M6T Research Study - Stage 2 Utilisation Surveys
Report

Department for Transport
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M6T Research Study - Stage 2 Utilisation Surveys

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1 Introduction

1 Introduction

1.1 Background

The M6 motorway through the West Midlands region is one of the busiest motorways in the UK, and currently experiences a number of problems that have an impact not only on the motorway network, but also on the adjacent highway network. These problems include:

- congestion and resultant delay;
- unreliable journey times;
- congestion caused by maintenance;
- safety problems.

The M6 Toll Road (M6T) was opened in December 2003. It is a privately financed three-lane motorway that bypasses the busiest section of the M6 through Birmingham, providing a link from the M6 north of Birmingham to the M42 east of Birmingham. The M6T is 27 miles in length and has eight entry and/or exit junctions, and six toll stations.

The M6T is the first tolled motorway scheme in the UK entirely designed, built, financed and operated by the private sector. The Concession agreement provides for Midland Expressway Limited (MEL) to carry out the design, construction, financing, operation and maintenance of the M6T at their own cost and risk, without recourse to government funds or Government Guarantees.

The focus is to be based around a case study of the M6 Toll Road (M6T), for which a preliminary feasibility scoping and design stage has already been conducted. This brief relates to the second (main) stage of this study.

The Department for Transport commissioned Faber Maunsell in February 2006 to undertake the second (main) stage of this study, covering travel demand analysis, utilisation and willingness to pay studies.

1.2 Objective of Utilisation Survey

The principle aim of this survey is to understand the revealed preferences of journeys on the tolled route by origin and destination and purpose. This would allow analysis of trip lengths by purpose, as well as providing data that could be used to support an understanding of choice behaviour.

1.3 Structure of Report

Chapter 2 gives and overview of the survey process, while Chapter 3 describes checks on the data from interviews, non-TAG and TAG questionnaires to eliminate extraneous data from analysis, and the expansion process to provide the data for analysis.

Chapter 4 describes the analysis of the non-TAG data, while Chapter 5 offers analysis of the TAG data, both for the periods surveyed. The findings from having combined non-TAG and TAG data for all periods are covered in Chapter 6. A summary is given in Chapter 7.

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2 Utilisation Survey

2 Utilisation Survey

2.1 Aims

The final version of the Interview sheet used in the field is included at Appendix A. The interview undertaken on site was intended as a control filter for the main questionnaire, and was necessarily of a short duration conducted.

2.2 Survey Design

The survey approach was agreed with MEL and a pilot survey took place on the 9th August 2006 at the main toll plazas. The pilot was successful and the process worked to all parties' satisfaction. Based on the pilot survey, it was expected that it would be possible to achieve more than the targeted 10% short interview sample, the control for the returned questionnaires. The questionnaires were designed and agreed and the main surveys were conducted in September 2006. The self-complete questionnaires and screening interviews are given at Appendix A.

2.3 Fieldwork

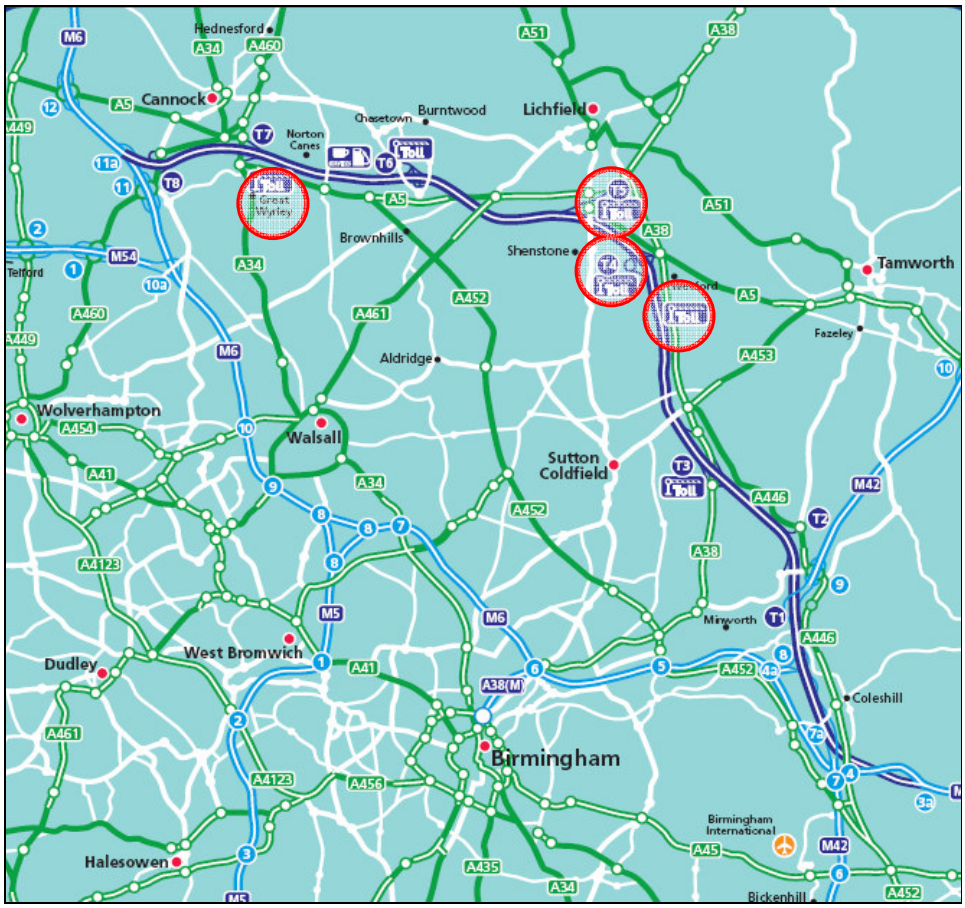
The project required data to be collected during 2006 from several different sources. Utilisation data were collected from M6T users to derive market composition through: interviews conducted at toll plazas; self-complete questionnaires handed out at toll plazas; and from drivers who were registered with MEL (the toll road operator) as TAG users and were consequently not required to stop and make payments at toll plazas. Other surveys that were undertaken in late 2006 are covered in other reports; these cover stated preference interviews for cars and freight vehicles. In order to capture non-M6T users for these surveys, interviews were undertaken at motorway service areas (MSAs) and using roadside interviews (RSIs) on slip roads.

The main utilisation survey of non-TAG M6T users took place on Sunday 3rd, Monday 4th, Wednesday 6th and Friday 8th September 2006 at Weeford Park mainline plaza southbound, Weeford Junction slip road plaza, Great Wyrley mainline plaza north bound and Shenstone slip road plaza. Surveys took place between 07:00-19:00 on each day at each location. Locations of plazas in the context of the scheme are shown in Figure 1, with those used for non-TAG screening interviews/main questionnaire hand-out circled in red. Questionnaires for TAG users were distributed to a selection of MEL's database of users.

2.4 Outcomes

During the course of the survey over 8,300 drivers were screened as they passed through the toll booths in order to provide a random sample of basic driver information such as trip purpose, occupancy and journey length. In total around 35,000 main questionnaires were distributed and as such the interviews comprised almost 25% of those passing, which exceeded the target of 10%. Over 6,600 (non-TAG) questionnaires, almost a 20% return rate, were completed and returned, punched and checked for inclusion in the data analysis.

TAG questionnaires were completed and returned from individuals by post, providing almost a further 1,000 TAG questionnaires for analysis.



Source: www.m6toll.co.uk

Figure 1: Location of M6T and non-TAG Survey Sites (circled)

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3 Data Processing and Expansion

3 Data Processing and Expansion

3.1 Logic and Range Checks on Screening Interviews

The interviews undertaken on site were intended as a control filter for the main questionnaire, and were necessarily of a short duration conducted while vehicles were in queues at toll booths. Every fourth or fifth vehicle's driver was interviewed in the queues where main questionnaires were handed out, while waiting to pass through toll plazas. The brief range of checks investigated the following:

- Questions with missing data;
- Questions with potentially miscoded data;
- Profiles by day of age, gender and vehicle type; and
- Occupancy of different vehicles.

Few inconsistent entries were observed. In summary, these amounted to:

Table 3.1: Summary of Major Checks on Interview Data

Questions	Interviews	Action
Vehicle types and occupancy	2 cars with 14-17 passengers and 2 LV (vans) with 8-10 passengers	Reject vehicles

3.2 Logic and Range Checks on Questionnaires

A copy of the self-complete questionnaire used in the field is included at Appendix A for non-TAG and TAG users. The format for both the TAG and Non-TAG questionnaire were similar, and the checks investigated the following comparisons:

- Questions with missing data;
- Questions with potentially miscoded data;
- Distances travelled and the journey time bands, allowing an assessment of average speeds;
- Journey time and the number of nights away, allowing inappropriate durations to be reviewed;
- Day the questionnaire handed out and the stated day on the postal return;
- Match of the expected arrival time and statement of whether an arrival time was a constraint or not;
- Match of responses for vehicles types, ensuring a particular vehicle type did not complete responses to questions for several vehicle types;
- Checking for balance in a driver's responses to preferences to using the M6T, M6 and A50/A500 for particular journeys, such that not all routes are favoured or declined;

Table 3.2 summarises this analysis below.

Table 3.2: Summary of Major Checks on Questionnaire Data

Questions	Non-TAG Users	TAG Users	Action
Journey speeds (Q1.1, 1.3, 1.5)	69 vehicles speed >100mph or <10mph	25 vehicle speed >100mph or <10mph	Reject vehicles for analysis using Q1.1, 1.3, 1.5)
Vehicle occupancy (Q1.13)	57 vehicles occupancy inconsistent with other questions	5 vehicles occupancy inconsistent with other questions	Reject vehicles for analysis using Q1.10, 1.13, 1.14, 3.3)
Day of journey (Q1.6)	310 not on survey day		Reject vehicles for analysis using Q1.6
Route preferences (Q2.4)	449 vehicles would use two of M6T, M6 and A500 each more than half the time for particular journey/purpose	64 vehicles would use two of M6T, M6 and A500 each more than half the time for particular journey/purpose	Reject vehicles for analysis involving Q2.4

3.3 New Variables for Analysis

Other significant variables added included a further measure of journey length, and journey purpose.

Journey 'lengths' (duration) determined from interviews were used as a proxy for distance. An extra variable for the analysis was created for journey length, based on matches in origin and destination data from the questionnaires. From either the postcode or town, it was possible to determine straight-line distances for 4,386 of the non-TAG questionnaires (65% of total) and 742 of the TAG questionnaires (77% of total). These were factored by 1.1 in the analysis above to approximate to route distances.

The four purpose categories recorded in the screening interviews were of necessity broad and it is suspected there was some misinterpretation of 'work' / 'business' and 'commuting'. The categories from the questionnaire are based on the origin and destination purposes.

For the main questionnaire returns, new variables were created to group together Home Based Work (HBW), Employer Business (EB), Home Employer Business (HEB), Home Based Other (HBO) and Non-Home Based Other (NHBO).

Journey purposes were mapped according to the correspondence list in Tables 3.3 and 3.4.

Table 3.3: Journey Purpose Correspondence for Main Questionnaires

Questionnaire Classes (origin and destinations)		home	usual work place	visiting business	friends relatives	holiday	leisure	personal business	education	shopping	other
		1	2	3	4	5	6	7	8	9	10
home	1		HBW	HEB	HBO	HBO	HBO	HBO	HBO	HBO	HBO
usual work place	2	HBW		EB	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO
visiting business	3	HEB	EB	EB	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO
friends relatives	4	HBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO
holiday	5	HBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO
leisure	6	HBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO
personal business	7	HBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO
education	8	HBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO
shopping	9	HBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO
other	10	HBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO	NHBO

Table 3.4: Journey Purpose Correspondence for Screening Interviews

Analysis Journey Purpose Grouping	Interview Grouping
EB	Business or Commercial
HBW	To or From Work
HEB	To or From Work OR Business or Commercial
HBO	Leisure
NHBO	Personal Business

3.4 Adjustment for Bias in Questionnaire Responses

The screening interview had been designed so that any response bias in the survey returns could be identified and adjusted for. This covered journey purpose, vehicle type, day of week, gender and occupancy. The proportions of survey returns in each category were adjusted iteratively for each record until they matched those observed in the toll booth screening questionnaires: the frequencies/percentages that result from each stage of the iterations are shown in Table 3.5. This procedure enabled the self-complete questionnaires to be rebased to a ‘random’ sample of M6T users for further expansion and analysis.

Table 3.5: Response Bias Adjustment Iterations for Non-TAG Data

	Screening Interviews			Self-Completion Returns							
Interview data				***Non TAG Iteration 1***		***Non TAG Iteration 2***		***Non TAG Iteration 3***		***NON TAG Iteration 4***	
Day	**Frequency**	**Valid Percent**	**Day**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**
Monday	1,987	23.8	Monday	1,595	25.3	1,582	25.2	1,490	23.7	1,485	23.7
Wednesday	2,150	25.7	Wednesday	1,416	22.5	1,650	26.3	1,590	25.3	1,602	25.5
Friday	2,365	28.3	Friday	1,499	23.8	1,786	28.5	1,781	28.4	1,779	28.3
Sunday	1,852	22.2	Sunday	1,783	28.3	1,258	20.0	1,416	22.6	1,414	22.5
Total	8,354	100.0	Total	6,293	100.0	6,276	100.0	6,278	100.0	6,280	100.0
			Invalid	379		396		394		392	
				6,672		6,672		6,672		6,672	
Journey Purpose	**Frequency**	**Valid Percent**	**Journey Purpose**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**
			EB	616	9.5	683	10.5	646	9.9	631	9.7
			HEB	1,785	27.4	1,641	25.2	1,546	23.8	1,512	23.2
Business	2,695	32.5	*cf Business*		*36.9*		*35.7*		*33.7*		*32.9*
Work	1,074	12.9	HBW	432	6.6	841	12.9	874	13.4	855	13.1
Leisure	3,082	37.1	HBO	3,321	51.0	3,012	46.3	3,092	47.5	3,150	48.4
Personal Business	1,451	17.5	NHBO	359	5.5	334	5.1	353	5.4	363	5.6
Leisure+PB		*54.6*	*cf Other*		*56.5*		*51.4*		*52.9*		*54.0*
Total	8,302	100.0	Total	6,513	100.0	6,511	100.0	6,511	100.0	6,510	100.0
Invalid	52		Invalid	159		161		161		162	
	8,354			6,672		6,672		6,672		6,672	
Vehicle Type	**Frequency**	**Valid Percent**	**Vehicle Type**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**
LV	593	7.2	Van	224	3.4	464	7.0	470	7.1	472	7.1
OGV1	119	1.4									
OGV2	169	2.0									
OGV1+OGV2		*3.4*	*HGV*	*105*	*1.6*	*224*	*3.4*	*231*	*3.5*	*231*	*3.5*
PSV	34	0.4	Bus/Coach	32	0.5	28	0.4	27	0.4	27	0.4
Car	7,360	88.8	Car	6,143	92.9	5,882	89.0	5,870	88.8	5,869	88.8
Motorcycle	3	0.0	Motorcycle/scooter	1	0.0	3	0.0	3	0.0	2	0.0
Other	12	0.1	Other	106	1.6	10	0.1	9	0.1	10	0.1
Total	8,290	100.0	Total	6,611	100.0	6,610	100.0	6,611	100.0	6,611	100.0
Invalid	64		Invalid	61		62		61		61	
	8,354			6,672		6,672		6,672		6,672	
Occupancy	**Frequency**	**Valid Percent**	**Occupancy**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**
None - just the driver	4,682	56.2	None - just the driver	3,404	54.0	3,394	53.9	3,493	55.4	3,528	56.0
One passenger	2,591	31.1	One passenger	2,010	31.9	2,054	32.6	1,994	31.6	1,971	31.3
Two passengers	564	6.8	Two passengers	464	7.4	450	7.1	434	6.9	429	6.8
Three passengers	363	4.4	Three passengers	315	5.0	296	4.7	280	4.4	276	4.4
Four or more passengers	131	1.6	Four or more passengers	106	1.7	106	1.7	101	1.6	99	1.6
Total	8,331	100.0	Total	6,300	100.0	6,301	100.0	6,303	100.0	6,304	100.0
Invalid	23		Invalid	372		371		369		368	
	8,354			6,672		6,672		6,672		6,672	
Gender	**Frequency**	**Valid Percent**	**Gender**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**	**Frequency**	**Valid Percent**
Male	6,022	72.7	Male	4,573	69.1	4,769	72.0	4,798	72.4	4,808	72.6
Female	2,265	27.3	Female	2,048	30.9	1,853	28.0	1,825	27.6	1,815	27.4
Total	8,287	100.0	Total	6,622	100.0	6,622	100.0	6,622	100.0	6,622	100.0
Invalid	67		Invalid	50		50		50		50	
	8,354			6,672		6,672		6,672		6,672	

3.5 Expansion of Non TAG Data

The self-completed questionnaire responses were only a sample of the total flow that passed through the surveyed plazas on the surveyed days. MEL were able to provide flow data by plaza, date, hour and vehicle class that enabled factors to be calculated for the expansion of the response bias-adjusted records to the observed traffic flows. Information was also provided on the breakdown on TAG and non TAG vehicles, but this was not done by individual vehicle.

The expansion was undertaken by day, time period and plaza. Four time periods were used of 3 hour intervals, namely 07:00-10:00, 10:00-13:00, 13:00-16:00 and 16:00-19:00. Typical profiles are shown in Figure 2.1. Average proportions were determined of non-TAG vehicles by day and plaza. It was not possible to map conclusively between vehicle classes used by MEL and the vehicle groups derived in the utilisation survey, so the expansion was undertaken by total vehicles. Table 3.6 shows the issues presented by the differences in the MEL toll vehicle classes and the standard vehicle classification used in the self-complete questionnaires. It can be seen that there are overlaps between the two sets of data that mean it is not possible to derive explicit expansion factors for each vehicle type as recorded in the self-completion surveys.

However, as the self-completion surveys have already been adjusted for 'response bias' to reflect the vehicle-type proportions in the 'screening' interviews, it was considered that expanding to total vehicle numbers would be an acceptable approach.

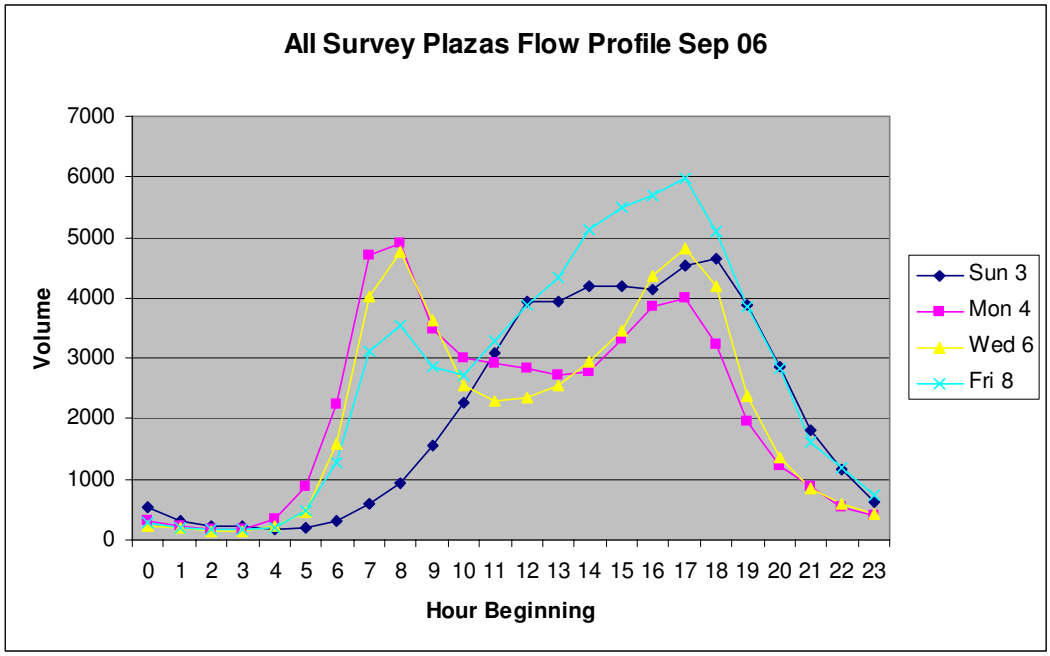

Figure 3.1: Typical Flow Profiles (Non TAG Surveys)

Table 3.6: Vehicle Grouping

MEL Toll Classes				M6T Utilisation Survey Vehicle Classes					
	Wheels	Axles	1st Axle Height	Van	HGV	Bus / Coach	Car	M'cycle / scooter	Other
1	<4		Any						
2	>=4	2	<1.3m						
3	>=4	>2	<1.3m						
4	>=4	2	>=1.3m						
5	>=4	>2, <=6	>=1.3m						
6	>=4	>6	>=1.3m						
11									

possible match

The resulting expansion factors are shown below in Table 3.7. This shows a total of 6,672 records that were matched to a toll plaza, as these data were recorded in the interviews and a unique reference number was given to each user, that could be matched between the screening interviews and self-complete questionnaires. Of these, 912 records did not have details of the day or time period entered on the self-complete questionnaires. The assumption was made that the unmatched records would be distributed between plaza and the survey day time periods, according to the distribution of observed flows from MEL (ie a total of 158,377). The data used in the frequency and cross tabulation analysis in chapter 4 are derived from the expansion factors applied to the bias-adjusted self-completed questionnaire data.

Table 3.7: Non-TAG Expansion Factors to Survey Period

Observed Flows: Non-TAG volumes from MEL (Flow X)

		Toll Plaza				
		GW	SH	WJ	WP	Total
Monday	between 7:00 and 10:00	4085	366	617	6635	11703
	between 10:00 and 13:00	3440	156	362	3923	7881
	between 13:00 and 16:00	3397	197	384	3903	7881
	between 16:00 and 19:00	4716	347	689	4146	9897
Wednesday	between 7:00 and 10:00	3903	412	677	5987	10980
	between 10:00 and 13:00	2863	179	337	3024	6403
	between 13:00 and 16:00	3742	240	415	3547	7944
	between 16:00 and 19:00	5977	367	868	4616	11828
Friday	between 7:00 and 10:00	3307	383	588	4427	8705
	between 10:00 and 13:00	4169	223	410	4277	9078
	between 13:00 and 16:00	7024	303	628	5778	13732
	between 16:00 and 19:00	7532	384	958	6482	15356
Sunday	between 7:00 and 10:00	1069	77	156	1692	2994
	between 10:00 and 13:00	3391	186	385	5077	9038
	between 13:00 and 16:00	4568	218	450	6774	12010
	between 16:00 and 19:00	5357	245	499	6846	12947

Total 158377 **A**

Non-TAG Volumes from Self-Complete Questionnaire Returns (Flow Y)

Toll Plaza				
GW	SH	WJ	WP	Total
185	60	74	207	526
147	17	22	123	309
119	17	22	98	256
110	26	32	89	257
155	70	68	269	562
118	21	31	175	345
51	15	19	185	270
65	24	54	177	320
169	32	50	122	373
124	14	37	142	317
181	29	39	189	438
211	21	51	203	486
48	11	6	95	160
124	23	33	219	399
76	22	43	245	386
100	20	36	200	356

Total Valid Cross Tab 5760
Total records 6672 **B**
Total Unmatched Cross Tab 912 **C**
Average Expansion for All Records 23.74 **A/B**

Observed Flows from MEL (Flow X) - Expanded Unmatched records (C x A/B) = Flow Z

		Toll Plaza				
		GW	SH	WJ	WP	Total
Monday	between 7:00 and 10:00	3527	316	533	5728	10104
	between 10:00 and 13:00	2970	134	313	3387	6804
	between 13:00 and 16:00	2932	170	331	3370	6804
	between 16:00 and 19:00	4071	299	595	3579	8544
Wednesday	between 7:00 and 10:00	3370	356	585	5168	9479
	between 10:00 and 13:00	2471	154	291	2611	5527
	between 13:00 and 16:00	3230	207	359	3063	6859
	between 16:00 and 19:00	5160	316	749	3985	10211
Friday	between 7:00 and 10:00	2855	331	507	3822	7515
	between 10:00 and 13:00	3599	192	354	3692	7837
	between 13:00 and 16:00	6064	261	542	4988	11855
	between 16:00 and 19:00	6503	331	827	5596	13257
Sunday	between 7:00 and 10:00	923	67	135	1461	2585
	between 10:00 and 13:00	2927	161	332	4383	7802
	between 13:00 and 16:00	3944	188	388	5848	10368
	between 16:00 and 19:00	4624	211	431	5910	11177

Valid Expanded Count 136728 **D**
Unmatched Total 21649 **E**
Expansion for Unmatched Records 23.74

Expansion Factors (Flows Z / Flow Y)

Toll Plaza				
GW	SH	WJ	WP	Total
19.063	5.270	7.199	27.672	19.208
20.203	7.903	14.207	27.537	22.019
24.642	10.018	15.060	34.386	26.577
37.009	11.509	18.601	40.212	33.246
21.741	5.084	8.598	19.214	16.866
20.944	7.352	9.385	14.918	16.021
63.341	13.801	18.869	16.554	25.402
79.385	13.184	13.878	22.515	31.909
16.893	10.331	10.148	31.328	20.147
29.024	13.749	9.555	26.003	24.723
33.504	9.006	13.891	26.393	27.067
30.818	15.776	16.222	27.565	27.278
19.226	6.056	22.449	15.378	16.157
23.606	6.979	10.060	20.013	19.555
51.894	8.537	9.029	23.869	26.860
46.244	10.555	11.973	29.552	31.396

3.6 Expansion of TAG Data

The same requirements to expand the TAG data exists as for non-TAG data. As the responses for the TAG questionnaires could (and did) relate to any of the seven days of the week, without a specific date confirmed in their postal return, they have been assumed to relate to a week in mid September. Similarly the TAG data could have originated from users of any of the six plazas used, rather than the four surveyed in the non-TAG surveys.

Examination of typical flow profiles from MEL (Figure 3.2), indicated it would be most suitable to consider expansion by day and periods of 00:00-07:00, 07:00-10:00, 10:00-13:00, 13:00-16:00, 16:00-19:00, 19:00-21:00 and 21:00-00:00. The resulting expansion factors (aggregated for all toll plazas) are shown in Table 3.8. These data are then used in the frequency and cross-tabulation analysis in chapter 5.

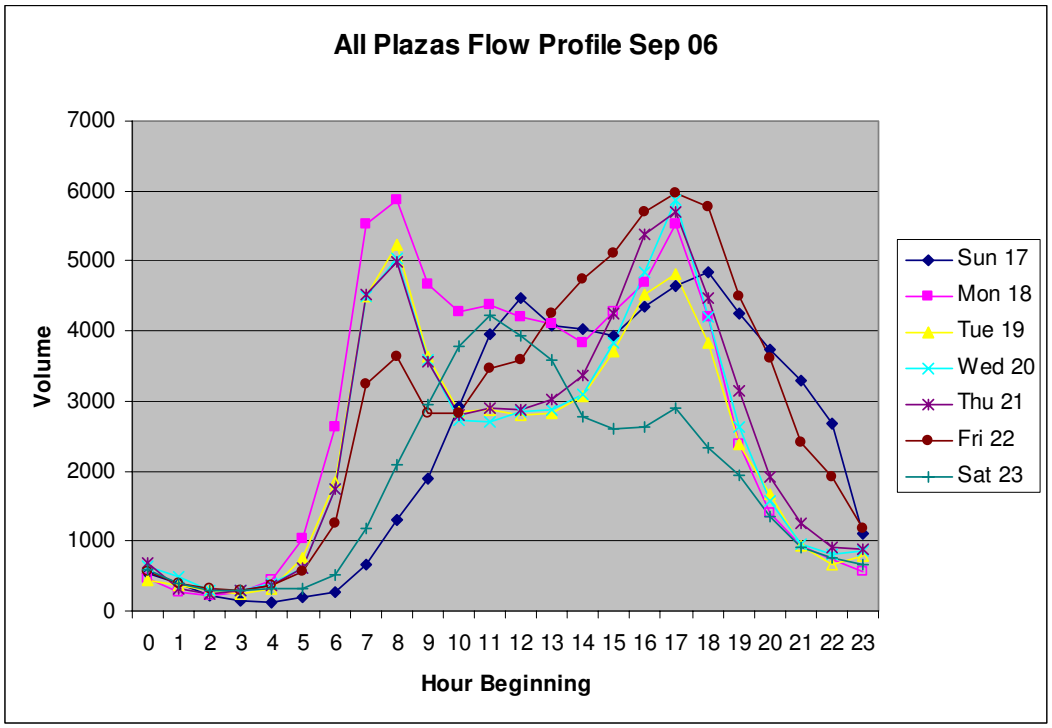

Figure 3.2: Typical Flow Profiles (TAG Surveys)

Table 3.8: TAG Expansion Factors to Survey Period

Observed Flows: TAG volumes from MEL (Flow X)

		Total
Monday	between 00:00 and 07:00	508
	between 7:00 and 10:00	1577
	between 10:00 and 13:00	1241
	between 13:00 and 16:00	1165
	between 16:00 and 19:00	1442
	between 19:00 and 21:00	371
	between 21:00 and 00:00	220
Tuesday	between 00:00 and 07:00	409
	between 7:00 and 10:00	1498
	between 10:00 and 13:00	942
	between 13:00 and 16:00	1071
	between 16:00 and 19:00	1520
	between 19:00 and 21:00	468
	between 21:00 and 00:00	273
Wednesday	between 00:00 and 07:00	469
	between 7:00 and 10:00	1432
	between 10:00 and 13:00	900
	between 13:00 and 16:00	1059
	between 16:00 and 19:00	1669
	between 19:00 and 21:00	457
	between 21:00 and 00:00	289
Thursday	between 00:00 and 07:00	448
	between 7:00 and 10:00	1411
	between 10:00 and 13:00	908
	between 13:00 and 16:00	1134
	between 16:00 and 19:00	1714
	between 19:00 and 21:00	547
	between 21:00 and 00:00	329
Friday	between 00:00 and 07:00	308
	between 7:00 and 10:00	850
	between 10:00 and 13:00	825
	between 13:00 and 16:00	1187
	between 16:00 and 19:00	1513
	between 19:00 and 21:00	687
	between 21:00 and 00:00	450
Saturday	between 00:00 and 07:00	111
	between 7:00 and 10:00	256
	between 10:00 and 13:00	492
	between 13:00 and 16:00	375
	between 16:00 and 19:00	330
	between 19:00 and 21:00	140
	between 21:00 and 00:00	102
Sunday	between 00:00 and 07:00	63
	between 7:00 and 10:00	114
	between 10:00 and 13:00	333
	between 13:00 and 16:00	347
	between 16:00 and 19:00	406
	between 19:00 and 21:00	227
	between 21:00 and 00:00	189
	Total	34773 **A**

TAG Volumes from Self-Complete Questionnaire Returns (Flow Y)

	Total
Monday	35
	137
	13
	8
	33
	9
	4
Tuesday	15
	77
	16
	13
	15
	5
	3
Wednesday	15
	84
	18
	12
	35
	8
	2
Thursday	8
	48
	8
	10
	26
	9
	6
Friday	8
	40
	14
	18
	38
	10
	6
Saturday	3
	12
	16
	8
	3
	0
	1
Sunday	5
	4
	15
	6
	17
	7
	4

Total Valid Cross Tab	907	
Total records	956	**B**
Total Unmatched Cross Tab	49	**C**
Average Expansion for All Records	36.37	**A/B**

Table 3.8: TAG Expansion Factors to Survey Period (cont'd)

Observed Flows from MEL (Flow X) - Expanded Unmatched records (C x A/B) = Flow Z **Expansion Factors (Flows Z / Flow Y)**

		Total	Total
Monday	between 00:00 and 07:00	482	13.758
	between 7:00 and 10:00	1497	10.924
	between 10:00 and 13:00	1177	90.552
	between 13:00 and 16:00	1105	138.103
	between 16:00 and 19:00	1368	41.454
	between 19:00 and 21:00	352	39.144
	between 21:00 and 00:00	209	52.293
Tuesday	between 00:00 and 07:00	388	25.864
	between 7:00 and 10:00	1421	18.453
	between 10:00 and 13:00	894	55.875
	between 13:00 and 16:00	1016	78.161
	between 16:00 and 19:00	1442	96.163
	between 19:00 and 21:00	444	88.759
	between 21:00 and 00:00	259	86.203
Wednesday	between 00:00 and 07:00	445	29.642
	between 7:00 and 10:00	1358	16.173
	between 10:00 and 13:00	853	47.412
	between 13:00 and 16:00	1004	83.699
	between 16:00 and 19:00	1583	45.235
	between 19:00 and 21:00	433	54.174
	between 21:00 and 00:00	274	136.977
Thursday	between 00:00 and 07:00	425	53.081
	between 7:00 and 10:00	1339	27.885
	between 10:00 and 13:00	862	107.711
	between 13:00 and 16:00	1076	107.559
	between 16:00 and 19:00	1626	62.526
	between 19:00 and 21:00	519	57.617
	between 21:00 and 00:00	312	52.058
Friday	between 00:00 and 07:00	292	36.522
	between 7:00 and 10:00	807	20.166
	between 10:00 and 13:00	783	55.923
	between 13:00 and 16:00	1126	62.557
	between 16:00 and 19:00	1436	37.787
	between 19:00 and 21:00	651	65.134
	between 21:00 and 00:00	427	71.110
Saturday	between 00:00 and 07:00	106	35.231
	between 7:00 and 10:00	243	20.210
	between 10:00 and 13:00	467	29.163
	between 13:00 and 16:00	356	44.531
	between 16:00 and 19:00	313	104.401
	between 19:00 and 21:00	133	230.118
	between 21:00 and 00:00	97	230.118
Sunday	between 00:00 and 07:00	60	11.916
	between 7:00 and 10:00	108	27.110
	between 10:00 and 13:00	316	21.089
	between 13:00 and 16:00	329	54.887
	between 16:00 and 19:00	385	22.663
	between 19:00 and 21:00	215	30.724
	between 21:00 and 00:00	179	44.729

Valid Expanded Count	32991	**D**
Unmatched Total	1782	**E**
Expansion for Unmatched Records	36.37	

3.7 Combination of Expanded Non-TAG and TAG Data

This aspect of the analysis is undertaken to obtain an idealised indication of the combined M6T September utilisation. For this it was necessary to further expand non-TAG data, such that they would be indicative of data from six plazas/seven days a week/24 hours a day, rather than the information from the survey period of four plazas/four days a week/12 hours a day. This would then match the expansion already done for the TAG data.

