Stroud Local Plan Review

Strategy Options

Transport Discussion Paper

Appendices

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APPENDIX A

Strategic Transport Assessment Trip Rate Assumptions

Trip rates calculated using TRICS on the 16th July 2018 – full TRICS can be provided upon request.

Residential for mixed private/affordable housing development

- Sites have been limited to those within 1 mile of a population up to 15,000 and within 5 miles of a population up to 100,000. All the sites used have Travel Plans.
- The cross testing for the am peak period (8:00 to 9:00) was 3.3% and for the pm peak period (17:00 to 18:00) was 0.7%.
- The vehicle trip rates are 0.561 per dwelling between 8:00 and 9:00 and 0.609 per dwelling between 17:00 and 18:00. All of the sites used have very poor public transport provision though.

Employment for Business Park rates

- Sites have been limited to those within 1 mile the population is up to 15,000 and within 5 miles the population is up to 75,000. No travel plans.
- The cross testing for the am peak period (8:00 to 9:00) was 13.8% and for the pm peak period (17:00 to 18:00) was 2.3%.
- This does give us higher trip rates of 1.244 per 100sq.m. for the morning peak and 1.404 per 100 sq.m. for the afternoon peak.
- Using Business Park rates does remove the need to assume a split between B1, B2 and B8 and does result in a higher rate. If planning apps come in with a different land use class, there is the option for the trip rates to be refined at that time.
- For the purposes of this assessment proportion of GFA used for employment purposes is 60% of the GFA allocated.

Strategic Transport Assessment - other sources of data

The following data sources were accessed during the week of the 5th March 2018:

Gloucestershire County Council's Local Transport Plan

 $\underline{\text{https://www.gloucestershire.gov.uk/transport/gloucestershires-local-transport-plan-2015-2031/}$

Stroud District's Highway Capacity Assessment

https://www.stroud.gov.uk/media/2313/ps e22.pdf

Gloucester, Cheltenham & Tewkesbury's Joint Core Strategy Transport Evidence Base -

https://drive.google.com/file/d/0BwVPoSbUL_uXcnZlWnpFUkR5ODg/view

https://drive.google.com/file/d/0BwVPoSbUL_uXc0hyVXNxQnhXYU0/view

Gloucestershire County Council's Think Travel website

Bus - http://www.easytraveling.org.uk/gcc/map.php

Rail - https://www.thinktravel.info/public-transport/rail/

Stroud Valleys Cycle Campaign - Stroud District Cycling Map

2011 Census – MSOA look up table

Site ID	Cluster areas	Sites	Nearest Census MSOA areas	Number of work related trips
1a	Gloucester Fringe	Hardwicke	Gloucester 14 & 15	8,692
1b	Gloucester Fringe	Hardwicke	Gloucester 14 & 15	8,692
1c	Gloucester Fringe	Brockworth, Brookthorpe, Haresfield	Stroud 1	3,380
2a	Cotswold Cluster	Bisley, Oakridge Lynch, Painswick, Cranham, Sheepcombe	Stroud 2	1,877
3a	Stonehouse Cluster	Stonehouse	Stroud 4, 5 & 9	10,340
3b	Stonehouse Cluster	Stonehouse	Stroud 4, 5 & 9	10,340
3c	Stonehouse Cluster	Large sites within settlement, Alkerton, Kings Stanley, Leonard Stanley, Standish, Middleyard, Selsley	tlement, Alkerton, Kings Stanley, Stroud 4, 5 & 9 10,340	
4a	Severn Vale	Large sites within settlement, Frampton, Whitminster, Arlingham, Longney, Saul	Stroud 3	2,554
5a	Stroud Valleys	Stroud, Minchinhampton, Nailsworth, Brimscombe, Chalford, Horsley, Manor Village, Woodchester, Thrupp & Tier 4/5 locations	Stroud 6, 7, 8, 10, 13	14,402
6a	Berkeley Cluster	Newtown & Sharpness	Stroud 12	2,446
6b	Berkeley Cluster	Newtown & Sharpness	Stroud 12	2,446
6c	Berkeley Cluster	Berkeley, Slimbridge, Cambridge, newport, Stone	Stroud 12	2,446
7a	Cam and Dursley	Cam	Stroud 11 & 14	6,058
7b	Cam and Dursley	Cam	Stroud 11 & 14	6,058
7c	Cam and Dursley	Cam, Dursley, Nympsfield, Stinchcombe	Stroud 11 & 14	6,058
8a	Wotton Cluster	Wotton under Edge, Kingswood, North Nibley, Hillesley	Stroud 15	3,307

2011 Census – Travel to work data by mode

Refer to MSOA for details on each site

Site ID	Cluster areas	Sites	Driving Car or Van (driving or passenger)	Bus	Train	Walk	Cycle	Other
1a & 1b	Gloucester Fringe	Hardwicke	80%	7%	0%	7%	4%	2%
1c	Gloucester Fringe	Brockworth, Brookthorpe, Haresfield	85%	5%	1%	5%	3%	1%
2a	Cotswold	Bisley, Oakridge Lynch, Painswick, Cranham, Sheepcombe	87%	2%	2%	5%	2%	2%
3a & 3b	Stonehouse	Stonehouse	79%	3%	1%	11%	4%	2%
3c	Stonehouse	Large sites within settlement, Alkerton, Kings Stanley, Leonard Stanley, Standish, Middleyard, Selsley	79%	3%	1%	11%	4%	2%
4a	Severn Vale	Large sites within settlement, Frampton, Whitminster, Arlingham, Longney, Saul	88%	1%	1%	5%	3%	1%
5a	Stroud Valleys	Stroud, Minchinhampton, Nailsworth, Brimscombe, Chalford, Horsley, Manor Village, Woodchester, Thrupp & Tier 4/5 locations	80%	3%	2%	11%	2%	1%
6a	Berkeley	Newtown & Sharpness	88%	1%	1%	7%	2%	2%
6b	Berkeley	Newtown & Sharpness	88%	1%	1%	7%	2%	2%
6c	Berkeley	Berkeley, Slimbridge, Cambridge, newport, Stone	88%	1%	1%	7%	2%	2%
7a	Cam and Dursley	Cam	82%	2%	2%	11%	2%	2%
7b	Cam and Dursley	ley Cam		2%	2%	11%	2%	2%
7c	Cam and Dursley	Cam, Dursley, Nympsfield, Stinchcombe	82%	2%	2%	11%	2%	2%
8a	Wotton			1%	1%	11%	2%	1%

2011 Census – Workplace location for resident population

Refer to MSOA for details on each site

			Inter	nal trips					Exte	rnal tri	ps from	Glouce	stersh	ire	
Site ID	Cluster areas	Sites	Cheltenham	Cotswold	Forest of Dean	Gloucester	Stroud	Tewkesbury	London	South East	West of England	Swindon	South West	Wales	West Midlands
1a & 1b	Gloucester Fringe	South of Hardwicke (G1 & G4)	8%	2%	2%	56%	20%	2%	1%	1%	6%	1%	1%	0%	2%
1c	Gloucester Fringe	Gloucester Fringe cluster (smaller sites)	9%	2%	1%	41%	23%	12%	1%	1%	5%	1%	1%	0%	2%
2a	Cotswold	Cotswold Cluster (smaller sites	11%	7%	0%	16%	42%	5%	4%	3%	5%	1%	1%	0%	2%
3a & 3b	Stonehouse	North/Northwest Stonehouse B1/B2	4%	4%	1%	11%	65%	4%	1%	1%	6%	1%	1%	0%	1%
3c	Stonehouse	Stonehouse Cluster (smaller sites)	4%	4%	1%	11%	65%	4%	1%	1%	6%	1%	1%	0%	1%
4a	Severn Vale	Severn Vale Cluster (small sites)	6%	3%	1%	17%	52%	4%	1%	1%	11%	1%	1%	0%	2%
5a	Stroud Valleys	Stroud Valleys Cluster (smaller sites)	5%	9%	0%	9%	59%	3%	2%	2%	6%	2%	2%	0%	1%
6a	Berkeley	Berkeley Cluster (smaller sites)	2%	2%	2%	8%	47%	3%	1%	1%	33%	0%	1%	1%	1%
6b	Berkeley	Land south of Sharpness (A1-5)	2%	2%	2%	8%	47%	3%	1%	1%	33%	0%	1%	1%	1%
6c	Berkeley	Land at Cam/Cambridge	2%	2%	2%	8%	47%	3%	1%	1%	33%	0%	1%	1%	1%
7a	Cam & Dursley	North west Cam(A/B)	2%	3%	1%	9%	58%	3%	1%	1%	18%	1%	1%	0%	1%
7b	Cam & Dursley	North east Cam (C/D/E)	2%	3%	1%	9%	58%	3%	1%	1%	18%	1%	1%	0%	1%
7c	Cam & Dursley	Cam & Dursley Cluster (smaller sites)	2%	3%	1%	9%	58%	3%	1%	1%	18%	1%	1%	0%	1%
8a	Wotton	Wotton Cluster (smaller sites)	2%	4%	0%	4%	44%	2%	1%	1%	38%	1%	2%	1%	1%

