Appendices

A.	Scheme Uncertainty Log	87
B.	Do Minimum Schemes	88
C.	Development Uncertainty Log	91
D.	Do Minimum Developments	92
E.	VDM Impact	97
F.	Peak Hour Uplift Factor Derivation	100
G.	Trips Generated by Local Plan Developments	101
H.	Local Plan Trip Distribution	103
l.	Local Plan Trip Distribution Plots	106
J.	Trip Growth Factors by Purpose	118
K.	Sustainable Transport Strategy Framework	119
L.	Development of Highway Mitigation	120
M.	Model Outputs at Key Locations	121
N.	Network Performance – M5 J12 & Gloucester	128
Ο.	Network Performance – M5 J13, Stonehouse & Stroud	129
P.	Network Performance – Sharpness and Berkeley	130
Q.	Network Performance – M5 J14	131

A. Scheme Uncertainty Log

cheme	Classification	Included in DM?	Model area	Comments
Vest Cheltenham Transport Improvement P1 Arle Court	Near certain	Yes	Simulation	
Vest Cheltenham Transport Improvement P2 Arle Court	Near certain	Yes	Simulation	
/est Cheltenham Transport Improvement P3 Arle Court	Near certain	Yes	Simulation	
/est Cheltenham Transport Improvement P4 Arle Court	Near certain	Yes	Simulation	
nsworth Development Roundabout Improvement	Near certain	Yes	Simulation	
vigworth Development Access	Near certain	Yes	Simulation	
errybrook Development Access	Near certain	Yes	Simulation	
17/A40 Barnwood Link	Near certain	Yes	Simulation	
nbridge Transport Scheme, Gloucester	Near certain	Yes	Simulation	Opened in September 2017
35/Hyde Lane/Southam Lane Signalised Junction improvements	Near certain	Yes	Simulation	Lane allocation changes
provements for A419 corridor, Stonehouse	Near certain	Yes	Simulation	Expected opening year is 2020
8 Cross Key roundaobut	Near certain	Yes	Simulation	zapostou opolimig your le 2020
nction improvement A40 Longford roundabout, Gloucester	Near certain	Yes	Simulation	Associated with Innsworth and Twigworth developments
ew A40 access roundabout	Near certain	Yes	Simulation	Associated with Innsworth and Twigworth developments
777710 docoss roundabout	Trodi contain	100	omination	7.55550atod With Illinoworth and Twigworth developments
88 / A40 link road	More than likely / near certain	Yes	Simulation	Associated with Innsworth and Twigworth developments
30 Llanthony Rd and St Ann Way (Southwest bypass) improvement, Gloucester	More than likely / near certain	Yes	Simulation	Expected opening year is 2020
0 Over Roundabout improvement (phase 2), Gloucester	More than likely / near certain	Yes	Simulation	Expected opening year is 2020 Expected > 2021
5 J10 'all movements' access (including link road into Cyber Park), Gloucester	More than likely / near certain	Yes	Simulation	Expected > 2021
averton crossroads junction (B4063 / B4634), Staverton	Hypothetical / Foreseeable	Yes	Simulation	Conversion of signals to roundabout
· · · · · · · · · · · · · · · · · · ·	• • • • • • • • • • • • • • • • • • • •			<u> </u>
nderford Northern Quarter Spine Road, Cinderford	Hypothetical	No	Simulation Simulation	Remote from Stroud, not included
eam Road junction improvement (phase 1), Lydney	Hypothetical	No		Remote from Stroud, not included
066 corridor improvements, Berkeley	Hypothetical	No	Simulation	Minor / local scheme, not included
cal improvement for Southgate Street to St Anns Way, Gloucester Barnabas Roundabout enhancement, Gloucester	Hypothetical	No	Simulation	Minor scheme, not included
· · · · · · · · · · · · · · · · · · ·	Hypothetical / Foreseeable	No	Simulation	Minor scheme, not included
hway improvement A4019 corridor including bus advantage, Cheltenham	More than likely / near certain	No	Simulation	
hway improvement A435 corridor improvement, Bishops Cleeve	More than likely / near certain	No	Simulation	
hway improvement Tewkesbury Northern Relief Road, Tewkesbury	Hypothetical	No	Simulation	
hway improvements Cirencester Town Centre, Cirencester	Hypothetical	No	Simulation	
6 / A438 corridor including M5 J9, Tewkesbury	Hypothetical / Foreseeable	No	Simulation	
hway improvement A38 outer ring road corridor, Gloucester	Hypothetical / Foreseeable	No	Simulation	
hway improvement A429 improvement, Moreton-in-Marsh	Hypothetical / Foreseeable	No	Simulation	
hway improvement A46 (Shurdington Road) corridor, Cheltenham	Hypothetical / Foreseeable	No	Simulation	
phway improvement Dursley Relief Road, Dursley	Hypothetical / Foreseeable	No	Simulation	
hway improvement Down Hatherley Lane corridor improvements, Innsworth	Hypothetical / Foreseeable	No	Simulation	
ghway improvement Merrywalks link and roundabout, Stroud	Hypothetical / Foreseeable	No	Simulation	
ursh	Hypothetical / Foreseeable	No	Simulation	
phway improvement Newerne Link Road, Lydney	Hypothetical / Foreseeable	No	Simulation	
plementation of Fosse Way Highway Improvement Feasibility Study (A429 / A433), Cirencester	Hypothetical / Foreseeable	No	Simulation	
nction improvement Allotment Corner, Kempsford	Hypothetical / Foreseeable	No	Simulation	
nction improvement A38 / B4066 junction including a new roundabout, Berkeley	Hypothetical / Foreseeable	No	Simulation	
nction improvement A40 Over Roundabout (phase 3) enhancement for outbound city traffic,				
oucester	Hypothetical / Foreseeable	No	Simulation	

Junction improvement A4135 / B4060 Woodfield roundabout, Dursley	Hypothetical / Foreseeable	No	Simulation	
Junction improvement A4135 / B4066 Dursley Road roundabout, Dursley	Hypothetical / Foreseeable	No	Simulation	
Junction improvement A417 - Brockworth Bypass / A46 Shurdington Road, Brockworth	Hypothetical / Foreseeable	No	Simulation	
Junction improvement A417 C&G roundabout new left turn lane from Barnwood link to Corinium				
Avenue, Gloucester	Hypothetical / Foreseeable	No	Simulation	
Junction improvement A417 Zoons Court roundabout, Gloucester	Hypothetical / Foreseeable	No	Simulation	
Junction improvement A419 / A46 Dudbridge Road roundabout, Stroud	Hypothetical / Foreseeable	No	Simulation	
Junction improvement A419 London Road / Dr Newtons Way, Stroud	Hypothetical / Foreseeable	No	Simulation	
Junction improvement A429 Unicorn junction (A436 / B4068), Stow-on-the-Wold	Hypothetical / Foreseeable	No	Simulation	
Junction improvement A429 / A433 junction, Kemble	Hypothetical / Foreseeable	No	Simulation	
Junction improvement A429 Cherry Tree junction, Cirencester	Hypothetical / Foreseeable	No	Simulation	
Junction improvement A46 / A4173 junction, Pitchcombe	Hypothetical / Foreseeable	No	Simulation	
Junction improvement A46 / Bath Road (Dudbridge Road), Stroud	Hypothetical / Foreseeable	No	Simulation	
Junction improvement A48 Highfield Road / Bypass, Lydney	Hypothetical / Foreseeable	No	Simulation	
Junction improvement B4226 / B4227 bridge including new highway, Cinderford	Hypothetical / Foreseeable	No	Simulation	
Junction improvement Bream Road junction (phase 2), Lydney	Hypothetical / Foreseeable	No	Simulation	
Junction improvement Priory Road providing bus advantage, Gloucester	Hypothetical / Foreseeable	No	Simulation	
Highway improvement A4019 Honeybourne Railway Bridge increased height clearance, Cheltenham	Hypothetical	No	Simulation	
Highway improvement A4151 / A4136 corridor improvements, Cinderford	Hypothetical	No	Simulation	
Highway improvement A417 replacement of existing highway with elevated section, Maisemore	Hypothetical	No	Simulation	
Highway improvement B4063 corridor, Churchdown	Hypothetical	No	Simulation	
Highway improvement London Road / Denmark Road junction, Gloucester	Hypothetical	No	Simulation	
Highway improvement Thames Street / High Street, Lechlade on Thames	Hypothetical	No	Simulation	
Highway improvements Tetbury Town Centre, Tetbury	Hypothetical	No	Simulation	
Junction improvement A4151 / A4136 junction, Cinderford	Hypothetical	No	Simulation	
Junction improvement A417 / Whelford Road junction, Fairford	Hypothetical	No	Simulation	
Junction improvement Five Ways junction including crossing facilities, Cirencester	Hypothetical	No	Simulation	
Junction improvement Highfield Hill including traffic calming, Lydney	Hypothetical	No	Simulation	

HIGHWAYS ENGLAND & OTHER HIGHWAY AUTHORITY SCHEMES

Scheme	Classification	Included in DM?	Model area Comments
A417 Missing Link	More than Likely	Yes	Simulation
A40 Elmbridge Court (As per local 'Elmbridge Transport Scheme')	Near certain	Yes	Simulation
M4 J15	More than likely / near certain 1	Yes	Simulation
M4 J16	More than likely / near certain 1	Yes	Simulation
M4 J17	More than likely / near certain 1	Yes	Simulation
A419 White Hart junction improvement, Swindon	More than likely / near certain 1	Yes	Simulation
A38 M5 J16 to Aztec West, Almondsbury	More than likely / near certain 1	Yes	Simulation
M5 J23 Signalisation	More than likely / near certain 1	Yes	Buffer
M5 J23 Dunball roundabout improvement	More than likely / near certain 1	Yes	Buffer
M5 J24 Huntworth roundabout improvement	More than likely / near certain ¹	Yes	Buffer
M5 J25	More than likely / near certain 1	Yes	Buffer
M5 J30/J31 - A379 Bridge Road Widening, Exeter	More than likely / near certain 1	Yes	Buffer
A38 Deep Lane Junction, East of Plymouth	More than likely / near certain 1	Yes	Buffer
A380 South Devon Highway (Kingskerswell By-Pass)	More than likely / near certain ¹	Yes	Buffer

A350 Chippenham Improvements	More than likely / near certain 1	Yes	Buffer	
A338, Blackwater Junction	More than likely / near certain ¹	Yes	Buffer	
A349 Dunyeat's Roundabout and Queen Anne Drive Junctions	More than likely / near certain ¹	Yes	Buffer	
A349 Major Improvement	More than likely / near certain ¹	Yes	Buffer	
Staplegrove, Taunton	More than likely / near certain ¹	Yes	Buffer	
Northern Inner Distribution Road (NIDR), Taunton	More than likely / near certain ¹	Yes	Buffer	
A34 Milton Interchange Improvement	More than likely / near certain ¹	Yes	Buffer	
A34 Chilton Interchange Improvement	More than likely / near certain ¹	Yes	Buffer	
A30 Temple to Higher Carblake	Near certain ¹	Yes	Buffer	
M49 Avonmouth Junction	More than likely ¹	Yes	Buffer	
M5 Bridgwater Junctions	Reasonably foreseeable ²	No	Buffer	Junction only scheme in buffer
A30 Chiverton to Carland Cross, Cornwall	More than likely ²	No	Buffer	Remote from Stroud, not included
M27 Southampton Junctions 5-8	Reasonably foreseeable ²	No	Buffer	Junction only scheme in buffer
M271 / A35 Redbridge roundabout upgrade	Reasonably foreseeable ²	No	Buffer	Junction only scheme in buffer
A31 Ringwood	Reasonably foreseeable ²	No	Buffer	Remote from Stroud, not included
A34 Oxford Junctions	Reasonably foreseeable ²	No	Buffer	Junction only scheme in buffer
M27 Junctions 4-11: Smart Motorways	More than likely ¹	Yes	Buffer	
M3 Junctions 9-14: Smart Motorways	More than likely 1	Yes	Buffer	
M3 J2-4a	Near certain ¹	Yes	Buffer	
A303 Amesbury to Berwick Down	More than likely	Yes	Buffer	
A303 Sparkford - Ilchester dualling	More than likely	Yes	Buffer	
A358 Taunton to Southfields	More than likely	Yes	Buffer	
M4 J3-12 SMP	More than likely / near certain ¹	Yes	Buffer	
M3 Junction 9 improvement	Reasonably foreseeable ²	No	Buffer	Junction only scheme in buffer
M27 Junction 9	Reasonably foreseeable ²	No	Buffer	Junction only scheme in buffer
M27 Junction 10	Reasonably foreseeable ²	No	Buffer	Junction only scheme in buffer
M3 Junction 2-4A	More than likely / near certain ¹	Yes	Buffer	
M4 Junctions 3-12 Smart Motorways	More than likely / near certain ¹	Yes	Buffer	
M23 Junctions 8-10: Smart Motorways	More than likely / near certain ¹	Yes	Buffer	
M25 Junctions 10-16 Smart Motorway	More than likely / near certain 1	Yes	Buffer	
Arundel Bypass	More than likely / near certain ²	No	Buffer	Not included, too remote from Stroud
A27 Chichester Bypass	More than likely / near certain ²	No	Buffer	Not included, too remote from Stroud
M6 Junctions 10a-13: Smart Motorway	More than likely / near certain ¹	Yes	Buffer	
M5 junctions 4a-6: Smart Motorway	More than likely / near certain 1	Yes	Buffer	
M1 Junctions 23a-25: Smart Motorway	More than likely / near certain 1	Yes	Buffer	
M1 Junctions 28-31: Smart Motorway	More than likely / near certain 1	Yes	Buffer	
M6 Junctions 13-15: Smart Motorway	More than likely / near certain 1	Yes	Buffer	
M1 Junctions 16-19: SMP	More than likely / near certain 1	Yes	Buffer	
M1 Junctions 13-16: SMP	More than likely / near certain 1	Yes	Buffer	
M6 Junctions 2-4: Smart Motorway	More than likely / near certain 1	Yes	Buffer	
M4 Corridor around Newport	More than likely / near certain 1	Yes	Buffer	
A465 Gilwern to Brynmawr	More than likely / near certain ¹	Yes	Buffer	
A465 Brynmawr to Tredegar	More than likely / near certain 1	Yes	Buffer	

<u>Notes</u>

² - These schemes are too remote from Stroud and/or they consist of junction-only schemes in the buffer network and were therefore not included in A417 PCF Stage 2 Do Minimum networks. Their probability/status has not been reviewed during the devleopment of the SLP forecasts.