From analysis of the MEL flow profiles (Figures 3.3 – 3.6), assumptions were made of similarities between data at surveyed sites and flow profiles of plazas/periods that had not been surveyed, in order to derive expansion factors to fully expand the data. For example, synthetic data for Great Wyrley between 00:00-07:00 on a Monday were derived by assuming similar question responses would be obtained from vehicles between 10:00-13:00 on Monday at the same plaza, and increasing the weighting for these responses according to the relative flows between 00:00-07:00 and 10:00-13:00. Table 3.9 shows the assumptions regarding expansion (in yellow), and the weightings applied to the surveyed plaza/day/periods.

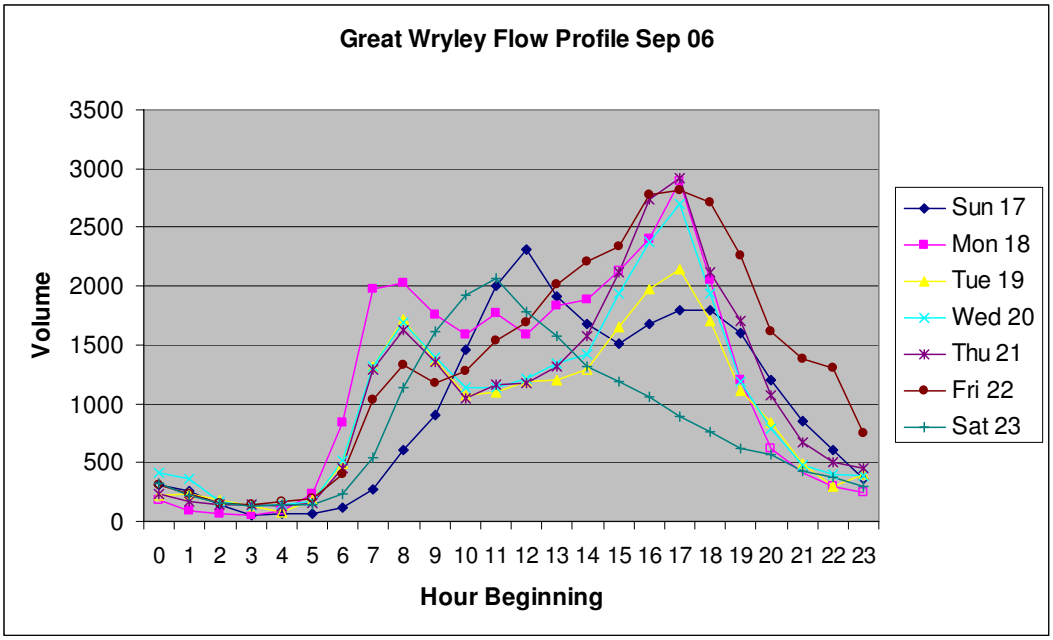

Figure 3.3: Typical Flow Profiles Great Wryley

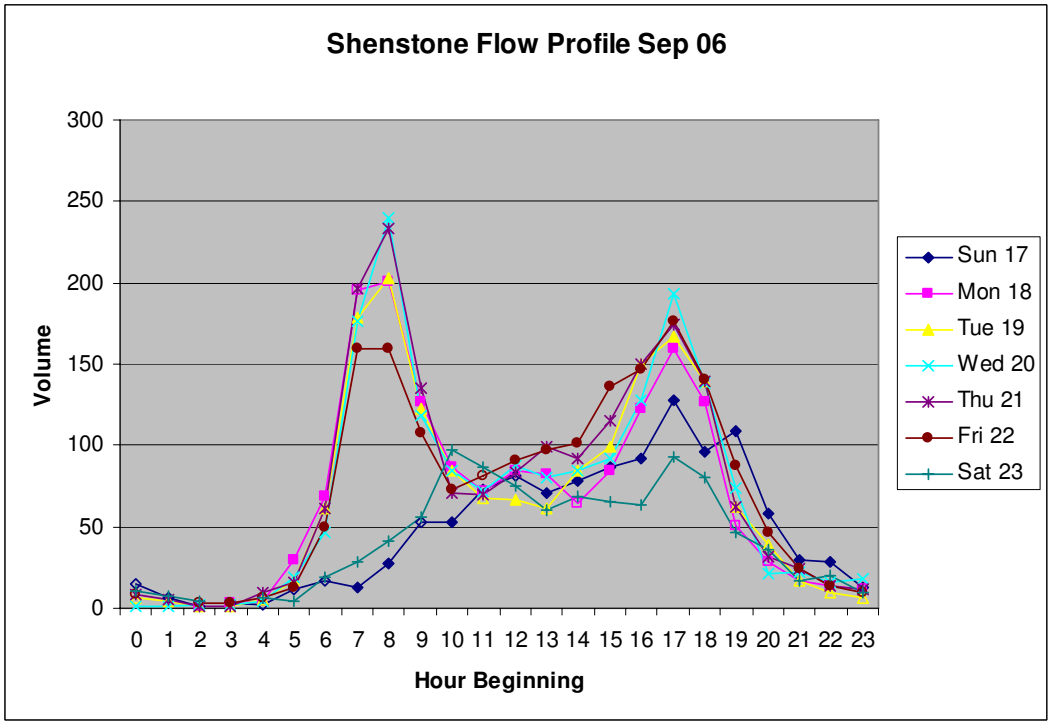

Figure 3.4: Typical Flow Profiles Shenstone

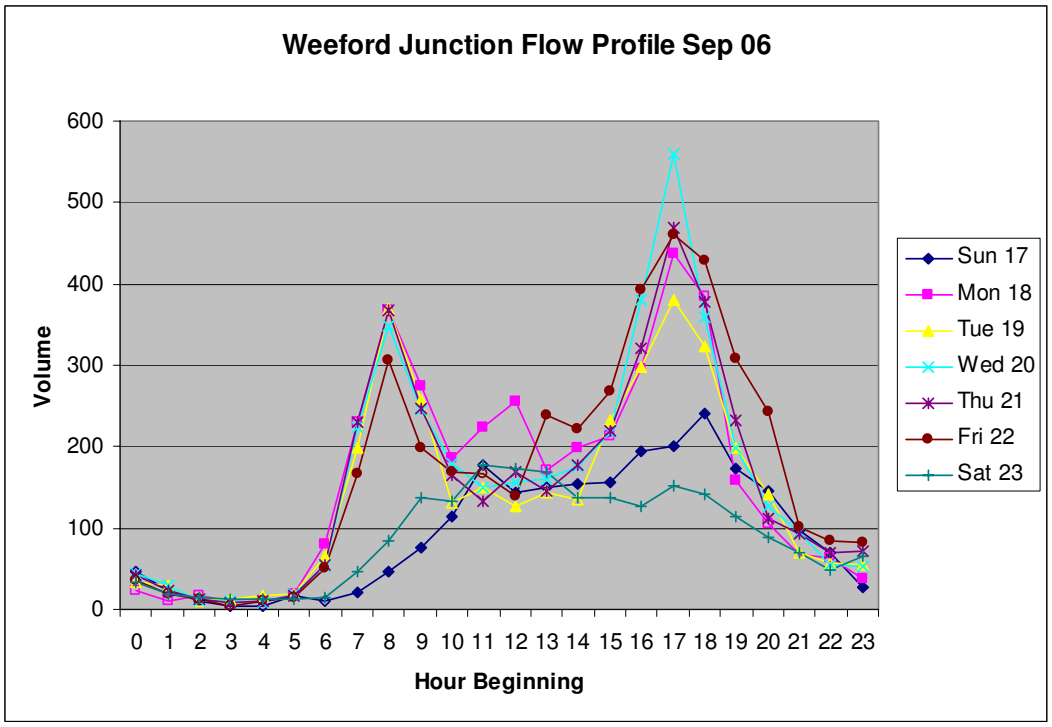

Figure 3.5: Typical Flow Profiles Weeford Junction

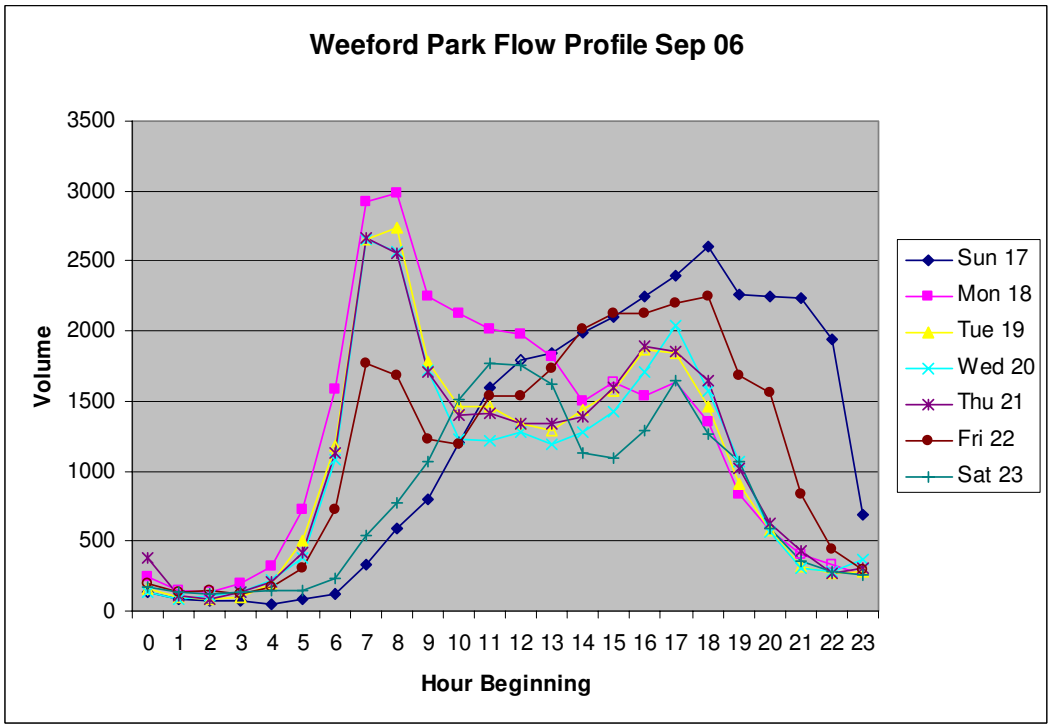

Figure 3.6: Typical Flow Profiles Weeford Park

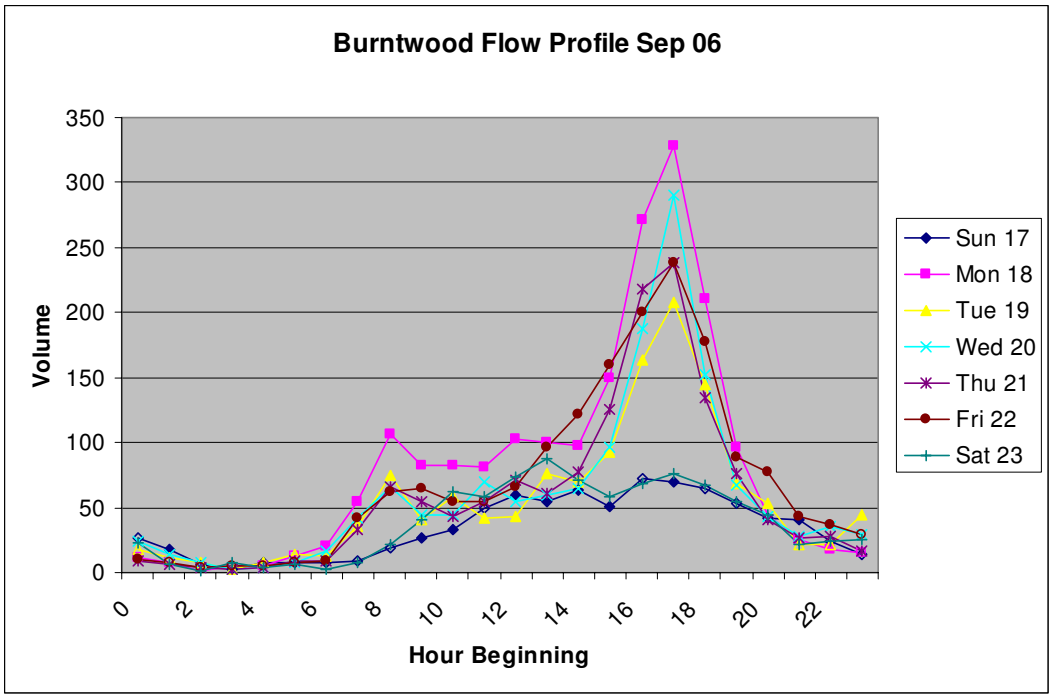

Figure 3.7: Typical Flow Profiles Burntwood

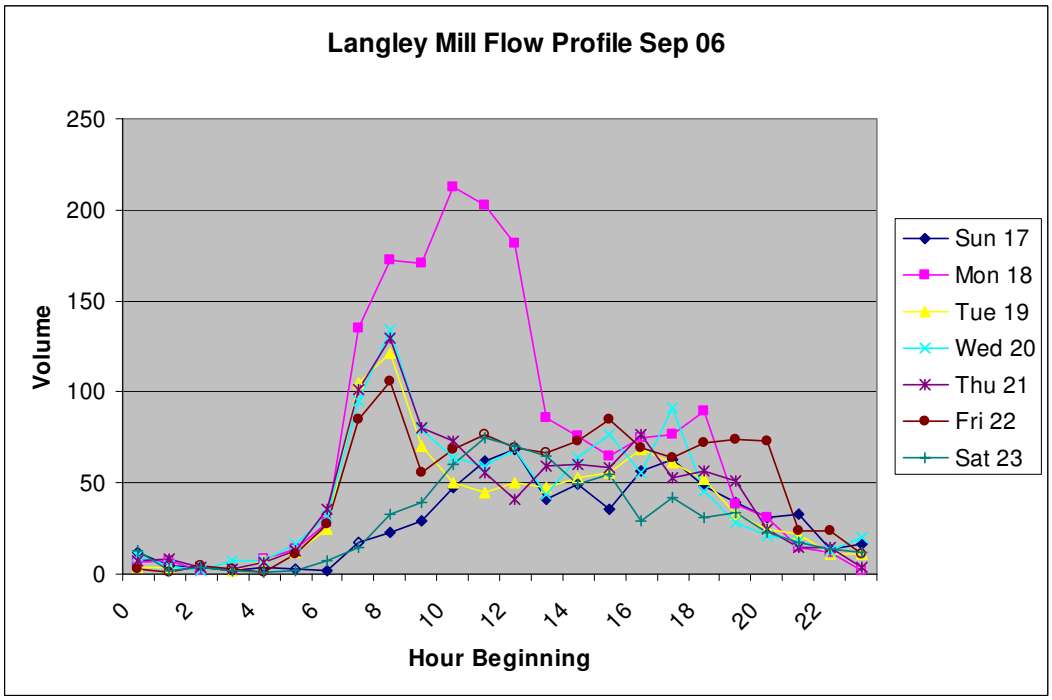

Figure 3.8: Typical Flow Profiles Langley Mill

Table 3.9: Combination of Non-TAG and TAG Data

Non TAG Expansion: 4 to 6 plazas, 4 to 7 days, 12 to 24 hours - Assumptions and Factors

		Toll Plaza according to Interview sites					
		Burntwood	**Great Wyrley**	**Langley Mill**	**Shenstone**	**Weeford Junction**	**Weeford Park**
	between 0:00 and 07:00	ave S/WJ Mo 10-13ppn	GW Mo 10-13ppn	ave S/WJ Mo 10-13ppn	S Mo 10-13ppn	WJ Mo 10-13ppn	WP Mo 10-13ppn
	between 7:00 and 10:00	ave S/WJ Mo	1.978	ave S/WJ Mo	3.284	2.771	1.952
	between 10:00 and 13:00	ave S/WJ Mo	4.132	ave S/WJ Mo	10.431	6.939	4.375
	between 13:00 and 16:00	ave S/WJ Mo	2.041	ave S/WJ Mo	4.723	2.997	1.946
	between 16:00 and 19:00	ave S/WJ Mo	2.132	ave S/WJ Mo	4.328	2.951	2.055
Monday	**between 19:00 and 00:00**	ave S/WJ Mo 10-13ppn	GW Mo 10-13ppn	ave S/WJ Mo 10-13ppn	S Mo 10-13ppn	WJ Mo 10-13ppn	WP Mo 10-13ppn
	between 0:00 and 07:00	ave S/WJ 10-13ppn Mo/We	ave GW 10-13ppn Mo/We	ave S/WJ 10-13ppn Mo/We	ave S 10-13ppn Mo/We	ave WJ 10-13ppn Mo/We	ave WP 10-13ppn Mo/We
	between 7:00 and 10:00	ave S/WJ of Mo/We	ave of Mo/We	ave S/WJ of Mo/We	ave of Mo/We	ave of Mo/We	ave of Mo/We
	between 10:00 and 13:00	ave S/WJ of Mo/We	ave of Mo/We	ave S/WJ of Mo/We	ave of Mo/We	ave of Mo/We	ave of Mo/We
	between 13:00 and 16:00	ave S/WJ of Mo/We	ave of Mo/We	ave S/WJ of Mo/We	ave of Mo/We	ave of Mo/We	ave of Mo/We
	between 16:00 and 19:00	ave S/WJ of Mo/We	ave of Mo/We	ave S/WJ of Mo/We	ave of Mo/We	ave of Mo/We	ave of Mo/We
Tuesday	**between 19:00 and 00:00**	ave S/WJ 10-13ppn Mo/We	ave GW 10-13ppn Mo/We	ave S/WJ 10-13ppn Mo/We	ave S 10-13ppn Mo/We	ave WJ 10-13ppn Mo/We	ave WP 10-13ppn Mo/We
	between 0:00 and 07:00	ave S/WJ We 10-13ppn	GW We 10-13ppn	ave S/WJ We 10-13ppn	S We 10-13ppn	WJ We 10-13ppn	WP We 10-13ppn
	between 7:00 and 10:00	ave S/WJ We	2.023	ave S/WJ We	2.866	2.536	2.054
	between 10:00 and 13:00	ave S/WJ We	4.857	ave S/WJ We	8.495	7.373	5.043
	between 13:00 and 16:00	ave S/WJ We	1.952	ave S/WJ We	3.642	2.753	2.050
	between 16:00 and 19:00	ave S/WJ We	1.895	ave S/WJ We	3.805	2.528	1.951
Wednesday	**between 19:00 and 00:00**	ave S/WJ We 10-13ppn	GW We 10-13ppn	ave S/WJ We 10-13ppn	S We 10-13ppn	WJ We 10-13ppn	WP We 10-13ppn
	between 0:00 and 07:00	ave S/WJ 10-13ppn Mo/We	ave GW 10-13ppn Mo/We	ave S/WJ 10-13ppn Mo/We	ave S 10-13ppn Mo/We	ave WJ 10-13ppn Mo/We	ave WP 10-13ppn Mo/We
	between 7:00 and 10:00	ave S/WJ of Mo/We	ave of Mo/We	ave S/WJ of Mo/We	ave of Mo/We	ave of Mo/We	ave of Mo/We
	between 10:00 and 13:00	ave S/WJ of Mo/We	ave of Mo/We	ave S/WJ of Mo/We	ave of Mo/We	ave of Mo/We	ave of Mo/We
	between 13:00 and 16:00	ave S/WJ of Mo/We	ave of Mo/We	ave S/WJ of Mo/We	ave of Mo/We	ave of Mo/We	ave of Mo/We
	between 16:00 and 19:00	ave S/WJ of Mo/We	ave of Mo/We	ave S/WJ of Mo/We	ave of Mo/We	ave of Mo/We	ave of Mo/We
Thursday	**between 19:00 and 00:00**	ave S/WJ 10-13ppn Mo/We	ave GW 10-13ppn Mo/We	ave S/WJ 10-13ppn Mo/We	ave S 10-13ppn Mo/We	ave WJ 10-13ppn Mo/We	ave WP 10-13ppn Mo/We
	between 0:00 and 07:00	ave S/WJ Fr 10-13ppn	GW Fr 10-13ppn	ave S/WJ Fr 10-13ppn	S Fr 10-13ppn	WJ Fr 10-13ppn	WP Fr 10-13ppn
	between 7:00 and 10:00	ave S/WJ Fr	1.000	ave S/WJ Fr	1.518	1.323	1.000
	between 10:00 and 13:00	ave S/WJ Fr	2.837	ave S/WJ Fr	4.230	3.876	2.200
	between 13:00 and 16:00	ave S/WJ Fr	1.000	ave S/WJ Fr	1.953	1.429	1.000
	between 16:00 and 19:00	ave S/WJ Fr	1.000	ave S/WJ Fr	1.930	1.330	1.000
Friday	**between 19:00 and 00:00**	ave S/WJ Fr 10-13ppn	GW Fr 10-13ppn	ave S/WJ Fr 10-13ppn	S Fr 10-13ppn	WJ Fr 10-13ppn	WP Fr 10-13ppn
	between 0:00 and 07:00	ave S/WJ Su 07-10ppn	GW Su 07-10ppn	ave S/WJ Su 07-10ppn	S Su 07-10ppn	WJ Su 07-10ppn	WP Su 07-10ppn
	between 7:00 and 10:00	ave S/WJ Su 07-10ppn	GW Su 07-10ppn	ave S/WJ Su 07-10ppn	S Su 07-10ppn	WJ Su 07-10ppn	WP Su 07-10ppn
	between 10:00 and 13:00	ave S/WJ Su 10-13ppn	GW Su 10-13ppn	ave S/WJ Su 10-13ppn	S Su 10-13ppn	WJ Su 10-13ppn	WP Su 10-13ppn
	between 13:00 and 16:00	ave S/WJ Su 10-13ppn	GW Su 10-13ppn	ave S/WJ Su 10-13ppn	S Su 10-13ppn	WJ Su 10-13ppn	WP Su 10-13ppn
	between 16:00 and 19:00	ave S/WJ Su 10-13ppn	GW Su 10-13ppn	ave S/WJ Su 10-13ppn	S Su 10-13ppn	WJ Su 10-13ppn	WP Su 10-13ppn
Saturday	**between 19:00 and 00:00**	ave S/WJ Su 07-10ppn	GW Su 07-10ppn	ave S/WJ Su 07-10ppn	S Su 07-10ppn	WJ Su 07-10ppn	WP Su 07-10ppn
	between 0:00 and 07:00	ave S/WJ Su 07-10ppn	GW Su 07-10ppn	ave S/WJ Su 07-10ppn	S Su 07-10ppn	WJ Su 07-10ppn	WP Su 07-10ppn
	between 7:00 and 10:00	ave S/WJ Su	7.441	ave S/WJ Su	10.240	11.326	6.265
	between 10:00 and 13:00	ave S/WJ Su	3.145	ave S/WJ Su	7.654	5.731	3.813
	between 13:00 and 16:00	ave S/WJ Su	1.000	ave S/WJ Su	1.621	1.323	1.000
	between 16:00 and 19:00	ave S/WJ Su	1.562	ave S/WJ Su	2.626	2.160	1.605
	between 19:00 and 21:00	ave S/WJ Su 16-19ppn	GW Su 16-19ppn	ave S/WJ Su 16-19ppn	S Su 16-19ppn	WJ Su 16-19ppn	WP Su 16-19ppn
Sunday	**between 21:00 and 00:00**	ave S/WJ Su 07-10ppn	GW Su 07-10ppn	ave S/WJ Su 07-10ppn	S Su 07-10ppn	WJ Su 07-10ppn	WP Su 07-10ppn

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4 Analysis of Non TAG Users

4 Analysis of Non TAG Users

4.1 Introduction

This chapter presents frequency and cross-tabulation of the non-TAG data set, analysed for each of the survey days in September of Monday, Wednesday, Friday and Sunday, for the periods 07:00-19:00.

The frequency and cross-tabulation analysis tables are presented in Appendix B. In some instances below, a graph is presented to help clarify the findings where several tables result for each frequency or cross-tabulation analysis. Key cells in the tables of valid percentages have been shaded: green >50% respondents, yellow >10% respondents, red >1% and numbers are given to one decimal place. Other 'count' values in tables represent absolute numbers rather than proportions.

4.2 Frequency Analysis

4.2.1 *Journey Length*

Appendix B Table 4.1: Journey Length

(Q1.1: Where did your journey start? Q1.3: And where were you travelling to?)

A summary is shown in Table 4.1 below (by distance and duration) – data is grouped by day in the appendices.

Table 3.1: Journey Length Summary (by distance and duration)

Status	Distance	MON Valid Percent	WED Valid Percent	FRI Valid Percent	SUN Valid Percent
	between 0 and 50 km	7.7	7.0	5.3	2.2
	between 50 and 100 km	13.6	16.4	9.7	6.3
	between 100 and 150 km	11.8	13.5	9.7	9.4
	between 150 and 200 km	12.4	10.3	13.8	11.4
	between 200 and 250 km	13.3	15.4	15.0	14.6
	between 250 and 300 km	15.0	12.8	17.3	19.8
	between 300 and 350 km	13.4	10.6	11.4	15.7
	between 350 and 400 km	5.2	6.0	6.2	6.5
	between 400 and 450 km	1.8	1.7	3.0	3.7
	between 450 and 500 km	1.8	1.9	2.1	2.3
	more than 500 km	3.9	4.3	6.5	8.1
Valid	Total	100.0	100.0	100.0	100.0
Total Valid Count		23,464	23,704	28,860	22,586
Total Invalid Count		12,197	11,075	15,497	11,743
Grand Total Count		35,661	34,779	44,357	34,330

Status	Duration	MON Valid Percent	WED Valid Percent	FRI Valid Percent	SUN Valid Percent
	Less than 1 Hour	7.6	7.1	5.1	2.5
	Between 1 and 2 hours	17.0	21.0	13.4	11.8
	Between 2 and 3 hours	17.4	20.2	15.6	15.6
	Between 3 and 4 hours	17.5	18.7	18.3	20.0
	Between 4 and 5 hours	14.2	14.7	17.2	19.3
	Between 5 and 6 hours	11.1	7.2	12.2	13.4
	Between 6 and 7 hours	7.2	4.1	7.2	7.0
	Between 7 and 8 hours	2.9	2.7	4.6	4.1
	Between 8 and 9 hours	1.9	2.1	2.7	1.6
	Between 9 and 10 hours	1.6	0.6	1.5	1.4
	More than 10 hours	1.6	1.6	2.2	3.4
Valid	Total	100.0	100.0	100.0	100.0
Total Valid Count		33,123	32,647	40,649	32,177
Total Invalid Count		2,538	2,132	3,708	2,153
Grand Total Count		35,661	34,779	44,357	34,330

From the origin-destination analysis, the peak grouping for most of the journeys fell in the band between 200-300km, and over 75% fell between 50-350km, regardless of the survey day. There were a higher proportion of vehicles travelling between 50-150km on Monday and Wednesday. This indicates few of the M6T journeys intercepted were local or short distance.

From the travel duration analysis, the peak bands fall in the 3rd and 4th band (between 2-3 and 3-4 hours). Figures 4.1 and 4.2 below show that the O-D analysis indicates a greater spread of busy bands, while travel duration indicates flows fall off gradually after a short peak.

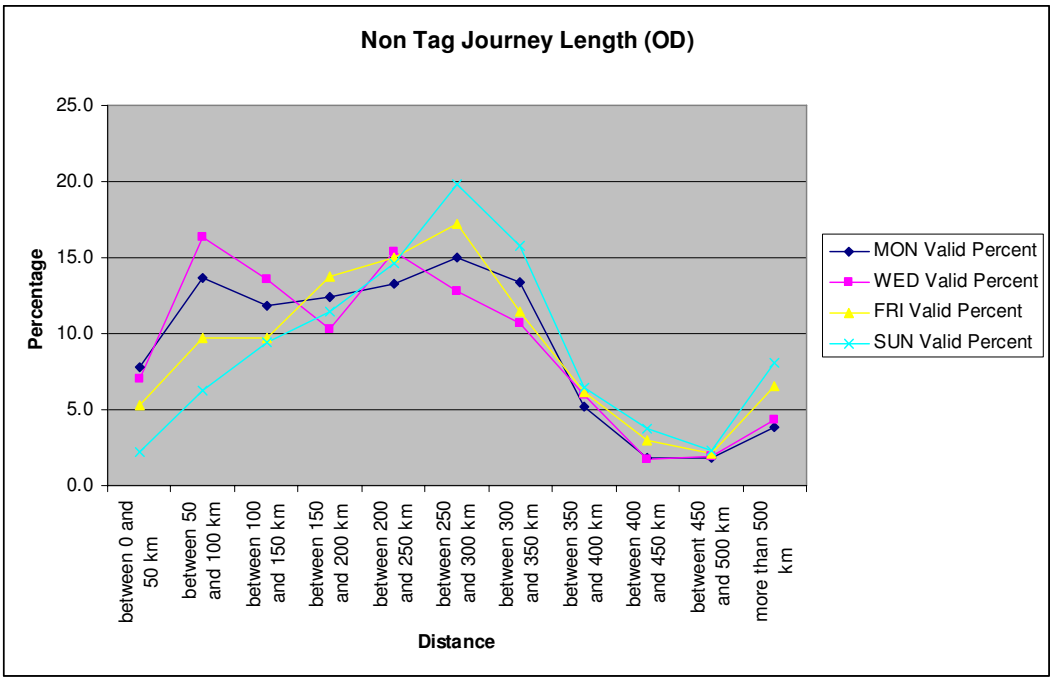

Figure 4.1: Journey Length (by OD) (Non TAG)

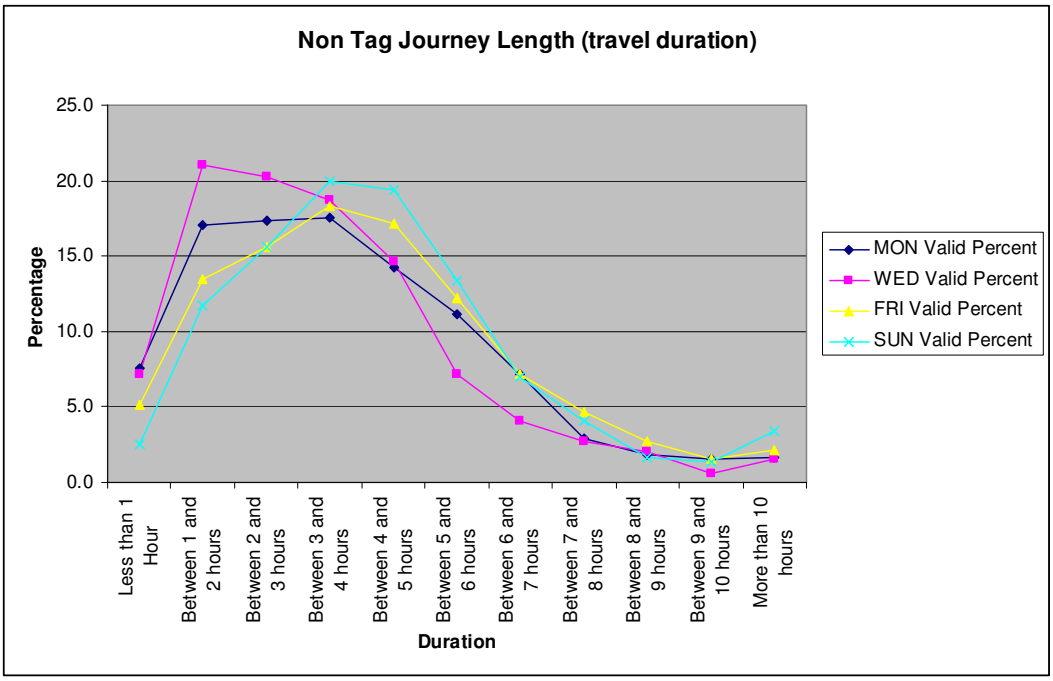

Figure 4.2: Journey Length (travel duration) (Non TAG)

4.2.2 *Journey Purpose*

Appendix B Table 4.2: Journey Purpose

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?)

A summary is shown in Table 4.2 below – data are grouped by day in the appendices.

Table 4.2: Journey Purpose Summary

Status	Purpose	MON Valid Percent	WED Valid Percent	FRI Valid Percent	SUN Valid Percent
	EB	11.9	18.0	7.3	2.2
	HBW	17.9	10.4	11.9	1.5
	HEB	23.2	36.7	22.0	6.2
	HBO	42.8	29.3	51.0	85.8
	NHBO	4.3	5.5	7.7	4.3
Valid	Total	100.0	100.0	100.0	100.0
Total Valid Count		34,797	34,266	43,664	33,645
Total Invalid Count		864	513	693	685
Grand Total Count		35,661	34,779	44,357	34,330

The HBO (home-based other) group, matched to leisure in the interviews, comprised the largest grouping on a Friday and Sunday. The proportion is over twice as large on a Sunday as on a Monday or Wednesday. On Monday and Wednesday, the work-related activities (EB, HBW, HEB) comprise over 50%, dropping as expected to less than 10% on a Sunday.

4.2.3 *Vehicle Type*

Appendix B Table 4.3: Vehicle Type

(Q1.10: What type of vehicle were you using when making this journey?)

A summary is shown in Table 4.3 below – data is grouped by day in the appendices.