APPENDIX B

Site Assessments Tables

Site ID	Cluster areas	Settlements	
			Sites
1a	Gloucester Fringe	Hardwicke	One or two A sites South of Hardwicke (G1)
1b	Gloucester Fringe	Hardwicke	South of M5/J12 (G4)
1c	Gloucester Fringe	Brockworth, Brookthorpe, Haresfield	Merged sites for strategic TA
2a	Cotswold Cluster	Bisley, Oakridge Lynch, Painswick, Cranham, Sheepcombe	Merged sites for strategic TA
3a	Stonehouse Cluster	Stonehouse	North Stonehouse B1
3b	Stonehouse Cluster	Stonehouse	M5 J13 (D1/D2)
3с	Stonehouse Cluster	Large sites within settlement, Alkerton, Kings Stanley, Leonard Stanley, Standish, Middleyard, Selsley	Merged sites for strategic TA
4a	Severn Vale	Large sites within settlement, Frampton, Whitminster, Arlingham, Longney, Saul	Merged sites for strategic TA
5a	Stroud Valleys	Stroud, Minchinhampton, Nailsworth, Brimscombe, Chalford, Horsley, Manor Village, Woodchester, Thrupp & Tier 4/5 locations	Merged sites for strategic TA
6a	Berkeley Cluster	Newtown & Sharpness	Land south of Sharpness
6b	Berkeley Cluster	Newtown & Sharpness	Land at Cam/Cambridge
6c	Berkeley Cluster	Berkeley, Slimbridge, Cambridge, newport, Stone	Merged sites for strategic TA
7a	Cam and Dursley	Cam	North west Cam(A)
7b	Cam and Dursley	Cam	North east Cam (C/D/E)
7c	Cam and Dursley	Cam, Dursley, Nympsfield, Stinchcombe	Merged sites for strategic TA
8a	Wotton Cluster	Wotton under Edge, Kingswood, North Nibley, Hillesley	Merged sites for strategic TA

TA site Ref	1a	3									
Area	Gloucester Fri	loucester Fringe									
Site Name	Hardwicke - C	ardwicke - One or two A sites South of Hardwicke (G1)									
Development	1 – Concentra	ated Growth	2 – Wi	ider D	istribution	3 - Dis	pers	al	4 – Growth Point		
Proposal by option	Res	Emp	Res		Emp	Res		Emp	Res		Emp
' '	1,400	0	800		0	150		0	1,400)	0
Peak Hour Trip	AM	PM	AM		PM	AM		PM	AM		PM
rates by option	785	853	449		487	84		91	785		853
2011 Census Mode of Travel to work	Driving Car or Van (driving o passenger)		Bus		Train	Walk		Су	cle		Other
WOIN	80%	7'	%		0%	7%		4	%		2%
Within Stroud		d Within 0	CSV area	Wi	ithin Forest	Within West	of	Withir	n West		Other
	District			of	f Cotswold	England		Midlands			
	20%	65	5%		4%	5%		2	%		4%

Strategic Road Network	
Main SRN access corridor – volume of traffic	M5 - >50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J12
Major Road Network	
Main MRN access corridor	A38
What type of road is it	Primary Link
Volume of traffic flows	15k to 20k
Known pinch points	A38 - Cross Keys Roundabout
	A38 - Cole Avenue
Local Road Network	
Main highway access corridor	Pound Lane / Church Lane - accessing onto B4008 Bristol Road or A38 at Cross
	Keys roundabout
What type of road is it	Local Links
Known pinch points	A38 - Cross Keys Roundabout - A38 - Cole Avenue
Bus Network	
Existing Bus services	12, 66, 16A, 60, 62, 66S, 167
Identify services served by high frequency services	12 (12mins) & 66 (30 mins)
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	12 - Gloucester - Quedgeley
(at least 1 bus per hour between 7am to 7pm)	66 - Stroud - Stonehouse - Waterwells P&R - Kingsway – Gloucester
Rail Network	
Identify approximate distance to nearest railway	Gloucester Station - 6 miles - Stonehouse Station - 6 miles - Possible new station
station or planned station	at Hunts Grove would be under a mile
Identify locations served by high frequency services	Cheltenham, Bristol, Cardiff, London & Swindon
(at least 1 train per hour between 7am to 7pm)	
Known access issues	Stonehouse station is basic and constrained by its location limiting any possible
Known access issues	station expansion
	Neither station is on the main line and therefore does not have the best service
Known service or access improvements	coverage. Ongoing work with West of England to extend MetroWest scheme to
	Gloucester to provide 30 minute frequency to Bristol
Walking and Cycling Network	
How well Is the cluster integrated into the existing	Urban extension - cycleable network - Canal towpath is accessible
walking and cycling network?	
Identify major trip attractors within walking and	2km Quedgeley
cycling distance (2km walk or 5km cycle)	5km Gloucester & Stonehouse
Known access issues	Local assessment required
Known access improvements	Importance of integration into existing network

Possible Infrastructure	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
requirements by option	M5 J12 – Capacity improvement	M5 J12 – Capacity improvement	 Integration into existing walking and cycling network 	M5 J12 – Capacity improvement
	 A38 - Cross Keys Roundabout – upgrade of access 	A38 - Cross Keys Roundabout Bus service 12 -		A38 - Cross Keys Roundabout — upgrade of access
	A38 - Cole Avenue	extension of existing services into site		A38 - Cole Avenue
	Bus service 12 - extension of existing services into site	Integration into existing walking and cycling network		Bus service 12 - extension of existing services into site
	 Linkages to Countywide cycle network 			Linkages to Countywide cycle network

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	1b										
Area	Gloucester Fr	oucester Fringe									
Site Name	Hardwicke - S	rdwicke - South of M5/J12 (G4)									
Development Proposal by option	1 – Conce Grov		2 – W	ider I	Distribution	3 - Dis	persa	al	4 –	Grow	vth Point
	Res	Emp	Res		Emp	Res		Emp	Res		Emp
	0	10	0		10	0		10	0		10
Peak Hour Trip	AM	PM	1 AM		PM	AM		PM	AM		PM
rates by option	746	842	746		842	746	746 842		746		365
2011 Census Mode of Travel to	Driving Car or Van (driving of passenger)		Bus		Train	Walk		Сус	cle		Other
work	80%	7	%		0%	7%		49	%		2%
	Within Stroud Within		n CSV	W	ithin Forest	Within West of With		Within	hin West		Other
	District	ar	ea	0	f Cotswold	England		Midlands			
	20%	65	5%		4%	5%		29	%		4%

