



Strategic and Local Plan
Trip Rates Technical Note



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Prepared by:

Chris Richman MSc

Graduate Transport Modeller

Eva Douligeri MEng MSc

Senior Transport Consultant

David Battershill BSc MSc

Associate Director - Transport Planning & Modelling

Reviewed & Approved by:

Karl Jarvis MSc

Director

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1 Overview

1.1 Introduction

This Technical Note provides an overview of the calculation and application of trip rates for the transport modelling of the Preferred Spatial Option (PSO) for the Regulation 19 submission transport evidence bases for the Strategic Local Plan (SLP) (Gloucester, Cheltenham and Tewkesbury) and Cotswold Local plan. It should be noted that the same trip rates and approach have been applied across these local plans except for business park trip rates, following feedback with National Highways.

Section 1 of this TN describes the broad application of the trip rates in relation to the variable demand model, internalisation, as well as detailing the residential and employment trip rates used.

Section 2 show the location and quantum of the residential and employment development forming the PSO

Section 3 provides a more detailed breakdown of how the residential and employment trip rates have been applied by geographic area for strategic sites across each local plan area.

Section 4 of this TN provides a comparison between the trip rates applied for PSO for SLP and Cotswold and other local comparator trip rates from other local plans and studies.

This TN should be read in conjunction with the following reports:

- SLP Spatial Option Assessment Technical Note and Appendices, the Forecasting Output Technical Note and the Vision and Validate Technical Note.

1.2 Application of the Variable Demand Model and V&V trip rates

Prior to the modelling of the PSO, the spatial option modelling stage was undertaken for the SLP, with the aim of informing the selection of the PSO. For the spatial option modelling, two sets of model runs were undertaken on each spatial option using the following two trip rates:

- a) **Standard trip rates** – these represent a standard approach (akin to the more traditional predict and provide approach) and therefore a worst case regarding the number of generated car trips.
- b) **V&V trip rates** – these represent a lower car trip rate, reflecting a vision and validate approach where broadly a 20% reduction in car mode share was assumed, corresponding to a shift to more sustainable modes of transport.

The application of the V&V trip rates for the spatial option modelling provided a suitable forecasting range, helping to show what could be achieved in line with a vision focused on more sustainable transport. This was instead of running the variable demand model for each spatial option test, given the number of model scenarios and time it would have taken.

For the PSO modelling (as well as for intervention testing) only the standard trip rates have been used alongside the application of the Gloucestershire Countywide Multi-Modal Model's (GC3M) calibrated Variable Demand Model (VDM). The GC3M's VDM allows for the redistribution of trips and shift to more sustainable modes. The shift away from car to more sustainable modes will only become apparent in the intervention testing.

1.3 Internalisation

For the modelling of the PSO, no internalisation reduction factor has been applied for the new development sites forming the PSO. This could therefore be considered a worst-case regarding traffic impacts.

1.4 Trip Rates - Residential

Table 1-1 shows peak hour vehicle residential trip rates, including 2-way totals, by direction and further split by vehicle type (Car, LGV, OGV), which were used for the PSO modelling for SLP and the Cotswold local plan. The trip rates are further categorised by the following three location types: Residential; Residential Isolated; and Village, reflecting the differing travel behaviour and car dependency associated with each location type.

Category	Period	Vehicles			Car		LGV		OGV	
		Arrivals	Departures	2-Way	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Residential	AM (08:00 - 09:00)	0.120	0.313	0.43	0.109	0.289	0.009	0.023	0.002	0.001
	IP (Avg 10:00-16:00)	0.148	0.143	0.29	0.125	0.121	0.021	0.021	0.002	0.002
	PM (17:00 - 18:00)	0.293	0.145	0.44	0.263	0.130	0.029	0.014	0.001	0.001
Isolated Residential	AM (08:00 - 09:00)	0.124	0.349	0.47	0.113	0.326	0.010	0.022	0.001	0.001
	IP (Avg 10:00-16:00)	0.155	0.149	0.30	0.132	0.126	0.022	0.022	0.001	0.002
	PM (17:00 - 18:00)	0.309	0.164	0.47	0.268	0.143	0.040	0.020	0.001	0.001
Village	AM (08:00 - 09:00)	0.164	0.416	0.58	0.142	0.386	0.019	0.025	0.003	0.005
	IP (Avg 10:00-16:00)	0.159	0.153	0.31	0.137	0.131	0.021	0.021	0.001	0.001
	PM (17:00 - 18:00)	0.342	0.166	0.51	0.318	0.151	0.023	0.014	0.001	0.001

Table 1-1: Trip Rates (per dwelling per hour) by location category and mode

1.5 Trip Rates - Employment

Table 1-2 presents the peak hour vehicle employment trip rate, including 2-way totals, by direction and further split by vehicle type (Cat, LGV, OGV), covering the AM peak (08:00–09:00), inter-peak (average hourly), and PM peak (17:00–18:00) periods. Separate rates are provided for each employment land use category, Business Park (B1), Industrial Estate (B2), and Warehousing (B8), reflecting the differing travel patterns and shift structures associated with each use type. The employment land was provided by the local authorities in hectares; these were then converted for each site to Gross Floor Area using the conversion assumptions in GCC's GC3M uncertainty log.

In collaboration with National Highways (NH), separate business park TRICs datasets were developed for the Cotswolds and SLP studies to derive the AM and PM peak hour trip rates. The Cotswolds study utilised pre-COVID site selections (10 sites) to inform a robust assessment of the highway impacts associated with Business Park employment development. For the SLP study, which encompasses larger population centres, a small proportion of post-COVID survey data (3 sites) was incorporated to supplement the pre-COVID dataset.

Category	Period	Vehicles			Car		LGV		OGV	
		Arrivals	Departures	2-Way	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Business Park (Cotswold)	AM (08:00–09:00)	1.512	0.127	1.64	1.475	0.100	0.034	0.022	0.003	0.005
	IP (Avg 10:00–16:00)	0.126	0.161	0.29	0.107	0.139	0.016	0.017	0.004	0.004
	PM (17:00–18:00)	0.126	1.290	1.42	0.116	1.269	0.007	0.018	0.003	0.003
Business Park (SLP)	AM (08:00–09:00)	1.367	0.120	1.49	1.334	0.094	0.031	0.021	0.002	0.005
	IP (Avg 10:00–16:00)	0.126	0.161	0.29	0.107	0.139	0.016	0.017	0.004	0.004
	PM (17:00–18:00)	0.124	1.186	1.31	0.114	1.167	0.007	0.017	0.003	0.002
Industrial Estate	AM (08:00–09:00)	0.371	0.063	0.43	0.269	0.063	0.078	0.064	0.024	0.018
	IP (Avg 10:00–16:00)	0.221	0.237	0.46	0.128	0.144	0.068	0.068	0.025	0.025
	PM (17:00–18:00)	0.119	0.344	0.46	0.083	0.290	0.024	0.043	0.012	0.011
Warehousing	AM (08:00–09:00)	0.083	0.040	0.12	0.048	0.013	0.012	0.006	0.023	0.021

Category	Period	Vehicles			Car		LGV		OGV	
		Arrivals	Departures	2-Way	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
	IP (Avg 10:00-16:00)	0.057	0.068	0.12	0.026	0.034	0.009	0.010	0.022	0.024
	PM (17:00-18:00)	0.045	0.081	0.13	0.020	0.060	0.005	0.005	0.020	0.016

Table 1-2: Employment Trip Rates (trips per 100sqm GFA) by location category and mode

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2 Preferred Spatial Option

2.1 SLP

2.1.1 Residential Developments

The residential development sites are grouped into three location type categories, each with different trip rates, namely, Strategic Sites, Service Village Sites, and Rural Settlements.

