



Place types:

$user\_neg1, user\_neg2$  } Data String

$gn, gn, ng, ng, wait$  }

$TL1, TL2, PTL1, PTL2$  Data Transferr

$\uparrow$  Cars

$\uparrow$  Pedestrians

gnd and map:

$t_1: ((user\_neg1 \neq NULL) \vee (user\_neg2 \neq NULL)) \wedge (wait \neq NULL)$

$gn = wait$

$PTL1.SendOverNetwork("yellow"), PTL2.SendOverNetwork("yellow")$

$t_2: (gn \neq NULL)$

$ng = gn$

$TL1.SendOverNetwork("red"), TL2.SendOverNetwork("red")$

$PTL1.SendOverNetwork("green"), PTL2.SendOverNetwork("green")$

$t_3: (ng \neq NULL)$

$ng = ng$

$PTL1.SendOverNetwork("yellow"), PTL2.SendOverNetwork("yellow")$

$t_4: (ng \neq NULL)$

$gn = ng$

$PTL1.SendOverNetwork("red"), PTL2.SendOverNetwork("red")$

$TL1.SendOverNetwork("green"), TL2.SendOverNetwork("green")$

$t_5: (gn \neq NULL)$

$wait = gn$