

## APPENDIX K - Assessment of M180 Opening Year Development Traffic Impact

### M180 3-4 (2-way flows)

2007-2012 Factor (NRTF Central Growth)

1.076159

Time (Hour Begin)	2007 Observed	2012 Estimate	2012 Predicted Development		2012 Development Impact	
			Day-to-day	Sensitivity	Day-to-day	Sensitivity
00:00	154	165				
01:00	126	135				
02:00	111	119				
03:00	135	146				
04:00	291	313				
05:00	656	706				
06:00	1335	1437				
07:00	2344	2522				
08:00	2443	2629	18	26	0.7%	1.0%
09:00	1991	2143				
10:00	1848	1988				
11:00	1891	2034				
12:00	1917	2063	8	16	0.4%	0.8%
13:00	1944	2092				
14:00	2055	2212				
15:00	2194	2361				
16:00	2416	2600				
17:00	2462	2650	18	26	0.7%	1.0%
18:00	1743	1875				
19:00	1019	1096				
20:00	640	689				
21:00	463	498				
22:00	335	360				
23:00	227	245				
	30740	33081				
<b>07:00-19:00</b>	<b>25247</b>	<b>27170</b>	<b>136</b>	<b>240</b>	<b>0.5%</b>	<b>0.9%</b>

### M180 4-5 (2-way flows)

2007-2012 Factor (NRTF Central Growth)

1.076159

Time (Hour Begin)	2007 Observed	2012 Estimate	2012 Predicted Development		2012 Development Impact	
			Day-to-day	Sensitivity	Day-to-day	Sensitivity
00:00	192	207				
01:00	146	157				
02:00	138	149				
03:00	167	180				
04:00	362	389				
05:00	846	910				
06:00	1806	1944				
07:00	3482	3747				
08:00	3507	3774	18	26	0.5%	0.7%
09:00	2520	2711				
10:00	2307	2482				
11:00	2345	2524				
12:00	2383	2564	8	16	0.3%	0.6%
13:00	2474	2663				
14:00	2583	2779				
15:00	2800	3013				
16:00	3259	3508				
17:00	3450	3713	18	26	0.5%	0.7%
18:00	2283	2457				
19:00	1305	1404				
20:00	859	925				
21:00	636	685				
22:00	475	512				
23:00	307	330				
	40633	43728				
<b>07:00-19:00</b>	<b>33393</b>	<b>35936</b>	<b>136</b>	<b>240</b>	<b>0.4%</b>	<b>0.7%</b>

