



A27 Chichester Bypass

Developers Contribution Analysis for Strategic Development Options and Sustainable Transport Measures

October 2015



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Executive Summary

Chichester District Council commissioned Jacobs to identify a consistent technical methodology for calculating developer contributions to fund improvements to the A27 Chichester Bypass necessary to mitigate the traffic impacts of development proposed in the Local Plan.

The Chichester Transport Study, using the Chichester Area Transport Model (CATM), in 2012/13 identified a package of infrastructure to be delivered by Local Plan development, including upgrades to the A27 Chichester Bypass. The A27 upgrades were junction improvements which mitigate the impacts of planned development, but do not include significant betterment. The A27 upgrades were planned as a design for junction improvements which would mitigate the impacts of planned development, but do not include significant betterment. This package was costed at £12.817m.

CATM was used to identify the number of trips generated by each housing development that use the key A27 junctions. The CATM model forecast was updated to reflect the June 2015 housing allocation of Chichester's Local Plan. The analysis only included outstanding housing developments identified in the Local Plan, excluding those that were already permitted¹.

The mitigation costs were equally divided between each trip that used the A27 junctions from the housing contributing to the mitigation costs. The analysis shows that the individual cost per trip is £8,316.78.

Based on this individual trip cost, the contribution from each development has been calculated. The contribution per dwelling for each of the identified developments is shown in the table below.

Development zones		Total no of trips post adjustment	Total cost per development		Cost per dwelling (Total cost per dev/no of hous. Dev)
Large Strategic Locations	No of Housing Dev.		Based on cost per trip: £8316.782		
Westhampnett/NE Chichester - Westhampnett development area	300	140.27986	£	1,166,677	£ 3,888.92
Westhampnett/NE Chichester - NE Chichester development area	200	24.34197	£	202,447	£ 1,012.23
Tangmere	1000	711.04226	£	5,913,584	£ 5,913.58
West of Chichester City - Northern access (Phase 1)	750	123.91967	£	1,030,613	£ 1,374.15
West of Chichester City - Southern access (Phase 2)	850	184.24229	£	1,532,303	£ 1,802.71
Other Housing Development					
Chichester City (built-up area)					
Zone 8 (Housing sites identified in Chi City North Development Brief)	130	21.91109	£	182,230	£ 1,401.77
Zones 1-7, 10-58 (housing to be apportioned equally between zones)	201	63.19633	£	525,590	£ 2,614.88
Southbourne					
Zone 73	105	22.76463	£	189,328	£ 1,803.13
East Wittering & Bracklesham					
Zone 63	130	50.76822	£	422,228	£ 3,247.91

¹ Some smaller parish housing allocations were excluded where they were considered unlikely to generate a substantial impact on the A27 Chichester Bypass junctions.

1. Introduction

1.1 Overview

Chichester District Council commissioned Jacobs to undertake technical work to identify a consistent methodology for calculating developer contributions to fund improvements to the A27 Chichester Bypass necessary to mitigate the traffic impacts of development proposed in the Local Plan (whether funded measures are provided on their own or as part of a wider Department of Transport scheme to be funded mainly from central Government).

The Chichester Transport Study using CATM in 2012/13 identified a package of infrastructure to be delivered by Local Plan development, including upgrades to the A27 Chichester Bypass. The A27 upgrades were planned as a design for junction improvements which would mitigate the impacts of planned development, but do not include significant betterment. This package was costed at £12.817m.

In 2011 Chichester District Council commissioned Jacobs to forecast the effects of future housing growth in Chichester. This study was carried out with a collaborative partnership working arrangement between Chichester District Council, West Sussex County Council, the Highways Agency, and the housing promoters for the Tangmere, West of Chichester and Westhampnett/North East of Chichester development sites. Jacobs used the Chichester Area Transport Model (CATM) to assess the effects on the highways network likely to arise as a result of potential options under consideration for the Local Plan, and to identify measures that could potentially mitigate these impacts.

The CATM model is a strategic model and forecasts traffic flows in the future year scenarios taking account of future planned development (and factoring in projected baseline increase in traffic flows). This was supplemented by more detailed modelling, undertaken by Parsons Brinkerhoff for the Highways Agency, of the A27 junctions around Chichester using flow information provided by the CATM model. The outcomes of junction modelling were subsequently fed back into the strategic assessment of the area-wide strategy, which informed the development strategy now included in the adopted Chichester Local Plan.

The following chapters describe the CATM model and the methodology employed to identify the amount of traffic using the key junction on the A27 Chichester bypass that generated by the housing developments in the Chichester Local Plan.

1.2 Scope of the Report

This report describes the methodology, the resulting highway traffic flows and the contributions of each development site. In summary, the content of this report is, as below:

- Chapter 2 gives an overview of the CATM model
- Chapter 3 describes the committed housing and development site assumptions
- Chapter 4 describes the network mitigation measures
- Chapter 5 presents the link analysis methodology
- Chapter 6 presents the contributions required from each development
- Chapter 7 gives a summary of the results

2. Chichester Area Transport Model (CATM)

The CATM model used in this study was developed by Jacobs for West Sussex County Council. It has enabled us to model the highway impacts of the housing developments. CATM is a multi-modal demand model that incorporates a public transport assignment model and a highway assignment model.

The highway model is validated to a base year of 2009 using count data on key cordons inside and outside the A27 Chichester Bypass and journey time survey data along the A27. The modelled turning movements were reviewed against turning movement surveys (from 2003 onwards) and found to be robust. Model preparation made intensive use of available local traffic data whilst avoiding the need for costly programmes of additional surveys. Before scenario testing was completed, model performance on key routes was verified against the most recent traffic flow data.

Figure 2.1 : CATM Zoning System – Study Area

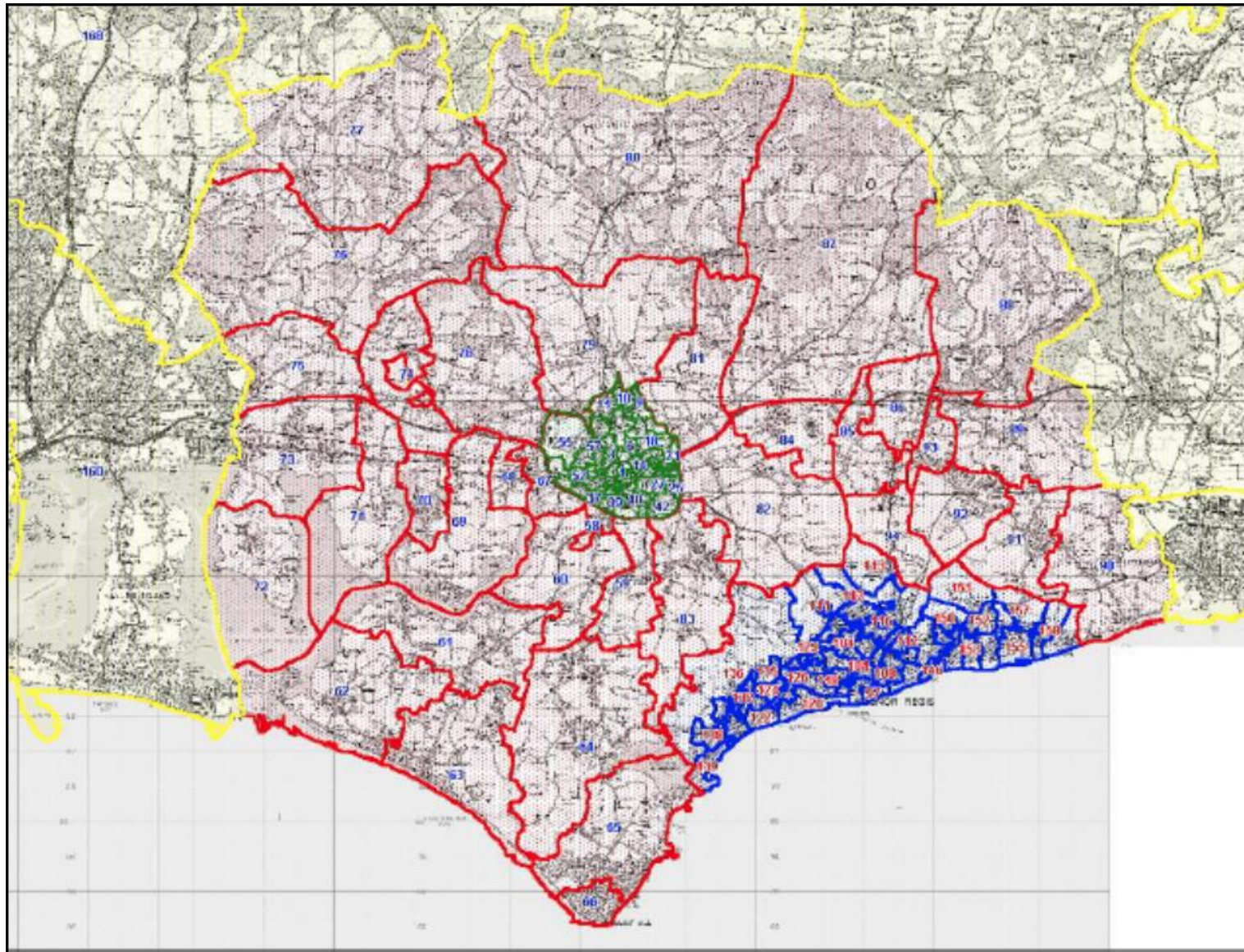
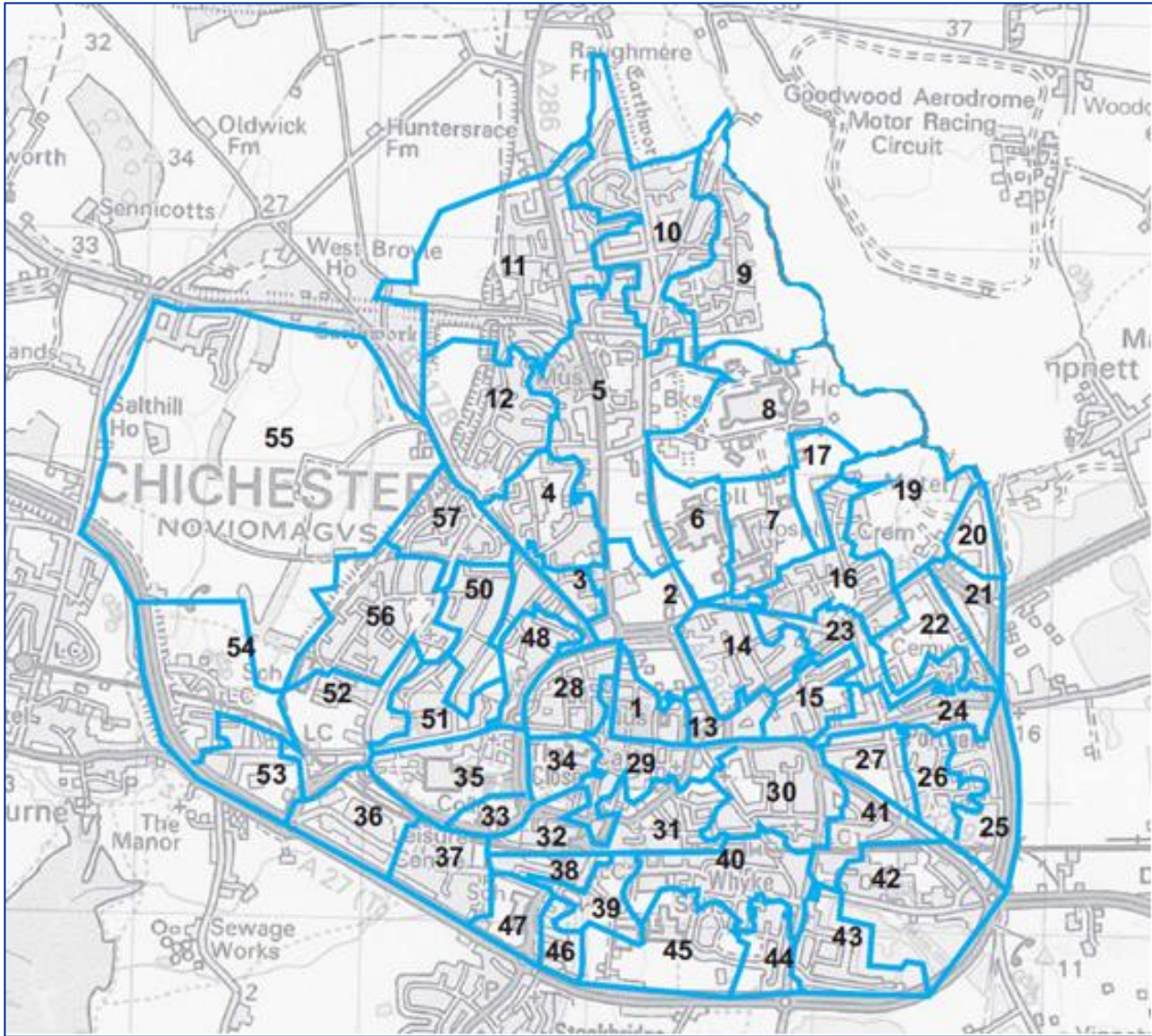


Figure 2.2 : CATM Zoning System – Chichester



CATM Zoning System – Study Area

3. Forecasting Assumptions

The forecast year used for this study was 2031. The main scenarios tested are described below. The following assumptions were made in the modelling.