Table 4.3: Vehicle Type Summary

Status	Vehicle	MON Valid Percent	WED Valid Percent	FRI Valid Percent	SUN Valid Percent
	Van	8.7	8.9	7.0	3.4
	HGV	4.7	6.4	2.8	1.2
	Bus/Coach	0.3	0.3	0.6	0.3
	Car	86.1	84.2	89.4	94.7
	Motorcycle	0.0	0.0	0.0	0.1
	Other	0.1	0.1	0.2	0.2
Valid	Total	100.0	100.0	100.0	100.0
Total Valid Count		35,489	34,757	44,226	34,124
Total Invalid Count		172	22	131	206
Grand Total Count		35,661	34,779	44,357	34,330

The largest vehicle group was cars, at over 94% on Sunday, dropping to 84% on Wednesday. The proportion of commercial vehicles (van/HGV) on a weekday was two or three times more than the proportion on a Sunday. Motorcycles were only intercepted on a Sunday.

4.2.4 *Goods Vehicle Particulars*

Appendix B Table 4.4: Goods Vehicle Particulars

(Q1.11: Goods Vehicle Drivers … owner … load type … load status)

A summary is shown in Table 4.4 below – data is grouped by day in the appendices.

Table 4.4: Goods Vehicle Particulars Summary

Status	Owner	MON Valid Percent	WED Valid Percent	FRI Valid Percent	SUN Valid Percent
	Shipper	4.5	4.1	1.2	4.7
	Haulier	37.6	40.2	39.1	18.3
	Neither	57.9	55.7	59.7	77.0
Valid	Total	100.0	100.0	100.0	100.0
Total Valid Count		3,371	4,072	3,305	1,064
Total Invalid Count		32,290	30,707	41,052	33,266
Grand Total Count		35,661	34,779	44,357	34,330

Status	Load Type	MON Valid Percent	WED Valid Percent	FRI Valid Percent	SUN Valid Percent
	Bulk (Steel, coal, agriculture, ag	8.1	8.9	8.0	0.0
	High value	16.3	18.1	12.4	18.3
	General haulage	19.9	18.7	17.4	23.6
	Food	11.0	8.5	8.0	0.0
	Low value	2.2	8.4	11.1	16.5
	Parcels/post	1.9	3.9	8.9	0.0
	Non food retail	4.9	9.3	11.3	0.0
	Various	35.8	24.1	23.0	41.7
Valid	Total	100.0	100.0	100.0	100.0
Total Valid Count		2,980	3,939	3,077	847
Total Invalid Count		32,681	30,840	41,279	33,483
Grand Total Count		35,661	34,779	44,357	34,330

Status	Load Status	MON Valid Percent	WED Valid Percent	FRI Valid Percent	SUN Valid Percent
	Loaded	59.7	49.2	38.5	37.5
	Part loaded	21.9	27.6	26.7	21.6
	Empty	18.4	23.3	34.8	40.8
Valid	Total	100.0	100.0	100.0	100.0
Total Valid Count		3,070	4,224	3,046	1,111
Total Invalid Count		32,591	30,555	41,311	33,219
Grand Total Count		35,661	34,779	44,357	34,330

Most goods vehicles were not readily classified into either shipper or haulier (with the highest proportion on Sunday), and similarly almost 30% (on weekdays) had non-specific load types. Almost half the vehicles were fully loaded on weekdays (60% on Monday), and a third on Sunday. This would fit with vehicles starting deliveries at the start of the week, returning at the end of the week.

4.2.5 *Coach Particulars*

Appendix B Table 4.5: Bus/Coach Particulars

(Q1.12: Coach drivers … service type)

The summary for an average survey day is shown in Table 4.5 below – daily breakdowns are in the appendices.

Table 4.5: Bus/Coach Particulars Summary

Status	Service	All Survey Days
	Chartered	78.6
	Scheduled	21.4
Valid	Total	100.0
Total Valid Count		494
Total Invalid Count		148,632
Grand Total Count		149,126

The majority of buses/coaches were chartered, as could be expected. This peaked at 90% on Friday.

4.2.6 *Vehicle Occupancy*

Appendix B Table 4.6: Vehicle Occupancy

(Q1.13: Car drivers/motorcyclists/goods vehicle drivers … no of occupants)

A summary is shown in Table 4.6 below – data is grouped by day in the appendices.

Table 4.6: Vehicle Occupancy Summary

Status	Occupancy	MON Valid Percent	WED Valid Percent	FRI Valid Percent	SUN Valid Percent
	Driver only	60.4	69.1	53.9	32.1
	One passenger	27.9	23.7	34.9	43.4
	Two passengers	5.5	5.3	6.5	11.3
	Three passengers	4.8	1.5	3.3	9.6
	Four or more passengers	1.5	0.4	1.3	3.6
Valid	Total	100.0	100.0	100.0	100.0
Total Valid Count		33,583	32,840	42,158	33,168
Total Invalid Count		2,078	1,939	2,198	1,162
Grand Total Count		35,661	34,779	44,357	34,330

Almost 90% of vehicles on a weekday had no more than two occupants, while almost 70% of vehicles had at least two occupants on a Sunday. The average occupancy on a weekday was around 1.5 people/vehicle, rising to 2 people/vehicle on Sunday.

4.2.7 *Overnight Stops*

Appendix B Table 4.7: Overnight Stops

(Q1.15: Were you staying away from home on this trip and if so how many nights?)

A summary is shown in Table 4.7 below – data is grouped by day in the appendices.

Table 4.7: Overnight Stops Summary

Status	Overnight Stops	MON Valid Percent	WED Valid Percent	FRI Valid Percent	SUN Valid Percent
	No, none	42.3	52.0	34.5	23.2
	Yes, one night away	12.0	17.8	10.2	20.9
	Yes, two nights away	11.1	10.7	25.4	22.7
	Yes, three or more nights away	34.6	19.6	30.0	33.2
Valid	Total	100.0	100.0	100.0	100.0
Total Valid Count		35,488	34,615	44,247	34,166
Total Invalid Count		173	164	109	164
Grand Total Count		35,661	34,779	44,357	34,330

Around half the drivers would be staying away from home on their trip on a weekday, but over 70% would be staying away on the Sunday. Wednesday drivers would stop on average less than 1 night on their trip, while for Sunday drivers it would be more than 1 ½ days.

4.2.8 *Hierarchy of Reasons for using M6T*

Appendix B Table 4.8: Hierarchy of Reasons for using M6T

(Q2.1: How important were the following in your decision to use the M6 Toll for your journey (on the day you were given the questionnaire)?)

The weighted importance of reasons for using the M6T was similar on the different days. The weighting was attained by combining 60% of 'very important' responses, 30% of 'quite important' responses and 10% of 'not at all important' responses for a particular reason. This means the highest weighting would be 60 (all 'very important'), and lowest 10 (all 'not at all important') – this was then converted to an index between 100 (all 'very important') and 0 (all 'not at all important'). These are shown on Figure 4.3: reasons have been ranked according to the total of all days. Consistently the most important reasons were: 'saves time over alternative routes', 'guarantees no hold-ups' and 'journey times are more predictable than alternative routes'. The least important were 'using it by mistake', 'use of the MSA' and 'trying it out'.

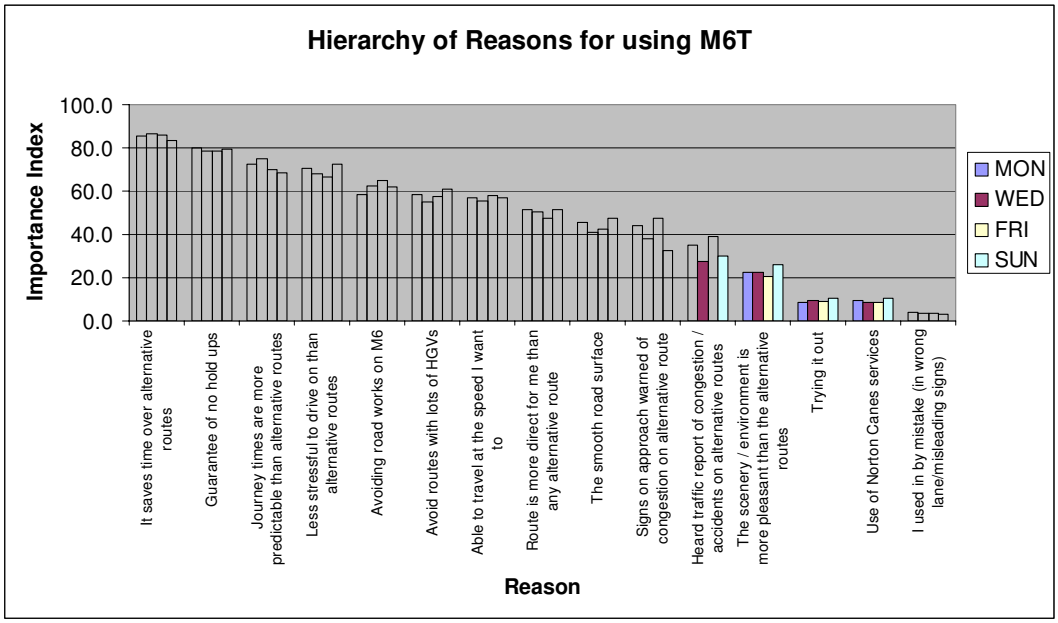

Figure 4.3: Hierarchy of Reasons for using M6T (Non TAG)

4.2.9 *Main Reason for using M6T*

Appendix B Table 4.9: Main Reason for using M6T

(Q2.2: Which of the above reasons would you say was the main reason?)

The summary for an average survey day is shown in Table 4.9 below – daily breakdowns are in the appendices.

Table 4.9: Main Reason for using M6T Summary

Status	Main Reason	All Survey Days
	It saves time over alternative routes	56.3
	I used in by mistake (in wrong lane/misleading signs)	0.7
	Able to travel at the speed I want to	1.4
	Avoid routes with lots of HGVs	2.8
	Trying it out	0.8
	Journey times are more predictable than alternative routes	5.6
	Signs on approach warned of congestion on alternative route	2.6
	The smooth road surface	0.3
	Use of Norton Canes services	0.2
	Less stressful to drive on than alternative routes	8.3
	Guarantee of no hold ups	5.6
	Route is more direct for me than any alternative route	2.8
	The scenery / environment is more pleasant than the alternative routes	0.3
	Heard traffic report of congestion / accidents on alternative routes	2.5
	Avoiding road works on M6	7.2
	Other	2.7
	Total	100.0
Total Valid Count		144,661
Total Invalid Count		4,465
Grand Total Count		149,126

When drivers were asked for the single most important reason for using the M6T, the response was similar to above, with over 50% citing ‘time saving over alternative routes’. The next most important reasons were ‘less stressful than alterative routes’ and ‘avoids M6 roadworks’, both at less than 10% of responses.

4.2.10 *Frequency of Journey*

Appendix B Table 4.10: Frequency of Journey

(Q2.3: How often do you make this journey for this purpose (i.e. between the places given in Q1.1 and Q1.3)?)

On a Monday, Wednesday and Friday, the proportions of journeys that fall into each frequency classification are similar for the frequencies of usage between 'daily' to 'monthly'. Sunday usage is decidedly less for these frequencies. On Monday, Wednesday and Friday, the highest proportion of usage is 'several times a year', at almost 40%, while on a Sunday it reaches over 50%. This is shown on Figure 4.4.

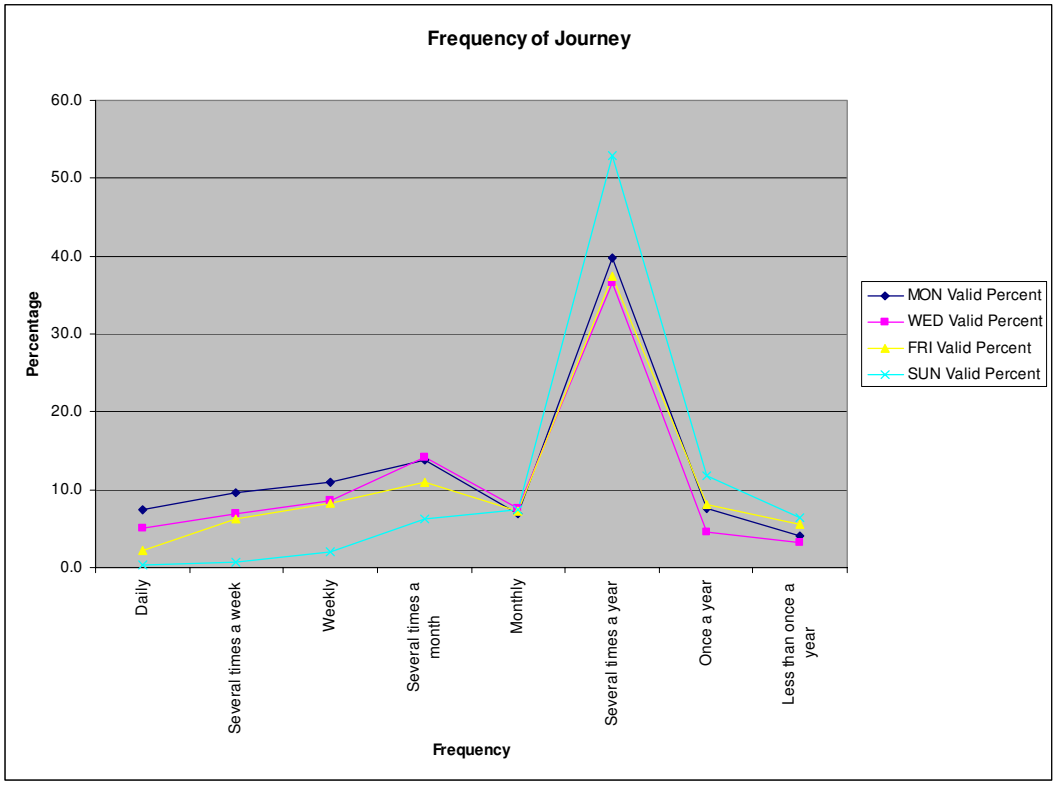

Figure 4.4: Frequency of Journey (Non TAG)

4.2.11 *Route Choice*

Appendix B Table 4.11: Route Choice

(Q2.4: Approximately how many times would you use these routes when making this journey?)

The summary for an average survey day is shown in Table 4.11 below – daily breakdowns are in the appendices.

Table 4.11: Route Choice Summary

Status	Frequency of Using given Route	All Survey Days		
		M6T	M6	A50/A500
Valid	Most of the time	75.2	10.3	1.9
	More than half the time	6.6	3.2	1.0
	About half the time	7.9	10.0	2.5
	Less than half the time	5.0	14.2	5.8
	Very rarely	5.4	42.2	28.0
	Never	0.0	20.1	60.9
	Total	100.0	100.0	100.0
Total Valid Count		140,137	120,542	115,984
Total Invalid Count		8,989	28,584	33,142
Grand Total Count		149,126	149,126	149,126

Over 70% of drivers surveyed responded that they would use the M6T 'most of the time', while a similar proportion of drivers would use the M6 at best 'less than half the time'. The unattractiveness of the A50/A500 is apparent with around 60% 'never' using the route for the journey, regardless of whether a weekend or weekday driver. This shows the M6T is more of an automatic choice for users.

4.2.12 *Age of Users*

Appendix B Table 4.12: Age of Users

(Q3.2: What age group do you belong in?)

The summary for an average survey day is shown in Table 4.12 below – daily breakdowns are in the appendices.

Table 4.12: Age of Users Summary

Status	Age	All Survey Days
Valid	Under 18	0.1
	18 - 24	2.9
	25 - 34	14.2
	35 - 44	23.1
	45 - 54	25.2
	55 - 64	23.8
	65 - 74	9.0
	75+	1.8
	Total	100.0
Total Valid Count		148,732
Total Invalid Count		395
Grand Total Count		149,126

A smooth profile is shown of drivers' ages, peaking in the 45-54 group, noticeably on a Monday and Friday. The largest group consisted of older people at a weekend and younger people on a Wednesday. Around 10% of drivers were over 65.

4.2.13 *Group Size of Users*

Appendix B Table 4.13: Group Composition of Users

(Q3.3: How would you describe the other occupants with you today?)

A summary is shown in Table 4.13 below – data are grouped by day in the appendices.

Table 4.13: Group Composition of Users Summary

Status	Group Composition	MON Valid Percent	WED Valid Percent	FRI Valid Percent	SUN Valid Percent
	Partner	46.8	47.2	56.3	53.4
	Friends	7.0	7.4	7.4	5.4
	Colleagues	11.0	21.4	7.3	1.5
	With small children (under 5)	4.2	4.3	4.7	5.1
	With children (5 - 16)	8.2	1.4	4.0	10.8
	With family (mixed ages)	18.8	15.9	15.5	19.1
	Pets/other animals	4.0	2.2	4.7	4.8
Valid	Total	100.0	100.0	100.0	100.0
Total Valid Count		16,481	11,742	22,991	28,788
Total Invalid Count		19,180	23,037	21,366	5,542
Grand Total Count		35,661	34,779	44,357	34,330

Over half of the drivers who responded on a Friday or Sunday and who were not travelling alone were travelling with their 'partners'; this was slightly less on other days. The grouping of 'with family (mixed ages)' was the next highest proportion on the survey days, apart for Wednesday, when 'colleagues' were the next highest proportion (over 20%). The lowest proportions were for drivers travelling with 'colleagues' on Sunday, and 'with children 5-16' on Wednesday.

4.2.14 *Income of Users*

Appendix B Table 4.14: Income of Users

(Q3.4: Please indicate your approximate household income)

The summary for an average survey day is shown in Table 4.14 below – daily breakdowns are in the appendices.

Table 4.14: Income of Users Summary

Status	Income	All Survey Days
	Under £10,000 pa	3.3
	Between £10k to £19,999	10.5
	Between £20k to £29,999	18.4
	Between £30k to £39,999	18.1
	Between £40k to £49,999	15.9
	Between £50k to £59,999	11.1
	Between £60k to £69,999	6.8
	Over £70k	16.0
Valid	Total	100.0
Total Valid Count		116,304
Total Invalid Count		32,823
Grand Total Count		149,126

Below £70k, a smooth profile is shown of household income, peaking in the £30k-40k. The proportion for £70k is similar to the £40k-50k band: if a similar 'tail' is assumed as at the lower end, an upper income level of about £90k is indicated. Compared with national statistics for car

drivers from 2006, the lowest half of income bands surveyed feature higher proportions than nationally, while the highest half of income bands feature lower proportions than nationally.

4.3 Cross-Tabulation Analysis

4.3.1 *Journey Length v Journey Purpose*

Appendix B Table 4.15: Journey Length and Journey Purpose

(Q1.1: Where did your journey start? Q1.3: And where were you travelling to?

Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?)

The summary for weekday/weekend survey days are shown in Table 4.15 below – daily breakdowns are in the appendices.

Table 4.15: Journey Length (by distance and duration) and Journey Purpose Summary

	MON-WED-FRI (WEEKDAY) Journey Purpose					SUN (WEEKEND) Journey Purpose				
Journey Distance	**EB**	**HBW**	**HEB**	**HBO**	**NHBO**	**EB**	**HBW**	**HEB**	**HBO**	**NHBO**
between 0 and 50 km	3.9	23.0	3.6	3.8	3.3	0.0	3.2	1.1	2.3	3.4
between 50 and 100 km	10.4	32.3	14.4	6.2	10.4	0.0	20.1	4.8	6.1	7.5
between 100 and 150 km	19.4	14.0	14.6	7.0	11.0	16.7	36.8	6.0	8.9	13.3
between 150 and 200 km	13.2	12.1	15.6	10.4	11.2	0.0	6.0	15.0	11.0	18.0
between 200 and 250 km	15.6	5.3	17.1	16.0	13.7	15.1	0.0	12.5	15.2	10.3
between 250 and 300 km	14.0	6.2	16.8	17.6	14.3	1.2	24.1	20.2	19.9	25.4
between 300 and 350 km	10.3	4.5	11.3	14.4	17.8	5.0	9.8	8.3	17.0	0.0
between 350 and 400 km	4.8	1.1	3.0	9.3	8.7	0.0	0.0	8.2	6.6	7.7
between 400 and 450 km	2.1	0.7	1.1	3.5	2.6	0.0	0.0	2.4	4.0	5.2
between 450 and 500 km	4.0	0.0	0.6	3.0	1.4	0.0	0.0	9.3	2.1	0.0
more than 500 km	2.3	0.9	2.0	8.9	5.6	62.0	0.0	12.3	7.0	9.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Count	8,379	11,459	19,326	31,995	3,681	258	348	1,199	19,540	796

	MON-WED-FRI (WEEKDAY) Journey Purpose					SUN (WEEKEND) Journey Purpose				
Journey Duration	**EB**	**HBW**	**HEB**	**HBO**	**NHBO**	**EB**	**HBW**	**HEB**	**HBO**	**NHBO**
Less than 1 Hour	4.5	21.9	4.0	3.8	5.1	4.7	2.2	1.6	2.6	3.0
Between 1 and 2 hours	14.8	38.5	20.2	8.5	15.8	12.7	29.4	14.2	10.9	17.7
Between 2 and 3 hours	24.4	15.6	24.4	12.0	15.2	4.9	24.8	19.7	15.4	13.7
Between 3 and 4 hours	19.4	12.2	23.7	16.5	16.8	11.0	8.5	19.5	20.9	18.9
Between 4 and 5 hours	15.1	5.9	15.1	18.4	20.6	17.7	4.4	14.7	20.2	10.3
Between 5 and 6 hours	10.3	4.4	7.0	13.8	12.5	19.2	6.9	7.2	13.8	13.7
Between 6 and 7 hours	5.9	0.0	2.3	11.2	5.6	4.0	8.5	9.0	6.8	12.3
Between 7 and 8 hours	2.2	0.4	1.4	6.3	3.6	11.3	0.0	3.5	4.0	5.5
Between 8 and 9 hours	1.4	0.0	1.4	4.0	1.5	0.0	0.0	5.1	1.6	0.0
Between 9 and 10 hours	0.8	0.0	0.1	2.5	1.8	0.0	0.0	4.6	1.1	1.2
More than 10 hours	1.1	1.0	0.4	3.1	1.4	14.4	15.3	0.9	2.8	3.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Count	12,736	14,295	28,385	42,889	6,126	699	496	1,936	27,067	1,362

More responses came from the journey duration survey than journey distance survey. On each of the surveyed weekdays, home based work (HBW) journeys were most prevalent in the shorter journey bands, presumably related to daily commuting. On Sunday, there were higher proportions of trips that were employment-related (EB, HBW and HEB) in the longer distance bands than on other days. Generally the peak banding for HBW was for the shorter distances, while HBO had the peak banding for the longer distances.

4.3.2 *Journey Length v Likelihood of MSA Stop*

Appendix B Table 4.16: Journey Length and Likelihood of MSA Stop

(Q1.1: Where did your journey start? Q1.3: And where were you travelling to?

Q1.9: Did you stop en route eg at a service station?)

The summary for an average survey day is shown in Table 4.16 below – daily breakdowns are in the appendices.

Table 4.16: Journey Length (by distance and duration) and Likelihood of MSA Stop Summary

	All Survey Days MSA Stop		
Journey Distance	**Yes**	**Total**	**Count**
between 0 and 50 km	2.8	100.0	5,479
between 50 and 100 km	8.5	100.0	11,181
between 100 and 150 km	26.6	100.0	10,873
between 150 and 200 km	36.8	100.0	11,723
between 200 and 250 km	54.6	100.0	14,183
between 250 and 300 km	72.3	100.0	15,814
between 300 and 350 km	74.9	100.0	12,413
between 350 and 400 km	86.4	100.0	5,876
between 400 and 450 km	84.4	100.0	2,423
between 450 and 500 km	82.0	100.0	1,984
more than 500 km	96.2	100.0	5,614

	All Survey Days MSA Stop		
Journey Duration	**Yes**	**Total**	**Count**
Less than 1 Hour	2.6	100.0	7,632
Between 1 and 2 hours	9.9	100.0	21,689
Between 2 and 3 hours	27.1	100.0	23,481
Between 3 and 4 hours	54.3	100.0	25,566
Between 4 and 5 hours	70.7	100.0	22,589
Between 5 and 6 hours	85.6	100.0	15,143
Between 6 and 7 hours	92.8	100.0	8,812
Between 7 and 8 hours	89.2	100.0	4,966
Between 8 and 9 hours	94.1	100.0	2,883
Between 9 and 10 hours	96.1	100.0	1,779
More than 10 hours	93.8	100.0	3,030

The occurrence of stops at services increases with journey length, either by distance or duration. For journeys in excess of the 200-250km or 3-4 hours bands, over 50% of drivers will stop on their journey. For journeys more than 500km, 95% of drivers would stop at services.

4.3.3 *Journey Length v Vehicle Type*

Appendix B Table 4.17: Journey Length and Vehicle Type

(Q1.1: Where did your journey start? Q1.3: And where were you travelling to?

Q1.10: What type of vehicle were you using when making this journey?)

The summary for weekday/weekend survey days are shown in Table 4.17 below – daily breakdowns are in the appendices.

Table 4.17: Journey Length and Vehicle Type Summary

	MON-WED-FRI (WEEKDAY) Vehicle Type						SUN (WEEKEND) Vehicle Type					
Journey Distance	Van	HGV	Bus/Coach	Motorcycle	Car	Other	Van	HGV	Bus/Coach	Motorcycle	Car	Other
between 0 and 50 km	2.9	0.0	0.0	0.0	7.3	0.0	7.3	0.0	0.0	0.0	2.1	0.0
between 50 and 100 km	15.1	1.9	16.9	0.0	13.3	3.4	9.5	0.0	0.0	0.0	6.0	0.0
between 100 and 150 km	11.7	16.2	19.1	0.0	11.3	16.1	3.4	0.0	0.0	0.0	9.8	0.0
between 150 and 200 km	7.7	21.8	14.8	0.0	12.2	14.9	5.7	0.0	51.6	0.0	11.7	5.3
between 200 and 250 km	18.9	16.9	16.4	0.0	14.0	8.0	5.5	0.0	0.0	0.0	15.1	7.9
between 250 and 300 km	16.7	12.5	8.7	0.0	15.2	18.4	14.6	0.0	0.0	100.0	20.1	28.9
between 300 and 350 km	9.7	17.8	0.0	0.0	11.8	8.0	11.8	0.0	0.0	0.0	15.9	23.7
between 350 and 400 km	4.6	4.5	0.0	0.0	6.0	11.5	0.0	0.0	0.0	0.0	6.8	15.8
between 400 and 450 km	3.1	0.0	9.3	0.0	2.2	5.7	11.8	34.5	0.0	0.0	3.2	5.3
between 450 and 500 km	1.0	6.3	0.0	0.0	1.9	0.0	3.4	0.0	0.0	0.0	2.3	0.0
more than 500 km	8.5	2.0	14.8	0.0	4.8	13.8	27.2	65.5	48.4	0.0	7.0	13.2
Total	100.0	100.0	100.0	0.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Count	5,739	3,045	183	0	66,799	87	740	165	31	48	21,404	38

On weekdays surveyed there was little variability in the journey length profile for cars, the most populous users, exceeding 10% for each band between 50 and 350km. On Sunday, 10% was exceeded in each band between 150 and 350km. The profile of journey distances for HGVs were similar on Monday and Friday. On Wednesday and Sunday there were higher proportions of long distance trips by HGVs. Vans were represented in most journey distance bands on each of the survey days.

4.3.4 *Journey Purpose v Route Choice*

Appendix B Table 4.18: Journey Purpose and Route Choice

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?

Q2.4: Approximately how many times would you use these routes when making this journey?)

The summary for an average survey day is shown in Table 4.18 below – daily breakdowns are in the appendices.

Table 4.18: Journey Purpose and Route Choice Summary

	Frequency of Using M6T						
Journey Purpose	Most of the time	More than half the time	About half the time	Less than half the time	Very rarely	Total	Count
EB	64.6	8.7	9.3	8.9	8.6	100.0	13,265
HBW	65.2	7.8	10.3	10.3	6.4	100.0	14,488
HEB	76.8	6.3	8.9	4.4	3.6	100.0	30,597
HBO	79.0	5.9	6.7	3.4	5.0	100.0	71,685
NHBO	70.1	5.5	8.9	5.6	10.0	100.0	7,489

Around 70% of drivers by journey-purpose would use the M6T 'most of the time'. This drops to below 60% on Friday for EB and HBW journey purposes. Similar proportions would use the M6 at best 'less than half the time'. 15 of the 20 journey purposes on the survey days would have more than 50% of drivers 'never' use the A50/A500.

4.3.5 *Journey Purpose v Who Pays Toll*

Appendix B Table 4.19: Journey Purpose and Who Pays Toll

Journey Purpose and Who Pays Toll

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?

Q1.14: Who paid for the toll charge when making this trip?)

The summary for an average survey day is shown in Table 4.19 below – daily breakdowns are in the appendices.

Table 4.19: Journey Purpose and Who Pays Toll Summary

	Who Pays Toll					
Journey Purpose	**Employer reimburses cost**	**Self**	**Split between travellers**	**Other passengers / driver**	**Total**	**Count**
EB	83.6	15.7	0.1	0.6	100.0	13,899
HBW	33.3	64.7	1.0	1.0	100.0	15,473
HEB	73.3	25.1	1.2	0.4	100.0	32,213
HBO	1.6	87.7	5.4	5.3	100.0	75,346
NHBO	14.6	76.3	4.9	4.2	100.0	8,041

70%-80% of drivers whose journey purpose is EB or HEB would have their toll reimbursed by employers. The majority of HBW, HBO and NHBO drivers on weekdays would pay the toll themselves.

4.3.6 *Journey Purpose v Hierarchy of Reasons for using M6T*

Appendix B Table 4.20: Journey Purpose and Hierarchy of Reasons for using M6T

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?

Q2.1: How important were the following in your decision to use the M6 Toll for your journey (on the day you were given the questionnaire)?)

The weighting of importance for using the M6T was attained by combining 60% of 'very important' responses, 30% of 'quite important' responses and 10% of 'not at all important' responses for a particular reason. This means the highest weighting would be 60 (all 'very important'), and lowest 10 (all 'not at all important') – this was then converted to an index between 100 (all 'very important') and 0 (all 'not at all important'). The results are shown in Figures 4.5 – 4.8: reasons have been ranked according to the total of all purposes. Drivers with a HBW or HEB journey purpose tended to give more importance to the main reason for using the M6T than other journey purposes. Drivers with an EB or NHBO journey purpose on a Sunday gave lower importance to reasons for using the M6T than other purposes. Consistently the most important reasons for using the M6T were 'time saving over alternative routes' and 'guarantees of no hold-ups'. Most variation in the ranking of journey purposes occurs on a Wednesday.