# Highways Agency Link Counts (M180) September 2007

16/09/07 - 29/09/07

## M180 Junction 3-4 Eastbound

Link ID	Link Description	Time Period	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	5-day Average
LM131	M180 J3 to M180 J4	00:00 - 01:00	91	78	76	81	105	119	120	119	79	99	101	129	81	95
LM131	M180 J3 to M180 J4	01:00 - 02:00	47	63	83	76	78	83	87	63	44	94	85	83	69	76
LM131	M180 J3 to M180 J4	02:00 - 03:00	39	40	48	53	68	66	65	40	34	61	65	77	60	57
LM131	M180 J3 to M180 J4	03:00 - 04:00	16	46	62	60	59	60	51	25	42	45	53	52	72	55
LM131	M180 J3 to M180 J4	04:00 - 05:00	40	77	90	83	84	86	64	37	72	80	91	86	95	84
LM131	M180 J3 to M180 J4	05:00 - 06:00	72	201	208	210	221	196	114	75	197	200	218	212	192	206
LM131	M180 J3 to M180 J4	06:00 - 07:00	162	571	514	553	553	492	232	135	511	529	572	533	586	541
LM131	M180 J3 to M180 J4	07:00 - 08:00	228	1300	1224	1247	1225	1185	387	211	1278	1222	1307	1275	1246	1251
LM131	M180 J3 to M180 J4	08:00 - 09:00	321	1240	1202	1277	1244	1229	465	299	1229	1272	1265	1240	1168	1237
LM131	M180 J3 to M180 J4	09:00 - 10:00	618	925	1045	996	1046	945	552	459	983	1007	1068	1047	968	1003
LM131	M180 J3 to M180 J4	10:00 - 11:00	762	972	952	879	944	907	732	676	960	959	955	981	977	949
LM131	M180 J3 to M180 J4	11:00 - 12:00	831	969	898	896	957	925	848	774	932	875	925	901	1044	932
LM131	M180 J3 to M180 J4	12:00 - 13:00	783	995	904	908	934	983	834	678	1022	875	847	828	1123	942
LM131	M180 J3 to M180 J4	13:00 - 14:00	792	950	841	900	875	1032	774	652	1004	912	892	933	1087	943
LM131	M180 J3 to M180 J4	14:00 - 15:00	690	991	863	937	932	1162	752	623	1014	877	934	982	1260	995
LM131	M180 J3 to M180 J4	15:00 - 16:00	727	947	987	1018	1037	1221	700	699	1022	1015	997	1020	1321	1059
LM131	M180 J3 to M180 J4	16:00 - 17:00	815	796	1128	1193	1193	1378	711	789	1152	1194	1197	1209	1548	1199
LM131	M180 J3 to M180 J4	17:00 - 18:00	756	1219	1322	1322	1367	1373	977	768	1214	1224	1178	1225	1553	1300
LM131	M180 J3 to M180 J4	18:00 - 19:00	749	1061	849	917	939	1070	751	661	853	889	877	984	1255	969
LM131	M180 J3 to M180 J4	19:00 - 20:00	503	421	593	587	613	765	563	577	484	520	589	651	867	609
LM131	M180 J3 to M180 J4	20:00 - 21:00	396	279	319	398	418	515	351	460	340	350	388	419	647	407
LM131	M180 J3 to M180 J4	21:00 - 22:00	259	227	436	244	249	347	198	323	242	249	254	259	371	288
LM131	M180 J3 to M180 J4	22:00 - 23:00	156	156	255	165	190	249	156	186	158	174	213	209	247	202
LM131	M180 J3 to M180 J4	23:00 - 00:00	110	113	142	144	165	168	128	134	111	137	186	144	174	148
			9963	14637	15041	15144	15496	16556	10612	9463	14977	14859	15257	15479	18011	15546
		<b>07:00-19:00</b>	<b>8072</b>	<b>12365</b>	<b>12215</b>	<b>12490</b>	<b>12693</b>	<b>13410</b>	<b>8483</b>	<b>7289</b>	<b>12663</b>	<b>12321</b>	<b>12442</b>	<b>12625</b>	<b>14550</b>	<b>12777</b>

