30.00 km/h   40.00 km/h

Speed distribution of roads
whose speed limits are 40km/h

0.00

30.0

25.00 km/h   35.00 km/h

Speed distribution of roads
whose speed limits are 35km/h

0.00

25.0

15.00 km/h   25.00 km/h

Speed distribution of roads
whose speed limits are 25km/h

0.00

15.0

Acceleration of cars

Deceleration of cars

Acceleration of buses

Deceleration of buses

| Following | Car following model | Lane Change | Lateral | Signal Control |

Wiedemann 74

Model parameters

Average standstill distance:	2.00 m
Additive part of safety distance:	2.00
Multiplic. part of safety distance:	3.00

Wiedemann 74 car following model

| Following | Car following model | Lane Change | Lateral | Signal Control |

General behavior: Free lane selection

Necessary lane change (route)

	Own	Trailing vehicle	
Maximum deceleration:	-4.00 m/s2	-3.00 m/s2	**Lange change behaviour**
- 1 m/s2 per distance:	100.00 m	100.00 m	
Accepted deceleration:	-1.00 m/s2	-1.00 m/s2	

Waiting time before diffusion:	60.00 s	☐ Overtake reduced speed areas
Min. headway (front/rear):	0.50 m	☑ Advanced merging
To slower lane if collision time is above.	11.00 s	☑ Vehicle routing decisions look ahead
Safety distance reduction factor:	0.60	
Maximum deceleration for cooperative braking:	-3.00 m/s2	

☐ Cooperative lane change

Maximum speed difference:	10.80 km/h
Maximum collision time:	10.00 s

☐ Rear correction of lateral position

Maximum speed: 3.00 km/h

Active during time period from 1.00 s until 10.00 s after lane change s[...]

,lane changer' (Own)
Trailing vehicle
-1000m   -500m   Emerg. stop

Fig. S2 Parameters on the vehicle speeds' distribution, acceleration, deceleration, car-follow-model, and lane-change model