SIMULACIJE U VISSIM-u II

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SVEUČILIŠTE
JOSIPA JURJA STROSSMAYERA
U OSIJEKU

JOSIP JURAJ STROSSMAYER
UNIVERSITY OF OSIJEK

SADRŽAJ

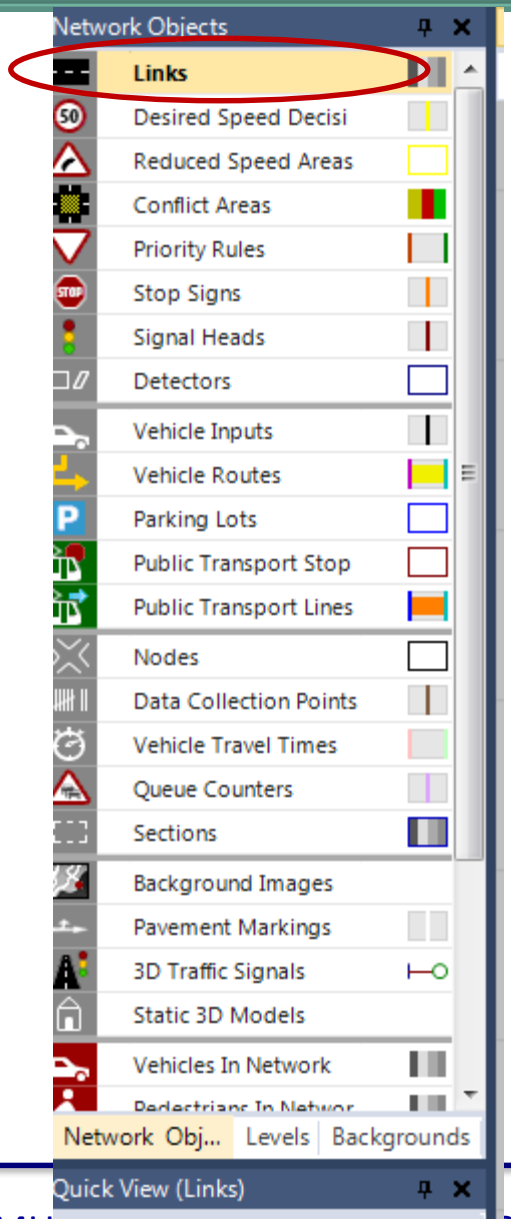
Vježba 2:

Druga mikrosimulacija

T raskrižje

DRUGA MIKROSIMULACIJA T RASKRIŽJE

1. Otvoriti Primjer 1A
2. Nacrtati novi link
3. Povezati postojeću prometnicu sa novim linkom pomoću 4 konektora – za sve moguće putanje vozila
    - putanje vozila promatrati izvorište-odredište i tako formirati konektore
    - **Konektori:** *Network Objekts/Links,* lijevom tipkom se klikne željeni link i zatim "CTRL + desna tipka" i povući do mjesta gdje se konektor završava. Kada se otpusti desna tipka, otvori se dijaloški prozor *Connector.* U polje *Spline* (zakrivljenost konektora) upisuje se vrijednost 8


