MID SUSSEX TRANSPORT STUDY

TRANSPORT IMPACT OF SITES DPD SCENARIO

MODELLING REPORT

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1. INTRODUCTION

1.1 Work Undertaken

- 1.1.1 Mid Sussex District Council (MSDC) commissioned SYSTRA to:
 - Build a strategic highway model to underpin the Mid Sussex Transport Study (MSTS); and
 - Update the Mid Sussex Transport Study to test the impact of proposed development on the strategic and local transport network and upon significant routes in Ashdown Forest (adjacent to but outside of Mid Sussex District).
- 1.1.2 The work is further divided into the following stages:
 - 2017 Base Year Highway Model Production and Validation
 - 2031 Reference Case Scenario;
 - 2031 Sites DPD (Development Plan Documents) Scenario
 - 2031 Sites DPD Scenario including potential mitigation schemes

1.2 Background to the Study

- 1.2.1 The District Plan was submitted to the Secretary of State in August 2016 and adopted on 28th March 2018.
- 1.2.2 The Inspector is satisfied that it is appropriate for the Plan to contain a stepped housing trajectory, taking place after year 2023/24, at 876 dpa for the period up to 2023/24, and subsequently 1,090 dpa to 2031. Effectively this means MSDC have an agreed Plan at 876 dpa for the period to 2023/24 with any subsequent increase primarily subject to the findings of Habitats Regulation Assessment at the higher level of development to assess the transport impact of the Plan on the Ashdown Forest.
- 1.2.3 The additional housing requirement was agreed up to 2031 plan period based on 1,090dpa, subject to further transport modelling work that is required to test the impact of the residual housing requirement on the highway network.

1.3 Highway Model

- 1.3.1 The Mid Sussex Strategic Highway Model (MSSHM) was produced in accordance with standard good practice as set out in the Department for Transport's (DfT) transport analysis guidance (TAG), in particular TAG unit M3-1 Highway Assignment Modelling, (January 2014). As such, the approaches to data processing, matrices and network production, along with model calibration are consistent with those of similar strategic highways models.
- 1.3.2 The model production made appropriate use of existing data and existing models in the area. A very small programme of surveys was undertaken to fill in some gaps in data.

1.4 Transport Study

1.4.1 The impact on the highway network of the agreed Development Scenarios are assessed based on the National Planning Policy Framework (NPPF). The assessment of impacts is based on criteria agreed by MSDC and West Sussex County Council (WSCC). These are

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- derived using WSCC's position statement in relation to the NPPF which sets out their interpretation of terms defining traffic impacts.
- 1.4.2 Where junctions are assessed to be adversely impacted by the developments, mitigation schemes are devised and tested. These mitigations aim to remove all 'severe' impacts.
- 1.4.3 Further parallel work is also being undertaken to:
 - O Undertake environmental impact and road safety impact analysis to comply with National Planning Practice Guidance on transport evidence bases in plan making. This work is undertaken for the *Sites DPD Scenario* as part of the Mid Sussex Transport Study to inform the proposed submission (Regulation 19) Site Allocations Development Plan Documents (DPD).
 - O Undertake air quality modelling and ecological interpretation for Habitats Regulations Assessment to test the impact of traffic, as a result of proposed development, on the Ashdown Forest Special Area of Conservation. This will be based on the outputs of the Mid Sussex Transport Study.

1.5 Scenario's Tested

- 1.5.1 A series of 2031 Development Scenarios have been refined over a number of iterations (reports for Development Scenarios 1 8 are available on the Site Allocations DPD Evidence Library). The Reference Case Scenario has also been updated. The Sites DPD Scenario represents a refined scenario as part of the Council's plan making process, including sustainability appraisal, to help inform preparation of the Draft Site Allocations DPD and select a preferred option.
- 1.5.2 The *Reference Case* represents the road network in 2031, and includes any committed highway infrastructure, development in the district and background growth to this date. This acts as a baseline when assessing the impacts of the Development Scenarios.
- 1.5.3 The *Sites DPD Scenario* builds on the *Reference* Case and assesses proposed Local Plan development and supporting infrastructure in 2031. It includes:
 - 22 housing development sites (there are 21 additional to the *Reference Case* due to SA24 being committed); and
 - 8 additional employment sites including a science and technology park (subsequently referred to as the S&T park) north of the A2300 near Burgess Hill
- 1.5.4 Where junctions are assessed to be adversely impacted by the developments, a set of appropriate sustainable measures and highway mitigation schemes are proposed and tested. These mitigations aim to remove the 'severe' impacts.
- 1.5.5 The report chapters are:
 - Chapter 1 Introduction
 - O Chapter 2 Scenario Preparation
 - Chapter 3 The Sites DPD Scenario without Mitigation
 - Chapter 4 Proposed Mitigation
 - O Chapter 5 The Sites DPD Scenario with Mitigation
 - Chapter 6 Key Locations
 - Chapter 7 Conclusions
 - Chapter 8 Junction Summaries

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2. SCENARIO PREPARATION

2.1 Reference Case Demand Matrices

Key Assumptions

- 2.1.1 This Chapter describes the production of the future year *Reference Case* matrices and network, using the Base model as the starting point. The assumptions for this task are:
 - Reference Case Housing in Mid Sussex District (see Appendix A for detail):
 - O Significant *Reference Case* Housing in Neighbouring Authorities (Appendix A):
 - Reference Case Employment (Appendix A)
 - Reference Case Infrastructure
 - Trip Rates and Trip Generation
- 2.1.2 The *Reference Case* represents a benchmark against which the development Scenarios are tested and compared. This enables separation of impacts resulting from the Scenario from impacts due to background growth, committed development and infrastructure.

Use of TEMPro

- 2.1.3 Travel demand matrices contain the forecast trips between origin and destination zones across the model study area. Forecasts are based on information obtained from the DfT's National Trip End Model (NTEM), obtained using the Trip End Model Presentation Program (TEMPro). This is compliant with guidance set out in WebTAG (Web-based Transport Assessment Guidance, published by the DfT). The forecasts include:
 - o population
 - employment
 - households by car ownership
 - trip ends
- 2.1.4 TEMPro is designed to allow analysis of pre-processed data from the NTEM. The pre-processed data is itself the output from a series of models developed and run by DfT's Transport Appraisal and Strategic Modelling (TASM) division. TEMPro can also be used to provide summaries of traffic growth using data from the National Transport Model (NTM).
- 2.1.5 For the transport study the trip ends information is used in the form of origin and destination growth factors. These are extracted for 2017-2031 for the AM (0700-1000) and PM (1600-1900) periods, for the locations required.

TEMPro and Site Specific Growth

- 2.1.6 In using TEMPro it is important to be aware of the level of growth that it is applying, and to compare that with the reference case development data that has been provided by the District Council. The data from the district should not simply be added to the TEMPro data as this would lead to double-counting.
- 2.1.7 If committed development data appears to fall short of TEMPro forecasts it is usually considered appropriate to uplift the growth to match TEMPro. Matching to TEMPro provides a consistent benchmark upon which to base Scenario impacts.

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- 2.1.8 Comparison between Mid Sussex TEMPro housing forecasts for 2017-2031 and site specific housing reference case data showed they are very similar:
 - Mid Sussex TEMPro housing 2017-2031 = 10789 households
 - Mid Sussex Site Specific Reference Case = 10802 households including Windfall
- 2.1.9 It was therefore agreed that all reference case growth in the District is applied on a site specific basis directly to model zones, in preference to using TEMPro, which is used for growth outside the District only.
- 2.1.10 Growth in **freight** traffic is taken from national road traffic forecasts taken from the National Transport Model (NTM) in accordance with DfT WebTAG guidance.
- 2.1.11 **Windfall sites** are assumed to be 588 units by 2031 distributed pro-rata across the *Reference Case* developments.

2.2 Trip Rates

- 2.2.1 Trip rates are required to calculate trip generations for Mid Sussex developments that are applied directly to an existing model zone or dedicated new model zone.
- 2.2.2 The TRICS (Trip Rate Information Computer System) database is used to calculate origin and destination trip rates for the AM peak, and PM peak hours. They are used to derive the forecast matrices for the *Reference Case* and are shown in **Table 1**; the higher tidal rates are in **bold**. For robustness the 85th percentile is used rather than the mean trip rate for the survey selection.
- 2.2.3 To ensure an adequate sample a minimal number of surveys regarded as not relevant were removed from the analyses. Surveys in the following groups were removed:
 - O Town centre, neighbourhood centre and 'free-standing' developments
 - Saturday surveys
 - All non B1 or B2 (for employment)
 - C1 and C2 (for residential)

Table 1. General Vehicle Trip Rates

USE	CLASS	PARAMETER	AM ORIG	AM DEST	PM ORIG	PM DEST
Private Houses and Flats		dwellings	0.397	0.191	0.143	0.486
Office	B1a	employees	0.043	0.511	0.394	0.021
Research and Development	B1b	employees	0.183	0.367	0.465	0.045
Light Industry	B1c	employees	0.300	0.700	0.844	0.067
Hotel	C1	rooms	0.284	0.104	0.151	0.252



2.3 Sites DPD Scenario Matrices

Key Assumptions

- 2.3.1 The key assumptions are listed below:
 - O Development Locations, Use Class and number of units/employees (Appendix A)
 - Trip Rates and Trip Generation
 - Trip Distribution
 - Development Scenario Infrastructure
 - Development Site Access and Link Roads
- 2.3.2 The *Sites DPD Scenario* trip matrices are prepared for the AM peak and PM peak hours. The trip rates that are derived from TRICS for the committed *Reference Case* developments are used again to calculate trip generations for the development sites.
- 2.3.3 The *Sites DPD Scenario* assesses the impact of an additional 21 housing development sites and 8 employment sites (including the S&T park), compared to the *Reference Case*. **Table** 2 summarises the total housing units considered.

Table 2. Total Housing units Considered in Mid-Sussex in the Sites DPD Scenario

SCENARIO	TOTAL UNITS CONSIDERED	DIFFERENCE
Reference Case excluding Windfall	10,214	-
Reference Case including Windfall	10,802	588
Sites DPD Scenario	12,646	1,844

2.3.4 **Appendix A** provides details of the strategic sites in more detail, including location, units/employees, trip rate and trips generated.

Trip Distribution

2.3.5 The trip distributions are taken from the main model zones that the development is located in or near to and are therefore based on a combination of Census Journey Work 2011 for commuting trips and existing local model matrices.

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2.4 Forecast Matrices Creation Process

2.4.1 The process to prepare the 2031 *Reference Case* and *Sites DPD Scenario* matrices is described below.

Reference Case - Non Mid Sussex Growth (TEMPro)

- 1) Origin and destination trip ends growth factors are extracted from TEMPro for 2017-2031 for the AM (0700-1000) and PM (1600-1900) periods. This is done at the most appropriate level of detail for the model zones, including at the lowest level of disaggregation available (Middle Super Output Area MSOA) for neighbouring areas. Mid Sussex is not included because growth is applied from site specific data.
- 2) TEMPro trip ends by mode are based on the average rates over an area. A mapping exercise is therefore undertaken to calculate appropriate factor for each of the MSSHM zones. This process results in creation of 2017-2031 zonal trip end growth factors for the non- Mid Sussex zones.

Reference Case - Mid Sussex and Neighbouring Authority Site Specific Development

- 3) The site specific data is collated and a mapping exercise is undertaken to apply each development to the appropriate model zone. Larger developments usually have a dedicated new zone added.
- 4) Trip generations are applied using the trip rates described above. This creates trip growth for the zones which is then applied to the 2017 Base matrices in combination with non-Mid Sussex TEMPro growth to produce the 2031 Reference Case matrices.

Sites DPD Scenario - Mid Sussex Growth Site Specific Development

- 5) The site specific Mid Sussex data is collated and a mapping exercise is undertaken to apply each development to the appropriate model zone. Larger developments usually have a dedicated new zone added.
- 6) Trip generations are applied using the trip rates above. This creates trip growth for the Mid Sussex zones which is then applied to the 2031 Reference Case matrices. The applied origin and destination trip generations do not necessarily match, so a furnessing process is required (using the SATURN MX software) to balance these appropriately. This results in the matrices increasing by approximately the average of the origin and destination increases, which is considered appropriate due to the use of 85th percentile trip rates.

2.4.2 The matrix changes are summarised in **Table 3**.

Table 3. Sites DPD Scenario Matrix Sizes and Changes

CCENARIO	AM P	EAK	PM PEAK		
SCENARIO	ORIGINS	DESTS	ORIGINS	DESTS	
Reference Case Matrix Total	185,749	185,749	179,361	179,361	
Sites DPD Scenario Trips Generations from Trip Rate	1,422	2,239	2,316	1,158	
Sites DPD Scenario Furnessed Matrix Total	187,578	187,578	181,116	181,116	
Change from Reference Case	1,829	1,829	1,755	1,755	

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2.5 Infrastructure

2.5.1 The dualling of the A2300 is included in the *Reference Case* scenario. The scheme includes the closure of the Bishopstone Lane / A2300 junction for vehicular use. **Table 4** is a summary of infrastructure included in the *Reference Case*.

Table 4. Reference Case Infrastructure

LOCATION			DESCRIPTION
Burgess Hill	A2300		Dualling, and junction improvements
	The Hub	Cuckfield Rd	Roundabout improvements
		Gatehouse Lane	Signal controlled crossing
	East of Kings Way	Junction Road / Silverdale road	Traffic signals
		Valebridge Rd / Janes Lane / Junction Rd	Traffic signals
		Kings Way	Traffic signals
		Church Rd / Mill Rd	Traffic signals
		Keymer Rd	Traffic signals
		Cants Lane	Traffic signals
		Ditchling Common	Speed restrictions
Copthorne	A264	A264 / Brookhill Rd / A220	Roundabout improvements
		Dukes Head Roundabout	Roundabout improvements
Hassocks	Hassocks Stonepound	Stonepound Crossroads	Traffic signals improvements
Haywards Heath	Penland Farm	Hanlye Lane, Borderhill Lane	Roundabout
	Fox Hill	South of Hurstwood Lane	Extension of 30mph speed limit
	Relief Road (east)	Hurstwood Lane	Traffic Signals
	Fox Hill	B2112, Colwell Rd	Roundabout improvements
Crawley	Copthorne	M23 J10	Junction improvements
	Tinsley	Gatwick road	Roundabout improvements
	Pound Hill	A2011	Link road, and junction improvements
	Tinsley	Radford Rd	Traffic signals
	Tinsley Green	Steers Lane / Radford Rd	Traffic signals
		Steers Lane / B2036	Traffic signals
	Hazelwick	A2011	Signalised roundabout
	Fernhill	B2036	Roundabout improvements
	Manor Royal	Gatwick Road	Roundabout improvements
	Cheals Junction	A23	Roundabout slip lane
	Pease Pottage	M23 J11	Signalised gyratory
	Smart Motorways	M23	Motorway improvements

2.5.2 The *Sites DPD Scenario* includes the S&T Park to the north of the A2300, the access to which is via a new roundabout on Cuckfield Road, north of the A2300 / Cuckfield Road roundabout. Improvements at the A2300 / Cuckfield Road roundabout have been included as part of the this development in order to accommodate the large volumes of traffic using this junction in the AM and PM peaks. In the *Sites DPD Scenario*, a hamburger configuration is included at this junction, with a cut-through for traffic staying on the A2300, and signals installed on all approach arms. This has been based on the developer's documents provided.

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3. THE SITES DPD SCENARIO WITHOUT MITIGATION

3.1 Introduction to Results

- 3.1.1 This section includes commentary on the outcomes of the *Sites DPD Scenario*, along with numerical analysis using criteria based on interpretation of the National Planning Policy Framework (NPPF). The following sections are:
 - The Sites DPD Scenario without Mitigation
 - Traffic Flow Impacts
 - Impacts on M23 and A23 strategic road network
 - O Identification of Junctions with Capacity Impacts
 - Criteria
 - Junctions Identified
 - Proposed Mitigation
 - Sustainable Measures
 - Highway Mitigation
 - The Sites DPD Scenario with Mitigation
 - Traffic Flow Impacts
 - Impacts on M23 and A23 strategic road network
 - Key Locations Commentary focussing on the A264/A22 at Felbridge
 - Conclusions
 - Junction Summaries one page summaries for junctions with 'severe' impacts

3.2 Traffic Flow Impacts

- 3.2.1 The Sites DPD Scenario <u>without</u> Mitigation generates significant additional traffic centred around the A2300 and nearby roads, in the AM and PM Peak. The additional demand on the A2300 in particular results in significant rerouting on Cuckfield Road (north and south of the A2300) and the A272 through Ansty. There are also particular impacts on the A273 through Hassocks, B2036, B2116 and B2117.
- 3.2.2 The A23/A2300 dumbbell junction is significantly impacted and in the PM peak traffic is avoiding this junction in favour of alternative routes.
- 3.2.3 In the PM peak, the S&T park traffic appears to be forcing existing traffic to reroute away from the A2300. This is due to heavy flows turning into and out of the park. This impact is less evident in the AM peak. In considering mitigations a priority is for this impact to be alleviated, so that existing A2300 traffic remains on the A2300 and not be forced elsewhere. Keeping traffic on the A2300 may in turn mitigate impacts elsewhere that are currently suffering from the re-routeing.
- 3.2.4 There are also significant flow impacts on the A264, along with rerouting to alternative routes using the B2110 through Turners Hill. This appears to be due to congestion on the A264 particularly at the junction with the A22 at Felbridge.