The 2031 Baseline Scenario includes:

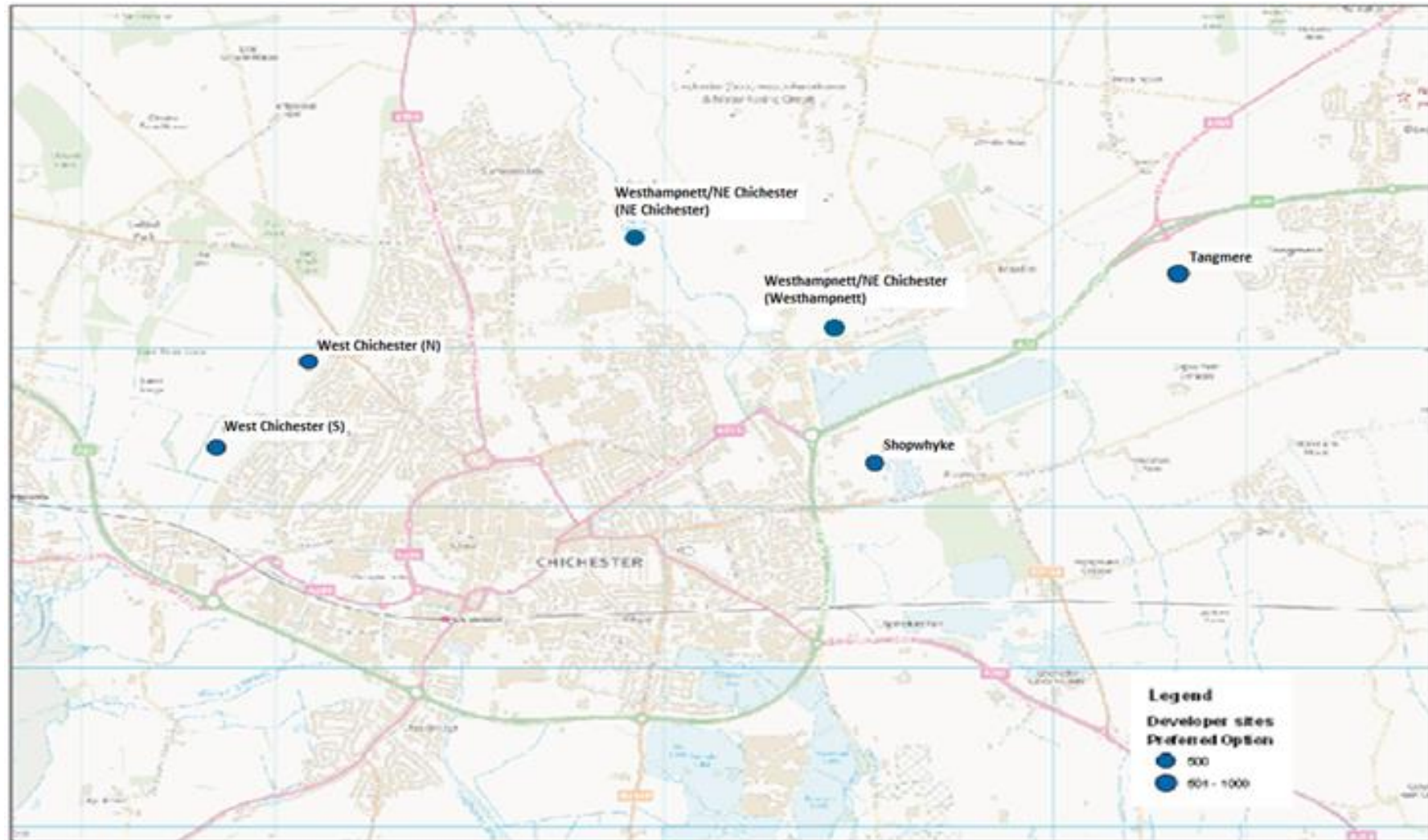
- *current / committed housing developments*
- *'non development' growth in travel demand e.g. car ownership, employment & tourism growth*
- *committed improvements to the road network*

Table 3.1 shows the additional housing proposed in the Local Plan as at June 2015. The figures have been adjusted to exclude housing already built since the Local Plan base date. The table also shows the housing developments of 50 or more dwellings, excluding those developments already permitted. It is intended that the identified sites will contribute to the cost of the identified A27 mitigation through planning obligations. Smaller parish housing allocations have been excluded where they are considered unlikely to generate a substantial impact on the A27 Chichester Bypass junctions.

Table 3.1 : Proposed Local Plan Housing – June 2015

Housing Distribution	Total Additional Housing – Local Plan – June 2015	Sites of 50+ dwellings with potential to contribute to A27 mitigation
Large Strategic Locations		
Portfield/Shopwhyke	500	n/a
Westhampnett/NE Chichester	500	500
Tangmere	1,000	1,000
West of Chichester City	1,600	1,600
Sub-Total	3,600	3,100
Other Housing Development		
Chi City North Development Brief	130	130
Chichester City (built-up area)	468	201
Southbourne	404	105
East Wittering & Bracklesham	227	130
Selsey	307	0
Tangmere (non-strategic)	128	0
Elsewhere in South of District	841	0
Sub-Total	2,505	566
Total	6,105	3,666

Figure 3.1 : Location of Strategic Housing sites



4. Network Mitigation Measures

4.1 Introduction

The housing development testing identified significant deterioration in network performance along the A27 around Chichester by 2031, and indicated that this would be further worsened as a result of growth in housing (conclusions from the forecast modelling traffic flows results presented in Chapter 4: “Network Impacts of Growth Scenarios” of the Chichester Local Plan – Transport Study in March 2013).

In conjunction with the housing developers, targeted network improvements along the A27 were developed to address these outcomes in the 2031 development scenarios.

Smarter choices and demand management measures were also proposed for application across Chichester which would encourage the use of public transport, cycling and walking rather than travel by car.

4.2 Road Network mitigations - A27 Junction Improvement Plans

The following section details the mitigation measures tested along the A27 around Chichester.

A27 Mitigation Schemes were tested at the following junctions:

- Fishbourne
- Stockbridge
- Whyke
- Bognor Road
- Oving Road
- Portfield
- Speed Limits reduced to 50mph between junctions along A27

These junction improvement proposals were developed in conjunction with housing developers for the strategic sites at Tangmere, West of Chichester, and Westhampnett/North East Chichester. The improvements at the Portfield Roundabout and Oving Road junction are those agreed as part of the planning permission already granted for the Shopwyke Lakes site.

4.2.1 Infrastructure Costs

To inform the planning process and negotiation of development contributions models for infrastructure delivery, initial budget cost estimates were prepared for each of the A27 junction improvements described above. These costs are summarised below.

Table 4.1 : Preferred Approach Development Schedule

Scheme	Budget cost estimate (£m)
Portfield Roundabout	0.619
Oving Road	0.459
Bognor Road Roundabout	1.220
Whyke Roundabout	2.225
Stockbridge Roundabout	2.644
Fishbourne Roundabout	1.734
Sub total	8.901
Optimism Bias (@44%)	3.916
TOTAL	12.817

The above estimation of budget cost has changed due to some developer contributions (£1.652m) towards improvements to A27 junctions that have already been secured through planning permissions. This includes the works to the Portfield and Oving junctions that are required as part of the Shopwyke Lakes planning permission (O/11/05283/OUT).

Therefore the budget costs identified for these junctions are not included in the following analysis. In addition, a financial payment of £100,000 towards the maintenance and upgrade of the Bognor Road roundabout has been secured from the planning permission for Phase 1 of the Barnfield Drive retail scheme (CC/12/00680/OUT). This reduces the money sought for the A27 mitigations to **£11.165m** for improvements to four junctions.

5. Housing Contributions Analysis

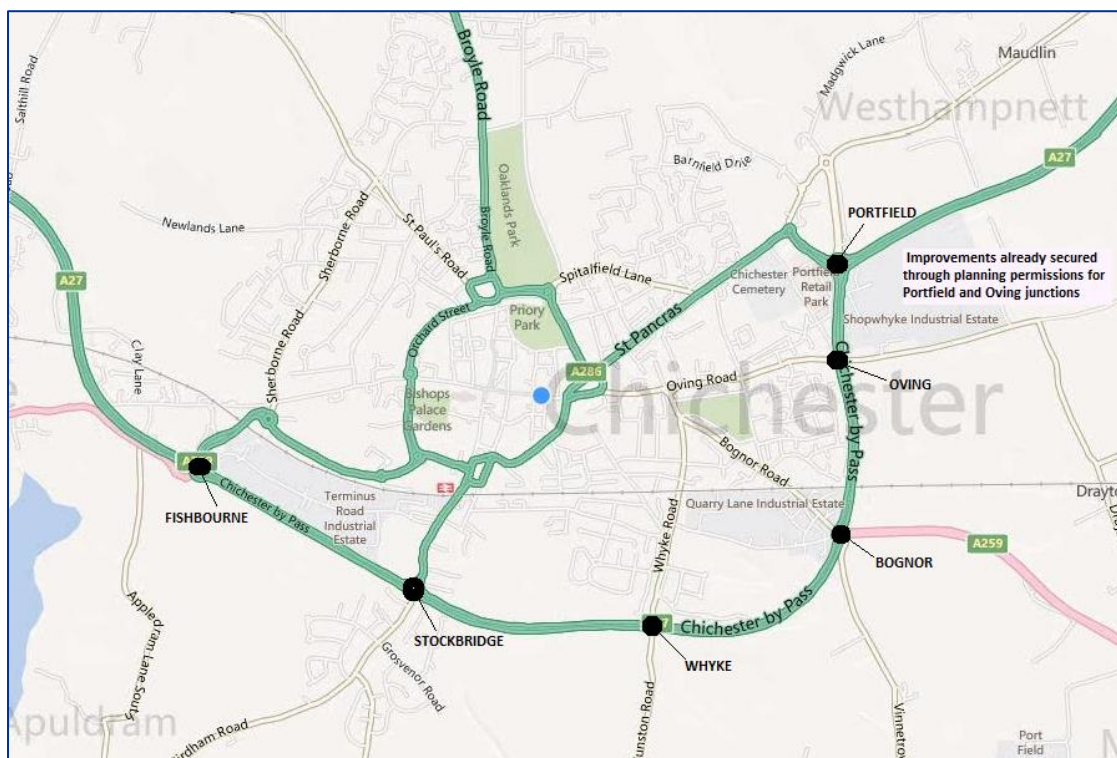
5.1 Introduction

This section of the report outlines the findings analysis undertaken using the CATM 2031 forecast model with the outstanding Local Plan housing at June 2015. This analysis identifies the traffic travelling along the A27 that is generated from the housing developments and which uses the key junctions on the A27.

