

## ***Appendix 3.8***

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***Summary Results of Comparing the  
Total Emission by Using Peak Hour Flow  
Speed and Design Road Speed***

### Appendix 3.8 Summary Results of Comparing the Total Emission by Using Peak Hour Flow Speed and Design Road Speed

Total Daily NO<sub>x</sub> Emission Rates by 16 vehicle classes by using Peak Hour Flow Speed and Design Road Speed.

Vehicle Classes	Total Daily NO <sub>x</sub> Emissions (ton/day) by using Peak Hour Flow Speed			Total Daily NO <sub>x</sub> Emissions (ton/day) by using Design Road Speed		
	50 kph	70 kph	80 kph	50 kph	70 kph	80 kph
PC&LGV	0.036742	0.025696	0.019572	0.033271	0.023008	0.019263
PC&LGV <2.5t	0.001497	0.000538	0.000674	0.001298	0.000539	0.000742
LGV2.5-3.5t	0.014097	0.006187	0.009835	0.012489	0.006077	0.010784
PLB	0.006419	0.002753	0.000499	0.005983	0.002688	0.000523
LGV>3.5t	0.065926	0.027903	0.043504	0.058312	0.027433	0.047660
HGV<15t	0.154905	0.194223	0.000000	0.139961	0.195280	0.000000
HGV>15t	0.013628	0.020505	0.000000	0.012064	0.020694	0.000000
FBDD	0.077659	0.040701	0.000000	0.069147	0.039216	0.000000
MC	0.036379	0.049158	0.000000	0.038329	0.051021	0.000000
Taxi	0.060935	0.025977	0.025270	0.054833	0.023247	0.024717
PrLB<3.5t	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PrLB>3.5t	0.002589	0.001196	0.001314	0.002374	0.001157	0.001427
NFB<6.4t	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
NFB 6.4-15t	0.089680	0.077898	0.000000	0.082333	0.077757	0.000000
NFB>15t	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FBSD	0.008475	0.002562	0.000000	0.007662	0.002426	0.000000
Total Emissions (tons/day)	0.568930	0.475298	0.100668	0.518056	0.470544	0.105115

**Total Daily RSP Emission Rates by 16 vehicle classes by using Peak Hour Flow Speed and Design Road Speed.**

Vehicle Classes	Total Daily RSP Emissions (ton/day) by using Peak Hour Flow Speed			Total Daily RSP Emissions (ton/day) by using Design Road Speed		
	50 kph	70 kph	80 kph	50 kph	70 kph	80 kph
PC&LGV	0.001885	0.001220	0.000624	0.001226	0.000723	0.000591
PC&LGV <2.5t	0.000595	0.000171	0.000173	0.000412	0.000131	0.000154
LGV2.5-3.5t	0.004831	0.001784	0.002205	0.003499	0.001297	0.001967
PLB	0.004575	0.001750	0.000221	0.003705	0.001270	0.000211
LGV>3.5t	0.003627	0.001295	0.001557	0.002618	0.000938	0.001394
HGV<15t	0.006182	0.005551	0.000000	0.004662	0.004953	0.000000
HGV>15t	0.000391	0.000404	0.000000	0.000283	0.000369	0.000000
FBDD	0.001980	0.000873	0.000000	0.001502	0.000640	0.000000
MC	0.001757	0.002077	0.000000	0.001584	0.002088	0.000000
Taxi	0.006686	0.002579	0.001790	0.004452	0.001612	0.001675
PrLB<3.5t	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
PrLB>3.5t	0.001790	0.000717	0.000603	0.001395	0.000518	0.000547
NFB<6.4t	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
NFB 6.4-15t	0.003152	0.002047	0.000000	0.002460	0.001769	0.000000
NFB>15t	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
FBSD	0.000287	0.000077	0.000000	0.000224	0.000053	0.000000
Total Emissions (tons/day)	0.037740	0.020544	0.007174	0.028023	0.016360	0.006538

**Notes:**

1. PC&LGV – Petrol Private Cars & Light Goods Vehicles
2. PC&LGV <2.5t – Diesel Private Cars & Light Goods Vehicles <2.5t
3. LGV2.5-3.5t – Diesel Private Cars & Light Goods Vehicles 2.5-3.5t
4. PLB – Public Light Buses
5. LGV>3.5t – Light Goods Vehicles >3.5t
6. HGV<15t – Medium & Heavy Goods Vehicles with GVW 5.5-15t
7. HGV>15t – Medium & Heavy Goods Vehicles with GVW >=15t
8. FBDD – Double Deck Franchised Buses
9. MC – Motor Cycles
10. Taxi – Taxi (LPG)
11. PrLB<3.5t – Private Light Buses <3.5t
12. PrLB>3.5t – Private Light Buses >3.5t
13. NFB<6.4t – Non-franchised Buses <6.4t
14. NFB6.4-15t – Non-franchised Buses 6.4-15t
15. NFB>15t – Non-franchised Buses >15t
16. FBSD – Single Deck Franchised Buses