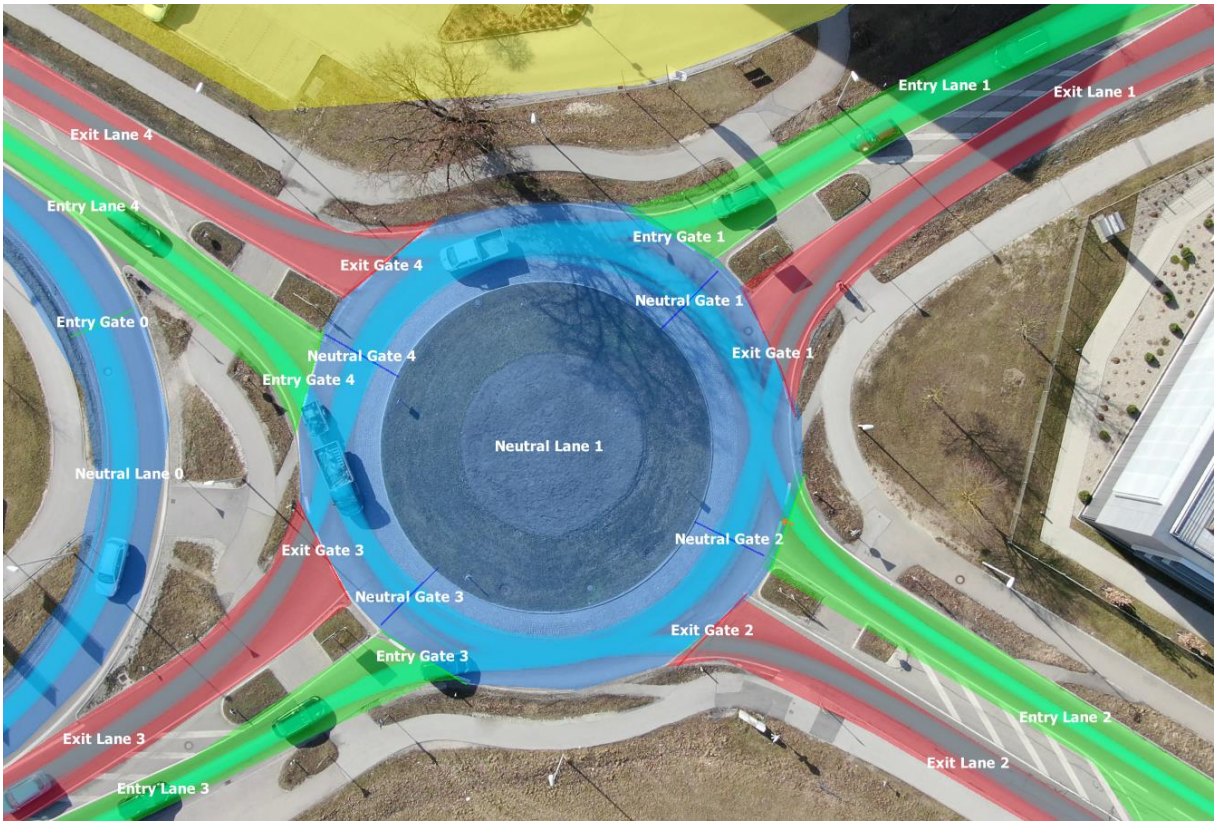
version 1.0

How to set and export data from Gap Time and Time to Follow?