5.2 Key Junctions on A27

Entry flows for links on the four key junctions (**Figure 5.1**) along the A27 have been examined in relation to the trips that are generated from the development sites and from zones (areas) of the rest of the network.

Figure 5.1 : Location of key junctions on A27 Chichester Bypass

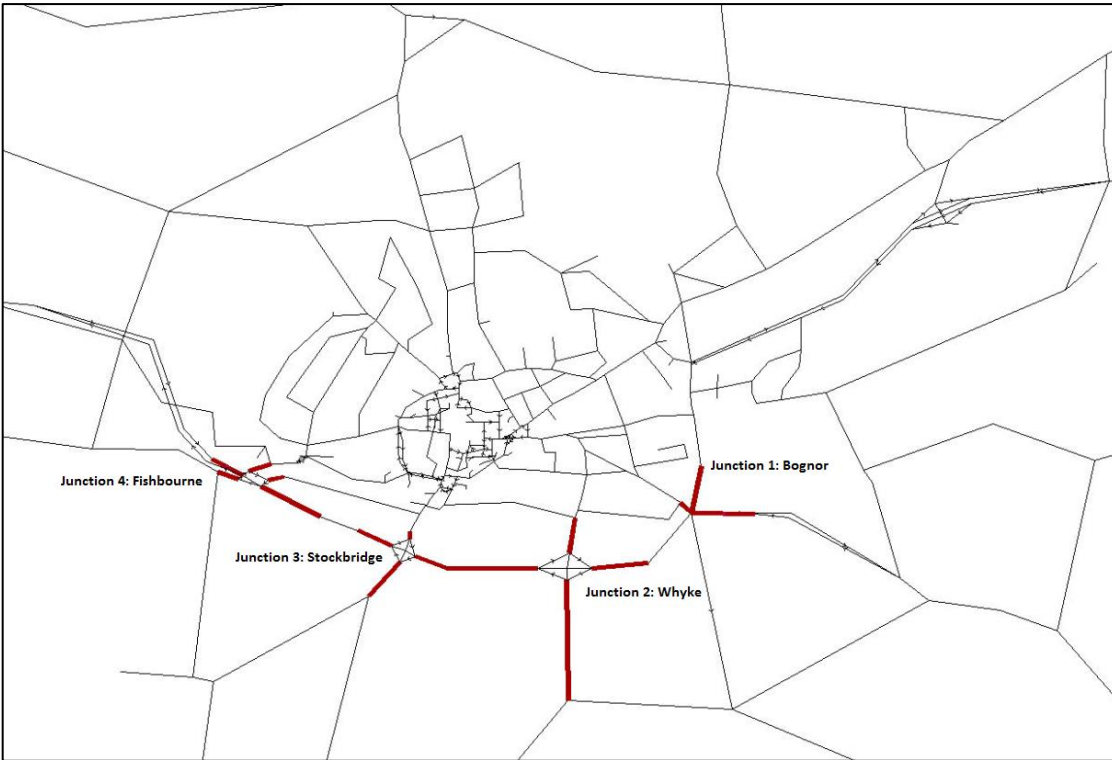


The key junctions are the following:

- Junction 1: Bognor
- Junction 2: Whyke
- Junction 3: Stockbridge
- Junction 4: Fishbourne

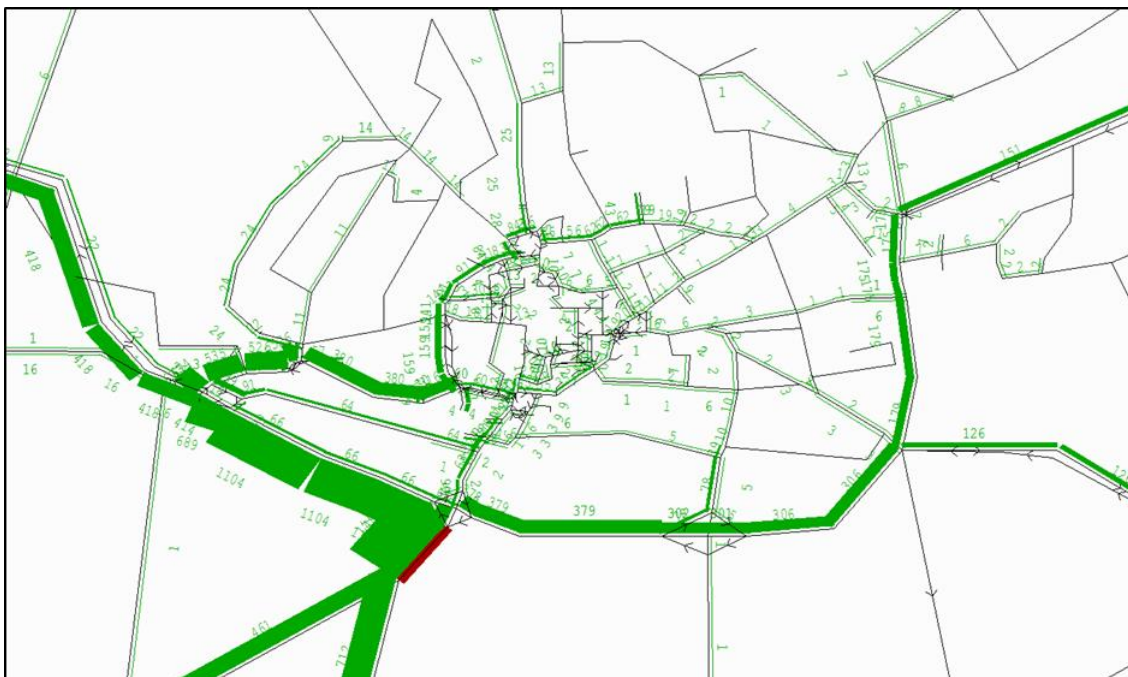
The links that have been used for link analysis for each junction on the A27 are shown in **Figure 5.2** which represents the modelled network of Chichester city .

Figure 5.2 : Links Selection on A27 key junctions



An example of the select link analysis is shown in **Figure 5.3**. This shows the routing of trips entering the Stockbridge junction from the south of Chichester, and the route taken through the network.

Figure 5.3 : Stockbridge junction NB Entry Select Link Analysis



5.3 Methodology

Select link analysis was undertaken for each of the links on the A27 key junctions. A matrix of trips for each junction was then created by combining the select link matrices for each entry link for each junction.

The identification of trips from the housing developments using the A27 junction was undertaken using the following methodology.

5.3.1 Trips generated by new and existing housing development zones

Where development sites have their own CATM model zones, as with the large strategic sites, the total number of trips to and from each strategic zone were included in the analysis.

For development sites that fell within existing model zones, it was necessary to exclude background growth and identify the number of housing development trips in the forecast matrices. This was done by calculating the proportion of trips generated in the forecast matrices by the new housing developments in each zone. This proportion was then applied to the zone in the select link matrices.

The model considers all the outstanding housing developments in the local plan. As shown earlier in Table 3.1 only housing developments of 50 dwellings or more that have not already been permitted were included in this analysis. Therefore the select link analysis matrices were also factored so that they represented :

- Trips only from not yet permitted developments;
- Trips from developments that have more than 50 dwellings;
- Non Strategic development trips relate to housing only trips.

5.3.2 Generated trips using A27 junctions

The total number of trips using the A27 key junctions and generated by the entire model is **29,137 trips** in the AM peak hour. The trips generated by the housing development sites using the key junctions are **1,342 trips** (9.5% of total trips along A27 key junctions).

The number of trips, generated by the existing development areas, does not include the employment trips. **Table 5.1** below shows:

- The number of trips generated by each of the development sites in the AM peak hour
- The total number of trips that use each junction on Chichester Bypass

Table 5.1 : Number of trips using A27 junctions

Development zones		Number of trips- All User Classes				Total number of trips
Large Strategic Locations	No of Housing Dev	Bognor (J1)	Whyke (J2)	Stockbridge (J3)	Fishbourne (J4)	
Westhampnett/NE Chichester - Westhampnett development area	300	54.66	36.22	26.79	22.60	140.28
Westhampnett/NE Chichester - NE Chichester development area	200	7.92	4.64	0.87	10.91	24.34
Tangmere	1000	263.23	215.34	135.23	97.24	711.04
West of Chichester City - Northern access (Phase 1)	750	34.13	16.59	27.33	45.87	123.92
West of Chichester City - Southern access (Phase 2)	850	30.39	28.01	46.17	79.68	184.24
Other Housing Development						
Chichester City (built-up area)						
Zone 8 (Housing sites identified in Chi City North Development Brief)	130	2.41	1.00	5.11	13.39	21.91
Zones 1-7, 10-58 (housing to be apportioned equally between zones)	201	13.57	12.39	20.22	17.01	63.20
Southbourne						
Zone 73	105	3.77	5.18	5.27	8.54	22.76
East Wittering & Bracklesham						
Zone 63	130	8.59	9.83	18.94	13.41	50.77
Total number of Housing Developments:						Total trips:
	3666	418.67	329.20	285.95	308.65	1,342.47

As shown in the **Table 5.1** the junctions that experience the most usage by trips generated from the new housing development are:

- Bognor junction (junction 1) - located at southeast of Chichester
- Whyke junction (junction 2) - located south of Chichester

The Tangmere Strategic Development Location has the greatest effect on the A27 bypass with more than **700 trips** using the corridor, as trips use more than one junction to complete their journey. This is 53% of the total numbers of trips that use the A27 and are generated by the development areas (1,343 trips) and the 2.5% of the total number of trips that are generated from the entire model (29,137 trips) in the AM peak hour.

5.3.3 Simplification of number of trips using A27 junctions

The usage of a junction depends on the location of the site. Therefore trips that are generated east of Chichester are most likely to use a junction at the east of A27 rather than any other junction west or southwest of A27 (e.g Stockbridge junction and Fishbourne junction).

For this reason, it was important to consider a sensible simplification of junction usage by the development sites. This was done by concentrating strategic sites towards the junctions they most affect and using the more dispersed parish allocations to plug the gaps. The results are shown in **Table 5.2**.

The number of trips for each junction and development site remains the same during the procedure of allocating trips into different junctions. **Appendix E** shows the entire procedure of adjusting the trips from the initial number of trips to the final (adjusted) number of trips. The adjusted trips were recalculated according to the following:

- The trips from the junctions which had lowest number of trips used by a development site was allocated to all the other junctions that had the highest usage.
- Most trips generated by “Large strategic locations” use Bognor junction (junction 1) and Whyke junction (junction 2). Trips generated from Tangmere and Westhampnett/NE Chichester mainly use Bognor junction and Whyke junction. Trips generated by West of Chichester City use Stockbridge junction (junction 3) and Fishbourne junction (junction 4). Therefore the remaining trips from the junctions have been removed and have been allocated to other junctions pro rata.
- The trips that have been removed from junctions in the strategic location sites they have been added to the same junctions in “Other Housing Development” sites to retain the same number of total trips that use each junction.