Network Objects
Links
Desired Speed Decisi
Reduced Speed Areas
Conflict Areas
Priority Rules
Stop Signs
Signal Heads
Detectors
Vehicle Inputs
Vehicle Routes
Parking Lots
Public Transport Stop
Public Transport Lines
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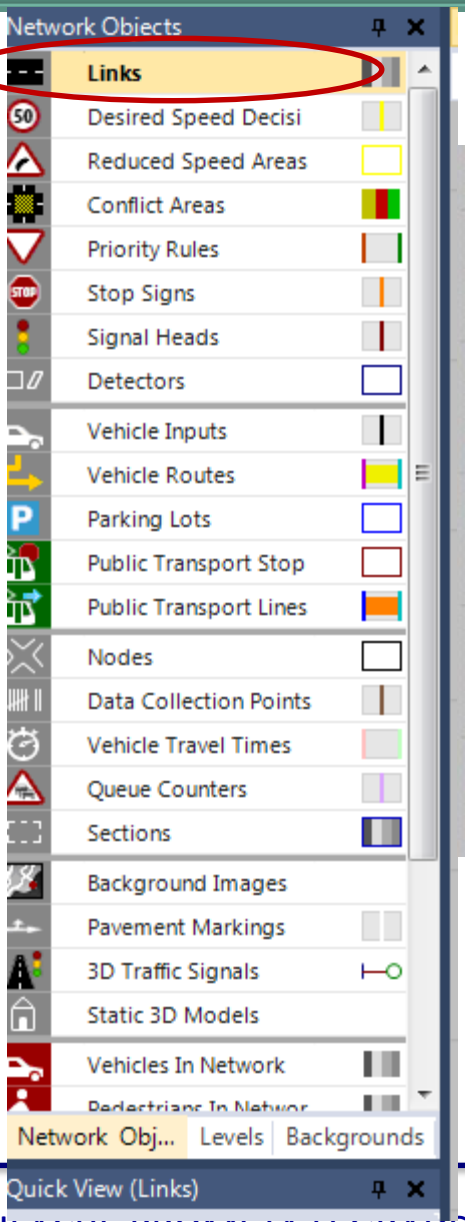
Data Collection Points
Vehicle Travel Times
Queue Counters
Sections
Background Images
Pavement Markings
3D Traffic Signals
Static 3D Models
Vehicles In Network
Network Obj...
Levels
Backgrounds
Quick View (Links)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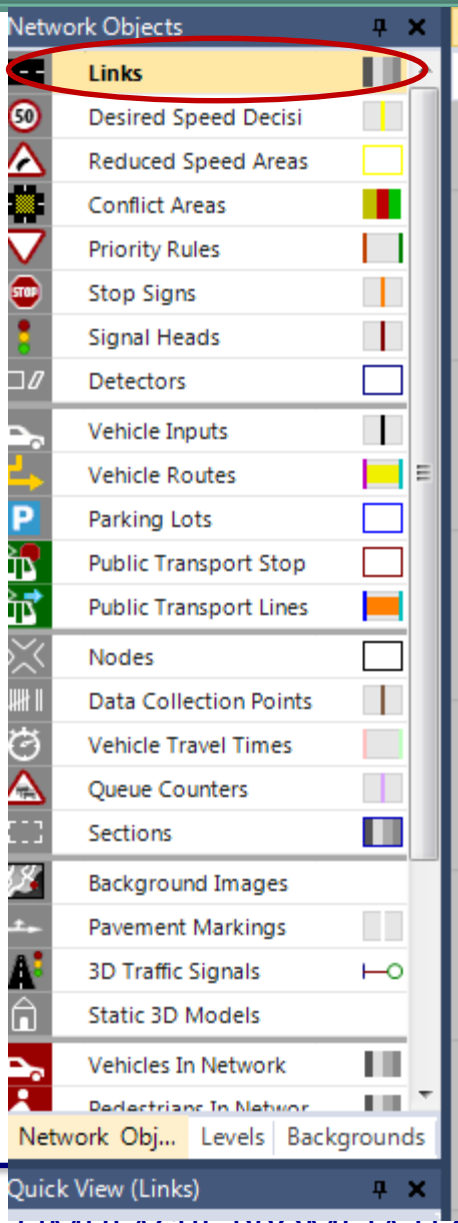
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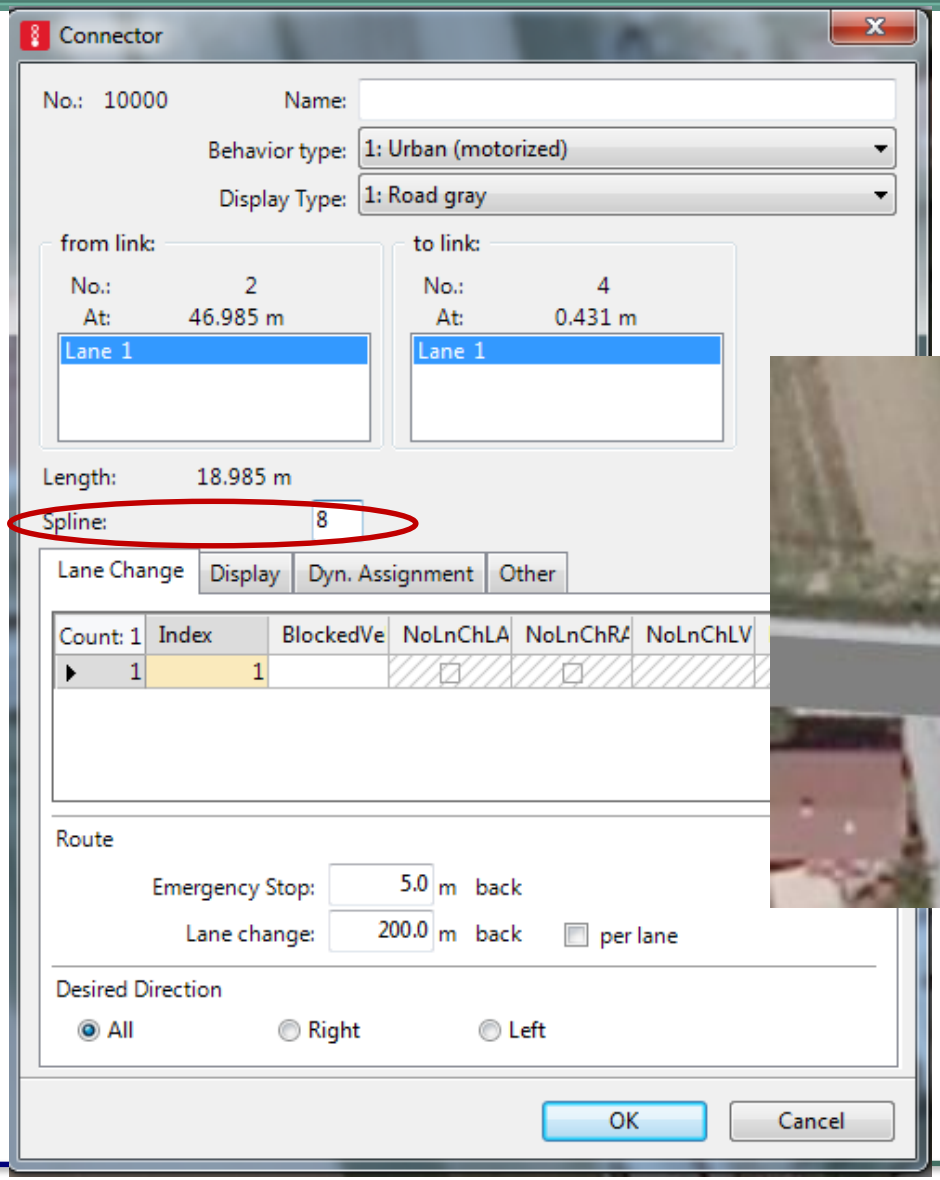
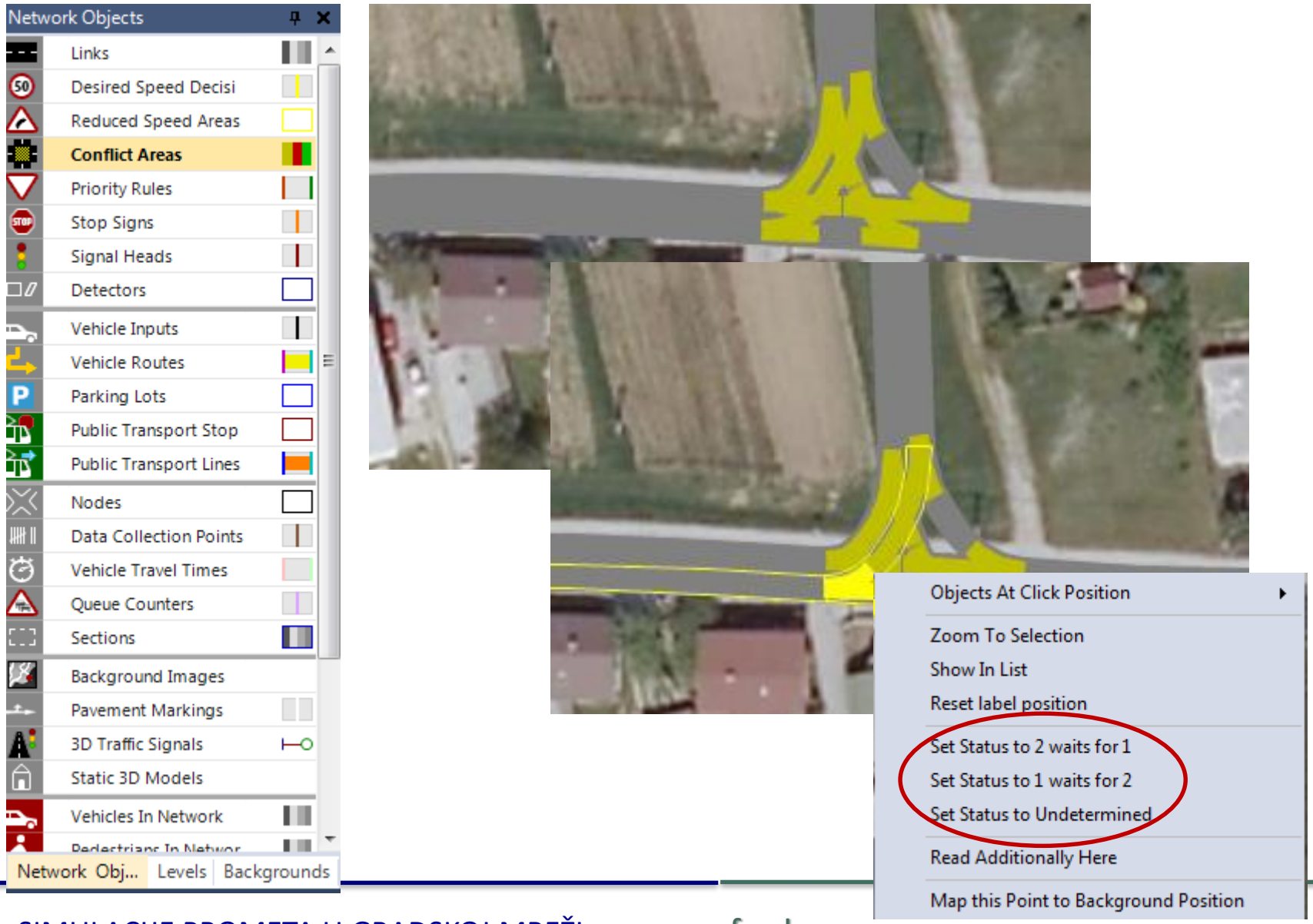