B. Do Minimum Schemes

Table B.1: Do Minimum Highway Schemes

	2 - 11 - 20 mmmam mgmay conomic	
ID	Scheme Name	Simulation / Buffer
1	West Cheltenham Transport Improvement P1	Simulation
2	West Cheltenham Transport Improvement P2	Simulation
3	West Cheltenham Transport Improvement P3	Simulation
4	West Cheltenham Transport Improvement P4	Simulation
5	Innsworth Development Roundabout Improvement	Simulation
6	Twigworth Development Access	Simulation
7	Perrybrook Development Access	Simulation
8	A417/A40 Barnwood Link	Simulation
9	Elmbridge Transport Scheme, Gloucester	Simulation
10	A435/Hyde Lane/Southam Lane Signalised Junction improvements	Simulation
11	A417 Missing Link	Simulation
12	Improvements for A419 corridor, Stonehouse	Simulation
13	A38 Cross Key roundaobut	Simulation
14	Junction improvement A40 Longford roundabout, Gloucester	Simulation
15	New A40 access roundabout	Simulation
16	A430 Llanthony Rd and St Ann Way (Southwest bypass) improvement, Gloucester	Simulation
17	A40 Over Roundabout improvement (phase 2), Gloucester	Simulation
18	M4 J15	Simulation
19	M4 J16	Simulation
20	M4 J17	Simulation
21	A419 White Hart junction improvement, Swindon	Simulation
22	A38 M5 J16 to Aztec West, Almondsbury	Simulation
23	M5 J23 Signalisation	Buffer
24	M5 J23 Dunball roundabout improvement	Buffer
25	M5 J24 Huntworth roundabout improvement	Buffer
26	M5 J25	Buffer
27	M5 J30/J31 - A379 Bridge Road Widening, Exeter	Buffer
28	A38 Deep Lane Junction, East of Plymouth	Buffer
29	A380 South Devon Highway (Kingskerswell By-Pass)	Buffer
30	A350 Chippenham Improvements	Buffer
31	A338, Blackwater Junction	Buffer
32	A349 Dunyeat's Roundabout and Queen Anne Drive Junctions	Buffer
33	A349 Major Improvement	Buffer
34	Staplegrove, Taunton	Buffer
35	Northern Inner Distribution Road (NIDR), Taunton	Buffer
36	A34 Milton Interchange Improvement	Buffer
37	A34 Chilton Interchange Improvement	Buffer
38	A30 Temple to Higher Carblake	Buffer
39	M49 Avonmouth Junction	Buffer
40	M27 Junctions 4-11: Smart Motorways	Buffer
41	M3 Junctions 9-14: Smart Motorways	Buffer
42	M3 J2-4a	Buffer
43	A303 Amesbury to Berwick Down	Buffer
44	A303 Sparkford - Ilchester dualling	Buffer
45	A358 Taunton to Southfields	Buffer
46	M4 J3-12 SMP	Buffer
47	M3 Junction 2-4A	Buffer

ID	Scheme Name	Simulation / Buffer
48	M4 Junctions 3-12 Smart Motorways	Buffer
49	M23 Junctions 8-10: Smart Motorways	Buffer
50	M25 Junctions 10-16 Smart Motorway	Buffer
51	M6 Junctions 10a-13: Smart Motorway	Buffer
52	M5 junctions 4a-6: Smart Motorway	Buffer
53	M1 Junctions 23a-25: Smart Motorway	Buffer
54	M1 Junctions 28-31: Smart Motorway	Buffer
55	M6 Junctions 13-15: Smart Motorway	Buffer
56	M1 Junctions 16-19: SMP	Buffer
57	M1 Junctions 13-16: SMP	Buffer
58	M6 Junctions 2-4: Smart Motorway	Buffer
59	M4 Corridor around Newport	Buffer
60	A465 Gilwern to Brynmawr	Buffer
61	A465 Brynmawr to Tredegar	Buffer

C. Development Uncertainty Log

Site Name	Туре	Authority	Data Source	Easting	Northing Certainty	Planning ref	Dwellings	Jobs
Cheltenham Cyber Park R	R	Cheltenham	A417 ML Log	391129	222738 More Than Likely	None	1,200	0
Cheltenham Cyber Park E	E	Cheltenham	A417 ML Log	391129	222738 More Than Likely	None	0	7,000
Haines And Strange Albion Street Cheltenham Gloucestershire GL52 2RH	R	Cheltenham	A417 ML Log	395229	222533 Near Certain	13/00827/OUT	50	0
GCHQ Oakley Priors Road Cheltenham Gloucestershire GL52 5AJ	R	Cheltenham	A417 ML Log	397443	222552 Near Certain	13/01683/REM	311	0
Car Park North Place Cheltenham Gloucestershire GL50 4DW	R	Cheltenham	A417 ML Log	395093	222789 More Than Likely	12/01612/FUL	143	0
Central Cheltenham Police Station Talbot House Lansdown Road Cheltenham								
Gloucestershire GL51 6QT	R	Cheltenham	A417 ML Log	393435	221653 Near Certain	17/00337/FUL	67	0
Cotswold Court Lansdown Road Cheltenham Gloucestershire GL50 2JA	R	Cheltenham	A417 ML Log	394082	221658 Near Certain	13/01501/FUL	53	0
Land To Rear Of Nuffield Hospital Hatherley Lane Cheltenham Gloucestershire R	R	Cheltenham	A417 ML Log	391100	221356 More Than Likely	15/01048/OUT	27	0
Land To Rear Of Nuffield Hospital Hatherley Lane Cheltenham Gloucestershire E	E	Cheltenham	A417 ML Log	391100	221356 More Than Likely	15/01048/OUT	0	201
Land At North Road West And Grovefield Way Cheltenham Gloucestershire	E	Cheltenham	A417 ML Log	390607	221423 More Than Likely	18/01004/FUL	0	1,018
Land At Starvehall Farm New Barn Lane Cheltenham Gloucestershire	R	Cheltenham	A417 ML Log	396194	223809 Near Certain	10/01243/OUT	300	0
Christ College Arle Road Cheltenham Gloucestershire GL51 8LE	R	Cheltenham	A417 ML Log	393415	223192 Near Certain	14/01317/REM	90	0
Travis Perkins Gloucester Road Cheltenham Gloucestershire GL51 0SX	R	Cheltenham	A417 ML Log	393637	222399 Near Certain	13/00106/FUL	107	0
John Dower House 24 Crescent Place Cheltenham Gloucestershire GL50 3RA	R	Cheltenham	A417 ML Log	394711	222450 Near Certain	15/00362/FUL	68	0
Premier Products Ltd Bouncers Lane Cheltenham Gloucestershire GL52 5JD	R	Cheltenham	A417 ML Log	396916	223124 Near Certain	17/00929/OUT	58	0
Phase 1 Land At Old Gloucester Road Cheltenham Gloucestershire	R	Cheltenham	A417 ML Log	391500	224265 Near Certain	17/01411/OUT	90	0
JCS Strategic Allocation Site A9 - Ashchurch	T	Tewkesbury	Tewkesbury New	392098	233046 Near Certain	13/01003/OUT	0	581
Land at Perrybrook, Brockworth R	R	Tewkesbury	A417 ML Log	389341	217153 Near Certain	12/01256/OUT	1,500	0
Land at Perrybrook, Brockworth E	E	Tewkesbury	A417 ML Log	389341	217153 Near Certain	12/01256/OUT	0	540
Innsworth R	R	Tewkesbury	A417 ML Log	385817	221493 Near Certain	15/00749/OUT	1,300	0
Innsworth E	E	Tewkesbury	A417 ML Log	385817	221493 Near Certain	15/00749/OUT	0	750
Elms Park R	R	Tewkesbury	A417 ML Log	393152	224140 More Than Likely	16/02000/OUT	4,285	0
Elms Park E	E	Tewkesbury	A417 ML Log	393152	224140 More Than Likely	16/02000/OUT	0	4,027
Land To The Rear Of Invista Green Street Brockworth R GL3 4LS	R	Tewkesbury	A417 ML Log	388683	216080 Near Certain	11/00091/OUT	145	0
Land To The Rear Of Invista Green Street Brockworth E GL3 4LS	E	Tewkesbury	A417 ML Log	388683	216080 Near Certain	11/00091/OUT	0	200
Nerva Meadows Plots 3200, 7400, 7520 Gloucester Business Park Brockworth	R	Tewkesbury	A417 ML Log	387977	215844 More Than Likely	15/01378/OUT	106	0
Parcel 3745 Cheltenham Road East Churchdown Gloucester Gloucestershire	R	Tewkesbury	A417 ML Log	386344	220486 More Than Likely	16/00738/OUT	465	0
Land At Tewkesbury Road Twigworth	R	Tewkesbury	A417 ML Log	384791	222067 Near Certain	15/01149/OUT	995	0
Land To East Of Tewkesbury Road And North Of Longford Lane Longford Gloucester			3					
Gloucestershire	R	Tewkesbury	A417 ML Log	384472	220504 Near Certain	15/00814/APP	269	0
Land To East Of Tewkesbury Road And North Of Longford Lane Longford Gloucester			3					
Gloucestershire	R	Tewkesbury	A417 ML Log	384696	220627 More Than Likely	16/00853/FUL	197	0
Cleevelands Evesham Road Bishops Cleeve R	R	Tewkesbury	A417 ML Log	395090	228284 Near Certain	10/01216/OUT	550	0
Cleevelands Evesham Road Bishops Cleeve E	F	Tewkesbury	A417 ML Log	395090	228284 Near Certain	10/01216/OUT	0	250
Land To The West Of Farm Lane Shurdington	R	Tewkesbury	A417 ML Log	393565	219502 Near Certain	14/00838/FUL	377	0
Plot 6200 Gloucester Business Park Brockworth Gloucester Gloucestershire	E	Tewkesbury	A417 ML Log	388303	215860 More Than Likely	17/00005/APP	0	293
Homelands Farm Gotherington Lane Bishops Cleeve GL52 8EN R	R	Tewkesbury	A417 ML Log	396351	228744 Near Certain	10/01005/OUT	450	0
Homelands Farm Gotherington Lane Bishops Cleeve GL52 8EN E	E	Tewkesbury	A417 ML Log	396351	228744 Near Certain	10/01005/OUT	0	50
J			-9	2,0001	2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	14/00583/OUT /		
Land To The West Of Lassington Lane Highnam Gloucester Gloucestershire	R	Tewkesbury	A417 ML Log	379583	221223 Near Certain	16/00858/APP	88	0
Part Parcel 3400 Columbine Road Walton Cardiff Tewkesbury Gloucestershire	R	Tewkesbury	A417 ML Log	390305	231076 Near Certain	16/00177/FUL	261	0
Adjacent 74 Evesham Road Bishops Cleeve Cheltenham Gloucestershire	R	Tewkesbury	A417 ML Log	395665	228547 Near Certain	15/01177/FUL	71	
Parcel 7561 Malleson Road Gotherington Cheltenham Gloucestershire	R	Tewkesbury	A417 ML Log	395761	229621 More Than Likely	16/00965/OUT	50	