Development zones	All User Classes - no of Trips				No of Trips to be removed from junctions - added to other junctions			
	J 1	J 2	J 3	J 4	J 1	J 2	J 3	J 4
Large Strategic Locations	No of trips				No of trips to be added			
Westhampnett/NE Chichester - Westhampnett development area	54.66	36.22	26.79	22.60	12.90	8.55	added to J1,J2, J4	5.34
Westhampnett/NE Chichester - NE Chichester development area	7.92	4.64	0.87	10.91	added to J4			13.43
Tangmere	263.23	215.34	135.23	97.24	41.70	34.12	21.42	added to J1,J2, J3
West of Chichester City - Northern access (Phase 1)	34.13	16.59	27.33	45.87	added to J3, J4		18.93	31.78
West of Chichester City - Southern access (Phase 2)	30.39	28.01	46.17	79.68	added to J3, J4		21.42	36.97
Other Housing Development	No of trips				No of trips to be added			
Chichester City (built-up area)								
Zone 8 (Housing sites identified in Chi City North Development Brief)	2.41	1.00	5.11	13.39	13.08	5.43	added to J1, J2	
Zones 1-7, 9-58 (housing to be apportioned equally between zones)	13.57	12.39	20.22	17.01	19.47	17.77	added to J1,J2	
Southbourne	No of trips				No of trips to be added			
Zone 73	3.77	5.18	5.27	8.54	added to J3, J4		3.42	5.53
East Wittering & Bracklesham	No of trips				No of trips to be added			
Zone 63	8.59	9.83	18.94	13.41	added to J4			37.36

Table 5.2 : Adjusted number of trips using A27 junctions

The total number of trips that use each junction is not changed significantly as shown in **Table 5.3** during the procedure of adjusting the trips into different junctions.

Trips adjusted to different junctions	Bognor (J1)	Whyke (J2)	Stockbridge (J3)	Fishbourne (J4)
No of trips post adjustment	421.03	330.81	279.20	311.43
No of trips prior adjustment	418.67	329.20	285.95	308.65
Difference in trips	-2.36	-1.60	6.74	-2.77
Difference in % of trips	0.56%	0.49%	-2.36%	0.90%

Table 5.3 : Total number of trips using A27 junctions prior and post adjustment

The next **Table 5.4** shows the final number of trips calculated by the simplification of trips as described above. The total number of trips generated by each development site is not changed. The total number of trips at each junction has a slight and non-significant change and the total number of trips at all junctions has not changed.

Table 5.4 : Simplification of trips using A27 junctions

Development zones		All User Classes - no of trips prior adjustment				All User Classes - Final no of trips post adjustment				Total no of trips per development prior adjustment	Total no of trips per development post adjustment
		Bognor J 1	Whyke J 2	Stockbridge J 3	Fishbourne J 4	Bognor J 1	Whyke J 2	Stockbridge J 3	Fishbourne J 4		
Large Strategic Locations	No of Housing Dev.	No of trips				No of trips adjusted					
Westhampnett/NE Chichester - Westhampnett development area	300	54.66	36.22	26.79	22.60	67.57	44.78		27.93	140.28	140.28
Westhampnett/NE Chichester - NE Chichester development area	200	7.92	4.64	0.87	10.91				24.34	24.34	24.34
Tangmere	1000	263.23	215.34	135.23	97.24	304.93	249.45	156.66		711.04	711.04
West of Chichester City - Northern access (Phase 1)	750	34.13	16.59	27.33	45.87			46.26	77.66	123.92	123.92
West of Chichester City - Southern access (Phase 2)	850	30.39	28.01	46.17	79.68			67.59	116.65	184.24	184.24
Other Housing Development Chichester City (built-up area)		No of trips				No of trips adjusted					
Zone 8 (Housing sites identified in Chi City North Development Brief)	130	2.41	1.00	5.11	13.39	15.49	6.43			21.91	21.91
Zones 1-7, 10-58 (housing to be apportioned equally between zones)	201	13.57	12.39	20.22	17.01	33.04	30.15			63.20	63.20
Southbourne		No of trips				No of trips adjusted					
Zone 73	105	3.77	5.18	5.27	8.54			8.69	14.07	22.76	22.76
East Wittering & Bracklesham		No of trips				No of trips adjusted					
Zone 63	130	8.59	9.83	18.94	13.41				50.77	50.77	50.77
Number of trips per junction		Total no of trips per junction prior adjustment				Total no of trips per junction post adjustment				total no of trips from all developments prior adjustment	total no of trips from all developments post adjustment
		418.67	329.20	285.95	308.65	421.03	330.81	279.20	311.43		
Total no of trips at junctions		Total no of trips per junction prior adjustment				Total no of trips per junction post adjustment				1342.47	1342.47
		1342.47				1342.47					

6. Developer Contribution for each housing location

6.1 Introduction

The outstanding mitigation cost of A27 is **£11.165 m** (as mentioned in section 4.2.1) and relates only to the impact of the housing developments identified in the Local Plan. In case that non-residential development proposals come forward that are not identified in the Local Plan, additional financial contributions may need to be sought towards A27 mitigation. To facilitate this it was necessary to calculate a cost per residential development generated trip at each junction and per dwelling.

6.2 Contributions per individual trip

The developer contributions are calculated for each housing development individually. For simplification reasons the contributions from each site were recalculated by concentrating contributions from strategic sites towards the junctions they most affect and using the more dispersed parish allocations to plug the gaps.

For a total number of **1342 trips** generated by the housing development sites and for a mitigation cost of £11.165m for A27 the **cost per individual trip is £8,316.78**.

All contributions from each development are presented in **Appendix F** (contributions for all development sites prior to the zones grouping and trip adjustment). The simplified contributions from each development site are presented in **Appendix G**.

6.3 Contributions per dwelling

The contributions for each development site are based on the total number of trips from that site using the A27 junctions. The cost per individual dwelling derives from the total contribution cost divided by the number of dwellings at each development site as shown in **Table 6.1**.

Table 6.1: Cost per dwelling for each development site

Development zones		Total no of trips post adjustment	Total cost per development		Cost per dwelling (Total cost per dev/no of hous. Dev)
Large Strategic Locations	No of Housing Dev.		Based on cost per trip: £8316.782		
Westhampnett/NE Chichester - Westhampnett development area	300	140.27986	£	1,166,677	£ 3,888.92
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Zone 73	105	22.76463	£	189,328	£ 1,803.13
East Wittering & Bracklesham					
Zone 63	130	50.76822	£	422,228	£ 3,247.91

As shown in Table 6.1 the highest cost per dwelling is £5,913.58 for the housing developments in the large strategic area of Tangmere. The second highest cost per dwelling is £3,888.92 for the Westhampnett development area.

Among the non-strategic developments the highest contribution is for the East Wittering and Bracklesham area with a cost of £3,247.91.

The highest total developer contribution costs are for the largest strategic development areas of Tangmere (£5,913,629) and for West of Chichester City (Southern Access) (£1,532,267). The highest contribution cost of "Other housing developments" is £525,595 for the Chichester city. Housing developments in East Wittering and Bracklesham experience a high cost of more than £400,000.

7. Summary

Chichester District Council commissioned Jacobs to identify a consistent technical methodology for calculating developer contributions to fund improvements to the A27 Chichester Bypass necessary to mitigate the traffic impacts of development proposed in the Local Plan (whether funded measures are provided on their own or as part of a wider Department of Transport scheme to be funded mainly from central Government).

The Chichester Transport Study using CATM in 2012/13 identified a package of infrastructure to be delivered by Local Plan development, including upgrades to the A27 Chichester Bypass. The A27 upgrades were planned as a design for junction improvements which would mitigate the impacts of planned development, but do not include significant betterment.

CATM was used to identify the number of trips generated by each housing development that use the key A27 junctions. The CATM model was updated to reflect the housing proposed in the Chichester Local Plan at June 2015 excluding those sites that have already gained planning permission. The analysis only covered larger housing developments (of 50 dwellings or more) as it was considered that these would have a significant measurable traffic impact on the A27 junctions.

The developer contribution varies among the development sites related to the number of trips generated by each development and using the A27 key junctions.

The individual trip cost is £8,317 and the highest contributions are:

- *Among the large strategic development locations:*
 - £5,913,629 for Tangmere area
 - £1,532,267 for Southern access (Phase 2) of West of Chichester City
- *The highest contribution cost of other housing developments:*
 - £ 525,594 for the Chichester city
 - £ 422,231 for East Wittering & Bracklesham