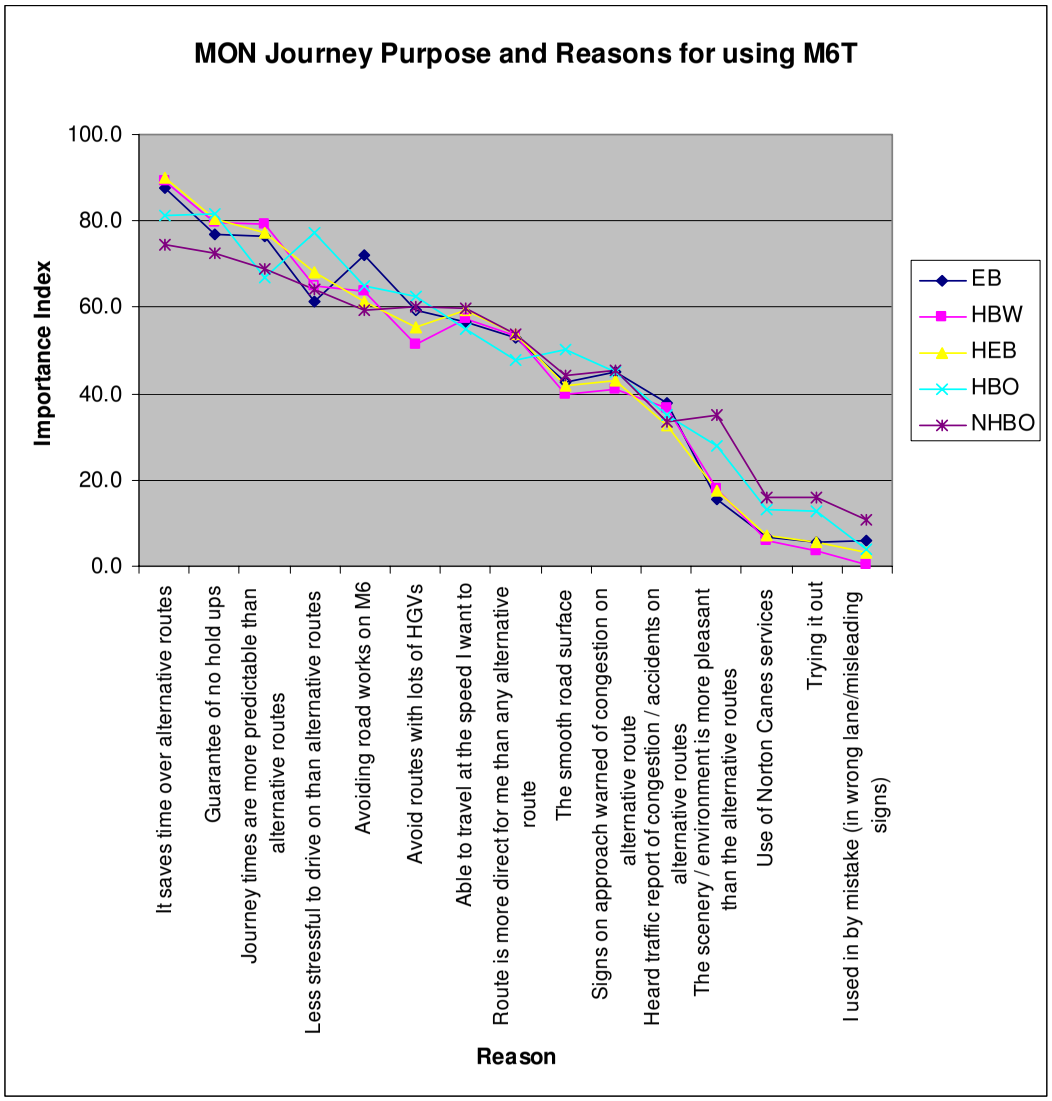

Figure 4.5: MONDAY Journey Purpose and Hierarchy of Reasons for using M6T

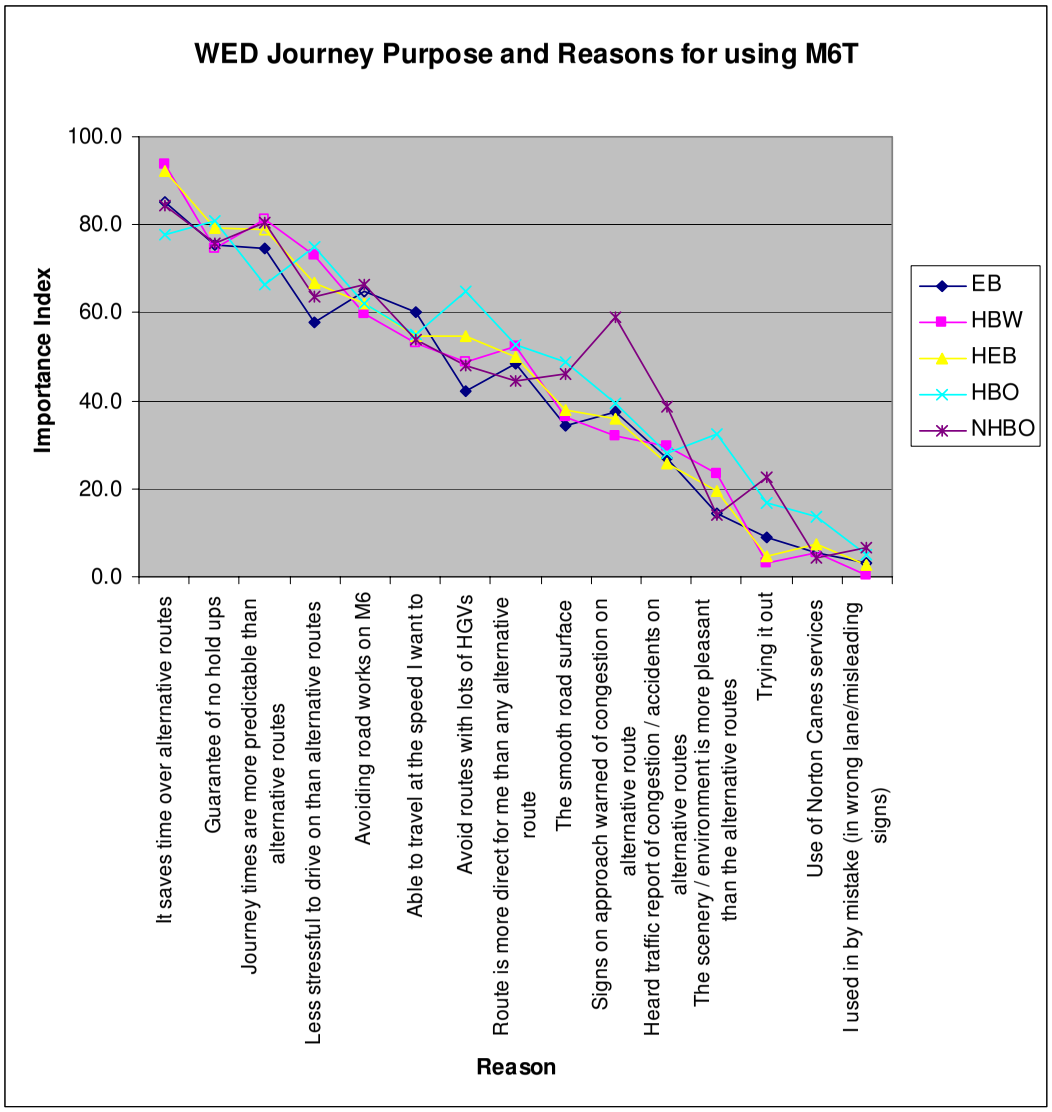

Figure 4.6: WEDNESDAY Journey Purpose and Hierarchy of Reasons for using M6T

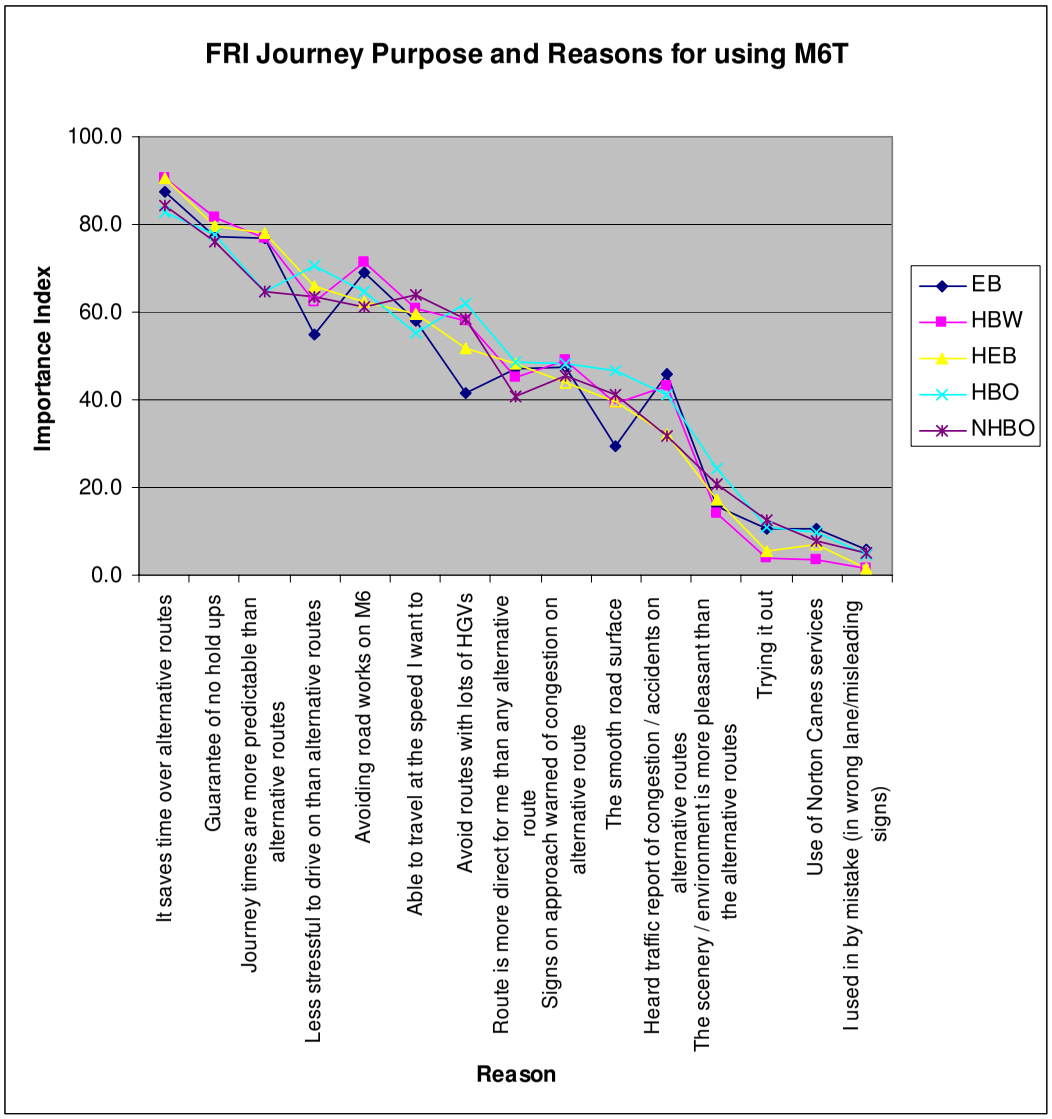

Figure 4.7: FRIDAY Journey Purpose and Hierarchy of Reasons for using M6T

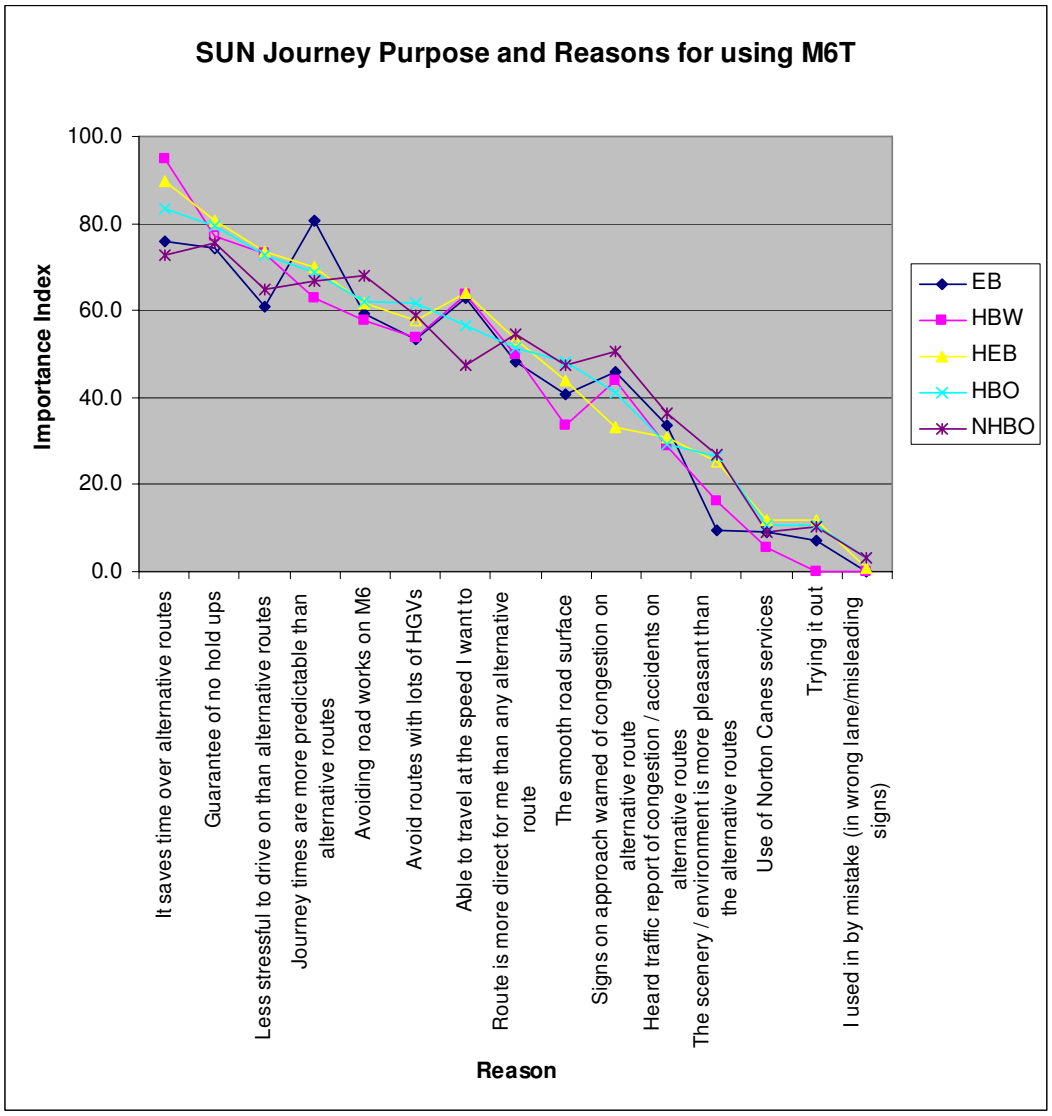

Figure 4.8: SUNDAY Journey Purpose and Hierarchy of Reasons for using M6T

4.3.7 *Journey Purpose v Frequency of Journey*

Appendix B Table 4.21: Journey Purpose and Frequency of Journey

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?

Q2.3: How often do you make this journey for this purpose (ie between the places given in Q1.1 and Q1.3)?)

The summary for an average survey day is shown in Table 4.21 below – daily breakdowns are in the appendices.

Table 4.21: Journey Purpose and Frequency of Journey Summary

	Journey Purpose					
Frequency of Journey	**EB**	**HBW**	**HEB**	**HBO**	**NHBO**	**Count**
First time today	13.9	1.4	12.1	15.5	17.3	
Daily	1.4	25.1	1.6	0.0	1.0	
Several times a week	8.2	25.3	4.6	0.7	2.6	
Weekly	11.0	19.9	9.3	1.7	5.1	
Several times a month	15.8	14.7	19.5	5.0	11.4	
Monthly	9.0	3.1	9.4	7.1	5.4	
Several times a year	31.0	10.2	36.9	51.8	42.1	
Once a year	6.1	0.0	4.3	11.5	7.1	
Less than once a year	3.7	0.3	2.2	6.6	8.1	
Total	100.0	100.0	100.0	100.0	100.0	36,469

For drivers surveyed on HBW journey purposes, 90% of trips were made at frequencies between 'daily' or 'several times a month' on weekdays. On Sunday, this proportion dropped to 50%. Journeys made 'several times a year' were the most popular for each journey purpose on the survey days, apart from HBW journey purposes on weekdays.

4.3.8 *Actual Lateness of Arrival v Acceptable Lateness of Arrival*

Appendix B Table 4.22: Actual Lateness and Acceptable Lateness

(Q1.5: At approximately what time did you arrive at your destination?

Q1.8: I needed to be at my destination no later than … minutes after my expected time)

The summary for survey days is shown in Table 4.22 below – daily breakdowns are in the appendices.

Table 4.22: Actual Lateness and Acceptable Lateness Summary

	Actual Lateness			
Allowable Lateness	**Mon**	**Wed**	**Fri**	**Sun**
on time	100.0	38.0	100.0	100.0
upto 10 min late	67.6	88.3	81.3	84.6
upto 20 min late	86.6	94.2	84.6	97.3
upto 30 min late	91.7	96.8	89.7	95.5
upto 60 min late	98.0	99.7	96.7	97.9
more than 1h late	2.1	0.0	7.7	3.4

All trips that had to be on time were on time, apart from on Wednesday. For trips that could be upto 20 mins late, over 84% met this criteria on Friday – it was higher on other days. For trips that could be more than 1hr late, 92% arrived earlier and bettered this criteria on Friday: on other days, the proportion was higher.

4.3.9 *Arrival Time Constraint v Goods Vehicle Load Type*

Appendix B Table 4.23: Arrival Time Constraint and Goods Vehicle Load Type

(Q1.7: Did you have to arrive at your destination by a particular time?

Q1.11: Goods Vehicle Drivers … owner … load type … load status)

The summary for an average survey day is shown in Table 4.23 below – daily breakdowns are in the appendices.

Table 4.23: Arrival Time Constraint and Goods Vehicle Load Type Summary

	Arrival Time Constraint		
Load Type	**Yes**	**Total**	**Count**
Bulk (Steel, coal, agriculture, aggregates)	19.2	100.0	1,117
High value	50.1	100.0	1,734
General haulage	63.4	100.0	2,066
Food	71.8	100.0	908
Low value	31.7	100.0	878
Parcels/post	63.9	100.0	485
Non food retail	44.4	100.0	859
Various	23.8	100.0	3,077

Over 50% of goods vehicles with load types of 'food', 'parcels/post', 'general haulage' and 'high value' had stipulations regarding their arrival times.

4.3.10 *Vehicle Type v Hierarchy of Reasons for using M6T*

Appendix B Table 4.24: Vehicle Type and Hierarchy of Reasons for using M6T

(Q1.10: What type of vehicle were you using when making this journey?

Q2.1: How important were the following in your decision to use the M6 Toll for your journey (on the day you were given the questionnaire)?)

The weighting of importance for using the M6T was attained by combining 60% of 'very important' responses, 30% of 'quite important' responses and 10% of 'not at all important' responses for a particular reason. This means the highest weighting would be 60 (all 'very important'), and lowest 10 (all 'not at all important') – this was then converted to an index between 100 (all 'very important') and 0 (all 'not at all important'). The results are shown in Figures 4.9 – 4.12: reasons have been ranked according to the total of all vehicle types. The most importance was given to 'saving time over alternatives' and 'avoidance of hold-ups'. The lowest importance was for 'using it by mistake'. Most variation in the rankings by vehicle type occurs on a Sunday. HGV and bus/coach had most variation in the trend on each survey day. Some variation appears due to the smaller sample size available. Where no responses are received for a class of vehicle the importance index is displayed as 0.

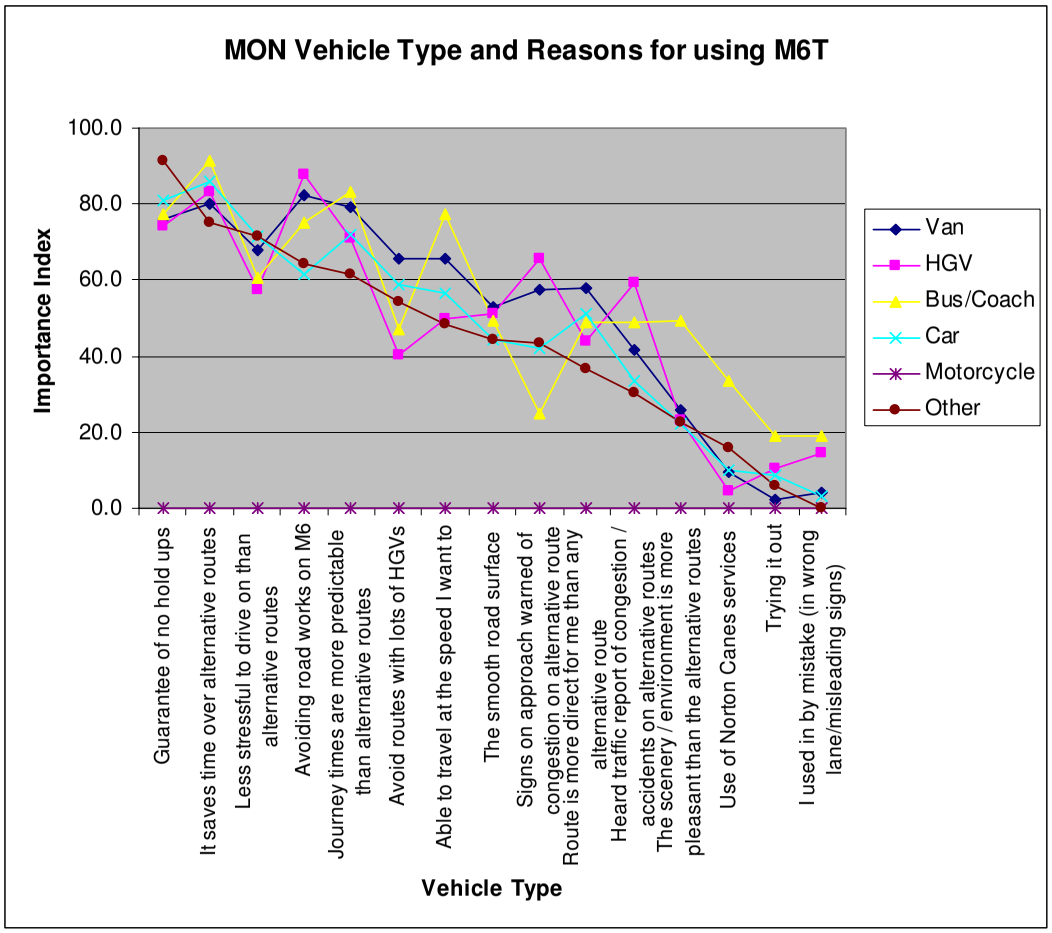

Figure 4.9: MONDAY Vehicle Type and Hierarchy of Reasons for using M6T

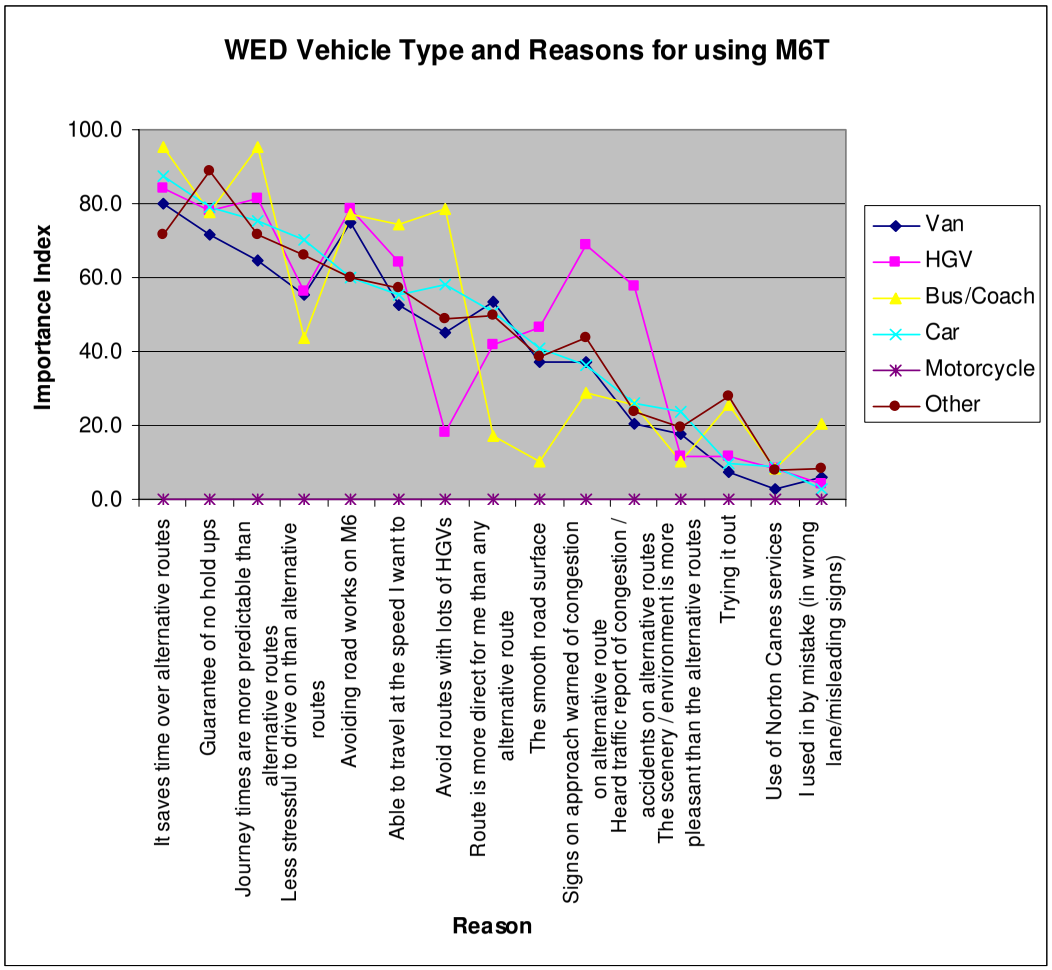

Figure 4.10: WEDNESDAY Vehicle Type and Hierarchy of Reasons for using M6T

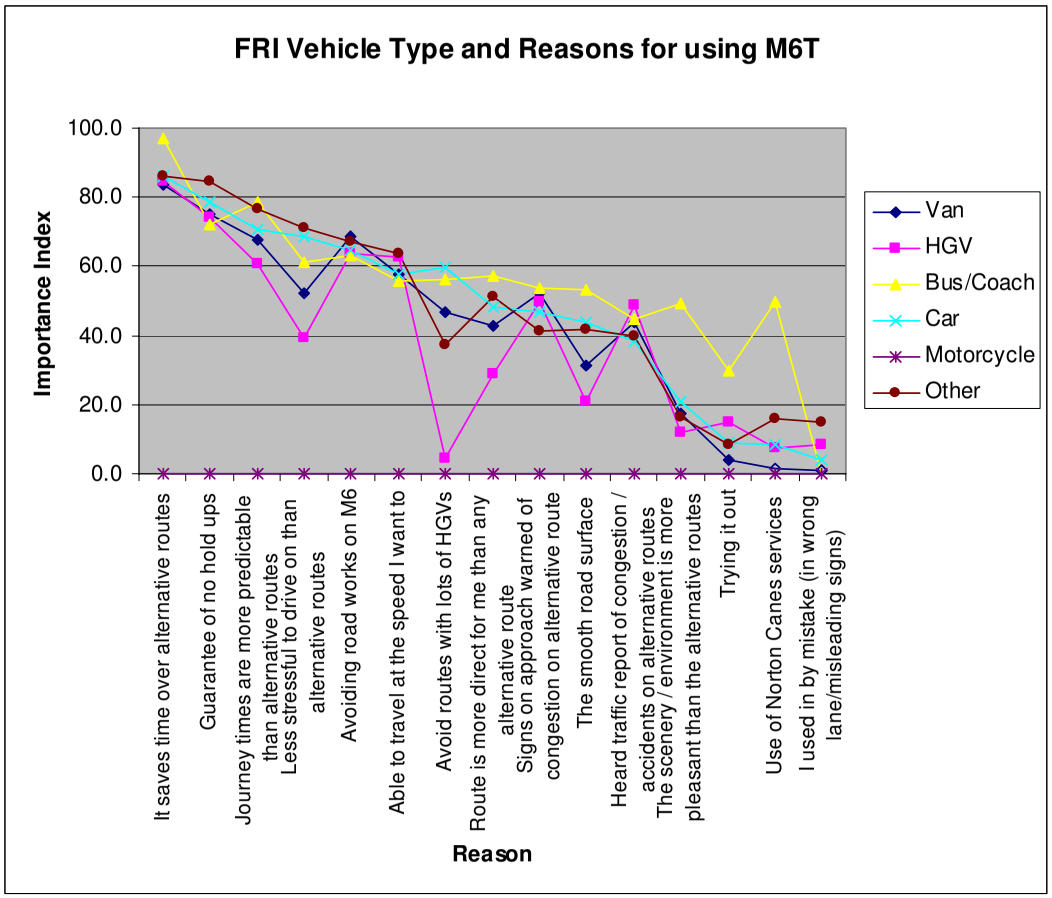

Figure 4.11: FRIDAY Vehicle Type and Hierarchy of Reasons for using M6T

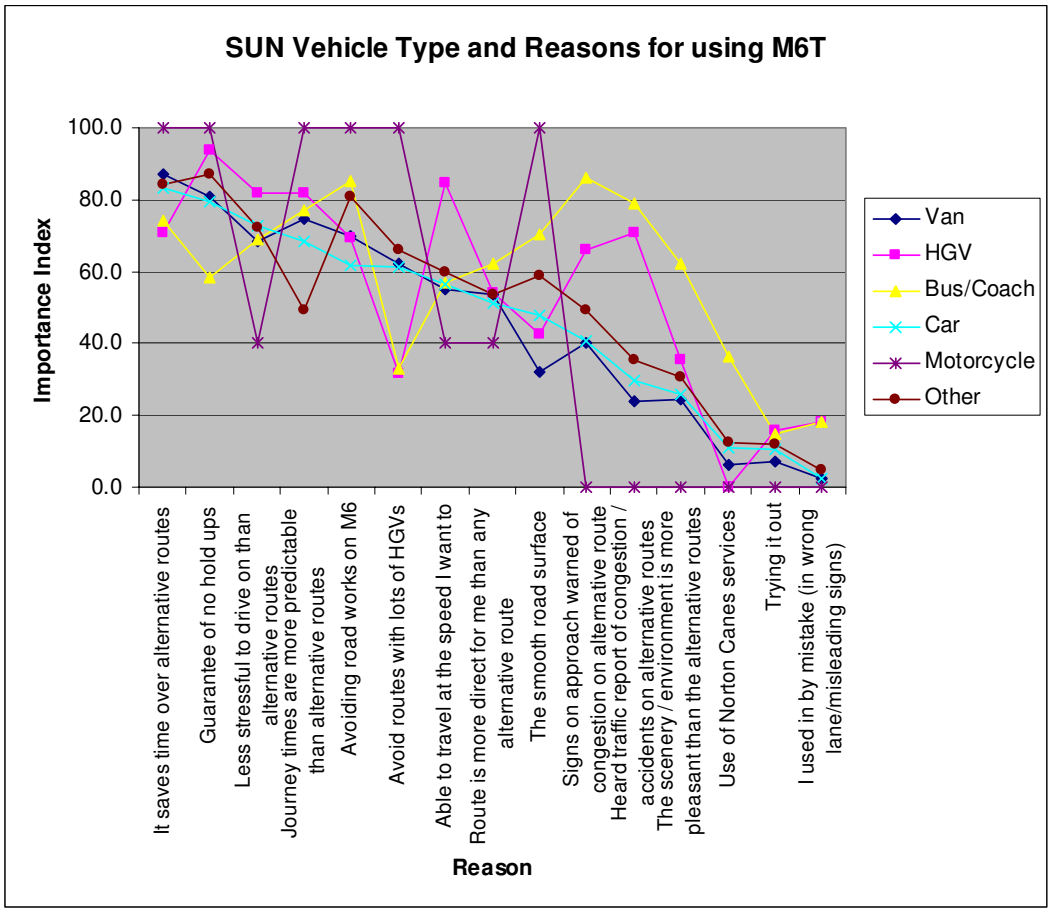

Figure 4.12: SUNDAY Vehicle Type and Hierarchy of Reasons for using M6T

4.3.11 *Occupancy v Group Composition*

Appendix B Table 4.25: Occupancy and Group Composition

(Q1.13: Car drivers/motorcyclists/goods vehicle drivers … no of occupants

Q3.3: How would you describe the other occupants travelling with you today?)

The summary for an average survey day is shown in Table 4.25 below – daily breakdowns are in the appendices.

Table 4.25: Occupancy and Group Composition Summary

	Group Composition								
Occupancy (besides driver)	Partner	Friends	Colleagues	With small children (under 5)	With children (5 - 16)	With family (mixed ages)	Pets/other animals	Total	Count
One passenger	68.3	5.6	8.7	1.2	2.6	9.1	4.4	100.0	47,134
Two passengers	29.0	9.6	6.2	9.1	11.2	32.1	2.7	100.0	14,219
Three passengers	29.2	7.9	1.6	11.4	18.9	29.1	2.0	100.0	10,560
Four or more passengers	24.5	2.9	6.1	11.4	22.8	28.4	4.0	100.0	4,126

Of journeys on the surveyed days that had one passenger, in 60-70% of cases it was a 'partner'. Of journeys with two or three passengers, 'family (mixed ages)' was the largest grouping in around 30% of journeys.

4.3.12 *Who Pays Toll v Main Reason for using M6T*

Appendix B Table 4.26: Who Pays Toll and Main Reason for using M6T

(Q1.14: Who paid for the toll charge when making this trip?

Q2.1: How important were the following in your decision to use the M6 Toll for your journey (on the day you were given the questionnaire)?)

The summary for an average survey day is shown in Table 4.26 below – daily breakdowns are in the appendices.

Table 4.26: Who Pays Toll and Main Reason for using M6T Summary

	Who Pays Toll			
Main Reason	**Employer reimburses cost**	**Self**	**Split between travellers**	**Other passengers / driver**
It saves time over alternative routes	64.0	53.1	57.2	48.7
I used in by mistake (in wrong lane/misleading signs)	0.4	0.8	0.2	0.8
Able to travel at the speed I want to	1.6	1.1	2.5	2.8
Avoid routes with lots of HGVs	1.2	3.5	3.6	2.7
Trying it out	0.1	1.0	1.2	3.3
Journey times are more predictable than alternative routes	8.0	4.9	3.2	1.0
Signs on approach warned of congestion on alternative route	1.7	2.8	4.2	6.6
The smooth road surface	0.1	0.3	0.0	0.7
Use of Norton Canes services	0.1	0.2	0.0	0.6
Less stressful to drive on than alternative routes	2.8	10.6	9.1	12.0
Guarantee of no hold ups	4.3	6.3	7.1	4.0
Route is more direct for me than any alternative route	2.5	2.9	3.6	1.3
The scenery / environment is more pleasant than the alternative routes	0.1	0.4	0.4	0.0
Heard traffic report of congestion / accidents on alternative routes	2.2	2.7	1.7	2.8
Avoiding road works on M6	8.0	7.0	4.2	6.8
Other	2.8	2.5	1.9	5.9
Total	100.0	100.0	100.0	100.0
Count	42,330	91,308	4,920	4,687

Regardless of who paid the toll, the most frequent most important reason for using the M6T was for time saving over alternatives, reaching over 60% of users who have the toll paid by employers. For 8% of users who had the toll reimbursed by employers (almost double the proportion of users who pay the toll themselves), the most important reason was predictably of journey . While between 9%-12% of users who did not have the toll reimbursed by employers noted the most important reason was that the M6T was less stressful than other routes, less than 3% of employer-reimbursed drivers noted it.

4.3.13 *Hierarchy of Reasons for using M6T v Frequency of Journey*

Appendix B Table 4.27: Hierarchy of Reasons for using M6T and Frequency of Journey

(Q2.1: How important were the following in your decision to use the M6 Toll for your journey (on the day you were given the questionnaire)?

Q2.3: How often do you make this journey for this purpose (ie between the places given in Q1.1 and Q1.3)?)

The weighting of importance for using the M6T was attained by combining 60% of 'very important' responses, 30% of 'quite important' responses and 10% of 'not at all important' responses for a particular reason. This means the highest weighting would be 60 (all 'very important'), and lowest 10 (all 'not at all important') – this was then converted to an index between 100 (all 'very important') and 0 (all 'not at all important'). The results are shown in Figures 4.13 – 4.16: reasons have been ranked according to the total of all journey frequencies. To help in analysis, the frequency of journey responses were classed as first time, regular ('daily' – 'several times a month'), occasional ('monthly' – 'several times a year'), infrequent ('once a year' – 'less than once a year'). The most importance was given to 'saving time over alternatives' and 'avoidance of hold-ups'. The lowest importance was for 'using it by mistake'. Regular and occasional drivers gave the higher ratings to the most important reasons than infrequent and first-time users. Most variation in the rankings by journey frequency occurs on a Wednesday.