Part Parcel 0085 Land West Of Bredon Road Bredon Road Tewkesbury								
Gloucestershire	R	Tewkesbury	A417 ML Log	390104	233953 More Than Likely	16/00663/APP	68	0
Parcel 3441 And 3629 Land Between Greet Road And Gretton Road Winchcombe	R	Tewkesbury	A417 ML Log	402419	229364 Near Certain	13/00986/APP	85	0
Land Parcels 4331 4619 And 5837 Pamington Lane Pamington Tewkesbury	IX	Tewkesbury	A417 IVIL LOG	402417	227304 Near Certain	13/00/700/AIT	0.5	- 0
Gloucestershire	R	Tewkesbury	A417 ML Log	393837	233487 Near Certain	14/00972/OUT	150	0
Land Adjacent Cornerways High Street Twyning	R	Tewkesbury	A417 ML Log	389619	236802 Near Certain	13/00978/FUL	58	0
Land On The East Side Of Cheltenham Road East Churchdown Gloucester	IX.	Tevressury	7417 IVIE LOG	307017	230002 Near Certain	13/00//0/102	30	
Gloucestershire	E	Tewkesbury	A417 ML Log	387774	222335 Near Certain	15/01115/FUL	0	300
Coopers Edge - Parcels 25A, 25B, 26A, 26B, 27A, 27B	R	Tewkesbury	Tewkesbury New	388059	215455	15/01274/APP	214	0
Land at A38/A4019 Jct	R	Tewkesbury	Tewkesbury New	388979	227147 Near Certain	17/01337/OUT	50	0
Land adj to Hucclecote Road and Golf Club	R	Tewkesbury	Tewkesbury New	388444	216669 Near Certain	18/01239/FUL	166	0
Earla day to Haddiedete Roda and Gen Glab	- 1	Townessary	Townessary New	000111	210007 14001 00110111	10/0120//102	100	
		Cotswold	Cotswold District Residential Land					
Roman Way, Bourton-on-the-Water	R	District	Monitoring Statistic (April 2019)	417241	221594 Near certain	16/03834/FUL	111	0
Toman Way, Boarton on the Water	- 1	District	William Statistic (April 2017)	117211	221071 Wodi Gertain	10/00001/102		
		Cotswold	Cotswold District Residential Land					
Land parcel off Station Road, Bourton-on-the-Water	R	District	Monitoring Statistic (April 2019)	416573	221448 Near certain	14/02923/REM	100	0
zana parsor on etation nead, Boarton on the Water		District	morning statistic (riprii 2017)	110070	ZZTTTO ITOCI OSITAIII	11/02/20/112111		
		Cotswold	Cotswold District Residential Land					
Kingshill Development, London Road, Cirencester R	R	District	Monitoring Statistic (April 2019)	403567	202439 Near certain	15/03117/REM	94	0
iningeriii 2 everepriisi i, 2 eriasi i read, en eriesete iv		2.00.100	e.mermig etations (rip.m.2017)		202107 11001 00110111	10,001177112111		
		Cotswold	Cotswold District Residential Land					
Kingshill Development, London Road, Cirencester E	F	District	Monitoring Statistic (April 2019)	403567	202439 Near certain	15/03117/REM	0	503
g				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		100000000000000000000000000000000000000		
		Cotswold	Cotswold District Residential Land					
Land west of Siddington Road and south of North Hill Road, Cirencester	R	District	Monitoring Statistic (April 2019)	403246	200475 Near certain	14/02871/REM	55	0
zana noot or olaamigtori noaa ana ooatii ol nortii mii noaa, oli olioootoi		District	morning statistic (riprii 2017)	100210	200170 Roal Contain	11/020/1/112111		
		Cotswold	Cotswold District Residential Land					
Land west of Pips Field, Cirencester Road, Fairford	R	District	Monitoring Statistic (April 2019)	414517	200804 Near certain	12/02133/FUL	68	0
				77.75				
		Cotswold	Cotswold District Residential Land					
Land at London Road, Fairford	R	District	Monitoring Statistic (April 2019)	416388	201148 Near certain	15/04461/REM	117	0
			у станово (ф ,			107071071211		
		Cotswold	Cotswold District Residential Land					
Land parcel south of Home Farm, Fairford	R	District	Monitoring Statistic (April 2019)	414554	200620 Near certain	15/02707/REM	120	0
		2.00.100	e.mermig etations (rip.m.2017)		20020 1100 00 100	10,02,07,112		
		Cotswold	Cotswold District Residential Land					
Land at Top Farm, West Lane, Kemble	R	District	Monitoring Statistic (April 2019)	398628	197167 Near certain	14/03638/REM	50	0
zana at rop rann, rrost zano, temore		District	morning statistic (riprii 2017)	070020	177107 Itodi Gertain	T II GGGGG/TILIVI		
		Cotswold	Cotswold District Residential Land					
Old Station Site, Lechlade	R	District	Monitoring Statistic (April 2019)	421769	200510 Near certain	14/04198/REM	61	0
		2.53.100		12.707	20010	5 11 / 5/ 112141		
		Cotswold	Cotswold District Residential Land					
Former Meon Hill Nurseries, Canada Lane, Mickleton	R	District	Monitoring Statistic (April 2019)	416454	244203 Near certain	14/01578/REM	75	0
		2.53.100		110101	21.200	5 10 / 5/ 112141	, 0	
		Cotswold	Cotswold District Residential Land					
Land parcel off Broad Marston Road, Mickleton	R	District	Monitoring Statistic (April 2019)	415813	243851 Near certain	16/02049/REM	90	0
Zana par on broad maroton houd, midioton		Diotriot		110010	_ 1000 1 11001 001 tall 1	10, 020 17, 11, 11, 11, 11, 11, 11, 11, 11, 11,	,,	J

				1				
		Cotswold	Cotswold District Residential Land					
Land adjacent to Arbour Close and Cotswold Edge, Mickleton	R	District	Monitoring Statistic (April 2019)	415630	243334 Near certain	14/03019/REM	70	(
		Catawald	Cotoureld District Desidential Land					
Land at Fire Coming Callege Landon Dood Mareton in March	D	Cotswold	Cotswold District Residential Land	401510	222571 Near cortain	11 /000 40 /DEN 4	F 4	
Land at Fire Service College, London Road, Moreton-in-Marsh	K	District	Monitoring Statistic (April 2019)	421510	232571 Near certain	11/00940/REM	54	
		Cotswold	Cotswold District Residential Land					
The Fire Service College, London Road, Moreton-in-Marsh	R	District	Monitoring Statistic (April 2019)	422432	232792 Near certain	16/00858/REM	250	(
		Cotswold	Cotswold District Residential Land					
Land off Todenham Road, Moreton-in-Marsh	R	District	Monitoring Statistic (April 2019)	421085	232696 Near certain	14/04503/REM	105	(
		Cotswold	Cotswold District Residential Land					
Land north of Cirencester Road, GL8 8SA, Tetbury	D	District	Monitoring Statistic (April 2019)	389630	193727 Near certain	17/04978/FUL	128	(
Land Hor til of Chericester Road, GLo 83A, Tetbury	K	DISTITUTE	World ing Statistic (April 2019)	309030	193727 Near Certain	17/049/0/FUL	120	
		Cotswold	Cotswold District Residential Land					
Land parcel at Quercus Park, Tetbury	R	District	Monitoring Statistic (April 2019)	389853	193994 Near certain	14/03567/REM	50	(
and particular Calcination and anti-			memering etailers (* p 20 ;)	337333		1 17 000077 112111		
		Cotswold	Cotswold District Residential Land					
Highfield Farm, Tetbury	R	District	Monitoring Statistic (April 2019)	389568	194254 Near certain	15/02517/REM	133	(
		Cotswold	Cotswold District Residential Land					
Land parcel south of Quercus Road, Quercus Road, Tetbury	R	District	Monitoring Statistic (April 2019)	389682	194041 Near certain	15/03479/REM	123	(
	_	Cotswold	Cotswold District Residential Land					
Land parcel at Upper Rissington, Upper Rissington	R	District	Monitoring Statistic (April 2019)	420279	220148 Near certain	12/03810/REM	194	(
Land at Chartantan Farms Crambanas Lana CL7/ID Cinamasatan D	D	Cotswold	Cotswold District Housing Land	401201	200027 Mana than likely	17/00054/011	2.250	,
Land at Chesterton Farm, Cranhams Lane, GL7 6JP, Cirencester R	K	District	Supply Report (May 2019) Cotswold District Housing Land	401281	200837 More than likely	16/00054/OUT	2,350	- (
Land at Chesterton Farm, Cranhams Lane, GL7 6JP, Cirencester E	E	Cotswold District	g .	401281	200837 More than likely	16/00054/OUT	0	500
Land at Chestertonn ann, Crannans Lane, GL7 GF, Chencester L	L	Cotswold	Supply Report (May 2019) Cotswold District Housing Land	401201	200637 Note than likely	10/00034/001	U	300
Land at Siddington Park Farm, GL7 6ET, Preston	R	District	Supply Report (May 2019)	404034	200307 More than likely	17/00076/OUT	171	(
Edita at oldanigtori arki arii, oʻzi oʻzi, i rostori		Cotswold	Cotswold District Housing Land	10 100 1	200007 More than mery	177000707001	.,,,	
Land to the south of Love Lane, Siddington	R	District	Supply Report (May 2019)	402679	199971 More than likely	15/05165/OUT	88	(
. 3		Cotswold	Cotswold District Housing Land		,			
Land adjacent to Bretton House, Station Road, Stow-on-the-Wold	R	District	Supply Report (May 2019)	419125	225309 Near certain	17/01218/REM	106	(
-		Cotswold	Cotswold District Housing Land					
Highfield Farm, Tetbury	R	District	Supply Report (May 2019)	389568	194254 Near certain	15/02517/REM	117	(
		Cotswold	Cotswold District Housing Land					
Land north of Collin Lane, Willersey	R	District	Supply Report (May 2019)	409798	239501 Near certain	16/02543/REM	50	(
		Cotswold	Cotswold District Local Plan 2011-					
Land at Evenlode Road, Moreton-in-Marsh	R	District	2031 (adopted 3 August 2018)	421364	231880 Near certain	19/00086/OUT	67	(
London the set of Ferrica A.		Cotswold	Cotswold District Local Plan 2011-	400740	221044 N	M_19A -	24	
Land south east of Fosseway Avenue, Moreton-in-Marsh	K	District	2031 (adopted 3 August 2018)	420743	231946 Near certain	19/02248/FUL	91	1 00
Land At Barnwood Link Road Gloucester Former Clausester Academy Estrourt Class Clausester Cl 1 3 LP	E	Gloucester	A417 ML Log	386357	219006 Near Certain	14/01035/OUT	0	1,03
Former Gloucester Academy Estcourt Close Gloucester GL1 3LR Hucclecote Centre Churchdown Lane Gloucester GL3 3QN	K	Gloucester	A417 ML Log	384044 387659	219848 Near Certain 217460 Near Certain	16/00631/OUT	90 53	(
Former Contract Chemicals Site Bristol Road Gloucester GL3 3QN	K	Gloucester	A417 ML Log			11/00742/OUT		(
FORTHER CONTRACT CHEMICALS SITE BLISTOL KOAO GIOUCESTEL PTS 2RX K	K	Gloucester	A417 ML Log	382262	216517 Near Certain	07/00474/OUT	86	