Appendix A. Trips per development zone at each junction – All trips

Development zones		User Class 1				User Class 2				All User Classes				Total no of trips from dev zone (for existing zones it includes both)
		Junction 1	Junction 2	Junction 3	Junction 4	Junction 1	Junction 2	Junction 3	Junction 4	Junction 1	Junction 2	Junction 3	Junction 4	
Large Strategic Locations¹	zone no													
Westhampnett/NE Chichester - Westhampnett development area	207	54.66	36.22	26.79	22.60	0.003	0.001	0.001	0.001	54.66	36.22	26.79	22.60	140.28
Westhampnett/NE Chichester - NE Chichester development area	9	19.97	11.71	2.20	27.52	0.003	0.000	0.000	0.000	19.97	11.71	2.20	27.52	61.40
Tangmere	206	263.23	215.33	135.23	97.24	0.002	0.001	0.001	0.001	263.23	215.34	135.23	97.24	711.04
West of Chichester City - Northern access (Phase 1)	208	34.12	16.59	27.33	45.87	0.002	0.001	0.001	0.001	34.13	16.59	27.33	45.87	123.92
West of Chichester City - Southern access (Phase 2)	209	30.39	28.01	46.17	79.68	0.002	0.001	0.001	0.002	30.39	28.01	46.17	79.68	184.24
Other Housing Development²														
Chichester City (built-up area)														
Zone 8 (Housing sites identified in Chi City North Development Brief ³)	8	8.87	3.68	18.81	49.30	0.00	0.00	0.00	0.00	8.87	3.68	18.81	49.30	80.67
	1	146.85	19.62	62.81	119.12	0.00	0.03	4.99	31.43	146.86	19.65	67.80	150.55	384.86
	2	5.95	1.67	7.15	34.87	0.00	0.00	0.00	14.27	5.95	1.67	7.15	49.14	63.91
	3	7.07	4.06	4.92	1.09	0.00	0.00	0.00	0.00	7.07	4.06	4.92	1.09	17.15
	4	33.35	0.50	11.59	25.70	0.00	0.00	0.00	0.00	33.36	0.50	11.59	25.70	71.15
	5	44.88	13.24	16.04	22.08	0.01	0.00	0.00	0.00	44.89	13.24	16.04	22.08	96.25
	6	2.56	0.51	4.74	108.92	0.00	0.00	0.00	0.00	2.57	0.51	4.74	108.92	116.73
	7	66.34	41.48	46.66	54.87	0.00	0.00	0.00	0.00	66.34	41.48	46.66	54.87	209.35
	10	15.14	1.35	1.38	2.00	0.00	0.00	0.00	0.00	15.15	1.35	1.38	2.00	19.87
	11	5.86	0.28	3.10	20.20	0.00	0.00	0.00	0.00	5.87	0.28	3.10	20.20	29.45
	12	10.43	2.33	2.21	32.15	0.00	0.00	0.00	0.00	10.43	2.33	2.21	32.15	47.12
	13	38.37	14.82	54.45	72.69	0.00	0.00	0.00	0.00	38.37	14.82	54.45	72.69	180.33
	14	31.53	17.13	16.82	25.79	0.00	0.00	0.00	0.00	31.53	17.13	16.82	25.79	91.28
	15	32.78	9.36	10.57	11.02	0.00	0.00	0.00	0.00	32.79	9.36	10.57	11.02	63.74
	16	2.72	2.17	2.65	3.10	0.00	0.00	0.00	24.03	2.72	2.17	2.65	27.14	34.68
	17	27.50	8.42	24.57	40.13	0.00	0.00	0.00	0.00	27.51	8.42	24.57	40.13	100.64
	18	60.25	44.85	38.68	39.38	0.00	0.00	0.00	0.00	60.26	44.85	38.68	39.38	183.17
	19	37.35	24.72	13.91	14.88	0.00	0.00	0.00	0.00	37.36	24.72	13.91	14.88	90.86
	20	24.32	13.36	10.71	10.45	0.00	0.00	0.00	0.00	24.32	13.36	10.71	10.45	58.85
	21	53.68	33.34	14.33	14.19	0.00	0.00	0.00	0.00	53.68	33.34	14.33	14.20	115.54
	22	64.28	41.33	19.02	18.51	0.00	0.00	0.00	0.00	64.28	41.33	19.02	18.51	143.15
	23	3.35	2.08	2.13	2.50	0.00	0.00	0.00	0.00	3.35	2.08	2.13	2.50	10.06
	24	113.64	86.54	71.13	72.88	0.00	0.00	0.00	0.00	113.64	86.54	71.13	72.88	344.18
	25	68.51	47.70	44.91	44.59	0.00	0.00	0.00	0.00	68.52	47.70	44.91	44.59	205.72
	26	124.66	89.86	82.45	73.96	0.00	0.00	0.00	0.00	124.66	89.86	82.45	73.96	370.92
	27	39.17	25.05	9.06	8.01	0.00	0.00	0.00	0.00	39.17	25.05	9.06	8.01	81.29
	28	105.24	32.19	96.05	233.18	0.00	0.00	0.00	0.00	105.24	32.19	96.05	233.18	466.66
	29	283.37	32.89	223.24	322.25	0.00	0.00	0.00	0.00	283.37	32.89	223.24	322.26	861.76
	30	58.36	48.41	44.44	26.86	0.00	0.00	0.00	0.00	58.37	48.42	44.44	26.86	178.09
Zones 1-7, 10-58 (housing to be apportioned equally between zones)	31	79.71	28.04	94.05	119.74	0.00	0.00	0.00	0.00	79.72	28.04	94.05	119.74	321.55
	32	37.94	83.63	105.26	48.49	0.56	39.49	39.18	0.00	38.50	123.12	144.44	48.49	354.55
	33	28.05	12.32	50.54	47.82	0.00	0.00	0.00	0.00	28.05	12.32	50.54	47.83	138.74
	34	13.48	8.04	21.50	55.68	0.00	0.00	0.00	0.00	13.48	8.04	21.51	55.69	98.71
	35	54.49	87.83	140.84	204.22	0.00	0.00	0.00	0.00	54.50	87.83	140.85	204.22	487.39
	36	27.67	50.30	51.10	37.01	0.00	0.00	0.00	31.43	27.67	50.30	51.11	68.45	197.53
	37	57.04	109.57	141.15	151.76	0.00	0.00	0.00	0.90	57.04	109.58	141.15	152.66	460.43
	38	90.06	135.13	228.25	115.23	0.00	0.00	0.00	0.00	90.07	135.13	228.25	115.23	568.67
	39	29.74	29.46	62.54	57.32	0.00	0.00	0.00	0.00	29.74	29.46	62.54	57.32	179.06
	40	89.34	148.03	55.83	30.75	0.00	0.00	0.00	0.00	89.35	148.03	55.83	30.75	323.96
	41	26.95	39.76	35.70	35.34	0.00	0.00	0.00	0.00	26.96	39.76	35.70	35.34	137.76
	42	152.56	154.67	90.96	66.10	62.65	55.21	50.42	50.42	215.20	209.88	141.38	116.52	682.98
	43	24.95	15.20	5.99	4.06	0.00	0.00	0.00	0.00	24.95	15.21	6.00	4.06	50.22
	44	15.11	35.52	15.10	1.80	0.00	0.00	0.00	0.00	15.12	35.52	15.11	1.80	67.54
	45	42.60	47.05	53.47	24.98	0.00	0.00	0.00	0.00	42.60	47.05	53.47	24.99	168.11
	46	61.45	87.64	29.47	34.58	0.00	0.00	0.00	0.00	61.45	87.65	29.48	34.58	213.15
	47	25.36	53.95	25.00	9.67	0.00	0.00	0.00	0.00	25.36	53.95	25.00	9.67	113.99
	48	24.64	2.23	9.38	12.43	0.00	0.00	0.00	0.00	24.64	2.23	9.38	12.44	48.69
	49	7.33	2.63	0.99	3.87	0.00	0.00	0.00	0.00	7.33	2.63	0.99	3.87	14.82
	50	6.72	0.05	10.18	8.65	0.00	0.00	0.00	0.00	6.72	0.06	10.19	8.65	25.61
	51	2.35	5.38	8.64	18.56	0.00	0.00	0.00	0.00	2.35	5.38	8.64	18.57	34.93
	52	13.89	20.55	31.10	64.98	0.00	0.00	0.00	0.00	13.89	20.55	31.10	64.98	130.52
	53	28.43	50.90	63.97	103.02	0.00	0.00	0.00	0.00	28.43	50.90	63.97	103.02	246.32
	54	8.68	20.86	34.04	66.64	0.00	0.00	0.00	0.00	8.68	20.86	34.04	66.64	130.22
	55	8.73	0.04	0.23	0.23	0.00	0.00	0.00	0.00	8.73	0.04	0.23	0.23	9.23
	56	21.41	1.58	4.04	28.84	0.00	0.00	0.00	0.00	21.41	1.58	4.04	28.84	55.87
	57	11.75	4.68	6.16	10.81	0.00	0.00	0.00	0.00	11.75	4.68	6.16	10.81	33.41
	58	74.10	92.52	281.81	176.04	0.00	0.00	0.01	0.00	74.11	92.53	281.82	176.04	624.49
Southbourne														
Zone 73	73	96.05	132.12	134.42	217.59	3.48	3.48	3.48	3.91	99.53	135.60	137.90	221.50	594.54
East Wittering & Bracklesham⁴														
Zone 63	63	123.91	141.87	273.40	193.47	0.08	0.08	0.07	0.07	123.99	141.94	273.47	193.54	732.94
total no of trips from all dev zones through A27													13184.27	
% of devl zones to total no of trips through A27													45.25%	

Appendix B. Trips per development site at each junction – Developments contributing to Mitigation Only

Development zones		User Class 1				User Class 2				All User Classes				Total no of trips from dev zone trips for new dev only and existing zone 9
		Junction 1	Junction 2	Junction 3	Junction 4	Junction 1	Junction 2	Junction 3	Junction 4	Junction 1	Junction 2	Junction 3	Junction 4	
Large Strategic Locations¹	zone no													
Westhampnett/NE Chichester - Westhampnett development area	207.00	54.66	36.22	26.79	22.60	0.00	0.00	0.00	0.00	54.66	36.22	26.79	22.60	140.28
Westhampnett/NE Chichester - NE Chichester development area	9.00	7.92	4.64	0.87	10.91	0.00	0.00	0.00	0.00	7.92	4.64	0.87	10.91	24.34
Tangmere	206.00	263.23	215.33	135.23	97.24	0.00	0.00	0.00	0.00	263.23	215.34	135.23	97.24	711.04
West of Chichester City - Northern access (Phase 1)	208.00	34.12	16.59	27.33	45.87	0.00	0.00	0.00	0.00	34.13	16.59	27.33	45.87	123.92
West of Chichester City - Southern access (Phase 2)	209.00	30.39	28.01	46.17	79.68	0.00	0.00	0.00	0.00	30.39	28.01	46.17	79.68	184.24
Other Housing Development²														total trips from this zone (Year 2031)
Chichester City (built-up area)														
Zone 8 (Housing sites identified in Chi City North Development Brief) ³	8.00	2.41	1.00	5.11	13.39	0.00	0.00	0.00	0.00	2.41	1.00	5.11	13.39	21.91
Zones 1-7, 10-58 (housing to be apportioned equally between zones)	1.00	0.35	0.05	0.15	0.28	0.00	0.00	0.00	0.00	0.35	0.05	0.15	0.28	0.83
	2.00	0.03	0.01	0.04	0.20	0.00	0.00	0.00	0.00	0.03	0.01	0.04	0.20	0.29
	3.00	0.06	0.04	0.04	0.01	0.00	0.00	0.00	0.00	0.06	0.04	0.04	0.01	0.16
	4.00	0.17	0.00	0.06	0.13	0.00	0.00	0.00	0.00	0.17	0.00	0.06	0.13	0.37
	5.00	0.21	0.06	0.08	0.10	0.00	0.00	0.00	0.00	0.21	0.06	0.08	0.10	0.45
	6.00	0.01	0.00	0.02	0.38	0.00	0.00	0.00	0.00	0.01	0.00	0.02	0.38	0.41
	7.00	0.11	0.07	0.08	0.09	0.00	0.00	0.00	0.00	0.11	0.07	0.08	0.09	0.34
	10.00	0.06	0.01	0.01	0.01	0.00	0.00	0.00	0.00	0.06	0.01	0.01	0.01	0.08
	11.00	0.02	0.00	0.01	0.06	0.00	0.00	0.00	0.00	0.02	0.00	0.01	0.06	0.09
	12.00	0.09	0.02	0.02	0.27	0.00	0.00	0.00	0.00	0.09	0.02	0.02	0.27	0.39
	13.00	0.08	0.03	0.11	0.15	0.00	0.00	0.00	0.00	0.08	0.03	0.11	0.15	0.36
	14.00	0.07	0.04	0.04	0.06	0.00	0.00	0.00	0.00	0.07	0.04	0.04	0.06	0.20
	15.00	0.16	0.05	0.05	0.05	0.00	0.00	0.00	0.00	0.16	0.05	0.05	0.05	0.31
	16.00	0.03	0.02	0.03	0.03	0.00	0.00	0.00	0.00	0.03	0.02	0.03	0.03	0.11
	17.00	0.07	0.02	0.07	0.11	0.00	0.00	0.00	0.00	0.07	0.02	0.07	0.11	0.27
	18.00	0.59	0.44	0.38	0.39	0.00	0.00	0.00	0.00	0.59	0.44	0.38	0.39	1.79
	19.00	0.33	0.22	0.12	0.13	0.00	0.00	0.00	0.00	0.33	0.22	0.12	0.13	0.79
	20.00	0.20	0.11	0.09	0.09	0.00	0.00	0.00	0.00	0.20	0.11	0.09	0.09	0.48
	21.00	0.34	0.21	0.09	0.09	0.00	0.00	0.00	0.00	0.34	0.21	0.09	0.09	0.73
	22.00	0.16	0.10	0.05	0.05	0.00	0.00	0.00	0.00	0.16	0.10	0.05	0.05	0.36
	23.00	0.04	0.03	0.03	0.03	0.00	0.00	0.00	0.00	0.04	0.03	0.03	0.03	0.12
	24.00	0.34	0.26	0.22	0.22	0.00	0.00	0.00	0.00	0.34	0.26	0.22	0.22	1.04
	25.00	0.33	0.23	0.22	0.21	0.00	0.00	0.00	0.00	0.33	0.23	0.22	0.21	0.99
	26.00	0.47	0.34	0.31	0.28	0.00	0.00	0.00	0.00	0.47	0.34	0.31	0.28	1.40
	27.00	0.32	0.20	0.07	0.06	0.00	0.00	0.00	0.00	0.32	0.20	0.07	0.06	0.66
	28.00	0.15	0.05	0.14	0.34	0.00	0.00	0.00	0.00	0.15	0.05	0.14	0.34	0.68
	29.00	0.24	0.03	0.19	0.27	0.00	0.00	0.00	0.00	0.24	0.03	0.19	0.27	0.73
	30.00	0.13	0.11	0.10	0.06	0.00	0.00	0.00	0.00	0.13	0.11	0.10	0.06	0.39
	31.00	0.22	0.08	0.26	0.33	0.00	0.00	0.00	0.00	0.22	0.08	0.26	0.33	0.87
	32.00	0.08	0.17	0.22	0.10	0.00	0.00	0.00	0.00	0.08	0.17	0.22	0.10	0.57
	33.00	0.22	0.10	0.41	0.38	0.00	0.00	0.00	0.00	0.22	0.10	0.41	0.38	1.11
	34.00	0.10	0.06	0.17	0.43	0.00	0.00	0.00	0.00	0.10	0.06	0.17	0.43	0.76
	35.00	0.12	0.19	0.31	0.45	0.00	0.00	0.00	0.00	0.12	0.19	0.31	0.45	1.07
	36.00	0.25	0.46	0.47	0.34	0.00	0.00	0.00	0.00	0.25	0.46	0.47	0.34	1.52
	37.00	0.17	0.33	0.43	0.46	0.00	0.00	0.00	0.00	0.17	0.33	0.43	0.46	1.39
	38.00	0.14	0.21	0.36	0.18	0.00	0.00	0.00	0.00	0.14	0.21	0.36	0.18	0.90
	39.00	0.11	0.11	0.23	0.21	0.00	0.00	0.00	0.00	0.11	0.11	0.23	0.21	0.67
	40.00	0.44	0.72	0.27	0.15	0.00	0.00	0.00	0.00	0.44	0.72	0.27	0.15	1.58
	41.00	0.29	0.43	0.38	0.38	0.00	0.00	0.00	0.00	0.29	0.43	0.38	0.38	1.48
	42.00	0.39	0.40	0.24	0.17	0.00	0.00	0.00	0.00	0.39	0.40	0.24	0.17	1.20
	43.00	0.59	0.36	0.14	0.10	0.00	0.00	0.00	0.00	0.59	0.36	0.14	0.10	1.18
	44.00	0.23	0.55	0.23	0.03	0.00	0.00	0.00	0.00	0.23	0.55	0.23	0.03	1.04
	45.00	0.33	0.36	0.41	0.19	0.00	0.00	0.00	0.00	0.33	0.36	0.41	0.19	1.30
	46.00	0.24	0.34	0.11	0.13	0.00	0.00	0.00	0.00	0.24	0.34	0.11	0.13	0.82
	47.00	0.25	0.54	0.25	0.10	0.00	0.00	0.00	0.00	0.25	0.54	0.25	0.10	1.13
	48.00	0.17	0.02	0.06	0.09	0.00	0.00	0.00	0.00	0.17	0.02	0.06	0.09	0.33
	49.00	0.07	0.02	0.01	0.04	0.00	0.00	0.00	0.00	0.07	0.02	0.01	0.04	0.14
	50.00	0.12	0.00	0.19	0.16	0.00	0.00	0.00	0.00	0.12	0.00	0.19	0.16	0.47
51.00	0.04	0.10	0.17	0.36	0.00	0.00	0.00	0.00	0.04	0.10	0.17	0.36	0.67	
52.00	0.07	0.10	0.15	0.31	0.00	0.00	0.00	0.00	0.07	0.10	0.15	0.31	0.63	
53.00	0.04	0.08	0.10	0.15	0.00	0.00	0.00	0.00	0.04	0.08	0.10	0.15	0.37	
54.00	0.02	0.04	0.06	0.12	0.00	0.00	0.00	0.00	0.02	0.04	0.06	0.12	0.23	
55.00	0.49	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.49	0.00	0.01	0.01	0.52	
56.00	0.06	0.00	0.01	0.08	0.00	0.00	0.00	0.00	0.06	0.00	0.01	0.08	0.16	
57.00	0.06	0.02	0.03	0.06	0.00	0.00	0.00	0.00	0.06	0.02	0.03	0.06	0.18	
58.00	3.09	3.86	11.77	7.35	0.00	0.00	0.00	0.00	3.09	3.86	11.77	7.35	26.07	
Southbourne														
Zone 73	73.00	3.77	5.18	5.27	8.54	0.00	0.00	0.00	0.00	3.77	5.18	5.27	8.54	22.76
East Wittering & Bracklesham⁴														
Zone 63	63.00	8.59	9.83	18.94	13.41	0.00	0.00	0.00	0.00	8.59	9.83	18.94	13.41	50.77
total no of trips from all dev zones through A27													1342.47	
% of devl zones to total no of trips through A27													0.0461	