Strategic Road Network	
Main SRN access corridor – volume of traffic	M5 - >50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J12
Major Road Network	
Main MRN access corridor	A38
What type of road is it	Primary Link
Volume of traffic flows	15k to 20k
Known pinch points	A38 - Cross Keys Roundabout A38 - Cole Avenue
Local Road Network	
Main highway access corridor	Haresfield Lane - accessing B4008 Bristol Rd or A38 at Cross Keys roundabout
What type of road is it	Local Links
Known pinch points	A38 - Cross Keys Roundabout - A38 - Cole Avenue
Bus Network	
Existing Bus services	12, 66, 16A, 60, 62, 66S, 167
Identify services served by high frequency services	12 (12mins) & 66 (30 mins)
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	12 - Gloucester - Quedgeley
(at least 1 bus per hour between 7am to 7pm)	66 - Stroud - Stonehouse - Waterwells P&R - Kingsway – Gloucester
Rail Network	
Identify approximate distance to nearest railway	Gloucester Station - 6 miles - Stonehouse Station - 6 miles - Possible new station
station or planned station	at Hunts Grove would be under a mile
Identify locations served by high frequency services	Cheltenham, Bristol, Cardiff, London & Swindon
(at least 1 train per hour between 7am to 7pm)	
Known access issues	Stonehouse station is basic and constrained by its location limiting any possible station expansion
Known service or access improvements	Neither station is on the main line and therefore does not have the best service coverage. Ongoing work with West of England to extend MetroWest scheme to Gloucester to provide 30 minute frequency to Bristol
Walking and Cycling Network	
How well Is the cluster integrated into the existing walking and cycling network?	Urban extension - cycleable network - Canal towpath is accessible
Identify major trip attractors within walking and	2km Quedgeley
cycling distance (2km walk or 5km cycle)	5km Gloucester & Stonehouse
Known access issues	Local assessment required
Known access improvements	Importance of integration into existing network

Possible	1 – Concentrated	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Infrastructure	Growth			
requirements by option	M5 J12 – Capacity improvement	M5 J12 – Capacity improvement	A38 - Cross Keys Roundabout – upgrade of access	M5 J12 – Capacity improvement
	A38 - Cross Keys Roundabout – upgrade of access	A38 - Cross Keys Roundabout – upgrade of access	Linkages to Countywide cycle network	A38 - Cross Keys Roundabout – upgrade of access
	A38 - Cole Avenue	A38 - Cole Avenue		A38 - Cole Avenue
	Bus service 12 extension of existing services into site	Bus service 12 extension of existing services into site Linkages to		Bus service 12 extension of existing services into site
	Linkages to Countywide cycle network	Countywide cycle network Integration into		Linkages to Countywide cycle network
	 Integration into existing walking and cycling network 	existing walking and cycling network		Integration into existing walking and cycling network

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	1c	1c									
Area	Gloucester Fr	Gloucester Fringe									
Site Name	Brockworth, E	Brockworth, Brookthorpe, Haresfield - Merged sites for strategic TA									
Development Proposal by option		1 – Concentrated 2 – Growth		2 – Wider Distribution		3 - Dispersal		4 –	4 – Growth Point		
Troposar by option	Res	Emp	Res		Emp	Res		Emp	Res		Emp
	150	0	150		0	220		0	0		0
Peak Hour Trip	AM	PM	AM		PM	AM		PM	AM		PM
rates by option	84	91	84		91	123		134	0		0
2011 Census Mode of Travel to	Driving Car of Van (driving of passenger)	or Bu	Bus		Train	Walk		Су	cle		Other
work	85%	59	%		1%	5%		39	3%		1%
	Within Strou	d Within	Within CSV		ithin Forest	Within West	of	Within	West		Other
	District	are	ea	0	f Cotswold	England		Midla	ands		
	23%	63	%		3%	5%		29	%		4%

Strategic Road Network	
Main SRN access corridor – volume of traffic	A417 (Brockworth) to M5 J11a - 30k to 50k daily vehicle movements
Known pinch points (existing evidence base)	A417 Missing Link
Major Road Network	
Main MRN access corridor	A38
What type of road is it	Primary Link
Volume of traffic flows	30k to 50k
Known pinch points	A38 – C&G Roundabout & Walls Roundabout
Local Road Network	
Main highway access corridor	Local network around sites
What type of road is it	Local links - <6k daily vehicle movements
Known pinch points	Assessment required
Bus Network	
Existing Bus services	2A & 804
Identify services served by high frequency services	2 (30 mins)
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	2 - Gloucester - Abbeydale - Upton St Leonards - Abbeydale – Gloucester
(at least 1 bus per hour between 7am to 7pm)	
Rail Network	
Identify approximate distance to nearest railway	Gloucester - 3.5 miles
station or planned station	
Identify locations served by high frequency services	Cheltenham, Bristol, Cardiff, London & Swindon
(at least 1 train per hour between 7am to 7pm)	
Known access issues	
	Gloucester is not on the main line and therefore does not have the best service
Known service or access improvements	coverage. Ongoing work with West of England to extend MetroWest scheme to
	Gloucester to provide 30 minute frequency to Bristol
Walking and Cycling Network	
How well Is the cluster integrated into the existing	Urban extension - links to Gloucester via Abbeymead are cycleable
walking and cycling network?	
Identify major trip attractors within walking and	2km - Abbeymead - 5km Gloucester, Quedgeley, Brockworth, Longleavens,
cycling distance (2km walk or 5km cycle)	Churchdown & Painswick
Known access issues	Local assessment required
Known access improvements	Importance of integration into existing network

Possible	1 – Concentrated	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Infrastructure	Growth			
requirements by	 Local highway 	 Local highway access 	 Local highway access 	
option	access	improvements may	improvements may	
	improvements may	be required subject to	be required subject to	
	be required subject	local assessment	local assessment	
	to local assessment			

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	2a	2a									
Area	Cotswold Clus	Cotswold Cluster									
Site Name	Bisley, Oakrid	Bisley, Oakridge Lynch, Painswick, Cranham, Sheepcombe - Merged sites for strategic TA									
Development Proposal by option	1 – Conce Grov			2 – Wider Distribution		3 - Dispersal		4 – Growth Point		vth Point	
	Res	Emp	Res		Emp	Res		Emp	Res		Emp
	0	0	0		0	100		0	0		0
Peak Hour Trip	AM	PM	AM		PM	AM		PM	AM		PM
rates by option	0	0	0		0	56		61	0		0
2011 Census Mode of Travel to	Driving Car of Van (driving of passenger)	or Bu	Bus		Train	Walk		Су	cle		Other
work	87%	29	%		2%	5%		2%			2%
	Within Strou	d Within	Within CSV		ithin Forest	Within West	of	Within	n West		Other
	District	are	ea	0	f Cotswold	England		Midla	idlands		
	43%	33	%		7%	5%		29	%		10%

Strategic Road Network	
Main SRN access corridor – volume of traffic	M5 J11a Northbound >50k daily vehicle movements
	M5 J12 South bound >50k daily vehicle movements
Known pinch points (existing evidence base)	Minimum impact caused by proposed development
Major Road Network	
Main MRN access corridor	A38
What type of road is it	Primary Link
Volume of traffic flows	20k to 30k
Known pinch points	A38 – St. Barnabas Roundabout -
Local Road Network	
Main highway access corridor	A46, B4073 - other local links
What type of road is it	District Link – between 6k to 10k
Known pinch points	Assessment required
Bus Network	
Existing Bus services	8, 66, 228
Identify services served by high frequency services	66 (60mins)
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	66 Stroud - Painswick - Brockworth - Cheltenham
(at least 1 bus per hour between 7am to 7pm)	
Rail Network	
Identify approximate distance to nearest railway	Multiple locations more than 4 miles to Stroud Station
station or planned station	
Identify locations served by high frequency services	Cheltenham, Bristol, Cardiff, London & Swindon
(at least 1 train per hour between 7am to 7pm)	
Known access issues	Limited car parking - need to improve station footbridge access
Known service or access improvements	Services cannot access to Bristol - change required at Gloucester for southbound destinations.
Walking and Cycling Network	
How well Is the cluster integrated into the existing	Urban extension
walking and cycling network?	
Identify major trip attractors within walking and	2km -Painswick - 5km - Stroud, Brockworth & Kingsway
cycling distance (2km walk or 5km cycle)	
Known access issues	Local assessment required
Known access improvements	Urban extension