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3.3 Impacts on M23 and A23 strategic road network

3.3.1 An approach is devised to identify directional carriageway sections forecast to experience impacts in the future because of the strategic developments. An adaptable criteria representing a 'notable flow increase' is defined as any carriageway section experiencing the following:

Increase in traffic flow of 100 vehicles or more

3.3.2 The impact between the M23 Junction 9 and the A23/A273 at Pyecombe is assessed and the number carriageway sections with a notable flow increase is shown in **Table 5.**

Table 5. Number of M23/A23 carriageway sections identified as having a 'notable flow increase'

SCENARIO	AM	AM	PM	PM
	NORTHBOUND	SOUTHBOUND	NORTHBOUND	SOUTHBOUND
Sites DPD Scenario <u>without</u> Mitigation	1	6	9	0

- 3.3.3 The results show the impact is tidal, the southbound being impacted in the AM and the northbound in the PM. It is considered that this is largely due to the commuting trips to the S&T park. In the AM peak the notable flow increases are confined to the A23, while in the PM peak they extend to the M23. **Appendix B** include these results in more detail.
- 3.3.4 The detailed results show the flow increases are higher in the PM peak, when the most significantly impacted section, in term of traffic flow increase, is between the A272 and the M23 Junction 11 where the increase is up to approximately 13%.

3.4 Identification of Junctions with Capacity Impacts

- 3.4.1 The impact of the Development Scenarios are assessed based on the National Planning Policy Framework (NPPF). The assessment of impacts is based on criteria agreed by MSDC and West Sussex County Council (WSCC). These are derived using WSCC's position statement in relation to the NPPF which sets out their interpretation of terms defining traffic impacts, namely "significant amount of movement" and "severe impacts". In addition, a "showstopper" is defined as a location where the impacts do not have a reasonable prospect of being able to comply with NPPF paragraph 32.
- 3.4.2 An approach is devised to identify locations forecast to experience 'severe' impacts in the future because of the strategic developments.
- 3.4.3 This uses appropriately selected criteria to reflect the interpretation of the NPPF. A 'severe' impact is defined as a junction with any approach arm experiencing either of the following:
 - a junction with an increase in ratio of flow to capacity (RFC) of **10**% or more to an RFC of **95**% or more in any period in any Scenario; or
 - an increase in average delay of one minute or more to an average delay of two minutes or more in any period in any Scenario
- 3.4.4 A '**significant**' impact is a junction with any approach arm experiencing the following:
 - a junction with an increase in ratio of flow to capacity (RFC) of 5% or more to an RFC of 85% or more in any period in any Scenario

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3.4.5 **Table 6** shows how many junctions are forecast to be impacted significantly or severely in the *Sites DPD Scenario without Mitigation* when compared to the *Reference* Case.

Table 6. 'Severe' and 'Significant' impacts due to Sites DPD Scenario without Mitigation versus Reference Case

SCENARIO	'SEVERE' IMPACTS	'SIGNIFICANT' IMPACTS
Sites DPD Scenario <u>without</u> Mitigation vs Reference Case	9	8

3.4.6 It can be seen that in the *Sites DPD Scenario* <u>without</u> *Mitigation* there are 'severe' impacts at **nine** junctions and 'significant' impacts at **eight** junctions.

'Severe' Junctions

- 3.4.7 The nine junctions with 'severe' impacts are:
 - N7 B2028 Turners Hill Road / Wallage Lane, Crawley Down
 - C7 A272 / B2036, Ansty
 - S1 A23 / A2300 Southbound On-Slip
 - O S2 A23 / A2300 Eastern Roundabout
 - O S5 A2300 / Northern Arc Spine Road
 - O S6 Junction Road / B2113, Burgess Hill
 - S8 A273 / B2116 Hassocks (Stonepound)
 - S9 A23 / A281 Eastbound On-Slip, Pyecombe
 - S22 Valebridge Road / Junction Road / Leylands Road, Burgess Hill
- 3.4.8 **Appendix B** shows summary results for the *Sites DPD Scenario* without Mitigation. They include junctions identified in previous Scenarios or in the previous Mid Sussex Transport Study which, for consistency, are retained in the list even if no 'significant' or 'severe' impacts are identified in the *Sites DPD Scenario* without Mitigation. They also contain the results for the Reference Case, compared against the 2017 Base using the same criteria.
- 3.4.9 **Appendix C** shows detailed results for the same junctions, by approach arm. The *Reference* Case results are also provided.
- 3.4.10 **Figure 1** is a map showing the locations of the significant and severely impacted junctions. **Appendix D** shows the map including the full list of junctions. **Appendix E** shows the map including the locations of the *Sites DPD Scenario* development sites.

3.5 Cross Boundary Impacts

- 3.5.1 The junction analysis includes appropriate coverage of neighbouring authorities, the extent of which is defined by the scale and location of the developments. These are:
 - Crawley Borough;
 - Horsham District;
 - Tandridge District;
 - Wealden District; and
 - Lewes District
- 3.5.2 In the *Sites DPD Scenario* <u>without</u> *Mitigation* there are no 'severe' and two 'significantly' impacted junctions outside of Mid Sussex, as follows.
 - S10 B2112 / B2116, Ditchling (Lewes District)
 - S21 B2112 / Green Road, Wivelsfield (Lewes District)

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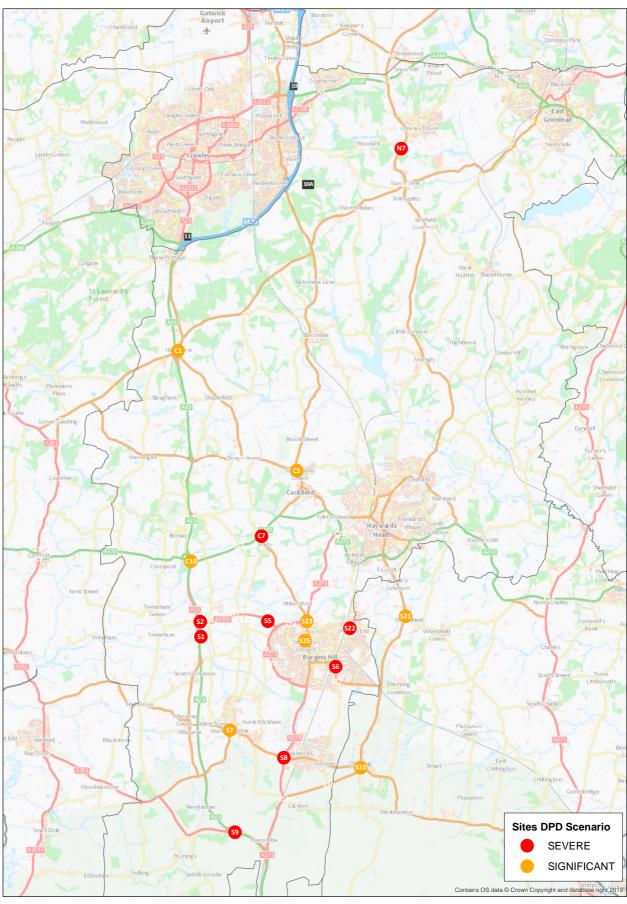
These are both marginal impacts affecting the B2112 southern approach arm in the PM peak only, due to the volume over capacity (V/C) increasing from 87% to 94% at S10 and from 81% to 86% at S21 (see **Appendix C**).

- 3.5.3 The are no 'severe' or 'significant' impacts in any of the other neighbouring authorities.
- 3.5.4 **Appendix B** summarises changes in traffic volumes in terms of total distance travelled (in vehicle kilometres) for the **Ashdown Forest**. It can be seen that compared to the Reference Case the *Sites* DPD *Scenario* <u>without</u> <u>Mitigation</u> results in an increase in vehicle kilometres of 0.52% in the PM peak. In the AM peak there is no discernible change in distance travelled.

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Figure 1. Location of 'significant' and 'severely' impacted junctions in the Sites DPD Scenario versus Reference Case



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4. PROPOSED MITIGATION

4.1 Sustainable Measures

- 4.1.1 Sustainable travel measures are the most effective form of mitigating highway impacts. Sustainable transport, and 'smarter choices' have been considered at each development site, and have been modelled through a reduction of car trips.
- 4.1.2 A set of mitigations is proposed to alleviate the 'severe' impacts identified for *Sites DPD Scenario*. The potential **sustainable mitigations** are proposed in discussion with WSCC and are the measures that can be expected for each site based on location and opportunity for enhancement to bus services and active modes.
- 4.1.3 For the purposes of modelling the sustainable measures are translated to assumed percentage reductions to be applied to the scenario developments only, on a site by site basis as shown in **Table 7**.

Table 7. Sustainable Measures by Development Site

SHLAA ID	Site address	Sites DPD Scenario	Proposed Sustainable Mitigation Improvements	Proposed Car Trip Reduction
127	Land at St. Martin Close, Handcross	65 units	RTI Summary Display on site	1.5%
138	Land south of Hammerwood Road, Ashurst Wood	12 units		1.0%
184	Land south of St. Stephens Church, Hamsland, Horsted Keynes	30 units	RTI Summary Display on site	1.0%
196	Land south of Crawley Down Road, Felbridge	200 units	Bus Priority on A22 corridor Direct bus services to Gatwick	2.0%
345	St. Wilfrids Catholic Primary School, School Close, Burgess Hill	200 units	PT Interchange BH Enhanced bus infrastructure BH Enhanced of cycle parking at BH station	1.5%
479	Land at Hanlye Lane to the east of Ardingly Road, Cuckfield	55 units	RTI Summary Display on site	1.5%
519	Land north of Burleigh Lane, Crawley Down	50 units	RTI Summary Display on site	1.5%
594	Land South of Southway, Burgess Hill	30 units	PT Interchange BH	1.5%
644	Ansty Cross Garage, Cuckfield Road, Ansty	12 units		1.0%
770	Land south and west of Imberhorne Upper School, Imberhorne Lane, East Grinstead	550 units	Bus Priority on A22 corridor Bus Shelters within development with RTI Direct bus services to Gatwick	3.0%
783	Rogers Farm, Fox Hill, Haywards Heath	25 units	RTI Summary Display on site	1.0%
807	Land South of The Old Police House, Birchgrove Road, Horsted Keynes	25 units	RTI Summary Display on site	1.0%
827	Land South of 96 Folders Lane, Burgess Hill	43 units	PT Interchange BH	1.5%
829	Land to the north Lyndon, Reeds Lane, Sayers Common	35 units	RTI Summary Display on site	1.0%
832	Land west of Selsfield Road, Ardingly	100 units	RTI Summary Display on site	1.5%
840	Woodfield House, Isaacs Lane, Burgess Hill	30 units	RTI Summary Display on site	1.0%
847	East Grinstead Police Station, College Lane, East Grinstead	34 units	Bus Priority on A22 corridor	1.5%
854	Withypitts Farm, Selsfield Road, Turners Hill	16 units		1.0%
897	Land to the rear Firlands, Church Road, Scaynes Hill	20 units	RTI Summary Display on site	1.0%
904	Land to the south of Selby Close, Hammonds Ridge, Burgess Hill	12 units	PT Interchange BH	1.5%
976	Land East of Keymer Road and South of Folders Lane, Burgess Hill.	300 units	PT Interchange BH	1.5%
801	Science and Technology Park - North	2500 employees	PT Interchange BH Bus Shelters within development with RTI Bus Services to BH and station	3.0%

Note: Improved PT interchange refers to improvements to interchange facilities, the extent of which is not yet decided and would be developed through contributions from multiple sites, whether through CIL or S106.

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4.2 Highway Mitigation

- 4.2.1 Highway mitigations are proposed to directly address the 'severe' impacts that cannot be fully removed by sustainable measures alone. **Table 8** describes the outline measures that are proposed and tested in the *Sites DPD Scenario* with mitigation model runs. At this stage of the mitigation process the outline descriptions are sufficient for the purposes of the strategic highway model.
- 4.2.2 To explain the approach in proposing mitigations, it is apparent that some junctions are suffering severe delays, due in part at least, to rerouting away from the A2300 to the A272, A273 through Hassocks, B2036, B2116 and B2117 (including junctions S6, S8, S9 and S22). For these junctions we state 'Full or partial mitigation expected from mitigation at other locations', the focus being to mitigate the A2300, because this will encourage traffic to remain on the main arterial routes and not reroute to rural and residential roads.
- 4.2.3 In proposing mitigation at the A23/A2300 junction at Hickstead (S1/S2), it is apparent from the modelling that in the PM peak the southbound on-slip is unlikely to be able to accommodate significant additional demand without widening of the A23. This is due to the on-slip being opposed by the high tidal flow the A23 southbound experiences in the PM peak, which results in difficulties for traffic merging onto the A23. Further work is required to establish the deliverability of this mitigation improvement.
- 4.2.4 It should be noted that the potential need to provide access for the consented site at Northlands Farm could constrain the proposed free flow mitigation at Hickstead (S2). The status of this site's access requirements should be investigated in further design.

Waste Plan Allocation

- 4.2.5 The West Sussex Waste Local Plan allocates land at Goddards Green, (approximately 5.0 hectares) as acceptable in principle for the development of facilities for the transfer, recycling, and/or recovery of waste. As there is currently no planning application under discussion for the site, the timing of any development remains uncertain. The scale of development to be provided on the site is also flexible and traffic conditions at Hickstead may be a constraint to that. Accordingly this allocation is not included in the Reference Case.
- 4.2.6 The allocation will generate a number of HGV movements during the proposed operating hours of 07:30-18:30 Monday-Friday and 07:30-13.00 Saturday, estimated as between 60 and 240 per day. Generated HGV traffic should be restricted to routing via the A2300 and connecting principal (class A) roads, rather than any use of Cuckfield Road either north of the site access point or to the south of the A2300. This means that the future year base conditions on junctions along the A2300, notably including the roundabouts with the A23 slip roads at Hickstead may have slightly more congested conditions in the future reference conditions, with an estimate of 7-20 additional two-way HGV movements at A2300/A23 in any one hour, subject to any improvement works. A need for modelling at planning application stage is therefore identified.
- 4.2.7 Development of a joint solution with the Science and Technology Park at the impacted junctions (including Hickstead) may enable the future facility, through its own impact assessment, to identify a proportional contribution for the additional traffic movements which it would generate.

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Table 8. Outline Highway Mitigation

ID	AREA	JUNCTION	OUTLINE MITIGATION PROPOSAL
N7	Crawley Down	B2028 Turners Hill Road / Wallage Lane	None - the impacted approach arm (Wallage Lane) is a minor road and the 'severe' impact is marginal. It is not considered appropriate to undertake junction improvements which could result in facilitating additional through traffic on Wallage Lane
C7	Ansty	A272 / B2036	Minor widening on A272 western and eastern arms
S1	Hickstead	A23 / A2300 Southbound On-Slip	A23 widened to three lanes from A2300 Southbound Off- Slip to B2118/Mill Lane Off-Slip
S2	Hickstead	A23 / A2300 Eastern Roundabout	Free flow for A23 Southbound off-slip to A2300 eastbound and partial signalisation
S5	Burgess Hill	A2300 / Northern Arc Spine Road	Lengthening of A2300 western arm flare
S6	Burgess Hill	Junction Road / B2113, Burgess Hill	None – full or partial mitigation expected from mitigation at other locations
S8	Hassocks	A273 / B2116 Hassocks (Stonepound)	None – full or partial mitigation expected from mitigation at other locations
S9	Pyecombe	A23 / A281 Eastbound On-Slip	None – full or partial mitigation expected from mitigation at other locations
S22	Burgess Hill	Valebridge Road / Junction Road / Leylands Road	None – full or partial mitigation expected from mitigation at other locations

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5. THE SITES DPD SCENARIO WITH MITIGATION

5.1 Traffic Flow Impacts

5.1.1 The highway mitigations remove the 'severe' impacts on the A23 and A2300, which draws traffic back to these more strategic routes, thereby also removing the 'severe' impacts on the less strategic rural and residential roads to which some traffic had been displaced.