Former Wellman Graham St Gobain Industrial Sites Bristol Road Gloucester GL2 5BX	X R	Gloucester	A417 ML Log	382339	216588 Near Certain	07/00472/OUT	172	0
Land East Of Hempsted Lane Hempsted Lane Gloucester	R	Gloucester	A417 ML Log	381753	217061 More Then Likely	13/01032/OUT	50	0
Old Hempsted Fuel Depot Hempsted Lane Gloucester	R	Gloucester	A417 ML Log	381917	217626 Near Certain	12/00725/OUT	85	0
Norville Optical Co Ltd Paul Street Gloucester GL1 4NY	R	Gloucester	A417 ML Log	383954	217135 Near Certain	16/00815/FUL	63	0
Former Kwik Save 103 Northgate Street Gloucester	R	Gloucester	A417 ML Log	383441	218795 Near Certain	16/00142/FUL	95	0
Land South Of Grange Road Gloucester	R	Gloucester	A417 ML Log	382676	214125 Near Certain	16/00165/OUT	250	0
Business School & Student Accommodation	R	Gloucester	Gloucester New	384420	219576 Done		80	0
Barbican Carpark, Blackfriars (Phase 1)	R	Gloucester	Gloucester New	382911	218485 Done		118	0
Former Gloucester Prison, Barrack Square	R	Gloucester	Gloucester New	382748	218541 More than likely		202	0
Barbican Carpark, Blackfriars (Phase 2)	R	Gloucester	Gloucester New	382885	218517 More than likely		74	0
McCarthy & Stone, Land at Bakers Quay	R	Gloucester	Gloucester New	382432	217886 Near certain		50	0
Former Civil Service Club, Estcourt Road	R	Gloucester	Gloucester New	383659	219564 Near certain		100	0
Land At Bakers Quay Provender Mill	R	Gloucester	Gloucester New	382559	217859 Near Certain	15/01144/FUL	166	0
Mayos Land Bristol Road Quedgeley Gloucester	R	Gloucester	Gloucester New	380695	212948 Complete	13/01013/REM	49	0
Former Gloscat Buildings Brunswick Road Gloucester	R	Gloucester	Gloucester New	383132	218272 Complete	11/00107/FUL	190	0
Flats - Land At Bakers Quay Monk Meadow	R	Gloucester	Gloucester New	382394	217961 Near Certain	14/00709/FUL	409	0
Kingsway Framework All Areas	R	Gloucester	Gloucester New	381402	214047 Near Certain		692	0
Larger Winnycroft Development Site (close to B4073 Painswick Rd, west of M5)	R	Gloucester	Gloucester New	385495	214519 Near Certain	14/01063/OUT	420	0
Little Winnycroft Development Site (close to B4073 Painswick Rd, west of M5)	R	Gloucester	Gloucester New	385699	214703 Near Certain	14/01063/OUT	217	0
Gateway 12 Davy Way, Hardwicke, Gloucester, Gloucestershire	E	Stroud	A417 ML Log	380655	211360 Near Certain	S.14/1518/FUL	0	467
Land at Quedgeley Trading Estate East Haresfield Stonehouse	E	Stroud	A417 ML Log	380465	211049 More Than Likely	16/1724/OUT	0	2,149
Sellars Farm Sellars Road Hardwicke Glos.	R	Stroud	Stroud New	379720	213260 Complete	S.12/2528/REM	64	0
Land at Box Road Cam Durlsey Glos.	R	Stroud	Stroud New	374934	201775 Complete	S.11/1682/FUL	54	0
Parcel 16B And 19B Land To The West And South Of Gloucester Business Park Upto	on							
St Leonards	R	Stroud	Stroud New	387402	215818 Complete	S.16/1558/REM	79	0
Land South Of Leonard Stanley Primary School Bath Road Leonard Stanely Glos.	R	Stroud	Stroud New	380766	203362 Complete	S.16/1398/REM	75	0
Land At Colethrop Farm Bath Road Hardwicke	R	Stroud	Stroud New	380402	211349 Complete	S.17/2215/REM	53	0
Land West of Stonehouse Nastend Lane	R	Stroud	Stroud New	379295	206467 Near Certain	S.14/0810/OUT	1,332	0
Colethrop Farm (Hunt's Grove)	R	Stroud	Stroud New	380992	211785 Near Certain	S.09/1692/VAR	1,273	0
SA3 Land north east of Draycott Cam	R	Stroud	Stroud New	375148	201237 Near Certain	S.15/2804/OUT	450	0
Land at Littlecombe	D D	Stroud	Stroud New	375752	198673 Near Certain	S.15/0476/OUT	124	0
Land at rear of Canonbury Street Berkeley	D D	Stroud	Stroud New	368684	199432 Near Certain	S.14/0619/FUL	170	0
Former Standish Hospital and former Westridge Hospital Standish	D D	Stroud	Stroud New	381697	206767 Near Certain	S.17/2729/FUL	147	0
Dudbridge Industrial Estate Dudbridge Road Stroud	R	Stroud	Stroud New	383590	204751 Near Certain	S.17/1987/OUT	130	0
Wimberley Mill Knapp Lane Brimscombe	P	Stroud	Stroud New	387435	202014 Near Certain	S.13/2668/OUT	104	0
Land north west of Box Road Cam	D D	Stroud	Stroud New	375076	202009 Near Certain	S.17/1366/OUT	90	0
Rooksmoor Mills Bath Road Woodchester	11					S.13/1893/FUL	54	0
	I.P.	Stroud	Stroud Now	38/160	JUST JUNEAR CARTAIN			0
II Ianiais industriai estata - III/I Rath Road Stroud	R	Stroud	Stroud New	384169	203149 Near Certain			Λ
Daniels Industrial Estate 104 Bath Road Stroud Heneage Farm, Falfield	R R P	Stroud	Stroud New	383971	204305 Near Certain	S.16/2152/OUT	50	0
Heneage Farm, Falfield	R R R	Stroud S Glos	Stroud New S Glos New	383971 368233	204305 Near Certain 193521 More than Likely	S.16/2152/OUT PT17/4800/O	50 85	0
Heneage Farm, Falfield Land South of Wotton Road, Charfield	R R R R	Stroud S Glos S Glos	Stroud New S Glos New S Glos New	383971 368233 372820	204305 Near Certain 193521 More than Likely 192335 Near Certain	S.16/2152/OUT PT17/4800/O PT13/4182/O	50 85 106	0
Heneage Farm, Falfield Land South of Wotton Road, Charfield Poplar Lane Wickwar	R R R R	Stroud S Glos S Glos S Glos	Stroud New S Glos New S Glos New S Glos New	383971 368233 372820 372621	204305 Near Certain 193521 More than Likely 192335 Near Certain 187642 More than Likely	S.16/2152/OUT PT17/4800/O PT13/4182/O PK16/4006/O	50 85 106 80	0 0 0
Heneage Farm, Falfield Land South of Wotton Road, Charfield Poplar Lane Wickwar Land North of Wotton Road, Charfield	R R R R R	Stroud S Glos S Glos S Glos S Glos	Stroud New S Glos New S Glos New S Glos New S Glos New	383971 368233 372820 372621 372138	204305 Near Certain 193521 More than Likely 192335 Near Certain 187642 More than Likely 192513 More than Likely	S.16/2152/OUT PT17/4800/O PT13/4182/O PK16/4006/O PT16/6924/O	50 85 106 80 115	0 0 0
Heneage Farm, Falfield Land South of Wotton Road, Charfield Poplar Lane Wickwar Land North of Wotton Road, Charfield Land South of Horwood Lane, Wickwar	R R R R R R	Stroud S Glos S Glos S Glos S Glos S Glos S Glos	Stroud New S Glos New	383971 368233 372820 372621 372138 372551	204305 Near Certain 193521 More than Likely 192335 Near Certain 187642 More than Likely 192513 More than Likely 187440 More than Likely	S.16/2152/OUT PT17/4800/O PT13/4182/O PK16/4006/O PT16/6924/O PK17/4552/O	50 85 106 80 115	0 0 0 0 0
Heneage Farm, Falfield Land South of Wotton Road, Charfield Poplar Lane Wickwar Land North of Wotton Road, Charfield	R R R R R R R	Stroud S Glos S Glos S Glos S Glos	Stroud New S Glos New S Glos New S Glos New S Glos New	383971 368233 372820 372621 372138	204305 Near Certain 193521 More than Likely 192335 Near Certain 187642 More than Likely 192513 More than Likely	S.16/2152/OUT PT17/4800/O PT13/4182/O PK16/4006/O PT16/6924/O	50 85 106 80 115	0 0 0 0 0 0

Land at Park Farm, Thornbury	R	S Glos	S Glos New	363695	191496 More than Likely	PT11/1442/O	500	0
Land at Morton Way, Thornbury	R	S Glos	S Glos New	364988	190960 More than Likely	PT12/2395/O	300	0
Land at House Leaze, North of Wotton Rd, Charfield	R	S Glos	S Glos New	372024	192296 More than Likely	PT16/6580/RM	64	0
Former Council Offices, Castle Street, Thornbury	R	S Glos	S Glos New	363521	190354 Near Certain	PT16/0982/F	62	0
Land to the West of Stowell Hill, Tytherington	R	S Glos	S Glos New	366689	188414 More than Likely	PT17/2331/O	27	0
Land at Duck Street, Tytherington	R	S Glos	S Glos New	366926	188146 More than Likely	PT17/2240/F	28	0
Oakfield House, Wotton Road, Rangeworthy	R	S Glos	S Glos New	369111	185688 More than Likely	PT18/3990/F	13	0

D. Do Minimum Developments

Table D.1: Do Minimum Developments

ID	Site Name	Authority	Dwell ings	Jobs
1	Cheltenham Cyber Park	Cheltenham	1,200	7,000
2	Haines And Strange Albion Street Cheltenham Gloucestershire GL52 2RH	Cheltenham	50	0
3	GCHQ Oakley Priors Road Cheltenham Gloucestershire GL52 5AJ	Cheltenham	311	0
4	Car Park North Place Cheltenham Gloucestershire GL50 4DW	Cheltenham	143	0
5	Central Cheltenham Police Station Talbot House Lansdown Road Cheltenham Gloucestershire GL51 6QT	Cheltenham	67	0
6	Cotswold Court Lansdown Road Cheltenham Gloucestershire GL50 2JA	Cheltenham	53	0
7	Land To Rear Of Nuffield Hospital Hatherley Lane Cheltenham Gloucestershire	Cheltenham	27	201
8	Land At North Road West And Grovefield Way Cheltenham Gloucestershire	Cheltenham	0	1,018
9	Land At Starvehall Farm New Barn Lane Cheltenham Gloucestershire	Cheltenham	300	0
10	Christ College Arle Road Cheltenham Gloucestershire GL51 8LE	Cheltenham	90	0
11	Travis Perkins Gloucester Road Cheltenham Gloucestershire GL51 0SX	Cheltenham	107	0
12	John Dower House 24 Crescent Place Cheltenham Gloucestershire GL50 3RA	Cheltenham	68	0
13	Premier Products Ltd Bouncers Lane Cheltenham Gloucestershire GL52 5JD	Cheltenham	58	0
14	Phase 1 Land At Old Gloucester Road Cheltenham Gloucestershire	Cheltenham	90	0
15	JCS Strategic Allocation Site A9 - Ashchurch	Tewkesbury	0	581
16	Land at Perrybrook, Brockworth	Tewkesbury	1,500	540
17	Innsworth	Tewkesbury	1,300	750
18	Elms Park	Tewkesbury	4,285	4,027
19	Land To The Rear Of Invista Green Street Brockworth R GL3 4LS	Tewkesbury	145	0
20	Land To The Rear Of Invista Green Street Brockworth E GL3 4LS	Tewkesbury	0	200
21	Nerva Meadows Plots 3200, 7400, 7520 Gloucester Business Park Brockworth	Tewkesbury	106	0
22	Parcel 3745 Cheltenham Road East Churchdown Gloucester Gloucestershire	Tewkesbury	465	0
23	Land At Tewkesbury Road Twigworth	Tewkesbury	995	0
24	Land To East Of Tewkesbury Road And North Of Longford Lane Longford Gloucester Gloucestershire	Tewkesbury	269	0
25	Land To East Of Tewkesbury Road And North Of Longford Lane Longford Gloucester Gloucestershire	Tewkesbury	197	0
26	Cleevelands Evesham Road Bishops Cleeve	Tewkesbury	550	250
27	Land To The West Of Farm Lane Shurdington	Tewkesbury	377	0
28	Plot 6200 Gloucester Business Park Brockworth Gloucester Gloucestershire	Tewkesbury	0	293
29	Homelands Farm Gotherington Lane Bishops Cleeve GL52 8EN	Tewkesbury	450	50
30	Land To The West Of Lassington Lane Highnam Gloucester Gloucestershire	Tewkesbury	88	0
31	Part Parcel 3400 Columbine Road Walton Cardiff Tewkesbury Gloucestershire	Tewkesbury	261	0

ID	Site Name	Authority	Dwell ings	Jobs
32	Adjacent 74 Evesham Road Bishops Cleeve Cheltenham Gloucestershire	Tewkesbury	71	0
33	Parcel 7561 Malleson Road Gotherington Cheltenham Gloucestershire	Tewkesbury	50	0
34	Part Parcel 0085 Land West Of Bredon Road Bredon Road Tewkesbury Gloucestershire	Tewkesbury	68	0
35	Parcel 3441 And 3629 Land Between Greet Road And Gretton Road Winchcombe	Tewkesbury	85	0
36	Land Parcels 4331 4619 And 5837 Pamington Lane Pamington Tewkesbury Gloucestershire	Tewkesbury	150	0
37	Land Adjacent Cornerways High Street Twyning	Tewkesbury	58	0
38	Land On The East Side Of Cheltenham Road East Churchdown Gloucester Gloucestershire	Tewkesbury	0	300
39	Coopers Edge - Parcels 25A, 25B, 26A, 26B, 27A, 27B	Tewkesbury	214	0
40	Land at A38/A4019 Jct	Tewkesbury	50	0
41	Land adj to Hucclecote Road and Golf Club	Tewkesbury	166	0
42	Roman Way, Bourton-on-the-Water	Cotswold District	111	0
43	Land parcel off Station Road, Bourton-on-the-Water	Cotswold District	100	0
44	Kingshill Development, London Road, Cirencester	Cotswold District	94	503
45	Land west of Siddington Road and south of North Hill Road, Cirencester	Cotswold District	55	0
46	Land west of Pips Field, Cirencester Road, Fairford	Cotswold District	68	0
47	Land at London Road, Fairford	Cotswold District	117	0
48	Land parcel south of Home Farm, Fairford	Cotswold District	120	0
49	Land at Top Farm, West Lane, Kemble	Cotswold District	50	0
50	Old Station Site, Lechlade	Cotswold District	61	0
51	Former Meon Hill Nurseries, Canada Lane, Mickleton	Cotswold District	75	0
52	Land parcel off Broad Marston Road, Mickleton	Cotswold District	90	0
53	Land adjacent to Arbour Close and Cotswold Edge, Mickleton	Cotswold District	70	0
54	Land at Fire Service College, London Road, Moreton-in-Marsh	Cotswold District	54	0
55	The Fire Service College, London Road, Moreton-in-Marsh	Cotswold District	250	0
56	Land off Todenham Road, Moreton-in-Marsh	Cotswold District	105	0
57	Land north of Cirencester Road, GL8 8SA, Tetbury	Cotswold District	128	0
58	Land parcel at Quercus Park, Tetbury	Cotswold District	50	0
59	Highfield Farm, Tetbury	Cotswold District	133	0
60	Land parcel south of Quercus Road, Quercus Road, Tetbury	Cotswold District	123	0
61	Land parcel at Upper Rissington, Upper Rissington	Cotswold District	194	0
62	Land at Chesterton Farm, Cranhams Lane, GL7 6JP, Cirencester	Cotswold District	2,350	500
63	Land at Siddington Park Farm, GL7 6ET, Preston	Cotswold District	171	0
64	Land to the south of Love Lane, Siddington	Cotswold District	88	0
65	Land adjacent to Bretton House, Station Road, Stow-on-the-Wold	Cotswold District	106	0
66	Highfield Farm, Tetbury	Cotswold District	117	0
67	Land north of Collin Lane, Willersey	Cotswold District	50	0
68	Land at Evenlode Road, Moreton-in-Marsh	Cotswold District	67	0
69	Land south east of Fosseway Avenue, Moreton-in-Marsh	Cotswold District	91	0