Possible Infrastructure	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
requirements by option			Local highway access improvements may be required subject to local assessment	

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	3a	3a									
Area	Stonehouse C	Stonehouse Cluster									
Site Name	Stonehouse -	Stonehouse - North Stonehouse B1									
Development Proposal by option		oncentrated 2 – V Growth		2 – Wider Distribution		3 - Dispersal		4 – Growth Point		vth Point	
Troposar by option	Res	Emp	Res		Emp	Res		Emp	Res		Emp
	750	0	750		0	150		0	0		0
Peak Hour Trip	AM	PM	AM		PM	AM		PM	AM		PM
rates by option	421	457	421		457	84		91	0		0
2011 Census Mode of Travel to	Driving Car of Van (driving of passenger)	or Bu	ıs		Train	Walk		Су	cle		Other
work	79%	39	%		1%	11%		49	4%		2%
	Within Strou	d Withi	Within CSV		ithin Forest	Within West	of	Within	West		Other
	District	are	ea	0	f Cotswold	England		Midla	dlands		
	65%	19	%		5%	6%		19	%		4%

Strategic Road Network	
Main SRN access corridor – volume of traffic	M5 - J13 >50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J13 is a known pinchpoint and the cumulative impacts of growth within the
	A419 corridor is required to understand the impact of delay
Major Road Network	
Main MRN access corridor	No proposed MRN in the vicinity of the site
What type of road is it	
Volume of traffic flows	
Known pinch points	
Local Road Network	
Main highway access corridor	B4008
What type of road is it	Suburban link - 15k to 20k daily vehicle movements
Known pinch points	Assessment required - issues over cumulative growth along corridor - Level
	crossing on Oldends Lane could be a barrier
Bus Network	
Existing Bus services	61, 401B & X3
Identify services served by high frequency services	61 (60 mins)
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	61 Stroud - Stonehouse - Eastington - Dursley – Woodmancote
(at least 1 bus per hour between 7am to 7pm)	
Rail Network	
Identify approximate distance to nearest railway	Stonehouse - 2.5 miles - Possible new station at Stonehouse Bristol Road - 1.5
station or planned station	miles
Identify locations served by high frequency services	Gloucester, Cheltenham, Swindon & London
(at least 1 train per hour between 7am to 7pm)	
Known access issues	Basic station in a constrained location
	No direct services to Bristol - change required at Gloucester for southbound
Known service or access improvements	destinations. New station at Stonehouse Bristol Road is a possibility this would be
'	located on the Bristol to Birmingham Line. Stonehouse would then be served by
	two stations on two lines
Walking and Cycling Network	Total and a second
How well Is the cluster integrated into the existing walking and cycling network?	Urban extension - links to Stonehouse
Identify major trip attractors within walking and	2km - Stonehouse including station - 5km Stroud
cycling distance (2km walk or 5km cycle)	
Known access issues	Level crossing on Oldends Lane
Known access improvements	Importance of integration into existing network & Countywide Cycleway

Possible Infrastructure	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
requirements by option	M5 J13 – capacity improvements Congestion issues along A419 Possible service extension & increased frequency for route 61. Level crossing on Oldends Lane could be a barrier Integration into existing network & Countywide Cycleway	M5 J13 – capacity improvements Congestion issues along A419 Possible service extension & increased frequency for route 61. Level crossing on Oldends Lane could be a barrier Integration into existing network & Countywide Cycleway	Integration into existing walking and cycling network	

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	3b											
Area	Stonehouse Clu	Stonehouse Cluster										
Site Name	Stonehouse - M	5 J13 (D1/D2	2)									
Development	1 – Concentrat	1 – Concentrated Growth 2 – Wider Distribution 3 - Dispersal 4 – Growth Point										
Proposal by	Res	Emp	Res		Emp	Res		Emp	Res		Emp	
option	0	20	0		20	0		20	0		20	
Peak Hour Trip	AM	PM	PM AM		PM	AM		PM	AM		PM	
rates by option	1493	1685	1493		1685	1493		1685	1493		1685	
2011 Census Mode of	Driving Car or Van (driving or passenger)	В	Bus		Train Walk		Cy	rcle		Other		
Travel to work	79%	3	%		1%	11%		4	1%		2%	
	Within Stroud District	Within (Within CSV area		ithin Forest of Cotswold	Within West England	of	_	Within West Midlands		Other	
	65%	19	9%		5%	6%		1	.%		4%	

Strategic Road Network	
Main SRN access corridor – volume of traffic	M5 - J13 >50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J13 is a known pinchpoint and the cumulative impacts of growth within the
	A419 corridor is required to understand the impact of delay
Major Road Network	
Main MRN access corridor	No proposed MRN in the vicinity of the site
What type of road is it	
Volume of traffic flows	
Known pinch points	
Local Road Network	
Main highway access corridor	A419 - 20k to 30k daily vehicle movements
What type of road is it	Primary
Known pinch points	Assessment required - Issues over cumulative growth along A419 corridor
Bus Network	
Existing Bus services	61, 401B & X3
Identify services served by high frequency services	61 (60 mins)
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	61 Stroud - Stonehouse - Eastington - Dursley – Woodmancote
(at least 1 bus per hour between 7am to 7pm)	
Rail Network	
Identify approximate distance to nearest railway	Stonehouse - 2.5 miles - Possible new station at Stonehouse Bristol Road - 1.5
station or planned station	miles
Identify locations served by high frequency services	Gloucester, Cheltenham, Swindon & London
(at least 1 train per hour between 7am to 7pm)	
Known access issues	Basic station in a constrained location
Known service or access improvements	No direct services to Bristol - change required at Gloucester for southbound destinations. New station at Stonehouse Bristol Road is a possibility this would be located on the Bristol to Birmingham Line. Stonehouse would then be served by
	two stations on two lines
Walking and Cycling Network	
How well Is the cluster integrated into the existing	New location -links onto Canal tow path and facilities on Bristol Road (A419).
walking and cycling network?	, , , , , , , , , , , , , , , , , , , ,
Identify major trip attractors within walking and	2km -Stroudwater Business Park - 5km - Stonehouse (including station), Stroud &
cycling distance (2km walk or 5km cycle)	Hardwicke
Known access issues	A419 is a barrier to pedestrians with limited crossing opportunities
Known access improvements	Safe pedestrian crossing between sites

Possible Infrastructure	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
requirements by option	M5 J13 – capacity improvements A419 – possible dualling from Oldends Lane to M5 Congestion issues along A419 Possible service extension & increased frequency for route 61. Level crossing on Oldends Lane could be a barrier Integration into existing network & Countywide Cycleway	M5 J13 – capacity improvements A419 – possible dualling from Oldends Lane to M5 Congestion issues along A419 Possible service extension & increased frequency for route 61. Level crossing on Oldends Lane could be a barrier Integration into existing network & Countywide Cycleway	M5 J13 – capacity improvements A419 – possible dualling from Oldends Lane to M5 Congestion issues along A419 Possible service extension & increased frequency for route 61. Level crossing on Oldends Lane could be a barrier Integration into existing network & Countywide Cycleway	M5 J13 – capacity improvements A419 – possible dualling from Oldends Lane to M5 Congestion issues along A419 Possible service extension & increased frequency for route 61. Level crossing on Oldends Lane could be a barrier Integration into existing network & Countywide Cycleway

