

Annex D4

Summary of Calculated VMTs for All Vehicle Classes

Annex D4 - Summary of Calculated VMTs for All Vehicle Classes

Vehicle Class	Road Speed	0000-0100	0100-0200	0200-0300	0300-0400	0400-0500	0500-0600	0600-0700	0700-0800	0800-0900	0900-1000	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	2000-2100	2100-2200	2200-2300	2300-0000		
LGV>3.5t	80kph (non-stop)	Total VMT	96248.56	73690.304	50630.753	41607.451	41607.451	55142.404	109783.51	251148.59	310301.35	305789.7	287743.09	287743.09	298235.62	307443.58	309489.8	307443.58	312047.56	325859.5	344786.98	284423.68	218944.85	176997.47	149373.59	125842.13	
		VMT (Petrol)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		VMT (Diesel)	96248.56	73690.304	50630.753	41607.451	41607.451	55142.404	109783.51	251148.59	310301.35	305789.7	287743.09	287743.09	298235.62	307443.58	309489.8	307443.58	312047.56	325859.5	344786.98	284423.68	218944.85	176997.47	149373.59	125842.13	
		Trips (Petrol)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Trips (Diesel)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	70kph (non-stop)	Total VMT	406.06803	310.89584	213.6087	175.53983	175.53983	232.64314	463.17135	1059.5838	1309.1464	1290.112	1213.9742	1213.9742	0	0	0	0	0	0	0	0	0	0	0	0	0
		VMT (Petrol)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		VMT (Diesel)	406.06803	310.89584	213.6087	175.53983	175.53983	232.64314	463.17135	1059.5838	1309.1464	1290.112	1213.9742	1213.9742	0	0	0	0	0	0	0	0	0	0	0	0	
		Trips (Petrol)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Trips (Diesel)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	50kph (non-stop)	Total VMT	86348.616	66110.659	45422.97	37327.787	37327.787	49470.561	98491.39	225315.92	278384.34	274336.75	258146.38	258146.38	232228.24	239398.24	240991.57	239398.24	242983.24	253738.23	268476.56	221473.25	170486.6	137823.28	116313.29	97989.962	
		VMT (Petrol)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		VMT (Diesel)	86348.616	66110.659	45422.97	37327.787	37327.787	49470.561	98491.39	225315.92	278384.34	274336.75	258146.38	258146.38	232228.24	239398.24	240991.57	239398.24	242983.24	253738.23	268476.56	221473.25	170486.6	137823.28	116313.29	97989.962	
		Trips (Petrol)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Trips (Diesel)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	50kph (stop)	Total VMT	1192.6178	913.09804	627.36668	515.55876	515.55876	683.27064	1360.3297	3111.9872	3844.9502	3789.0463	3565.4304	3565.4304	4296.1283	4428.7704	4458.2464	4428.7704	4495.0914	4694.0545	4966.7075	4097.1653	3153.933	2549.6748	2151.7487	1812.7746	
VMT (Petrol)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
VMT (Diesel)		1192.6178	913.09804	627.36668	515.55876	515.55876	683.27064	1360.3297	3111.9872	3844.9502	3789.0463	3565.4304	3565.4304	4296.1283	4428.7704	4458.2464	4428.7704	4495.0914	4694.0545	4966.7075	4097.1653	3153.933	2549.6748	2151.7487	1812.7746		
Trips (Petrol)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Trips (Diesel)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Hourly VMT Petrol																											
Hourly VMT Diesel		184195.86	141024.96	96894.698	79626.336	79626.336	105528.88	210098.41	480636.08	593839.79	585205.6	550668.88	550668.88	534759.99	551270.59	554939.61	551270.59	559525.89	584291.79	618230.25	509994.09	392585.38	317370.42	267838.62	225644.87		
HGV<15t	80kph (non-stop)	Total VMT	899755.2	688875.07	473308.72	388956.67	388956.67	515484.75	1026283.3	2347798.7	2900773.3	2858597.2	2689893.1	2689893.1	1995090.5	2056688.5	2070376.9	2056688.5	2087487.5	2179884.5	2306502.6	1902693.5	1464663.4	1184050.3	999256.31	841839.22	
		VMT (Petrol)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		VMT (Diesel)	899755.2	688875.07	473308.72	388956.67	388956.67	515484.75	1026283.3	2347798.7	2900773.3	2858597.2	2689893.1	2689893.1	1995090.5	2056688.5	2070376.9	2056688.5	2087487.5	2179884.5	2306502.6	1902693.5	1464663.4	1184050.3	999256.31	841839.22	
		Trips (Petrol)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Trips (Diesel)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	70kph (non-stop)	Total VMT	28424.762	21762.709	14952.609	12287.788	12287.788	16285.02	32421.995	74170.864	91640.249	90307.839	84978.196	84978.196	22647.845	23347.092	23502.48	23347.092	23696.716	24745.587	26182.928	21598.974	16626.548	13441.088	11343.346	9556.3804	
		VMT (Petrol)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		VMT (Diesel)	28424.762	21762.709	14952.609	12287.788	12287.788	16285.02	32421.995	74170.864	91640.249	90307.839	84978.196	84978.196	22647.845	23347.092	23502.48	23347.092	23696.716	24745.587	26182.928	21598.974	16626.548	13441.088	11343.346	9556.3804	
		Trips (Petrol)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Trips (Diesel)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	50kph (non-stop)	Total VMT	243571.59	186484.5	128128.81	105293.97	105293.97	139546.22	277823.85	635569.62	785264.66	773847.24	728177.57	728177.57	614833.27	633816.12	638034.53	633816.12	643307.54	671781.81	710802.1	586359	451369.88	364892.47	307943.94	259432.22	
		VMT (Petrol)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
		VMT (Diesel)	243571.59	186484.5	128128.81	105293.97	105293.97	139546.22	277823.85	635569.62	785264.66	773847.24	728177.57	728177.57	614833.27	633816.12	638034.53	633816.12	643307.54	671781.81	710802.1	586359	451369.88	364892.47	307943.94	259432.22	
		Trips (Petrol)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Trips (Diesel)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	50kph (stop)	Total VMT	4485.4382	3434.1636	2359.5274	1939.0176	1939.0176	2569.7823	5116.203	11704.19	14460.866	14250.611	13409.591	13409.591	13036.684	13439.189	13528.635	13439.189	13640.442	14244.199	15071.57	12432.927	9570.6706	7737.0374	6529.5229	5500.8994	
VMT (Petrol)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
VMT (Diesel)		4485.4382	3434.1636	2359.5274	1939.0176	1939.0176	2569.7823	5116.203	11704.19	14460.866	14250.611	13409.591	13409.591	13036.684	13439.189	13528.635	13439.189	13640.442	14244.199	15071.57	12432.927	9570.6706	7737.0374	6529.5229	5500.8994		
Trips (Petrol)		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Trips (Diesel)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
Hourly VMT Petrol																											
Hourly VMT Diesel		1176237	900556.45	618749.67	508477.45	508477.45	673885.78	1341645.3	3069243.4	3792139	3737002.9	3516458.5	3516458.5	2645608.3	2727290.9	2745442.6	2727290.9	2768132.2	2890656.1	3058559.2	2523084.4	1942230.5	1570120.9	1325073.1	1116328.7		
HGV>15t	80kph (non-stop)	Total VMT	78460.997	60071.701	41273.754	33918.035	33918.035	44951.613	89494.575	204734.16	252954.99	249277.13	234565.69	234565.69	174156.18	179533.21	180728.11	179533.21	182221.73	190287.28	201340.						