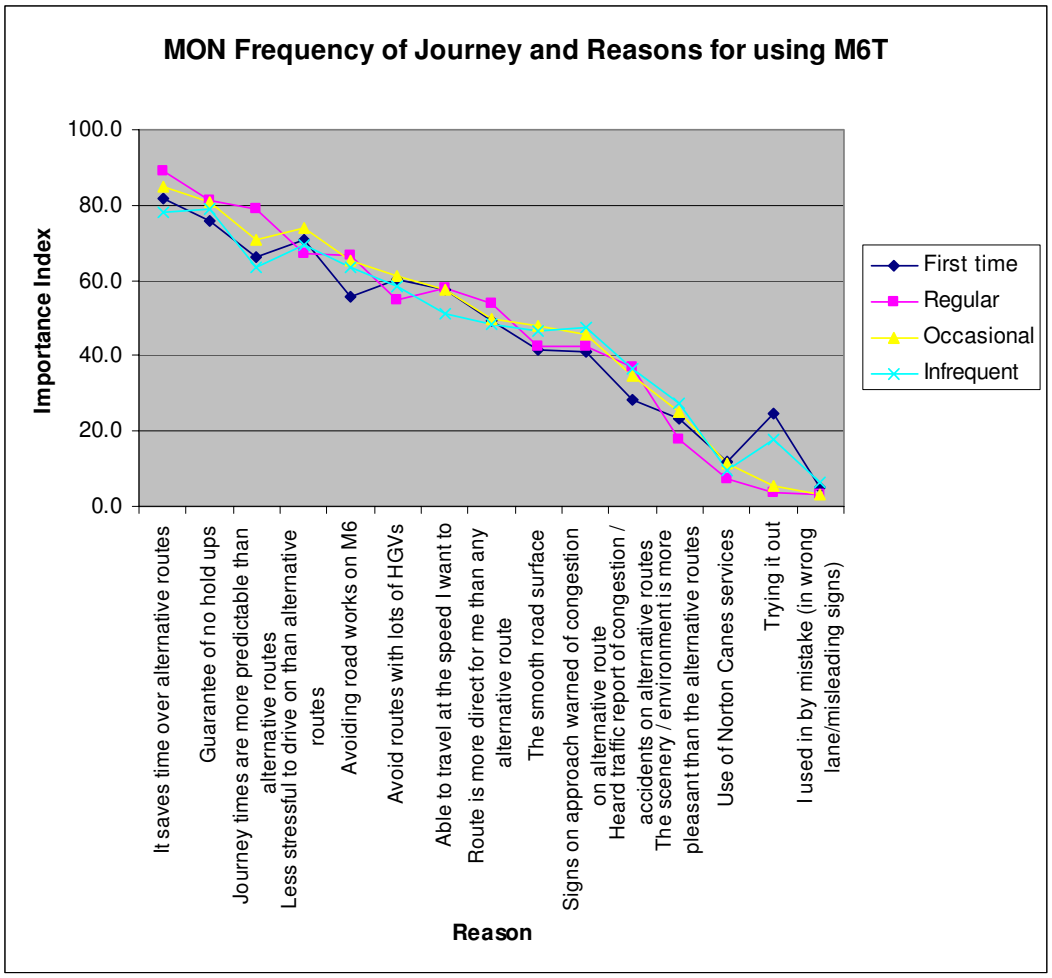

Figure 4.17: MONDAY Hierarchy of Reasons for using M6T and Frequency of Journey

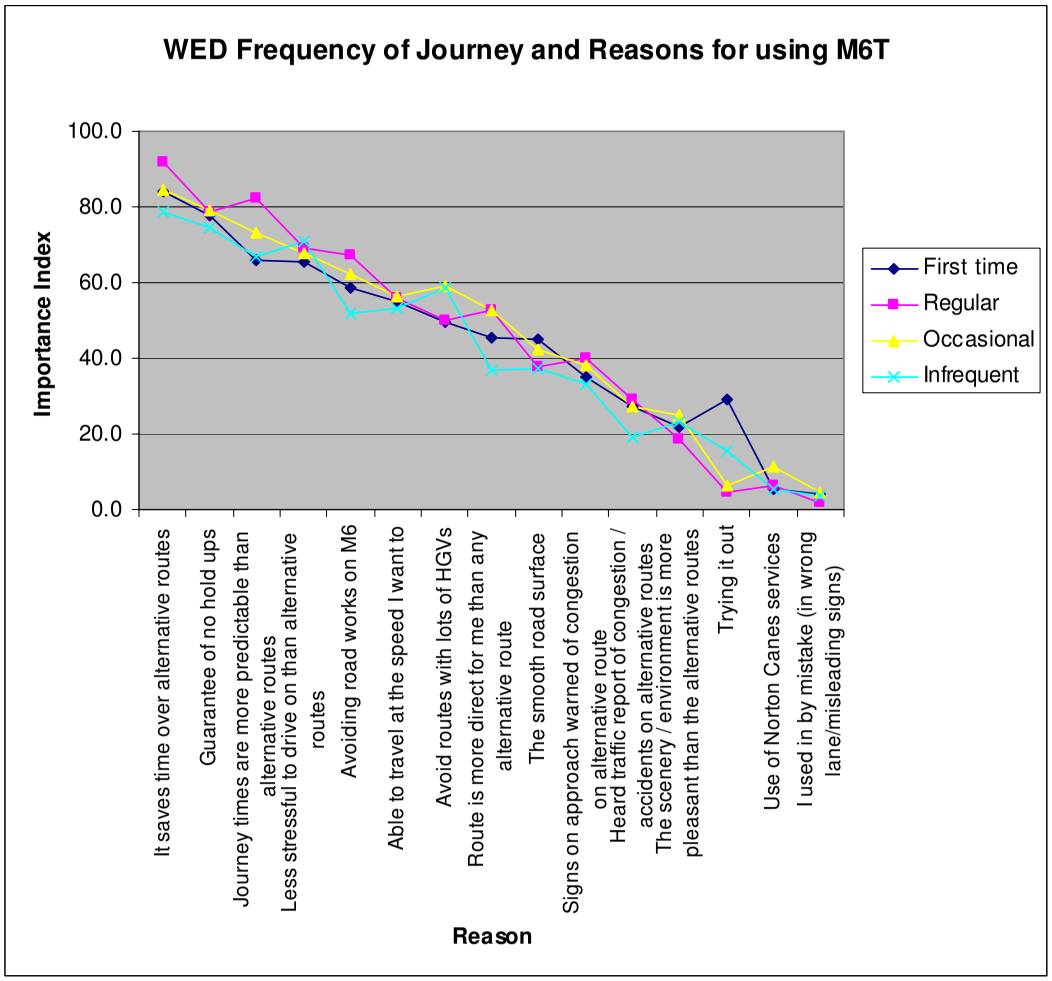

Figure 4.18: WEDNESDAY Hierarchy of Reasons for using M6T and Frequency of Journey

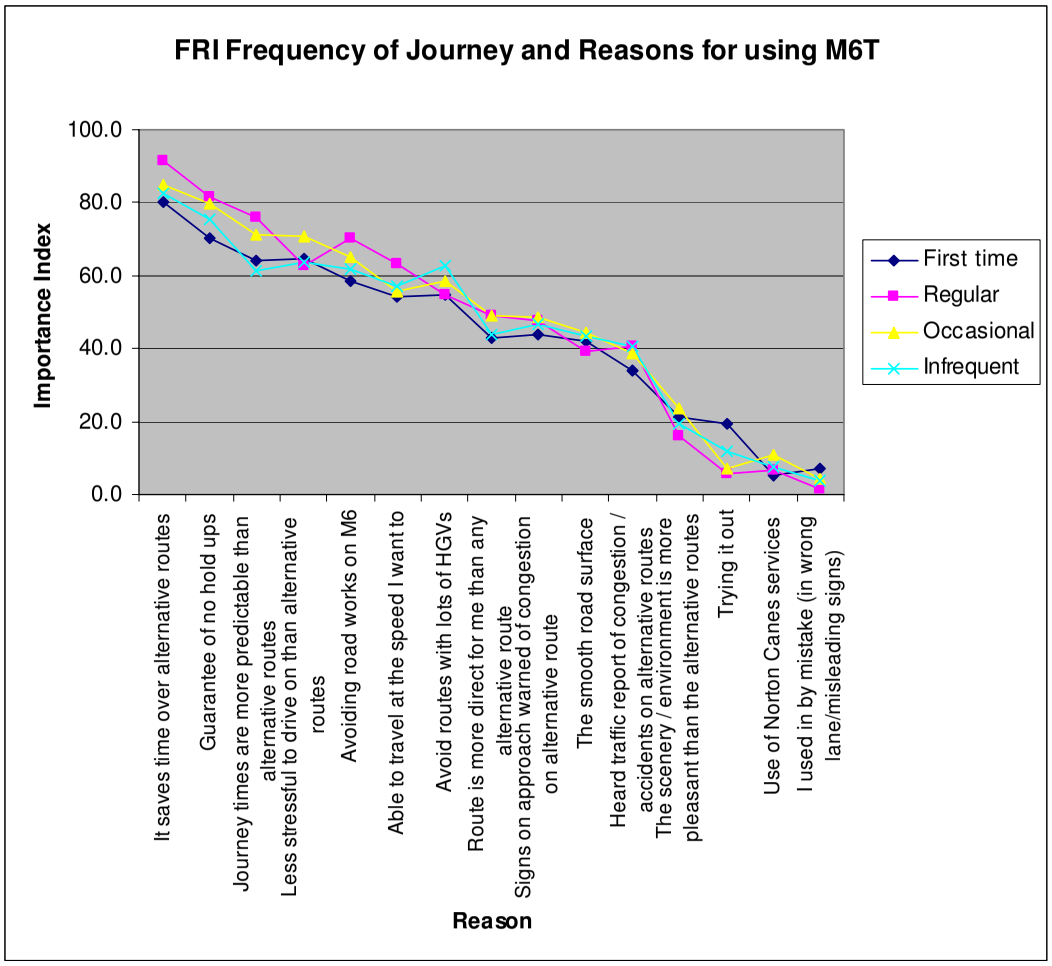

Figure 4.19: FRIDAY Hierarchy of Reasons for using M6T and Frequency of Journey

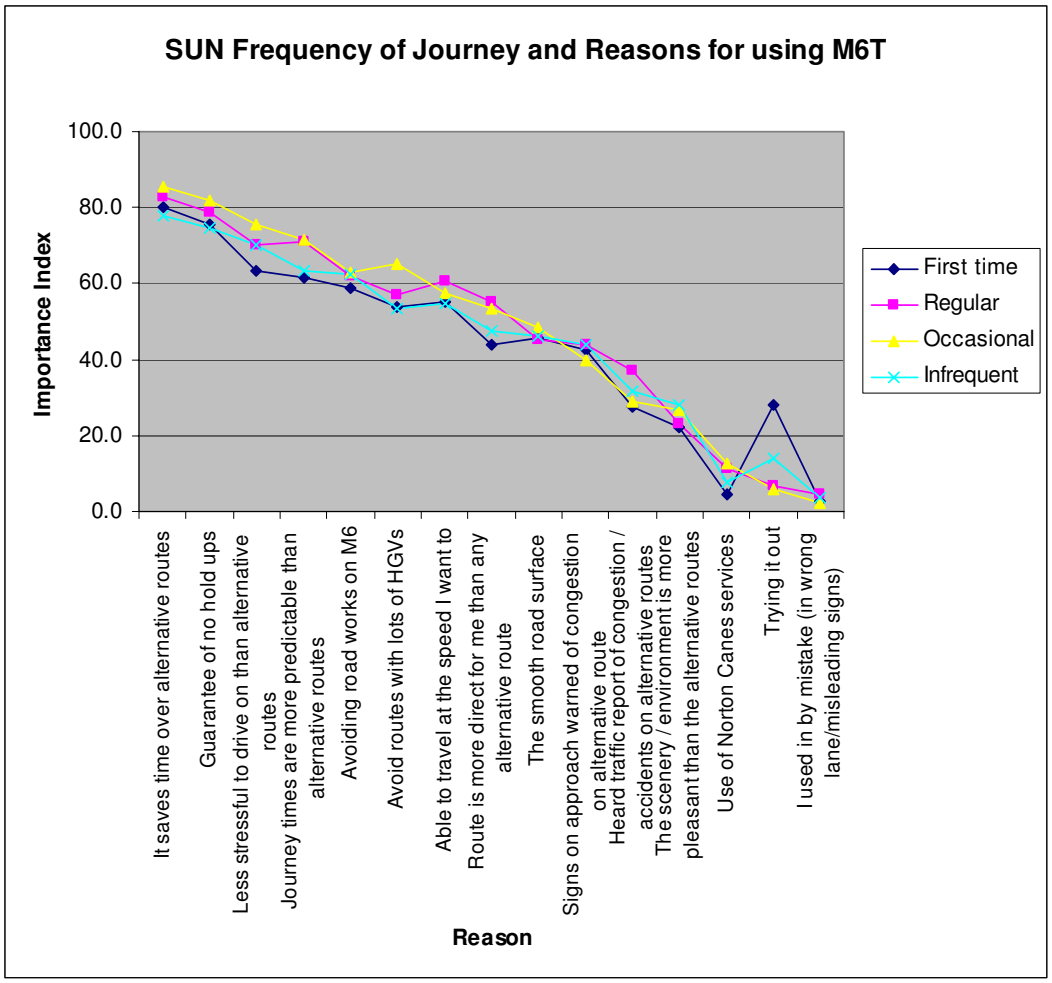

Figure 4.20: SUNDAY Hierarchy of Reasons for using M6T and Frequency of Journey

4.3.14 *Frequency of Journey v Route Choice*

Appendix B Table 4.28: Frequency of Journey and Route Choice

(Q2.3: How often do you make this journey for this purpose (ie between the places given in Q1.1 and Q1.3)?

Q2.4: Approximately how many times would you use these routes when making this journey?)

The summary for an average survey day is shown in Table 4.28 below – daily breakdowns are in the appendices.

Table 4.28: Frequency of Journey and Route Choice Summary

	Frequency of Using M6T						
Frequency of Journey	**Most of the time**	**More than half the time**	**About half the time**	**Less than half the time**	**Very rarely**	**Total**	**Count**
First time today	8.3	0.9	0.9	0.5	1.6	12.1	
Daily	2.7	0.2	0.1	0.1	0.3	3.4	
Several times a week	3.4	0.6	0.8	0.5	0.3	5.6	
Weekly	5.7	0.2	0.6	0.4	0.1	7.1	
Several times a month	7.7	0.8	0.9	1.0	0.7	11.1	
Monthly	5.5	0.6	0.6	0.3	0.2	7.2	
Several times a year	32.3	2.8	2.8	2.0	1.3	41.2	
Once a year	6.2	0.3	0.6	0.1	0.6	7.8	
Less than once a year	3.4	0.2	0.4	0.2	0.5	4.7	
Total	75.2	6.6	7.8	5.0	5.4	100.0	139,800

The frequencies of journey responses were grouped as in the analysis above. 50-60% of drivers who would select the M6T for their journey would be regular and occasional-use drivers using the route 'most of the time'. This is the largest route choice grouping. 5-10% of drivers who would select the M6 for their journey would be regular and occasional-use drivers using the route 'most of the time'. This then falls further to 1% of drivers who would select the A50/A500 for their journey, who would be regular and occasional-use drivers and who would use the route 'most of the time'.

4.3.15 *Route Choice v Gender*

Appendix B Table 4.29: Route Choice and Gender

Q2.4: Approximately how many times would you use these routes when making this journey?)

Q3.1: Record gender)

The summary for an average survey day is shown in Table 4.29 below – daily breakdowns are in the appendices.

Table 4.29: Route Choice and Gender Summary

	Gender	
Frequency of Using M6T	**Male**	**Female**
Most of the time	73.1	80.6
More than half the time	7.1	5.1
About half the time	8.4	6.4
Less than half the time	5.5	3.7
Very rarely	5.9	4.2
Total	100.0	100.0
Count	100,327	39,651

Over 70% of journeys by both males and females would use the M6T most of the time, with females being the highest proportion. For less frequent usage higher proportions of males use the M6T.

4.3.16 *Route Choice v Group Composition*

Appendix B Table 4.30: Route Choice and Group Composition

(Q2.4: Approximately how many times would you use these routes when making this journey?

Q3.3: How would you describe the other occupants travelling with you today?)

On Monday and Wednesday, between 40-50% of journeys would also feature partners. On Friday and Sunday this rises to over 50%. Regardless of route choice and survey day, group composition is dominated by partners, colleagues and family of mixed ages.

4.3.17 *Journey Purpose v Occupancy*

Appendix B Table 4.31: Journey Purpose and Occupancy

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?

Q3.3: How would you describe the other occupants travelling with you today?)

On Monday, Wednesday and Friday, around 80% of EB, HBW and HEB journeys were being made by only the driver. This dropped to 60% on Sunday. Around 45-50% of HBO journeys had one passenger, regardless of the day. Between 70-80% of HBO and NHBO journeys would feature one or two occupants.

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5 Analysis of TAG Users

5 Analysis of TAG Users

5.1 Introduction

This chapter presents frequency information and cross-tabulation of the TAG data set, by weekday and weekend.

The frequency and cross-tabulation analysis tables are presented in Appendix C. In some instances below, a graph is presented to help clarify the findings where several tables are included for each frequency or cross-tabulation analysis. Key cells in the tables of valid percentages have been shaded: green >50% respondents, yellow >10% respondents, red >1% and numbers are given to one decimal place. Other 'count' values in tables represent absolute numbers rather than proportions.

5.2 Frequency Analysis

5.2.1 *Journey Length*

Appendix C Table 5.1: Journey Length

(Q1.1: Where did your journey start? Q1.3: And where were you travelling to?)

A summary is shown in Table 5.1 below (by distance and duration) – data is grouped by day in the appendices.

Table 5.1: Journey Length Summary (by distance and duration)

Status	Distance	All Survey Days
	between 0 and 50 km	19.6
	between 50 and 100 km	22.3
	between 100 and 150 km	16.4
	between 150 and 200 km	11.4
	between 200 and 250 km	10.5
	between 250 and 300 km	8.1
	between 300 and 350 km	7.3
	between 350 and 400 km	2.4
	between 400 and 450 km	1.3
	between 450 and 500 km	0.4
	more than 500 km	0.2
Valid	Total	100.0
Total Valid Count		31,193
Total Invalid Count		3,071
Grand Total Count		34,264

Status	Duration	All Survey Days
	Less than 1 Hour	20.7
	Between 1 and 2 hours	28.4
	Between 2 and 3 hours	21.4
	Between 3 and 4 hours	12.4
	Between 4 and 5 hours	7.4
	Between 5 and 6 hours	4.1
	Between 6 and 7 hours	2.7
	Between 7 and 8 hours	1.4
	Between 8 and 9 hours	0.8
	Between 9 and 10 hours	0.1
	More than 10 hours	0.4
Valid	Total	100.0
Total Valid Count		25,489
Total Invalid Count		8,775
Grand Total Count		34,264

From the origin-destination analysis, most of the journeys fell in the band between 50-100km on a weekday, tapering away with increased distance. The indications for weekends were that there was no clear declining trend unless journeys were over 350km in length, when their popularity declined. Results are shown in Figures 5.1 and 5.2.

Analysis by travel duration indicated the most populous weekday trips were between 1-2 hours, and between 3-4 hours at weekends.

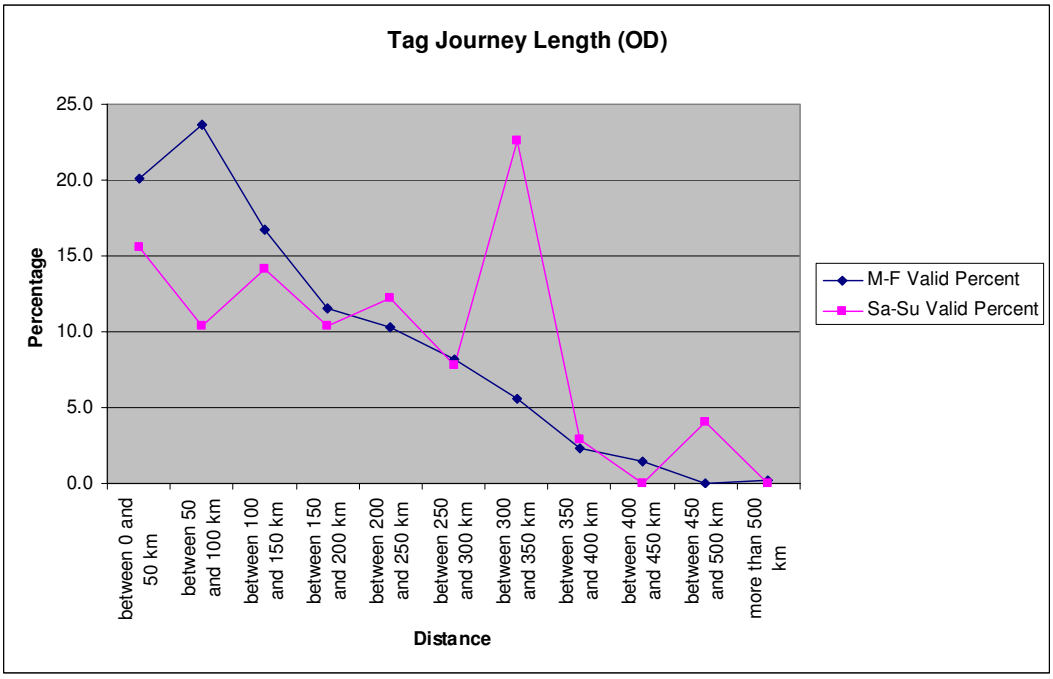

Figure 5.1: Journey Length (by OD) (TAG)

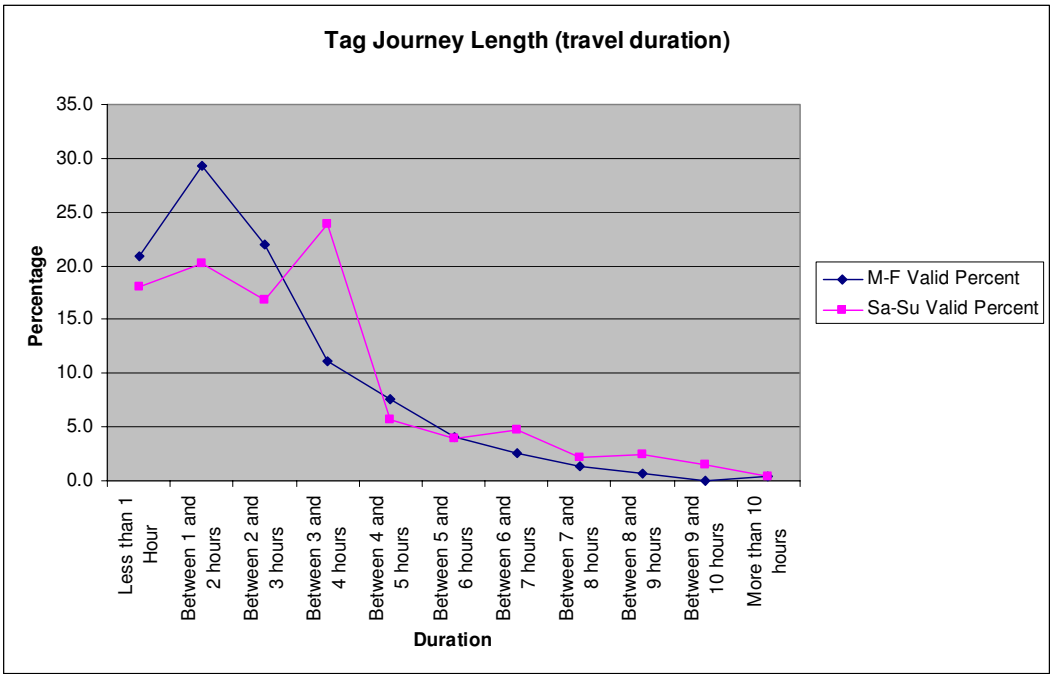

Figure 5.2: Journey Length (travel duration) (TAG)

5.2.2 *Journey Purpose*

Appendix C Table 5.2: Journey Purpose

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?)

A summary is shown in Table 5.2 below – data is grouped by day in the appendices.

Table 5.2: Journey Purpose Summary

Status	Purpose	All Survey Days
	EB	11.4
	HBW	29.9
	HEB	38.2
	HBO	19.5
	NHBO	1.0
Valid	Total	100.0
Total Valid Count		33,563
Total Invalid Count		701
Grand Total Count		34,264

The HEB (home-employers business) group comprises the largest grouping, followed by HBW. The proportion of work-related trips on a weekday is 3x more than at weekends.

5.2.3 *Vehicle Type*

Appendix C Table 5.3: Vehicle Type

(Q1.10: What type of vehicle were you using when making this journey?)

A summary is shown in Table 5.3 below – data is grouped by day in the appendices.

Table 5.3: Vehicle Type Summary

Status	Vehicle	All Survey Days
	Van	3.4
	HGV	1.4
	Bus/Coach	0.1
	Car	94.6
	Motorcycle	0.0
	Other	0.6
Valid	Total	100.0
Total Valid Count		33,959
Total Invalid Count		305
Grand Total Count		34,264

The largest user group were cars, at almost 95%, regardless of day-type.

5.2.4 *Goods Vehicle Particulars*

Appendix C Table 5.4: Goods Vehicle Particulars

(Q1.11: Goods Vehicle Drivers … owner … load type … load status)

A summary is shown in Table 5.4 below – data are grouped by day in the appendices.

Table 5.4: Goods Vehicle Particulars Summary

Status	Owner	All Survey Days
	Shipper	3.4
	Haulier	26.7
	Neither	69.9
Valid	Total	100.0
Total Valid Count		1,568
Total Invalid Count		32,696
Grand Total Count		34,264

Status	Load Type	All Survey Days
	Bulk (Steel, coal, agriculture, aggregates	5.6
	High value	11.9
	General haulage	18.0
	Food	4.8
	Low value	3.6
	Parcels/post	14.3
	Non food retail	8.2
	Various	33.5
Valid	Total	100.0
Total Valid Count		1,153
Total Invalid Count		33,111
Grand Total Count		34,264

Status	Load Status	All Survey Days
	Loaded	54.3
	Part loaded	17.9
	Empty	27.8
Valid	Total	100.0
Total Valid Count		1,000
Total Invalid Count		33,264
Grand Total Count		34,264

Very high proportions of goods vehicles were not readily classified into either shipper or haulier, and similarly almost 30% had non-specific load types. Over half the vehicles were fully loaded, with a higher proportion fully loaded at a weekend (albeit from a smaller sample size).

5.2.5 *Coach Particulars*

Appendix C Table 5.5: Bus/Coach Particulars

(Q1.12: Coach drivers … service type)

Usage of the M6T by tagged buses/coaches was non-existent, as could be expected.

5.2.6 *Vehicle Occupancy*

Appendix C Table 5.6: Vehicle Occupancy

(Q1.13: Car drivers/motorcyclists/goods vehicle drivers … no of occupants)

A summary is shown in Table 5.6 below – data are grouped by day in the appendices.

Table 5.6: Vehicle Occupancy Summary

Status	Occupancy	All Survey Days
	Driver only	79.4
	One passenger	13.6
	Two passengers	3.6
	Three passengers	1.9
	Four or more passengers	1.5
Valid	Total	100.0
Total Valid Count		32,843
Total Invalid Count		1,421
Grand Total Count		34,264

Over 80% of the tagged-vehicles had a single occupant. The average occupancy on a weekday was around 1.2 people/vehicle, compared to around 2 people/vehicle at a weekend.

5.2.7 *Overnight Stops*

Appendix C Table 5.7: Overnight Stops

(Q1.15: Were you staying away from home on this trip and if so how many nights?)

A summary is shown in Table 5.7 below – data is grouped by day in the appendices.

Table 5.7: Overnight Stops Summary

Status	Overnight Stops	All Survey Days
	No, none	60.2
	Yes, one night away	14.2
	Yes, two nights away	10.3
	Yes, three or more nights away	15.3
Valid	Total	100.0
Total Valid Count		34,253
Total Invalid Count		11
Grand Total Count		34,264

60% of drivers did not intend to make overnight stops. Weekday drivers would stop less than 2 nights on their trip, weekend drivers more than 2 nights.

5.2.8 *Hierarchy of Reasons for using M6T*

Appendix C Table 5.8: Hierarchy of Reasons for using M6T

(Q2.1: How important were the following in your decision to use the M6 Toll for your journey (on the day you were given the questionnaire)?)

The weighted importance of reasons for using the M6T was similar on the different days. The weighting was attained by combining 60% of 'very important' responses, 30% of 'quite important' responses and 10% of 'not at all important' responses for a particular reason. This

means the highest weighting would be 60 (all 'very important'), and lowest 10 (all 'not at all important') – this was then converted to an index between 100 (all 'very important') and 0 (all 'not at all important'). The results are shown in Figure 5.3: reasons have been ranked according to the total of all days. Consistently the most important reasons were: 'saves time over alternative routes', 'journey times are more predictable than alternative routes' and 'guarantees no hold-ups'. The least important were 'using it by mistake', 'trying it out' and 'use of the MSA'. These match reasons expressed by non-TAG users.

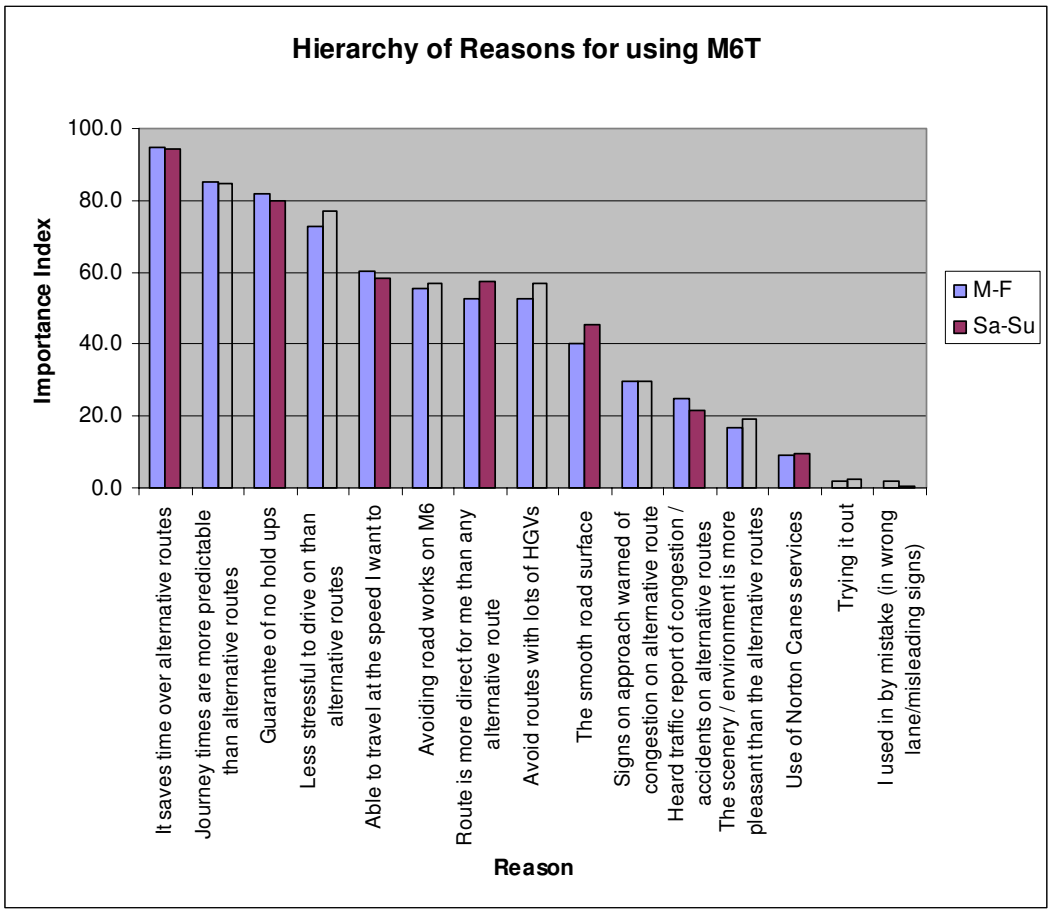

Figure 5.3: Hierarchy of Reasons for using M6T

5.2.9 *Main Reason for using M6T*

Appendix C Table 5.9: Main Reason for using M6T

(Q2.2: Which of the above reasons would you say was the main reason?)

The summary for an average survey day is shown in Table 5.9 below – daily breakdowns are in the appendices.

Table 5.9: Main Reason for using M6T Summary

Status	Main Reason	All Survey Days
	It saves time over alternative routes	69.3
	I used in by mistake (in wrong lane/misleading signs)	0.0
	Able to travel at the speed I want to	1.6
	Avoid routes with lots of HGVs	1.5
	Trying it out	0.0
	Journey times are more predictable than alternative routes	10.4
	Signs on approach warned of congestion on alternative route	1.7
	The smooth road surface	0.0
	Use of Norton Canes services	0.2
	Less stressful to drive on than alternative routes	4.1
	Guarantee of no hold ups	3.8
	Route is more direct for me than any alternative route	3.3
	The scenery / environment is more pleasant than the alternative routes	0.1
	Heard traffic report of congestion / accidents on alternative routes	0.5
	Avoiding road works on M6	2.5
	Other	0.9
	Total	100.0
Total Valid Count		33,186
Total Invalid Count		1,078
Grand Total Count		34,264

The most important reason for two-thirds of drivers is that the M6T 'saves time over alternative routes'. The next most important reason, for 10% of drivers is that 'journey times are more predictable than alternative routes'.

5.2.10 *Frequency of Journey*

Appendix C Table 5.10: Frequency of Journey

(Q2.3: How often do you make this journey for this purpose (i.e. between the places given in Q1.1 and Q1.3)?)

For journeys at frequencies of "at least several times a month", the proportion of journeys made on weekdays were higher than the proportion at weekends. For journey frequencies between 'several times a month' and 'less than once a year', there were higher proportions at a weekend. 35% of weekend trips were made 'several times a year'.