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	3c	3c									
Area	Stonehouse C	Stonehouse Cluster									
Site Name		Large sites within settlement, Alkerton, Kings Stanley, Leonard Stanley, Standish, Middleyard, Selsley - Merged sites for strategic TA									
Development Proposal by option	1 – Conce Grov		2 – W	2 – Wider Distribution		3 - Dispersal		al	4 – Growth Point		
Troposar by option	Res	Emp	Res		Emp	Res		Emp	Res		Emp
	195	0	195		0	335		0	0		0
Peak Hour Trip	AM	PM	AM		PM	AM		PM	AM		PM
rates by option	109	119	109		119	188		204	0		0
2011 Census Mode of Travel to	Driving Car of Van (driving passenger)	or Bu	Bus		Train	Walk		Сус	cle		Other
work	79%	39	%		1%	11%		4%			2%
	Within Strou	d Withi	n CSV	W	ithin Forest	Within West of Withi		Within	West		Other
	District	are	ea	0	f Cotswold	England		Midlands			
	65%	19	1%		5%	6%		19	%		4%

Strategic Road Network	
Main SRN access corridor – volume of traffic	M5 - J13 >50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J13 is a known pinchpoint and the cumulative impacts of growth within the
	A419 corridor is required to understand the impact of delay
Major Road Network	
Main MRN access corridor	No proposed MRN in the vicinity of the site
What type of road is it	
Volume of traffic flows	
Known pinch points	
Local Road Network	
Main highway access corridor	A419 - 20k to 30k daily vehicle movements
What type of road is it	Primary
Known pinch points	Access constrained by distance to M5 J12 - issues over cumulative growth along
	corridor
Bus Network	
Existing Bus services	61, 401B & X3
Identify services served by high frequency services	61 (60 mins)
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	61 Stroud - Stonehouse - Eastington - Dursley – Woodmancote
(at least 1 bus per hour between 7am to 7pm)	
Rail Network	
Identify approximate distance to nearest railway	Stonehouse - 2.5 miles - Possible new station at Stonehouse Bristol Road - 1.5
station or planned station	miles
Identify locations served by high frequency services	Gloucester, Cheltenham, Swindon & London
(at least 1 train per hour between 7am to 7pm)	
Known access issues	Basic station in a constrained location
	No direct services to Bristol - change required at Gloucester for southbound
Known service or access improvements	destinations. New station at Stonehouse Bristol Road is a possibility this would be
international designation of the second seco	located on the Bristol to Birmingham Line. Stonehouse would then be served by
	two stations on two lines
Walking and Cycling Network	
How well Is the cluster integrated into the existing	Village Location / urban extension
walking and cycling network?	
Identify major trip attractors within walking and	2km -Stonehouse - 5km - Stroud, Hardwicke & Quedgeley
cycling distance (2km walk or 5km cycle)	Lead and a second and the second and
Known access issues	Local assessment required
Known access improvements	Village Location / urban extension

Possible	1 – Concentrated	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Infrastructure	Growth			
requirements by option	Local highway access improvements may be required subject to local assessment	Local highway access improvements may be required subject to local assessment	Local highway access improvements may be required subject to local assessment	

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	4a	4a									
Area	Severn Vale	Severn Vale									
Site Name	Large sites wi TA	Large sites within settlement, Frampton, Whitminster, Arlingham, Longney, Saul - Merged sites for strategic TA									
Development Proposal by option	1 – Conce Grov		ated 2 – Wi		2 – Wider Distribution		3 - Dispersal		4 – Growth Point		vth Point
Proposar by option	Res	Emp	Res		Emp	Res		Emp	Res		Emp
	0	0	220		0	140		0	0		0
Peak Hour Trip	AM	PM	AM		PM	AM		PM	AM		PM
rates by option	115	125	123		134	79		85	0		0
2011 Census Mode of Travel to	Driving Car of Van (driving of passenger)	or Bu	Bus		Train	Walk		Су	cle		Other
work	88%	19	%		1%	5%		3%			1%
	Within Strou	d Withi	n CSV	W	ithin Forest	Within West of V		Within	Within West		Other
	District	ar	ea	0	f Cotswold	England		Midlands			
	52%	27	%		4%	11%		29	%		4%

Strategic Road Network	
Main SRN access corridor – volume of traffic	M5 - J13 >50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J13 is a known pinchpoint and the cumulative impacts of growth within the
	A419 corridor is required to understand the impact of delay
Major Road Network	
Main MRN access corridor	A38
What type of road is it	Primary Link
Volume of traffic flows	10k to 15k
Known pinch points	A38 –Cross Keys Roundabout -
Local Road Network	
Main highway access corridor	Multiple locations
What type of road is it	Local network
Known pinch points	Local assessment would be required
Bus Network	
Existing Bus services	2, 6, 60, 62, 66F, 113A, 242, 346, 401B
Identify services served by high frequency services	
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	
(at least 1 bus per hour between 7am to 7pm)	
Rail Network	
Identify approximate distance to nearest railway	Stonehouse - 5 miles
station or planned station	
Identify locations served by high frequency services	Cheltenham, Bristol, Cardiff, London & Swindon
(at least 1 train per hour between 7am to 7pm)	
Known access issues	Stonehouse station is rather basic and is cited in a constrained location
	Neither station is on the main line and therefore does not have the best service
Known service or access improvements	coverage. Ongoing work with West of England to extend MetroWest scheme to
	Gloucester to provide 30 minute frequency to Bristol
Walking and Cycling Network	
How well Is the cluster integrated into the existing	Village extension
walking and cycling network?	
Identify major trip attractors within walking and	2km -Saul - 5km - Stonehouse & Hardwicke
cycling distance (2km walk or 5km cycle)	
Known access issues	Local assessment required
Known access improvements	

Possible	1 – Concentrated	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Infrastructure requirements by option	Growth	Local highway access improvements may be required subject to	Local highway access improvements may be required subject to	
		local assessment	local assessment	

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	5a	5a									
Area	Stroud Valleys	Stroud Valleys									
Site Name	,	Stroud, Minchinhampton, Nailsworth, Brimscombe, Chalford, Horsley, Manor Village, Woodchester, Thrupp & Fier 4/5 locations - Merged sites for strategic TA									
Development	1 – Concentra	ted Growth	2 – Wi	der [Distribution	3 - Dis	pers	al	4 – 0	Grow	th Point
Proposal by option	Res	Emp	Res		Emp	Res		Emp	Res		Emp
Troposar by option	445	0	825		0	835		0	0		0
Peak Hour Trip	AM	PM	AM		PM	AM		PM	AM		PM
rates by option	135	146	463		502	468		509 0			0
2011 Census Mode of Travel to	Driving Car or		Bus		Train		Walk		Cycle		Other
work	80%	39	6		2%	11%		2%			1%
	Within Stroug	I Within C	Within CSV area		ithin Forest of Cotswold	Within West England	t of	Within Midla	West ands		Other
	59%	17	%		9%	6%		19	%		8%

Strategic Road Network	
Main SRN access corridor – volume of traffic	M5 - J13 >50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J13 is a known pinchpoint and the cumulative impacts of growth within the
	A419 corridor is required to understand the impact of delay
Major Road Network	
Main MRN access corridor	A38
What type of road is it	Primary Link
Volume of traffic flows	10k to 15k
Known pinch points	-
Local Road Network	
Main highway access corridor	Multiple locations - Local links feeding onto A419 / B4066 / A46 - 6k to 30k daily
	vehicle movements depending on link
What type of road is it	Local network
Known pinch points	Assessment required - multiple junctions identified as having possible capacity
	issues - issues over cumulative growth along corridor
Bus Network	
Existing Bus services	3, 40, 52, 54, 63, 65, 64, 66, 69 & 230
Identify services served by high frequency services	8 (60mins), 63 (30 mins) & 66 (60mins)
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	8 Stroud - Stroud Hospital Uplands - Stroud - Bisley –Oakridge, 63 Forest Green
(at least 1 bus per hour between 7am to 7pm)	- Nailsworth - Stroud - Whiteshill – Gloucester & 66 Stroud - Painswick -
(at least 1 bus per flour between 7 am to 7 pm)	Brockworth – Cheltenham
Rail Network	
Identify approximate distance to nearest railway	Multiple locations more than 4 miles
station or planned station	
Identify locations served by high frequency services	Cheltenham, Bristol, Cardiff, London & Swindon
(at least 1 train per hour between 7am to 7pm)	
Known access issues	Limited car parking - need to improve station footbridge access
Known service or access improvements	Services cannot access to Bristol - change required at Gloucester for southbound
Tallown service of access improvements	destinations.
Walking and Cycling Network	
How well Is the cluster integrated into the existing	Urban extensions
walking and cycling network?	
Identify major trip attractors within walking and	2km -Stroud - 5km - Stonehouse, Nailsworth, Minchinhampton, Chalford &
cycling distance (2km walk or 5km cycle)	Painswick
Known access issues	Topography is an issue for long distance cycling - Canal tow path does provide some traffic free routes
Known access improvements	Many of the roads are highly accessible but some gradients may be a barrier

