How to set traffic regions and export traffic-region data?

Getting stationary time, average speed or acceleration of objects within the area that you define is possible with us.

Traffic regions are mostly used to define **stationary vehicles** in a certain area in the scene view, but you can get other information such as **average speed** or **average acceleration** of each object within the traffic region. You can **set your own virtual traffic region** in the video and you can **move it or change it** any time you want. You can use the possibility to **export all the traffic data to .CSV file** for further analysis as well.

To set a **new Traffic region** go to main menu and press Add Traffic Region. You can choose this option through right-click as well.
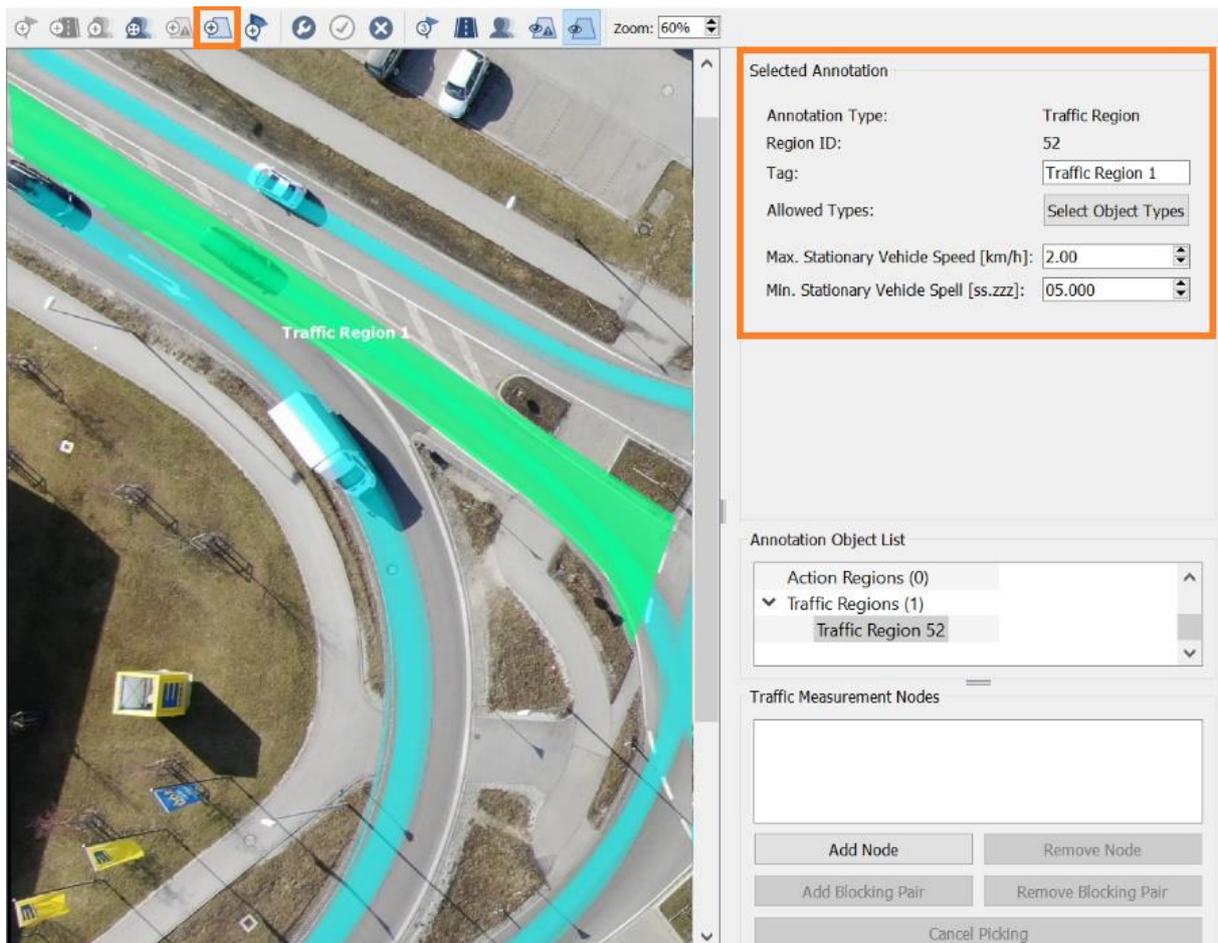
In the **Selected Annotation settings,** you can see and set:

- **Annotation Type** – The currently selected annotation type.

- **Region ID** – ID Annotation number.

- **Tag** – You can edit the Traffic Region name here.

- **Allowed Types** – Here you can set which kinds of objects the Traffic Region will detect.