## M180 Junction 3-4 Westbound

Link ID	Link Description	Time Period	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	5-day Average	M180 Jnt 3-4 2-way Demand
LM132	M180 J4 to M180 J3	00:00 - 01:00	74	48	55	68	65	63	73	79	47	54	62	59	68	59	154
LM132	M180 J4 to M180 J3	01:00 - 02:00	45	54	36	48	57	50	53	46	38	56	54	62	42	50	126
LM132	M180 J4 to M180 J3	02:00 - 03:00	35	52	50	50	60	66	45	46	39	65	47	47	62	54	111
LM132	M180 J4 to M180 J3	03:00 - 04:00	23	93	73	83	87	86	48	33	83	79	73	72	74	80	135
LM132	M180 J4 to M180 J3	04:00 - 05:00	37	275	181	206	185	190	81	50	233	223	180	198	195	207	291
LM132	M180 J4 to M180 J3	05:00 - 06:00	96	532	478	434	458	409	151	108	530	418	417	422	411	451	656
LM132	M180 J4 to M180 J3	06:00 - 07:00	173	892	813	807	822	697	253	171	866	756	797	748	741	794	1335
LM132	M180 J4 to M180 J3	07:00 - 08:00	279	1219	1138	1061	1113	1000	355	276	1141	1149	1077	1039	991	1093	2344
LM132	M180 J4 to M180 J3	08:00 - 09:00	444	1294	1268	1260	1198	1125	502	397	1171	1172	1202	1243	1134	1207	2443
LM132	M180 J4 to M180 J3	09:00 - 10:00	699	1007	1010	1015	929	979	686	620	952	1064	929	946	1051	988	1991
LM132	M180 J4 to M180 J3	10:00 - 11:00	829	991	793	839	882	970	876	785	910	810	862	901	1033	899	1848
LM132	M180 J4 to M180 J3	11:00 - 12:00	885	973	884	875	969	1020	961	925	1015	859	952	928	1108	958	1891
LM132	M180 J4 to M180 J3	12:00 - 13:00	750	944	902	885	917	1048	794	879	1022	947	994	927	1168	975	1917
LM132	M180 J4 to M180 J3	13:00 - 14:00	909	1016	944	972	1013	1126	862	870	935	909	936	973	1189	1001	1944
LM132	M180 J4 to M180 J3	14:00 - 15:00	872	978	964	1029	1060	1147	648	907	1017	1036	1003	1143	1224	1060	2055
LM132	M180 J4 to M180 J3	15:00 - 16:00	1000	1082	1090	1087	1207	1164	590	994	1121	1053	1178	1127	1244	1135	2194
LM132	M180 J4 to M180 J3	16:00 - 17:00	1271	1108	1180	1298	1279	1212	632	1041	1152	1252	1256	1209	1224	1217	2416
LM132	M180 J4 to M180 J3	17:00 - 18:00	1301	1111	1190	1244	1180	1042	663	1041	1114	1180	1230	1220	1114	1163	2462
LM132	M180 J4 to M180 J3	18:00 - 19:00	1038	754	939	856	737	683	479	846	756	740	772	742	752	773	1743
LM132	M180 J4 to M180 J3	19:00 - 20:00	702	389	421	476	412	394	307	620	392	396	398	403	416	410	1019
LM132	M180 J4 to M180 J3	20:00 - 21:00	402	222	233	263	253	223	204	333	230	247	203	230	225	233	640
LM132	M180 J4 to M180 J3	21:00 - 22:00	199	145	170	184	170	170	154	182	163	191	166	188	205	175	463
LM132	M180 J4 to M180 J3	22:00 - 23:00	112	103	107	145	151	132	149	116	118	130	165	144	138	133	335
LM132	M180 J4 to M180 J3	23:00 - 00:00	72	60	62	81	74	90	90	61	70	82	103	84	84	79	227
			12247	15342	14981	15266	15278	15086	9656	11426	15115	14868	15056	15055	15893	15194	30740
		<b>07:00-19:00</b>	<b>10277</b>	<b>12477</b>	<b>12302</b>	<b>12421</b>	<b>12484</b>	<b>12516</b>	<b>8048</b>	<b>9581</b>	<b>12306</b>	<b>12171</b>	<b>12391</b>	<b>12398</b>	<b>13232</b>	<b>12470</b>	<b>25247</b>