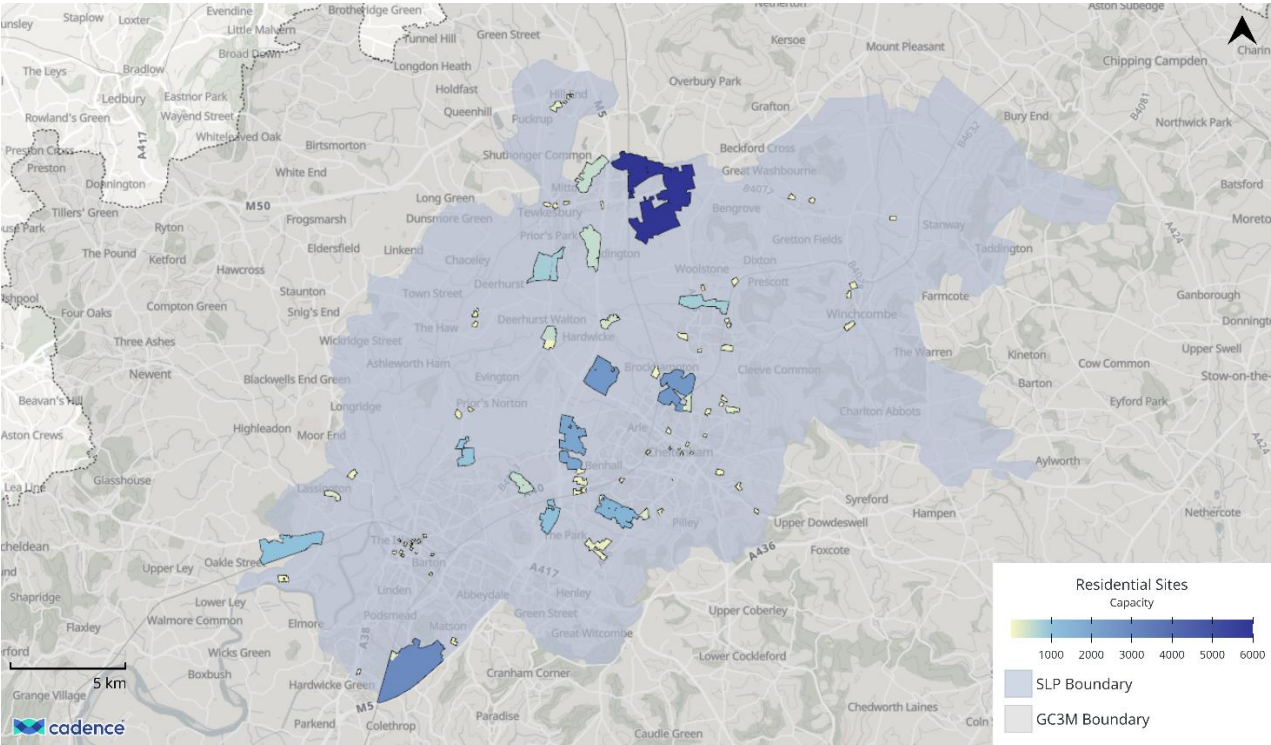


Figure 2-2 Figure 2-1 shows the split in dwellings for the SLP PSO into the three different location types. Table 2-1 tabulates the residential development sites included in the PSO into each location type category, forming a total of 30,814 dwellings.

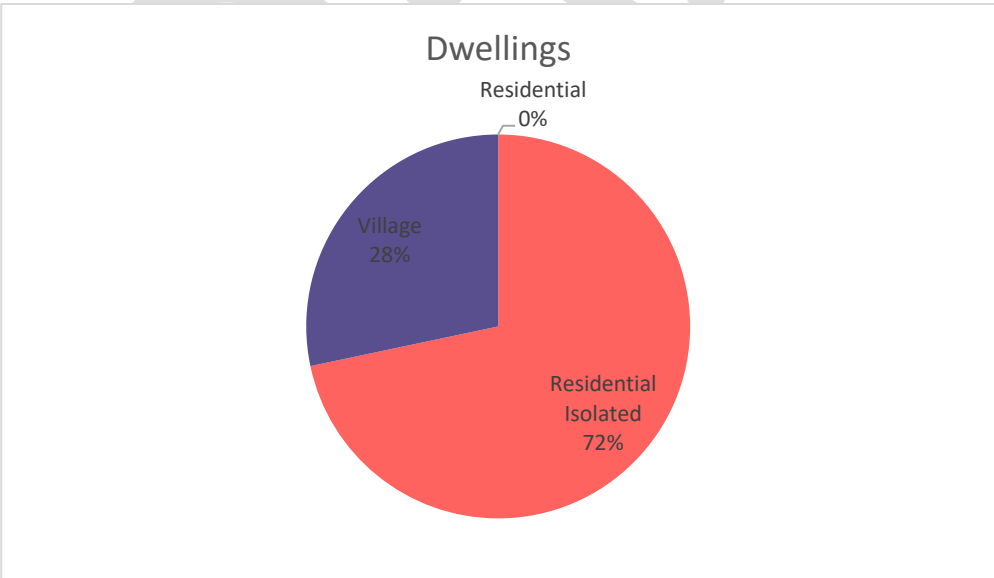


Figure 2-1: Dwellings by Location Type Trip Rate Category

Trip Rate	Dwellings
Residential	0

Residential Isolated	22,090
Village	8,724
Total	30,814

Table 2-1: Dwelling Totals by Location Type Trip Rate Category

Strategic Sites are large-scale allocated housing developments, with 500 dwellings or more, which are expected to generate significant levels of new travel demand. Service Village Sites comprise smaller allocations within established settlements that benefit from existing services and facilities, whilst Rural Settlement sites represent minor allocations in less accessible locations with limited onward connectivity.

Figure 2-2 show the location of the SLP residential development sites in the PSO by number of dwellings. Table 2-2 provides the breakdown of the residential development sites regarding number of dwellings for each location.

Given the scale of trip generation associated with large residential developments, this TN provides a more detailed analysis in section 3, of the trip generation for the Strategic Sites.

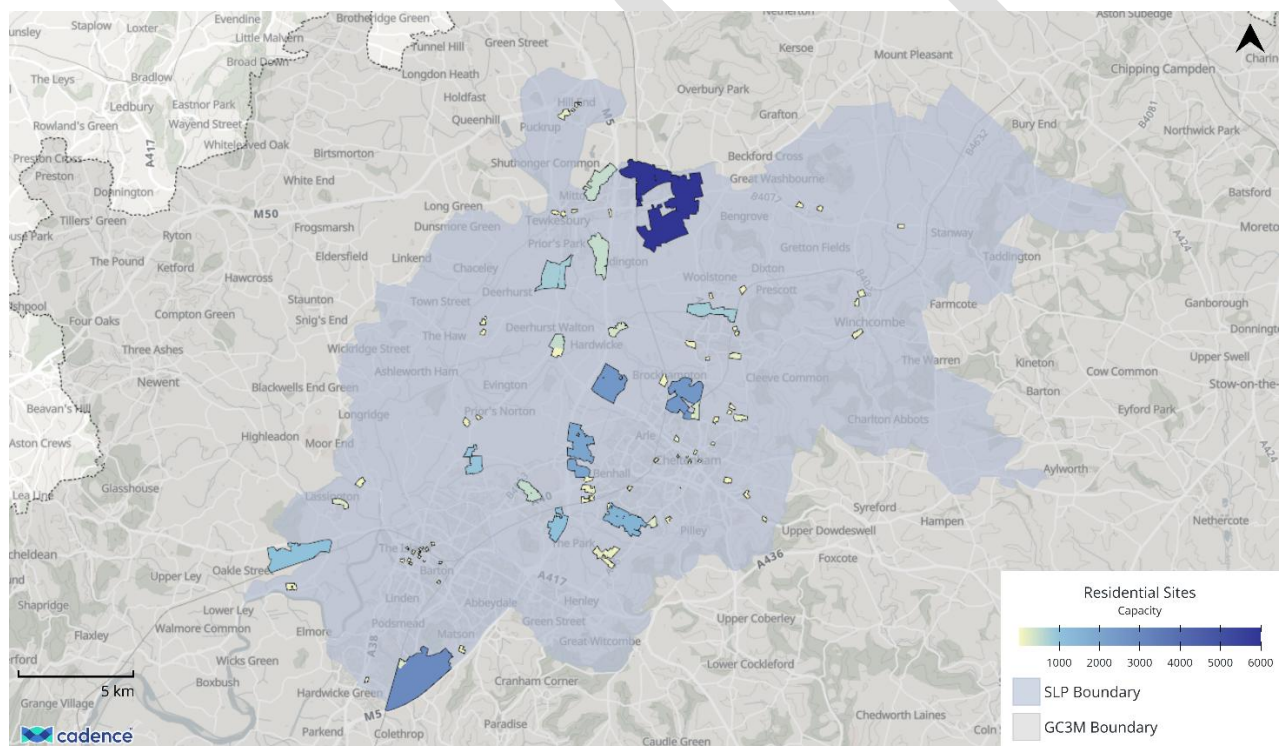


Figure 2-2: SLP PSO Residential Sites Development Size

Site	Dwellings	Description
West Gloucester	1000	Strategic Sites
East of Churchdown	1000	Strategic Sites
North Churchdown	500	Strategic Sites
South Cheltenham	1500	Strategic Sites
Land north of Bishops Cleeve	800	Strategic Sites
Land at Walton Cardiff	500	Strategic Sites
Tewkesbury Garden Communities	6000	Strategic Sites
Land at Mitton	500	Strategic Sites
Land east of Swindon Village	2500	Strategic Sites
Safeguarded Land	2000	Strategic Sites