Connector
No.: 10000
Name:
Behavior type: 1: Urban (motorized)
Display Type: 1: Road gray
from link:
No.: 2
At: 46.985 m
Lane 1
to link:
No.: 4
At: 0.431 m
Lane 1
Length: 18.985 m
Spline: 8
Lane Change
Display
Dyn. Assignment
Other
Count: 1
Index
BlockedVe
NoLnChLA
NoLnChRA
NoLnChLV
1
1
Route
Emergency Stop: 5.0 m back
Lane change: 200.0 m back
per lane
Desired Direction
All
Right
Left
OK
Cancel

DRUGA MIKROSIMULACIJA T RASKRIŽJE

4. Pravila prednosti definirati s *Network Objects/Conflict Areas* (automatski se generira za sve potencijalne konflikte između linkova i konektora). Lijevom tipkom se klikne na svaku konfliktnu točku i promijeni konkretni tijek prednosti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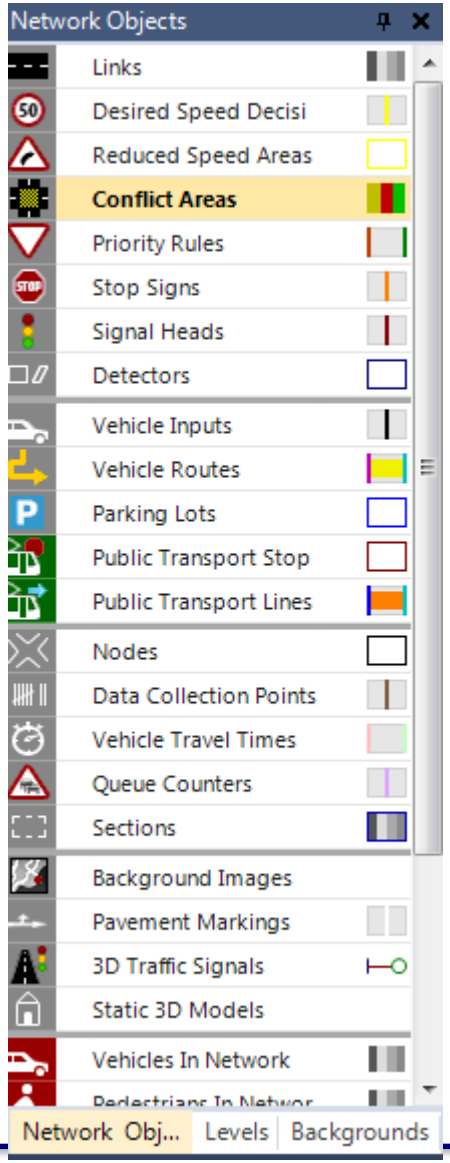
Backgrounds
Objects At Click Position
Zoom To Selection
Show In List
Reset label position
Set Status to 2 waits for 1
Set Status to 1 waits for 2
Set Status to Undetermined
Read Additionally Here
Map this Point to Background Position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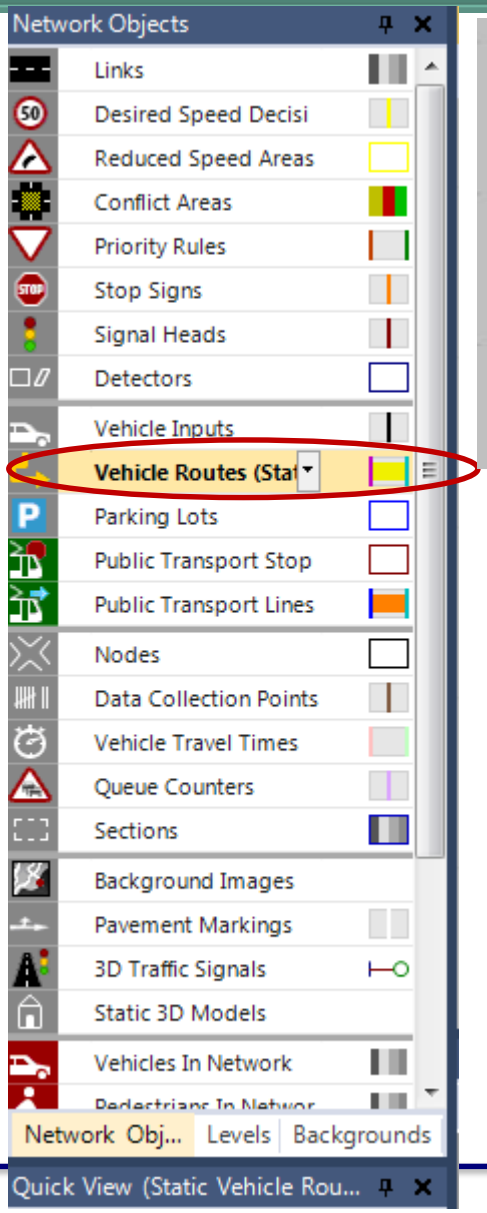
DRUGA MIKROSIMULACIJA T RASKRIŽJE