- **Allowed Colours** – Only in SCOUT mode. Here you can set which object colours the Traffic Region will detect.

- **Max. Stationary Vehicle Speed** – Set the maximum speed at which the vehicle is considered stationary.

- **Min. Stationary Vehicle Spell** – Set how long at least the vehicle must be below Max. Stationary Vehicle Speed to be considered stationary.

To **export data** from your traffic regions, go to Analysis - Export Traffic Regions Crossing Events to .CSV File.

If you open your **traffic region data** file in **Microsoft Excel**, it will look like this:

Traffic Region ID	Track ID	Type	Entry Time [s]	Exit Time [s]	Avg. Speed [km/h]	Avg. Tan. Acc. [ms-2]	Avg. Lat. Acc. [ms-2]	Avg. Total Acc. [ms-2]	Total Stationary [s]	Longest Stationary [s]
52	22	Car	15.2819	22.0554	21.053545	-0.7374	-0.4571	1.2419	0.000	0.000
52	29	Car	31.1645	41.9419	13.104078	-0.5553	-0.2058	1.5367	0.000	0.000
52	37	Medium Vehicle	48.1147	58.2916	13.872632	-0.4874	-0.2333	1.2069	0.000	0.000
52	46	Car	57.3907	64.0974	21.768308	-0.3566	-0.4914	1.1614	0.000	0.000
52	50	Car	60.3937	70.8708	13.728829	-0.2585	-0.1991	0.8961	0.000	0.000
52	52	Car	64.3977	73.3399	16.046420	-0.2795	-0.3158	1.2570	0.000	0.000
52	54	Car	66.8668	75.075	17.452032	-0.1932	-0.3790	1.4737	0.000	0.000
52	57	Car	71.2712	76.6099	26.688589	-0.4389	-0.7230	1.2920	0.000	0.000
52	64	Car	77.3439	81.9485	30.987905	-0.9302	-0.9398	1.6846	0.000	0.000
52	66	Medium Vehicle	79.713	84.451	30.237616	-0.9079	-0.8870	1.4835	0.000	0.000
52	71	Car	89.8231	98.2982	16.642124	-0.8872	-0.1937	1.6921	0.000	0.000
52	88	Car	113.68	118.051	32.401277	-1.0561	-1.0260	1.9206	0.000	0.000
52	91	Car	117.451	130.697	10.710738	-0.5772	-0.1581	1.1832	5.939	5.939
52	104	Car	148.615	153.02	33.051668	-1.1360	-0.9547	1.6889	0.000	0.000
52	112	Car	161.661	167.067	26.326609	-0.8059	-0.6805	1.4706	0.000	0.000
52	114	Car	170.604	176.81	23.231321	-1.3918	-0.5185	2.1817	0.000	0.000
52	115	Medium Vehicle	174.641	184.685	14.507392	-0.0969	-0.2537	1.4163	0.000	0.000
52	141	Car	217.117	222.856	24.427518	-1.8514	-0.5369	3.0581	0.000	0.000
52	144	Medium Vehicle	223.156	258.058	4.016440	-0.2051	-0.0196	0.4852	27.527	17.918
52	167	Car	261.728	273.14	12.582538	-0.3796	-0.2633	1.0682	0.000	0.000
52	171	Car	263.163	275.776	11.325008	-0.1734	-0.2012	1.0396	0.000	0.000
52	174	Car	266.032	277.978	12.042657	-0.3202	-0.1681	1.3634	0.000	0.000
52	177	Car	274.975	282.749	18.105689	-0.1405	-0.3126	0.7562	0.000	0.000

See the interpretation of each column below:

- **Traffic Region ID** – Unique ID of traffic region.
- **Track ID** – Unique identification number of each object.
- **Type** – Object classification, there are 7 object categories: Car, Medium Vehicle, Heavy Vehicle, Bus, Motorcycle, Bicycle, Pedestrian and Undefined.
- **Entry Time [s]** – Time of the video (in seconds) when vehicle entered to the traffic region.
- **Exit Time [s]** – Time of the video (in seconds) when vehicle left to the traffic region.
- **Avg. Speed [km/h]** – Average speed in km/h within defined traffic region.
- **Avg. Tan. Acc. [ms-2]** – Average tangential acceleration within defined traffic region. Positive value means acceleration and negative value means deceleration.
- **Avg. Lat. Acc. [ms-2]** – Average Lateral acceleration within defined traffic region. Positive value means acceleration and negative value means deceleration.
- **Avg. Total Acc. [ms-2]** – Absolute size of immediate acceleration vector.
- **Total Stationary [s]** – Total stationary time within the traffic region.
- **Longest Stationary [s]** – Longest stationary time measured within the traffic region.