Site	Dwellings	Description
Land adjoining North West Cheltenham	2500	Strategic Sites
Land south of Tewkesbury	800	Strategic Sites
East Twigworth	942	Strategic Sites
Land at Whaddon	3000	Strategic Sites
Part of Normansbrook Farm, Sandy Pluck Lane	128	Rural
Land at Apperley	57	Rural
Land at Gabb Lane Apperley	14	Rural
Land off Shutter Lane, Gotherington, GL52 9ED	34	Rural
Grange Farm , Coombe Hill (site A)	530	Rural
Land opposite Elms Farm , Minsterworth	54	Rural
Land at Elms Farm, Minsterwoth	55	Rural
Land between A48 and Church Lane, Minsterwoth, GL2 8JH	54	Rural
Land to the rear of former Kings Head	42	Rural
GL29LY Norton Site 2	85	Rural
Land off Badgeworth Lane, Shurdington, GL51 4UQ	158	Rural
Land off Lambert Avenue, Shurdington, Cheltenham	91	Rural
Land west of Toddington Village Hall	55	Rural
Land at Greenacre, Hill End, Twynning, Tewkesbury, Gloucester, GL20	14	Rural
Woodmancote Park Homes, North, Woodmancote	41	Rural
Woodmancote Park Homes, South, Woodmancote	37	Rural
Land on the south side of Dibden Lane, Alderton, Tewkesbury, Gloucestershire	51	Rural
Land to the south of Gretton Road, Gotherington	65	Rural
Land between Court Drive and School Road, Apperley	55	Rural
Land off Beckford Road, Alderton	59	Rural
Land North OF Brockeridge Road	160	Rural
Land at Hill End Farm, Twynning	10	Rural
Land south of Two Hedges Road, Bishop's Cleeve	178	Rural
Land at Coombe Hill	69	Rural
Land north of Badgeworth Lane, Shurdington	104	Rural
Land at Longlands, Shurdington Road	56	Rural
Land South of Badgeworth Lane	218	Rural
Fair Acres, Badgeworth Lane	42	Rural
Corndean Lane, Winchcombe	153	Rural
Land between Greet Road and Gretton Road, opposite Winchcombe School, GL54 5LB	100	Rural
Land at Kyderminster Road	66	Rural
Land at Hill End Farm, Twynning	21	Rural
Land at Hill End Farm, Twynning	9	Rural
Land lying to the south of Stoke Road, Bishops Cleeve	94	Rural
Land at 105 Cheltenham Road, Bishop's Cleeve	21	Rural
Land west of A435 and south of Stoke Orchard Road, Bishops Cleeve	50	Rural
Land at Brizen Farm	239	Rural
Land east of Woodleigh Field, Highnam	264	Rural
Land to the south of Stoke Road, Cheltenham, GL52 7SB	362	Rural
Land west of the A417, Maisemore	92	Rural
Land to the north-west of Ledbury Road, Maisemore	58	Rural
GWRSA Social Club	35	Rural
Colwell Youth & Community centre	25	Rural
Spread Eagle Court, Lower Northgate Street	30	Rural
Above Wilkinson, 74-78 Northgate Street	60	Rural
Land off lower Eastgate Street	15	Rural

Site	Dwellings	Description
Former Health Centre, Hatherley Road	15	Rural
Land East of Sneedhams Road (aka Land South of Winneycroft Allocation)	35	Rural
67-69 London Road	60	Rural
Site south of Winnycroft	55	Rural
Upper Floors of the Oxbode	40	Rural
Greater Blackfriars - Former Fleece Hotel	30	Urban
Land south of homeground road	200	Urban
Portland Street	50	Urban
Land south of Glenfall Way	28	Urban
Land south east of Ham Road	13	Urban
210 Hatherley Road	39	Urban
Commercial Street Car Park	7	Urban
Cakebridge Place	34	Urban
Sherborne Place Car Park	20	Urban
Rear of High Street Car Park	20	Urban
55 Northgate Street	5	Urban
Land north of Branch Road, west of Grovefield Way	149	Urban
Land off Badgeworth Road, south of North Road West	119	Urban
Land between A40 and Bamfurlong Lane (west)	114	Urban
The Paddocks, Swindon Lane	74	Urban
Land at Hunting Butts (east), Evesham Road	367	Urban
Land east of Cheltenham Racecourse 2, Park Lane	41	Urban
Land north of Park Lane	63	Urban
Land off New Barn Lane 3 (south of Racecourse)	46	Urban
Land at the Hayloft (west), The Reddings / Badgeworth Road	71	Urban
The Maples, The Reddings	11	Urban
Land at The Hayloft (west/south), The Reddings	46	Urban
Land at Sunnyfield Lane (west)	29	Urban
Land off Oakhurst Rise	26	Urban
Land west of Dowdeswell Park, London Road, Charlton Kings, Cheltenham, GL52 6UG	48	Urban
Maenan Stud, Brockhampton Lane	69	Urban
Parsons Piece, Swindon Village	115	Urban
Land East of Kidnappers Lane	22	Urban
Land at Brailsford House (Parker Court)	16	Urban
The Briars, The Reddings	48	Urban
Land at The Vineyards Industrial Estate	84	Urban
Hardwick Campus, University of Gloucestershire, Cheltenham	95	Urban
Cavendish House, Cheltenham	50	Urban
12-16 Quay Street	10	Urban
The Lodge, 19 Brunswick Square	20	Urban
Former Argos	60	Urban
NEM House	10	Urban
60 Kings Walk	20	Urban
Southgate Moorings	40	Urban
Station Hotel	20	Urban
PCC land at Waterwells	50	Urban
Land at Shaw Green Lane, Prestbury	189	Urban
Land adjacent to Alderman Knight School, Ashchurch Road, Tewkesbury	57	Urban
Healings Mill, Quay Street, Tewkesbury (site C)	5	Urban
Healings Mill, Quay Street, Tewkesbury (site B)	5	Urban

Site	Dwellings	Description
Healings Mill, Quay Street, Tewkesbury (site D)	8	Urban
Healings Mill, Quay Street, Tewkesbury (site A)	5	Urban
Bishop's Walk / Spring Gardens, Tewkesbury	63	Urban
Former MAFF site, Tewkesbury	45	Urban
Healings Mill, Mill Buildings, Tewkesbury	21	Urban
Part of West Quay, The Dock	80	Urban

Table 2-2: List of Residential sites in SLP PSO

2.1.2 Employment Developments

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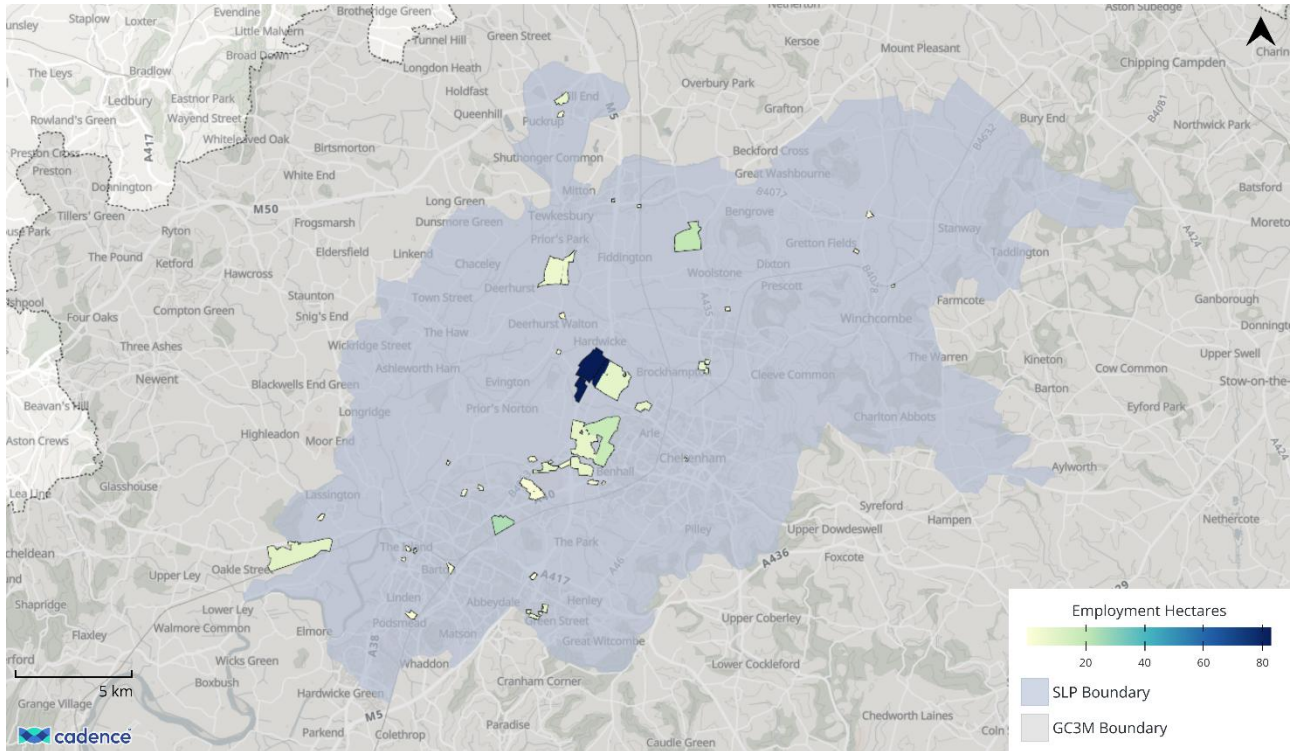


Figure 2-3 show the employment sites and corresponding employment land area in hectares included in the PSO. Employment development land in the PSO totals 252.7 hectares.