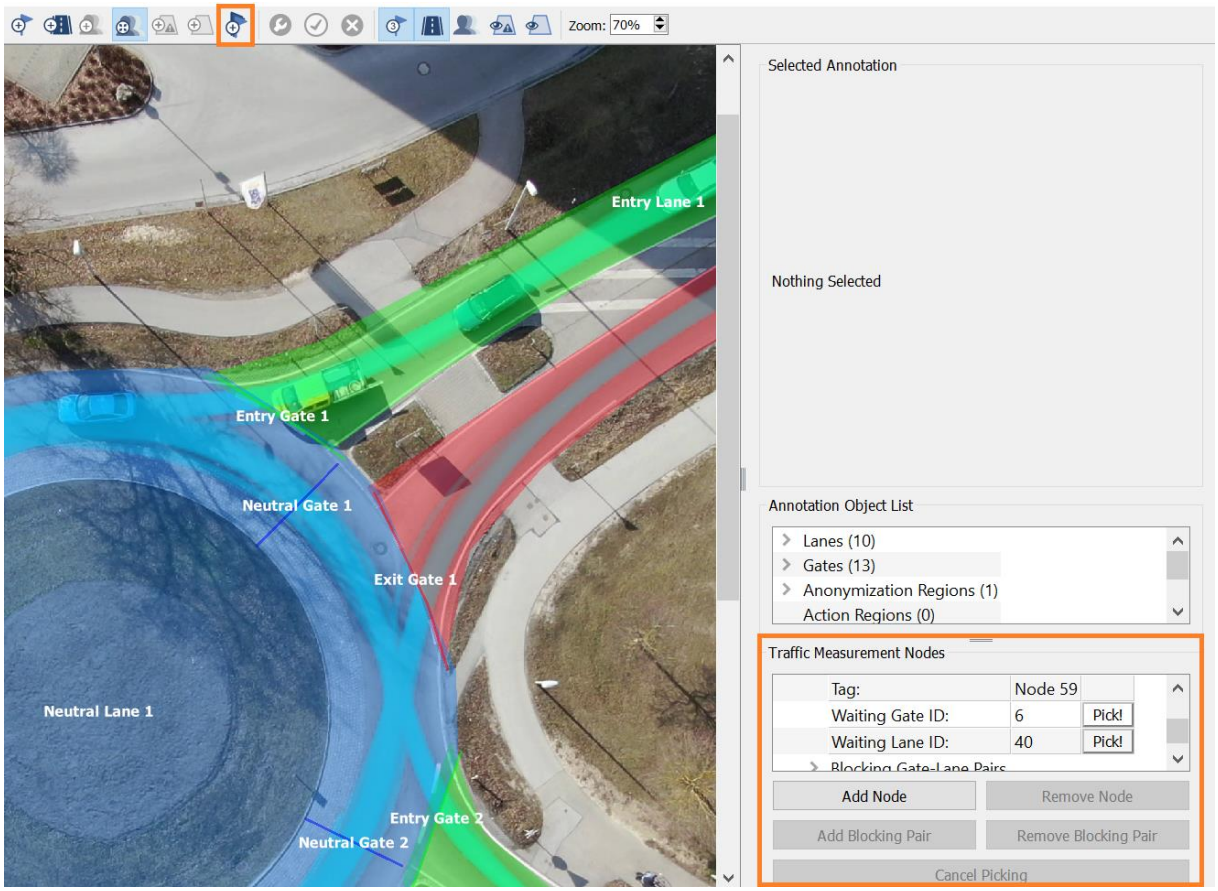
Calculate capacity of the roundabout or intersection, analyse drivers' behaviour based on interactions with others.

First, you have to **set specific virtual gates and lines to your video.** What you need to set are **waiting gates and lines** represented by entry gates and lines (green) on the edges of the roundabout or intersection and **blocking gates and lines r**epresented by neutral gates and lines (blue) within the intersection or roundabout. A combination of entry and neutral gates might look like the following.

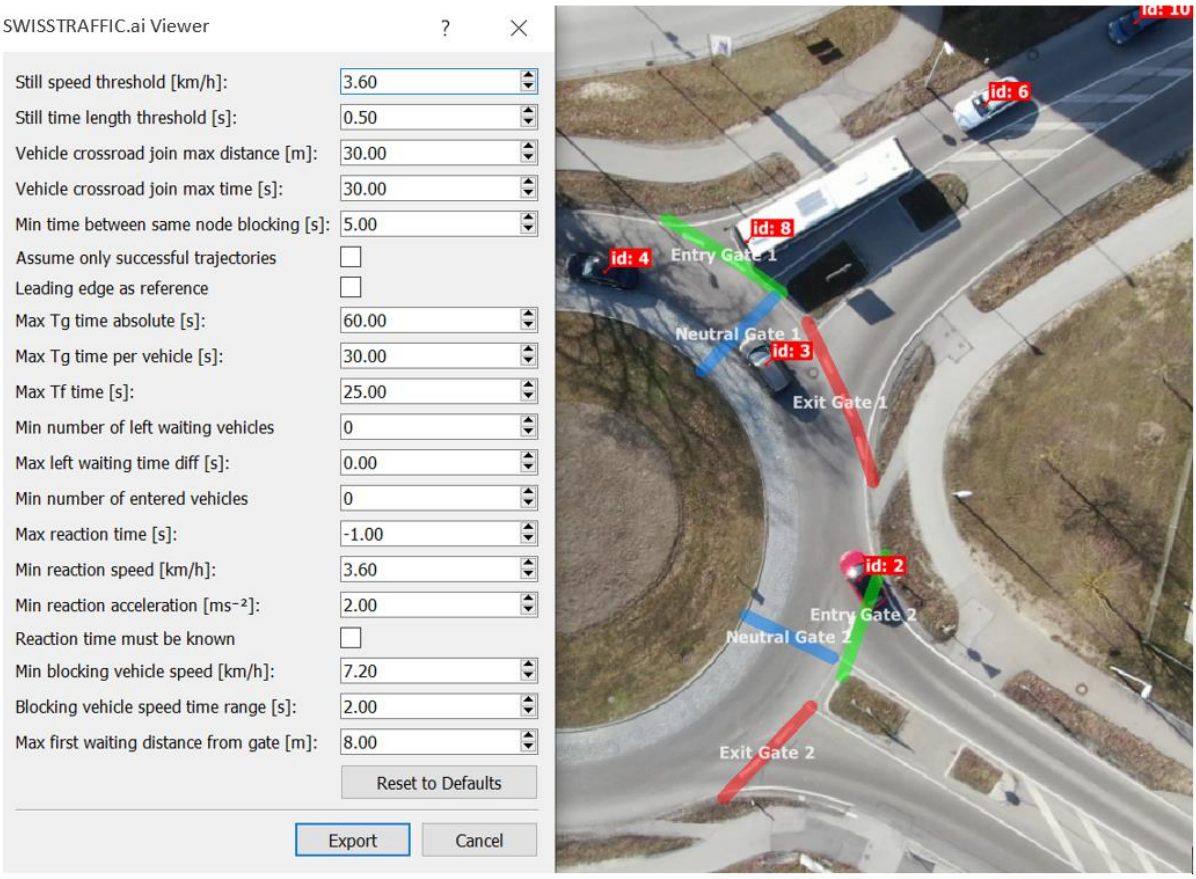


Now you are ready to **set your own Node** that will define the **relationship between waiting and blocking gates/lines.** Click Add Measurement Node in the main menu and set the waiting gate/line and blocking gate/line in the right-bottom menu. In this case, we have set:

