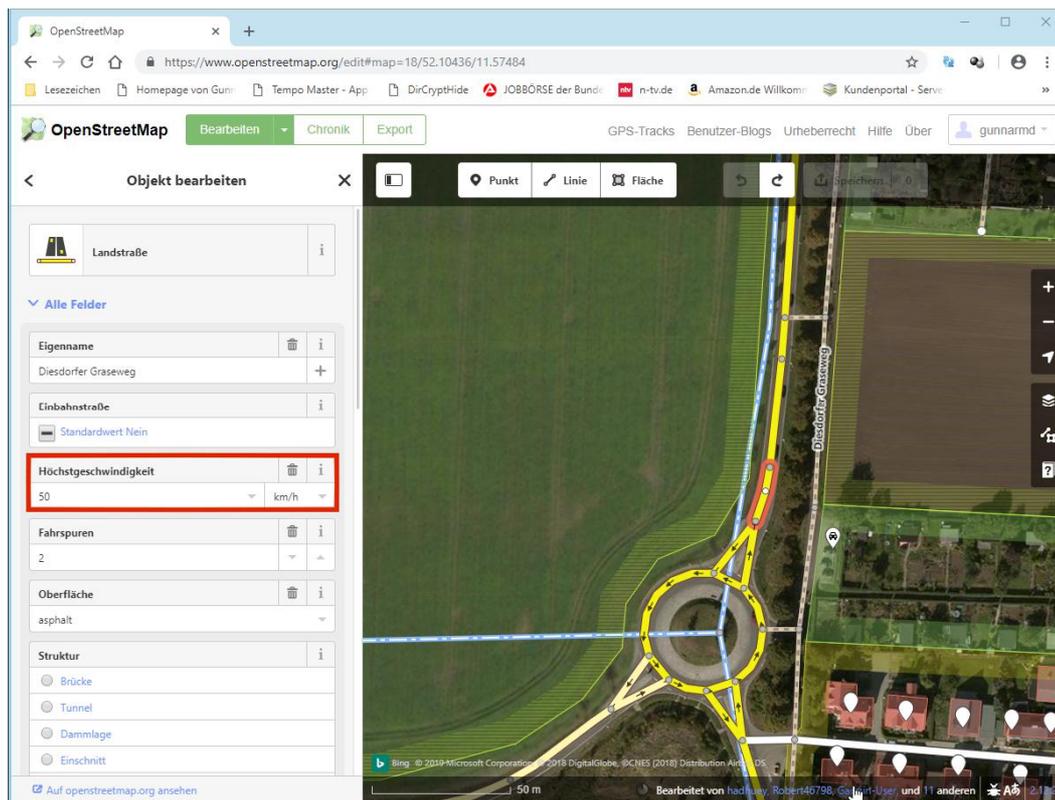


In this case, the default maximum speed field will be blank. If there is already a value in it, it must be deleted. Since there is no delete button, the entry is marked with the mouse and deleted with the Del key. The two entries maxspeed:forward and maxspeed:backward must be added in the block "All properties" (if they do not already exist). To do this, use the dark box with the plus sign. The block "All Properties" is located on the left side below. Possibly, you have to scroll down to this first.

The spelling must be exact. Otherwise there will be no entry for this direction in the Tempomaster database. On the road segments small arrows (in the form of triangles) are shown (red arrow). If these are obscured by the street name, simply hover over it with the mouse and the street name will be hidden.

These arrows have a crucial meaning in the last two properties. The value for "maxspeed:forward" always applies in the direction of the arrow, maxspeed:backward in the opposite direction.

It then joins again a road segment with uniform speed for both directions, here apply 50 km/h:

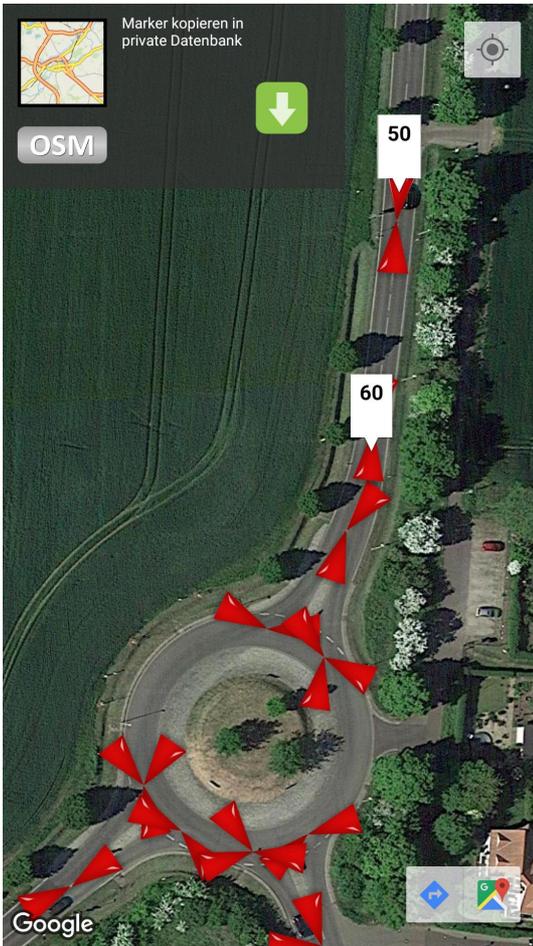


In this case, any existing entries of values in the block "All properties" must be deleted. If you have made changes, the "Save" button above the map will be activated. This saves the changes directly to the OSM database. Left beside this Button are still the two buttons with which you work steps undo or redo (just before saving possible).

Important! When clicking on the lines, always click between the nodes. Otherwise, there is a risk that you move these points involuntarily with the connected lines. This should only happen if you want to deliberately correct the location of the nodes.

The speeds are by default the unit km/h. If the mph unit is used, it must be set in the standard field using the drop-down list. At maxspeed: xxx, it will be sent directly to you (for example 50 mph). There is always a space in front of the unit.

The points can also be checked in the app. In the setup menu you can call up a map in which these points are entered as markers in the form of red triangles. This map can be accessed via the button to the right of the download button. In the picture is the section edited above:



It is always just a text box with the speed fade. I have edited this image to represent the two data 50 and 60 km/h at the same time. These boxes appear after tapping a marker. If no markers are displayed after moving the map section, simply click anywhere on the map. The markers are always displayed 300 meters in the vicinity of the click point.

I hope I could inspire someone with this guide. Maybe one or the other uses this possibility. The compliance with the permissible speed is thereby enormously facilitated. I am always looking forward to a feedback. Hints and suggestions you can send to my email address:

Tempomaster[at]g-daehling.de

[Further instructions on OSM](#)

Download and instructions for the tool Osm2Tempomaster:

http://www.g-daehling.de/tempomaster_de/osm2tempomaster.zip

Data collection of speed data with a Dashcam:

http://www.g-daehling.de/tempomaster_de/Anleitung%20Dashcam%20OSM.pdf

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