5.2 Performance on M23 and A23 strategic road network

5.2.1 The impact between the M23 Junction 9 and the A23/A273 at Pyecombe is assessed and the number carriageway sections with a notable flow increase is shown in **Table 9.**

Table 9. Number of M23/A23 carriageway sections identified as having a 'notable flow increase'

SCENARIO	AM NORTHBOUND	AM SOUTHBOUND	PM NORTHBOUND	РМ southbound
Sites DPD Scenario	1	6	9	0
Sites DPD Scenario with Mitigation	1	6	9	2

- 5.2.2 Although the number of carriageway sections with a notable flow increase is largely unchanged, the mitigations at the A23/A2300 junction and widening of the A23, as described in **Table 8** result in a releasing of capacity leading to new notable flow increases on **two** A23 southbound sections (PM Peak) from the A2300 on-slip to the B2117. This is shown in more detail in **Appendix B.**
- 5.2.3 The detailed results show the flow increases are higher in the PM peak, when the most significantly impacted section, in term of traffic flow increase, is between the A272 and the M23 Junction 11 where the increase is up to 14%.

5.3 Junctions with Capacity Impacts

5.3.1 **Table 10** shows how many junctions are forecast to be impacted significantly or severely in the *Sites DPD Scenario* with Mitigation when compared to the *Reference* Case.

Table 10. 'Severe' and 'Significant' impacts due to Sites DPD Scenarios versus Reference Case

SCENARIO	'SEVERE'	'SIGNIFICANT'
Sites DPD Scenario <u>without</u> Mitigation versus Reference Case	9	8
Sites DPD Scenario <u>with</u> Mitigation versus Reference Case	1	11

'Severe' Junctions

- 5.3.2 The inclusion of mitigation measures, reduces the number of junctions severely impacted to **one** junction:
 - N7 B2028 Turners Hill Road / Wallage Lane, Crawley Down
- 5.3.3 As stated in **Table 8** the impacted approach arm (Wallage Lane) is a minor road and the 'severe' impact is relatively marginal due to the PM peak volume over capacity (V/C) increasing from 83% to 98% (see **Appendix C**). It is not considered appropriate to undertake junction improvements which could result in facilitating additional through

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traffic on Wallage Lane, rather than using more appropriate east-west routes including the A264.

- 5.3.4 Appendices B and C show the summary results and detailed junction results
- 5.3.5 **Figure 2** is a map showing the locations of the significant and severely impacted junctions in the *Sites DPD Scenario* with Mitigation.
- 5.3.6 There is an increase in the number of junctions with a 'significant' impact compared to the <u>without</u> mitigation Scenario. This is largely due to junctions moving from 'severe' to 'significant', while others move from either 'severe' or 'significant' to 'no impact'. However there are two junctions in Burgess Hill that become newly 'significant' having been 'no impact' in the <u>without</u> mitigation Scenario. These are:
 - S24 A273 Jane Murray Way / Sussex Way
 - O S27 B2113 Keymer Road / Folders Lane
- 5.3.7 These secondary impacts are relatively small and result from the mitigation drawing traffic back to the A23/A2300 and the main arterial routes through Burgess Hill, away from roads in residential areas, which is the desired overall outcome. It should be noted that changes in traffic flows will include displaced traffic and is not just confined to development traffic only. Traffic volumes overall are reduced in Burgess Hill in the <u>with</u> mitigation scenario which is beneficial in terms of undesirable rat-running and the associated safety and air quality impacts.
- 5.3.8 It is considered that these and other 'significant' impacts should be addressed using sustainable measures. In addition to the sustainability advantages, this is due to highway mitigations being limited by constraints on land availability within the highway boundary.
- In studying the newly 'significant' impacts at junctions S24 and S27 in more detail, they each occur at one approach arm at each of these junctions. These are the A273 western approach at junction S24 and the Keymer Road southern approach at S27 where, in both cases, the PM peak volume over capacity (V/C) increases to approximately 89% and triggers a 'significant' impact (they both increase to just under 85% in the <u>without</u> mitigation scenario, therefore 'no impact' because the criteria are not triggered).
- 5.3.10 These effects are largely a secondary impact of mitigations elsewhere, particularly on the A2300 and its junction with the A23 at Hickstead. As intended, these mitigations lead to reductions in traffic on routes such as the A273, B2036, B2112 and B2113 as traffic returns to the A23/A2300. However, as part of the balancing of delay across different locations that the model simulates, these reductions in turn release some capacity, resulting in traffic increases on some roads and leading to these small increases in V/C. This effect is more noticeable at roundabouts, where increased flow will also decrease spare capacity and therefore increase the V/C for movements they oppose.

5.4 Cross Boundary Impacts

- 5.4.1 The junction analysis includes appropriate coverage of neighbouring authorities, the extent of which is defined by the scale and location of the developments. In the *Sites DPD Scenario* with Mitigation there are no 'severe' and one 'significantly' impacted junction outside of Mid Sussex, as follows:
 - S21 B2112 / Green Road, Wivelsfield (Lewes District)

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This is a marginal impact affecting the B2112 southern approach arm in the PM peak only, due to the volume over capacity (V/C) increasing from 81% to 86% (see **Appendix C**).

- 5.4.2 The are no 'severe' or 'significant' impacts in any of the other neighbouring authorities.
- 5.4.3 **Appendix B** summarises changes in traffic volumes in terms of total distance travelled (in vehicle kilometres) for the **Ashdown Forest**. It can be seen that compared to the Reference Case the *Sites DPD Scenario* <u>with</u> <u>Mitigation</u> results in an increase in vehicle kilometres of 0.24% in the PM peak, which is lower the 0.52% increase <u>without</u> mitigation. In the AM peak there remains no discernible change in distance travelled.

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Figure 2. 'Significant' and 'severely' impacted junctions in Sites DPD Scenario <u>with</u> Mitigation vs. Reference Case 10A with Mitigation SEVERE SIGNIFICANT





6. **KEY LOCATIONS**

A264/A22 Felbridge

- 6.1.1 This signalised junction is currently regarded as a 'hotspot' where delays are experienced. Therefore, it would be reasonable to expect 'severe' conditions in future year scenarios.
- 6.1.2 The A264/A22 junction is not identified as having a severe impacts in the Scenarios. However, it should be noted that this junction is flagged as severe in the Reference Case, and operates over capacity; the Scenarios generate slightly more traffic passing through the junction, which increases these impacts further, but not enough to result in severe impacts for the scenarios. Although the nearby developments increase pressure, the model is reporting that the 'severe' conditions are attributable to the Reference Case situation rather than the Scenario developments.

Rerouting

- 6.1.3 The highway model allows travellers to change their route due to congestion to achieve the most cost-effective journey possible. It can be seen in the Reference Case that significant rerouting is occurring away from the A264/A22 in both the AM and PM peak, and this continues in the Scenarios. The alternative route favoured by the model is via the B2028 and B2110 through Turners Hill. It is mostly trips going to East Grinstead area south of the A22, including Imberhorne Lane that do this.
- 6.1.4 Online route planners suggest that even in current conditions alternative routes on local 'B' roads including those used in the model are viable, and therefore it is reasonable to expect this would happen in reality in 2031.
- 6.1.5 Once the model reaches capacity at a location, delay will increase significantly and extensive rerouting will occur if alternative faster routes are available. Traffic heading to the Imberhorne Lane development from the west will, according to the model, route via the B2110 through Turners Hill, rather than experience the delays on the A264 particularly at the junction with the A22 at Felbridge. Online journey planners suggest this is perhaps already the quicker route in the PM peak for Imberhorne and other destinations south of the A22 in the East Grinstead area.
- 6.1.6 It is apparent that in the PM peak, for journeys from the west to the Imberhorne Lane development, most of the scenario traffic is rerouting from the A264. It is difficult to put an exact figure on this because it varies depending on origin and journey length. The PM peak model shows increases of up to around 150 vehicles on the B2028 through Crawley Down towards Turner's Hill and about 100 additional vehicles travelling east on the B2110 at Turner's Hill towards Imberhorne Lane. This is a mix of traffic relating to the Imberhorne site, the smaller sites in the north of the District and re-routed traffic from the Reference Case avoiding the A264. This outcome is similar in the mitigation scenario.

Recommended Further Work

6.1.7 It is considered that to significantly reduce the congestion at this junction and therefore the rerouting in favour of less suitable routes in the Reference Case and Scenarios, a significant mitigation of the A264/A22 would be required. To be fully effective this could involve land outside of the WSCC highway boundary, subject to the outcome of more detailed study work.

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7. **CONCLUSIONS**

The Sites DPD Scenario without Mitigation

- 7.1.1 The Sites DPD Scenario without Mitigation generates significant additional traffic centred around the A2300 and nearby roads, in the AM and PM Peak. This results in significant rerouting on Cuckfield Road and the A272 through Ansty. There are also impacts on the A273 through Hassocks, B2036, B2116 and B2117. The A23/A2300 dumbbell junction is significantly impacted and in the PM peak traffic is avoiding this junction in favour of alternative routes.
- 7.1.2 There are also significant flow impacts on the A264, but these are already prevalent in the Reference Case, resulting in rerouting to alternative routes using the B2110 through Turners Hill. This appears to be mainly due to congestion on the A264 particularly at the junction with the A22 at Felbridge.
- 7.1.3 'Severe' impacts (as defined by the described criteria) occur at **nine** junctions:
 - N7 B2028 Turners Hill Road / Wallage Lane, Crawley Down
 - 0 C7 A272 / B2036, Ansty
 - 0 S1 A23 / A2300 Southbound On-Slip
 - 0 S2 A23 / A2300 Eastern Roundabout
 - 0 S5 A2300 / Northern Arc Spine Road
 - S6 Junction Road / B2113, Burgess Hill
 - 0 S8 A273 / B2116 Hassocks (Stonepound)
 - 0 S9 A23 / A281 Eastbound On-Slip, Pyecombe
 - S22 Valebridge Road / Junction Road / Leylands Road, Burgess Hill
- 7.1.4 On the M23/A23 the impact is tidal. In the AM peak **six** southbound carriageway sections (all on A23) show an increase of 100 vehicles or more, while in the PM peak nine northbound sections (A23 and M23) increase by 100 vehicles or more. The highest percentage increases are up to approximately 13% on the section between the A272 and M23 Junction 11. It is considered that this is largely attributable to the S&T park.

The Sites DPD Scenario with Mitigation

- 7.1.5 Modelled mitigations include widening of the A23 to three lanes from the A2300 Southbound off-slip to B2118/Mill Lane off-slip and at the eastern Hickstead roundabout a free flow for the A23 southbound off-slip to A2300 eastbound, and partial signalisation.
- 7.1.6 The highway mitigations remove the 'severe' impacts on the A23 and A2300, which draws traffic back to these more strategic routes, thereby also removing the 'severe' impacts on the less strategic rural and residential roads to which some traffic had been displaced.
- 7.1.7 Following mitigation, one location remains at 'severe':
 - N7 B2028 Turners Hill Road / Wallage Lane, Crawley Down

The impacted approach arm (Wallage Lane) is a minor road and the 'severe' impact is relatively marginal due to the PM peak volume over capacity (V/C) increasing from 83% to 98% (see Appendix C). It is not considered appropriate to undertake junction improvements which could result in facilitating additional through traffic on Wallage Lane, rather than using more appropriate east-west routes including the A264.

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- 7.1.8 There is an increase in the number of junctions with a 'significant' impact compared to the without mitigation Scenario. This is largely due to junctions moving from 'severe' to 'significant'. However there are two junctions in Burgess Hill that become newly 'significant' having been 'no impact' in the without mitigation Scenario. These impacts are small and result from the mitigation drawing traffic back to the A23/A2300 and the main arterial routes through Burgess Hill, away from roads in residential areas, which is the desired overall outcome.
- 7.1.9 On the M23/A23 the mitigations described above at the A23 and at Hickstead result in a releasing of capacity leading to two new PM peak increases of 100 vehicles or more on carriageway sections of the A23 southbound from the A2300 on-slip to the B2117. The highest percentage increases are up to approximately 14% on the section between the A272 and M23 Junction 11. It is considered that this is largely attributable to the S&T park.

Cross Boundary Impacts

- 7.1.10 The junction analysis includes appropriate coverage of neighbouring authorities, the extent of which is defined by the scale and location of the developments. These are:
 - 0 Crawley Borough;
 - 0 Horsham District;
 - 0 Tandridge District;
 - Wealden District; and
 - **Lewes District**
- 7.1.11 Outside of Mid Sussex there are no 'severe' and one marginal 'significant' impact in the Sites DPD Scenario with Mitigation:
 - S21 B2112 / Green Road, Wivelsfield (Lewes District)
- 7.1.12 The are no 'severe' or 'significant' impacts in any of the other neighbouring authorities.
- 7.1.13 In the Ashdown Forest, there is an increase in distance travelled (vehicle kilometres) of 0.24% in the PM peak, which is lower the 0.52% increase without mitigation. In the AM peak there is no discernible change in distance travelled.

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8. JUNCTION SUMMARIES

- 8.1.1 The following pages provide the junction performance statistics and commentary for each of the severely impacted junctions in *Sites* DPD Scenario, when compared to the *Reference* Case.
- 8.1.2 Strategic junctions on the A264, and in East Grinstead (N1, N2, N9, and N6) have also been included for reference. A summary of how the junctions are forecast to perform is shown in **Appendix C**, alongside the impact on the M23 and A23.

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N7 B2028 Turners Hill Road / Wallage Lane

Table 11 reports the performance by approach arm for AM and PM peaks, in each modelled Scenario.

Reference Case

The congestion on the A264 / A22 causes rerouting in both the AM and PM peak to alternative routes such as the B2028 and B2110 through Turner's Hill. This causes a number of junctions on these roads to operate at capacity in the *Reference* Case. The Wallage Lane arm of junction N7 is forecast to operate at capacity in the AM peak, with an RFC of 99%, and is forecast to operate close to capacity, 83% in the PM peak. The B2110 Church Road arm of the B2110 Church Road / B2028 Selsfield Road / B2110 East Street junction (N8) is forecast to operate over capacity.

Sites DPD Scenario

The Sites DPD Scenario includes development sites near Turner's Hill as well as in East Grinstead. This increases the amount of traffic rerouting away from the congested A264 / A22 to the B2028 and B2110 compared to the Reference Case. With the B2110 Church Road / B2028 Selsfield Road / B2110 East Street junction (N8) still operating over capacity, this additional traffic is forced to use Wallage Lane, B2027 Turner's Hill Road, and B2110 East Street to access East Grinstead. This increases the traffic on the Wallage Lane arm of the B2028 Turners Hill Road / Wallage Lane junction (N7), causing it to have a forecast capacity increase over 10% in the PM peak, to 98% in the Sites DPD Scenario.

Sites DPD Scenario with Mitigation

When the proposed mitigation is introduced, there are small amounts of rerouting at this junction, however the Wallage Lane arm remains at 'severe'. Wallage Lane is a minor road and the 'severe' impact is marginal. It is not considered appropriate to undertake junction improvements which could result in facilitating additional through traffic on Wallage Lane.

REFERENCE CASE 2031 SITES DPD SCENARIO APPROACH ARM 2031 WITH MITIGATION **FLOW DELAY FLOW DELAY FLOW DELAY RFC (%)** RFC (%) RFC (%) (VEH) (SECS) (VEH) (SECS) (VEH) (SECS) **AM PEAK** 1 1 1 TURNERS HILL ROAD (N) 376 338 17 380 19 19 473 1 TURNERS HILL ROAD (S) 22 1 524 24 524 24 1 WALLAGE LANE 549 99 73 532 100 77 533 100 79 **PM PEAK** TURNERS HILL ROAD (N) 945 47 2 1101 54 2 1075 53 2 TURNERS HILL ROAD (S) 224 1 249 12 1 247 12 1 11 WALLAGE LANE 380 83 38 392 73 401 97 71

Table 11. N7: B2028 Turners Hill Road / Wallage Lane

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C7 A272 / B2036, Ansty

The junction performance in the AM and PM peaks for the A272 / B2036 (C7) junction are summarised in Table 12.

Reference Case

The junction is forecast to perform at or over capacity on every arm in the AM peak, and over capacity on A272 eastern and western arms in the PM peak.

Sites DPD Scenario

In the 2031 development scenarios, more traffic is generated by the additional development. This causes more traffic to use the junction, hence increasing RFC and delay on most arms of the junction in AM and PM peaks triggering a severe impact when compared to the *Reference* Case. Due to the junctions location, there is some tidal flow with the A272 eastern arm being forecast to cause a severe impact in the AM period, and the A272 western arm causing a severe impact in the PM peak.