Appendix C. Trips % per development – All trips

Development zones		User Class 1 - % of total trips of junction				User Class 2 - % of total trips of junction				All User Classes - % of total trips of junction				Total no of trips from dev zone		
		Junction 1	Junction 2	Junction 3	Junction 4	Junction 1	Junction 2	Junction 3	Junction 4	Junction 1	Junction 2	Junction 3	Junction 4			
Large Strategic Locations¹		zone no														
Westhampnett/NE Chichester - Westhampnett development area		207	0.86%	0.59%	0.40%	0.32%	0.00%	0.00%	0.00%	0.00%	0.78%	0.53%	0.36%	0.29%	0.48%	
Westhampnett/NE Chichester - NE Chichester development area		9	0.31%	0.19%	0.03%	0.38%	0.00%	0.00%	0.00%	0.00%	0.29%	0.17%	0.03%	0.35%	0.21%	
Tangmere		206	4.14%	3.52%	2.00%	1.36%	0.00%	0.00%	0.00%	3.77%	3.18%	1.81%	1.23%	2.44%		
West of Chichester City - Northern access (Phase 1)		208	0.54%	0.27%	0.40%	0.64%	0.00%	0.00%	0.00%	0.00%	0.49%	0.25%	0.37%	0.58%	0.43%	
West of Chichester City - Southern access (Phase 2)		209	0.48%	0.46%	0.68%	1.11%	0.00%	0.00%	0.00%	0.00%	0.44%	0.41%	0.62%	1.01%	0.63%	
Other Housing Development²																
Chichester City (built-up area)																
Zone 8 (Housing sites identified in Chi City North Development Brief) ³		8	0.139%	0.060%	0.278%	0.689%	0.000%	0.000%	0.000%	0.000%	0.127%	0.054%	0.252%	0.623%	0.277%	
Zones 1-7, 10-58 (housing to be apportioned equally between zones)		1	2.308%	0.321%	0.928%	1.665%	0.000%	0.004%	0.699%	4.173%	2.105%	0.290%	0.907%	1.904%	1.321%	
		2	0.093%	0.027%	0.106%	0.487%	0.000%	0.000%	0.000%	1.894%	0.085%	0.025%	0.096%	0.621%	0.219%	
		3	0.111%	0.066%	0.073%	0.015%	0.000%	0.000%	0.000%	0.000%	0.101%	0.060%	0.066%	0.014%	0.059%	
		4	0.524%	0.008%	0.171%	0.359%	0.000%	0.000%	0.000%	0.000%	0.478%	0.007%	0.155%	0.325%	0.244%	
		5	0.705%	0.216%	0.237%	0.309%	0.001%	0.000%	0.000%	0.000%	0.643%	0.195%	0.214%	0.279%	0.330%	
		6	0.040%	0.008%	0.070%	1.522%	0.000%	0.000%	0.000%	0.000%	0.037%	0.008%	0.063%	1.377%	0.401%	
		7	1.043%	0.678%	0.690%	0.767%	0.000%	0.000%	0.000%	0.000%	0.951%	0.613%	0.624%	0.694%	0.719%	
		10	0.238%	0.022%	0.020%	0.028%	0.000%	0.000%	0.000%	0.000%	0.217%	0.020%	0.018%	0.025%	0.068%	
		11	0.092%	0.005%	0.046%	0.282%	0.000%	0.000%	0.000%	0.000%	0.084%	0.004%	0.041%	0.255%	0.101%	
		12	0.164%	0.038%	0.033%	0.449%	0.000%	0.000%	0.000%	0.000%	0.149%	0.034%	0.030%	0.407%	0.162%	
		13	0.603%	0.242%	0.805%	1.016%	0.000%	0.000%	0.000%	0.000%	0.550%	0.219%	0.728%	0.919%	0.619%	
		14	0.496%	0.280%	0.249%	0.360%	0.000%	0.000%	0.000%	0.000%	0.452%	0.253%	0.225%	0.326%	0.313%	
		15	0.515%	0.153%	0.156%	0.154%	0.000%	0.000%	0.000%	0.000%	0.470%	0.138%	0.141%	0.139%	0.219%	
		16	0.043%	0.035%	0.039%	0.043%	0.000%	0.000%	0.000%	3.191%	0.039%	0.032%	0.035%	0.343%	0.119%	
		17	0.432%	0.138%	0.363%	0.561%	0.000%	0.000%	0.000%	0.000%	0.394%	0.124%	0.329%	0.508%	0.345%	
		18	0.947%	0.733%	0.572%	0.550%	0.000%	0.000%	0.000%	0.000%	0.864%	0.662%	0.517%	0.498%	0.629%	
		19	0.587%	0.404%	0.206%	0.208%	0.000%	0.000%	0.000%	0.000%	0.535%	0.365%	0.186%	0.188%	0.312%	
		20	0.382%	0.218%	0.158%	0.146%	0.000%	0.000%	0.000%	0.000%	0.349%	0.197%	0.143%	0.132%	0.202%	
		21	0.844%	0.545%	0.212%	0.198%	0.000%	0.000%	0.000%	0.000%	0.769%	0.492%	0.192%	0.180%	0.397%	
		22	1.010%	0.675%	0.281%	0.259%	0.000%	0.000%	0.000%	0.000%	0.921%	0.610%	0.254%	0.234%	0.491%	
		23	0.053%	0.034%	0.032%	0.035%	0.001%	0.000%	0.000%	0.000%	0.048%	0.031%	0.029%	0.032%	0.035%	
		24	1.786%	1.414%	1.051%	1.019%	0.001%	0.000%	0.000%	0.000%	1.629%	1.278%	0.951%	0.922%	1.181%	
		25	1.077%	0.779%	0.664%	0.623%	0.001%	0.000%	0.000%	0.000%	0.982%	0.704%	0.600%	0.564%	0.706%	
		26	1.959%	1.468%	1.219%	1.034%	0.001%	0.000%	0.000%	0.000%	1.786%	1.327%	1.102%	0.935%	1.273%	
		27	0.616%	0.409%	0.134%	0.112%	0.001%	0.000%	0.000%	0.000%	0.561%	0.370%	0.121%	0.101%	0.279%	
		28	1.654%	0.526%	1.420%	3.259%	0.000%	0.000%	0.000%	0.000%	1.508%	0.475%	1.284%	2.949%	1.602%	
		29	4.453%	0.537%	3.300%	4.504%	0.000%	0.000%	0.000%	0.000%	4.061%	0.486%	2.985%	4.075%	2.958%	
		30	0.917%	0.791%	0.657%	0.375%	0.001%	0.000%	0.000%	0.000%	0.836%	0.715%	0.594%	0.340%	0.611%	
		31	1.253%	0.458%	1.390%	1.674%	0.000%	0.000%	0.000%	0.000%	1.142%	0.414%	1.257%	1.514%	1.104%	
		32	0.596%	1.366%	1.556%	0.678%	0.091%	6.074%	5.487%	0.000%	0.552%	1.818%	1.931%	0.613%	1.217%	
		33	0.441%	0.201%	0.747%	0.668%	0.000%	0.000%	0.000%	0.000%	0.402%	0.182%	0.676%	0.605%	0.476%	
		34	0.212%	0.131%	0.318%	0.778%	0.000%	0.000%	0.000%	0.000%	0.193%	0.119%	0.288%	0.704%	0.339%	
		35	0.856%	1.435%	2.082%	2.854%	0.000%	0.000%	0.000%	0.000%	0.781%	1.297%	1.883%	2.583%	1.673%	
		36	0.435%	0.822%	0.755%	0.517%	0.000%	0.001%	0.001%	4.173%	0.397%	0.743%	0.683%	0.866%	0.678%	
		37	0.896%	1.790%	2.086%	2.121%	0.000%	0.001%	0.001%	0.120%	0.817%	1.618%	1.887%	1.931%	1.580%	
		38	1.415%	2.208%	3.374%	1.611%	0.000%	0.000%	0.000%	0.000%	1.291%	1.996%	3.052%	1.457%	1.952%	
		39	0.467%	0.481%	0.924%	0.801%	0.000%	0.000%	0.000%	0.000%	0.426%	0.435%	0.836%	0.725%	0.615%	
		40	1.404%	2.418%	0.825%	0.430%	0.001%	0.001%	0.000%	0.000%	1.280%	2.186%	0.746%	0.389%	1.112%	
		41	0.424%	0.650%	0.528%	0.494%	0.001%	0.000%	0.000%	0.000%	0.386%	0.587%	0.477%	0.447%	0.473%	
		42	2.398%	2.527%	1.344%	0.924%	10.187%	8.491%	7.062%	6.693%	3.084%	3.100%	1.890%	1.474%	2.344%	
		43	0.392%	0.248%	0.089%	0.057%	0.001%	0.001%	0.000%	0.000%	0.358%	0.225%	0.080%	0.051%	0.172%	
		44	0.238%	0.580%	0.223%	0.025%	0.001%	0.001%	0.000%	0.000%	0.217%	0.525%	0.202%	0.023%	0.232%	
		45	0.669%	0.769%	0.790%	0.349%	0.000%	0.000%	0.000%	0.000%	0.611%	0.695%	0.715%	0.316%	0.577%	
		46	0.966%	1.432%	0.436%	0.483%	0.000%	0.001%	0.000%	0.000%	0.881%	1.294%	0.394%	0.437%	0.732%	
		47	0.399%	0.881%	0.370%	0.135%	0.000%	0.001%	0.000%	0.000%	0.363%	0.797%	0.334%	0.122%	0.391%	
		48	0.387%	0.036%	0.139%	0.174%	0.000%	0.000%	0.000%	0.000%	0.353%	0.033%	0.125%	0.157%	0.167%	
		49	0.115%	0.043%	0.015%	0.054%	0.000%	0.000%	0.000%	0.000%	0.105%	0.039%	0.013%	0.049%	0.051%	
		50	0.106%	0.001%	0.151%	0.121%	0.000%	0.000%	0.000%	0.000%	0.096%	0.001%	0.136%	0.109%	0.088%	
		51	0.037%	0.088%	0.128%	0.259%	0.000%	0.000%	0.000%	0.000%	0.034%	0.079%	0.115%	0.235%	0.120%	
		52	0.218%	0.336%	0.460%	0.908%	0.000%	0.000%	0.000%	0.000%	0.199%	0.304%	0.416%	0.822%	0.448%	
		53	0.447%	0.832%	0.946%	1.440%	0.000%	0.000%	0.000%	0.000%	0.407%	0.752%	0.855%	1.303%	0.845%	
		54	0.136%	0.341%	0.503%	0.931%	0.000%	0.000%	0.000%	0.000%	0.124%	0.308%	0.455%	0.843%	0.447%	
		55	0.137%	0.001%	0.003%	0.003%	0.000%	0.000%	0.000%	0.000%	0.125%	0.001%	0.003%	0.003%	0.032%	
		56	0.336%	0.026%	0.060%	0.403%	0.000%	0.000%	0.000%	0.000%	0.307%	0.023%	0.054%	0.365%	0.192%	
		57	0.185%	0.077%	0.091%	0.151%	0.000%	0.000%	0.000%	0.000%	0.168%	0.069%	0.082%	0.137%	0.115%	
		58	1.165%	1.512%	4.165%	2.461%	0.000%	0.001%	0.001%	0.000%	1.062%	1.366%	3.768%	2.226%	2.143%	
		Southbourne														
		Zone 73		73	1.510%	2.158%	1.987%	3.041%	0.566%	0.536%	0.488%	0.519%	1.426%	2.003%	1.844%	2.801%
East Wittering & Bracklesham⁴																
Zone 63		63	1.947%	2.318%	4.041%	2.704%	0.012%	0.012%	0.010%	0.009%	1.777%	2.096%	3.656%	2.448%	2.516%	
% of trips from development sites before factoring														45.25%		