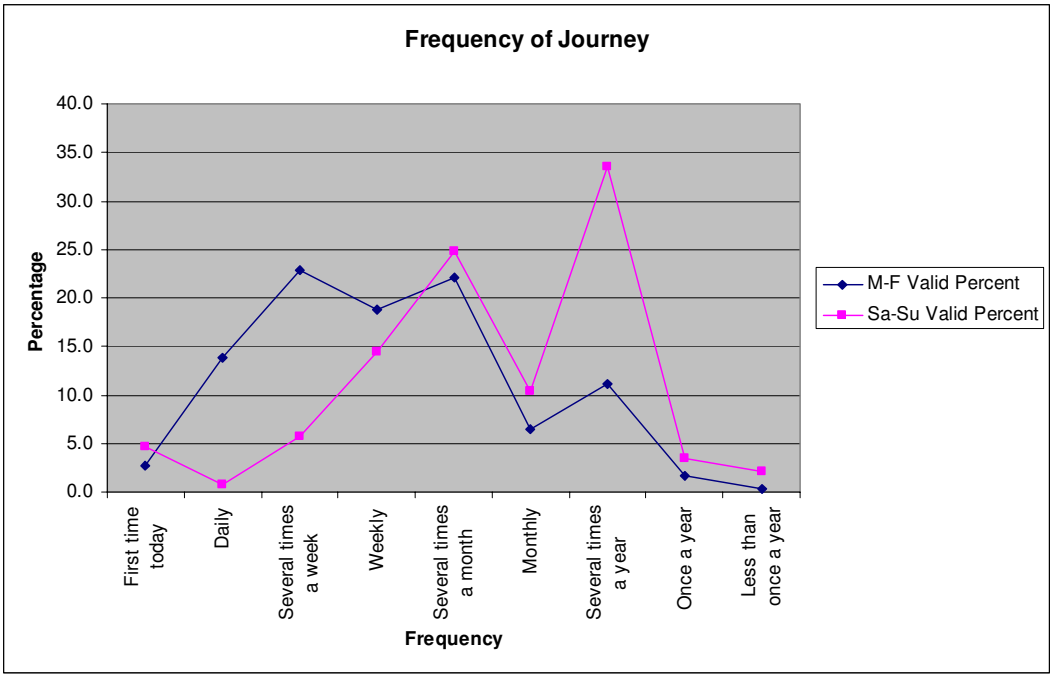

Figure 5.4: Frequency of Journey (TAG)

5.2.11 *Route Choice*

Appendix C Table 5.11: Route Choice

(Q2.4: Approximately how many times would you use these routes when making this journey?)

The summary for an average survey day is shown in Table 5.11 below – daily breakdowns are in the appendices.

Table 5.11: Route Choice Summary

Status	Frequency of Using given Route	All Survey Days		
		M6T	M6	A50/A500
	Most of the time	86.3	5.5	2.9
	More than half the time	5.0	1.4	0.9
	About half the time	5.3	5.7	1.4
	Less than half the time	2.5	12.7	5.8
	Very rarely	1.0	50.1	32.6
	Never	-	24.7	56.5
Valid	Total	100.0	100.0	100.0
Total Valid Count		34,081	30,757	30,147
Total Invalid Count		183	3,507	4,117
Grand Total Count		34,264	34,264	34,264

Over 85% of drivers responded that they would use the M6T 'most of the time', slightly less than the proportion of drivers would use the M6 at best 'less than half the time'. Over half of respondents would never use the A50/A500 for the journey. For the TAG users, the M6T is more of an automatic choice for their journey.

5.2.12 *Age of Users*

Appendix C Table 5.12: Age of Users

(Q3.2: What age group do you belong in?)

The summary for an average survey day are shown in Table 5.12 below – daily breakdowns are in the appendices.

Table 5.12: Age of Users Summary

Status	Age	All Survey Days
	Under 18	0.0
	18 - 24	0.9
	25 - 34	11.5
	35 - 44	34.3
	45 - 54	32.6
	55 - 64	18.0
	65 - 74	2.7
	75+	0.0
Valid	Total	100.0
Total Valid Count		34,170
Total Invalid Count		95
Grand Total Count		34,264

A smooth profile is shown of drivers' ages, peaking in the 35-44: around 85% of respondents were between 35 and 64.

5.2.13 *Group Size of Users*

Appendix C Table 5.13: Group Composition of Users

(Q3.3: How would you describe the other occupants with you today?)

A summary is shown in Table 5.13 below – data are grouped by day in the appendices.

Table 5.13: Group Composition of Users Summary

Status	Group Composition	All Survey Days
	Partner	42.1
	Friends	5.4
	Colleagues	17.2
	With small children (under 5)	6.9
	With children (5 - 16)	10.8
	With family (mixed ages)	12.4
	Pets/other animals	5.3
	Total	100.0
Total Valid Count		8,611
Total Invalid Count		25,653
Grand Total Count		34,264

Over 40% of the drivers who responded were travelling with their 'partners'. The grouping of 'colleagues' was the next highest proportion at 17% (25% on weekdays). Over 40% of weekend travel involved groups featuring family and children.

5.2.14 *Income of Users*

Appendix C Table 5.14: Income of Users

(Q3.4: Please indicate your approximate household income)

The summary for an average survey day is shown in Table 5.14 below – daily breakdowns are in the appendices.

Table 5.14: Income of Users Summary

Status	Income	All Survey Days
	Under £10,000 pa	0.9
	Between £10k to £19,999	2.7
	Between £20k to £29,999	4.6
	Between £30k to £39,999	12.7
	Between £40k to £49,999	15.1
	Between £50k to £59,999	14.6
	Between £60k to £69,999	11.8
	Over £70k	37.5
Valid	Total	100.0
Total Valid Count		28,329
Total Invalid Count		5,935
Grand Total Count		34,264

Below £70k, a smooth profile is shown of household income, peaking in the £40-50k band. The proportion for £70k is higher than any other band: if a similar 'tail' is assumed as at the lower end, an upper income level of about £110k is indicated. Compares with national statistics for car drivers from 2006, the lowest income bands surveyed feature lower proportions than

nationally, while the mid-range income bands feature higher proportions than nationally. The highest income bands feature similar proportions.

5.3 Cross-Tabulation Analysis

5.3.1 *Journey Length v Journey Purpose*

Appendix C Table 5.15: Journey Length and Journey Purpose

(Q1.1: Where did your journey start? Q1.3: And where were you travelling to?

Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?)

The summary for weekday/weekend survey days are shown in Table 5.15 below – daily breakdowns are in the appendices.

Table 5.15: Journey Length (by distance and duration) and Journey Purpose Summary

	Weekday Journey Purpose					Weekend Journey Purpose				
Journey Distance	**EB**	**HBW**	**HEB**	**HBO**	**NHBO**	**EB**	**HBW**	**HEB**	**HBO**	**NHBO**
between 0 and 50 km	10.3	31.3	12.7	19.7	0.0	0.0	13.5	0.0	20.5	0.0
between 50 and 100 km	11.7	29.9	22.8	20.2	28.6	49.2	0.0	0.0	11.2	0.0
between 100 and 150 km	28.0	16.6	17.7	7.8	0.0	9.1	0.0	0.0	17.5	0.0
between 150 and 200 km	14.6	8.3	13.5	13.3	0.0	0.0	16.7	0.0	12.8	0.0
between 200 and 250 km	12.3	9.4	10.0	9.8	49.8	41.7	34.9	16.5	5.7	100.0
between 250 and 300 km	10.1	2.4	11.6	11.7	0.0	0.0	0.0	0.0	11.1	0.0
between 300 and 350 km	5.5	2.1	7.5	6.7	0.0	0.0	34.9	75.5	12.8	0.0
between 350 and 400 km	0.7	0.0	2.6	7.8	21.6	0.0	0.0	8.0	2.5	0.0
between 400 and 450 km	4.6	0.0	1.5	3.1	0.0	0.0	0.0	0.0	0.0	0.0
between 450 and 500 km	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	0.0
more than 500 km	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Count	2,328	7,896	9,187	2,893	241	132	215	364	1,796	21

	Weekday Journey Purpose					Weekend Journey Purpose				
Journey Duration	**EB**	**HBW**	**HEB**	**HBO**	**NHBO**	**EB**	**HBW**	**HEB**	**HBO**	**NHBO**
Less than 1 Hour	12.3	36.0	9.9	24.4	0.0	0.0	14.9	13.1	21.2	0.0
Between 1 and 2 hours	18.8	36.2	31.8	16.6	21.8	53.5	0.0	0.0	22.4	0.0
Between 2 and 3 hours	28.3	16.3	24.5	24.2	24.0	0.0	0.0	30.3	18.0	0.0
Between 3 and 4 hours	12.6	5.2	12.2	17.2	37.9	38.2	85.1	17.8	18.5	100.0
Between 4 and 5 hours	12.5	2.2	10.1	9.6	0.0	0.0	0.0	5.8	6.9	0.0
Between 5 and 6 hours	7.5	1.4	5.4	3.5	16.4	0.0	0.0	8.5	4.0	0.0
Between 6 and 7 hours	1.7	2.0	3.7	1.5	0.0	0.0	0.0	3.5	5.9	0.0
Between 7 and 8 hours	3.1	0.7	0.8	3.0	0.0	0.0	0.0	0.0	1.0	0.0
Between 8 and 9 hours	3.2	0.0	0.8	0.0	0.0	0.0	0.0	21.0	0.0	0.0
Between 9 and 10 hours	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	0.0
More than 10 hours	0.0	0.0	0.8	0.0	0.0	8.3	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Count	3,436	9,318	11,049	3,638	317	144	195	343	2,151	21

On weekdays, home based work (HBW) journeys were most prevalent in the shorter journey bands, presumably related to daily commuting – over 60% were less than 100km and over 70% less than 2 hours. At weekends, the largest HBW grouping was for journeys between 200-250km / 300-350km or 3-4 hours. Also at weekends, there were higher proportions of trips that are employment-related (EB, HBW and HEB) in the longer distance bands than in the week. There was little difference in the banding proportions for HBO journey purposes on weekdays or at weekends.

5.3.2 *Journey Length v Likelihood of MSA Stop*

Appendix C Table 5.16: Journey Length and Likelihood of MSA Stop

(Q1.1: Where did your journey start? Q1.3: And where were you travelling to?

Q1.9: Did you stop en route eg at a service station?)

The summary for an average survey day is shown in Table 5.16 below – daily breakdowns are in the appendices.

Table 5.16: Journey Length (by distance and duration) and Likelihood of MSA Stop Summary

	All Survey Days MSA Stop		
Journey Distance	**Yes**	**Total**	**Count**
between 0 and 50 km	0.6	100.0	29
between 50 and 100 km	12.8	100.0	721
between 100 and 150 km	13.5	100.0	566
between 150 and 200 km	33.1	100.0	961
between 200 and 250 km	42.1	100.0	1,122
between 250 and 300 km	47.2	100.0	937
between 300 and 350 km	56.5	100.0	945
between 350 and 400 km	54.0	100.0	329
between 400 and 450 km	100.0	100.0	336
between 450 and 500 km	100.0	100.0	104
more than 500 km	100.0	100.0	761

	All Survey Days MSA Stop		
Journey Duration	**Yes**	**Total**	**Count**
Less than 1 Hour	4.6	100.0	290
Between 1 and 2 hours	8.4	100.0	290
Between 2 and 3 hours	21.3	100.0	815
Between 3 and 4 hours	40.3	100.0	1,553
Between 4 and 5 hours	66.0	100.0	1,443
Between 5 and 6 hours	61.3	100.0	1,474
Between 6 and 7 hours	85.3	100.0	865
Between 7 and 8 hours	74.8	100.0	560
Between 8 and 9 hours	100.0	100.0	350
Between 9 and 10 hours	100.0	100.0	238
More than 10 hours	100.0	100.0	99

The occurrence of stops at services increases with journey length, either by distance or duration. For journeys in excess of the 4-5 hours bands, over 50% of drivers will stop on their journey. For journeys more than 400km, 100% of drivers would stop at services.

5.3.3 *Journey Length v Vehicle Type*

Appendix C Table 5.17: Journey Length and Vehicle Type

(Q1.1: Where did your journey start? Q1.3: And where were you travelling to?

Q1.10: What type of vehicle were you using when making this journey?)

The summary for weekday/weekend survey days are shown in Table 5.17 below – daily breakdowns are in the appendices.

Table 5.17: Journey Length and Vehicle Type Summary

	Weekday Vehicle Type						Weekend Vehicle Type					
Journey Distance	Van	HGV	Bus/Coach	Motorcycle	Car	Other	Van	HGV	Bus/Coach	Motorcycle	Car	Other
between 0 and 50 km	18.7	0.0	0.0	0.0	20.3	0.0	39.7	0.0	0.0	0.0	13.9	100.0
between 50 and 100 km	27.9	0.0	0.0	0.0	23.8	25.0	0.0	0.0	0.0	0.0	10.8	0.0
between 100 and 150 km	22.3	22.8	0.0	0.0	16.5	50.0	60.3	0.0	0.0	0.0	13.4	0.0
between 150 and 200 km	9.1	0.0	0.0	0.0	11.8	25.0	0.0	0.0	0.0	0.0	10.9	0.0
between 200 and 250 km	12.9	25.2	0.0	0.0	10.2	0.0	0.0	0.0	100.0	0.0	11.9	0.0
between 250 and 300 km	5.2	3.7	0.0	0.0	8.2	0.0	0.0	0.0	0.0	0.0	8.2	0.0
between 300 and 350 km	4.0	48.3	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	23.7	0.0
between 350 and 400 km	0.0	0.0	0.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	3.0	0.0
between 400 and 450 km	0.0	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
between 450 and 500 km	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0
more than 500 km	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	0.0	0.0	100.0	100.0	100.0	0.0	100.0	0.0	100.0	100.0
Count	696	294	0	0	21,714	56	58	0	21	0	2,447	36

On weekdays and at weekends, there was little difference in the journey length profile for cars, the most populous users, exceeding 10% for each band between 0 and 250km. On weekdays, almost 50% of HGVs fell into journeys travelled between 300-350km. Over 60% of vans on weekdays were on journeys of less than 150km.

5.3.4 *Journey Purpose v Day of Week v Route Choice*

Appendix C Table 5.18: Journey Purpose and Route Choice

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?

Q2.4: Approximately how many times would you use these routes when making this journey?)

The summary for an average survey day is shown in Table 5.18 below – daily breakdowns are in the appendices.

Table 5.18: Journey Purpose and Route Choice Summary

	Frequency of Using M6T						
Journey Purpose	Most of the time	More than half the time	About half the time	Less than half the time	Very rarely	Total	Count
EB	90.8	5.6	2.7	0.9	0.0	100.0	3,818
HBW	79.3	6.7	6.4	5.5	2.2	100.0	9,186
HEB	89.7	3.7	5.6	1.0	0.0	100.0	12,245
HBO	87.4	3.4	4.8	2.1	2.2	100.0	6,306
NHBO	80.5	0.0	8.3	11.2	0.0	100.0	338

Generally at least 80% of drivers by journey-purpose would use the M6T 'most of the time', regardless of the day. On weekdays, around 60% of EB and HEB journey-purpose drivers would rarely use the M6 for their journey. Over 90% of all trips, regardless of journey purpose and day, would 'very rarely' or 'never' use the A50/A500 for their journey.

5.3.5 *Journey Purpose v Who pays Toll*

Appendix C Table 5.19: Journey Purpose and Who Pays Toll

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?

Q1.14: Who paid for the toll charge when making this trip?)

The summary for an average survey day is shown in Table 5.19 below – daily breakdowns are in the appendices.

Table 5.19: Journey Purpose and Who Pays Toll Summary

	Who Pays Toll					
Journey Purpose	**Employer reimburses cost**	**Self**	**Split between travellers**	**Other passengers/ driver**	**Total**	**Count**
EB	89.7	10.3	0.0	0.0	100.0	3,599
HBW	41.1	58.8	0.1	0.0	100.0	9,895
HEB	74.5	24.4	1.1	0.0	100.0	12,932
HBO	14.3	83.6	0.2	1.9	100.0	6,432
NHBO	42.6	57.4	0.0	0.0	100.0	338

70%-90% of drivers whose journey purpose is EB or HEB would have their toll reimbursed by employers. All EB drivers would have their toll reimbursed by employers at weekends.

5.3.6 *Journey Purpose v Hierarchy of Reasons for using M6T*

Appendix C Table 5.20: Journey Purpose and Hierarchy of Reasons for using M6T

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?

Q2.1: How important were the following in your decision to use the M6 Toll for your journey (on the day you were given the questionnaire)?)

The weighting of importance for using the M6T was attained by combining 60% of 'very important' responses, 30% of 'quite important' responses and 10% of 'not at all important' responses for a particular reason. This means the highest weighting would be 60 (all 'very important'), and lowest 10 (all 'not at all important') – this was then converted to an index between 100 (all 'very important') and 0 (all 'not at all important'). The results are shown in Figures 5.5 and 5.6: reasons have been ranked according to the total of all purposes. Drivers with an NHBO journey purpose varied most from the ranked trend on weekdays and at weekends. Consistently the most important reasons for using the M6T were 'time saving over alternative routes' and 'journey times more predictable than alternative routes'. Most variation in the ranking of journey purposes occurs at a weekend.

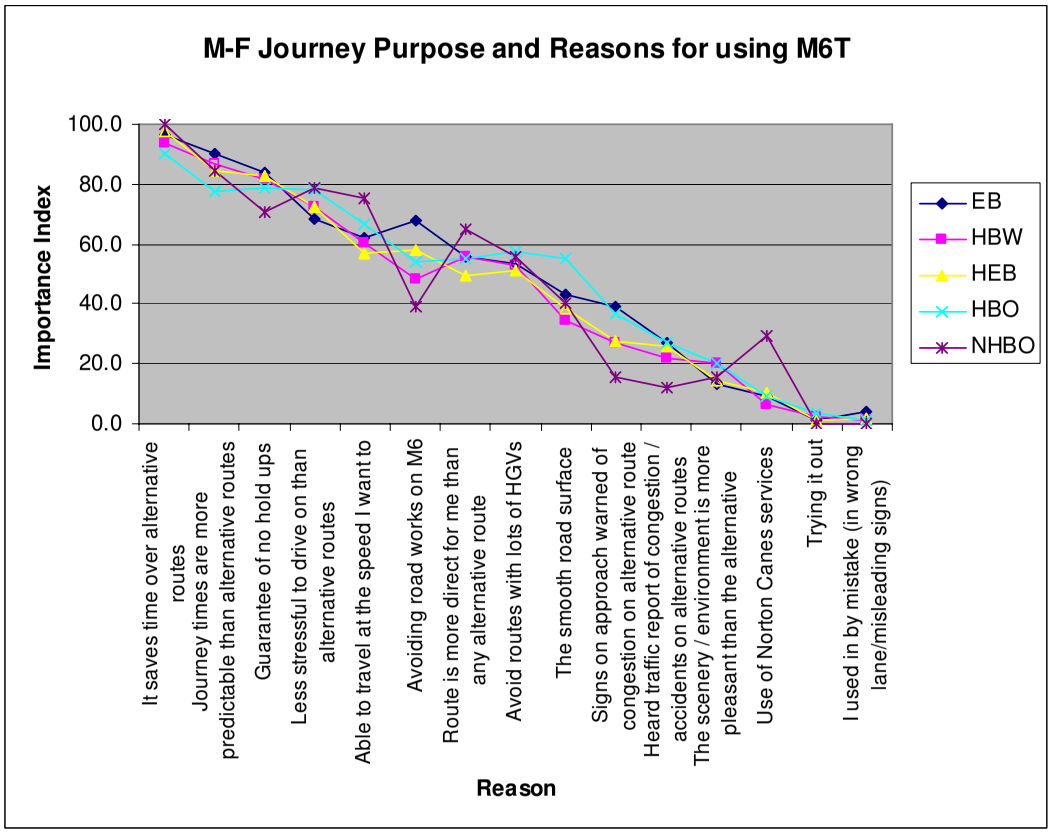

Figure 5.5: Monday-Friday Journey Purpose and Hierarchy of Reasons for using M6T

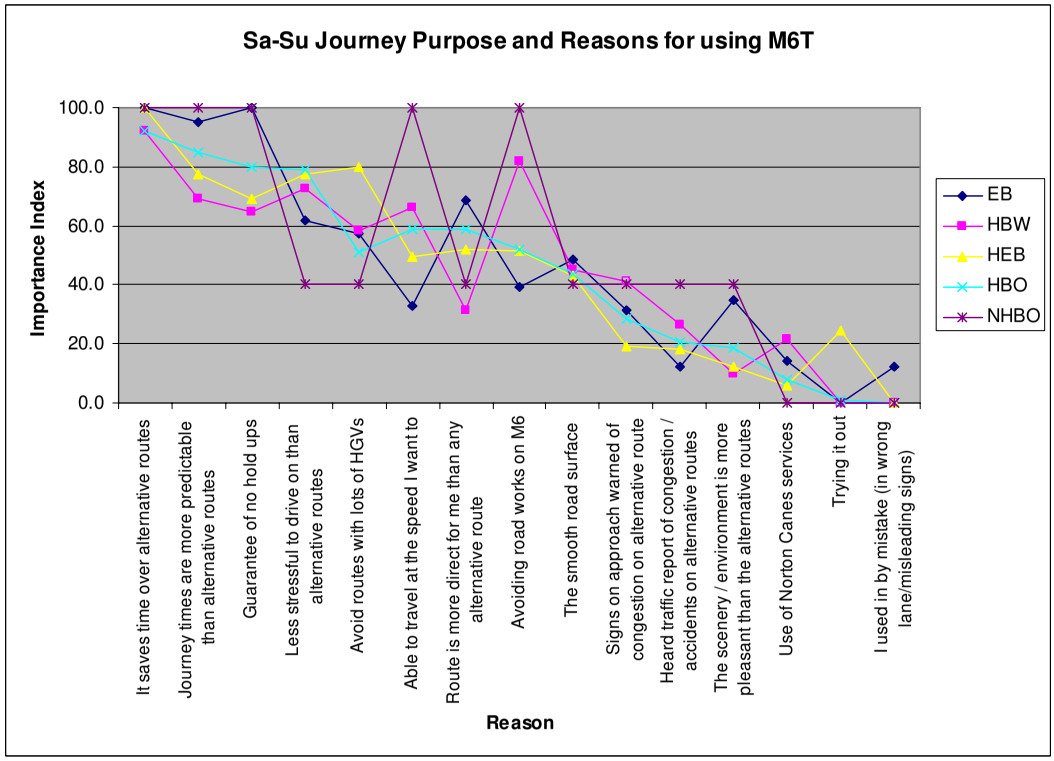

Figure 5.6: Saturday-Sunday Journey Purpose and Hierarchy of Reasons for using M6T

5.3.7 *Journey Purpose v Frequency of Journey*

Appendix C Table 5.21: Journey Purpose and Frequency of Journey

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?

Q2.3: How often do you make this journey for this purpose (ie between the places given in Q1.1 and Q1.3)?)

The summary for an average survey day is shown in Table 5.21 below – daily breakdowns are in the appendices.

Table 5.21: Journey Purpose and Frequency of Journey Summary

	Journey Purpose				
Frequency of Journey	**EB**	**HBW**	**HEB**	**HBO**	**NHBO**
First time today	0.9	0.5	3.9	6.3	0.0
Daily	7.1	35.7	3.3	0.0	0.0
Several times a week	16.7	34.8	17.9	8.9	21.0
Monthly	13.7	22.0	20.7	12.5	21.6
Several times a month	33.4	5.4	31.8	22.7	19.5
Monthly	3.8	0.3	10.3	11.3	26.6
Several times a year	23.9	1.3	9.4	32.1	11.2
Once a year	0.0	0.0	2.8	4.2	0.0
Less than once a year	0.4	0.0	0.0	2.0	0.0
Total	100.0	100.0	100.0	100.0	100.0
Count	548	1,414	1,844	933	48

For drivers on HBW journey purposes, around 90% of trips were made at frequencies between 'daily' or 'several times a month' on weekdays and at weekends. While regular HEB journeys on weekdays varied in occurrence between drivers who made the journey 'daily' to 'once a year'. At weekends their occurrence was only between 'weekly' and 'several times a year'.

5.3.8 *Actual Lateness of Arrival v Acceptable Lateness of Arrival*

Appendix C Table 5.22: Actual Lateness and Acceptable Lateness

(Q1.5: At approximately what time did you arrive at your destination?

Q1.8: I needed to be at my destination no later than … minutes after my expected time)

The summary for survey days is shown in Table 5.22 below – daily breakdowns are in the appendices.

Table 5.22: Actual Lateness and Acceptable Lateness Summary

	Actual Lateness	
Allowable Lateness	**Weekday**	**Weekend**
on time	11.5	0.0
upto 10 min late	90.0	100.0
upto 20 min late	93.1	100.0
upto 30 min late	92.5	100.0
upto 60 min late	96.8	100.0
more than 1h late	9.9	0.0

On weekdays, only 11% of trips that had to be on time achieved this – the remainder were upto 10 mins late. Over 90% of other trips on weekdays were within their allowable lateness bands. At weekends, there were no vehicles recorded that had to be on time or that were allowed to be late.

5.3.9 *Arrival Time Constraint v Goods Vehicle Load Type*

Appendix C Table 5.23: Arrival Time Constraint and Goods Vehicle Load Type

(Q1.7: Did you have to arrive at your destination by a particular time?

Q1.11: Goods Vehicle Drivers … owner … load type … load status)

The summary for an average survey day is shown in Table 5.23 below – daily breakdowns are in the appendices.

Table 5.23: Arrival Time Constraint and Goods Vehicle Load Type Summary

	Arrival Time Constraint		
Load type	**Yes**	**Total**	**Count**
Bulk (Steel, coal, agriculture, aggregates)	0.0	100.0	64
High value	100.0	100.0	90
General haulage	35.1	100.0	208
Food	100.0	100.0	56
Low value	100.0	100.0	41
Parcels/post	77.0	100.0	165
Non food retail	58.9	100.0	95
Various	31.0	100.0	364

On weekdays, goods vehicles with load types of 'bulk', 'general haulage' or 'various' had least stipulations over arrival time. At weekends, only two load types were recorded, both having arrival constraints.

5.3.10 *Vehicle Type v Hierarchy of Reasons for using M6T*

Appendix C Table 5.24: Vehicle Type and Hierarchy of Reasons for using M6T

(Q1.10: What type of vehicle were you using when making this journey?

Q2.1: How important were the following in your decision to use the M6 Toll for your journey (on the day you were given the questionnaire)?)

The weighting of importance for using the M6T was attained by combining 60% of 'very important' responses, 30% of 'quite important' responses and 10% of 'not at all important' responses for a particular reason. This means the highest weighting would be 60 (all 'very important'), and lowest 10 (all 'not at all important') – this was then converted to an index between 100 (all 'very important') and 0 (all 'not at all important'). The results are shown in Figures 5.7 – 5.8; reasons have been ranked according to the total of all vehicle types. The highest importance was given to 'saving time over alternatives' and 'journey times more predictable than alternatives'. Even the reasons with the least importance for car drivers were higher than the importance given by other vehicle drivers. Most variation in the ranking of vehicle types occurs at a weekend. All vehicle types (apart from car) varied considerably from the ranked trend.

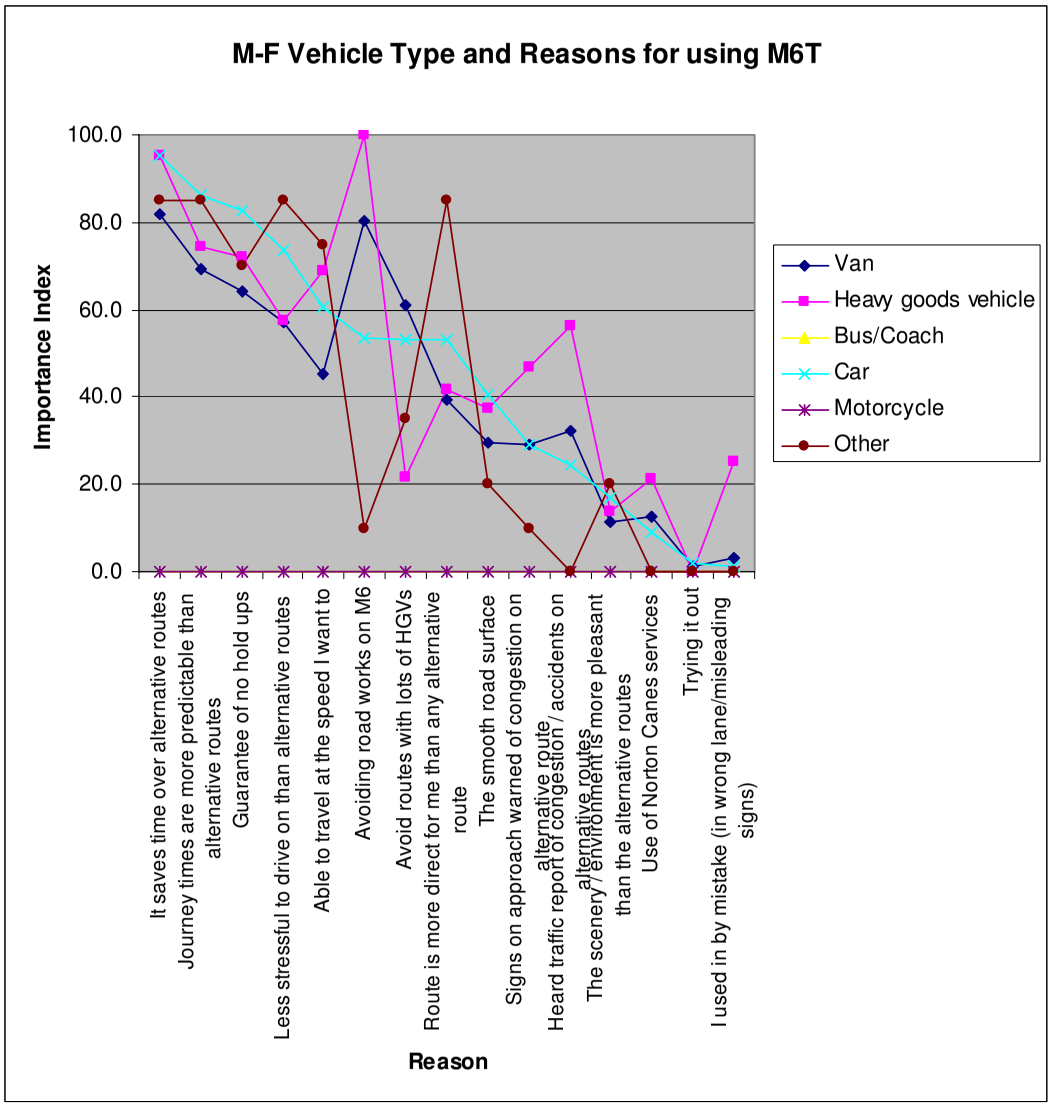

Figure 5.7: Monday-Friday Vehicle Type and Hierarchy of Reasons for using M6T

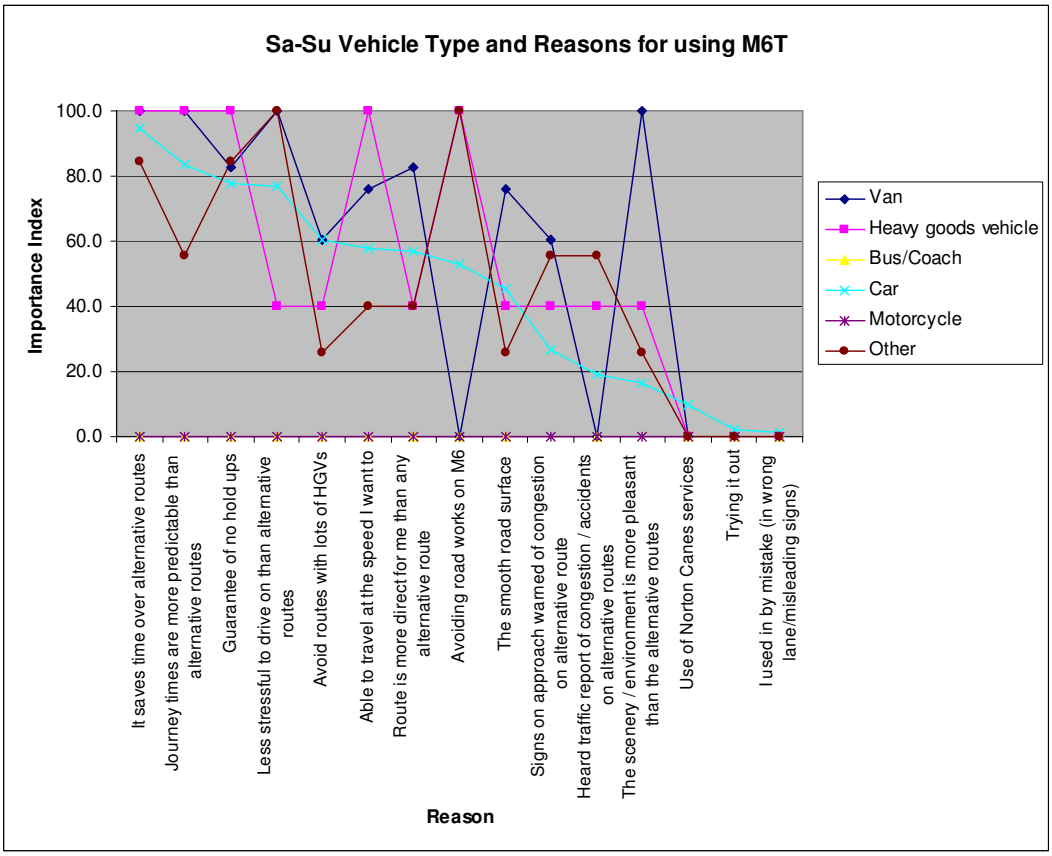

Figure 5.8: Saturday-Sunday Vehicle Type and Hierarchy of Reasons for using M6T

5.3.11 *Occupancy v Group Composition*

Appendix C Table 5.25: Occupancy and Group Composition

(Q1.13: Car drivers/motorcyclists/goods vehicle drivers … no of occupants

Q3.3: How would you describe the other occupants travelling with you today?)

The summary for an average survey day is shown in Table 5.25 below – daily breakdowns are in the appendices.