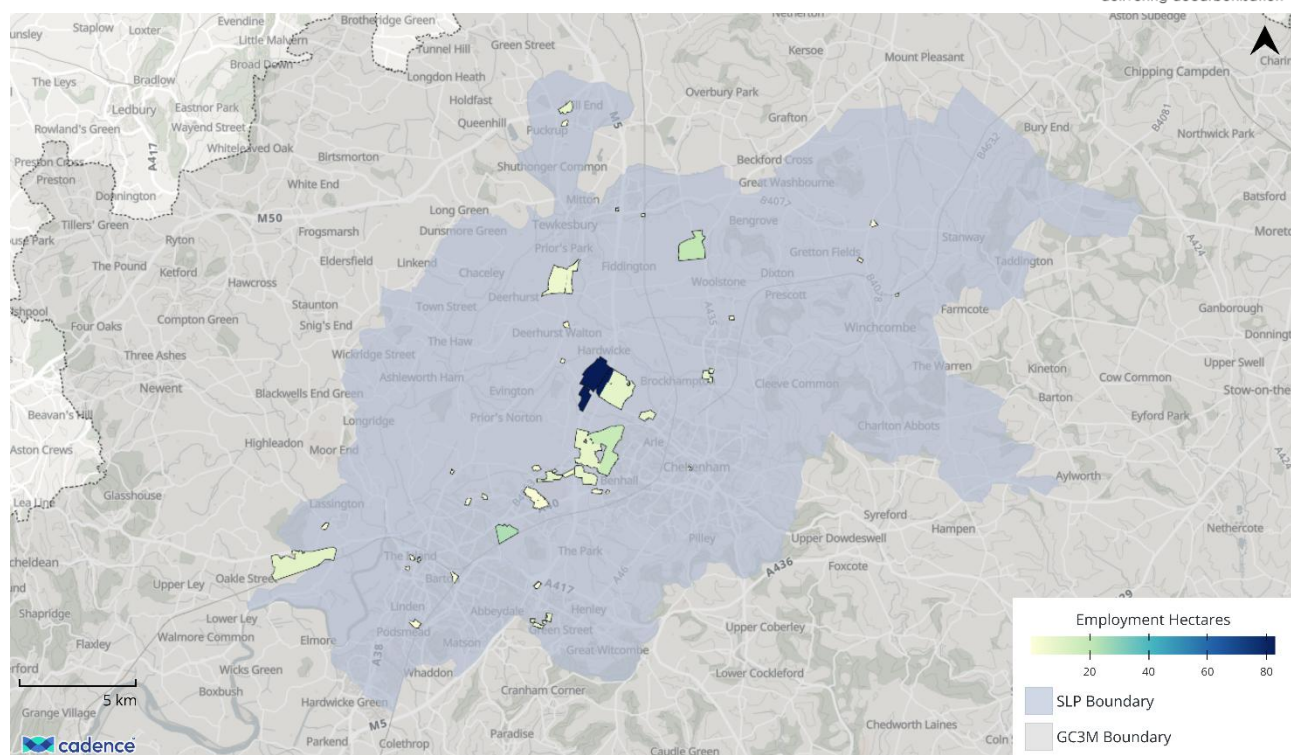


Figure 2-3: Employment Sites and Employment Hectares

Site	Employment Hectares
Ashville Business Park	2.61
Bamfurlong Industrial Park	0.51
Blackridge Sports & Community Hub	0.35
Brockridge Business Park	7.91
Cleeve Business Park	7.63
Duddage Farm Business Park	1.37
Fleece Hotel and Longsmith Street Carpark	0.21
Former Quayside House, Blackfriars	0.15
Gloucester Business Park	7.35
Highfield Farm	2.16
Highnam Business Centre	2.28
Homelands Farm	0.92
Innsworth & Twigworth	3.50
Isbourne Business Centre	0.00
Knightsbridge Business Centre	0.85
Land adjoining North West Cheltenham	8.78
Land at Cheltenham Walk	0.68
Land at Gloucestershire Airport	9.24
Land at Pamington, Tewkesbury	0.00
Land between Smow Farm and Claydon House Farm, Tewkesbury	0.00
Land east of Bamfurlong Lane Staverton	3.73
Land North West of M5 J10	83.01
Land north-west of Grovefield Way	2.20
Land south of Hatherley Lane	0.86
Land south of Tewkesbury	5.87

Land south of Triangle Park	1.68
Malvern View Business Park	0.00
Meteor Business Park	0.00
Newton Farm Business Park, Fiddington, Ashchurch	0.51
North Brockworth	2.48
North Churchdown	2.05
North West Cheltenham	8.79
Orchard Industrial Estate	2.78
Park Farm Industrial Estate	0.85
Part of West Quay, the Docks	0.32
Safeguarded Land	8.35
South Churchdown	23.76
Tewkesbury Business Park	0.34
Tewkesbury Garden Communities Future Employment Area	20.00
Twigworth Court	0.51
Twittocks Farm	0.00
West Cheltenham	18.00
West Gloucester	9.81
Withytrees Farm	0.34

Table 2-3: List of Employment Sites in SLP PSO

2.2 Cotswold

2.2.1 Residential Developments

Figure 2-4 shows how the number of dwellings are split between the location type trip rate categories for all PSO developments across the Cotswold, including the sites with less than 500 dwellings.

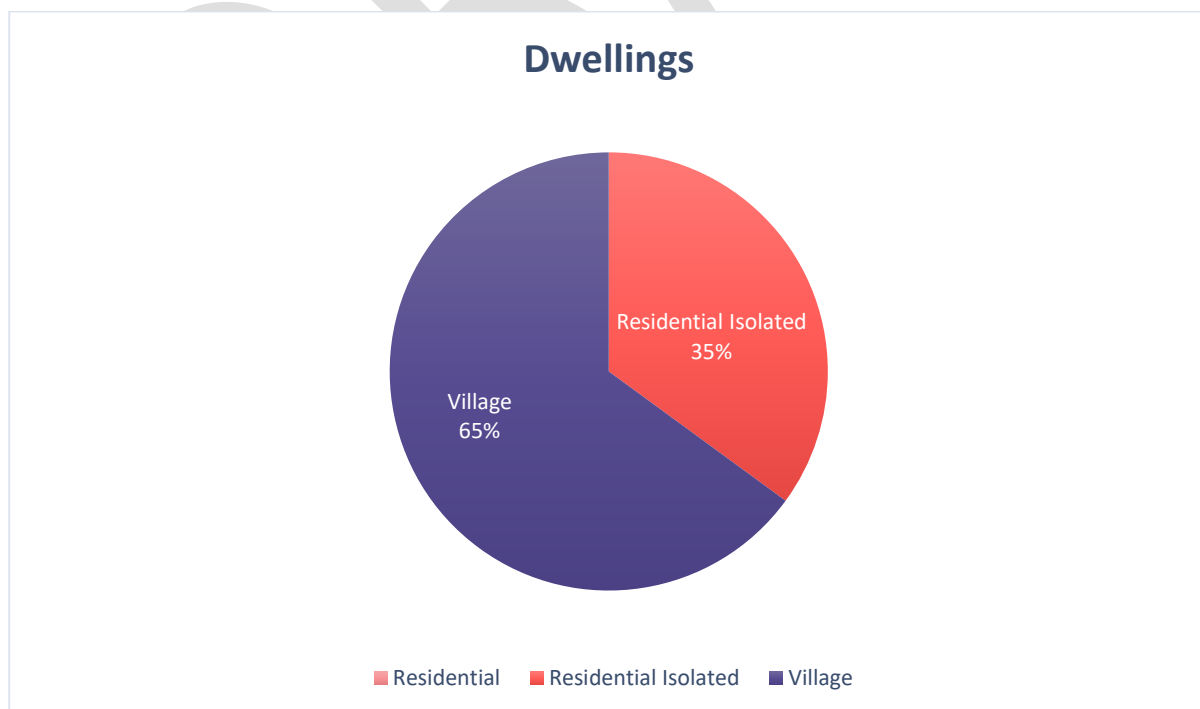


Figure 2-4: Dwellings by Location Type Trip Rate Category

Trip Rate	Dwellings
Residential	0
Residential Isolated	6,609
Village	12,250
Total	18,859

Table 2-4: Dwelling Totals by Location Type Trip Rate Category

Table 2-5 presents the eleven strategic residential development sites included in the Cotswold PSO, accounting for a total of 10,760 dwellings.