Sites DPD Scenario with Mitigation

At this junction, additional capacity in the form of **flared approaches on the A272 (W) and A272 (E)** have been included, successfully mitigating the junction impacts.

Table 12. C7: A272 / B2036 Junction

APPROACH ARM	REFERENCE CASE			2031 SITES DPD SCENARIO			2031 <u>WITH</u> MITIGATION		
	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)
AM PEAK									
A272 (E)	898	103	64	903	108	163	1106	103	66
B2036 (S)	753	105	122	749	103	88	702	105	122
A272 (W)	736	92	6	748	97	12	571	64	4
PM PEAK									
A272 (E)	879	105	104	889	105	118	984	103	80
B2036 (S)	305	36	5	716	98	21	494	72	7
A272 (W)	846	102	47	789	108	171	946	103	81

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S1 A23 / A2300 Southbound On-Slip, Burgess Hill

The forecast performance of the A23 / A2300 southbound on-slip (S1) in Burgess Hill are shown in **Table 13**.

Reference Case

The A23 southbound operates within capacity on three lane section north of the A2300; the model forecasts that the junction operates close to capacity (RFC of 98%) when the A23 reduces to two lanes, after the A23 southbound off-slip to the A2300. Both the A23 southbound and A23 southbound on-slip operate within capacity in the AM peak.

Sites DPD Scenario

The additional development introduced as part of the 2031 development scenario generates more traffic on the A23 southbound in the PM peak, increasing the RFC to 100%. With the A23 southbound operating at capacity, traffic on the southbound on-slip has difficulty merging onto the A23 southbound. This is reflected in an RFC increase of over 50% in 2031 *Sites* DPD Scenario compared to the *Reference* Case, meaning the junction is severely impacted.

Sites DPD Scenario with Mitigation

At this junction, additional capacity in the form of a A23 widening to three lanes from the A2300 Southbound Off-Slip to the B2118/Mill Lane Off-Slip has been included, successfully mitigating the junction impacts.

Table 13. S1: A23 / A2300 Southbound On-Slip

APPROACH ARM	REFEREN	REFERENCE CASE			2031 SITES DPD SCENARIO			2031 <u>WITH</u> MITIGATION		
	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	
AM PEAK										
A23 SB ON-SLIP	698	39	4	772	47	4	785	41	3	
A23 SOUTHBOUND	2287	71	4	2305	75	5	2295	46	2	
PM PEAK										
A23 SB ON-SLIP	677	49	5	596	107	173	1158	61	4	
A23 SOUTHBOUND	3501	98	25	3632	100	36	3605	70	4	

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S2 A23 / A2300 Eastern Roundabout, Burgess Hill

Table 14 summarises the junction performance of the A23 / A2300 eastern roundabout (S2), in the modelled scenarios.

Reference Case

The model forecasts that the A23 / A2300 eastern roundabout operates within capacity, with RFC's below 80% on all arms, in the AM and PM peaks in the *Reference* Case.

Sites DPD Scenario

When the additional development included in the *Sites DPD Scenario*, more traffic is forecast on the A23 southbound off-slip and A2300 eastern arm of the roundabout in the AM peak. This is primarily driven by traffic travelling to the Science and Technology Park, on the A2300, in the AM peak. The additional traffic causes the junction to be severely impacted, with increases in RFC and delay on these arms.

Sites DPD Scenario with Mitigation

A single free-flow lane from the A23 southbound off-slip to the A2300 (E) arm has been included, alongside reducing the number of approach lanes from two to one on the southbound off-slip. This give-way is also signalised in the same phase as circulating traffic, and traffic from the A2300 (W) approach. The mitigation also includes new traffic signals where the A2300 (E) approach gives way to circulating traffic. The proposed scheme successfully mitigates against the high RFCs and delays at the junction, in both AM and PM peaks.

Table 14. S2: A23 / A2300 Eastern Roundabout

APPROACH ARM	REFEREN	REFERENCE CASE			2031 SITES DPD SCENARIO			2031 <u>WITH</u> MITIGATION		
	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	
AM PEAK										
A23 SB OFF-SLIP	1182	68	4	1422	107	159	0	0	14	
A2300 (E)	1619	73	3	1965	96	4	1948	73	10	
A2300 (W)	326	32	3	744	79	4	519	27	0	
PM PEAK										
A23 SB OFF-SLIP	1175	68	4	1081	57	3	0	0	32	
A2300 (E)	1785	79	3	1951	91	3	2529	85	11	
A2300 (W)	424	39	3	191	18	3	215	11	0	

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S5 A2300 / Northern Arc Spine Road, Burgess Hill

Table 15 shows how the performance of the A2300 / Northern Arc Spine Road junction compares in the different modelled scenarios.

Reference Case

The A2300 / Northern Arc Spine Road junction is introduced with the addition of the Northern Arc development in the *Reference* Case scenario. The proposed access takes the form of a four-arm roundabout on the A2300. The model forecasts that the A2300 (W) and southern Northern Arc arms of the junction are approaching capacity in the AM and PM peaks, but the other arms operate within capacity.

Sites DPD Scenario

The Sites DPD Scenario includes the Science and Technology Park, located to the west of this junction. The additional traffic generated by this development increases the volume of traffic on the A2300 as it's the primary access road to and from the Park. This causes a severe impact at the junction compared to the Reference Case, with the A2300 western arm having an increase in RFC exceeding 100% in the PM peak.

Sites DPD Scenario with Mitigation

Additional capacity has been included on the A300 western arm through increasing the length of the proposed flare. This mitigation measure successfully reduces the RFC and delay to a point where the junction is no longer severely impacted.

Table 15. S5: A2300 / Northern Arc Spine Road Roundabout

APPROACH ARM	REFERENCE CASE			2031 SITE	2031 SITES DPD SCENARIO			2031 <u>WITH</u> MITIGATION		
	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	
AM PEAK										
NORTHERN ARC (N)	338	29	5	872	76	9	840	80	11	
A2300 (E)	846	56	5	1258	79	8	1185	74	7	
NORTHERN ARC (S)	997	67	5	1066	69	7	1068	69	7	
A2300 (W)	1669	79	4	1966	94	6	2136	92	5	
PM PEAK										
NORTHERN ARC (N)	248	20	5	197	18	5	239	22	5	
A2300 (E)	845	55	5	839	55	5	822	54	5	
NORTHERN ARC (S)	1175	77	6	1239	81	6	1236	81	7	
A2300 (W)	2185	86	5	2291	104	83	2334	93	7	

Notes: an increase in RFC of **5%** or more to an RFC of **85%** or more is highlighted in **orange** an increase in RFC of **10%** or more to an RFC of **95%** or more is highlighted **red**

an increase in delay of **one minute** or more to a delay of **two minutes** or more is highlighted **red**

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S6 Junction Road / B2113, Burgess Hill

The junction performance of the Junction Road / B2113 junction (S6) are summarised in Table 16.

Reference Case

The *Reference* Case scenario includes all committed development and infrastructure. This includes the reconfiguration of this junction from a roundabout, to signals. The model forecasts that this junction operates at capacity, with delays in the AM and PM peaks in the *Reference* Case.

Sites DPD Scenario

The additional developments in 2031 *Sites* DPD Scenario increases the traffic passing through this junction, primarily on the B2113 Station Road arm. Although there is some rerouting to avoid it, the increases worsen the performance of the junction enough to cause severe impacts in the AM and PM peaks.

Sites DPD Scenario with Mitigation

Nearby mitigation results in rerouting from this junction, reducing the volume of traffic to a point where it is no longer severely impacted, but is still operating over capacity.

Table 16. S6: Junction Road / B2113 Junction

APPROACH ARM	REFERENCE CASE			2031 SITES DPD SCENARIO			2031 <u>WITH</u> MITIGATION		
	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)
AM PEAK									
JUNCTION ROAD (N)	425	97	108	430	101	153	415	101	154
SILVERDALE ROAD	0	0	122	0	0	122	0	0	122
B2113 KEYMER RD (S)	499	105	212	520	109	294	573	107	249
B2113 STATION RD (W)	525	105	206	523	103	183	483	105	218
PM PEAK									
JUNCTION ROAD (N)	138	10	38	132	10	38	134	10	43
SILVERDALE ROAD	0	0	122	0	0	122	0	0	122
B2113 KEYMER RD (S)	479	100	122	483	99	115	481	100	126
B2113 STATION RD (W)	541	106	235	564	111	325	634	107	242

Notes: an increase in RFC of 5% or more to an RFC of 85% or more is highlighted in orange

an increase in RFC of 10% or more to an RFC of 95% or more is highlighted red

an increase in delay of **one minute** or more to a delay of **two minutes** or more is highlighted **red**

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A273 / B2116 Stonepound. Hassocks

Table 17 outlines the junction performance for A273 / B2116 Stonepoound crossroads in the modelled scenarios.

Reference Case

S8

Despite additional capacity being provided as part of the committed highway infrastructure scheme, all arms of the junction operate at, or close to capacity in the *Reference* Case scenario.

Sites DPD Scenario

The additional traffic generated by the developments cause the London Road and Hurst Road arms to be severely impacted in the PM peak.

Sites DPD Scenario with Mitigation

Rerouting, caused by mitigation elsewhere in the network successfully reduces delay on the London Road and Hurst Road arms in the PM peak, to a point where the junction is no longer severely impacted, but is still operating over capacity.

Table 17. S8: A273 / B2116 Stonepound Junction

APPROACH ARM	REFERENCE CASE			2031 SITES DPD SCENARIO			2031 <u>WITH</u> MITIGATION		
	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)
AM PEAK									
LONDON ROAD (N)	551	112	335	612	106	225	589	108	260
KEYMER ROAD (E)	439	106	248	451	109	302	462	108	279
BRIGHTON ROAD (S)	420	103	190	423	105	214	410	105	223
HURST ROAD (W)	430	89	81	433	90	83	435	90	84
PM PEAK									
LONDON ROAD (N)	614	102	138	728	107	232	689	102	153
KEYMER ROAD (E)	463	101	147	465	101	139	453	102	166
BRIGHTON ROAD (S)	424	95	92	426	60	49	329	96	120
HURST ROAD (W)	347	101	161	405	106	246	559	103	175

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S9 A23 / A23 Southbound On-Slip, Pyecombe

Table 18 shows the RFC and delay for each approach arm in each of the modelled scenarios.

Reference Case

As the A23 / A2300 southbound on-slip (S1) shows, the A23 southbound operates at capacity when it reduces to two lanes after the A23 / A2300 southbound off-slip. The capacity constraints continue to Pyecombe, where the model forecasts an RFC of 100% on both the A23, and A23 eastbound on-slip in the PM peak.

Sites DPD Scenario

In the *Sites DPD Scenario*, the additional traffic increases the traffic on the already congested A23 southbound on-slip. The model forecasts that the additional traffic on the A23 southbound on-slip would increase delays on the slip road by 73 seconds in *Sites DPD Scenario*, when compared to *Reference* Case, causing the junction to be severely impacted.

Sites DPD Scenario with Mitigation

The mitigation included elsewhere provides a small amount of relief on the A23 southbound, allowing more traffic to merge from the A23 southbound on-slip to the A23 southbound. This slightly reduces the delay experienced by users on the A23 southbound on-slip, such that the junction is no longer identified as being severely impacted compared to the *Reference* Case.

Table 18. S9: A23 / A281 Eastbound On-Slip

APPROACH ARM	REFEREN	CE CASE		2031 SITE	S DPD SCEN	ARIO	2031 <u>W/7</u>	2031 <u>WITH</u> MITIGATION					
	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)				
AM PEAK													
A23 SB ON-SLIP	2979	83	17	2916	82	17	2945	83	18				
A23 SB	346	34	5	317	33	5	321	34	5				
PM PEAK													
A23 SB ON-SLIP	4270	100	62	4276	100	64	4247	101	69				
A23 SB	28	95	227	31	103	300	31	102	275				

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S22 Valebridge Road / Junction Road / Leylands Road, Burgess Hill

The junction performance of Valebridge Road / Junction Road / Leylands Road in the modelled scenarios is summarised in **Table 19**.

Reference Case

The *Reference* Case includes the committed schemes to convert the Valebridge Road / Junction Road / Leylands Road junction from a mini-roundabout to traffic signals. The Leylands Road arm of the junction is forecast to operate at capacity in the PM peak, with an RFC of 104%.

Sites DPD Scenario

The *Sites DPD Scenario* forecasts that the Leylands Road approach arm is severely impacted compared to the *Reference* Case, in the PM peak. The additional traffic generated by the developments increases the traffic flows on the Leylands Road approach arm, causing the delay to increase by 77 seconds.

Sites DPD Scenario with Mitigation

Traffic reduction from sustainable measures, and highway mitigation measures elsewhere in the network have successfully mitigated the delay on the Leylands Road approach arm such that the junction is no longer identified as having a severe impact compared to the *Reference* Case.

Table 19. S22: Valebridge Road / Junction Road / Leylands Road Junction

APPROACH ARM	REFERENC	E CASE		2031 SITES	DPD SCENA	RIO	2031 <u>WITH</u>	V	
	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)
AM PEAK									
VALEBRIDGE ROAD (N)	644	55	72	641	55	72	643	55	82
JUNCTION ROAD (S)	486	93	65	509	97	91	465	100	118
LEYLANDS ROAD (W)	1041	99	66	1030	95	44	1085	96	45
PM PEAK									
VALEBRIDGE ROAD (N)	659	56	73	642	54	67	668	57	92
JUNCTION ROAD (S)	259	50	33	256	49	32	263	56	37
LEYLANDS ROAD (W)	1025	104	152	1043	108	229	1102	105	158



N1 A264 / A2220, Copthorne

Table 20. N1: A264 / A2220 Junction

APPROACH ARM	REFERENC	E CASE		2031 SITES	DPD SCENA	RIO	2031 <u>WIT</u> F	<u>I</u> MITIGATIOI	V
	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)
AM PEAK									
BROOKHILL RD (N)	409	40	14	426	41	14	426	41	14
A264 (E)	548	42	11	663	50	12	665	50	12
COPTHORNE HOTEL	63	1	10	63	1	10	63	1	10
A2220 (S)	1076	71	12	1143	78	12	1140	78	12
A264 (W)	1436	108	174	1389	109	191	1390	109	192
PM PEAK									
BROOKHILL RD (N)	769	65	15	855	75	16	854	74	16
A264 (E)	1130	87	15	1097	86	15	1091	85	15
COPTHORNE HOTEL	69	1	10	69	1	10	69	1	10
A2220 (S)	783	61	12	863	67	12	844	66	12
A264 (W)	1220	79	11	1254	82	11	1254	82	11

Notes: an increase in RFC of **5%** or more to an RFC of **85%** or more is highlighted in **orange**an increase in RFC of **10%** or more to an RFC of **95%** or more is highlighted **red**an increase in delay of **one minute** or more to a delay of **two minutes** or more is highlighted **red**

A22 / Imberhorne Lane, East Grinstead

N6

Table 21. N6: A22 / Imberhorne Lane Junction

APPROACH ARM	REFERENC	E CASE		2031 SITES	DPD SCENA	RIO	2031 <u>WITH</u>	<u>I</u> MITIGATIO	V
	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)
AM PEAK									
A22 (W)	730	45	8	735	46	6	730	46	6
A22 (E)	713	98	70	675	100	57	676	100	54
IMBERHORNE LANE (S)	375	50	18	445	62	20	440	61	20
PM PEAK									
A22 (W)	919	61	11	953	62	10	948	62	10
A22 (E)	838	85	25	828	82	23	828	82	23
IMBERHORNE LANE (S)	324	55	24	361	61	61 25		61	25

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N2 A264 / B2028, Copthorne

Table 22. N2: A264 / B2028 Junction

APPROACH ARM	REFERENC	E CASE		2031 SITES	DPD SCENA	RIO	2031 <u>WITH</u>	<u>I</u> MITIGATIO	V
	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)
AM PEAK									
B2027 (N)	248	12	3	278	14	4	274	14	4
A264 SNOW HILL (E)	241	12	3	293	14	3	294	14	3
B2027 (S)	596	28	3	652	31	3	652	31	3
A264 (W)	966	46	4	967	46	4	961	46	4
PM PEAK									
B2027 (N)	710	34	4	737	36	4	736	36	4
A264 SNOW HILL (E)	398	20	4	382	19	4	381	19	4
B2027 (S)	365	18	4	363	18	4	356	18	4
A264 (W)	1121	53	3	1256	59	3	1227	58	3