Table 5.25: Occupancy and Group Composition Summary

	Group Composition								
Occupancy (besides driver)	**Partner**	**Friends**	**Colleagues**	**With small children (under 5)**	**With children (5 16)**	**With family (mixed ages)**	**Pets/other animals**	**Total**	**Count**
One passenger	37.2	3.2	21.8	4.1	5.0	2.2	26.5	100.0	5,802
Two passengers	22.1	9.4	6.6	13.9	13.7	10.8	23.4	100.0	1,944
Three passengers	24.0	8.7	9.9	5.0	15.0	9.4	28.2	100.0	1,143
Four or more passengers	18.8	0.0	7.3	15.3	14.0	10.6	34.0	100.0	1,837

Of journeys on the surveyed days that had one passenger, in 30-40% of them it was a ‘partner’. Of journeys with two or more passengers, ‘partners’ were the largest group, apart from weekday journeys involving four or more passengers, when ‘family (mixed ages)’ was often the largest group.

5.3.12 *Who Pays Toll v Main Reason for using M6T*

Appendix C Table 5.26: Who Pays Toll and Main Reason for using M6T

(Q1.14: Who paid for the toll charge when making this trip?

Q2.1: How important were the following in your decision to use the M6 Toll for your journey (on the day you were given the questionnaire)?)

The summary for an average survey day is shown in Table 5.26 below – daily breakdowns are in the appendices.

Table 5.26: Who Pays Toll and Main Reason for using M6T Summary

	Who Pays Toll			
Main Reason	**Employer reimburses cost**	**Self**	**Split between travellers**	**Other passengers / driver**
It saves time over alternative routes	71.6	67.1	13.8	65.2
I used in by mistake (in wrong lane/misleading signs)	0.0	0.0	0.0	0.0
Able to travel at the speed I want to	1.9	1.4	0.0	0.8
Avoid routes with lots of HGVs	0.1	2.1	86.2	3.1
Trying it out	0.1	0.0	0.0	0.0
Journey times are more predictable than alternative routes	12.5	8.5	0.0	7.1
Signs on approach warned of congestion on alternative route	0.7	3.1	0.0	2.0
The smooth road surface	0.0	0.0	0.0	0.0
Use of Norton Canes services	0.0	0.6	0.0	0.0
Less stressful to drive on than alternative routes	3.1	5.0	0.0	8.1
Guarantee of no hold ups	4.4	2.6	0.0	6.0
Route is more direct for me than any alternative route	2.2	4.2	0.0	6.9
The scenery / environment is more pleasant than the alternative routes	0.0	0.2	0.0	0.0
Heard traffic report of congestion / accidents on alternative routes	0.2	1.1	0.0	0.0
Avoiding road works on M6	2.5	2.6	0.0	0.0
Other	0.8	1.3	0.0	0.7
Total	100.0	100.0	100.0	100.0
Count	17,674	12,278	159	2,733

For most groups by toll-payer, the most important reason given by users for using the M6T was time saving over alternative routes. However where the toll was split between travellers, this reason was most important for only 15% of users. Most had noted it was more important to avoid HGVs. For users who had the toll reimbursed by employer, 12% believed the most important reason was because journey times are more predictable (compared to 8% for users who pay the toll themselves).

5.3.13 *Hierarchy of Reasons for using M6T v Frequency of Journey*

Appendix C Table 5.27: Hierarchy of reasons for using M6T and Frequency of Journey

(Q2.1: How important were the following in your decision to use the M6 Toll for your journey (on the day you were given the questionnaire)?

Q2.3: How often do you make this journey for this purpose (ie between the places given in Q1.1 and Q1.3)?)

The weighting of importance for using the M6T was attained by combining 60% of 'very important' responses, 30% of 'quite important' responses and 10% of 'not at all important' responses for a particular reason. This means the highest weighting would be 60 (all 'very important'), and lowest 10 (all 'not at all important') – this was then converted to an index between 100 (all 'very important') and 0 (all 'not at all important'). The results are shown in Figures 5.9 and 5.10: reasons have been ranked according to the total of all journey frequencies. The frequency of journey responses were classed as first time, regular ('daily' – 'several times a month'), occasional ('monthly' – 'several times a year'), infrequent ('once a year' – 'less than once a year'). The most important reasons given were to 'saving time over alternatives' and 'journey times more predictable than alternatives'. Most variation in the ranking of journey frequencies occurs at a weekend. At weekends, first-time and infrequent users consistently generally gave higher ratings than regular and occasional users.

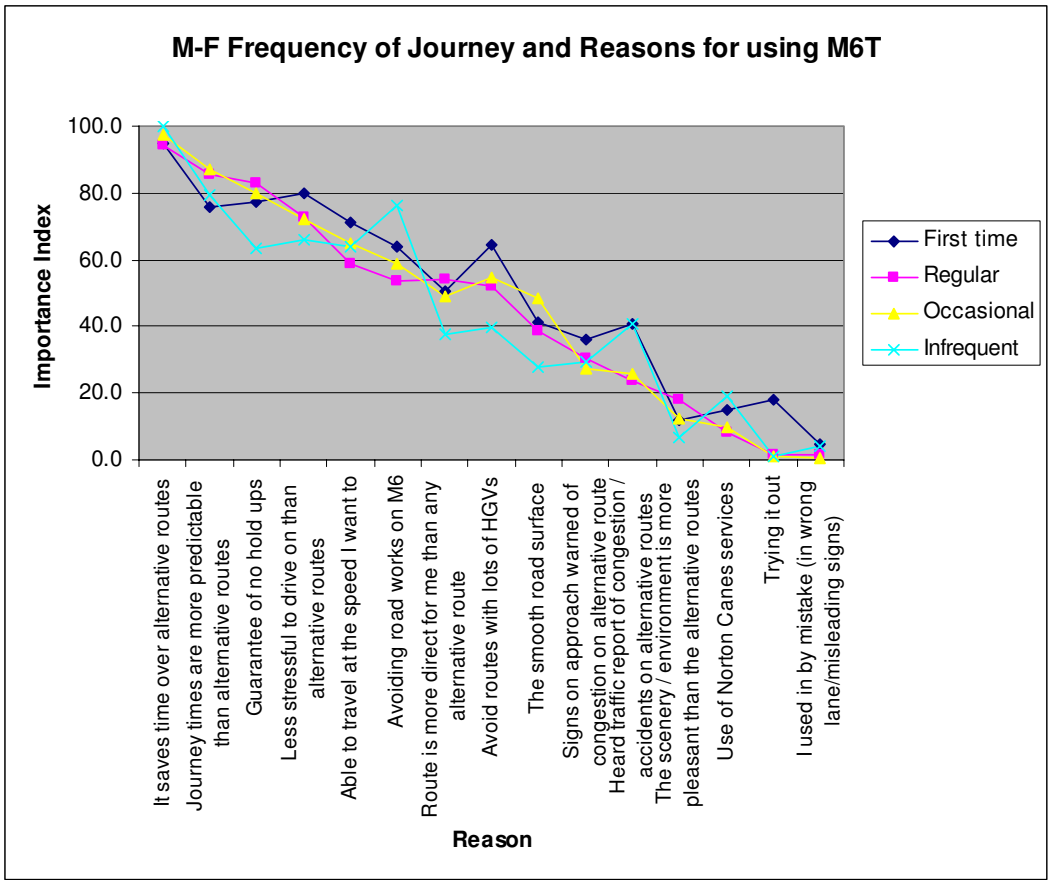

Figure 5.9: Monday-Friday Hierarchy of reasons for using M6T and Frequency of Journey

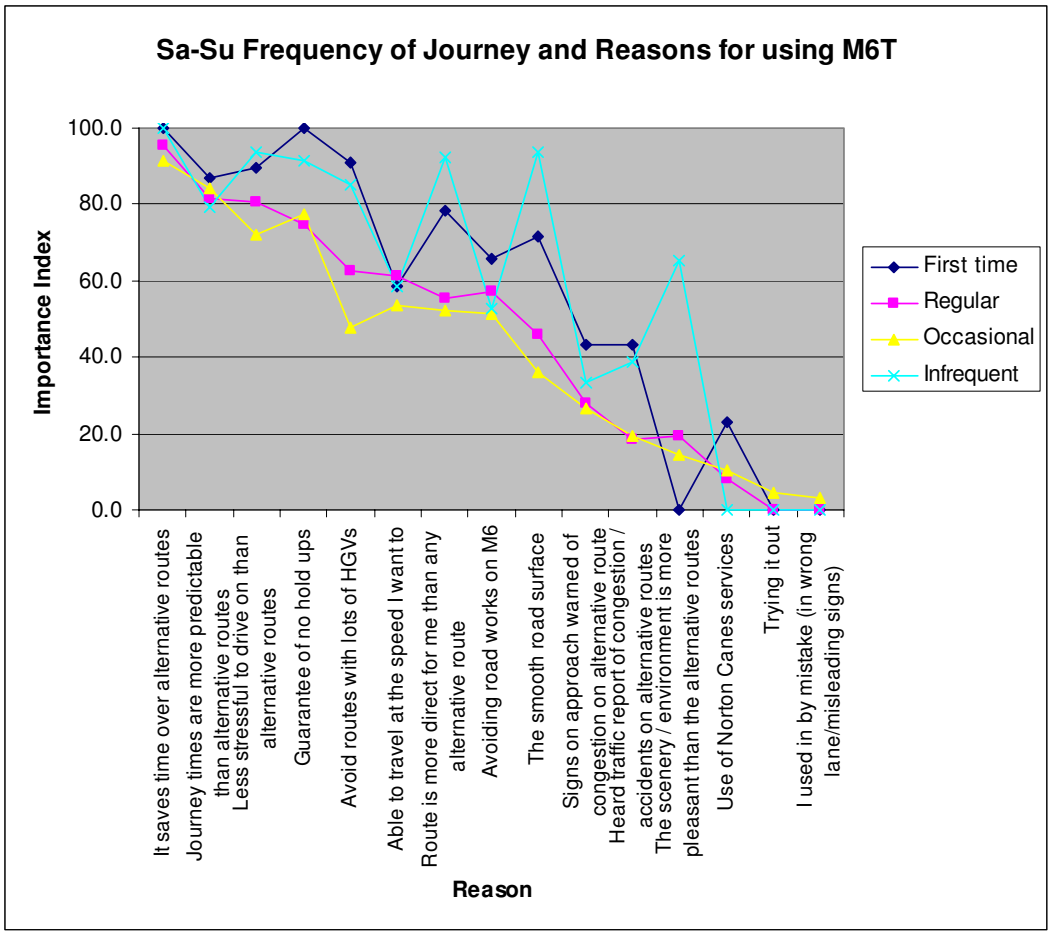

Figure 5.10: Saturday-Sunday Hierarchy of reasons for using M6T and Frequency of Journey

5.3.14 *Frequency of Journey v Route Choice*

Appendix C Table 5.28: Frequency of Journey and Route Choice

(Q2.3: How often do you make this journey for this purpose (i.e. between the places given in Q1.1 and Q1.3)?

Q2.4: Approximately how many times would you use these routes when making this journey?)

The summary for an average survey day is shown in Table 5.28 below – daily breakdowns are in the appendices.

Table 5.28: Frequency of Journey and Route Choice Summary

	Frequency of Using M6T						
Frequency of Journey	**Most of the time**	**More than half the time**	**About half the time**	**Less than half the time**	**Very rarely**	**Total**	**Count**
First time today	2.8	0.1	0.0	0.3	0.0	3.1	995
Daily	9.9	0.4	0.9	0.5	0.3	12.0	3,911
Several times a week	16.6	1.1	2.3	0.8	0.0	20.8	6,768
Monthly	16.4	1.3	0.6	0.1	0.0	18.4	5,973
Several times a month	19.9	0.9	1.1	0.4	0.2	22.5	7,313
Monthly	6.2	0.2	0.4	0.0	0.1	7.0	2,264
Several times a year	12.3	0.6	0.1	0.5	0.4	14.0	4,545
Once a year	1.6	0.0	0.0	0.1	0.0	1.7	542
Less than once a year	0.5	0.0	0.0	0.0	0.0	0.5	164
Total	86.2	4.6	5.5	2.6	1.0	100.0	32,475

The frequencies of journey responses were grouped as in the analysis above. On weekdays, 60% of drivers who would select the M6T for their journey would be regular-use drivers using the route 'most of the time', compared to 30% at weekends. Over 40% of drivers who would select the M6T for their journey at the weekend would be occasional-use drivers using the route 'most of the time'. 5% of drivers who would select the M6 for their journey would be regular and occasional-use drivers using the route 'most of the time'. This then falls further to 1% of drivers who would select the A50/A500 for their journey, who would be regular and occasional-use drivers would using the route 'most of the time'.

5.3.15 *Route Choice v Gender*

Appendix C Table 5.29: Route Choice and Gender

Q2.4: Approximately how many times would you use these routes when making this journey?)

Q3.1: Record gender)

The summary for an average survey day is shown in Table 5.29 below – daily breakdowns are in the appendices.

Table 5.29: Route Choice and Gender Summary

	Gender	
Frequency of Using M6T	**Male**	**Female**
Most of the time	86.1	87.1
More than half the time	5.1	2.6
About half the time	4.9	8.1
Less than half the time	2.8	1.7
Very rarely	1.2	0.6
Total	100.0	100.0
Count	26,326	6,176

Over 85% of males and females use the M6T most of the time.

5.3.16 *Route Choice v Group Composition*

Appendix C Table 5.30: Route Choice and Group Composition

(Q2.4: Approximately how many times would you use these routes when making this journey?

Q3.3: How would you describe the other occupants travelling with you today?)

On weekdays, 30% of journeys made on the M6T would also feature 'partners', while 30% of journeys made on the M6 or A50/A500 would 'very rarely' or 'never' feature partners. At weekends, these figures rise to 40%.

60% of weekday journeys, regardless of route choice, would include partners and/or colleagues. At weekends, almost 80% of journeys would include combinations of partners, children (5-16) and mixed age families.

5.3.17 *Journey Purpose v Occupancy*

Appendix C Table 5.31: Journey Purpose and Occupancy

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?

Q3.3: How would you describe the other occupants travelling with you today?)

On weekdays, over 75% of EB, HBW and HEB journeys were being made by only the driver. For HBW and HEB journeys, this rose to nearly 90% at weekends. For EB journeys, it dropped to 50% at weekends. 70% of HBO journeys would feature one or two occupants.

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6 Analysis of Combined non TAG and TAG Data

6 Analysis of Combined Non TAG and TAG Data

6.1 Introduction

This chapter presents a selection of frequency and cross-tabulation analysis for the combined data. The frequency and cross-tabulation analysis tables are presented in Appendix D. Key cells in the tables (valid percentages in the frequency analysis and all cells in the cross-tabulations) have been shaded: green >50% respondents, yellow >10% respondents, red >1%.

6.2 Frequency Analysis

6.2.1 *Journey Length*

Appendix D Table 6.1: Journey Length

(Q1.1: Where did your journey start? Q1.3: And where were you travelling to?)

A summary is shown in Table 6.1 below – data are grouped by weekday/weekend in the appendices.

Table 6.1: Journey Length Summary (by distance and duration)

Status	Distance	Valid Percent T+NT 24-7
	between 0 and 50 km	7.5
	between 50 and 100 km	12.8
	between 100 and 150 km	12.2
	between 150 and 200 km	12.0
	between 200 and 250 km	13.9
	between 250 and 300 km	15.3
	between 300 and 350 km	11.9
	between 350 and 400 km	5.7
	between 400 and 450 km	2.1
	betwen 450 and 500 km	1.8
	more than 500 km	4.8
Valid	Total	100.0
Total Valid Count		230,207
Total Invalid Count		115,412
Grand Total Count		345,619

Status	Duration	Valid Percent T+NT 24-7
	Less than 1 Hour	7.5
	Between 1 and 2 hours	17.7
	Between 2 and 3 hours	18.4
	Between 3 and 4 hours	17.9
	Between 4 and 5 hours	14.9
	Between 5 and 6 hours	9.6
	Between 6 and 7 hours	6.1
	Between 7 and 8 hours	3.2
	Between 8 and 9 hours	1.8
	Between 9 and 10 hours	1.1
	More than 10 hours	1.9
Valid	Total	100.0
Total Valid Count		322,818
Total Invalid Count		22,801
Grand Total Count		345,619

The combined journey length profiles show weekday and weekend proportions peak in the 200-350km bands, with weekday proportions being similar for shorter distances bands. By travel duration, both the weekday and weekend profiles peak early (1-2 hour duration weekdays, 3-4

hour duration weekend) before tailing off gradually with distance. Weekday results are shown in Figures 6.1 and 6.2, weekend results in Figures 6.3 and 6.4.

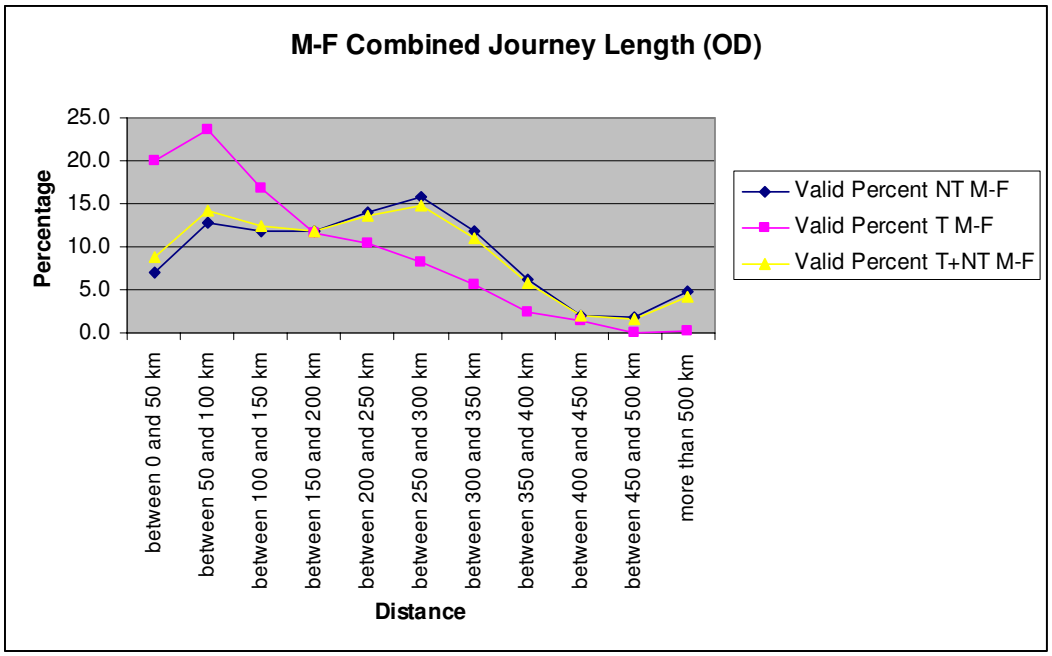

Figure 6.1: Monday-Friday Combined Journey Length (OD)

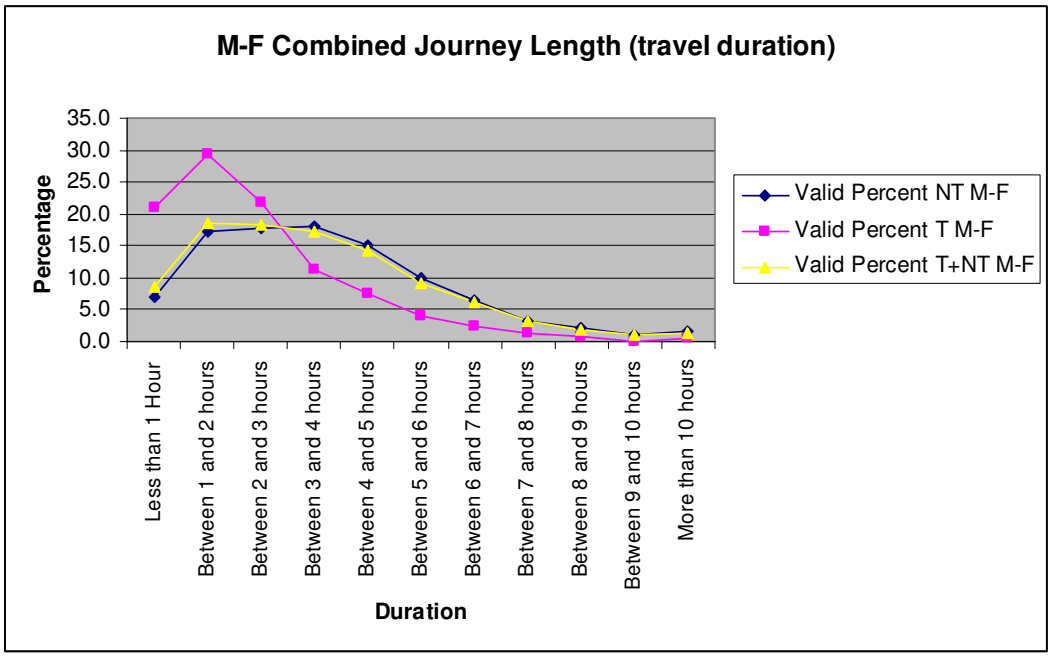

Figure 6.2: Monday-Friday Combined Journey Length (travel duration)

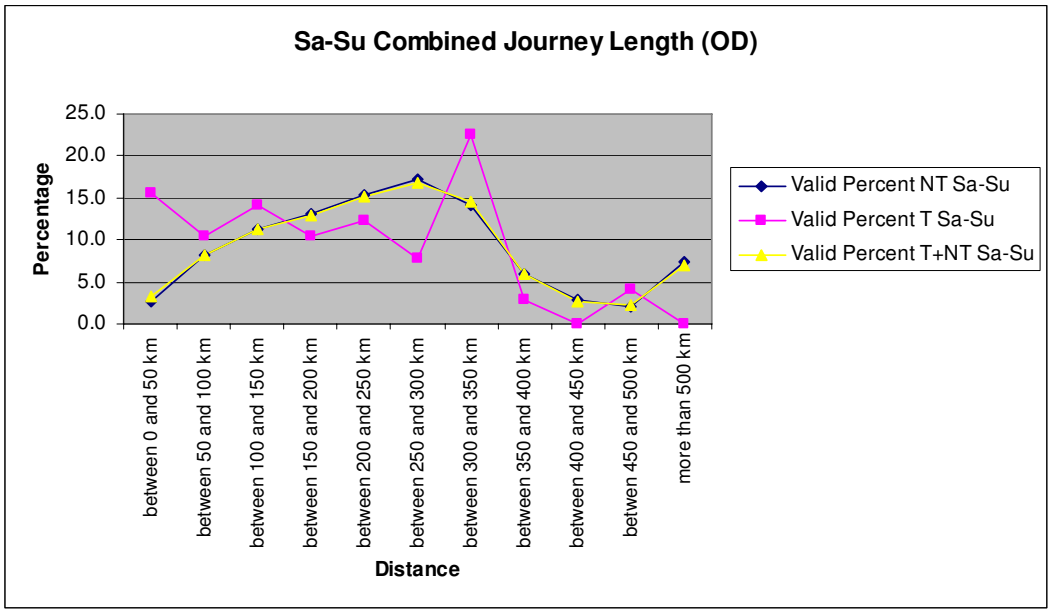

Figure 6.3: Saturday-Sunday Combined Journey Length (OD)

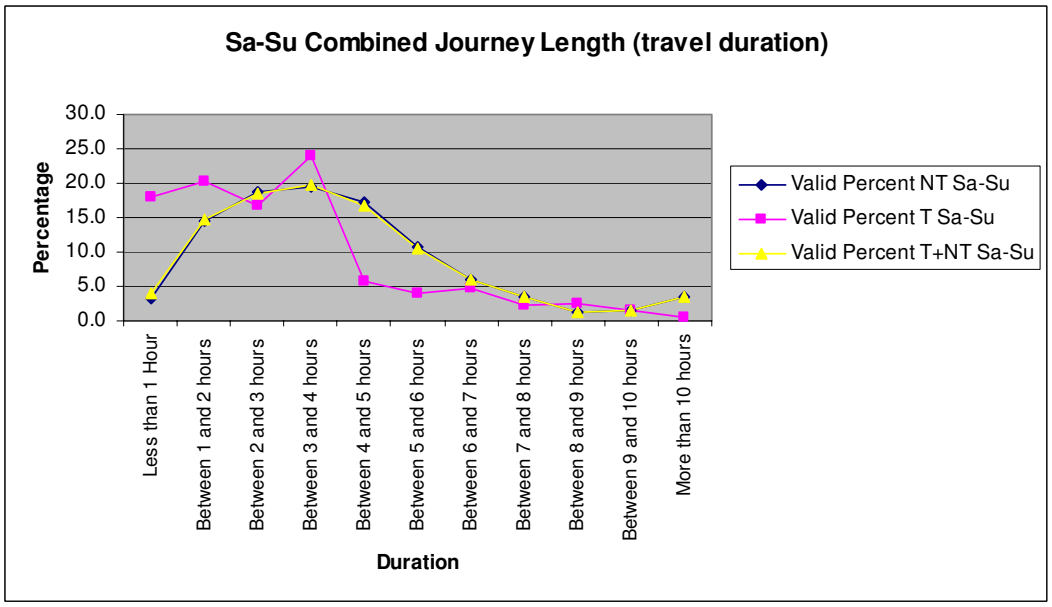

Figure 6.4: Saturday-Sunday Combined Journey Length (travel duration)

6.2.2 *Journey Purpose*

Appendix D Table 6.2: Journey Purpose

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?)

A summary is shown in Table 6.2 below – data is grouped by weekday/weekend in the appendices.

Table 6.2: Journey Purpose Summary

Status	Journey Purpose	Valid Percent T+NT 24-7
	EB	10.1
	HBW	11.6
	HEB	23.0
	HBO	50.3
	NHBO	5.1
Valid	Total	100.0
Total Valid Count		339,451
Total Invalid Count		6,167
Grand Total Count		345,619

Over 50% of journeys were for HBO journey purpose (almost 40% of weekday journeys). Commuting type journey purposes (HBW) were for almost 15% of weekday journeys and less than 5% of weekend journeys.

6.2.3 *Vehicle Occupancy*

Appendix D Table 6.3: Vehicle Occupancy

(Q1.13: Car drivers/motorcyclists/goods vehicle drivers … no of occupants)

A summary is shown in Table 6.3 below – data is grouped by weekday/weekend in the appendices.

Table 6.3: Vehicle Occupancy Summary

Status	Occupancy	Valid Percent T+NT 24-7
	Driver only	55.5
	One passenger	31.3
	Two passengers	6.8
	Three passengers	4.6
	Four or more passengers	1.7
Valid	Total	100.0
Total Valid Count		329,248
Total Invalid Count		16,371
Grand Total Count		345,619

Over 55% of journeys featured just the driver. Almost 90% featured one or two occupants. At weekends, almost 90% of journeys featured up to 3 occupants.

6.2.4 *Main reason for using M6T*

Appendix D Table 6.4: Main Reason for using M6T

(Q2.2: Which of the above reasons would you say was the main reason?)

A summary is shown in Table 6.4 below – data are grouped by weekday/weekend in the appendices.

Table 6.4: Main Reasons for using M6T Summary

Status	Main Reason	Valid Percent T+NT 24-7
	It saves time over alternative routes	56.4
	I used in by mistake (in wrong lane/misleading signs)	0.6
	Able to travel at the speed I want to	1.4
	Avoid routes with lots of HGVs	2.7
	Trying it out	0.9
	Journey times are more predictable than alternative routes	6.5
	Signs on approach warned of congestion on alternative route	2.2
	The smooth road surface	0.3
	Use of Norton Canes services	0.2
	Less stressful to drive on than alternative routes	8.5
	Guarantee of no hold ups	5.6
	Route is more direct for me than any alternative route	3.0
	The scenery / environment is more pleasant than the alternative routes	0.3
	Heard traffic report of congestion / accidents on alternative routes	2.0
	Avoiding road works on M6	6.9
	Other	2.4
Valid	Total	100.0
Total Valid Count		335,310
Total Invalid Count		10,309
Grand Total Count		345,619

Over 50% of drivers gave the main reasons for using the M6T as being 'to save time over alternative routes'. The next most important reason given by 10% of weekend drivers (slightly less for weekday drivers) was being 'less stressful than alternative routes'. The least important reason behind using the M6T was 'use of Norton Canes services' (<0.5%).

6.2.5 *Frequency of Journey*

Appendix D Table 6.5: Frequency of Journey

(Q2.3: How often do you make this journey for this purpose (i.e. between the places given in Q1.1 and Q1.3)?)

A summary is shown in Table 6.5 below – data are grouped by weekday/weekend in the appendices.

Table 6.5: Frequency of Journey Summary

Status	Frequency of Journey	Valid Percent T+NT 24-7
	First time today	11.9
	Daily	4.3
	Several times a week	6.9
	Weekly	8.1
	Several times a month	11.9
	Monthly	7.1
	Several times a year	38.4
	Once a year	7.2
	Less than once a year	4.2
Valid	Total	100.0
Total Valid Count		344,511
Total Invalid Count		1,107
Grand Total Count		345,619

The peak grouping (almost 40%) was journeys that occur 'several times a year'. There were similar proportions of first time users on weekday and at weekends.

6.3 Cross-Tabulation Analysis

6.3.1 *Journey Length v Journey Purpose*

Appendix D Table 6.6: Journey Length and Journey Purpose

(Q1.1: Where did your journey start? Q1.3: And where were you travelling to?

Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?)

A summary is shown in Table 6.6 below – data are grouped by weekday/weekend in the appendices.

Table 6.6: Journey Length and Journey Purpose Summary

	Journey Purpose				
Journey Distance	EB	HBW	HEB	HBO	NHBO
between 0 and 50 km	5.5	26.7	5.1	4.1	3.6
between 50 and 100 km	12.1	31.6	15.5	7.1	11.2
between 100 and 150 km	19.7	13.6	15.9	9.1	11.4
between 150 and 200 km	12.8	9.3	14.5	11.6	12.6
between 200 and 250 km	14.3	7.0	14.3	15.4	14.4
between 250 and 300 km	13.7	5.8	16.4	17.4	15.9
between 300 and 350 km	9.1	3.7	11.1	14.6	12.3
between 350 and 400 km	5.0	1.3	3.5	7.8	9.4
between 400 and 450 km	2.1	0.3	1.2	3.1	2.5
between 450 and 500 km	3.1	0.0	1.0	2.4	0.8
more than 500 km	2.6	0.7	1.7	7.4	5.9
Total	100.0	100.0	100.0	100.0	100.0
Count	21,016	30,418	49,887	116,094	9,139

Journey Duration	Journey Purpose EB	HBW	HEB	HBO	NHBO
Less than 1 Hour	7.6	34.3	9.6	4.5	8.3
Between 1 and 2 hours	20.2	44.0	25.4	11.5	17.7
Between 2 and 3 hours	26.5	15.7	26.0	15.9	15.0
Between 3 and 4 hours	18.9	13.8	24.3	19.0	14.4
Between 4 and 5 hours	15.5	4.9	16.3	17.9	18.3
Between 5 and 6 hours	9.3	4.6	7.2	12.5	11.6
Between 6 and 7 hours	6.1	0.5	2.7	9.0	8.7
Between 7 and 8 hours	3.5	0.2	1.6	4.7	3.9
Between 8 and 9 hours	0.9	0.0	2.1	2.5	0.6
Between 9 and 10 hours	0.6	0.0	0.6	1.7	2.2
More than 10 hours	13.0	36.1	18.2	4.9	3.4
Total	100.0	100.0	100.0	100.0	100.0
Count	29,054	28,226	61,704	154,744	15,495

On weekdays, HBW is the journey purpose with the greatest proportions in shorter length bands; the frequency drops with increasing journey length. Other journey purposes tend to have peak proportions around 250-300km or the 2-5hour duration (depending on the purpose). Similar trends are apparent from the weekend data for HBW, HEB and HBO purposes; the trends for EB and HNBO are less clear. Weekday results are shown in Figures 5.5 and 5.6, weekend results in Figures 5.7 and 5.8.