**M180 Junction 4-5 Eastbound**

			Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	5-day Average
LM133	M180 J4 to M180 J5	00:00 - 01:00	110	87	85	104	112	132	149	136	80	115	121	157	95	109
LM133	M180 J4 to M180 J5	01:00 - 02:00	65	64	83	79	69	84	103	75	45	106	91	87	87	80
LM133	M180 J4 to M180 J5	02:00 - 03:00	40	45	71	76	78	78	78	49	42	67	70	88	80	70
LM133	M180 J4 to M180 J5	03:00 - 04:00	33	65	82	76	79	80	65	45	64	49	71	70	102	74
LM133	M180 J4 to M180 J5	04:00 - 05:00	66	133	150	128	127	142	102	64	125	131	148	134	128	135
LM133	M180 J4 to M180 J5	05:00 - 06:00	132	336	354	314	334	312	196	127	314	339	330	336	330	330
LM133	M180 J4 to M180 J5	06:00 - 07:00	247	949	913	924	933	763	361	227	790	903	933	890	925	892
LM133	M180 J4 to M180 J5	07:00 - 08:00	304	2062	2020	1988	1936	1765	504	291	1865	1993	2018	1967	1981	1960
LM133	M180 J4 to M180 J5	08:00 - 09:00	377	1798	1776	1840	1791	1673	597	369	1724	1796	1806	1783	1708	1770
LM133	M180 J4 to M180 J5	09:00 - 10:00	694	1168	1308	1284	1275	1171	712	558	1208	1250	1267	1261	1248	1244
LM133	M180 J4 to M180 J5	10:00 - 11:00	911	1180	1170	1101	1112	1099	906	837	1179	1149	1161	1143	1206	1150
LM133	M180 J4 to M180 J5	11:00 - 12:00	991	1233	1097	1079	1190	1114	1071	951	1117	1070	1104	1142	1315	1146
LM133	M180 J4 to M180 J5	12:00 - 13:00	944	1163	1127	1144	1145	1174	1051	886	1169	1076	1104	1094	1354	1155
LM133	M180 J4 to M180 J5	13:00 - 14:00	1016	1176	1136	1222	1178	1303	975	889	1235	1160	1099	1191	1439	1214
LM133	M180 J4 to M180 J5	14:00 - 15:00	912	1250	1083	1217	1249	1455	970	808	1270	1167	1238	1223	1511	1266
LM133	M180 J4 to M180 J5	15:00 - 16:00	900	1246	1328	1386	1358	1574	843	836	1308	1336	1398	1359	1683	1398
LM133	M180 J4 to M180 J5	16:00 - 17:00	970	1251	1545	1480	1580	1724	900	871	1514	1565	1624	1587	1844	1571
LM133	M180 J4 to M180 J5	17:00 - 18:00	933	1545	1568	1593	1676	1672	977	823	1541	1570	1587	1582	1858	1619
LM133	M180 J4 to M180 J5	18:00 - 19:00	827	1141	1014	1030	1130	1274	826	768	1015	1017	1120	1087	1427	1126
LM133	M180 J4 to M180 J5	19:00 - 20:00	587	539	727	654	721	866	592	610	528	634	671	780	995	712
LM133	M180 J4 to M180 J5	20:00 - 21:00	438	355	434	458	487	584	382	530	410	424	453	508	672	479
LM133	M180 J4 to M180 J5	21:00 - 22:00	306	321	395	355	311	417	252	348	290	317	362	349	469	359
LM133	M180 J4 to M180 J5	22:00 - 23:00	180	207	249	221	226	309	187	212	210	210	274	249	317	247
LM133	M180 J4 to M180 J5	23:00 - 00:00	121	142	158	162	179	210	163	149	134	147	213	167	192	170
LM133	M180 J4 to M180 J5	00:00 - 01:00	12104	19456	19873	19915	20276	20975	12962	11459	19177	19591	20263	20234	22966	20273
		<b>07:00-19:00</b>	<b>9779</b>	<b>16213</b>	<b>16172</b>	<b>16364</b>	<b>16620</b>	<b>16998</b>	<b>10332</b>	<b>8887</b>	<b>16145</b>	<b>16149</b>	<b>16526</b>	<b>16419</b>	<b>18574</b>	<b>16618</b>