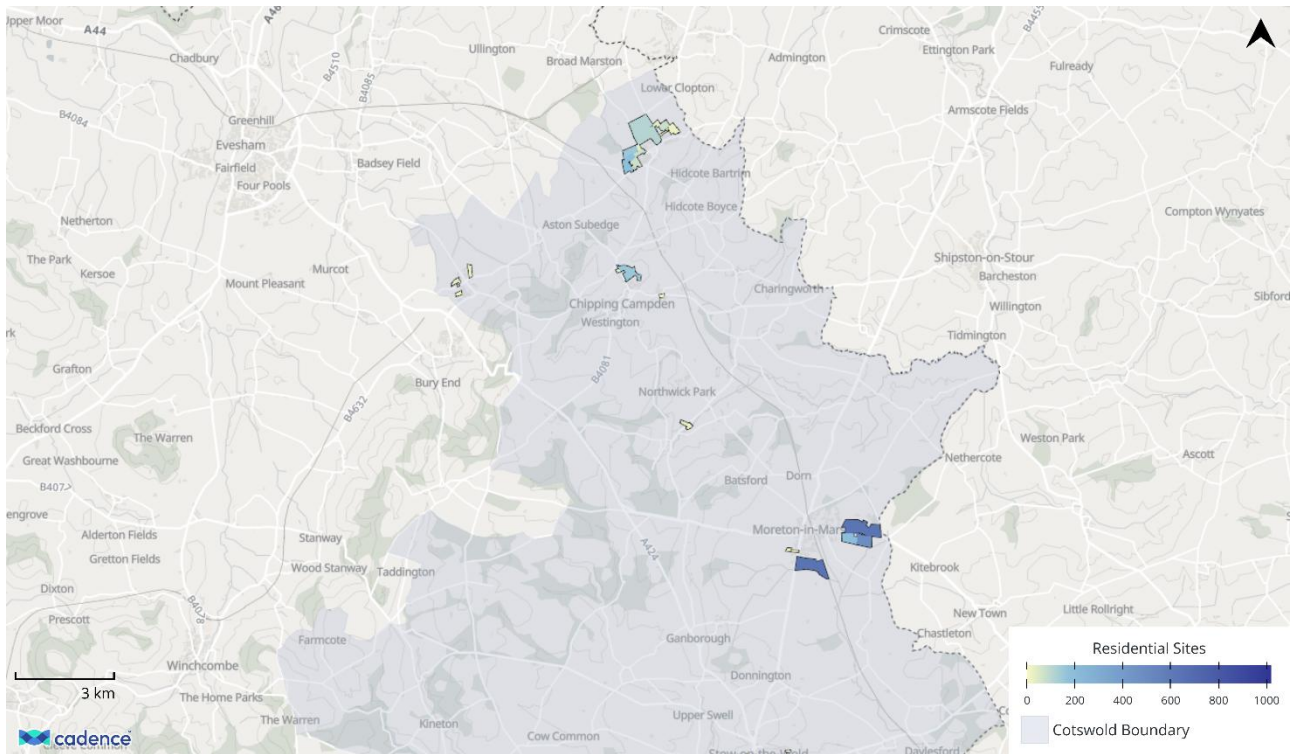


Figure 2-5 and Error! Reference source not found. illustrate the full extent of residential sites included within the PSO, providing spatial context for the distribution of development across the district. Given the scale of trip generation associated with large residential developments, this report focuses on the Strategic Sites.

Site	Dwellings
Phase 2-f: Land at Chesterton Farm, Cranhams Lane, GL7 6JP	549
Phase 3a-i: Land at Chesterton Farm, Cranhams Lane, GL7 6JP	982
Land south-west of Preston between Cirencester Road (A419) and A419T	960
Land east of Kingshill Lane	613
Land south-west of Kemble	1,020
Fire Service College (Site A)	833
Ampney Crucis	660
Land at Down Ampney	1,660
Land south of Driffield	1,090
Mickleton	1,264
Land at Moreton-in-Marsh	1,129

Table 2-5: List of Strategic Residential sites in Cotswold PSO

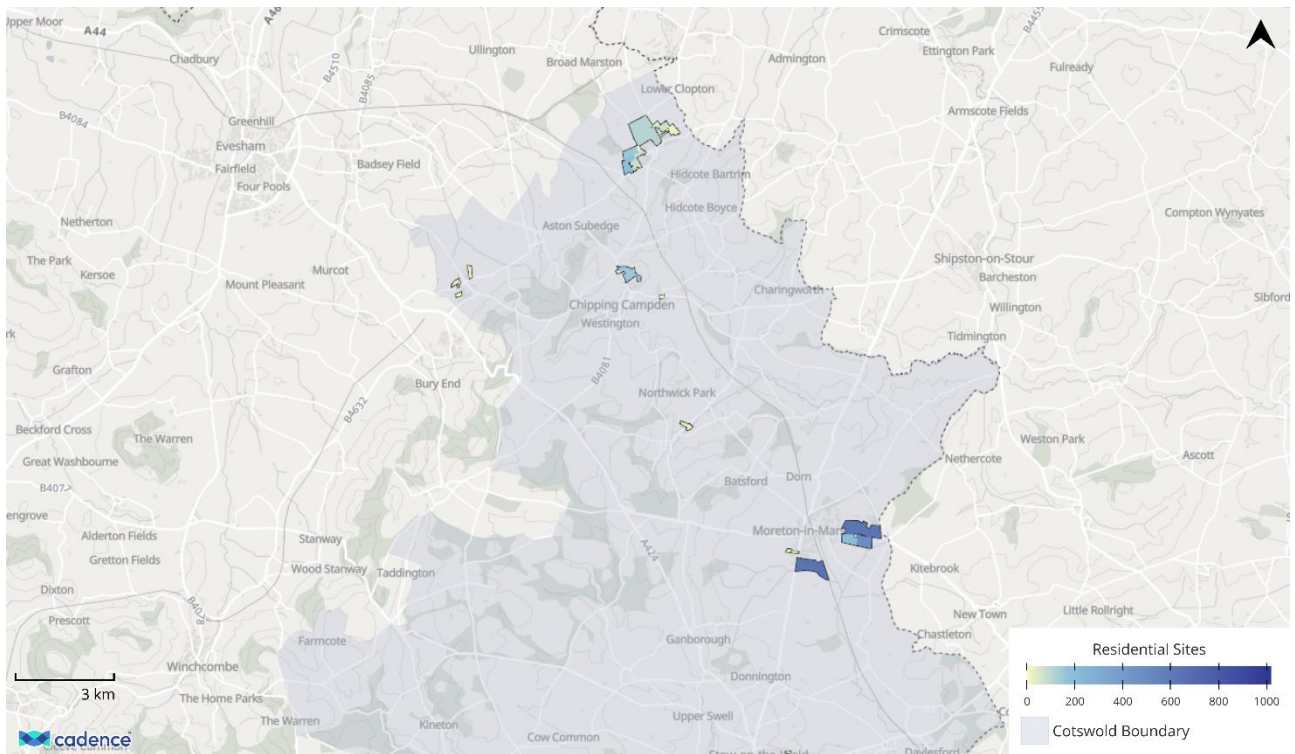


Figure 2-5: North Cotswold PSO Residential Sites

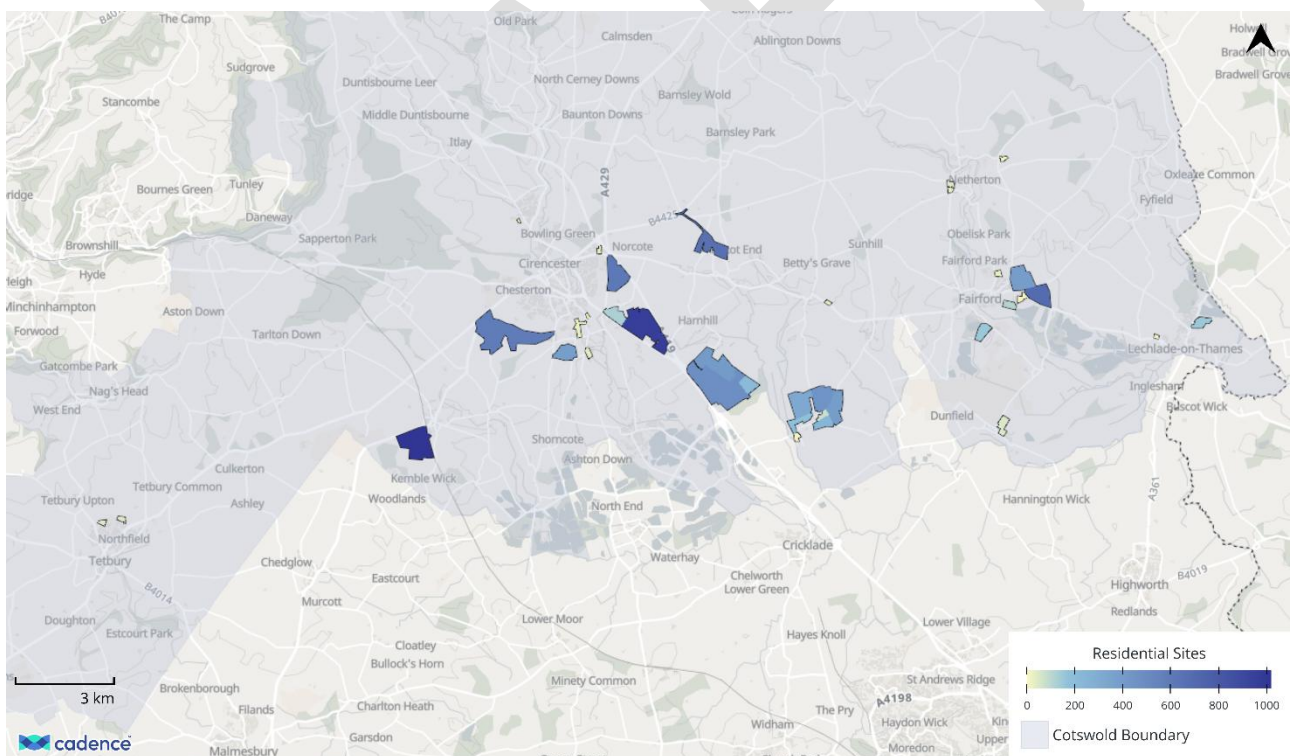


Figure 2-6 South Cotswold PSO Residential Sites

2.2.2 Employment Developments

Table 2-6 and Figure 2-7 show the employment sites and corresponding employment land in hectares included in the final Cotswold PSO. Employment development land in the PSO totals 80 hectares.