Possible	1 – Concentrated	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Infrastructure	Growth			
requirements by option	Congestion issues along A419 Importance of integration into existing network & Countywide	Congestion issues along A419 Importance of integration into existing network & Countywide Cycleway	Congestion issues along A419 Importance of integration into existing network & Countywide Cycleway	
	Cycleway			

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	6a	ба										
Area	Berkeley Clus	Berkeley Cluster										
Site Name	Newtown & S	Sharpness - La	nd south	of Sh	arpness							
Development Proposal by option		1 – Concentrated 2 – W Growth		– Wider Distribution		3 - Dispersal		4 – Growth Point		vth Point		
Troposar by option	Res	Emp	Res		Emp	Res		Emp	Res		Emp	
	0 0 0					2000		10 20)	10	
Peak Hour Trip	AM	PM	AM PM		AM		PM AM			PM		
rates by option	0	0	0		0	1868		2060 186		3	2060	
2011 Census Mode of Travel to	Driving Car of Van (driving of passenger)	or Bu	Bus		Train	Walk	Walk Cy		cle		Other	
work	88%	19	%		1%	7% 2		25	2%		2%	
	Within Strou	d Withi	n CSV	W	ithin Forest	Within West	of	Within	West		Other	
	District	are	ea	0	f Cotswold	England		Midla	ands			
	46%	13	%		4%	32%		19	%		3%	

Strategic Road Network	
Main SRN access corridor – volume of traffic	Southbound M5 J14 - Northbound M5 J13 – 50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J13 is a known pinchpoint and the cumulative impacts of growth within the
	A419 corridor require assessment.
	M5 J14 is a pinchpoint restricting growth - work is required to resolve the issue. A
	multi funding package would be required from various developments.
Major Road Network	
Main MRN access corridor	No proposed MRN in the vicinity of the site
What type of road is it	
Volume of traffic flows	
Known pinch points	
Local Road Network	
Main highway access corridor	B4066
What type of road is it	Suburban Link - 6k to 15k daily vehicle movements
Known pinch points	Assessment required - but access is an issue with the A38 & Alkington Lane - some
	form of major junctions or new highway access onto A38 may be required
Bus Network	
Existing Bus services	6, 62, 207, X1, X6
Identify services served by high frequency services	
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	
(at least 1 bus per hour between 7am to 7pm)	
Rail Network	
Identify approximate distance to nearest railway station or planned station	Cam & Dursley 8 miles - Possible new station at Charfield 10 miles
Identify locations served by high frequency services	Bristol & Gloucester
(at least 1 train per hour between 7am to 7pm)	
Known access issues	Parking/ walking and cycling access need improvements
Known service or access improvements	Ongoing work with West of England to extend MetroWest scheme to Gloucester
Known service of access improvements	to provide 30 minute frequency to Bristol
Walking and Cycling Network	
How well Is the cluster integrated into the existing	New settlement
walking and cycling network?	
Identify major trip attractors within walking and	2km Newtown - 5km Berkeley
cycling distance (2km walk or 5km cycle)	
Known access issues	Rural location - quiet lane network may need to be managed to limit vehicle use
Known access improvements	Important for walking and cycling links to be designed into the site from the
	outset to enable sustainable travel for short distance trips. Links to Cam & Dursley
	station should also be provided

Possible Infrastructure	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
requirements by option			M5 J13 – capacity improvement M5 J14 capacity improvement A38 & Alkington Lane access improvements New bus routes required Important for walking and cycling links to be designed into the site from the outset to enable sustainable travel for short distance trips. Linkages to countywide cycle network	M5 J13 – capacity improvement M5 J14 capacity improvement A38 & Alkington Lane access improvements New bus routes required Important for walking and cycling links to be designed into the site from the outset to enable sustainable travel for short distance trips. Linkages to countywide cycle network

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	6b	6b										
Area	Berkeley Clus	Berkeley Cluster										
Site Name	Newtown & S	Sharpness - La	nd at Cam	ı/Car	nbridge							
Development Proposal by option	1 – Conce Grov		2 – Wi	2 – Wider Distribution		3 - Dispersal		4 – Growth Point		vth Point		
Troposar by option	Res	Emp	Res		Emp	Res		Emp	Res		Emp	
	0	0	0		0	0		0	1750)	0	
Peak Hour Trip	AM	PM	AM		PM	AM		PM	AM		PM	
rates by option	0	0	0		0	0		0	982		1066	
2011 Census Mode of Travel to	Driving Car of Van (driving of passenger)	or Bu	Bus		Train		Walk Cy		cle		Other	
work	88%	19	%		1%	7%		25	2%		2%	
	Within Stroud Within CSV Within Forest Within West of Within						Within West of Withir		nin West		Other	
	District	are	ea	0	f Cotswold	England		Midla	ands			
	46%	13	%		4%	32%		19	%		3%	

Strategic Road Network	
Main SRN access corridor – volume of traffic	Southbound M5 J14 - Northbound M5 J13 - >50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J13 is a known pinchpoint and the cumulative impacts of growth within the A419 corridor require assessment. M5 J14 is a pinchpoint restricting growth work is required to resolve the issue. A multi funding package would be required from various developments.
Major Road Network	
Main MRN access corridor	No proposed MRN in the vicinity of the site
What type of road is it	
Volume of traffic flows	
Known pinch points	
Local Road Network	
Main highway access corridor	Assessment required – A38
What type of road is it	Primary Link - 10k to 15k daily vehicle movements
Known pinch points	
Bus Network	
Existing Bus services	6, 60, 61, 62, 346, X2, X3
Identify services served by high frequency services (at least 1 bus per hour between 7am to 7pm)	61 (60 mins)
Identify locations served by high frequency services (at least 1 bus per hour between 7am to 7pm)	61 Stroud - Stonehouse - Eastington - Dursley – Woodmancote
Rail Network	
Identify approximate distance to nearest railway station or planned station	Cam & Dursley - 2 miles
Identify locations served by high frequency services (at least 1 train per hour between 7am to 7pm)	Bristol & Gloucester
Known access issues	Parking/ walking and cycling access need improvements
Known service or access improvements	Ongoing work with West of England to extend MetroWest scheme to Gloucester to provide 30 minute frequency to Bristol
Walking and Cycling Network	
How well Is the cluster integrated into the existing walking and cycling network?	Village location (New settlement)
Identify major trip attractors within walking and cycling distance (2km walk or 5km cycle)	2km Cam & Dursley station - 5km Stonehouse, Dursley & Frampton on Severn
Known access issues	Safe crossing facilities for A38
Known access improvements	Local assessment required - Important for walking and cycling links to be designed into the site to enable sustainable travel for short distance trips. Links to Cam & Dursley station should also be provided - along with links to Gloucester / Sharpness Canal Tow Path

Possible Infrastructure	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
requirements by				M5 J13 – capacity improvement
option				M5 J14 capacity
				improvementNew bus routes
				required Linkages to
				countywide cycle
				Walking and cycling links to Cam
				& Dursley station