Notes: an increase in RFC of **5%** or more to an RFC of **85%** or more is highlighted in **orange**an increase in RFC of **10%** or more to an RFC of **95%** or more is highlighted **red**an increase in delay of **one minute** or more to a delay of **two minutes** or more is highlighted **red**

N9 A264 / A22 Felbridge, East Grinstead

Table 23. N9: A265 / A22 Felbridge Junction

APPROACH ARM	REFERENC	E CASE		2031 SITES	DPD SCENA	RIO	2031 <u>WITH</u>	<u>I</u> MITIGATIO	V
	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)	FLOW (VEH)	RFC (%)	DELAY (SECS)
AM PEAK									
A264 (W)	578	105	195	604	107	225	601	107	216
A22 (N)	492	56	13	496	56	13	496	56	13
A22 LONDON RD (S)	1368	108	241	1407	108	241	1406	108	241
PM PEAK									
A264 (W)	580	101	113	595	103	145	596	103	148
A22 (N)	595	64	14	613	65	14	605	64	14
A22 LONDON RD (S)	1267	100	101	1276	101	110	1275	101	108

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		TRANSPORT STUDY - DEVELOPMENT SITE ASSUMPTIONS AND TRIP RATES			Windfall: Check:	588 588							Ref Trips				SitesDPD Tr				Diff			
District	ID	Ste address	Use Class	Quant for TRICs	Ref	Ref inc Windfall	Sites DPD	Diff	Trip Rate AM O	Trip Rate AM D	Trip Rate PM O	Trip Rate PM D	MA qirT O	Trip AM D	Trip PM O	Trip PM D	Trip AM O	Trip AM D	Trip PM O	Trip PM D	Trip AM O	Trip AM D	Trip PM O	Trip PM D
MidSussex		Land at Gravelve Lane and Scamos Hill. Lindfield	Housing	rate units	130	137			0.397	0.191	0.143		55	26	20	67	55	26	20	67	0	0	0	0
MidSussex MidSussex MidSussex	22	Land rear of 11A Crawley Down Road, Felbridge Land to rear of Dunnines Mill Scorts Club Dunniness Rd. East Grinstead Land south of Sunte House, Birchen Lane, Haywards Heath		units units units	31 12 8	13		3 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143	0.486	5	2	5 2 1	16 6 4	13 5 3	2 2	5 2 1	16	0	0	0	0
MidSussex MidSussex MidSussex	36	Land North of Wickham Way and East of Birchen Lane, Haywards Heath Land adjacent to Station Goods Yard, Keymer Road, Hassocks Land north of the AZ64 at Junction 10 of MZ3		units units units	15 16 500	16 17 525	7 1	7 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	7	3 101	2 2 76	8 8 257	6 7 210	3 3 101	2 2 76	8 8 257	0	0	0	0
MidSussex MidSussex MidSussex	45	Former Sewage Works, Fairbridge Way, Burgess Hill Land off Kings Way, East of Gerald Clore, Burgess Hill Land at Forbill Gamblemed Land. Poshill. Hawwards Heath	Housing Housing	units units units	325 27 104	344 25 110	34	4 0 9 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	136 11	66 5	49 4 16	167 14 53	136 11	66 5 21	49	167	0	0	0	0
MidSussex MidSussex	83	Imberhorne Lower School, Windmill Lane, East Grinstead Motorcycle Workshop (former G&W Motors), London Road, Bolney	Housing Housing	units units	200 10	212	2 21	2 0	0.397 0.397	0.191 0.191	0.143 0.143	0.486	84	40	30 2	103	84	40	30 2	103	0	0	0	0
MidSussex MidSussex MidSussex	84 88	Burges Hill Sation yard/cer park, Burges Hill The Oaks Centre, Junction Road, Burges Hill		units units	12 20	159 13 21	1 2	3 0 1 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486 0.486	5 8	2	23 2 3	6 10	5 8	2	2	1 10	0	0	0	0
MidSussex MidSussex MidSussex	92	Keymer Tile Works, Nye Road, Burgess Hill Ooen air market. Cvorus Road. Burgess Hill Stonequarry Woods, East Grinstead	Housing	units units units	308 25 40	326 26 42	5 2	6 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	10	62 5	47 4 6	158 13 21	10	62 5 8	47 4 6	158 1 13 1 21	0	0	0	0
MidSussex MidSussex MidSussex	116	Sation Goods Yard, Hassocks Glockfield, North Street, Turners Hill Land at St. Martin Close, Handroos	Housing	units units units	54 41 0	43		3 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	17	11 8	8 6 0	28 21 0	23 17 26	11 8 12	8 6 9	28 21 32	0	0 0 12	0 0	0 0 32
MidSussex MidSussex MidSussex	139	Land south of Hammerwood Road, Ashurst Wood Land between 98-104 Maypole Road. Ashurst Wood West Hoath's Sation Goods Yard Sation Road. Sharethorne	Housing	units units units	0 5		1	2 12 5 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	2	2	1	3	2 2	1	1	3	5 0	0	0	0
MidSussex	148	Land north of Top Road, Sharpthorne Land to the west of the Rectov Hawwards Heath Road. Balcombe Land so the Promound Wood Clore, Lindfield	Housing	units units	0 14 43	15			0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143	0.486	0	3	2 7	0 7 22	0 6 18	3	2	7 22	0	0	0	0
MidSussex MidSussex	184	Land south of St. Stephens Church, Hamsland, Horsted Keynes Land opposite Newlands, (Spring Field Shaw), London Road, Balcombe	Housing Housing	units units	0 14	15	3 3	0 30 5 0	0.397 0.397	0.191 0.191	0.143 0.143	0.486 0.486	0	3	0 2	0 7	12	6	4	15		6	4	15
	190			units units units	0 62	15 C	20	0 200	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	26	13	0 9	7 0 32	79 26	38 13		97		38 0	29	97 0
MidSussex MidSussex MidSussex	220	Pease Pottase Golf House. Horsham Road, Pease Pottare Land north of Kingsland Laines, Sayers Common Land to the north of Shepherds Walk Hassocks		units units units	119	126 137	5 12	6 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	50	24 26	18 20	13 61 67	50	5 24 26			. 0	0	0	0
MidSussex MidSussex MidSussex	238	Land ast of Kings Way, Burges Hill Land at Little Park Farm, north of Hustpierpoint Hurst Farm, Hustwood Lane, Haywards Heath	Housing Housing Housing	units	84	327 89 370	9 8	9 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486		62 17	47 13 53		35	62 17 71	13		0	0	0	0
MidSussex MidSussex	247	Penland Farm, Haywards Heath Land at Holly Farm, Copthorne Way, Copthorne	Housing	units units	178 45	188 48 47	3 18 3 4	8 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143	0.486 0.486	75 19	36 9	27 7	91 23 23	19	36 9	27 7		0	0	0	0
MidSussex MidSussex	281	Land south of Hazel Close. Crawley Down Land at the Ham, Hassocks Farringdon House, Wood Street, East Grinstead	Housing Housing	units units	60 129	63 136	6 5 13	3 0 6 0	0.397 0.397	0.191 0.191	0.143 0.143	0.486 0.486	25 54	12 26	9 20	31 66	25 54	12 26		31	0	0	0	0
MidSussex MidSussex MidSussex MidSussex	321	Seaspace House, Brighton Road, Handcross Meadway Garage, Lowdells Lane, East Grinstead	Housing Housing	units units units	42 7 8	44 7	3	7 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	18 3	1 2	1	22 4 4	18 3	1 2	1	4	0	0	0	0
MidSussex MidSussex	369 409	Wilflink Catholic Primary School, School Close, Burgess Hill S3-99 Lingflied Road, Earl Grinstraad Sussex House. London Road, East Grinstrad	Housing	units units units	11 8	12	2 1		0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	5	2	2	6	5	2 2	29	6	0	0	0 0	0
MidSussex MidSussex MidSussex	433	Victoria House, College Road, Ardingly Beckford Lewes Road, East Grinstead The Emperor Restaurant, Cyprus Road, Burgess Hill		units units units	5 6 9	- 5 - 6 10	5 1	5 0 6 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	3 4	1 1 2	1 1	3 3	3	1 2	1 1	3	0	0	0	0
MidSussex	470	Wealden House, Lewes Road, Ashurst Wood	Housing	units units	50 7 16	53 7	5	3 0 7 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486 0.486	21 3	10	1 2	26 4 8	21 3 7	10 1 3	1 2	26 4	0	0	0	0
MidSussex	479	Land at Hanive Lane to the east of Ardinely Road. Cuckfield	Housing	units units	0 10	11 212	5	5 55 1 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486 0.486	0	2	0 2 30	0 5 103	22 4 84	11 2 40	8 2 30	27	22	11	8	27 0
MidSussex MidSussex	483	Land south of Rocky Lane Phase 2, Haywards Heath Palmers Autocare Centre. Turners Hill Road. Crawley Down	Housing Housing	units units	200 112 8	212 118 8	3 11	8 0	0.397 0.397	0.191 0.191	0.143	0.486	47	23	30 17 1	103 58 4		23 2		103 58	0	0	0	0
MidSussex	493a		Housing	units units	1163.5	1230 1230	123	0 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486		235 235	7 176 176	598 598						0	0	0
MidSussex MidSussex MidSussex	496 510	Land to the east of Gravelye Lane and south of Scamps Hill and bounded to the east by Northlands Brook (Site K), Lindfield Land south of Rocky Lane & to the west of Weald Rise and Fox Hill Villace. Hawards Heath Imberhorne Lane car park, Imberhorne Lane, East Grinstead	Housing Housing Housing	units	18 320 18	338 15	3 33	8 0 9 0	0.397 0.397 0.397	0.191 0.191 0.191		0.486		65	48 3	9 164 9	134 8	65 4	48 3	1 164	0	0	0	0
MidSussex MidSussex MidSussex	519 528	Land at Hyde Estate (to the north of Handcross) Land north of Burleigh Lane, Crawley Down Land north of Burleigh Lane, Crawley Down Land at Burgess Hill Town Centre (multiple sites)	Housing	units units units	70 0 142	74 C 150		0 50	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486		14 0 29	11 0 21	36 0 73	29 20 60	14 10 29		36 24		10 0	7	24 0
MidSussex MidSussex MidSussex	531 534	Land north of 99 Reed Pond Walk, Franklands Willage, Haywards Heath Land rear of 88 Folders Lane, Burges Hill Western side Offician Road, Burges Hill Western side Offician Road, Burges Hill	Housing Housing	units	18 73 80	19 77 85	7 7	9 0 7 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143	0.486	31	15 16	3 11 12	9 38		15 16	3 11	38	0	0	0	0
MidSussex MidSussex MidSussex	548 553	Land at treat of and including 17 Copthorne Road, Felbridge The Old Estate Yard, Church Road, Turners Hill Est dirinstead Delevy Office, 75 London Road, Sart Grinstead	Housing Housing	units units	25 0 12	26	5 2	6 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	10	5	4 0	13		5	4	13	0	0	0	0
MidSussex MidSussex	562	Land at Hill Place Farm to the south west of East Grinstead, west and east of the Bluebell Railway Line Land at Bridge Hall, Cuckfield Road, Burgess Hill	Housing Housing		200 35	212	2 21	2 0 7 0	0.397 0.397	0.191 0.191	0.143 0.143	0.486	84 15	40	30	103	15	40	30	103	. 0	0	0	0
MidSussex MidSussex MidSussex	597 619	Land South of Southway, Burgess Hill Land arear of Decon Villas, Western Road, Hawards Heath Beech Hurst Depot, Bolnore Road, Hawards Heath	Housing Housing		0 10 15	11	5 1	1 0 6 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	4	2	2	5	12 4 6	2	2	15 1 5 1 8	0 0	0	0	0
MidSussex MidSussex MidSussex	644	Bluebell Woodland, Sharpthorne	Housing Housing	units units units	20 0 14	21	1 1	2 12 5 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	6	4 0	3 0 2	10 0 7	5	2 3	2 2	10 6	5	0 2 0	2 0	6
MidSussex MidSussex MidSussex	668	Hardriding-Farm, Brighton Road, Pease Pottage Hook Place, Cuchield Road, Burges Hill Hasocoks Golf Club, London Road, Hasocok	Housing Housing Housing	units units units	617 8 165	653 8 174	3	8 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143			125 2 33	93 1 25	317 4 85	259 3 69	125 2 33	93 1 25	317 4 85	0	0	0	0
MidSussex MidSussex MidSussex	707	1 - 2-8 Bell Hammer, East Grinstead Land west of London Road Southern part1. Bolnev land west of London Road Southern part1. Bolnev		units units units	11 12 5	12			0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	5 5 2	2	2 2	6	5 5 2	2 2	2	6	0	0	0	0
MidSussex MidSussex MidSussex	713	Land north of Redcourt South, Cuttinglye Lane, Crawley Down Ashplats House, Hollye Road, East Girnstead Land adjacent Dain Cottage, Lewes Road, Scyners Hill	Housing Housing	units	5 30	32	3		0.397 0.397 0.397	0.191 0.191 0.191	0.143	0.486	2 13 21	10	1 5	3 15 26		1 6 10	5	. 3 i 15		0	0	0
MidSussex MidSussex	728	Ravenswood Hotel, Horsted Lane, Sharpthorne Land adjacent to Greenstede House, Wood Street, East Grinstead	Housing Housing	units units	12	13	1 1	3 0	0.397 0.397	0.191 0.191	0.143	0.486	5	2	2	6	5	2	2	: 6	0	0	0	0
MidSussex MidSussex MidSussex	744	The Priors, Stresham Gardens, Havwards Heath IMP Carl Park, Harlands Road, Haywards Heath Land south of Phoenix House, Carletuse Road, East Grinstead	Housing Housing	units units units		42	3 1	2 0	0.397 0.397 0.397	0.191 0.191 0.191		0.486		8	6	27 21 6	17 5	11 8 2	6	27		0	0	0
MidSussex MidSussex MidSussex	753 756	Land to the north of Clayton Mills, Mackie Avenue, Hassocks Land at the Brow, Burgess Hill	Housing Housing	units units units	100	529 106	52	9 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	42	101	76 15	51	210 42	101 20	76 15	257 51	0	0	0	0
MidSussex	759 761	U.C., Wesiden House, Lewer Road, Ashurst Wood Tower Car Sales. Tower Close. East Grinstead Industrial units, Springfield Farm, Lewer Road, Scaynes Hill	Housing Housing Housing		25 5 3	26	5 2 5		0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	10 2 1	1	1 0	13 3 2	10 2 1	5 1 1	4 1 0	3	0	0	0	0
MidSussex MidSussex MidSussex	765 768	Slaueham Manor, Slaueham Place, Slaueham.	Housing Housing	units	25 129 0	26 136			0.397 0.397 0.397	0.191 0.191 0.191	0.143	0.486		26 0	20 0	13 66 0		5 26 105	20 79	13 66 267	0 0 218	0 0	0 0	0 0 267
MidSussex MidSussex MidSussex	773	Superdrug, 78 London Road, East Grinstead	Housing Housing	units	9 7 43	10 7 45	7	7 0	0.397 0.397 0.397	0.191 0.191 0.191		0.486	3	1	1 1 7	5 4 22	4 3 18	2 1	1 1 7	. 5 . 4	0	0	0	0
MidSussex MidSussex	783 807	Rogers Farm, Fox Hill, Haywards Heath Land South of The Old Police House. Bircharove Road. Horsted Kevnes	Housing Housing	units units	0	0	2 2	5 25 5 25	0.397 0.397 0.397	0.191 0.191 0.191	0.143	0.486	0	0	0	0	10		4	12	10		4	12
MidSussex MidSussex MidSussex	829	Land west of Selsfield Road, Ardingly	Housing Housing		0		3 10	5 35 0 100	0.397 0.397	0.191	0.143 0.143	0.486	0	0	0	0	17 14 40	7 19	5 14	17	40	19	5	21 17 49
MidSussex	843	Woodfield House, Isaacs Lane, Burgess Hill 37-39 Permymount Road, Haywards Heath East Grinstead Police Station, College Lane, East Grinstead	Housing Housing Housing		0 145 0	153	3 3 15 0 3	3 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	61	29	22 0	75 0	12 61 13	6 29 6	22 5	15 75 17		6 0 6	i 4 0 0	15 0 17
MidSussex MidSussex MidSussex	897	Withholts Farm. Selfield Road. Turners Hill Land to the rear Firthands, Church Road, Scaynes Hill Land to the south of Selbv Close. Hammonds Ridde. Bursess Hill	Housing	units units units	0 0	0) 1) 2	0 20	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486		0	0	0	6 8 5	3 4 2	3 2	10	8	3 4 2	3	10 6
MidSussex MidSussex MidSussex	923	49 Queens Road East Grinteted Twineham Grange Farm, Bob Lane, Twineham Land parcel north of Charles Benenett Court Franklands Village Haywards Heath	Housing	units units units	14 6 12	15 6 13	5 1	5 0 6 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486		3 1 2	1 2	7 3 6	6 3 5	3 1 2	1 2	3	0	0	0	0
MidSussex MidSussex MidSussex	953 956	Land opposite Former Queens Head (west of London Road), Bolney 122 Queens Road East Grinstead	Housing Housing	units units units	30 5 5	32			0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	13 2	1	5 1	15 3	13 2	6 1	5 1	15 . 3	0	0	0	0
MidSussex MidSussex MidSussex	959	Sooers Ride Selsfield Road Turners Hill Site to rear of Tiltwood House Gage Close Crawley Down	Housing Housing	units units units	9 5	10	1	0 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	2	2	1	5	4 2	1	1	5	0	0	0	0
MidSussex MidSussex MidSussex	969	Manor Court Valebridge Road Burgess HII Packer Close, Quary Rise, East Grintead Dart Court Quarry Rise East Grintead Dart Court Quarry Rise East Grintead	Housing Housing			-14 18		4 0	0.397 0.397 0.397	0.191 0.191 0.191		0.486	-5	-2	-1	-4	-3	-2	-1	-4	0	0	0	0
MidSussex MidSussex	969	Aventis House Market Place Haywards Heath Heath Land west of Freeks Lane Bureess Hill	Housing Housing	units units	12 460	13 486	3 1 5 48	3 0 6 0	0.397 0.397	0.191 0.191	0.143 0.143	0.486	5 193	93	2 70	6 236	5 193	2 93	70	236	0	0	0	0
MidSussex MidSussex	975 976	Jubilee House Cvorus Road Burzess Hill Land East of Keymer Road and South of Folders Lane, Burgess Hill.	Housing Housing	units	0	15	30	5 0 0 300	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486 0.486	6	3	2 0	7 0	3 6 119	1 3 57				0 0 57	0 0	0 0 146
Horsham Horsham Crawley	H2 C1	Land North of Horsham North East Crawley	Housing	units units units	2500 2000	2500 2500 2000	250	0 0	0.397 0.397 0.397	0.191 0.191 0.191	0.143 0.143 0.143	0.486	993 794	478 478 382	358 358 286	1215	993 794	478 478 382	358	1215	0	0	0 0	0
Tandridge Horsham Horsham	HI HI	South Godstone Garden Community Klinwood Vale	Housing B1c B1c	emp emp	1330 721 714	1330 721 714	1 72	1 0	0.397 0.300 0.300	0.191 0.700 0.700	0.143 0.844 0.844	0.067	528 216 214	254 505 500	190 609 603	646 48 48	216	254 505 500	609	48	0	0	0	0
MidSussex MidSussex MidSussex	HUE	The Hub	B1b B1b B1a	sqm emp emp	21000 2500 0	21000 2500	250	0 0	0.450 0.183 0.043	1.606 0.367 0.511	1.933 0.465 0.394	0.045	458	337 918	406 1163 0	45 113 0	95	337 918	1163	113	0	0 0 319	0 0	0 0 13
MidSussex MidSussex	801	Science and Technology Park Science and Technology Park	B1b B1c	emp emp rooms	0 0	0	125	0 1250 5 625	0.183 0.300 0.284	0.367 0.700 0.104		0.045	0	0	0	0	229 188	459 438	581 528	. 56 42	229 188	459 438	581 528	56 42
Reigate&Bans MidSussex	RB1	Horlev Strateeic Business Park Land at Stairbridge Lane (South of Boiney Grange), Boiney	C1 B1a B1	sam sam	88000	88000	8800 654	0 0 7 6547	0.269 0.450	3.077 1.606	2.587 1.933	0.425 0.212	237	2708			237 29	2708 105	2277 127	374	0 29	105	127	0 14
MidSussex MidSussex MidSussex	192	Land at Stairbridge Lane (South of Bolney Grange), Bolney Pease Pottage Nurseries, Brighton Road, Pease Pottage	B2 B8 B1	sqm sqm	0	0	654 654 119	7 6547 0 1190	0.468 0.136 0.450	1.000 0.634 1.606	0.737 0.607 1.933	0.102	0	0	0	0	31 9 5	65 42 19	40 23	7	31 9 5	65 42 19	40	7
MidSussex MidSussex MidSussex	192	Pease Pottage Nurseries, Brighton Road, Pease Pottage	B2 B8 B1	sqm sqm	0	0	119 119 171	0 1190	0.468 0.136 0.450	1.000 0.634 1.606	0.737 0.607 1.933	0.102	0	0	0	0	2 8	12 8 28	7	1	2 8	12 8 28	7	1
MidSussex	826 826 864	Burnside Centre, Victoria Road, Burgess Hill Burnside Centre, Victoria Road, Burgess Hill Marylands Nursery, Cowfold Road, Bolney	B2 B8 B1	sam sam	0 0	0	171	0 0	0.468 0.136 0.450	1.000 0.634 1.606	0.607	0.263	0	0	0	0	0	17 0 0	13 0 0	5	0	17 0	13 0	0
MidSussex MidSussex MidSussex	864	Marylands Nursery, Cowfold Road, Bolney	B2 B8 B1	sqm sqm sqm	0 0	0 0	857 273		0.468 0.136 0.450	1.000 0.634 1.606	0.737 0.607 1.933	0.102	0	0	0	0	0 12 12	0 54 44			12 12	0 54 44	52	
MidSussex MidSussex MidSussex	888 888	Cedars (Former Crawley Forest School) Brighton Road Pease Pottage Cedars (Former Crawley Forest School) Brighton Road Pease Pottage	B2 B8 B1	sqm sqm sam	0 0	0	273 273 71	8 2738 8 2738	0.468 0.136 0.450	1.000 0.634 1.606	0.737 0.607 1.933	0.263	0	0	0	0	13	27 17 11	20 17	3	13	27	20	7
MidSussex MidSussex	906	Undeveloped land (south) at Bolney Grange Business Park Stairbridge Lane Bolney Undeveloped land (south) at Bolney Grange Business Park Stairbridge Lane Bolney	B2 B8	sqm sqm	0	0	71 71	4 714 4 714	0.468 0.136	1.000 0.634	0.737	0.263	0	0	0	0	3	7	5	2	3	7	5	2
MidSussex MidSussex MidSussex	907	Undeveloped land (east) at Bolney Grange Business Park Stairbridge Lane Bolney Undeveloped land (east) at Bolney Grange Business Park Stairbridge Lane Bolney	B1 B2 B8	sqm sqm sqm	0	0	23 23 23	8 238 8 238	0.450 0.468 0.136	1.606 1.000 0.634		0.263	0	0	0	0	1 0	2 2	2	1	1 1 0	2 2	2	1 0
MidSussex MidSussex MidSussex	912	Site of Former KDG Victoria Road Burgess Hill Site of Former KDG Victoria Road Burgess Hill	B1 B2 B8	sqm sqm sqm	0 0	0 0	196 196	4 1964 0 0	0.450 0.468 0.136	1.606 1.000 0.634	1.933 0.737 0.607	0.263	0	0	0 0	0	9	32 20 0	14		9 0	32 20 0		5
MidSussex MidSussex MidSussex	931 931 931	Extension (east) to Bolney Granee Business Park Stairbridge Lane Bolney Extension (east) to Bolney Grange Business Park Stairbridge Lane Bolney Extension (east) to Bolney Grange Business Park Stairbridge Lane Bolney Extension (east) to Bolney Grange Business Park Stairbridge Lane Bolney	B1 B2 B8	sam sam sam	0 0	0	83 83 83	3 833 3 833 3 833	0.450 0.468 0.136	1.606 1.000 0.634	1.933 0.737 0.607	0.212 0.263 0.102	0	0	0	0	4	13 8 5		2	4	13 8 5	16 6	2 2
MidSussex MidSussex MidSussex	940	Land north of the A264 at Junction 10 of M23 (Employment Area) Land north of the A264 at Junction 10 of M23 (Employment Area) Land north of the A264 at Junction 10 of M23 (Employment Area) Land north of the A264 at Junction 10 of M23 (Employment Area)	B1 B2 B8	sqm sqm sqm	0 0	0	482	1 4821 0 0	0.450 0.468 0.136	1.606 1.000 0.634	1.933 0.737	0.212	0	0	0	0	22	77 0 31	93 0 29	10	22	77 0 31	93	
		Carro Instituti the Autes at Institution 2 to in each springlymens well. Middisseek Middisseek Middisseek Middisseek	units sam		10214 21000 2500		2 1264 2 83353.4	6 1844 6 62353.46	1	2	3	4	4288 95 458	2063 337 918		5250 45 113	297	2415	1808 1080	6146	203	352	264	896
		Mindusex Midsusex Midsusex	rooms		0								458 0 4840	3318	0 3113	5407				39	44		23	39
		All	units sqm				171353.	5 62353.46					7595 331	3654 3045	2736 2682	9298 419		4006 3700	3000 3357	531	203	352 655	674	896 112
		IIA	rooms Total Trips			3935	643						888 0 8815	1922 0 8621	2374 0 7792	209 0 9925	44		23	39	44	1216 16 2239	23	39
		All																						