Site	Employment Hectares
Phase 3a-i: Land at Chesterton Farm, Cranhams Lane, GL7 6JP	9.10
Land north of Bourton Industrial Park	5.62

Site	Employment Hectares
Land west of Battlebrook Drive, Station Road	1.03
Land north of B4632 and east of employment estate	3.00
Steadings southern extension, Cirencester	1.70
Land south-west of Preston between Cirencester Road (A419) and A419T	10.00
Land east of Kingshill Lane	1.00
Fosse Farm	10.00
Land north-east of Fairford	4.00
Land south-west of Kemble	1.00
Cotswold Airport	9.75
Land south of Cotswold Airport	16.28
Land at Prospect Gardens, Stratford Road, GL55 6SR	1.00
Fire Service College (Site C)	4.00
M89	1.50
Land north of Clark's Lane and south of Old Canal	1.00

Table 2-6: List of Employment Sites in Cotswold PSO

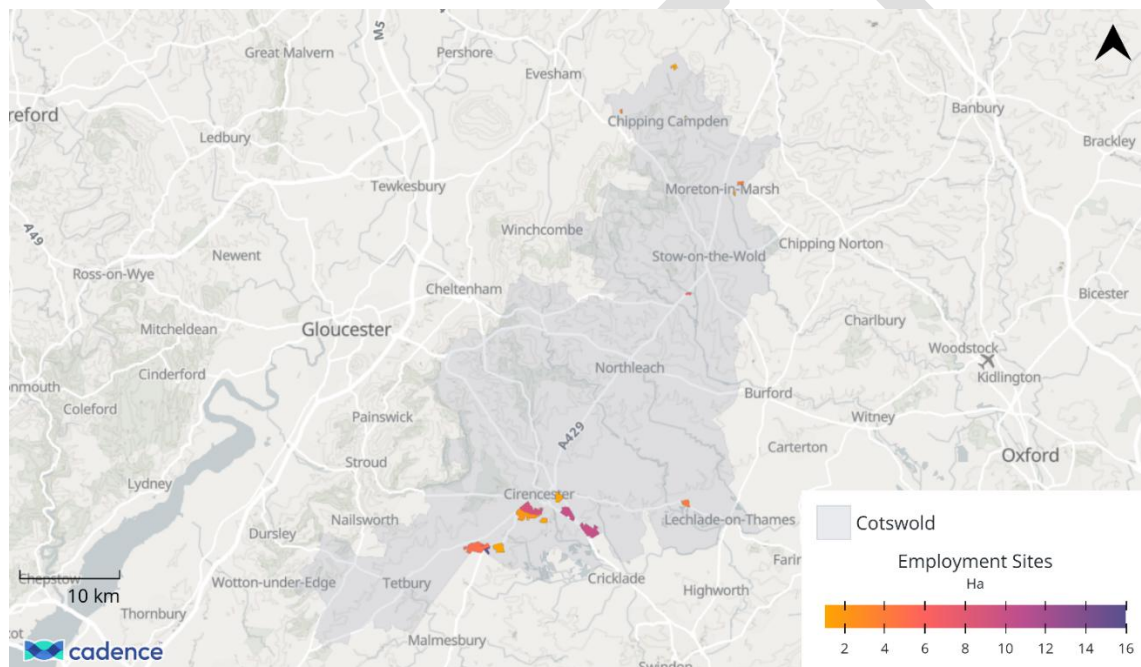


Figure 2-7: Cotswold PSO Employment Site Locations and Employment Hectares

3 Application of Trip Rates

Residential sites have been categorised into the location type categories shown in Table 3-1 for the purposes of allocating trip rates. The categorisation of sites into Residential, Residential Isolated and Village has been informed by a combination of spatial context, proximity to services and connectivity to the surrounding street network. The Department for Transport's Connectivity Tool was used for each development site to provide an indicative assessment of how well connected each location is to key services and facilities. It should be noted that the Connectivity Tool has been used for validation purposes only, to confirm that the categorisation applied to each site is reasonable. It should also be noted that following feedback from GCC and National Highways, only the residential isolated and village trip rate categories have been used for the PSO modelling.

Category	Description
Residential	Located within continuous urban built-up areas. Travel patterns and trip rates are lower compared to Residential Isolated and Village to reflect higher levels of accessibility and lower reliance on private vehicles.
Residential Isolated	Located within the vicinity of the main towns but are surrounded by mostly non-residential land uses. Travel patterns in these areas tend to differ from residential areas, as a greater reliance on private vehicles is expected with trip rates reflecting longer journeys. They tend to be located at the edge of urban areas with less access to public transport.
Village	Located within rural areas and are separated from the main urban areas and towns, with the land between villages and the main town being mostly undeveloped. Travel behaviour and trip rates differ from both Residential and Residential Isolated areas as access to services requires longer journeys. There is higher dependence on private car use.

Table 3-1: Trip Rate Categories

The following subsections describe each development site and outline the rationale for its categorisation as Residential, Residential Isolated or Village.

3.1 SLP

3.1.1 Residential Sites

Figure 3-1 displays how each of the residential PSO sites have been categorised. Sites classified as Residential are highlighted in yellow and are located within the continuous built-up area meaning that travel patterns and trip rates will reflect urban residential behaviour.

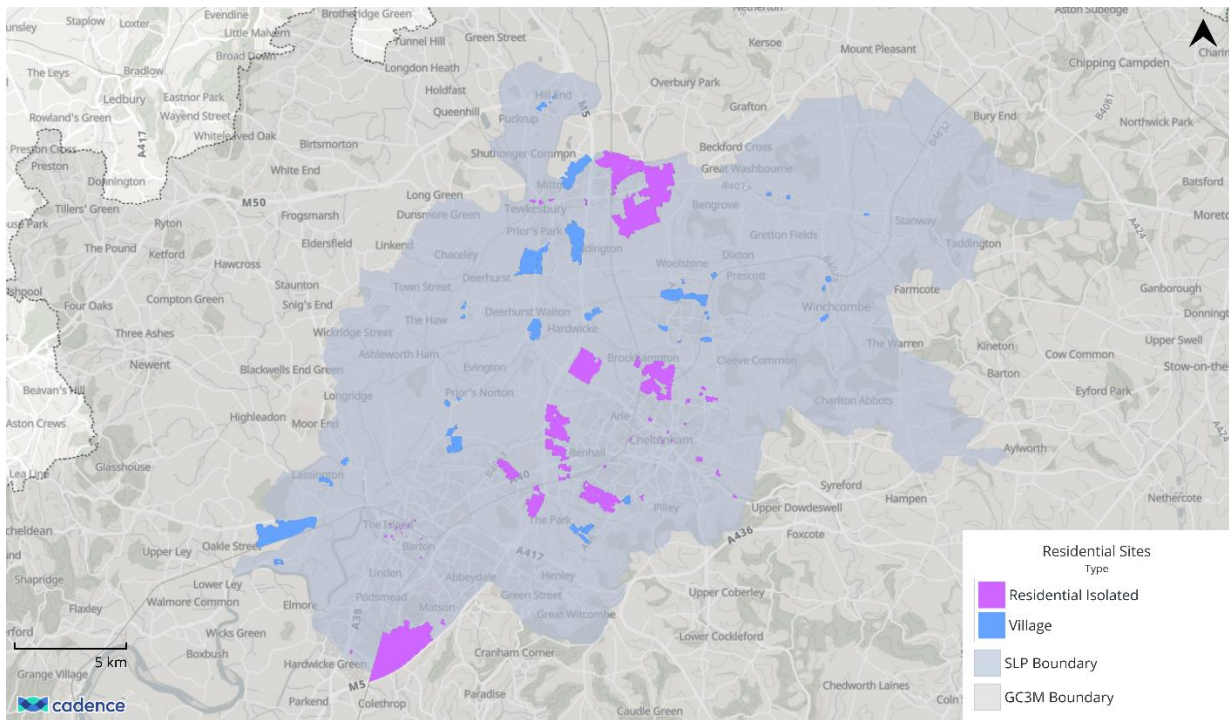


Figure 3-1: Residential PSO Sites by Trip Rate Category

This section presents a series of maps illustrating the inbound and outbound trips generated by the development sites shown in Figure 3-1 during the AM and PM peak periods. Arrivals or departures are represented by graduated circular symbols, with the size and colour intensity of each circle corresponding to the volume of trips generated. Lighter, smaller symbols indicate lower trip generation, while darker and larger symbols represent higher number of trips.

Figure 3-2 to Figure 3-5 illustrate the spatial distribution and magnitude of AM and PM peak arrivals and departures across the PSO residential development sites in the SLP region.

In the AM peak, higher departure trip volumes are concentrated at “Residential” and “Residential Isolated” sites within or adjacent to the main urban areas, particularly the large Tewkesbury Garden Community Site and several sites in the Cheltenham area. Although Village sites have higher trip rates, their smaller scale results in many cases in lower total arrivals and departures.