ID	Site Name	Authority	Dwell ings	Jobs
70	Land At Barnwood Link Road Gloucester	Gloucester	0	1,031
71	Former Gloucester Academy Estcourt Close Gloucester GL1 3LR	Gloucester	90	0
72	Hucclecote Centre Churchdown Lane Gloucester GL3 3QN	Gloucester	53	0
73	Former Contract Chemicals Site Bristol Road Gloucester GL2 5BX R	Gloucester	86	0
74	Former Wellman Graham St Gobain Industrial Sites Bristol Road Gloucester GL2 5BX	Gloucester	172	0
75	Land East Of Hempsted Lane Hempsted Lane Gloucester	Gloucester	50	0
76	Old Hempsted Fuel Depot Hempsted Lane Gloucester	Gloucester	85	0
77	Norville Optical Co Ltd Paul Street Gloucester GL1 4NY	Gloucester	63	0
78	Former Kwik Save 103 Northgate Street Gloucester	Gloucester	95	0
79	Land South Of Grange Road Gloucester	Gloucester	250	0
80	Business School & Student Accommodation	Gloucester	80	0
81	Barbican Carpark, Blackfriars (Phase 1)	Gloucester	118	0
82	Former Gloucester Prison, Barrack Square	Gloucester	202	0
83	Barbican Carpark, Blackfriars (Phase 2)	Gloucester	74	0
84	McCarthy & Stone, Land at Bakers Quay	Gloucester	50	0
85	Former Civil Service Club, Estcourt Road	Gloucester	100	0
86	Land At Bakers Quay Provender Mill	Gloucester	166	0
87	Mayos Land Bristol Road Quedgeley Gloucester	Gloucester	49	0
88	Former Gloscat Buildings Brunswick Road Gloucester	Gloucester	190	0
89	Flats - Land At Bakers Quay Monk Meadow	Gloucester	409	0
90	Kingsway Framework All Areas	Gloucester	692	0
91	Larger Winnycroft Development Site (close to B4073 Painswick Rd, west of M5)	Gloucester	420	0
92	Little Winnycroft Development Site (close to B4073 Painswick Rd, west of M5)	Gloucester	217	0
93	Gateway 12 Davy Way, Hardwicke, Gloucester, Gloucestershire	Stroud	0	467
94	Land at Quedgeley Trading Estate East Haresfield Stonehouse	Stroud	0	2,149
95	Sellars Farm Sellars Road Hardwicke Glos.	Stroud	64	0
96	Land at Box Road Cam Durlsey Glos.	Stroud	54	0
97	Parcel 16B And 19B Land To The West And South Of Gloucester Business Park Upton St Leonards	Stroud	79	0
98	Land South Of Leonard Stanley Primary School Bath Road Leonard Stanely Glos.	Stroud	75	0
99	Land At Colethrop Farm Bath Road Hardwicke	Stroud	53	0
100	Land West of Stonehouse Nastend Lane	Stroud	1,332	0
101	Colethrop Farm (Hunt's Grove)	Stroud	1,273	0
102	SA3 Land north east of Draycott Cam	Stroud	450	0
103	Land at Littlecombe	Stroud	124	0
104	Land at rear of Canonbury Street Berkeley	Stroud	170	0
	Former Standish Hospital and former Westridge Hospital	Stroud	147	0
105	Standish	Stroud	147	U
105 106	Standish Dudbridge Industrial Estate Dudbridge Road Stroud	Stroud	130	0

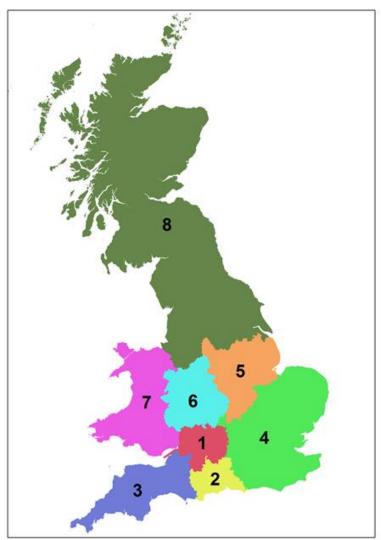
ID	Site Name	Authority	Dwell ings	Jobs
108	Land north west of Box Road Cam	Stroud	90	0
109	Rooksmoor Mills Bath Road Woodchester	Stroud	54	0
110	Daniels Industrial Estate 104 Bath Road Stroud	Stroud	50	0
111	Heneage Farm, Falfield	South Gloucestershire	85	0
112	Land South of Wotton Road, Charfield	South Gloucestershire	106	0
113	Poplar Lane Wickwar	South Gloucestershire	80	0
114	Land North of Wotton Road, Charfield	South Gloucestershire	115	0
115	Land South of Horwood Lane, Wickwar	South Gloucestershire	90	0
116	Cleve Park, Thornbury	South Gloucestershire	350	0
117	Land West of Gloucester Road, Thornbury	South Gloucestershire	130	0
118	Land at Post Farm, Thornbury	South Gloucestershire	132	0
119	Land at Park Farm, Thornbury	South Gloucestershire	500	0
120	Land at Morton Way, Thornbury	South Gloucestershire	300	0
121	Land at House Leaze, North of Wotton Rd, Charfield	South Gloucestershire	64	0
122	Former Council Offices, Castle Street, Thornbury	South Gloucestershire	62	0
123	Land to the West of Stowell Hill, Tytherington	South Gloucestershire	27	0
124	Land at Duck Street, Tytherington	South Gloucestershire	28	0
125	Oakfield House, Wotton Road, Rangeworthy	South Gloucestershire	13	0

E. VDM Impact

The impacts of the variable demand model are summarised using the sector system below and shown in Figure E.1.

- Sector 1 Main impact area of the Stroud Local Plan;
- Sector 2 Hampshire, east Dorset, south Wiltshire;
- Sector 3 Cornwall, Devon, Somerset and west Dorset;
- Sector 4 London, South East and East;
- Sector 5 East Midlands;
- Sector 6 West Midlands;
- Sector 7 Wales; and
- Sector 8 North and Scotland

Figure E.1: Variable Demand Impact Sector System



E.1 Highway Demand Changes

The 24-hour 2040 reference highway demand is shown in Table E.1, while Table E.2 presents the change between the reference demand and the 2040 Do Minimum scenario.

Table E.1: 24-Hour Reference Highway Demand, 2040 (000s of trips)

	1	2	3	4	5	6	7	8	Total
1	2836.4	25.8	120.1	134.3	5.3	67.9	30.1	4.0	3223.8
2	25.5	3101.8	31.2	165.2	2.6	4.4	1.8	2.5	3335.2
3	120.9	31.3	4016.1	11.6	1.9	7.4	5.8	2.8	4197.9
4	133.6	165.8	11.9	23970.7	171.8	48.5	8.0	25.5	24535.9
5	5.1	2.6	1.9	166.9	6208.5	154.0	2.1	189.0	6730.1
6	69.0	4.4	7.5	46.1	153.1	8075.8	32.5	87.9	8476.4
7	29.1	1.8	5.7	7.2	2.1	32.0	3811.2	82.1	3971.4
8	3.9	2.5	2.8	23.3	186.5	89.4	83.4	25759.6	26151.4
Total	3223.7	3335.9	4197.4	24525.4	6731.7	8479.5	3975.0	26153.5	80622.1

Table E.2: 24-Hour Highway Demand Change Between Reference and Do Minimum 2040

	1	2	3	4	5	6	7	8	Total
1	-3.2%	22.1%	10.8%	13.2%	29.3%	15.9%	130.5%	55.1%	0.0%
2	21.8%	-1.7%	23.1%	19.3%	31.7%	34.6%	62.6%	45.7%	-0.1%
3	11.5%	22.4%	-0.7%	18.2%	14.8%	18.2%	72.5%	29.8%	0.0%
4	13.4%	19.3%	15.8%	0.0%	24.8%	39.1%	63.5%	52.3%	0.5%
5	27.1%	29.8%	12.2%	22.3%	-2.3%	21.6%	28.5%	34.9%	0.0%
6	14.6%	33.2%	15.8%	39.9%	23.1%	-1.2%	21.5%	27.5%	0.0%
7	78.8%	53.8%	53.9%	48.8%	29.7%	19.5%	-1.5%	23.9%	0.0%
8	53.7%	44.9%	28.0%	53.3%	38.4%	29.4%	27.1%	-0.5%	0.0%
Total	-0.5%	0.1%	0.0%	0.5%	0.2%	0.0%	0.6%	0.0%	0.2%

The table shows that the post-VDM Do Minimum has an increased number of inter-sectoral highway trips compared to the reference and a reduction in the number of intra-sectoral highway trips. The overall volume of demand remains similar between the scenarios. The change in trip pattern is due to the changes to the generalised costs between the base and forecast years, which makes longer trips more attractive.

Some of the inter-sectoral changes represent relatively minor absolute changes in demand but, due to the low amount of reference demand relatively small absolute changes can result in large percentage changes. An exception to this is the relatively large absolute and percentage increase in trips to Wales (Sector 7) from Sectors 1 to 4; these increases reflect the removal of the Severn Crossing toll charges, which reduces the cost for trips into Wales.

E.2 Rail Demand Changes

Table E.3 shows the reference rail (car available) demand for 2040 at the 24-hour level. Table E.4 shows the difference between the reference demand and the Do Minimum demand.

Table E.3: 24-Hour Reference Rail Demand, 2040 (000s of trips)

	1	2	3	4	5	6	7	8	Total
1	14.9	0.6	7.6	13.7	0.2	1.5	2.6	0.6	41.7
2	0.6	31.8	1.1	23.5	0.0	0.1	0.1	0.1	57.3
3	7.6	1.1	21.5	5.3	0.1	0.2	0.5	0.2	36.5
4	13.4	23.2	5.0	2041.4	16.4	15.6	2.7	24.1	2141.8
5	0.2	0.0	0.1	16.9	10.2	5.4	0.1	7.1	40.2
6	1.4	0.1	0.2	15.9	5.2	98.4	1.6	5.9	128.8
7	2.6	0.1	0.5	2.9	0.1	1.6	34.1	2.1	44.1
8	0.6	0.1	0.2	25.5	7.1	6.0	2.1	212.3	253.8
Total	41.4	57.0	36.2	2145.0	39.5	128.7	43.9	252.5	2744.1

Table E.4: 24-Hour Rail Demand Change Between Reference and Do Minimum, 2040

	1	2	3	4	5	6	7	8	Total
1	-7.8%	-8.6%	-7.5%	6.5%	-13.4%	-4.5%	-13.2%	8.4%	-3.1%
2	-8.9%	-5.4%	-7.8%	-9.7%	-13.9%	-11.4%	-6.0%	18.3%	-7.2%
3	-7.2%	-8.0%	-8.3%	-4.3%	-11.4%	-10.0%	-16.4%	4.4%	-7.5%
4	4.3%	-10.1%	-5.7%	-7.2%	-12.4%	4.6%	0.6%	4.1%	-7.0%
5	-15.6%	-15.6%	-12.7%	-13.0%	-10.2%	-0.5%	-20.7%	-2.8%	-8.9%
6	-5.2%	-12.5%	-10.3%	4.5%	0.2%	-7.7%	-11.6%	18.0%	-4.8%
7	-14.2%	-7.4%	-17.1%	3.4%	-19.3%	-12.2%	-11.4%	-0.3%	-10.1%
8	5.1%	15.1%	2.8%	2.5%	-1.8%	16.9%	-1.4%	-3.1%	-2.0%
Total	-3.9%	-7.4%	-7.8%	-7.0%	-8.3%	-4.8%	-10.3%	-1.8%	-6.5%

The tables indicate that there is a decrease in overall rail demand. This indicates that there is a mode shift from rail to highway between the reference and post-VDM demand and is likely to be a result of the inclusion of several significant highway improvement schemes in the forecast models.

Redistribution is also evident with rail demand due to the changes in generalised costs compared to the base scenario. Again, some of the large percentage changes are a result of small numbers of trips in the reference demand.