Mid Sussex Transport Study: Scenario DPD Results Summary

Note: Results in Grey Italics are comparisons of Reference Cases to 2017 (for context)

Junction Analysis

Note: Includes junctions identified in previous Scenarios or in the previous Mid Sussex Transport Study which, for consistency, are retained in the list even if no significant or severe impacts are identified in the Sites DPD Scenario

Ref v 2017

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22

Junctions with SIGNIFICANT or SEVERE impact in either AM or PM Peak Hour

ID	Area	Junction	
N1	Copthorne	A264 / A2220 Copthorne	
N2	Copthorne	A264 / B2028 Copthorne	
N4	Copthorne	B2028 / B2037 Copthorne	
N6	East Grinstead	A22 / Imberhorne Lane	
N7	Crawley Down	B2028 Turners Hill Road / Wallage Lane	
N8	Turners Hill	B2110 / B2028 Turners Hill	
N9	Felbridge	A264 / A22 Felbridge	
N10	West Hoathly	Selsfield Road / Vowels Lane	
C1	Handcross	B2114 Junction, Handcross	
C2	Lower Beeding	B2110 / B2115 Leechpond Hill	
C3	Slough Green	B2115 Junction, Slough Green	
C4	Haywards Heath	Borde Hill Lane / Copyhold Lane	
C5	Haywards Heath	B2114 / B2036 Whitemans Green	
C6	Haywards Heath	B2036 / Ardingly Road, Whitemans Green	
C7	Haywards Heath	A272 / B2036	
C8	Cowfold	A281 North Junction, Cowfold	
C9	Cowfold	A281 South Junction, Cowfold	
C10	Bolney	A23 / A272 Bolney Road	
C11	North Chailey	A272 / A275 North Chailey	
C12	Haywards Heath	A273 / Isaac's Lane / Traustein Way	
S1	Burgess Hill	A23 / A2300 Southbound On-Slip	
S2	Burgess Hill	A23 / A2300 Eastern Roundabout	
S3	Burgess Hill	A2300 / Cuckfield Road	
S4	Burgess Hill	Cuckfield Road / THE HUB	
S5	Burgess Hill	A2300 / Northern Arc Spine Road	
S6	Burgess Hill	Junction Road / B2113, Burgess Hill	
S7	Hurstpierpoint	B2117 / B2116 Hurstpierpoint	
S8	Hassocks	A273 / B2116 Hassocks (Stonepound)	
S9	Pyecombe	A23 / A281 Eastbound On-Slip	
S10	Ditchling	B2112 / B2116 Ditchling	
S13	Burgess Hill	Cuckfield Rd / Science & Tech Park Access (N)	
S15	Burgess Hill	A272 Bolney Road / Bishopstone Lane	
S16	Burgess Hill	A2300 / Stairbridge Lane / Pookbourne Lane	
S17	Burgess Hill	Bishopstone Lane / Job's Lane	
S18	Hassocks	A273 / B2112	
S19	Hassocks	B2112 / Lodge Lane	
S20	Burgess Hill	Janes Lane / Manor Road	
S21	Burgess Hill	B2112 / Green Road	
S22	Burgess Hill	Valebridge Road / Junction Road / Leylands Road	
S23	Burgess Hill	A273 / B2036 / Marchants Way	
S24	Burgess Hill	A273 / Sussex Way	
S25	Burgess Hill	West Street / Fairfield Road	
S26	Burgess Hill	A273 / York Road	
S27	Burgess Hill	B2113 Keymer Road / Folders Lane	

Number of Junction with Severe impacts
Number of Junction with SIGNIFICANT impacts
SEVERE= Increase in RFC of 10% or more to 95% or more
or increase in delay of 1 min or more to 2 mins or more

SIGNIFICANT= Increase in RFC of 5% or more to 85% or more

2031 Sites DPD Scenario

Scenario	'Severe'	Number o	of 'Severe'	Excess V/C	delay
	change in Ref	Ar	ms	(above	(above
Ref	v 2017 also?			severe	severe
		AM	PM	criteria)	criteria
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
SEVERE	YES	0	1	14	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
SIG.		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
SIG.		0	0	0	0
		0	0	0	0
SEVERE	YES	1	2	61	223
		0	0	0	0
		0	0	0	0
SIG.		0	0	0	0
		0	0	0	0
CEL/EDE	VEC	0	0	0	0
SEVERE	YES	0	2	58	168
SEVERE		3 0	0	63 0	155 0
		0	0	0	0
SEVERE		0	1	17	0
SEVERE	YES	1	1	0	172
SIG.	ILS	0	0	0	0
SEVERE	YES	0	2	0	179
SEVERE	YES	0	1	0	73
SIG.	120	0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
SIG.		0	0	0	0
SEVERE	YES	0	1	0	77
SIG.		0	0	0	0
		0	0	0	0
SIG.		0	0	0	0
		0	0	0	0
		0	0	0	0
9	7	5	11	214	1047
8	1				

2031 Sites DPD Scenario with Mitigation

Scenario	'Severe'			Excesss V/C	Exces
V	change in Ref		Number of 'Severe'		(abo
Ref	v 2017 also?	Arı	ms	(above severe	seve
IVEI	v 2017 dis0!			criteria)	criter
		AM	PM	criteriai	criter
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
SEVERE	YES	0	1	14	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
SIG.		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
SIG.		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
SIG.		0	0	0	0
		0	0	0	0
		0	0	0	0
SIG.		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
SIG.		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
		0	0	0	0
SIG.		0	0	0	0
SIG.		0	0	0	0
SIG.		0	0	0	0
SIG.		0	0	0	0
SIG.		0	0	0	0
CIC		0	0	0	0
SIG.		0	0	0	0
1	1	0	1	14	0

Mid Sussex Transport Study: Scenario DPD Results Summary

Note: Results in Grey Italics are comparisons of Reference Cases to 2017 (for context)

M23 and A23 (Junction 8 to A27 Main Sections)

Average Increase in Peak Hour Flow - Impact of Scenario

M23 - Impact of Scenario v Reference Case	
A23 - Impact of Scenario v Reference Case	
Overall	

PM
2.42%
2.09%
2.18%

ScDPD v Ref

ScDPD mit. v Ref		
AM	PM	
0.09%	2.66%	
3.28%	3.44%	
2.40%	3.22%	

M23 - Impact of Reference Case v 2017	
A23 - Impact of Reference Case v 2017	
Overall	

Ref v 2017		
AM	PM	
20.80%	10.09%	
25.29%	19.04%	
24.05%	16.57%	

3.28%	3.4
2.40%	3.2

Road Sections with a NOTABLE FLOW INCREASE in AM or PM

Northbound		
1	A23	
-		

1	A23 - A27 to A273 OFF
2	A23 - A273 ON to A281 OFF
3	A23 - A281 ON to B2117 OFF
4	A23 - B2117 OFF to B2118 ON
5	A23 - B2118 ON to A2300 OFF
6	A23 - A2300 ON to A272 OFF
7	A23 - A272 ON to Jeremys Lane OFF
8	A23 - Jeremys Lane ON to B2115 OFF
9	A23 - B2115 ON to B2110 OFF
10	A23 - B2110 ON to J11 OFF
11	M23 - J11 ON - J10a ON
12	M23 - J10a ON to J10 OFF
13	M23 - J10 ON to J9 OFF
14	M23 - J9 ON to J8 OFF