5. Definiranje **smjerova vožnje** (npr. ravno i lijevo), za svaki smjer odrediti ”lokaciju odluke” i ”cilj” putovanja te udio ili broj vozila koja nastavljaju vožnju u tom smjeru. Naredbom *Network Objects/Vehicle Routes* određuju se mogući smjerovi vožnje i pripadajuća prometna opterećenja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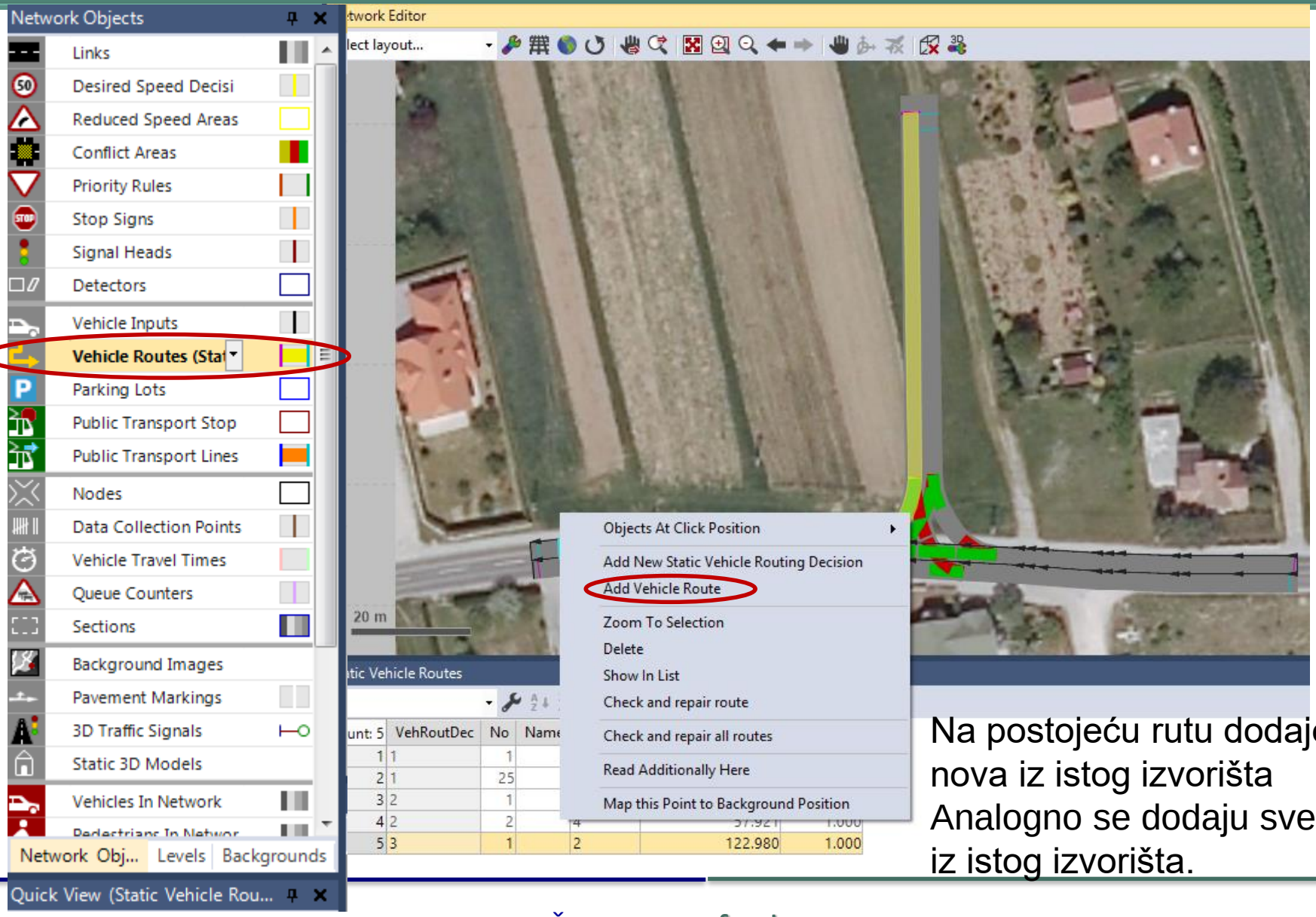
Objects At Click Position
Add New Static Vehicle Routing Decision
Zoom To Selection
Delete
Duplicate
Show In List
Set Scale
Check and repair all routes
Read Additionally Here
Map this Point to Background Position



Na postojeću rutu dodaje se nova iz istog izvorišta
Analogno se dodaju sve rute iz istog izvorišta.