Appendix D. Trips % per development post factoring- Contributing to Mitigation Only

Development zones		User Class 1 - % of total trips of junction				User Class 2 - % of total trips of junction				All User Classes - % of total trips of junction				All User Classes - % of total trips on A27				Total no of trips from dev zone
		Junction 1	Junction 2	Junction 3	Junction 4	Junction 1	Junction 2	Junction 3	Junction 4	Junction 1	Junction 2	Junction 3	Junction 4	Junction 1	Junction 2	Junction 3	Junction 4	
Large Strategic Locations¹	zone no																	
Westhampnett/NE Chichester - Westhampnett development area	207	0.86%	0.59%	0.40%	0.32%	0.00%	0.00%	0.00%	0.00%	0.78%	0.53%	0.36%	0.29%	0.19%	0.12%	0.09%	0.08%	0.48%
Westhampnett/NE Chichester - NE Chichester development area	9	0.12%	0.08%	0.01%	0.15%	0.00%	0.00%	0.00%	0.00%	0.11%	0.07%	0.01%	0.14%	0.03%	0.02%	0.00%	0.04%	0.08%
Tangmere	206	4.14%	3.52%	2.00%	1.36%	0.00%	0.00%	0.00%	0.00%	3.77%	3.18%	1.81%	1.23%	0.90%	0.74%	0.46%	0.33%	2.44%
West of Chichester City - Northern access (Phase 1)	208	0.54%	0.27%	0.40%	0.64%	0.00%	0.00%	0.00%	0.00%	0.49%	0.25%	0.37%	0.58%	0.12%	0.06%	0.09%	0.16%	0.43%
West of Chichester City - Southern access (Phase 2)	209	0.48%	0.46%	0.68%	1.11%	0.00%	0.00%	0.00%	0.00%	0.44%	0.41%	0.62%	1.01%	0.10%	0.10%	0.16%	0.27%	0.63%
Other Housing Development²																		
Chichester City (built-up area)																		
Zone 8 (Housing sites identified in Chi City North Development Brief) ³	8	0.038%	0.016%	0.076%	0.187%	0.000%	0.000%	0.000%	0.000%	0.035%	0.015%	0.068%	0.169%	0.008%	0.003%	0.018%	0.046%	0.075%
Zones 1-7, 10-58 (housing to be apportioned equally between zones)	1	0.005%	0.001%	0.002%	0.004%	0.000%	0.000%	0.000%	0.000%	0.005%	0.001%	0.002%	0.004%	0.001%	0.000%	0.001%	0.001%	0.003%
	2	0.001%	0.000%	0.001%	0.003%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.001%	0.003%	0.000%	0.000%	0.000%	0.001%	0.001%
	3	0.001%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.001%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.001%
	4	0.003%	0.000%	0.001%	0.002%	0.000%	0.000%	0.000%	0.000%	0.002%	0.000%	0.001%	0.002%	0.001%	0.000%	0.000%	0.000%	0.001%
	5	0.003%	0.001%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.003%	0.001%	0.001%	0.001%	0.001%	0.000%	0.000%	0.000%	0.001%
	6	0.000%	0.000%	0.000%	0.005%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.005%	0.000%	0.000%	0.000%	0.001%
	7	0.002%	0.001%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.002%	0.001%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.001%
	10	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	11	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.000%
	12	0.001%	0.000%	0.000%	0.004%	0.000%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.003%	0.000%	0.000%	0.000%	0.001%	0.001%
	13	0.001%	0.000%	0.002%	0.002%	0.000%	0.000%	0.000%	0.000%	0.001%	0.000%	0.001%	0.002%	0.000%	0.000%	0.000%	0.001%	0.001%
	14	0.001%	0.001%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.001%	0.001%	0.000%	0.001%	0.000%	0.000%	0.000%	0.000%	0.001%
	15	0.003%	0.001%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.002%	0.001%	0.001%	0.001%	0.001%	0.000%	0.000%	0.000%	0.001%
	16	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	17	0.001%	0.000%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.001%	0.000%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.001%
	18	0.009%	0.007%	0.006%	0.005%	0.000%	0.000%	0.000%	0.000%	0.008%	0.006%	0.005%	0.005%	0.002%	0.002%	0.001%	0.001%	0.006%
	19	0.005%	0.004%	0.002%	0.002%	0.000%	0.000%	0.000%	0.000%	0.005%	0.003%	0.002%	0.002%	0.001%	0.001%	0.000%	0.000%	0.003%
	20	0.003%	0.002%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.003%	0.002%	0.001%	0.001%	0.001%	0.000%	0.000%	0.000%	0.002%
	21	0.005%	0.003%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.005%	0.003%	0.001%	0.001%	0.001%	0.001%	0.000%	0.000%	0.003%
	22	0.003%	0.002%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.002%	0.002%	0.001%	0.001%	0.001%	0.000%	0.000%	0.000%	0.001%
	23	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	24	0.005%	0.004%	0.003%	0.003%	0.000%	0.000%	0.000%	0.000%	0.005%	0.004%	0.003%	0.003%	0.003%	0.001%	0.001%	0.001%	0.004%
	25	0.005%	0.004%	0.003%	0.003%	0.000%	0.000%	0.000%	0.000%	0.005%	0.003%	0.003%	0.003%	0.001%	0.001%	0.001%	0.001%	0.003%
	26	0.007%	0.006%	0.005%	0.004%	0.000%	0.000%	0.000%	0.000%	0.007%	0.005%	0.004%	0.004%	0.002%	0.001%	0.001%	0.001%	0.005%
	27	0.005%	0.003%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.005%	0.003%	0.001%	0.001%	0.001%	0.001%	0.000%	0.000%	0.002%
	28	0.002%	0.001%	0.002%	0.005%	0.000%	0.000%	0.000%	0.000%	0.002%	0.001%	0.002%	0.004%	0.001%	0.000%	0.000%	0.001%	0.002%
	29	0.004%	0.000%	0.003%	0.004%	0.000%	0.000%	0.000%	0.000%	0.003%	0.000%	0.003%	0.003%	0.001%	0.000%	0.001%	0.001%	0.003%
	30	0.002%	0.002%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.002%	0.002%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.001%
	31	0.003%	0.001%	0.004%	0.005%	0.000%	0.000%	0.000%	0.000%	0.003%	0.001%	0.003%	0.004%	0.001%	0.000%	0.001%	0.001%	0.003%
	32	0.001%	0.003%	0.003%	0.001%	0.000%	0.000%	0.000%	0.000%	0.001%	0.003%	0.003%	0.001%	0.000%	0.001%	0.001%	0.000%	0.002%
	33	0.004%	0.002%	0.006%	0.005%	0.000%	0.000%	0.000%	0.000%	0.003%	0.001%	0.005%	0.005%	0.001%	0.000%	0.001%	0.001%	0.004%
	34	0.002%	0.001%	0.002%	0.006%	0.000%	0.000%	0.000%	0.000%	0.001%	0.001%	0.002%	0.005%	0.000%	0.000%	0.001%	0.001%	0.003%
	35	0.002%	0.003%	0.005%	0.006%	0.000%	0.000%	0.000%	0.000%	0.002%	0.003%	0.004%	0.006%	0.000%	0.001%	0.001%	0.002%	0.004%
	36	0.004%	0.008%	0.007%	0.005%	0.000%	0.000%	0.000%	0.000%	0.004%	0.007%	0.006%	0.004%	0.001%	0.002%	0.002%	0.001%	0.005%
	37	0.003%	0.005%	0.006%	0.006%	0.000%	0.000%	0.000%	0.000%	0.002%	0.005%	0.006%	0.006%	0.001%	0.001%	0.001%	0.002%	0.005%
	38	0.002%	0.004%	0.005%	0.003%	0.000%	0.000%	0.000%	0.000%	0.002%	0.003%	0.005%	0.002%	0.000%	0.001%	0.001%	0.001%	0.003%
	39	0.002%	0.002%	0.003%	0.003%	0.000%	0.000%	0.000%	0.000%	0.002%	0.002%	0.003%	0.003%	0.000%	0.000%	0.001%	0.001%	0.002%
	40	0.007%	0.012%	0.004%	0.002%	0.000%	0.000%	0.000%	0.000%	0.006%	0.011%	0.004%	0.002%	0.001%	0.002%	0.001%	0.001%	0.005%
	41	0.005%	0.007%	0.006%	0.005%	0.000%	0.000%	0.000%	0.000%	0.004%	0.006%	0.005%	0.005%	0.001%	0.001%	0.001%	0.001%	0.005%
	42	0.006%	0.007%	0.003%	0.002%	0.000%	0.000%	0.000%	0.000%	0.006%	0.006%	0.003%	0.002%	0.001%	0.001%	0.001%	0.001%	0.004%
	43	0.009%	0.006%	0.002%	0.001%	0.000%	0.000%	0.000%	0.000%	0.008%	0.005%	0.002%	0.001%	0.002%	0.001%	0.000%	0.000%	0.004%
	44	0.004%	0.009%	0.003%	0.000%	0.000%	0.000%	0.000%	0.000%	0.003%	0.008%	0.003%	0.000%	0.001%	0.002%	0.001%	0.000%	0.004%
	45	0.005%	0.006%	0.006%	0.003%	0.000%	0.000%	0.000%	0.000%	0.005%	0.005%	0.006%	0.002%	0.001%	0.001%	0.001%	0.001%	0.004%
	46	0.004%	0.005%	0.002%	0.002%	0.000%	0.000%	0.000%	0.000%	0.003%	0.005%	0.002%	0.002%	0.001%	0.001%	0.000%	0.000%	0.003%
	47	0.004%	0.009%	0.004%	0.001%	0.000%	0.000%	0.000%	0.000%	0.004%	0.008%	0.003%	0.001%	0.001%	0.002%	0.001%	0.000%	0.004%
	48	0.003%	0.000%	0.001%	0.001%	0.000%	0.000%	0.000%	0.000%	0.002%	0.000%	0.001%	0.001%	0.001%	0.000%	0.000%	0.000%	0.001%
	49	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.001%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%	0.000%
	50	0.002%	0.000%	0.003%	0.002%	0.000%	0.000%	0.000%	0.000%	0.002%	0.000%	0.003%	0.002%	0.000%	0.000%	0.001%	0.001%	0.002%
	51	0.001%	0.002%	0.002%	0.005%	0.000%	0.000%	0.000%	0.000%	0.001%	0.002%	0.002%	0.004%	0.000%	0.000%	0.001%	0.001%	0.002%
	52	0.001%	0.002%	0.002%	0.004%	0.000%	0.000%	0.000%	0.000%	0.001%	0.001%	0.002%	0.004%	0.000%	0.000%	0.001%	0.001%	0.002%
	53	0.001%	0.001%	0.001%	0.002%	0.000%	0.000%	0.000%	0.000%	0.001%	0.001%	0.001%	0.002%	0.000%	0.000%	0.000%	0.001%	0.001%
	54	0.000%	0.001%	0.001%	0.002%	0.000%	0.000%	0.000%	0.000%	0.000%	0.001%	0.001%	0.001%	0.001%	0.000%	0.000%	0.000%	0.001%
	55																	