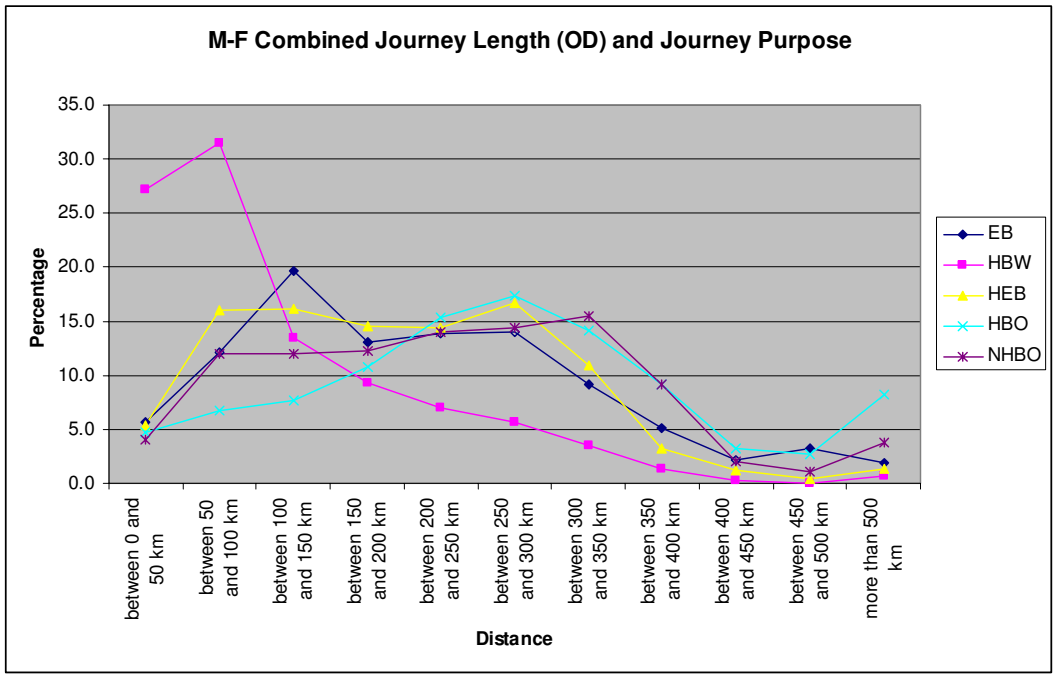

Figure 6.5: Monday-Friday Journey Length (OD) and Journey Purpose

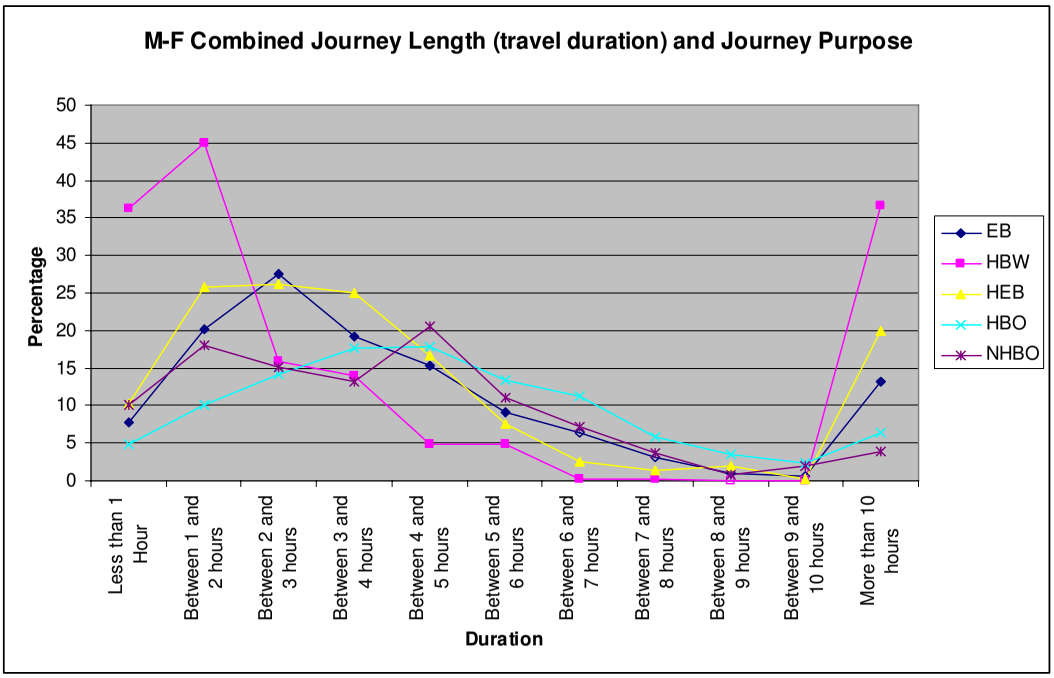

Figure 6.6: Monday-Friday Journey Length (travel duration) and Journey Purpose

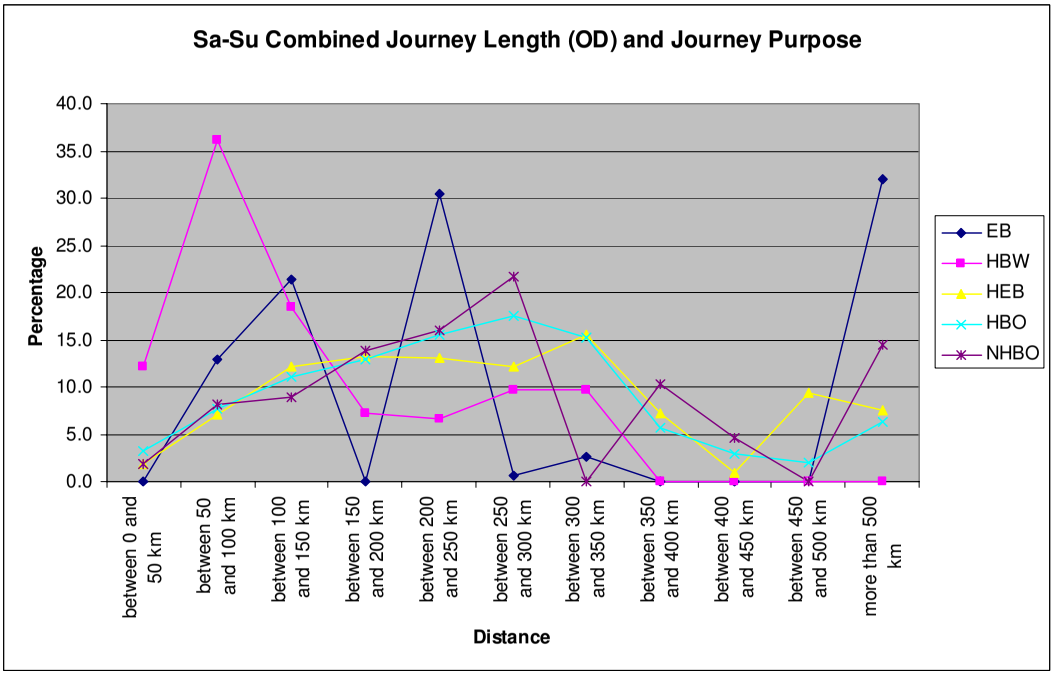

Figure 6.7: Saturday-Sunday Journey Length (OD) and Journey Purpose

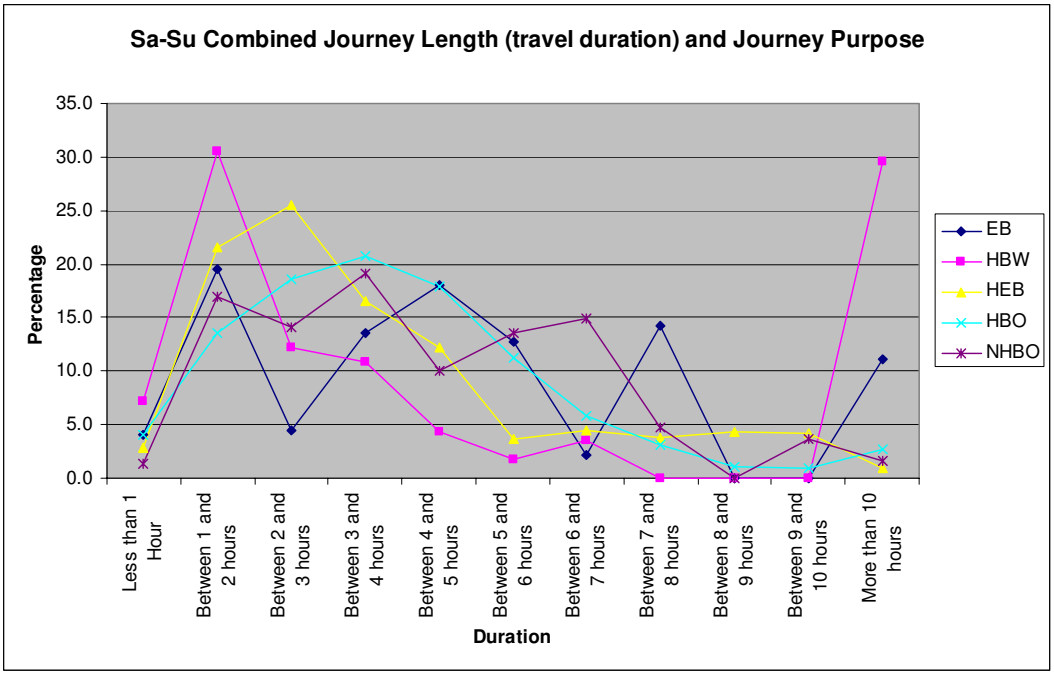

Figure 6.8: Saturday-Sunday Journey Length (travel duration) and Journey Purpose

6.3.2 *Journey Length v Vehicle Type*

Appendix D Table 6.7: Journey Length and Vehicle Type

(Q1.1: Where did your journey start? Q1.3: And where were you travelling to?

Q1.10: What type of vehicle were you using when making this journey?)

A summary is shown in Table 6.7 below – data are grouped by weekday/weekend in the appendices.

Table 6.7: Journey Length and Vehicle Type Summary

	Vehicle Type					
Journey Distance	**Van**	**HGV**	**Bus/Coach**	**Car**	**Motorcycl**	**Other**
between 0 and 50 km	3.8	0.0	19.8	6.6	0.0	24.6
between 50 and 100 km	15.4	1.8	23.5	11.7	0.0	14.2
between 100 and 150 km	11.9	13.7	16.5	11.7	0.0	10.2
between 150 and 200 km	8.2	17.7	11.9	12.0	0.0	10.2
between 200 and 250 km	17.9	15.1	10.1	14.0	0.0	8.7
between 250 and 300 km	14.8	18.2	8.3	16.0	100.0	10.2
between 300 and 350 km	9.5	16.8	4.9	12.7	0.0	7.2
between 350 and 400 km	3.5	6.2	2.4	6.3	0.0	7.4
between 400 and 450 km	3.9	1.4	1.7	2.1	0.0	3.0
betwen 450 and 500 km	2.3	5.6	0.0	1.8	0.0	0.0
more than 500 km	8.9	3.6	0.8	5.1	0.0	4.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Count	12,748	6,694	22,275	186,974	183	149

	Vehicle Type					
Journey Distance	**Van**	**HGV**	**Bus/Coach**	**Car**	**Motorcycl**	**Other**
Less than 1 Hour	6.3	0.0	7.2	8.7	0.0	8.3
Between 1 and 2 hours	21.5	5.2	1.0	20.0	0.0	12.7
Between 2 and 3 hours	16.7	18.2	12.2	20.4	0.0	14.6
Between 3 and 4 hours	20.3	21.0	21.8	19.5	0.0	22.2
Between 4 and 5 hours	12.1	21.1	4.2	16.6	0.0	15.0
Between 5 and 6 hours	10.1	11.7	10.6	10.4	100.0	17.4
Between 6 and 7 hours	5.7	10.8	10.1	6.5	0.0	9.5
Between 7 and 8 hours	3.1	6.4	11.3	3.4	0.0	3.5
Between 8 and 9 hours	1.8	4.0	0.0	1.9	0.0	3.9
Between 9 and 10 hours	1.0	0.8	2.5	1.3	0.0	0.9
More than 10 hours	11.2	8.2	19.2	11.7	0.0	17.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Count	18,713	10,421	1,084	262,761	183	232

On a weekday, the peak grouping for cars was for a journey length of 250-300km, and between 2-3 hours. The proportion of bus/coaches tended to decline with increasing journey distance. The proportions of HGV and cars were relatively constant for journey distances up to 300km, before declining thereafter. At weekends, the peak distances for HGVs tended to be longer. Weekday results are shown in Figures 6.9 and 6.10, weekend results in Figures 6.11 and 6.12.

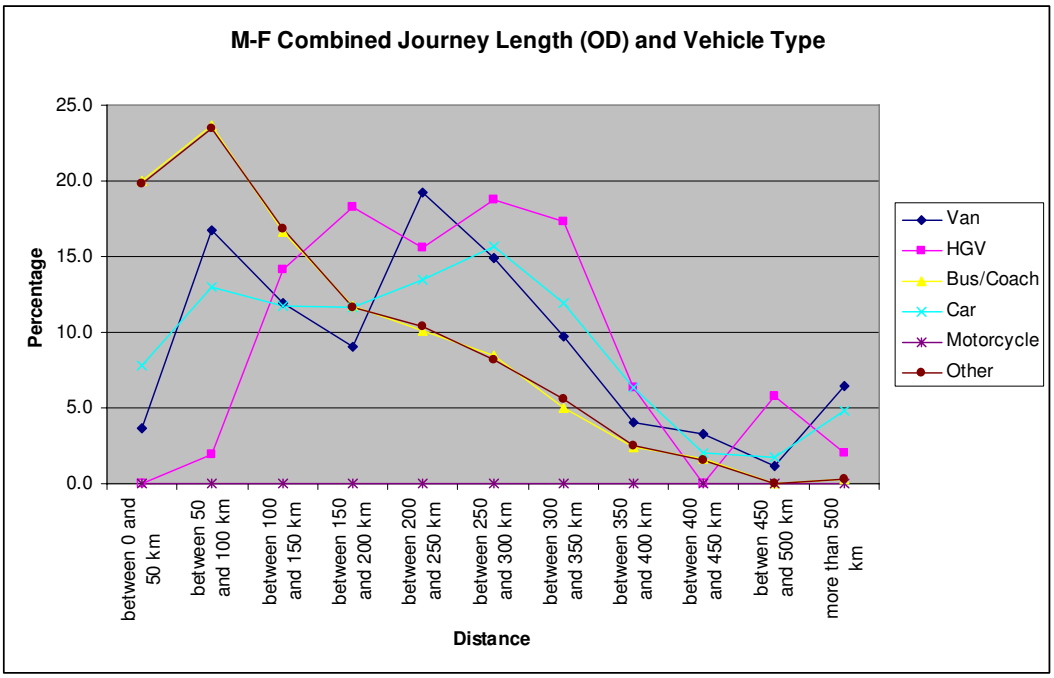

Figure 6.9: Monday-Friday Combined Journey Length (OD) and Vehicle Type

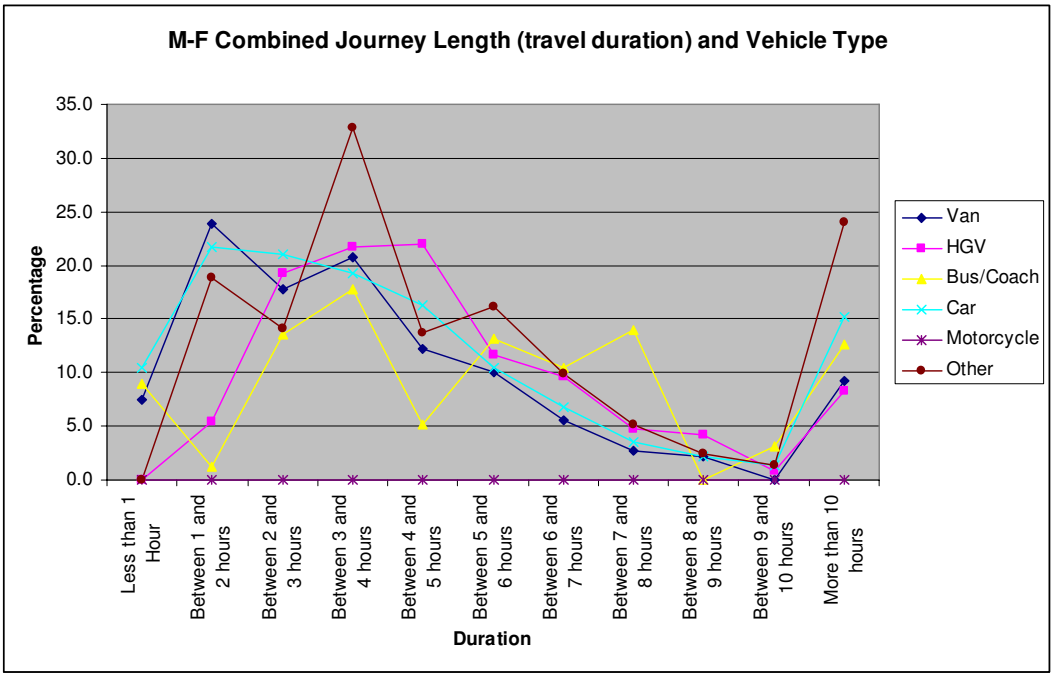

Figure 6.10: Monday-Friday Combined Journey Length (travel duration) and Vehicle Type

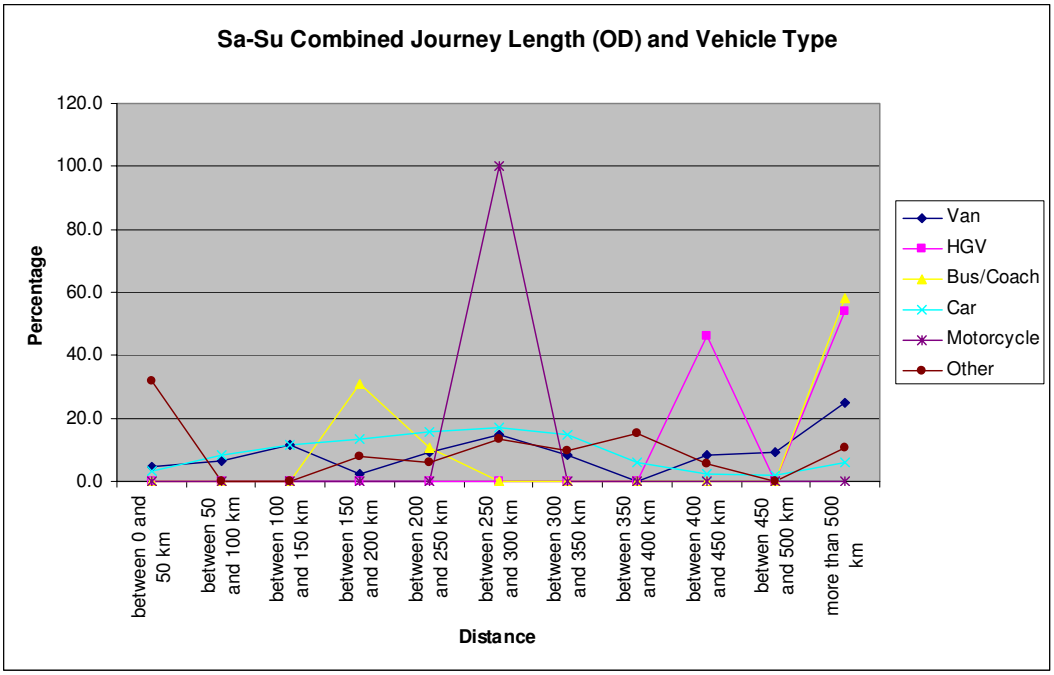

Figure 6.11: Saturday-Sunday Combined Journey Length (OD) and Vehicle Type

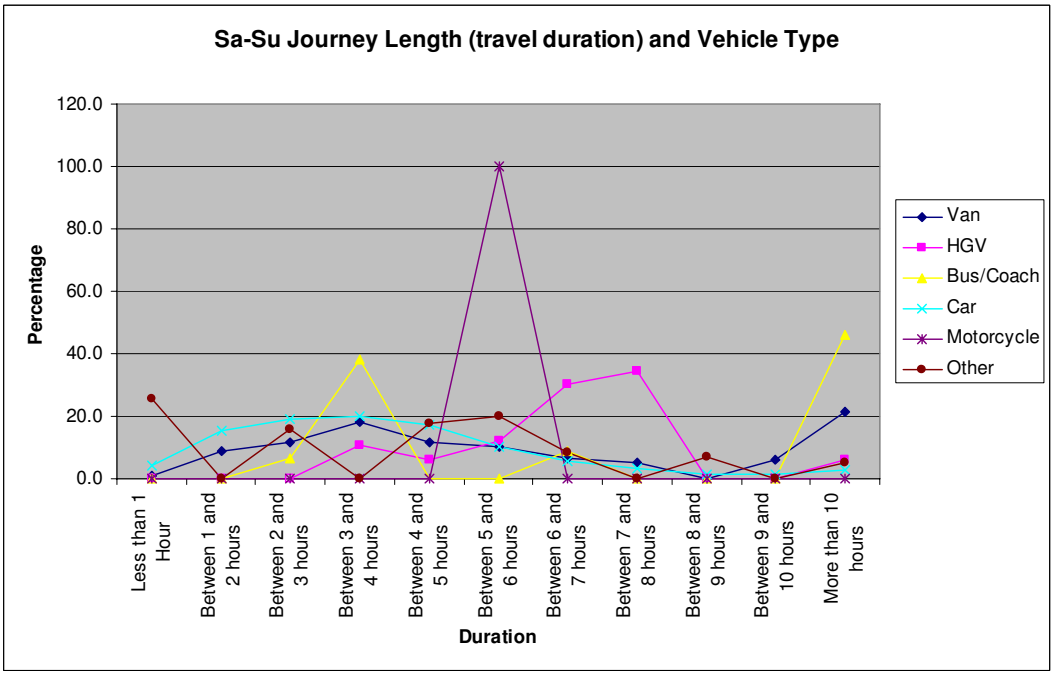

Figure 6.12: Sa-Su Combined Journey Length (travel duration) and Vehicle Type

6.3.3 *Journey Purpose v Frequency of Journey*

Appendix D Table 6.8: Journey Purpose and Frequency of Journey

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?

Q2.3: How often do you make this journey for this purpose (ie between the places given in Q1.1 and Q1.3)?)

A summary is shown in Table 6.8 below – data are grouped by weekday/weekend in the appendices.

Table 6.8: Journey Purpose and Frequency of Journey Summary

	Journey Purpose				
Frequency of Journey	**EB**	**HBW**	**HEB**	**HBO**	**NHBO**
First time today	12.5	0.7	10.5	14.7	17.3
Daily	2.2	30.3	2.1	0.1	0.7
Several times a week	9.9	30.3	7.6	1.1	2.7
Weekly	11.4	22.8	11.8	2.5	4.4
Several times a month	19.2	10.7	22.5	6.0	11.3
Monthly	7.5	1.1	9.9	7.5	5.6
Several times a year	31.9	3.8	30.5	50.8	40.8
Once a year	3.1	0.0	3.5	11.3	8.0
Less than once a year	2.3	0.2	1.7	6.1	9.0
Total	100.0	100.0	100.0	100.0	100.0
Count	34,032	39,231	77,755	170,030	17,167

Each journey purpose generally had “several times a year as” its highest proportion of journey frequencies, apart from HBW (several times a week). On weekdays, between 10-20% of each journey purpose (apart from HBW journeys) were on journeys being made for the first time.

6.3.4 *Journey Purpose v Occupancy*

Appendix D Table 6.9: Journey Purpose and Occupancy

(Q1.2: What was the main reason you were at that address? Q1.4: What was the main reason you were going to that address?

Q3.3: How would you describe the other occupants travelling with you today?)

A summary is shown in Table 6.9 below – data are grouped by weekday/weekend in the appendices.

Table 6.9: Journey Purpose and Occupancy Summary

	Journey Purpose				
Occupancy	**EB**	**HBW**	**HEB**	**HBO**	**NHBO**
Driver only	80.7	91.3	86.1	29.2	48.8
One passenger	15.1	6.7	11.9	48.5	36.3
Two passengers	2.5	1.6	1.6	11.1	7.6
Three passengers	1.1	0.2	0.3	8.3	5.0
Four or more passengers	0.7	0.2	0.1	2.9	2.3
Total	100.0	100.0	100.0	100.0	100.0
Count	29,899	37,579	74,970	165,436	15,553

Over 80% of journeys on EB, HBW or HEB journeys featured the driver only. At weekends, the proportion dropped to slightly over 60% for EB and HEB journeys. Over 95% of EB, HBW and EB journeys featured up to 2 occupants. Regardless of the day, between 70-90% of HBO and HNBO journeys featured up to 2 occupants.

7 Summary of Findings

7 Summary of Findings

7.1 Data Gathering

Surveys were conducted in September 2006 on the M6T, and involved the collection of data at four of the busier toll plazas – Great Wyrley, Shenstone, Weeford Junction and Weeford Park. Data were collected on a Monday, Wednesday, Friday and Sunday, all between the hours of 07:00-19:00.

Over 8,300 interviews were made at the toll plazas in order to correct for bias in the usage questionnaires, returned in the post. Over 35,000 questionnaires were handed to non-TAG users, and over 6,000 were returned in the post for subsequent analysis. Questionnaires were distributed to a selection of MEL's database of users: almost 1,000 were returned in the post for subsequent analysis.

7.2 Profile of Usage by Non-TAG User and TAG User

Analysis of data by non-TAG and TAG users separately was restricted to the constraints surveyed: non-TAG data were indicative of the four plazas in September 2006 on the survey days over 12 hours, while TAG data was indicative of all plazas for seven different days, 24 hours/day, in September 2006. The non-TAG data amounted to some 150,000 vehicles on the survey days, and the TAG data some 35,000 vehicles on the survey days.

As a summary of tables discussed in Section 4 and 5, Tables 7.1 – 7.4 below summarise the peak values for each component on weekdays and at weekends, and provide the average values for selected components.

Table 7.1: Non-TAG Users Frequency

Table	Component	Weekday Maximum (Mon, Wed, Fri)			Weekend Maximum (Sun)	
		Group	Day	Percentage	Group	Percentage
4.1a	Journey Length (OD)	Between 250-300km	Friday	17.3	Between 250-300km	19.8
4.1b	Journey Length (Travel Duration proxy)	Between 1 and 2 hours	Wednesday	21.0	Between 3 and 4 hours	20.0
4.2	Journey Purpose	HBO	Friday	51.0	HBO	85.8
4.3	Vehicle Type	Car	Friday	89.4	Car	94.7
4.4	Goods Vehicles' Owner	Neither	Friday	59.7	Neither	77.0
	Goods Vehicles' Load Type	Various	Friday	35.8	Various	41.7
	Goods Vehicles' Load Status	Loaded	Monday	59.7	Empty	40.8
4.5	Bus/Coach Particulars	Chartered	Friday	89.7	Chartered	69.7
4.6	Vehicle Occupancy	Driver only	Wednesday	69.1	One passenger	43.4
4.7	Overnight Stops	No, none	Wednesday	52.0	Yes, 3+ nights away	33.2
4.8	Hierarchy of Reasons for Using M6T	It saves time over alternative routes	Wednesday	86.5	It saves time over alternative routes	83.3
4.9	Main Reason for using M6T	It saves time over alternative routes	Friday	58.1	It saves time over alternative routes	51.3
4.10	Frequency of Journey	Several times a year	Friday	37.4	Several times a year	52.9
4.11	Route Choice (Frequency of using M6T)	Most of the time	Wednesday	76.4	Most of the time	78.9
	Route Choice (Frequency of using M6)	Very rarely	Wednesday	43.4	Very rarely	43.2
	Route Choice (Frequency of using A50/A500)	Never	Friday	59.5	Never	66.5
4.12	Age of Users	35-44	Wednesday	27.9	55-64	24.9
4.13	Group Composition of Users	Partner	Friday	56.3	Partner	53.4
4.14	Income of Users	Between £20k to £29,999	Monday	20.2	Between £30k to £39,999	20.3

Table 7.2: TAG Users Frequency

Table	Component	Weekday Maximum (Mon-Fri)		Weekend Maximum (Sat-Sun)	
		Group	Percentage	Group	Percentage
5.1a	Journey Length (OD)	Between 50-100km	23.7	Between 300-350km	22.6
5.1b	Journey Length (Travel Duration proxy)	Between 1 and 2 hours	29.3	Between 3 and 4 hours	23.9
5.2	Journey Purpose	HEB	40.8	HBO	67.7
5.3	Vehicle Type	Car	94.7	Car	93.6
5.4	Goods Vehicles' Owner	Neither	69.3	Neither	82.9
	Goods Vehicles' Load Type	Various	33.6	High value	67.5
	Goods Vehicles' Load Status	Loaded	53.3	Loaded	67.5
5.5	Bus/Coach Particulars	N/A	N/A	N/A	N/A
5.6	Vehicle Occupancy	Driver only	83.4	Driver only	45..1
5.7	Overnight Stops	No, none	62.3	No, none	41.9
5.8	Hierarchy of Reasons for Using M6T	It saves time over alternative routes	94.9	It saves time over alternative routes	94.1
5.9	Main Reason for using M6T	It saves time over alternative routes	69.5	It saves time over alternative routes	67.3
5.10	Frequency of Journey	Several times a week	22.9	Several times a year	33.6
5.11	Route Choice (Frequency of using M6T)	Most of the time	86.1	Most of the time	88.0
	Route Choice (Frequency of using M6)	Very rarely	50.3	Very rarely	48.1
	Route Choice (Frequency of using A50/A500)	Never	55.2	Never	66.6
5.12	Age of Users	35-44	35.1	45-54	29.5
5.13	Group Composition of Users	Partner	39.2	Partner	47.6
5.14	Income of Users	Over £70k	38.1	Over £70k	32.2

Table 7.3: Average Frequency Values for Non-TAG Users

Table	Component	Unit	Average Value			
			Mon	Wed	Fri	Sun
4.1a	Journey Length (OD)	km	220	215	243	269
4.1b	Journey Length (Travel Duration proxy)	hours	3.8	3.4	4.1	4.3
4.6	Vehicle Occupancy	person	1.6	1.4	1.6	2.1
4.12	Age of Users	year	48	49	49	49
4.14	Income of Users	£	41881	44255	42312	40662

Table 7.4: Average Frequency Values for TAG Users

			Average Value	
			Mon-Fri	Sat-Sun
5.1a	Journey Length (OD)	km	144	200
5.1b	Journey Length (Travel Duration proxy)	hours	2.4	3.0
5.6	Vehicle Occupancy	person	1.2	2.0
5.12	Age of Users	year	46	48
5.14	Income of Users	£	56962	54556

Other main findings noted are that:

- Journeys on the M6T tend to be long-distance, especially for non-TAG users, and average approximately 250km. Most journeys had durations of around 3 hours. TAG journeys tend to be shorter, on weekdays over 100km and 2 hours in duration. On weekdays, there is a higher proportion of commuters (40%) among the TAG users than the non-TAG users (30%).
- Around 90% of non-TAG and TAG vehicles had one or two occupants on weekdays, falling to between 60%-70% at weekends.
- The most important reasons for using the M6T were: saving time over alternatives; assurance of no hold-ups; journey time reliability; less stressful and avoiding M6 roadworks. The least important reason was when drivers were using it by mistake. When asked for the single most important reason for using the M6T, saving time over alternatives was consistently given.
- TAG users are more frequent users than non-TAG: between 10%-15% of non-TAG users take the M6T daily or several times a week, while for TAG users the figure is nearly 40%.
- There is a degree of loyalty in M6T users, in that most (over 75% for non-TAG, and over 85% for TAG) of M6T users choose to use the M6T most of the time for their journey.

7.3 Profile of Usage by All Users

The non-TAG and TAG users were combined such that data were indicative of all plazas for seven different days, 24 hours/day, in September. The combined data amounted to some 340,000 vehicles.

As a summary of tables discussed in Section 6 Tables 7.5 – 7.8 highlight the maximum values for each component, from the frequency analysis and cross-tabulation analysis, and average values for selected components.

Table 7.5: Combined Frequency, Non TAG and TAG (Mon-Fri, Sat-Sun)

Table	Component	Weekday Maximum		Weekend Maximum	
		Group	Percentage	Group	Percentage
6.1a	Journey Length (OD)	Between 250km and 300km	14.8	Between 250km and 300km	16.8
6.1b	Journey Length (Travel Duration proxy)	Between 1 and 2 hours	18.6	Between 3 and 4 hours	19.7
6.2	Journey Purpose	HBO	39.8	HBO	83.8
6.3	Occupancy	Driver only	62.9	One passenger	42.5
6.4	Main Reason for Using M6T	It saves time over alternative routes	57.7	It saves time over alternative routes	52.2
6.5	Frequency of Journey	Several times a year	34.8	Several times a year	50.0

Table 7.6: Combined Cross-Tabulations (Mon-Fri)

Table	Component	Maximum	
		Group	Percentage
6.6a	Journey Length (OD) and Journey Purpose	Between 50 and 100km (HBW)	31.4
6.6b	Journey Length (Travel Duration proxy) and Journey Purpose	Between 1 and 2 hours (HBW)	45.0
6.7a	Journey Length (OD) and Vehicle Type	Between 50 and 100 km (Bus/Coach)	23.7
6.7b	Journey Length (Travel Duration proxy) and Vehicle Type	Between 3 and 4 hours (Other)	32.9
6.8	Frequency of Journey and Journey Purpose	Several times a year (HBO)	50.6
6.9	Occupancy and Journey Purpose	Driver only (HBW)	91.6

Table 7.7: Combined Cross-Tabulations (Sat-Sun)

Table	Component	Maximum	
		Group	Percentage
6.6a	Journey Length (OD) and Journey Purpose	Between 50 and 100km (HBW)	36.1
6.6b	Journey Length (Travel Duration proxy) and Journey Purpose	Between 1 and 2 hours (HBW)	30.5
6.7a	Journey Length (OD) and Vehicle Type	Between 250 and 300km (Motorcycle)	100
6.7b	Journey Length (Travel Duration proxy) and Vehicle Type	Between 5 and 6 hours (Motorcycle)	100
6.8	Frequency of Journey and Journey Purpose	Several times a year (HBO)	51.2
6.9	Occupancy and Journey Purpose	Driver only (HBW)	85.6

Table 7.8: Average Frequency Values for Combined Users

			Average Value	
			Mon-Fri	Sat-Sun
6.1a	Journey Length (OD)	km	215	252
6.1b	Journey Length (Travel Duration proxy)	hours	3.6	4.0
6.3	Occupancy	person	1.5	2.1

Other main findings noted are that:

- Weekday journeys of between 150-250km and around 3 hours have similar proportions of non-TAG and TAG users. At shorter distances and durations, the proportions of TAG users are higher than non-TAG users. Most journeys tend to be around 250-300km in distance.
- Over 40% of weekday and over 80% of weekend journeys were leisure related, i.e. not connected with work or commuting.
- 90% of vehicles on weekdays had one or two occupants, 75% at weekends. While over 60% of vehicles had the driver only on weekdays, 30% were driver-only at weekends.
- Around 55% of drivers gave saving time over alternatives as the most important reason for using the M6T.
- Almost 25% of weekday drivers use the M6T between a daily frequency and weekly frequency.

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Appendices (bound separately)

Appendix A – Survey Templates

Screening Interview Survey

Main Questionnaire Survey

Appendix B – Non-TAG Analysis Tables

Non-TAG frequency analysis Tables 3.1 – 3.16 (MON, WED, FRI, SUN)

Non-TAG cross-tabulation analysis Tables 3.17 – 3.35 (MON, WED, FRI, SUN)

Appendix C – TAG Analysis Tables

TAG frequency analysis Tables 4.1 – 4.16 (Week, Weekend)

TAG cross-tabulation analysis Tables 4.17 – 4.35 (Week, Weekend)

Appendix D – Non-TAG and TAG Combined Analysis Tables

Combined Non-TAG and TAG frequency analysis Tables 5.1 – 5.5 (M-F, Sa-Su)

Combined Non-TAG and TAG cross-tabulation analysis Tables 5.6 – 5.9 (M-F, Sa-Su)