ScDPD v Ref	
AM	PM

PM
260 (7.9%)
415 (13.1%)
415 (13.1%)
411 (12.7%)
386 (11.3%)
235 (7.2%)
230 (6.4%)
198 (5.5%)
148 (3.7%)

ScDPD mit. v R	ef
AM	PM

430 430 433 399 24 23 20	
124 (3.5%)	
	326 (10%)
	430 (13.6%)
	430 (13.6%)
	433 (13.4%)
	399 (11.7%)
	242 (7.5%)
	238 (6.6%)
	202 (5.6%)
	153 (3.8%)

Southbound

15	M23 - J8 ON to J9 OFF
16	M23 - J9 ON to J10 OFF
17	M23 - J10 ON to J10a OFF
18	M23 - J10a OFF - J11 OFF
19	A23 - J11 ON to B2114 OFF
20	A23 - B2114 OFF to B2110 ON
21	A23 - B2110 ON to B2115 OFF
22	A23 - B2115 ON to Broxmead Lane OFF
23	A23 - Broxmead Lane OFF to A272 OFF
24	A23 - A272 ON to A2300 OFF
25	A23 - A2300 ON to B2118 OFF
26	A23 - B2118 OFF to B2117 ON
27	A23 - B2117 ON to A281 ON
28	A23 - A281 ON to A273 OFF
29	A23 - A273 ON to A27

244 (6.9%) 226 (7.2%)	
260 (7.7%)	
305 (9.3%)	
305 (9.3%)	
258 (7.4%)	
7	9

247 (7%)	
226 (7.3%)	
254 (7.6%)	
297 (9.1%)	
297 (9.1%)	
564 (16.3%)	
	584 (14%)
	434 (11.5%)
_	
7	11