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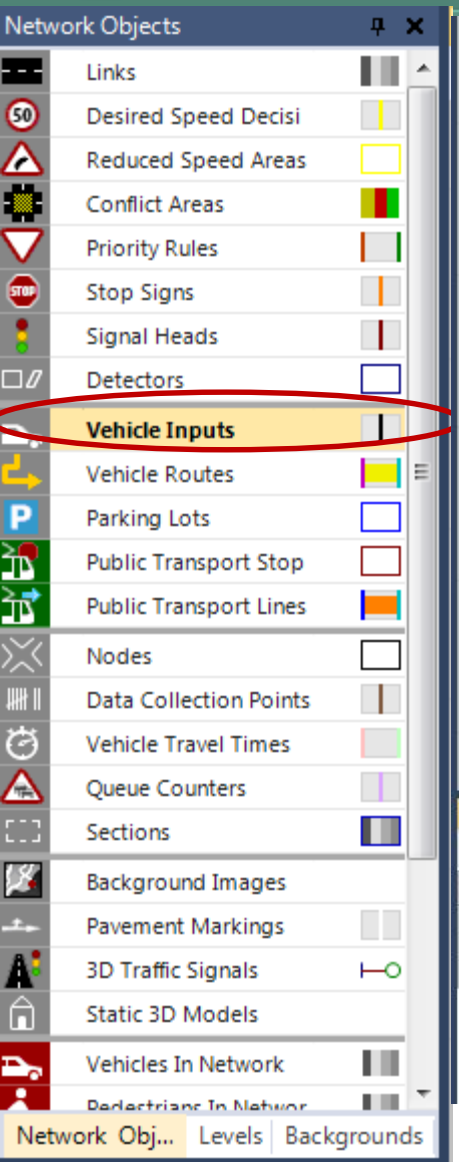
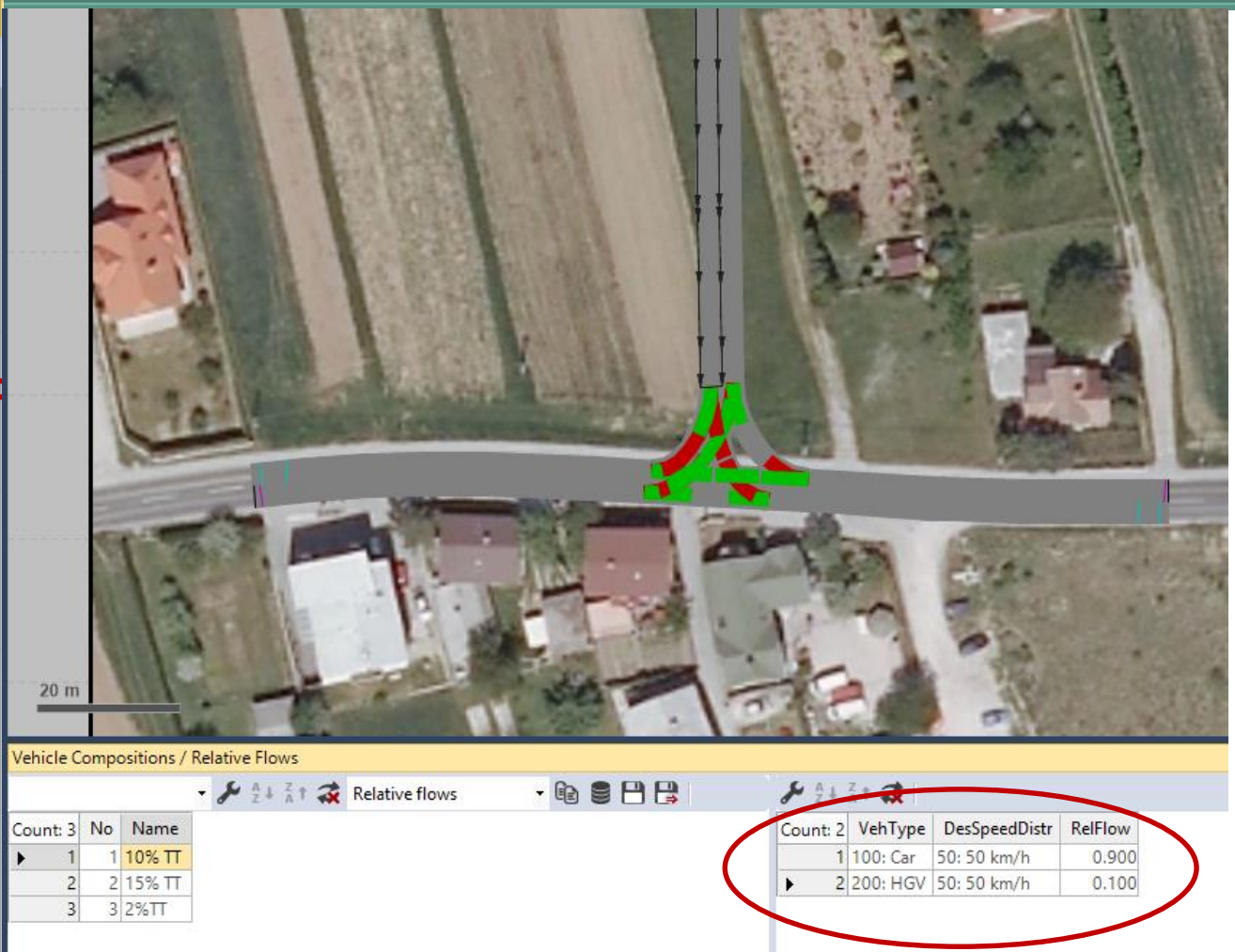
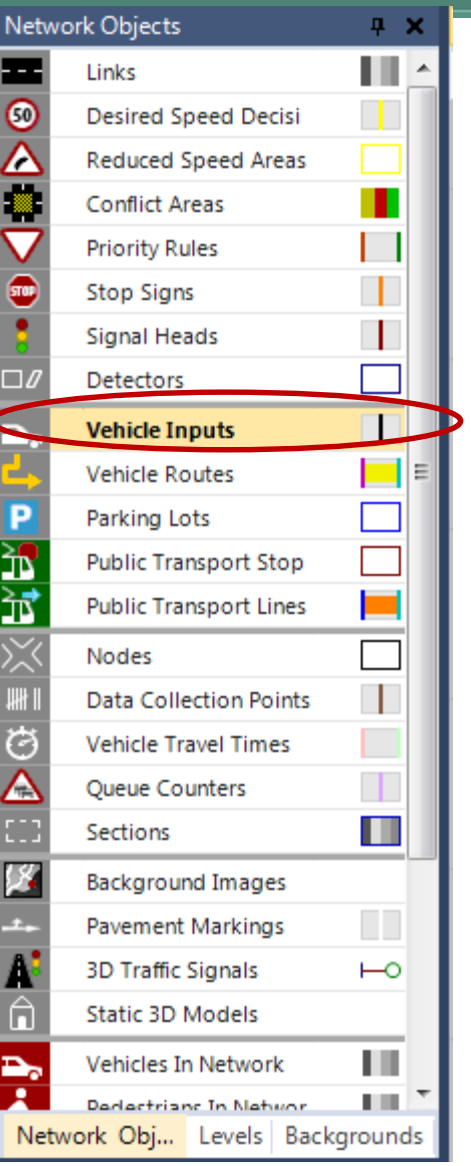
6. Za svaki **smjer vožnje** unosi se pripadajuće prometno opterećenje koje je zadano u zadatku