Appendix E. Adjusted number of trips per development and junction

Development zones		All User Classes - No of Trips for each development site				No of Trips to be removed from junctions - added to other junctions				All User Classes - Final no of trips for each development site				Total no of trips post adjustment		
		Junction 1	Junction 2	Junction 3	Junction 4	Junction 1	Junction 2	Junction 3	Junction 4	Junction 1	Junction 2	Junction 3	Junction 4			
Large Strategic Locations	No of Housing Developments	No of trips				No of trips to be added				No of trips adjusted						
Westhampnett/NE Chichester - Westhampnett development area	300	54.66	36.22	26.79	22.60	12.90	8.55	added to J1,J2, J4	5.34	67.57	44.78		27.93	140.28		
Westhampnett/NE Chichester - NE Chichester development area	200	7.92	4.64	0.87	10.91	added to J4			13.43				24.34	24.34		
Tangmere	1000	263.23	215.34	135.23	97.24	41.70	34.12	21.42	added to J1,J2, J3	304.93	249.45	156.66		711.04		
West of Chichester City - Northern access (Phase 1)	750	34.13	16.59	27.33	45.87	added to J3, J4		18.93	31.78			46.26	77.66	123.92		
West of Chichester City - Southern access (Phase 2)	850	30.39	28.01	46.17	79.68	added to J3, J4		21.42	36.97			67.59	116.65	184.24		
Other Housing Development																
Chichester City (built-up area)																
Zone 8 (Housing sites identified in Chi City North Development Brief)	130	2.41	1.00	5.11	13.39	13.08	5.43	added to J1, J2		15.49	6.43			21.91		
Zones 1-7, 10-58 (housing to be apportioned equally between zones)	201	13.57	12.39	20.22	17.01	19.47	17.77	added to J1,J2		33.04	30.15			63.20		
Southbourne																
Zone 73	105	3.77	5.18	5.27	8.54	added to J3, J4		3.42	5.53			8.69	14.07	22.76		
East Wittering & Bracklesham ⁴																
Zone 63	130	8.59	9.83	18.94	13.41	added to J4			37.36				50.77	50.77		
Total number of Housing Developments:		3666														1,342.47
						No of trips post adjustment				421.0	330.8	279.2	311.4			
						No of trips prior adjustment				418.7	329.2	285.9	308.7			
						Difference				-2.4	-1.6	6.7	-2.8			
						Difference in %				0.6%	0.5%	-2.4%	0.9%			
						total no of trips from all dev zones through A27				1,342.47						
				% of devl zones to total no of trips through A27				4.6%								

Appendix F. Contribution cost prior grouped development sites and simplified trips

Development zones		All User Classes - trip cost on A27				All User Classes - trip cost % on A27			
		Junction 1	Junction 2	Junction 3	Junction 4	Junction 1	Junction 2	Junction 3	Junction 4
Large Strategic Locations	No of Housing Developments	Mitigation Cost: £ 11,165,000.00		Trip Cost: £ 8,317		Mitigation Cost: £ 11,165,000		Trip Cost: £ 8,317	
Westhampnett/NE Chichester - Westhampnett development area	300	£ 454,636	£ 301,264	£ 222,820	£ 187,957	4.1%	2.7%	2.0%	1.7%
Westhampnett/NE Chichester - NE Chichester development area	200	£ 65,845	£ 38,626	£ 7,245	£ 90,732	0.6%	0.3%	0.1%	0.8%
Tangmere	1000	£ 2,189,224	£ 1,790,903	£ 1,124,705	£ 808,752	19.6%	16.0%	10.1%	7.2%
West of Chichester City - Northern access (Phase 1)	750	£ 283,825	£ 137,978	£ 227,280	£ 381,529	2.5%	1.2%	2.0%	3.4%
West of Chichester City - Southern access (Phase 2)	850	£ 252,724	£ 232,926	£ 383,981	£ 662,672	2.3%	2.1%	3.4%	5.9%
Other Housing Development									
Chichester City (built-up area)									
Zone 8 (Housing sites identified in Chi City North Development Brief)	130	£ 20,044	£ 8,318	£ 42,503	£ 111,365	0.2%	0.1%	0.4%	1.0%
Zones 1-7, 10-58 (housing to be apportioned equally between zones)	201	£ 112,895	£ 103,029	£ 168,197	£ 141,469	1.0%	0.9%	1.5%	1.3%
Southbourne									
Zone 73	105	£ 31,344	£ 43,114	£ 43,864	£ 71,007	0.3%	0.4%	0.4%	0.6%
East Wittering & Bracklesham									
Zone 63	130	£ 71,411	£ 81,758	£ 157,561	£ 111,498	0.6%	0.7%	1.4%	1.0%
Total number of Housing Developments:	3666	Total contribution from the development areas:			£ 11,165,000	Total contribution from the development areas:			100%

Appendix G. Contribution cost of grouped development sites and simplified trips

Development zones		All UC - no of trips				All UC- % of trips				Cost per trip				% Cost per trip				Cost per dwelling of development				Total cost per development (by total no of trips)
		J1	J2	J3	J4	J1	J2	J3	J4	J1	J2	J3	J4	J1	J2	J3	J4	J1	J2	J3	J4	
Large Strategic Locations	No of Housing Dev.									#####	Cost per trip £ 8,317			#####	Cost per trip : £ 8,317							
Westhampnett/NE Chichester - Westhampnett development area	300	67.6	44.8	0.0	27.9	0.2%	0.2%	0.0%	0.1%	£ 561,968	£ 372,387	£ -	£ 232,331	5.0%	3.3%	0.0%	2.1%	£ 1,873	£ 1,241	£ -	£ 774	£ 1,166,686
Westhampnett/NE Chichester - NE Chichester development area	200	0.0	0.0	0.0	24.3	0.0%	0.0%	0.0%	0.1%	£ -	£ -	£ -	£ 202,448	0.0%	0.0%	0.0%	1.8%	£ -	£ -	£ -	£ 1,012	£ 202,448
Tangmere	1000	304.9	249.5	156.7	0.0	1.0%	0.9%	0.5%	0.0%	£ 2,536,079	£2,074,650	£1,302,900	£ -	22.7%	18.6%	11.7%	0.0%	£ 2,536	£ 2,075	£ 1,303	£ -	£ 5,913,629
West of Chichester City - Northern access (Phase 1)	750	0.0	0.0	46.3	77.7	0.0%	0.0%	0.2%	0.3%	£ -	£ -	£ 384,736	£ 645,846	0.0%	0.0%	3.4%	5.8%	£ -	£ -	£ 513	£ 861	£ 1,030,582
West of Chichester City - Southern access (Phase 2)	850	0.0	0.0	67.6	116.6	0.0%	0.0%	0.2%	0.4%	£ -	£ -	£ 562,138	£ 970,130	0.0%	0.0%	5.0%	8.7%	£ -	£ -	£ 661	£ 1,141	£ 1,532,268
Other Housing Development																						
Chichester City (built-up area)																						
Zone 8 (Housing sites identified in Chi City North Development Brief)	130	15.5	6.4	0.0	0.0	0.1%	0.0%	0.0%	0.0%	£ 128,788	£ 53,443	£ -	£ -	1.2%	0.5%	0.0%	0.0%	£ 991	£ 411	£ -	£ -	£ 182,231
Zones 1-7, 10-58 (housing to be apportioned equally between zones)	201	33.0	30.2	0.0	0.0	0.1%	0.1%	0.0%	0.0%	£ 274,805	£ 250,789	£ -	£ -	2.5%	2.2%	0.0%	0.0%	£ 1,367	£ 1,248	£ -	£ -	£ 525,594
Southbourne																						
Zone 73	105	0.0	0.0	8.7	14.1	0.0%	0.0%	0.0%	0.0%	£ -	£ -	£ 72,297	£ 117,033	0.0%	0.0%	0.6%	1.0%	£ -	£ -	£ 689	£ 1,115	£ 189,330
East Wittering & Bracklesham																						
Zone 63	130	0.0	0.0	0.0	50.8	0.0%	0.0%	0.0%	0.2%	£ -	£ -	£ -	£ 422,231	0.0%	0.0%	0.0%	3.8%	£ -	£ -	£ -	£ 3,248	£ 422,231
Total number of Housing Developments:	3666	Total no of trips of the six junctions through A27:				Total % of trips of the four junction through A27:				Total contribution trips on junction for each development area				Total contribution per number of dwellings for each development area				£ 11,165,000.00				