F. Peak Hour Uplift Factor Derivation

Table F.1: Peak Hour Uplift Factor Derivation (two-way flows)

	•		AM Peak			PM Peak
Count Site ID	Average Hour	Peak Hour	Uplift Factor	Average Hour	Peak Hour	Uplift Factor
A01	403	450	1.117	414	487	1.175
A02	215	276	1.284	199	232	1.164
A03	258	314	1.216	246	274	1.116
A04	351	389	1.108	389	447	1.150
A05	293	347	1.184	275	313	1.136
B02	1600	1908	1.193	1778	2015	1.134
B03	414	548	1.323	328	403	1.226
B04	824	938	1.138	796	931	1.170
B05	483	558	1.154	535	610	1.140
B07	1381	1676	1.214	1261	1561	1.238
C01	1177	1333	1.133	1240	1425	1.150
C04	673	788	1.171	608	721	1.187
D02	819	924	1.128	803	910	1.133
D04	394	488	1.239	397	504	1.271
D05	403	496	1.231	370	446	1.206
E01	1215	1406	1.158	1195	1347	1.127
E02	479	581	1.212	479	556	1.159
E03	1208	1344	1.113	1212	1363	1.125
SN1	234	314	1.339	234	276	1.179
SN3	546	645	1.181	493	599	1.214
TOTAL	13372	15726	1.176	13252	15420	1.164

G. Trips Generated by Local Plan Developments

Table G.1: Trips Generated by Local Plan Developments

		AM		PM
Development	AM	Departur	PM	Departur
•				es
· ·				641
Land at Whaddon	389	961	968	548
New settlement at Wisloe	270	718	449	371
South of Hardwicke	203	502	464	263
M5 Junction 13	581	119	88	500
Northwest of Stonehouse	220	298	280	258
Hunts Grove extension	127	314	290	164
Sharpness Docks	289	184	158	238
West of Draycott	74	356	221	134
Javelin Park	231	59	40	201
Land west of Renishaw New Mills	231	59	40	201
South of M5 / J12	129	33	22	111
East of River Cam	19	91	57	35
Brimscombe Port	21	61	60	34
Northwest of Berkeley	21	55	51	21
Central river / canal corridor	17	49	48	27
The New Lawn, Nailsworth	11	33	32	18
East of Tobacconist Road	11	33	32	18
Railway land / car parks, Cheapside	11	31	30	17
Land at Focus School, Wanswell	12	32	30	12
South of Wickwar Road	5	25	16	10
Police station / Magistrates court, Parliament Street	6	18	18	10
Brimscombe Hill	6	16	16	9
Northwest of Whitminster Lane	5	14	13	5
Land west of School Lane	5	13	12	7
Merrywalks Arches, Merrywalks	4	10	10	6
North Nympsfield Road	4	10	10	6
South of Leonard Stanley Primary School	3	13	8	5
Washwell Fields	3	8	8	5
Land off Dozule Close	2	8	5	3
Land adjacent to Tilsdown House	2	8	5	3
	2	4	4	2
Magpies site, Oldends Lane	1	4	4	2
				2
	South of Hardwicke M5 Junction 13 Northwest of Stonehouse Hunts Grove extension Sharpness Docks West of Draycott Javelin Park Land west of Renishaw New Mills South of M5 / J12 East of River Cam Brimscombe Port Northwest of Berkeley Central river / canal corridor The New Lawn, Nailsworth East of Tobacconist Road Railway land / car parks, Cheapside Land at Focus School, Wanswell South of Wickwar Road Police station / Magistrates court, Parliament Street Brimscombe Hill Northwest of Whitminster Lane Land west of School Lane Merrywalks Arches, Merrywalks North Nympsfield Road South of Leonard Stanley Primary School Washwell Fields Land off Dozule Close Land adjacent to Tilsdown House Land west of Upton's Gardens	DevelopmentArrivalsNew settlement at Sharpness684Land at Whaddon389New settlement at Wisloe270South of Hardwicke203M5 Junction 13581Northwest of Stonehouse220Hunts Grove extension127Sharpness Docks289West of Draycott74Javelin Park231Land west of Renishaw New Mills231South of M5 / J12129East of River Cam19Brimscombe Port21Northwest of Berkeley21Central river / canal corridor17The New Lawn, Nailsworth11East of Tobacconist Road11Railway land / car parks, Cheapside11Land at Focus School, Wanswell12South of Wickwar Road5Police station / Magistrates court, Parliament Street6Brimscombe Hill6Northwest of Whitminster Lane5Land west of School Lane5Merrywalks Arches, Merrywalks4North Nympsfield Road4South of Leonard Stanley Primary School3Washwell Fields3Land off Dozule Close2Land west of Upton's Gardens2Land west of Upton's Gardens2Magpies site, Oldends Lane1	Development AM Arrivals Departur es New settlement at Sharpness 684 966 Land at Whaddon 389 961 New settlement at Wisloe 270 718 South of Hardwicke 203 502 M5 Junction 13 581 119 Northwest of Stonehouse 220 298 Hunts Grove extension 127 314 Sharpness Docks 289 184 West of Draycott 74 356 Javelin Park 231 59 Land west of Renishaw New Mills 231 59 South of M5 / J12 129 33 East of River Cam 19 91 Brimscombe Port 21 61 Northwest of Berkeley 21 55 Central river / canal corridor 17 49 The New Lawn, Nailsworth 11 33 East of Tobacconist Road 11 31 Railway land / car parks, Cheapside 11 31 Land at Focus School, Wanswell	Development Am Arrivals Departur es PM Arrivals New settlement at Sharpness 684 966 962 Land at Whaddon 389 961 968 New settlement at Wisloe 270 718 449 South of Hardwicke 203 502 464 M5 Junction 13 581 1119 88 Northwest of Stonehouse 220 298 280 Hunts Grove extension 127 314 290 Sharpness Docks 289 184 158 West of Draycott 74 356 221 Javelin Park 231 59 40 Land west of Renishaw New Mills 231 59 40 South of M5 / J12 129 33 22 East of River Carm 19 91 57 Brimscombe Port 21 61 60 Northwest of Berkeley 21 55 51 Central river / canal corridor 17 49 48

H. Local Plan Trip Distribution

Table H.1: Local Plan Residential Distribution

Employment STS Area

Residential STS Area / Local Plan Development	Stroud Valleys	Stonehouse	Gloucester Fringe	Berkeley	Cam & Dursley	Wotton- under- Edge	Stroud- Gloucester Rural 1	Stroud- Gloucester Rural 2	Cotswold North	Cotswold Central	Cotswold South	Gloucester	City of Bristol	Cheltenham	Swindon	South Glos.	North Somerset	South West	South East	Midlands / North (Via M5)	North West	Wales
Stroud Valleys	43%	8%	2%	1%	2%	1%	2%	1%	0%	8%	2%	8%	2%	4%	2%	3%	0%	2%	3%	5%	0%	1%
Stonehouse North/Northwest of Stonehouse	22%	34%	2%	1%	4%	1%	3%	1%	0%	3%	1%	10%	2%	3%	1%	2%	0%	1%	2%	6%	0%	1%
Stonehouse M5 Junction 13	23%	29%	2%	1%	4%	1%	5%	1%	0%	4%	1%	10%	2%	3%	1%	3%	0%	1%	2%	6%	0%	1%
Stonehouse Other	23%	29%	2%	1%	4%	1%	5%	1%	0%	4%	1%	10%	2%	3%	1%	3%	0%	1%	2%	6%	0%	1%
Gloucester Fringe Hunts Grove	4%	4%	15%	0%	1%	0%	2%	1%	0%	2%	0%	41%	1%	7%	1%	2%	0%	1%	1%	14%	0%	1%
Gloucester Fringe South of Hardwicke	4%	4%	15%	0%	1%	0%	2%	1%	0%	2%	0%	41%	1%	7%	1%	2%	0%	1%	1%	14%	0%	1%
Gloucester Fringe Land at Whaddon	4%	3%	17%	0%	1%	0%	1%	1%	0%	2%	0%	41%	1%	7%	1%	2%	0%	1%	1%	14%	0%	1%
Gloucester Fringe Other	4%	4%	13%	0%	1%	0%	2%	2%	0%	2%	0%	41%	1%	7%	1%	2%	0%	1%	1%	14%	0%	2%
Berkeley South/East of Newtown & Sharpness	6%	3%	5%	23%	8%	3%	3%	1%	0%	2%	1%	9%	9%	2%	0%	20%	1%	1%	1%	2%	0%	1%
Berkeley Other	6%	3%	2%	23%	6%	4%	3%	1%	0%	2%	1%	6%	8%	2%	0%	23%	1%	2%	2%	4%	0%	2%
Cam & Dursley Land at Wisloe	12%	8%	5%	5%	20%	3%	4%	1%	0%	2%	1%	10%	10%	2%	0%	10%	1%	2%	0%	3%	0%	1%
Cam & Dursley West of Draycott	14%	8%	2%	5%	24%	4%	4%	1%	0%	2%	2%	8%	4%	3%	1%	10%	1%	2%	2%	4%	0%	1%
Cam & Dursley Other	14%	8%	2%	5%	24%	4%	3%	1%	0%	2%	2%	8%	4%	3%	1%	10%	1%	2%	2%	4%	0%	1%

Table H.2: Local Plan Employment Distribution

Residential STS Area

										rtoora	ontial OTO /	ii ou										
Employment STS Area / Local Plan Development	Stroud Valleys	Stonehouse	Gloucester Fringe	Berkeley	Cam & Dursley	Wotton- under- Edge	Stroud- Gloucester Rural 1	Stroud- Gloucester Rural 2	Cotswold North	Cotswold Central	Cotswold South	Gloucester	City of Bristol	Cheltenham	Swindon	South Glos.	North Somerset	South West	South East	Midlands / North (Via M5)	North West	Wales
Stroud Valleys	54%	5%	3%	1%	8%	1%	2%	1%	0%	5%	2%	6%	1%	3%	0%	2%	0%	1%	1%	3%	0%	1%
Stonehouse North/Northwest of Stonehouse	23%	14%	6%	1%	10%	1%	3%	3%	0%	2%	1%	15%	2%	6%	0%	2%	0%	1%	1%	6%	0%	3%
Stonehouse																						
M5 Junction 13	23%	15%	7%	1%	9%	1%	1%	2%	0%	1%	0%	16%	3%	6%	0%	3%	0%	2%	0%	7%	0%	2%
Stonehouse																						
Other	23%	14%	6%	1%	10%	1%	3%	3%	0%	2%	1%	15%	2%	6%	0%	2%	0%	1%	1%	6%	0%	3%
Gloucester Fringe Hunts Grove	5%	1%	18%	1%	2%	0%	1%	4%	0%	2%	0%	33%	1%	8%	0%	1%	0%	1%	1%	13%	0%	6%
Gloucester Fringe South of Hardwicke	5%	1%	18%	1%	2%	0%	1%	4%	0%	2%	0%	33%	1%	8%	0%	1%	0%	1%	1%	13%	0%	6%
Gloucester Fringe Land at Whaddon	5%	1%	18%	1%	2%	0%	1%	4%	0%	2%	0%	33%	1%	8%	0%	1%	0%	1%	1%	13%	0%	6%
Gloucester Fringe Other	5%	1%	18%	1%	2%	0%	1%	4%	0%	2%	0%	33%	1%	8%	0%	1%	0%	1%	1%	13%	0%	6%
Berkeley South/East of Newtown & Sharpness	4%	3%	6%	26%	19%	3%	3%	1%	0%	1%	0%	5%	5%	1%	0%	15%	0%	2%	1%	3%	0%	2%
Berkeley																						
Other	5%	1%	2%	26%	19%	4%	3%	1%	0%	1%	0%	5%	4%	1%	0%	13%	2%	4%	2%	4%	0%	2%
Cam & Dursley Land at Wisloe	5%	4%	8%	10%	30%	3%	3%	1%	0%	1%	0%	6%	5%	1%	0%	16%	0%	2%	1%	3%	0%	1%
Cam & Dursley West of Draycott	12%	3%	2%	4%	50%	4%	3%	1%	0%	1%	1%	4%	1%	2%	0%	4%	0%	1%	1%	2%	0%	1%
Cam & Dursley Other	12%	3%	2%	4%	50%	4%	3%	1%	0%	1%	1%	4%	1%	2%	0%	4%	0%	1%	1%	2%	0%	1%

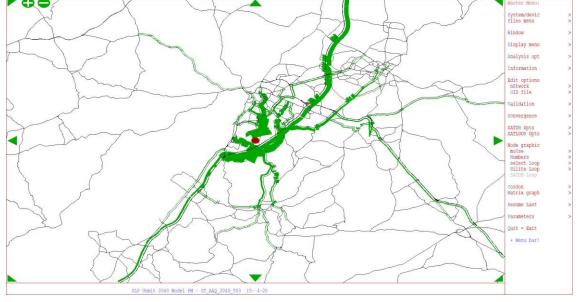
Local Plan Trip Distribution Plots

The following plots show the distribution of traffic departing and arriving at the major Local Plan proposed developments. Flows shown are demand flows.

Window Display men Analysis opt Edit options nEtwork GIS file Validation Node graphic Resume Last Quit = Exit

Figure I.1: Land at Whaddon (G2) (residential) - AM Departures

Figure I.2: Land at Whaddon (G2) (residential) - PM Arrivals



The differences in traffic distribution between arrivals and departures reflect the fact that access to/from the Whaddon site via J12 is much easier for inbound trips than it is for outbound trips. Outbound trips would need to turn right onto the B4008 and then negotiate both sides of J12,

whereas inbound trips have simpler left turns (most of which are unopposed) to make towards the Whaddon site.