NOTABLE = Increase in traffic flow of 100 vehicles or more

Ashdown Forest

Change in Vehicle Kilometres - Impact of Scenario

Ashdown Forest - Impact of Scenario v Reference	

ScDPD v Ref	
AM	PM
-0.48%	0.52%

ScDPD mit. v R	ef
AM	PM
-0.48%	0.24%

New /		Study: Junction approach arm statistics for identification	Approach Arm	Dem	RFC E	Delay	AM Avg Q (pcu)		PM RFC (%)		PM Avg Q	AM Dem	AM RFC (%)	AM Delay (s)	Avg Q		RFC D	elay A	PM A	M em	DPD Scenario AM AM RFC Delay (%) (s)	AM Avg Q	PM Dem (Veh)	PM RFC (%)	PM Delay (s)	PM Avg Q	AM Dem	AM	AM Delay		PM I	RFC De	elay /	PM Avg ((pcu
	Copthorne	A264 / A2220 Copthorne	Brookhill Road (N) A264 (E) Copthorne Hotel Access	344 781 43	35.5 61.1 0.7	14.6 12.8	0.2 0.4 0.0	525 1138	44.5 85.2 1.1	14.1 13.8	0.2			14.2 11.5	0.3	769 1130		15.1 15.2 9.8		426 663	41.4 14.2 49.5 11.9 1.0 10.1	0.3		74.7 85.7	15.1	1.0 1.4 0.0	426 665	41.4 49.7	14.2 11.9 10.1	0.3	854 1091	85.5 1	16.2 15.1 9.8	1
N1 N1			A2220 (S) A264 Copthorne Way (W)	872	65.3 97.2	12.4	0.4	508 1173	39.2 75.0		0.2	1076 1436	71.1 108.1	11.6 173.7	0.4	783 1220	60.9 78.5	12.0 10.6		1389	77.7 12.5 109.0 190.9	0.6	863	67.0	12.5	0.5	1140 1390	77.6 109.1	12.5 192.3	0.6 70.1		65.8 1	12.4 11.1	0
N2 N2	Copthorne	A264 / B2028 Copthorne	B2028 Turners Hill Road (N) A264 Snow Hill (E) B2028 Turners Hill Road (S)	504 384	24.8 58.0 51.3	4.8 4.4 5.4	0.1 0.2 0.3	447 461 369	64.0 77.5 57.6	7.3	0.5 1.1 0.4	241 596	28.3	3.5 3.4 3.3	0.1	710 398 365	34.5 20.0 18.2	3.9 4.0 3.6	0.1	278 293 652	13.8 3.5 13.6 3.4 30.6 3.4	1 0.1	363		3.6	0.2 0.1 0.1	274 294 652	13.6 13.7 30.7	3.5 3.4 3.4		381 356	19.0 17.7	4.0 4.1 3.6	(
N2 N4 N4	Copthorne	B2028 / B2037 Copthorne	A264 Copthorne Common Road (W) B2028 West Park Road (N) B2037 Snow Hill (E)	917 249 449	23.1 43.4	3.2 3.7	0.0 0.1	374 101	38.6 11.1	4.0	0.2	966 361 500	32.9 49.6	3.5 3.4 4.4	0.1	462 92	53.0 52.5 12.4	5.0	0.3	381 485	34.4 3.4 48.0 4.5	1 0.0	1256 0 446 2 73	52.4	5.2	0.0	961 381 483	45.8 34.4 47.8	3.5 3.4 4.5	0.1	1227 447 73	52.6	5.3 4.9	
N4 N4			B2028 West Park Road (S) B2037 Effingham Road (W)	515 176	55.6 18.8	5.1	0.3	237	20.8	3.2	0.0	766 239	88.9 24.7	11.9	1.8	327 898	28.2	3.3		756 258	86.1 10.3 26.4 3.7	3 1.4	334	28.3	3.2		756 256	86.1	10.2	1.4	340	28.9	3.2	
N6 N6 N6	East Grinstead	A22 / Imberhorne Lane	A22 (W) A22 (E) Imberhorne Lane (S)	714	46.3 80.3 48.4	8.8 27.3 17.6	1.4 3.1 1.3	856 792 183	58.0 74.9 32.4	19.7	2.0 2.9 0.8		98.2	7.9 70.1 17.8	1.2 3.5 1.4	919 838 324	85.1	10.7 25.4 24.1	3.2		46.2 5.7 100.4 57.2 62.1 19.7		828	82.1	23.2	1.8 3.1 1.7	730 676 440	45.9 100.2 61.2	5.7 54.1 19.6	0.8 3.9 1.7	828	82.1 2	10.3 23.2 25.5	1
N7 (Crawley Down	B2028 Turners Hill Road / Wallage Lane	B2028 Turners Hill Road (N) B2028 Turners Hill Road (S) Wallage Lane	318 268 352	16.4 13.3 57.2	1.1 1.1 23.8	0.0 0.0 0.2	561 195 178	28.6 9.7 31.9		0.0 0.0 0.1			1.1 1.2 73.0	0.0 0.0 4.7	945 224 380	46.5 10.7 83.4	1.8 1.0 37.6		380 524 532	19.0 1.2 24.0 1.2 100.2 77.3					0.0 0.0 4.5	376 524 533	18.8 24.1 100.3	1.2 1.2 79.1	0.0 0.0 6.1			2.0 1.0 71.2	(
N8	Turners Hill	B2110 / B2028 Turners Hill	B2028 North Street (N) (priority) B2110 East Street (E)	556 387	31.5 92.4	1.9 29.3	0.0	704 387	37.1 101.1	1.7 75.6	0.0 7.8	871 418	47.8 113.6	2.3 308.3	0.0 31.6	1290 317	64.6 106.8 1	2.7 194.3	0.0 15.9	898 426	49.4 2.4 115.9 350.9	1 0.0	1457	72.6 106.8	3.5 198.9	0.0 15.6	895 424	49.4 115.7	2.4 346.4	0.0	1437 307 1	71.9 .06.8 19	3.4	
N8 N8	Felbridge	A264 / A22 Felbridge	B2028 Selsfield Road (S) (priority) B2110 Paddockhurst Road (W) A264 Copthorne Road (W)		41.5 107.9	1.8 185.5	27.0	688 535 609	36.3 106.8	1.7 171.0	23.2		49.8 109.7	1.9 229.2 195.4		772 462 580	38.4 107.3 1	1.5	22.4	495	50.2 1.9 111.7 267.2				231.9		490	50.6 110.9	1.9 252.8	31.2	438 1	.09.1 23	1.6 230.9	
N9 N9			A22 Eastbourne Road (N) A22 London Road (S)	384 1326	68.4	27.7	2.2	504	64.6		2.0		55.6	12.7 241.3	1.4	595		13.6	1.7	496	55.6 12.8 108.4 241.3		613	65.0		1.8	496	55.6	12.8	1.4 59.8	605 1275		13.8	13
N10 N10 N10	West Hoathly	Selsfield Road / Vowels Lane	Selsfield Road (N) Vowels Lane (E) Selsfield Road (S)		29.8 37.0 36.2	1.3 6.9 1.9	0.0 0.2 0.0	801 177 593	39.5 40.3 34.5	1.5 8.6 2.1	0.0 0.3 0.0	650 296 780	31.7 52.5 43.5	1.3 6.4 2.2	0.0 0.3 0.0	1041 286 680	50.2 78.8 44.0	1.8 21.7 3.0	1.5	331 768	31.4 1.3 59.1 7.0 42.8 2.2	3 0.0 0 0.4 2 0.0	298	52.0 81.3 46.8	23.2	0.0 1.6 0.1	655 337 755	31.7 60.8 42.1	1.3 7.3 2.2	0.0 0.4 0.0	307		1.8 23.3 3.2	1
	CENTRAL Handcross	B2114 Junction, Handcross	B2110 High Street (N) (priority)	558	35.2	2.7	0.0	761	44.5	2.7	0.0	700	44.4	3.0	0.1	883	50.2	2.8	0.0	744	46.9 3.1	1 0.1	883	50.5	2.8	0.0	737	46.6	3.1	0.1	900	51.4	2.8	(
C1 C1			B2114 (S) (priority) B2110 (W)	453	16.9	3.7	0.0					586		4.5				3.8	0.1	398 661	20.2 1.1 92.1 6.2	2 0.6	496	68.8	3.9		398 658	20.2 91.7	6.1	0.0		70.0	3.9	(
C2 C2	Lower Beeding	B2110 / B2115 Leechpond Hill	B2110 (E) B2110 Leechpond Hill (S) B2115 (W)	491 253 269	31.9 12.8 39.4	1.0 3.9	0.0 0.0 0.1	530 162 270	29.5 8.1 38.2	1.0	0.0	183		1.0	0.0 0.0 0.2	712 254 340	39.3 12.6 49.9	2.2 1.0 4.1		177 533	35.9 3.0 8.9 1.0 74.2 4.4	0.0	256		1.0	0.0 0.0 0.1	575 195 534	36.1 9.8 75.8	3.1 1.0 4.6	0.0			1.0	(
C3 C3	Slough Green	B2115 Junction, Slough Green	B2114 Cuckfield Road (N) (priority) B2114 (E) (priority) B2115 Sloughgreen Lane (W)	153 639 388	8.0 30.1 57.6	1.0 1.3 4.5	0.0 0.0 0.2	71 477 492	3.7 23.8 67.4		0.0 0.0 0.1			1.0 1.4 5.7		81 547 609	4.1 26.5 82.8	1.0 1.2 4.9		93 771 572	4.9 1.0 33.1 1.4 81.7 5.5				1.3	0.0 0.0 0.3	93 713 568	4.9 31.2 81.5	1.0 1.3 5.5	0.0 0.0 0.4			1.0 1.3 5.0	
C4 / C4 /	Haywards Heath	Borde Hill Lane / Copyhold Lane	Borde Hill Lane (N) Copyhold Lane (E) Borde Hill Lane (S)	148	23.7 26.6 40.5	1.2 5.3	0.0 0.1 0.0	651 204 368	32.5 36.2 22.7	5.6	0.0 0.2 0.0	153	28.2	1.2 5.5 2.3	0.1	795 134 425	37.9 26.5 25.0	1.5 6.3 2.2	0.1	517 215 862	26.2 1.2 38.0 5.5 44.5 2.2		109	22.0	6.3		515 249 809	26.0 42.8 41.6	1.2 5.4 2.2	0.0 0.2 0.0	111	38.3 22.5 26.9	1.5	0
C5 /	Haywards Heath	B2114 / B2036 Whitemans Green	B2036 (N) B2036 (S)	266 922	38.1 105.0		0.1 25.1	291 648	42.3 74.4	4.5 3.2	0.1	263 1009	39.4 107.5	4.7 146.7	0.1 36.7	260 728	38.4 81.2	4.8	0.1 0.1 1	268 1016	39.9 4.7 107.7 149.5	7 0.1	255 830	37.7 91.8	4.8	0.1	270 999	40.3 106.0	4.7 119.7	0.1 29.8	253 776	37.4 86.6	4.8	
C5 C6 I	Haywards Heath	B2036 / Ardingly Road, Whitemans Green	B2114 Staplefield Road (W) B2036 Whitemans Green (N)	711	89.2 56.2	4.5 5.3 4.4	0.2	795	95.3	5.8	0.6		104.1	5.3 91.8 1.3		885	105.1		25.2	822	104.2 94.5	5 21.5		107.5	152.8	35.7	824	83.9 104.2 37.0	93.9 1.4		873 1	.06.8 14		
C6 C6	Haywards Heath	A272 / B2036	Ardingly Road (E) B2036 London Road (S) A272 (E)	795	92.4	8.2	0.2 14.6		64.0 58.8	51.1	11.0	836	107.6 102.7	159.7 63.9	34.6 14.8		104.7		23.5	903	108.6 178.5 108.0 163. 4	38.5	667	82.8 105.5	6.3	26.8	834	106.0	131.2 65.6	28.4 18.5	639 984 1	79.7	00.5	20
C7 C7			B2036 (S) A272 (W)			9.5	1.1	658		5.3	0.2	736	91.7	6.1	24.6 0.6		101.7		10.4		97.4 11.7	7 1.9	789	108.1	170.6		571	63.8	121.8	0.2	946 1	.03.4		20
C8 C8	Cowfold	A281 North Junction, Cowfold	A281 (N) A281 (S) A272 Station Road (W)	771	27.3 92.0 101.8	4.6 4.1 52.1	0.1 0.2 11.1	795	68.9 101.0 87.3	37.6	0.4 7.8 0.3	850	97.6	5.4	0.6	550 772 836	100.9	7.7 40.1 10.3	7.9	816	21.9 4.7 95.1 4.5 102.0 56.7	0.4	771	82.3 101.2 99.7	44.3	8.8	823	21.8 95.8 102.0	4.7	0.4	767 1	.01.0	8.1 41.2 10.2	8
C9 C9	Cowfold	A281 South Junction, Cowfold	A281 (N) A272 Bolney Road (E) A281 (S)		93.9 96.8 45.0	4.2 5.6 5.5	0.3 0.6 0.2		101.2 99.9 36.1		8.0 1.9 0.1			34.4 40.5 6.1	7.8 9.4 0.3	816 858 345	94.8	44.8 3.9 5.6	0.2	876	100.9 31.3 101.5 38.4 59.4 6.4				4.8			100.8 101.5 64.7	29.1 38.4 6.9		849	95.4	44.1 4.3 5.3	(
C10	Bolney	A23 / A272 Bolney Road	A23 Southbound Off-Slip A272 (E)	782		6.2	0.3	324 756	93.6	12.5		1116	103.8		25.7		40.9 57.2	4.8	0.4 1	1050	33.9 4.6 96.4 20.2	2 3.7	979	90.3	11.4	2.1	1086		4.4 35.9	9.2	857	79.7	4.9 7.4	(
C10 C11 /	North Chailey	A272 / A275 North Chailey	A272 (W) A272 (W) A275 (N)	426	64.0 24.4	5.8 5.2	0.0 0.3 0.1	786 570 219	78.2 75.1 47.6	5.2	0.4	658	81.6 22.2	5.1	0.4	807 197	92.2 43.7	3.9	0.2	990 626 111	99.5 3.0 77.4 4.7 21.4 6.0	7 0.3	820	93.8	4.4	0.0	626 111	77.1	4.5 6.0	0.3	806 187	93.0	4.4 10.8	(
11			A272 (E) A275 (S)	852 478	99.2 72.6	7.1	1.7 0.6	687 300	82.0 41.1	4.7 4.3	0.3	895 358	100.1 101.8	14.0 93.7	2.6 9.3	853 95	98.1 32.9	8.9 14.5	0.3	896 369	100.2 15.9 102.1 98.5	3.1	835	96.2 33.1	7.2 12.0	0.9	896 366	100.2	14.5 91.5	9.2	853 118	97.5 39.2	7.9 15.0	
C12 / C12 / C12 / C12 /	Haywards Heath	A273 / Isaac's Lane / Traustein Way	A273 (W) Isaac's Lane Parkfield Way (zone access) Traunstein Way	769 307	69.0 68.7 4.7 80.6	6.4 3.7 3.2 6.1	0.6 0.2 0.0 0.7	529 941 83 501	83.4 1.3	4.0 3.2	0.2 0.3 0.0 0.1	831 355	75.8 5.7	97.6 4.3 3.2 51.8	0.3	849 1087 88 724	78.2 102.8 1.7 69.9	5.2 73.7 3.3 4.9	19.8	899 357	104.6 112.2 79.8 4.5 5.8 3.2 104.2 103.4	0.3	1099	103.0 1.7	75.6 3.3	0.0	873 810 357 960	103.8 74.0 5.7 102.7	98.2 4.2 3.2 74.8	0.3	1100 1 87	.01.6 5 1.6	6.1 50.4 3.3 4.8	13
	боитн			701	00.0	0.1	0.7	301	30.2	4.0	0.1	343	101.5	31.0	12.7							23.3							74.0	10.5	733	70.5	4.0	
S1	Burgess Hill	A23 / A2300 Southbound On-Slip A23 / A2300 Eastern Roundabout	A23 Southbound On-Slip A23 Southbound A23 Southbound Off-Slip		16.2 55.9	3.9		388 3000 817	34.1 80.7 45.7	7.7	0.0		71.2	4.4	0.0	3501	98.5		0.0 2		47.1 3.9 74.7 4.8 107.4 159. 4	3 0.0	3632	100.0		0.0	785 2295	45.6	3.3 1.6			69.8	3.6	0
S2 S2	Burgess Hill	A23 / A2300 Eastern nountabout	A2300 (E) A2300 (W)	946	39.7 93.7 37.0	3.6 4.2 3.0	0.1 0.3 0.0	881	88.6	3.6	0.2		72.5	3.9 3.1 3.0	0.0	1175 1785 424	68.1 79.4 39.2	3.1 3.0	0.1 1	1965	96.4 4.2 78.7 4.0	2 0.1	1951	91.2	3.0		1948	73.0 26.5	9.9	3.9		85.1	31.7 10.8 0.0	4
S3	Burgess Hill	A2300 / Cuckfield Road	Cuckfield Road (N) A2300 (E) Cuckfield Road (S)	1161 174	15.6 108.2 23.5	4.7	0.1 51.6 0.1	172		4.5	0.1 24.3 0.1	1533 737	117.1 102.9	88.7			103.9		2.9 2 21.2	802	45.0 19.3 62.5 1.2 41.3 9.4	2 0.0	1389 3 996	33.5 105.1	0.7 143.6	25.6	865	47.5 62.4 44.2	19.5 1.2 9.7	2.0	1567 1024 1	37.9 .04.6 16		
S4 1 S4	Burgess Hill	Cuckfield Road / THE HUB	A2330 (W) Cuckfield Road (N) THE HUB	988 N/A N/A	91.6	4.7	0.5	N/A N/A	98.0	7.8	1.4	985 447	16.3	0.4 3.1	0.0	588	23.9 170.7 12	1.0			21.1 0.5 6.9 3.2	5 0.0		28.5		0.0	1059	21.2 7.1	0.5 3.2	0.0		15.8 12.6 23	0.9	68
S4 S5 I	Burgess Hill	A2300 / Northern Arc Spine Road	Cuckfield Road (S) N Arc (N)	N/A N/A				N/A				438 338	19.7	1.5 5.0	0.0	248	20.3	4.9	0.0	450 872	75.5 8.8	3 1.4	43	14.9 17.6	5.2	0.0	513 840	80.5	1.4	0.0	239	21.8	5.4	(
S5 S5 S5			A2300 (E) N Arc (S) A2300 (W)	N/A N/A N/A				N/A N/A N/A				997 1669	67.4	5.3	0.7	1175	54.7 77.4 86.1	4.8 6.1 5.1	0.4 1 1.0 1 1.0 1	1066	78.6 7.9 69.2 6.9 94.0 5.7	1.1	839 1 1239 1 2291	80.8	6.5	1.2	1068	74.5 69.1 91.9	7.3 6.8 4.6	1.1	1236	80.8	4.9 6.6 6.8	
S6 8 S6	Burgess Hill	Junction Road / B2113, Burgess Hill	Junction Road (N) Silverdale Road B2113 Keymer Road (S)	323 112 779	47.2 19.7 102.6	5.1 5.7 69.0	0.2 0.1 14.7	31 41 661	5.2 6.6 77.2		0.0 0.0 0.1	0	96.8 0.0 104.8	108.1 122.1 211.6	5.7 0.0 17.1	138 0 479		38.1 122.1 122.3	0.0	0	101.1 153.1 0.0 122.1 109.3 293.6	1 0.0		0.0		1.3 0.0 5.8	415 0 573	0.0	153.5 122.1 249.0	9.3 0.0 25.3	0	0.0 12	43.1 122.1 125.8	1
	Hurstpierpoint	B2117 / B2116 Hurstpierpoint	B2113 Station Road (W) Cuckfield Road (N)	316	93.6	3.9	0.7	526	67.2	4.4	0.2	498	104.6 63.1	4.1	0.2	783	95.5	10.4	1.5	408	103.3 182.7 52.4 3.9	9 0.1	2 564 L 825	104.3		34.0 21.6	483	61.1	217.6	0.1		93.2	12.0	1
S7 S7 S7			B2116 Hassocks Road (E) B2117 Brighton Road (S) B2116 Albourne Road (W)	286	28.7 37.1 15.3	3.3 3.8 3.5	0.0 0.1 0.0		39.1 13.4 23.1	3.4		303	41.9	4.4	0.1		33.9	5.0 3.6 3.5	0.1	296	35.9 3.6 40.6 4.3 14.5 3.6	3 0.1		43.1	4.0	0.1	414 417 139	39.0 59.3 15.4	3.8 5.3 3.9			25.7 49.0 35.2	4.2 4.0 3.9	0
S8 S8	Hassocks	A273 / B2116 Hassocks (Stonepound)	A273 London Road (N) B2116 Keymer Road (E) A273 Brighton Road (S)	369 389	100.8 102.2 101.7	178.7 160.2	6.8 8.6 8.8	373 402	51.5	132.5 43.4	4.3	439 420		247.6 190.2	18.5 13.3	463 424	101.6 1 101.0 1 95.4	92.4	8.0 4.5	451 423	104.7 213.5	24.7	465 426	100.6 59.6	232.1 139.5 48.6	5.0	462 410	108.2 105.1		23.0 16.6	453 1 329	02.4 15 02.0 16 96.4 12	L65.8 L20.4	10
S8 S9 S9	Pyecombe	A23 / A281 Eastbound On-Slip	B2116 Hurst Road (W) A23 Southbound A281 Southbound on-Slip	2366	67.8 67.3 25.6	10.7 4.1	0.0 0.1	3994	100.0	54.4 54.6 133.7		2979		17.2 5.0		4270 28	100.7 1 100.3 94.8 2	61.9	6.9 2		90.0 82.7 81.9 17.1 33.0 5.0	1 0.0	4276	100.4	63.8 299.8			90.4 82.7 33.6			559 1 4247 1		69.3	15
S10 I	Ditchling	B2112 / B2116 Ditchling	B2116 (W) B2112 (N)	323 825	53.0 104.9	6.5 106.4	0.3	287 852	40.9 106.0	4.7 125.5	0.1	466 864	75.5 111.9	9.1 234.5	0.8 52.6	151 952	23.0 110.4	4.8 199.4	0.1 49.3	431 876	69.2 7.8 111.9 235.0	3 0.6	171 3 957	26.4 110.9	5.1 208.1	0.1 51.2	422 878	68.1 111.9	7.8 234.2	0.6 53.4	180 943	28.0 .10.2 19	5.1 196.5	
510 510	Burgess Hill	Cuckfield Rd / Science & Tech Park Access (N)	B2116 (E) B2112 (S) Cuckfield Rd (N)		39.5 96.3	6.2 6.4	0.2	355 542 N/A					96.3	6.8		270 730 N/A	44.3 87.2	6.0 4.3	0.3	762	60.7 8.0 93.8 5.6 64.5 3.4	5 0.6	792	45.4 93.7	5.4	0.5	345 773 1078	60.5 95.1 64.4	7.9 6.1	0.7			5.0	
S13 S13			Science & Tech Park Access (W) Cuckfield Rd (S)	N/A N/A				N/A N/A				N/A N/A				N/A N/A				474 300	5.5 3.0 27.7 3.7	0.0 7 0.1	1389	16.2 16.0	3.0 4.9	0.0	459 341	5.4 30.9	3.0	0.0	1348 146	15.5 18.3	3.0	(
S15 S15 S15	Burgess Hill	A272 Bolney Road / Bishopstone Lane	A272 Bolney Road (W) A272 Bolney Road (E) Bishopstone Lane		30.8 34.5 11.8	1.3 1.4 7.7	0.0 0.0 0.1	606 639 35	30.4 31.5 8.2	1.3		1110		1.4 1.9 10.6	0.0	810 618 22	39.8 28.1 4.7	1.5 1.3 6.0		704 1028 23	36.1 1.4 47.5 1.7 6.4 8.4	7 0.0	818	37.4	1.5		510 1070 35	25.8 49.9 10.1	1.2 1.8 9.1	0.0 0.0 0.1	785		1.6 1.4 7.8	
S16 I S16 S16	Burgess Hill	A2300 / Stairbridge Lane / Pookbourne Lane	A2300 (W) Stairbridge Lane A2300 (E)	18	34.9 2.3 25.4	1.0 5.3 1.4	0.0 0.0 0.1	1053 87 944	37.6 10.7 23.0	6.5	0.0 0.2 0.1		5.4	0.5 3.5 0.5	0.0	1566 152 1785	28.1 10.8 29.3	0.5 3.5 0.5		159	45.1 0.7 13.5 3.8 37.3 0.6	3 0.0	271	16.1	3.3	0.0	2363 148 1948	49.3 13.4 37.1	0.7 4.1 0.6	0.0 0.1 0.0	356	20.6	0.4 3.3 0.7	(
S16 S18 /	Hassocks	A273 / B2112	Pookbourne Lane A273 (N)	514	3.0 25.9	1.2	0.0	20	2.9	1.0	0.0	525	24.5	1.2	0.0	413	20.1	1.1	0.0	587	28.2 1.3	3 0.0	556	25.9	1.2	0.0	558	26.5	1.2	0.0	532	0.6 25.9	1.2	
S18 S18 S19 /	Hassocks	B2112 / Lodge Lane	B2112 (E) A273 (S) Lodge Lane (N)	956	102.8 39.9 59.7	2.8 7.6		392 678	57.3 23.3	2.1		932	38.0	123.5 2.6	0.1	432	61.3	4.5 2.6 6.0	0.2	925	105.7 134.3 37.9 2.7 84.7 10.6	7 0.2	1029	67.3 41.4	5.5 3.1	0.3	656	37.1 84.4	129.3 2.6		837	32.3	4.7 3.0 6.8	
19			B2112 (E) B2112 (W)	352 598	18.0 30.8	1.2	0.0	316 428	15.7 21.6	1.2	0.0	248 562	12.5 28.6	1.3	0.0	300 772	14.3 38.4	1.2	0.0	177 560	9.0 1.2 28.7 1.3	0.0	329 952	16.4 46.7	1.5	0.0	194 555	9.8 28.5	1.2	0.0	305 892	15.2 44.3	1.4	
520 520 520	Burgess Hill	Janes Lane / Manor Road	Janes Lane (E) Manor Road Janes Lane (W)	144	10.1 21.0 16.9	1.0 3.7 1.7	0.0 0.0 0.0	83	9.3 12.1 20.0	3.6		309	44.7	1.0 3.9 2.3	0.1	327 175 684	16.2 26.8 41.4	1.1 4.2 3.1	0.1	310	11.5 1.0 45.3 4.0 31.9 2.4	0.1	197	30.0	4.2	0.1	204 322 574	10.3 46.6 33.2	1.0 3.9 2.4		197	30.0	1.1 4.2 3.1	
521 <i>l</i> 521 521	Burgess Hill	B2112 / Green Road	B2112 (N) Green Road (E) B2112 (S)		84.4 52.5 104.0	4.2 5.4 92.3	0.2 0.2 20.5	822 277 610	100.2 45.2 74.6	6.2		407		5.9	0.3			20.9 6.8 5.1	0.4	687 441 824		7 0.5	400	100.5 61.4 86.0	6.8	0.4	415	81.4 62.1 108.8		0.4		65.2	19.2 7.2 6.0	
S22 I	Burgess Hill	Valebridge Road / Junction Road / Leylands Road	Valebridge Road (N) Junction Road (S)	691 430	82.9 64.8	3.7 6.5	0.1	599 207	75.5 30.7	4.3 4.7	0.2	644 486	55.2 92.9	72.1 64.7	5.1 4.1	659 259	55.6 49.5	72.8 32.5	5.1	641 509	54.6 71.9 97.3 91.5	9 4.9	642	54.1 48.7	67.3 32.3	5.0	643 465	54.9 100.1	81.9 117.9	5.0 3.7	668 263	56.7 9 56.3 3	91.6 37.3	
22	Burgess Hill	A273 / B2036 / Marchants Way	Leylands Road (W) A273 (N) Marchants Way (F)	790	97.0	7.6 5.5	0.3 1.0 0.0	813		6.8	0.9		99.1	13.6 3.2	2.4	753	104.1 1 86.7 0.4	6.6	0.7	836	94.6 43.7 97.2 8.0 0.3 3.2	1.1		88.3	7.2	0.8	658	81.7	5.8 3.2	0.5		92.6	8.1	2
S23 S23 S23			Marchants Way (E) B2036 (S) A273 (W)		2.7 56.5 88.2	5.5 4.0 7.1	0.0 0.1 0.8	466 573	74.3	4.3	0.2	758 545	93.0 75.9	7.0 6.2	0.8	733 659	0.4 88.4 85.9	3.2 5.3 7.8	0.8	409	0.3 3.2 100.2 18.2 58.1 5.0	0.2	784	95.8 83.3	8.6 8.0	0.0 1.2 0.8	575	0.3 100.1 81.2	3.2 15.7 7.0	0.0 2.9 0.7	635	0.4 91.7 87.4	3.2 7.1 8.7	
S24 S24 S24	Burgess Hill	A273 / Sussex Way	A273 (E) Sussex Way (S) A273 (W)	576	51.3 74.6 70.3	4.2 4.7 3.8	0.1 0.3 0.2		59.7 65.3 47.2	4.6			63.4		0.2	718	50.9 70.3 73.5	4.9 4.2 3.7	0.2		62.5 7.3 80.3 4.9 76.1 3.8	0.4		72.6	4.2		462 819 1211	62.9 80.0 90.7	7.6 4.9 5.0	0.4	757		7.1 4.3 4.6	
S25 I S25 S25	Burgess Hill	West Street / Fairfield Road	Fairfield Road (N) West Street (E) Fairfield Road (S)	46 110 142	2.3 15.6 7.3	0.9 3.4 1.2	0.0 0.0 0.0	21 49 116	1.1 6.7 6.1	3.3		127	17.9	0.9 3.5 1.0	0.0 0.0 0.0	12 42 180	0.6 5.7 9.0	0.9 3.4 1.0		41 202 246	2.0 0.9 28.3 3.8 12.1 1.0	0.0	14 0 43 0 139	5.8	3.4		22 172 261	1.1 24.7 12.9	0.9 3.8 1.1	0.0 0.0 0.0	17 50 163		0.9 3.5 1.0	
S25 S26	Burgess Hill	A273 / York Road	West Street (W) A273 (N)	257 945	34.7	3.3 67.0	16.5	214 775	29.6 79.3	3.2	0.0	919	105.4	3.7	27.3	551 993	69.2 105.2 1	3.4	26.4	921	90.6 4.6 103.3 71.9	0.3	690	88.2 104.8	98.5	24.5	918	91.6 104.0	4.5 84.2	20.8	709 944 1	91.9 .04.3 8	4.4 89.7	2:
S26			York Road (E) A273 (S)	206	27.3	3.8	0.1		82.0	6.5	0.6	365	48.7	4.2	0.1	568		9.3	1.0	279	37.2 4.0	0.1		73.0	6.7	0.5	291	39.0	4.0		530 503	77.9 70.6	7.2 6.0	
S26	Burgess Hill	B2113 Keymer Road / Folders Lane	B2113 Keymer Road (N)	528	47.4	3.3	0.0	630	56.8	3.5		-		- 61	1.7		58.1	2.5	1.5	350	59.4 24.4	1.6	386	60.9	24.8	1.6	326	pr.	23.3	1.4	467	77.0	31.5	100