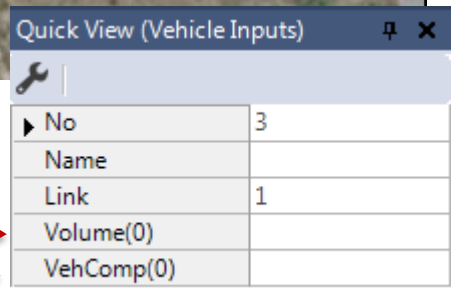


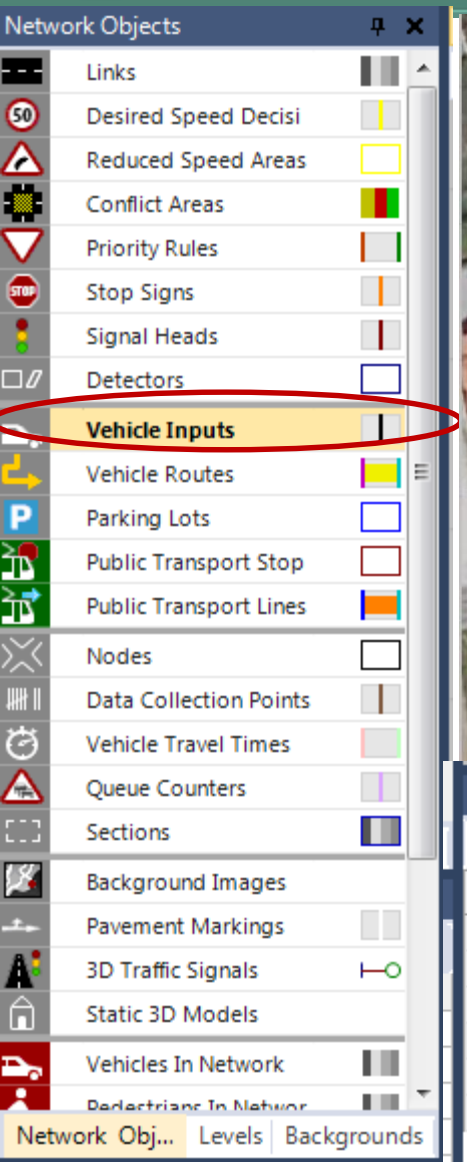


Definiraju se moguće kombinacije udjela teretnih vozila i raspodjela brzina na Traffic\Vehicle Composition



Za svaki dolazni pravac vožnje
CTR+desna tipka miša otvara prozor za
unos prometnog opterećenja cijele rute
i izbor definiranog udjela teretnih vozila





Static Vehicle Routes

<Single List>

Count: 6	VehRoutDec	No	Name	DestLink	DestinationPosition	RelFlow(0)
1	1	1		1	126.237	375.000
2	1	25		4	60.540	25.000
3	2	1		2	126.602	300.000
4	2	2		4	57.921	50.000
5	3	1		2	122.980	15.000
6	3	2		1	123.422	35.000