Figure I.3: New settlement at Sharpness (PS36) & Sharpness Docks (PS34) (mixed use) – AM Arrivals

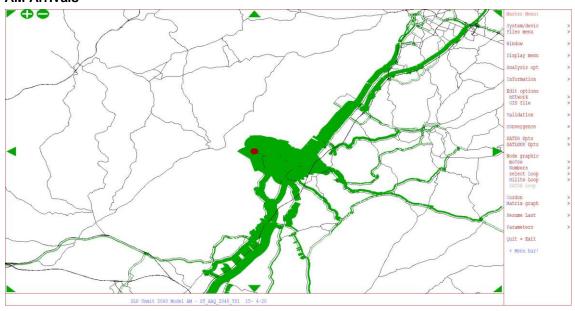
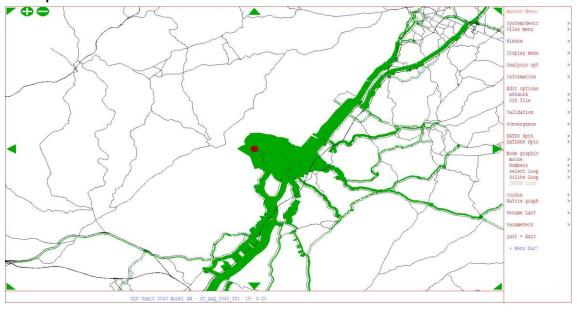


Figure I.4: New settlement at Sharpness (PS36) & Sharpness Docks (PS34) (mixed use) – PM Departures



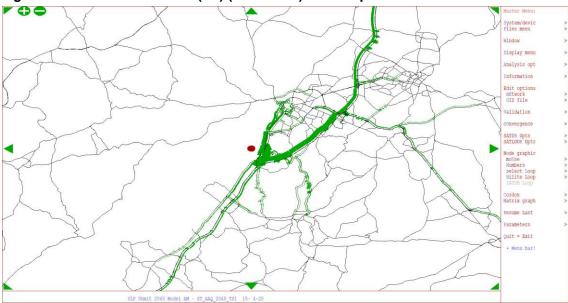
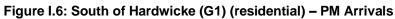
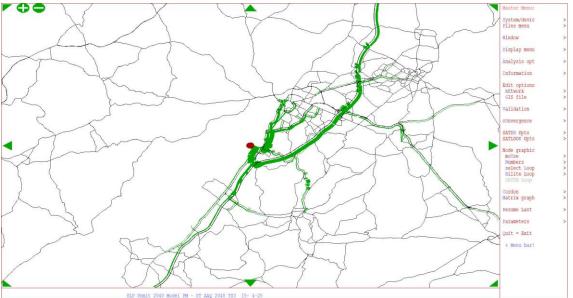


Figure I.5: South of Hardwicke (G1) (residential) - AM Departures





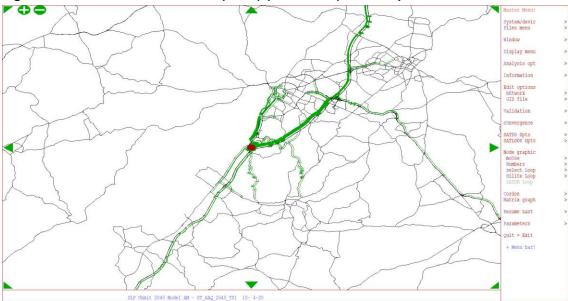
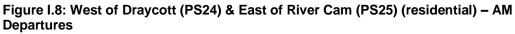
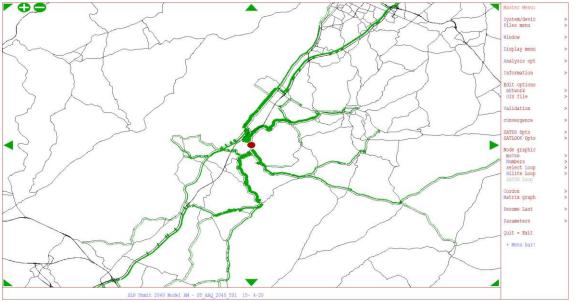


Figure I.7: Hunts Grove Extension (PS30) (residential) – AM Departures





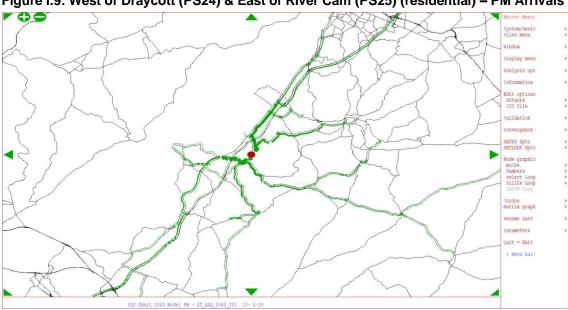
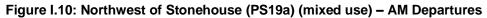
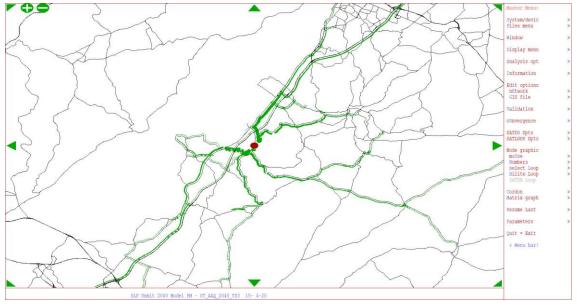


Figure I.9: West of Draycott (PS24) & East of River Cam (PS25) (residential) - PM Arrivals





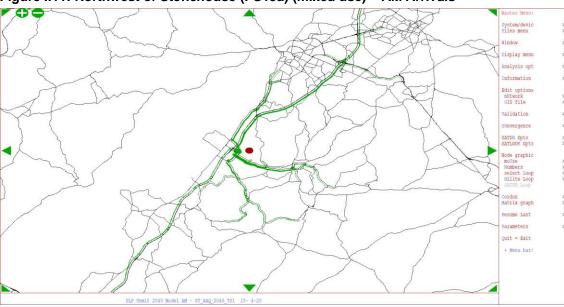
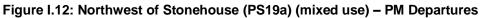
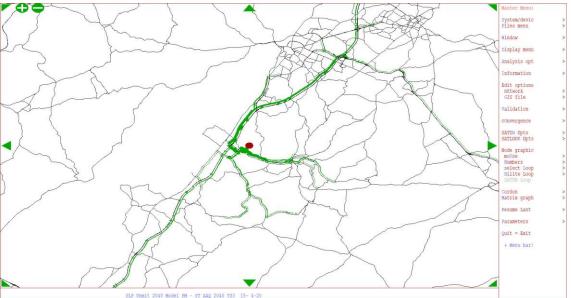


Figure I.11: Northwest of Stonehouse (PS19a) (mixed use) - AM Arrivals





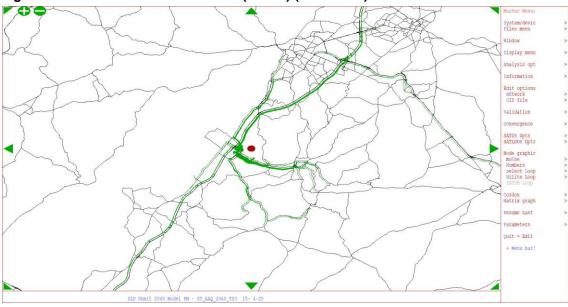
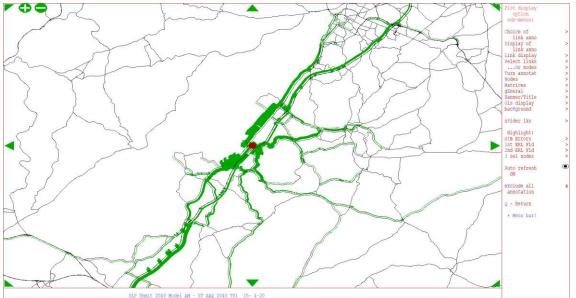


Figure I.13: Northwest of Stonehouse (PS19a) (mixed use) - PM Arrivals





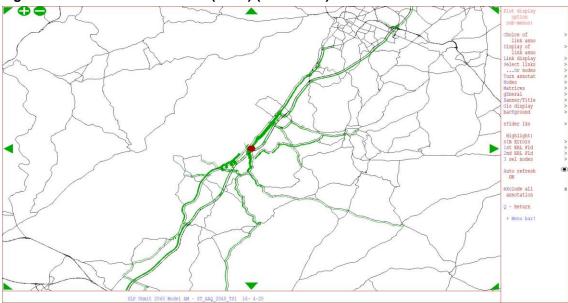
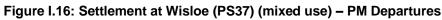
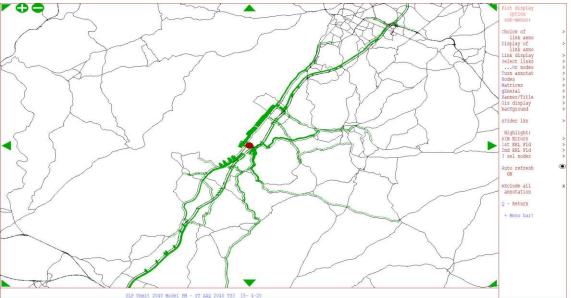


Figure I.15: Settlement at Wisloe (PS37) (mixed use) – AM Arrivals





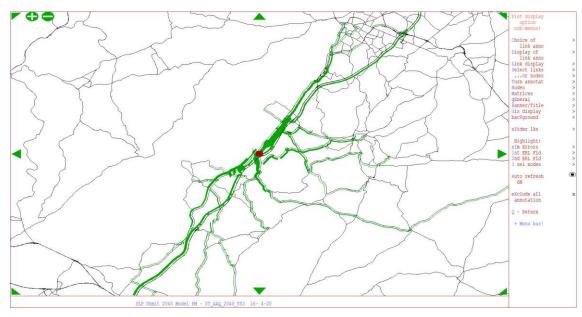
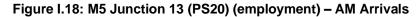
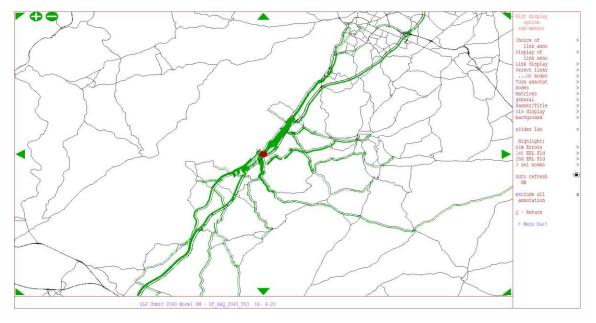


Figure I.17: Settlement at Wisloe (PS37) (mixed use) - PM Arrivals





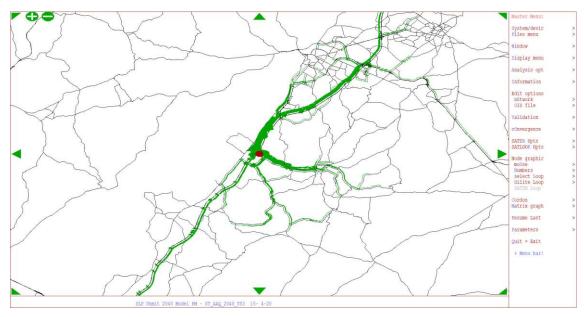


Figure I.19: M5 Junction 13 (PS20) (employment) - PM Departures

Figure I.20: South of M5 Junction 12 (PS32) & Javelin Park (PS43) (employment) – AM Arrivals

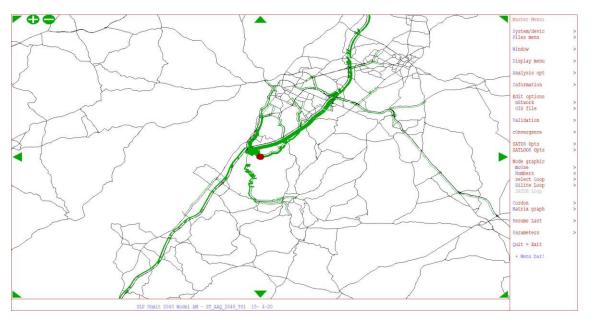


Figure I.21: South of M5 Junction 12 (PS32) & Javelin Park (PS43) (employment) – PM Departures

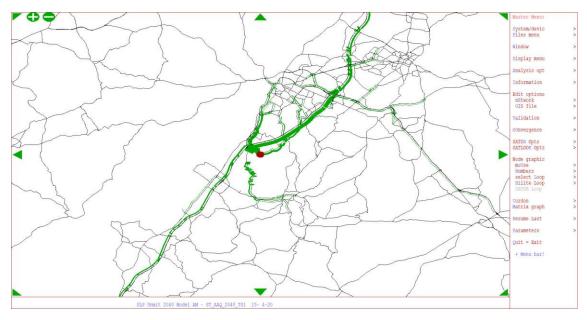
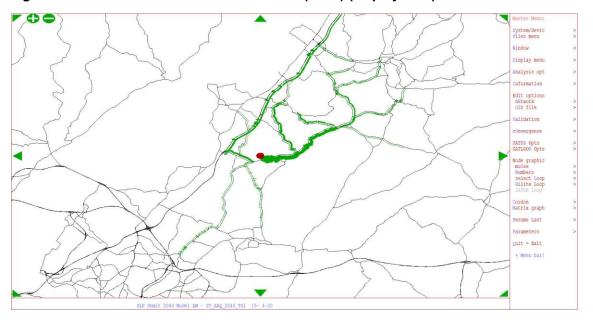


Figure I.22: Land West of Renishaw New Mills (PS47) (employment) - AM Arrivals



Restor Benns

Option Among The Community of the Community

Figure I.23: Land West of Renishaw New Mills (PS47) (employment) – PM Departures

J. Trip Growth Factors by Purpose

Table J.1: Trip Growth Factors (Car EB)