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	6c	бс									
Area	Berkeley Clus	Berkeley Cluster									
Site Name	Berkeley, Slin	Berkeley, Slimbridge, Cambridge, Newport, Stone - Merged sites for strategic TA									
Development Proposal by option	1 – Conce Grov		2 – Wider Distribution		3 - Dispersal		al	4 – Growth Point			
Proposal by option	Res	Emp	Res		Emp	Res		Emp	Res		Emp
	0	0	200		0	185		0	0		0
Peak Hour Trip	AM	PM	AM		PM	AM		PM	AM		PM
rates by option	0	0	112		122	104		113	0		0
2011 Census Mode of Travel to	Driving Car of Van (driving of passenger)	or Bi	Bus		s Train		Walk C		cle		Other
work	88%	1'	%		1%	7%		2%			2%
	Within Strou	d Withi	n CSV	W	ithin Forest	Within West of		Within West			Other
	District	ar	ea	of	f Cotswold	England		Midlands			
	46%	13	%		4%	32%		19	%		3%

Strategic Road Network	
Main SRN access corridor – volume of traffic	Southbound M5 J14 - Northbound M5 J13 – 50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J13 is a known pinchpoint and the cumulative impacts of growth within the
	A419 corridor require assessment.
	M5 J14 is a pinchpoint restricting growth - work is required to resolve the issue. A
	multi funding package would be required from various developments.
Major Road Network	
Main MRN access corridor	No proposed MRN in the vicinity of the site
What type of road is it	
Volume of traffic flows	
Known pinch points	
Local Road Network	
Main highway access corridor	B4066
What type of road is it	Suburban Link - 6k to 15k daily vehicle movements
Known pinch points	Assessment required - but access is an issue with the A38 & Alkington Lane - some
	form of major junctions or new highway access onto A38 may be required
Bus Network	
Existing Bus services	6, 62, 207, X1, X6
Identify services served by high frequency services	
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	
(at least 1 bus per hour between 7am to 7pm)	
Rail Network	
Identify approximate distance to nearest railway	Cam & Dursley - 2 miles
station or planned station	
Identify locations served by high frequency services	Bristol & Gloucester
(at least 1 train per hour between 7am to 7pm)	
Known access issues	Parking/ walking and cycling access need improvements
Known service or access improvements	Ongoing work with West of England to extend MetroWest scheme to Gloucester
•	to provide 30 minute frequency to Bristol
Walking and Cycling Network	
How well Is the cluster integrated into the existing	Village locations
walking and cycling network?	
Identify major trip attractors within walking and	Berkeley
cycling distance (2km walk or 5km cycle)	
Known access issues	Importance of integration with existing network
Known access improvements	Local assessment required

Possible Infrastructure	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
requirements by option		Local highway access improvements may be required subject to local assessment	Local highway access improvements may be required subject to local assessment	

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	7a								
Area	Cam and Dursley	/							
Site Name	Cam - North wes	st Cam(A)							
Development	1 – Concentra	ted Growth	2 – Wid	der Di	istribution	3 - Dis	persal	4 – 0	Growth Point
Proposal by	Res	Emp	Res		Emp	Res	Emp	Res	Emp
option	1200	0	200		0	100	0	0	0
Peak Hour Trip	AM	PM	AM		PM	AM	PM	AM	PM
rates by option	673	731	112		122	56	61	0	0
2011 Census Mode of Travel to	Driving Car or Va (driving or passenger)	an Bus	S		Train	Walk	Су	rcle	Other
work	88%	1%	,)		1%	7%	2	.%	2%
	Within Stroud District	Within CS	Within CSV area		thin Forest Cotswold	Within We of England		n West lands	Other
	47%	129	6		4%	33%	1	.%	3%

Strategic Road Network	
Main SRN access corridor – volume of traffic	Southbound M5 J14 - Northbound M5 J13 – 50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J13 is a known pinchpoint and the cumulative impacts of growth within the
	A419 corridor require assessment.
	M5 J14 is a pinchpoint restricting growth - work is required to resolve the issue. A
	multi funding package would be required from various developments.
Major Road Network	
Main MRN access corridor	No proposed MRN in the vicinity of the site
What type of road is it	
Volume of traffic flows	
Known pinch points	
Local Road Network	
Main highway access corridor	A4135
What type of road is it	Suburban / Primary Link with 10k to 15k vehicle movements
Known pinch points	Assessment required - junctions identified as having possible capacity issues
	including junctions with B4060 Woodfield Road & B4066 Dursley Road
Bus Network	
Existing Bus services	60, 61, 62, 65, 101, 346, X1A, X3 & X11
Identify services served by high frequency services	61 (60mins)
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	61 Stroud - Stonehouse - Eastington - Dursley – Woodmancote
(at least 1 bus per hour between 7am to 7pm)	
Rail Network	
Identify approximate distance to nearest railway station or planned station	Cam & Dursley under 1 mile
Identify locations served by high frequency services	Bristol & Gloucester
(at least 1 train per hour between 7am to 7pm)	Bristor & Gloucester
Known access issues	Parking needs to be improved as does walking and cycling access
	Ongoing work with West of England to extend MetroWest scheme to Gloucester
Known service or access improvements	to provide 30 minute frequency to Bristol
Walking and Cycling Network	
How well Is the cluster integrated into the existing	Urban extension
walking and cycling network?	
Identify major trip attractors within walking and	2km -Cam (including Cam & Dursley station) - 5km - Dursley, Berkeley &
cycling distance (2km walk or 5km cycle)	Stroudwater Business park
Known access issues	Improved links to station
Known access improvements	Many of the roads are highly accessible - but with increased traffic -may need to
	look to providing traffic free links to the station (multiple funding sources may be
	required)

Possible	1 – Concentrated	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Infrastructure	Growth			
requirements by option	M5 J13 – capacity improvement M5 J14 capacity improvement Bus service frequency increase and better linkages to railway station Improved cycle linkages to station Upgrade to Cam & Dursley station	Improved cycle linkages to station Upgrade to Cam & Dursley station		

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	7b	7b									
Area	Cam and Dur	Cam and Dursley									
Site Name	Cam - North 6	east Cam (C/D)/E)								
Development Proposal by option	1 – Conce Grov			- Wider Distribution		3 - Dispersal		4 – Growth Point		vth Point	
Troposar by option	Res	Emp	Res		Emp	Res		Emp	Res		Emp
	300	0	750		0	110		0	0		0
Peak Hour Trip	AM	PM	AM		PM	AM		PM	AM		PM
rates by option	168	183	421		457	62		67	0		0
2011 Census Mode of Travel to	Driving Car or Van (driving of passenger)		Bus		Train	Walk		Су	cle		Other
work	88%	1	%		1%	7%		2%			2%
	Within Stroug	Withi	n CSV	W	ithin Forest	Within West	Within West of Withir		West		Other
	District	ar	ea	0	f Cotswold	England		Midla	ands		
	47%	12	!%		4%	33%		19	%		3%

Strategic Road Network	
Main SRN access corridor – volume of traffic	Southbound M5 J14 - Northbound M5 J13 – 50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J13 is a known pinchpoint and the cumulative impacts of growth within the
	A419 corridor require assessment.
	M5 J14 is a pinchpoint restricting growth - work is required to resolve the issue. A
	multi funding package would be required from various developments.
Major Road Network	
Main MRN access corridor	No proposed MRN in the vicinity of the site
What type of road is it	
Volume of traffic flows	
Known pinch points	
Local Road Network	
Main highway access corridor	A4135
What type of road is it	Suburban / Primary Link with 10k to 15k vehicle movements
Known pinch points	Assessment required - junctions identified as having possible capacity issues
	including junctions with B4060 Woodfield Road & B4066 Dursley Road
Bus Network	
Existing Bus services	60, 61, 62, 65, 101, 346, X1A, X3 & X11
Identify services served by high frequency services	61 (60mins)
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	61 Stroud - Stonehouse - Eastington - Dursley – Woodmancote
(at least 1 bus per hour between 7am to 7pm)	
Rail Network	
Identify approximate distance to nearest railway station or planned station	Cam & Dursley under 1 mile
Identify locations served by high frequency services	Bristol & Gloucester
(at least 1 train per hour between 7am to 7pm)	
Known access issues	Parking needs to be improved as does walking and cycling access
Known service or access improvements	Ongoing work with West of England to extend MetroWest scheme to Gloucester
Known service of access improvements	to provide 30 minute frequency to Bristol
Walking and Cycling Network	
How well Is the cluster integrated into the existing	Urban extension
walking and cycling network?	
Identify major trip attractors within walking and	2km -Cam (including Cam & Dursley station) - 5km - Dursley, Berkeley &
cycling distance (2km walk or 5km cycle)	Stroudwater Business park
Known access issues	Improved links to station
Known access improvements	Many of the roads are highly accessible - but with increased traffic -may need to look to providing traffic free links to the station (multiple funding sources may be required)