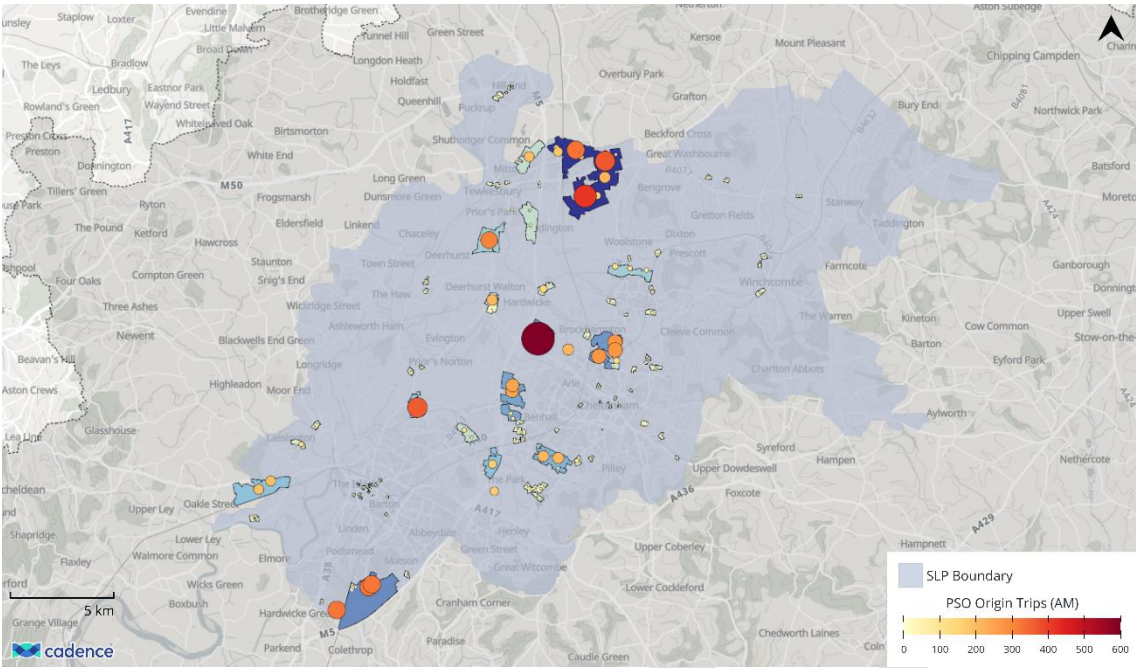


Figure 3-2: AM Departures for Residential Sites

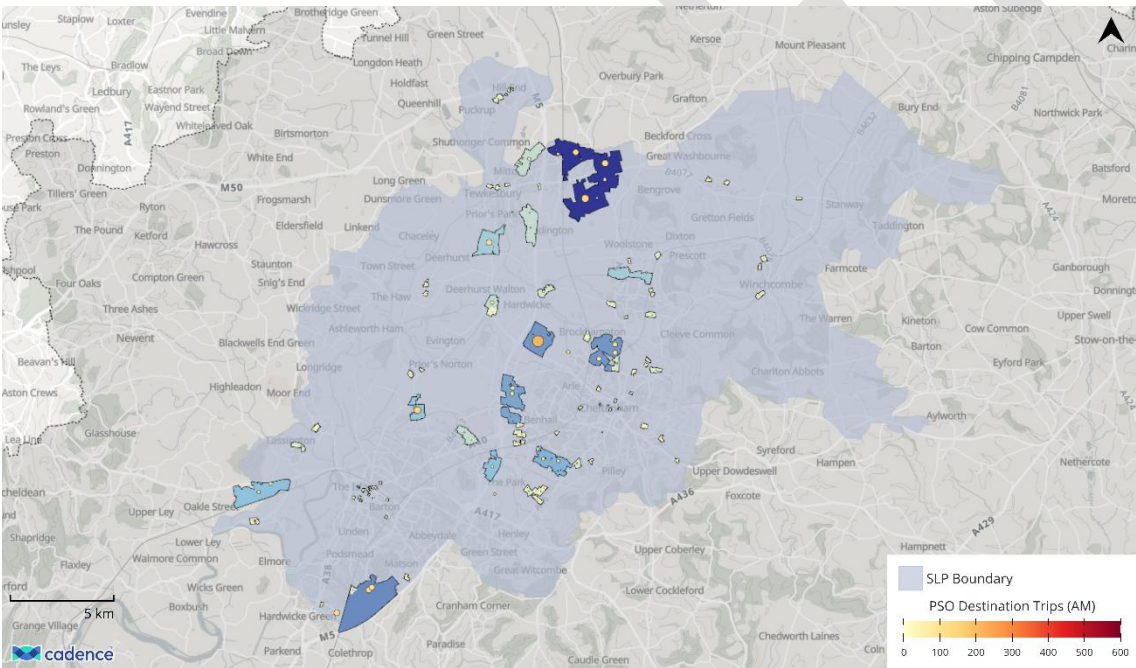


Figure 3-3: AM Arrivals for Residential Sites

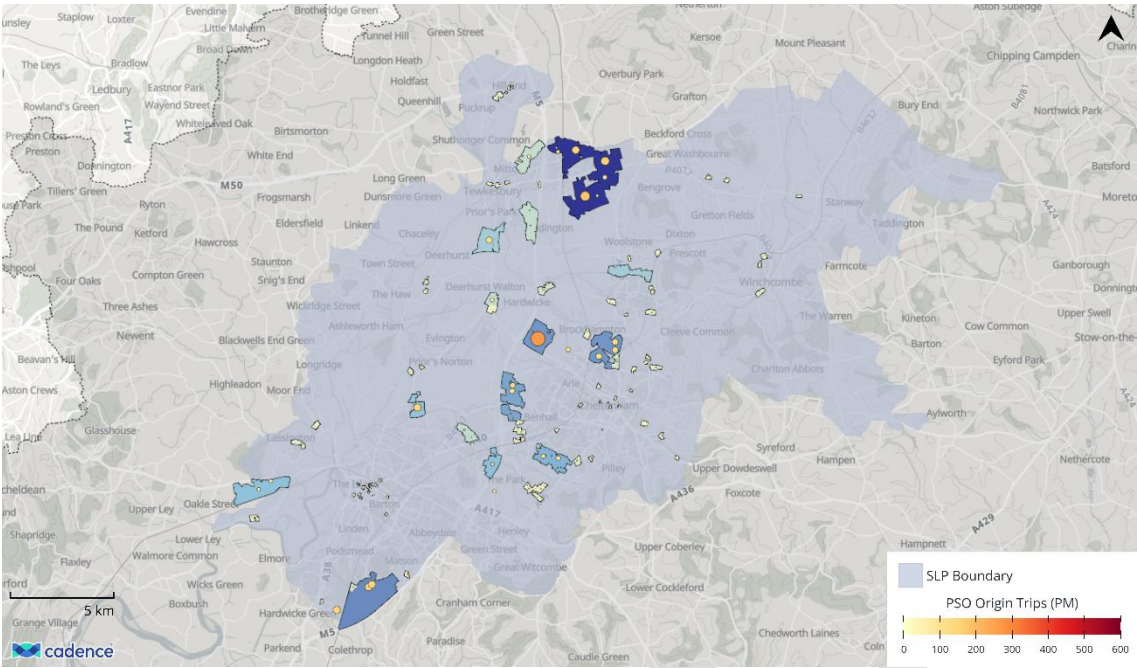


Figure 3-4: PM Departures for Residential Sites

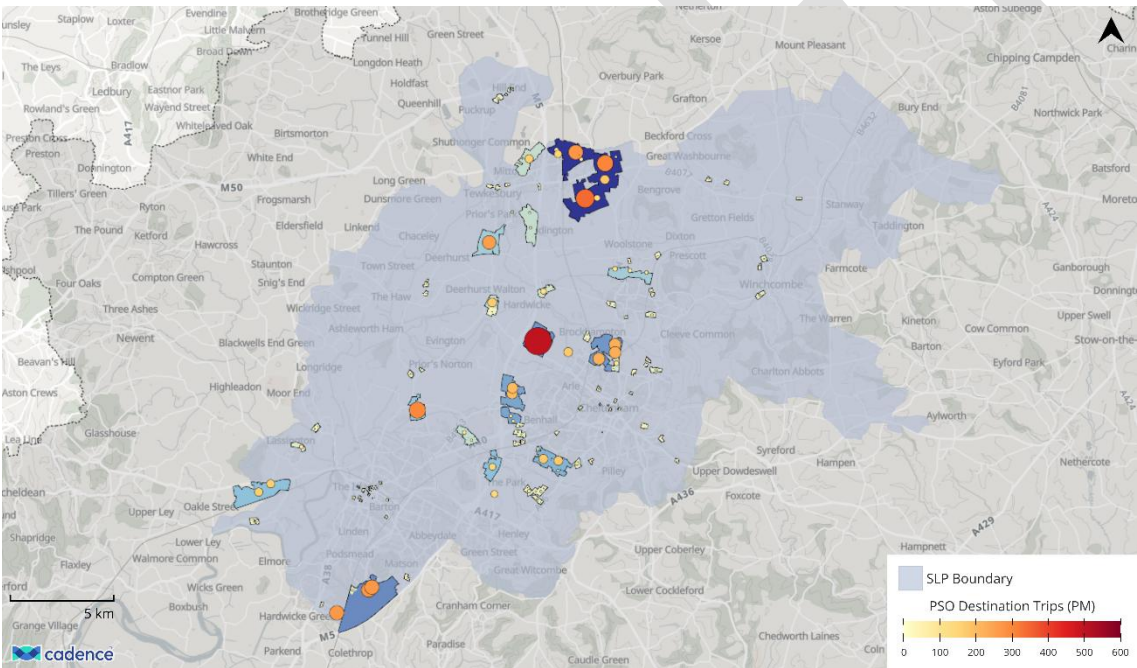


Figure 3-5: PM Arrivals for Residential Site

West Gloucester - Village

The West Gloucester site is located to the west of Gloucester and is physically separated from the main urban area by non-residential land uses. As shown in Figure 3-6, the site sits within a rural area and is not within the immediate vicinity of the built-up area of Gloucester. This separation from the urban area with limited development between the site and the city of Gloucester means that the West Gloucester site functions more as Village, reflecting its spatial separation from Gloucester's city and rural context. The classification is further supported by the DfT's Connectivity Tool, which indicated an employment overall connectivity score of 37. This score suggests a moderate level of accessibility, consistent with a village location where access to employment and other key services typically requires longer journeys compared to urban residential areas.