Za svaku definiranu rutu upisujemo broj vozila kao relativan podatak

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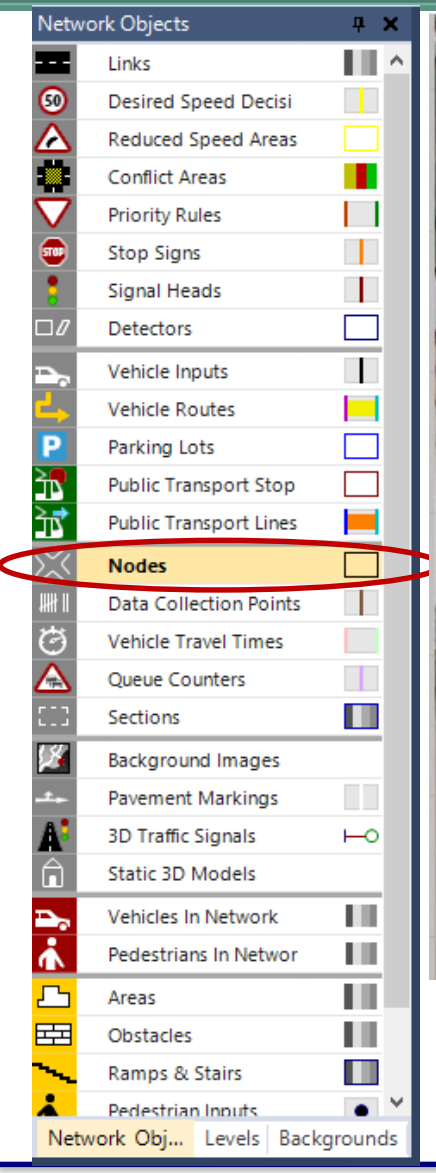
7. Pokretanjem simulacije izvrši se vizualna provjera definiranih prednosti u konfliktnoj zoni, uneseno prometno opterećenje i prometna raspodjela za svaku definiranu rutu (mogući smjer vožnje)
8. Definiranje područja raskrižja omogućava prikupljanje svih podataka o promatranom raskrižju



Network Objekts/Nodes i zatim ”CTRL + desnu tipku” završetak odabira
Duplim kilikom na desnu tipku koja otvara prozor Node

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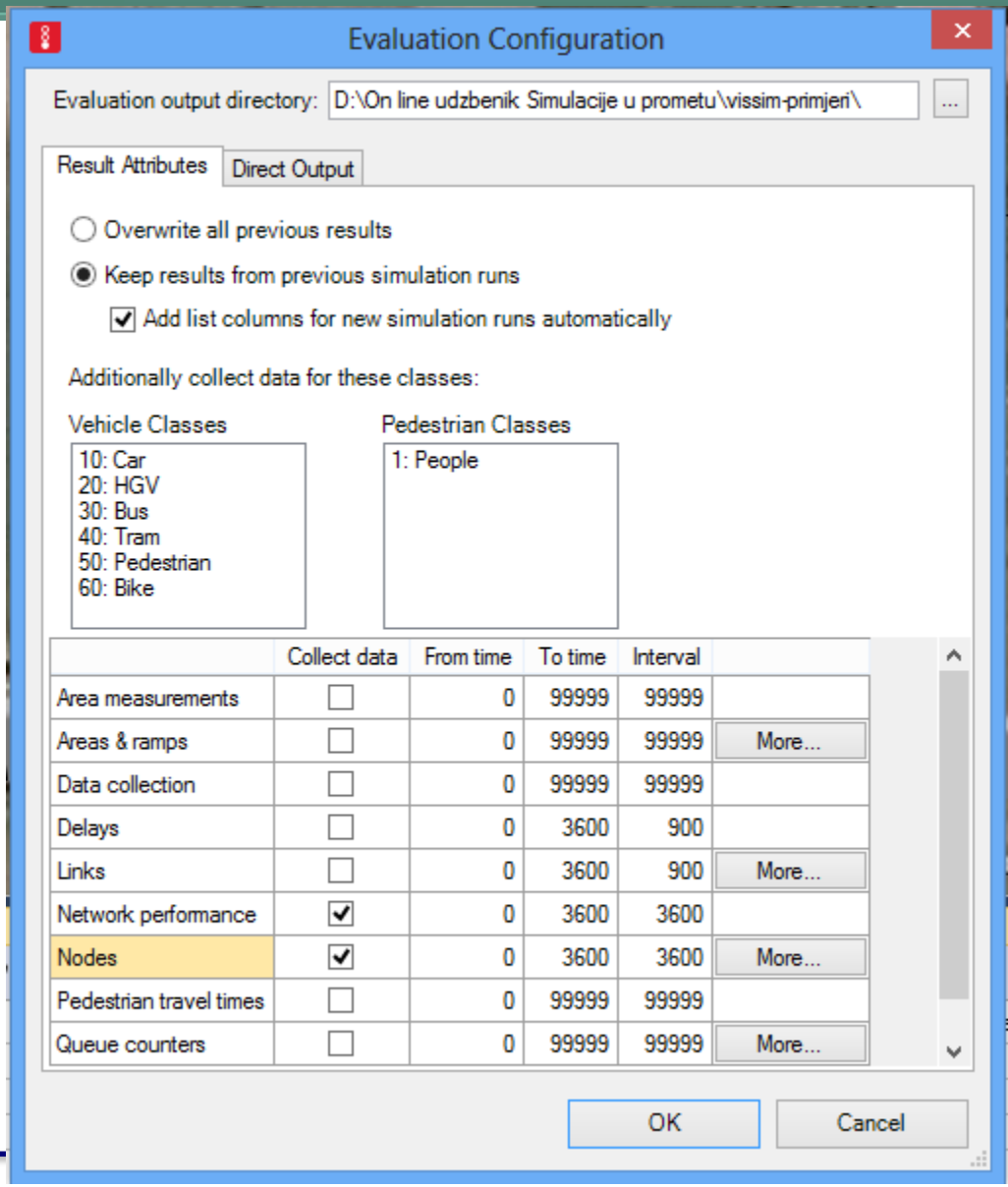
9. Analiza rezultat simulacije definira se u padajućem meniju *Evaluation/Configuration* koji otvara odgovarajući prozor za definiranje tipova podataka koje želimo prikupljati i vremenskih intervala