Trip End Type	NTEM	Do Minimum	Unmitigated Local Plan
AM Origins	1.18	1.21	1.30
AM Destinations	1.17	1.16	1.24
PM Origins	1.16	1.15	1.22
PM Destinations	1.17	1.16	1.23

Table J.2: Trip Growth Factors (Car Commute)

Trip End Type	NTEM	Do Minimum	Unmitigated Local Plan
AM Origins	1.14	1.15	1.22
AM Destinations	1.14	1.13	1.19
PM Origins	1.12	1.13	1.19
PM Destinations	1.13	1.15	1.22

Table J.3: Trip Growth Factors (Car Other)

Trip End Type	NTEM	Do Minimum	Unmitigated Local Plan
AM Origins	1.22	1.22	1.31
AM Destinations	1.22	1.20	1.29
PM Origins	1.20	1.22	1.29
PM Destinations	1.20	1.22	1.29

K. Sustainable Transport Strategy Framework

,	Ref.	•	Scale of Cost			opment			Background		
		Interventions	(1-Lowest to 5- Highest)	Trip Type		luction in car trips	Notes	Trip Type	Percentage red	duction in car trips	s Notes
					Min. (For Modelling)	Max. (Target, where different)			Min. (For Modelling)	Max. (Target)	
Strategic Sites											
All Strategic Sites	A	Travel Planning, internalisation, reducing the need to travel and facilitating home working. The combination of these measures will differ between sites, with each site expected to demonstrate how they will achieve a blanket mode shift/traffic reduction in addition to targeted measures as below.		All Development Trips	6%		To be applied to trip matrices before the targetted measures set out below.				Some measures will benefit surrounding residential areas such as reducing distances to facilities could increase propensity for active travel. However no reduction has been applied to background trips.
Land at Whaddon - 2,500 dwellings (Gloucester Fringe)	1	Provision of a multi-modal transport hub adjacent to the A4173 to allow interchange between sustainable modes		Trips to/from Gloucester City Centre. E.g. 2km from westgate st.	15% n		for sustainable travel into Gloucester	Trips past Whaddon towards Gloucester (A4173)	5%	~I	This would be reliant on disincentive for driving in Gloucester
	2	Local Measures: Modal filter on Naas Lane, pedestrian/cycle connection improvements, bus route through site.		Local trips to/from Waterwells area.	10%.		Priority for sustainable modes over car trips for local journeys.				Whilst there may be some local benefits it is not considered robust to apply background trip reductions.
South of Hardwicke - 1,200 dwellings Gloucester Fringe)	3	Contributions to sustainable transport measures on the A38 corridor, incuding improvements to strategic bus services		Trips to/from Gloucester city centre, and to/from destinations along the A38 and A419 within Stroud District. Include buffer 800m and city centre definition.	5%/10%		Higher % reduction in trips to/from Gloucester than south on A38. 10% reduction to Gloucester City Centre, 5% on trips elsewhere				See corridor package - not stated here to avoid double counting
Eco Park M5 Junction 13 - 10ha (Stonehouse Cluster)		Contributions and support to sustainable transport measures on the A38 and A419 sustainable transport corridors		Included in "bus services" below	Included below		Included below.				See corridor package - not stated here to avoid double counting
	5	Dedicated shuttle bus service between site and Cam and Dursley and Stonehouse rail stations		Trips to/from Gloucester, Cheltenham, Bristol, Yate and Swindon. 2km buffer from rail stations.	5%		Mode shift from car to rail for longer distance trips. 5% applied due to number of interchanges	None			Minimal potential to pick up background trips
	6	Improvements to bus services to connect the site with Stonehouse, Stroud, Gloucester and other destinations			10%, with 5% for agreed partial zones ("Yellow")		Mode shift from car to sustainable modes on these corridors.				See corridor package - not stated here to avoid double counting
		Measures need to be accompanied with robust approach to parking management which limits access to parking for those who do not "need" to drive.									
Stonehouse North West (Standish within Stonehouse Cluster) -		Contributions and support to sustainable transport measures on the A38 and A419 sustainable transport corridors		Included below							See corridor package - not stated here to avoid double counting
550 dwellings	8	Contributions to enhanced bus service frequencies to key destinations including Stroud, Stonehouse, Gloucester, and Cam and Dursley Station		Trips to/from Stonehouse, Stroud and Gloucester, and intermediary locations along the A38 and A419	"Yellow" zones.		Slightly lower than other corridor sites due to distance from the corridor and split of provision between LWoS spine road and A419.				See corridor package - not stated here to avoid double counting

New settlement at Wisloe, Slimbridge - 1,500 dwellings & 5ha (Berkley cluster)	9	Contributions and support to public transport measures on the A38, potentially including diversion into the site.	2	Trips along the A38 including to/from Gloucester City Centre	10%		Intended to support high frequency express services				See corridor package - not stated here to avoid double counting
	10	Pedestrian/cycle connections to Cam and Dursely station	3	Trips to/from Gloucester, Cheltenham, Bristol, Yate. 2km buffer from rail stations.	10%.	20%	Supports access to Rail for longer distance trips. Max target would depend on significant improvement to provision.	Cambridge/Slimb			Likely to benefit a relatively low number of trips due to sparsely populated origin
Cam North West - 700	11	Sustainable 'spine' through Wisloe - Cam - Dursley i.e. A4135 corridor measures Contributions and support to sustainable	2	Local Trips to/from Cam and Dursley Trips along the A38	10%, 5% for "Yellow" zones.		Opportunity to capture local leisure/employment trips Intended to support high				
dwellings (Cam & Dursley cluster)		transport measures on the A38, notably bus services		including to/from Gloucester City Centre	"yellow" zones		frequency express services. Less %reduction than Wisloe due to distance from A38				
	13	Contributions towards A4135 corridor measures	2	Local Trips to/from Cam and Dursley	10%		Opportunity to capture local leisure/employment trips				
New settlement at Sharpness - 2,400 dwellings & 10ha (Berkley Cluster)	14	Direct public transport services to key destinations, including Bristol, Gloucester and employment nodes	3	Trips to/from central bristol, central gloucester	20%		Service would need to be established early and be direct. This would need to be an exemplary service and the modelled value incorporates potential for the rail service to be delivered.	Sharpness and Bristol /	15%	20%	Lower proportion as trip patterns established and home locations further from central pick up point.
	15	Potential re-opening of the Sharpness railway branchline for passenger services (including to Gloucester)	5	Trips to/from central gloucester	Not to be included in model - feasibility		NB this would supersede the direct public transport services measure above.	Sharpness and Gloucester	Not to be included in model -		Lower proportion as trip patterns established and home locations further from central pick up point.
	16			Trips to/from Bristol, Stroud, Cheltenham, and longer distance cities	Not to be included in model - feasibility		Creates direct access to longer distance rail services, likely with a	Trips to/from Bristol, Stroud, Cheltenham, and	Not to be included in model -	20%	Lower proportion as trip patterns established and home locations further from central pick up point.
	17	Cycle route to Stroud from Sharpness development	3	trips to/from Stroud and intermediary destinations e.g. Stonehouse	0%	5%	Distance is likely to be a barrier, although ebikes have the potential to be an enabler	Trips between Stroud and Sharpness	0%	5%	Distance is likely to be a barrier, although ebikes have the potential to be an enabler

Movement Corridors								
438		Modal filters	4					
		Rapid bus / coach services to key	3					
		destinations such as Bristol						
		Improved bus frequency, bus stop	3					
		infrastructure and bus priority						
		Northern MetroBus extension	5					
	18	Low Investment	2			Trips using A38	5%	
	19	Medium Investment	3			Trips using A38	10%	
	20	High Investment	4			Trips using A38	15%	Model 15% to reflect High investment
								scenario and potential interchange with
								other corridors.
A419 / B4008		Cycle access improvements between	2			Trips between		
		Eastington and Chalford				Eastington and		
						Chalford using		
						A419		
		Cycle access improvements to NCR 45,	2			Trips to Stroud		
		Stroud				(and Nailsworth)		
		1				using A419 and		
						A46		
		Cycle access improvements for Cainscross	2			Trips through		
		roundabout, Stroud				Cainscross		
						Roundabout		
		Improved provision for pedestrians and	2			Trips using Ebley		
		cyclists on the A419 Ebley Rd corridor				Road (through		
						Ebley)		
		Improved bus frequency on A419 / B4008	3			Trips between		
		between Stroud, Stonehouse and				Stroud,		
		Gloucester (and, where appropriate, bus				Stonehouse and		
		stop improvements and bus priority)				Gloucester (using		
						A419 and B4008)		
	21	Low Investment	2			Trips using A419	5%	
	22	Medium Investment	3			Trips using A419	10%	
	23	High Investment	4			Trips using A419	15%	Model 15% to reflect High investment
								scenario and potential interchange with
								other corridors.
A4135		Completion of Cam - Dursley - Uley	2			Trips between		
		Greenway				Cam, Dursley and		
						Uley uisng A4135		
		Removing pedestrian and cycle pinchpoints	2			Trips on A4135		
		along full-length of corridor						
		Increase in bus frequency and improved	3			Trips on A4135		
		stop infrastructure, including improved				between Cam,		
		connections to Cam and Dursley railway				Dursley and		
		station				Railway Station		
		Bus priority measures along the corridor	3			Trips on A4135		
		1				between Cam,		
		1				Dursley and		
		l			<u> </u>	Railway Station		 <u> </u>
		Multi-modal interchange facilities at the A38	3			Trips on A38 and		
		and Cam and Dursley Station				towards Cam and		
		1				Dursley Railway		
		1				Station		
	24	Low Investment	2			Trips using	5%	
	25	Medium Investment	3			Trips using	10%	
						A4135		
	26	High Investment	4			Trips using	15%	Model 15% to reflect High investment
		3				A4135	.370	scenario and potential interchange with
								other corridors.
	Ī							outor contracto.

Stroud / Stonehouse - Bristol.	27	Improved public transport services between Stroud, Stonehouse and Cam and Dursley Station	3					Trips between Stroud/Stonehous e and Bristol, Gloucester, Yate and Cam and Dursley	5%		2 stage journey with bus and rail. This option has been modelled in STS Scenario
	28	Express bus services between Stroud and Bristol (with a potential interchange in the vicinity of M5 Junction 13)	3					Trips between Stroud/Stonehous e and Bristol	10%		No interchange but limited catchment
	29	New rail station south of Stonehouse on the Bristol to Birmingham line (note: a number of options are being considered as part of a wider aspiration to provide such a station between Bristol and Gloucester	5					Trips between Stroud/Stonehous e and destinations on Bristol to Birmingham line including Bristol, Cheltenham	10%		Potential to include destinations further afield, e.g. Exeter and Manchester, but likely to be limited numbers
Towns									•		
Stroud	30	Improvements to Stroud station, including potential for an integrated transport hub	4					Trips to / from Stroud to existing rail destinations e.g. Swindon, Gloucester, Reading, London	5%		Improved access to rail.
	31	Walking and cycling improvements in Stroud Town Centre	3					Local trips in Stroud	5%		Mode shift for local trips
Cam and Dursley	32	M5 pedestrian / cycle overbridge to Cam and Dursley Station	4				Included in Measures above	Trips to / from Cam and Dursley Station			Included in A4135 corridor measures
	33	Extension and improvement to Cam and Dursley greenway	2				Included in Measures above	Trips between Cam, Dursley and Uley uisng A4135			Included in A4135 corridor measures
	34	Improved walking and cycling links connecting with Cam and Uley	2				Included in Measures above	Trips between Cam and Uley			Included in A4135 corridor measures
General											
		Policy Interventions Package	2	All Development	0%		In addition to measures above	Trips within Stroud DC		0%	Limited potential to influence existing trips
	36	Mobility Behaviours	2	All Development	0%	2%	In addition to measures above	Trips within Stroud DC		1%	
	37	Public Transport packages, e.g. RTI, smart ticketing	3	All Development	0%	1%	In addition to measures above	Inter and intra- urban trips within Stroud and to/from Bristol/Gloucester		1%	
	38	Rail service improvements	4					Long distance trips		1%	
	39	Cycle access improvements to Gloucester & Sharpness Canal towpath, Gloucester	2				arguably could be	Trips between Sharpness and Gloucester (including destinations along the canal route)		2%	

Additional Notes

Trip rates used for each development have accounted for internalisation due to complementary land uses and sustainability benefits relating to location.

No additional reductions are proposed for "standard" measures such as Travel Planning and masterplans laid out to encourage sustainable travel.

This is not an exhaustive list of measures included in the STS but is designed as an exercise to reasonably identify the potential for mode shift to occur as a result of key measures or packages of measures.

This framework has been developed iteratively and been compared against the actual numbers of trips that these would relate to, through the SATURN exercise.

Measures need to be considered in combination with disincentive for driving, e.g. parking charges, congestion, parking availability etc

Two rates of percentage reduction have been defined. The minimum reduction represents a robust assumption and should be used for modelling purposes. The maximum reduction represents the potential mode shift that could be achieved by an intervention and can be considered a target if implemented.

Percentage reductions have been agreed with MM, SDC, HE, &GCC.

Trip types have been defined with reference to Mott MacDonalds SATURN model zones.