**M180 Junction 4-5 Westbound**

			Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	5-day Average	M180 Jnt 4-5 2-way Demand
LM134	M180 J5 to M180 J4	00:00 - 01:00	135	67	75	94	83	83	108	109	69	77	98	91	99	84	192
LM134	M180 J5 to M180 J4	01:00 - 02:00	66	71	50	70	72	62	75	70	50	67	70	91	57	66	146
LM134	M180 J5 to M180 J4	02:00 - 03:00	50	68	62	64	71	72	63	60	58	74	66	69	84	69	138
LM134	M180 J5 to M180 J4	03:00 - 04:00	36	108	80	88	88	86	64	45	104	86	94	103	98	94	167
LM134	M180 J5 to M180 J4	04:00 - 05:00	59	295	206	230	206	203	91	60	262	225	205	215	225	227	362
LM134	M180 J5 to M180 J4	05:00 - 06:00	169	616	539	511	542	467	221	147	614	459	473	479	459	516	846
LM134	M180 J5 to M180 J4	06:00 - 07:00	237	1019	936	887	894	834	341	231	1005	879	923	884	879	914	1806
LM134	M180 J5 to M180 J4	07:00 - 08:00	391	1679	1557	1507	1506	1435	527	362	1607	1520	1540	1478	1397	1523	3482
LM134	M180 J5 to M180 J4	08:00 - 09:00	594	1805	1800	1774	1700	1634	690	501	1727	1741	1712	1783	1702	1738	3507
LM134	M180 J5 to M180 J4	09:00 - 10:00	874	1273	1255	1352	1237	1275	871	786	1269	1306	1249	1237	1303	1276	2520
LM134	M180 J5 to M180 J4	10:00 - 11:00	964	1261	1041	1077	1088	1228	1117	929	1156	1092	1142	1183	1300	1157	2307
LM134	M180 J5 to M180 J4	11:00 - 12:00	1016	1214	1105	1097	1224	1248	1158	1063	1285	1078	1179	1174	1386	1199	2345
LM134	M180 J5 to M180 J4	12:00 - 13:00	943	1225	1136	1163	1197	1288	1053	1050	1222	1154	1252	1176	1462	1228	2383
LM134	M180 J5 to M180 J4	13:00 - 14:00	1045	1265	1216	1223	1248	1343	991	1023	1194	1150	1237	1255	1474	1261	2474
LM134	M180 J5 to M180 J4	14:00 - 15:00	1044	1218	1222	1301	1273	1419	795	1081	1252	1263	1294	1446	1474	1316	2583
LM134	M180 J5 to M180 J4	15:00 - 16:00	1176	1284	1332	1400	1476	1446	744	1180	1390	1329	1439	1419	1508	1402	2800
LM134	M180 J5 to M180 J4	16:00 - 17:00	1462	1605	1672	1711	1736	1652	827	1270	1641	1694	1719	1724	1726	1688	3259
LM134	M180 J5 to M180 J4	17:00 - 18:00	1619	1829	1895	1928	1882	1591	849	1229	1821	1880	1851	1926	1705	1831	3450
LM134	M180 J5 to M180 J4	18:00 - 19:00	1264	1158	1303	1275	1143	968	704	993	1161	1153	1230	1135	1052	1158	2283
LM134	M180 J5 to M180 J4	19:00 - 20:00	883	589	597	619	603	577	480	784	549	579	606	597	619	594	1305
LM134	M180 J5 to M180 J4	20:00 - 21:00	528	374	404	410	401	351	333	479	365	409	365	370	360	381	859
LM134	M180 J5 to M180 J4	21:00 - 22:00	280	251	264	299	272	258	240	258	283	302	289	279	280	278	636
LM134	M180 J5 to M180 J4	22:00 - 23:00	172	192	192	219	247	220	237	175	183	204	358	222	245	228	475
LM134	M180 J5 to M180 J4	23:00 - 00:00	125	112	113	140	135	160	136	90	113	125	198	117	152	137	307
		<b>07:00-19:00</b>	<b>15132</b>	<b>20578</b>	<b>20052</b>	<b>20439</b>	<b>20324</b>	<b>19900</b>	<b>12715</b>	<b>13975</b>	<b>20380</b>	<b>19846</b>	<b>20589</b>	<b>20453</b>	<b>21046</b>	<b>20361</b>	<b>40633</b>
		<b>07:00-19:00</b>	<b>12392</b>	<b>16816</b>	<b>16534</b>	<b>16808</b>	<b>16710</b>	<b>16527</b>	<b>10326</b>	<b>11467</b>	<b>16725</b>	<b>16360</b>	<b>16844</b>	<b>16936</b>	<b>17489</b>	<b>16775</b>	<b>33393</b>