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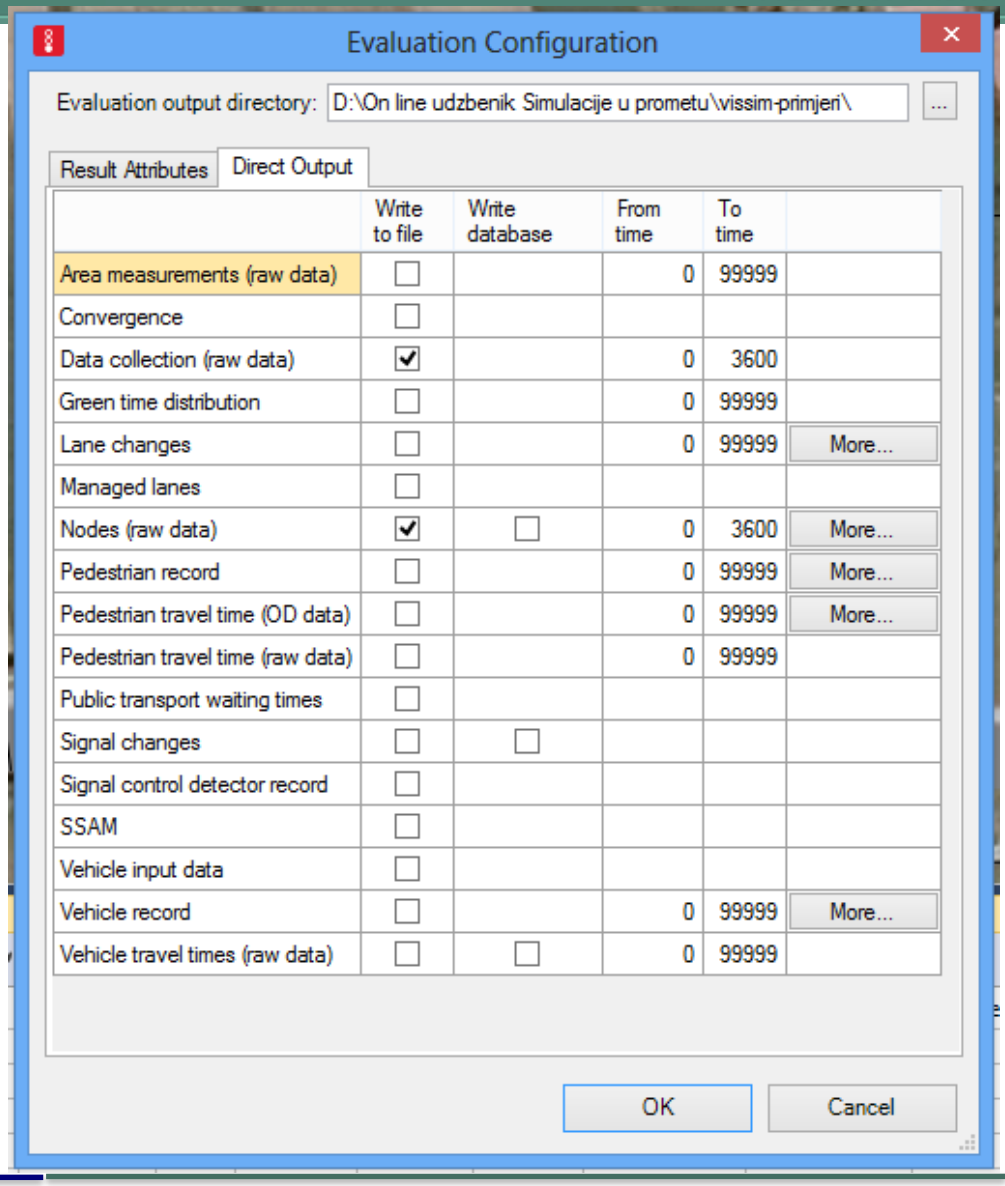
10. U padajućem meniju *Evaluation/Configuration* u kartici Direkt Output odabiru se opcije Nodes (raw data) i Data colection (raw data) i zadaje vrijeme prikupljanja podataka



Za svaku simulaciju koja se pokrene vidljivi su rezultrati simulacije i srednje vrijednosti rezultata.

Za iste ulazne podatke dobivaju se isti izlazni rezultati, što rezultate simulacije čini usporedivima.

Node Results

<Single List>

Count: 36	SimRun	TimeInt	Movement	QLen	QLenMax	Vehs(All)	Pers(All)	VehDelay(All)	PersDelay(All)	StopDelay(All)	Stops(All)
2	1	0-3600	1: K1 - 1: R2	0.00	0.00	17	17	1.78	1.78	0.45	0.18
3	1	0-3600	1: K1 - 2: <-	0.00	0.00	304	304	0.03	0.03	0.00	0.00
4	1	0-3600	1: K1 - 2: <-	0.00	0.00	47	47	0.02	0.02	0.00	0.00
5	1	0-3600	1: K1 - 3: TC	0.00	5.13	40	40	1.80	1.80	0.40	0.15
6	1	0-3600	1: K1 - 3: TC	0.01	12.82	11	11	0.00	0.00	0.00	0.00
7	2	0-3600	1: K1 - 1: R2	0.00	0.00	397	397	0.21	0.21	0.00	0.00
8	2	0-3600	1: K1 - 1: R2	0.00	0.00	17	17	1.78	1.78	0.45	0.18
9	2	0-3600	1: K1 - 2: <-	0.00	0.00	304	304	0.03	0.03	0.00	0.00
10	2	0-3600	1: K1 - 2: <-	0.00	0.00	47	47	0.02	0.02	0.00	0.00
11	2	0-3600	1: K1 - 3: TC	0.00	5.13	40	40	1.80	1.80	0.40	0.15
12	2	0-3600	1: K1 - 3: TC	0.01	12.82	11	11	0.00	0.00	0.00	0.00
13	Average	0-3600	1: K1 - 1: R2	0.00	0.00	397	397	0.21	0.21	0.00	0.00
14	Average	0-3600	1: K1 - 1: R2	0.00	0.00	17	17	1.78	1.78	0.45	0.18
15	Average	0-3600	1: K1 - 2: <-	0.00	0.00	304	304	0.03	0.03	0.00	0.00
16	Average	0-3600	1: K1 - 2: <-	0.00	0.00	47	47	0.02	0.02	0.00	0.00

Prva simulacija

Druga simulacija

Srednja vrijednost


Thank You!