Possible Infrastructure	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
requirements by option	 M5 J13 – capacity improvement M5 J14 capacity improvement New bus routes required Walking and cycling links to Cam & Dursley station 	 M5 J13 – capacity improvement M5 J14 capacity improvement New bus routes required Walking and cycling links to Cam & Dursley station Upgrade to Cam & Dursley station 		

RAG Assessments	1 – Concentrated	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
	Growth			
Likely scale of				
mitigation required				
Cumulative impact of				
the site – linked to				
location of likely impact				
Existing car usage				
Propensity of using				
passenger transport –				
before any mitigation				

TA site Ref	7c										
Area	Cam and Dursley										
Site Name	Cam, Dursley,	Cam, Dursley, Nympsfield, Stinchcombe - Merged sites for strategic TA									
Development Proposal by option	1 – Concentrated 2 – W Growth		2 – W	ider Distribution		3 - Dispersal		4 – Growth Point		vth Point	
	Res	Emp	Res		Emp	Res		Emp	Res		Emp
	250	0	250		0	290		0	0		0
Peak Hour Trip	AM	PM	AM		PM	AM		PM	AM		PM
rates by option	140	152	140 152 163 17		177	0		0			
2011 Census Mode of Travel to	Driving Car or Van (driving of passenger)		Bus		Train	Walk		Су	cle		Other
work	88%	19	%	1%		7%	7% 2		2%		2%
	Within Stroug	Withi	n CSV Within I		ithin Forest	Within West	of	Within	n West		Other
	District	t area		0	f Cotswold	England		Midla	ands		
	47%	12	%		4%	33%		19	%		3%

Strategic Road Network	
Main SRN access corridor – volume of traffic	Southbound M5 J14 - Northbound M5 J13 – 50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J13 is a known pinchpoint and the cumulative impacts of growth within the
, , , , , , , , , , , , , , , , , , ,	A419 corridor require assessment.
	M5 J14 is a pinchpoint restricting growth - work is required to resolve the issue. A
	multi funding package would be required from various developments.
Major Road Network	
Main MRN access corridor	No proposed MRN in the vicinity of the site
What type of road is it	
Volume of traffic flows	
Known pinch points	
Local Road Network	
Main highway access corridor	A4135
What type of road is it	Suburban / Primary Link with 10k to 15k vehicle movements
Known pinch points	Assessment required - junctions identified as having possible capacity issues
	including junctions with B4060 Woodfield Road & B4066 Dursley Road
Bus Network	
Existing Bus services	60, 61, 62, 65, 101, 346, X1A, X3 & X11
Identify services served by high frequency services	61 (60mins)
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	61 Stroud - Stonehouse - Eastington - Dursley – Woodmancote
(at least 1 bus per hour between 7am to 7pm)	
Rail Network	
Identify approximate distance to nearest railway	Cam & Dursley under 1 mile
station or planned station	
Identify locations served by high frequency services	Bristol & Gloucester
(at least 1 train per hour between 7am to 7pm)	
Known access issues	Parking needs to be improved as does walking and cycling access
Known service or access improvements	Ongoing work with West of England to extend MetroWest scheme to Gloucester
	to provide 30 minute frequency to Bristol
Walking and Cycling Network	
How well Is the cluster integrated into the existing	Urban extension
walking and cycling network?	
Identify major trip attractors within walking and	2km -Cam (including Cam & Dursley station) - 5km - Dursley, Berkeley &
cycling distance (2km walk or 5km cycle)	Stroudwater Business park
Known access issues	Improved links to station
Known access improvements	Many of the roads are highly accessible - but with increased traffic -may need to
	look to providing traffic free links to the station (multiple funding sources may be
	required)

Possible	1 – Concentrated	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Infrastructure	Growth			
requirements by	 Improved cycle 	 Improved cycle 	 Improved cycle 	
option	linkages to station	linkages to station	linkages to station	
option	 Upgrade to Cam & 	 Upgrade to Cam & 	 Upgrade to Cam & 	
	Dursley station	Dursley station	Dursley station	

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				

TA site Ref	8a										
Area	Wotton Clust	Wotton Cluster									
Site Name	Wotton unde	r Edge, Kings	wood, No	rth N	ibley, Hillesley	- Merged sites	s for	strategic ⁻	ГА		
Development Proposal by option	1 – Concentrated 2 – V		2 – W	Vider Distribution		3 - Dispersal		4 – Growth Point		vth Point	
Troposar by option	Res	Emp	Res		Emp	Res		Emp	Res		Emp
	0	0	200		0	100		0	0		0
Peak Hour Trip	AM	PM	AM		PM	AM		PM	AM		PM
rates by option	0	0	112		122	56		61	0		0
2011 Census Mode of Travel to	Driving Car or Van (driving of passenger)		Bus		Train	Walk		Су	cle		Other
work	85%		1%		1%	11%	2		2%		1%
	Within Stroug	d Withi	in CSV W		ithin Forest	Within West of Wit		Within	Vithin West		Other
	District	ar	ea	0	f Cotswold	England		Midla	ands		
	44%	12	2%		4%	38%	38% 19		%		6%

Strategic Road Network	
Main SRN access corridor – volume of traffic	Southbound M5 J14 50k daily vehicle movements
Known pinch points (existing evidence base)	M5 J14 is a pinchpoint restricting growth - work is required to resolve the issue. A
	multi funding package would be required from various developments.
Major Road Network	
Main MRN access corridor	No proposed MRN in the vicinity of the site
What type of road is it	
Volume of traffic flows	
Known pinch points	
Local Road Network	
Main highway access corridor	B4060
What type of road is it	District Link - <6k vehicle movements
Known pinch points	Local Assessment required
Bus Network	
Existing Bus services	60, 63, 84, 85, 288, 626, X11
Identify services served by high frequency services	84 / 85 (60 mins)
(at least 1 bus per hour between 7am to 7pm)	
Identify locations served by high frequency services	84/85 Yate
(at least 1 bus per hour between 7am to 7pm)	
Rail Network	
Identify approximate distance to nearest railway	Cam & Dursley - 7 miles - Possible new station in Charfield - 3 miles
station or planned station	
Identify locations served by high frequency services	Bristol & Gloucester
(at least 1 train per hour between 7am to 7pm)	
Known access issues	Parking needs to be improved as does walking and cycling access
Known service or access improvements	Ongoing work with West of England to extend MetroWest scheme to Gloucester
	to provide 30 minute frequency to Bristol
Walking and Cycling Network	
How well Is the cluster integrated into the existing	Urban extension
walking and cycling network?	
Identify major trip attractors within walking and	2km -Kingswood - 5km - Charfield & Dursley
cycling distance (2km walk or 5km cycle)	
Known access issues	Local assessment required
Known access improvements	Improved linkages to Charfield

Possible	1 – Concentrated	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Infrastructure requirements by option	Growth	Local highway access improvements may be required subject to local assessment	Local highway access improvements may be required subject to local assessment	

RAG Assessments	1 – Concentrated Growth	2 – Wider Distribution	3 - Dispersal	4 – Growth Point
Likely scale of mitigation required				
Cumulative impact of the site – linked to location of likely impact				
Existing car usage				
Propensity of using passenger transport – before any mitigation				