- Waiting Gate = Entry Gate 1
- Waiting Lane = Entry Lane 1
- Blocking Gate = Neutral Gate 1
- Blocking Lane = Neutral Lane 1



You can **set as many nodes as you want** and export data for all nodes. Once you are done with your settings, Confirm Annotation Redefinition and apply changes in Annotation Configurations. Now everything is ready to make an **export to a .CSV file.** Go to Analysis - Export Gap-Time/Time-to-Follow Data. You can use our Default values, or you can set your own values in the following table.



The **export** you get will include columns with the following data:

- **Unique Event ID** - Unique ID of an event.
- **Measurement Node ID** - Unique ID of the node that you have set.
- **Waiting Gate ID -** Unique ID of the waiting gate that you have set.
- **Video Position of First Blocking [ms]** - Video-time, when a vehicle was detected as a blocking one (passed a blocking gate).
- **First Blocking Vehicle ID -** Unique ID of the first blocking vehicle that has passed the blocking gate.
- **Second Blocking Vehicle ID** - Unique ID of the second blocking vehicle that has passed the blocking gate.
- **Number of Waiting Vehicles** - Number of vehicles in the waiting lane, waiting to enter the roundabout/intersection.
- **First Waiting Vehicle ID** - Unique ID of the first vehicle in the waiting lane.
- **Tg Value [ms]** - Gap time - distance between the first and second blocking car in ms.

- **Number of Left Waiting Vehicles** - How many cars there are left in the waiting lane after the first blocking vehicle passed.
- **First Left Waiting Vehicle ID** - ID of the first vehicle that left the waiting lane and could continue to the roundabout.
- **Entered Vehicles Count -** Number of vehicles that have left waiting lane during gap time.
- **(If Entered Vehicles Count > 1: list(Tf Value [ms]))** - In case gap time is sufficient for more vehicles to leave the waiting gate, time to follow for these vehicles is shown.
- **Reaction Time [ms]** - Reaction time of the following vehicle in the waiting lane.
- **Following Entered Vehicle ID** - Unique ID of the followed vehicle in the waiting lane.
- **Video Position of Following Vehicle Entry [ms]** - Time, when the first waiting vehicle left the waiting queue and the following vehicle became the first waiting vehicle.

In case gap time is sufficient for more than 2 vehicles to enter the waiting lane, the following columns are repeated:

- (If Entered Vehicles Count > 1: list(Tf Value [ms]))
- Reaction Time [ms]
- Following Entered Vehicle ID
- Video Position of Following Vehicle Entry [ms]

Unique Event ID	Measurement Node ID	Waiting Gate ID	Video Position of First Blocking [ms]	First Blocking Vehicle ID	Second Blocking Vehicle ID	Number of Waiting Vehicles	First Waiting Vehicle ID	Tg Value [ms]	Number of Left Waiting Vehicles	First Left Waiting Vehicle ID	Entered Vehicles Count	If Entered Vehicles Count > 1: list (Tf Value [ms])	Reaction Time [ms]	Following Entered Vehicle ID	Video Position of Following Vehicle Entry [ms]
239	59	6	400	3	2	3	8	1502	3	8	0				
240	59	6	1902	2	12	3	8	11011	0	---	3	4938	1101	6	3370
242	59	6	31999	27	31	1	26	9076	0	---	1				
189	56	8	36370	27	26	1	29	1702	1	29	0				
190	56	8	38071	26	34	1	29	8609	0	---	1				
213	57	9	64798	39	46	2	43	1668	2	43	0				
214	57	9	66466	46	50	3	43	7341	1	51	2	2369	1034	47	69102
216	57	9	73807	50	52	1	51	2102	1	51	0				
217	57	9	75909	52	54	1	51	1468	1	51	0				
218	57	9	77377	54	57	2	51	1435	2	51	0				
219	57	9	78812	57	64	2	51	5806	1	58	1				
229	58	11	80280	52	51	1	60	5239	0	---	1				
222	57	9	84618	64	66	5	58	2336	5	58	0				
223	57	9	86954	66	71	5	58	14581	0	---	5	3537	1068	63	88889
192	56	8	96363	68	76	1	71	11278	0	---	1				
193	56	8	124558	84	86	1	91	2469	1	91	0				
194	56	8	127027	86	87	1	91	1935	1	91	0				
195	56	8	128962	87	89	1	91	2903	0	---	1				