Annex D4 - Summary of Calculated VMTs for All Vehicle Classes

Vehicle Class	Road Speed	0000-0100	0100-0200	0200-0300	0300-0400	0400-0500	0500-0600	0600-0700	0700-0800	0800-0900	0900-1000	1000-1100	1100-1200	1200-1300	1300-1400	1400-1500	1500-1600	1600-1700	1700-1800	1800-1900	1900-2000	2000-2100	2100-2200	2200-2300	2300-0000
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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 Public Light Bus
- 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

The calculated VMTs are multiplied by 1000 for the subsequent use of EMFACHK emission factor calculations

* Ratio of LPG and diesel PLB was determined with reference to Table 4.4 in the Monthly Transport Digest (Apr 2008). (ie. Ratio of LPG vs Diesel PLB = Licensed LPG PLB/Total Licensed PLB : Licensed Diesel PLB/Total Licensed PLB = 2551/4349 : 1798/4349 = 58:42)

Ratio of LPG and diesel PrLB was determined with reference to Table 4.4 in the Monthly Transport Digest (Apr 2008). (ie. Ratio of LPG vs Diesel PLB = Licensed LPG PrLB/Total Licensed PrLB : Licensed Diesel PrLB/Total Licensed PrLB = (250+4)/1909 : 1655/1909 = 13:87)