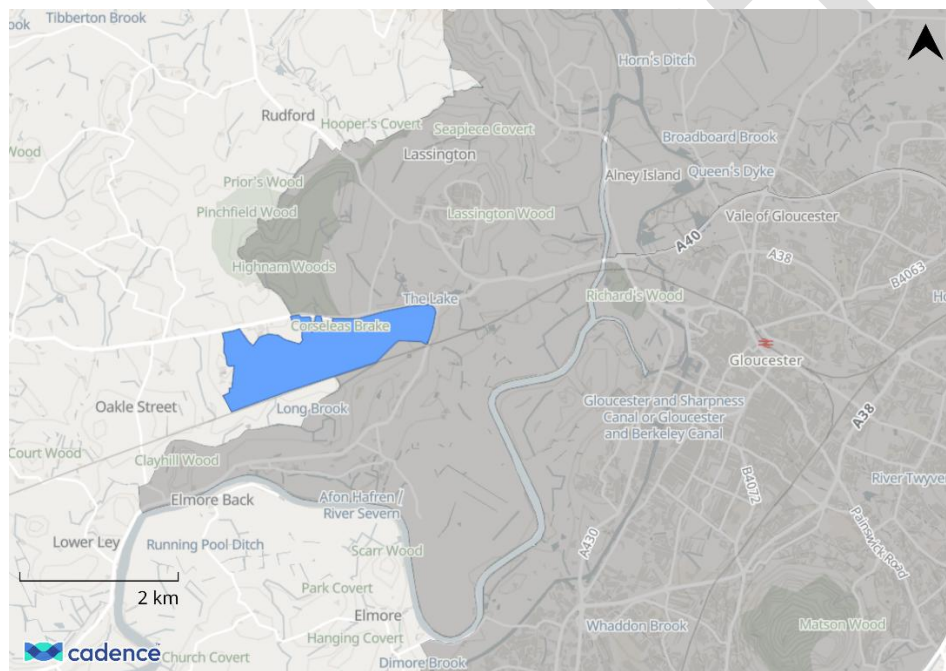


Figure 3-6: West Gloucester Site Location

Table 3-2 shows the arrival and departure car trips for the West Gloucester site for the PSO for each modelling period. The site consists of 1,000 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	142	19	3	386	25	5
IP (Avg 10:00-16:00)	137	21	1	131	21	1
PM (17:00-18:00)	318	23	1	151	14	1

Table 3-2: West Gloucester Modelled Car Trips by Period

East of Churchdown – Residential Isolated

This site is located adjacent to the eastern edge of Churchdown as shown in Figure 3-7 and sits near the A40 corridor which provides a direct east-west connection between Gloucester and Cheltenham. Although nearby services and facilities are available, access is less immediate than for sites located within the core residential areas of Gloucester. The site has therefore been categorised as Residential Isolated. This classification is supported by DfT's Connectivity Tool, which indicated a connectivity score of 58, suggesting a moderate level of accessibility.

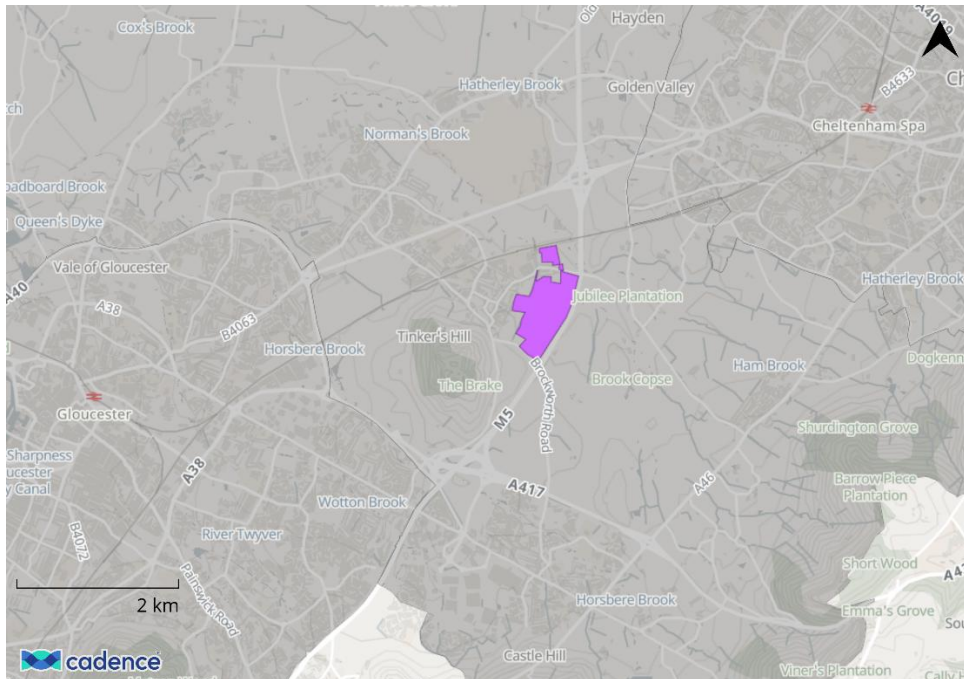


Figure 3-7: East of Churchdown Site Location

Table 3-3 shows the arrival and departure car trips for the East of Churchdown site for the PSO for each modelling period. The site consists of 1,000 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	113	10	1	326	22	1
IP (Avg 10:00-16:00)	132	22	1	126	22	2
PM (17:00-18:00)	268	40	1	143	20	1

Table 3-3: East of Churchdown Modelled Car Trips by Period

North Churchdown – Residential Isolated

This site is located to the North of Churchdown sitting adjacent to the A40 corridor as shown in Figure 3-8. This location offers good access to the strategic road network. However, the North Churchdown site is not fully integrated within the built-up area of Churchdown or Gloucester

and has therefore been categorised as Residential Isolated reflecting its position on the edge of the urban area and its separation from continuous residential areas. The DfT's Connectivity Tool indicated an overall connectivity score of 63.

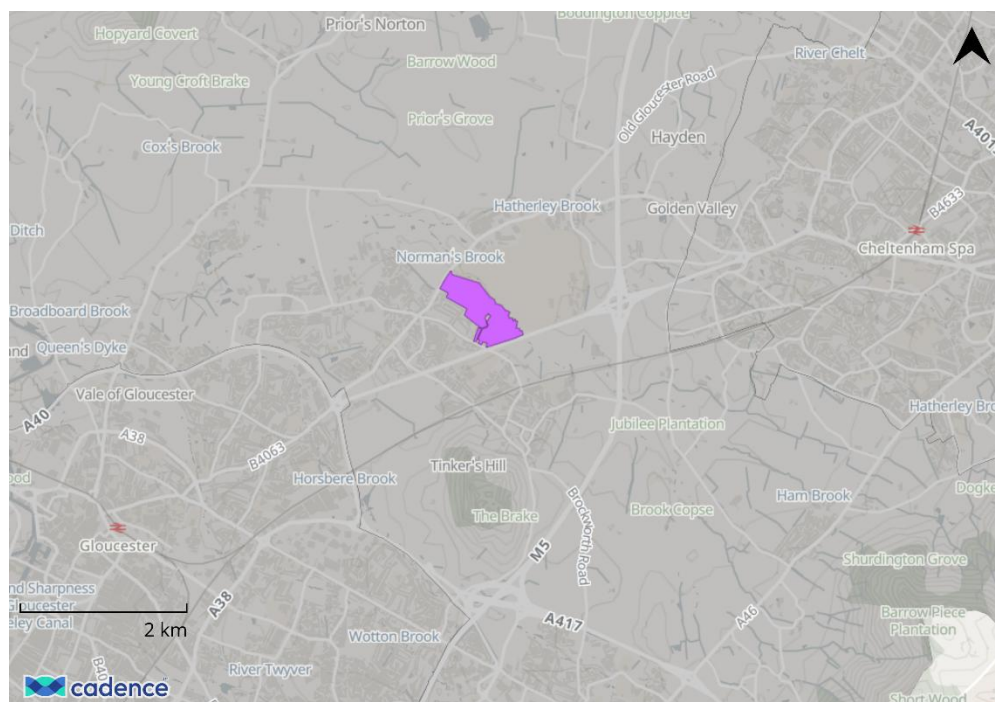


Figure 3-8: North Churchdown Site Location

The North Churchdown site consists of 500 dwellings. Table 3-4 shows car trip arrivals and departures for the PSO for each modelled period.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	57	5	1	163	11	1
IP (Avg 10:00-16:00)	66	11	1	63	11	1
PM (17:00-18:00)	134	20	1	72	10	1

Table 3-4: North Churchdown Modelled Car Trips by Period

South Cheltenham – Residential Isolated

This strategic site is located on the southern edge of Cheltenham, as shown in Figure 3-9. It benefits from proximity to the strategic road network including connections to the A46 and routes providing access towards the M5. However, its peripheral location results in a degree of functional isolation, including limited public transport access and limited immediate access to services compared to residential sites located within the main built-up area. Based on the above and the DfT's Connectivity tool that showed a score of 49, the site was categorised as Residential Isolated.

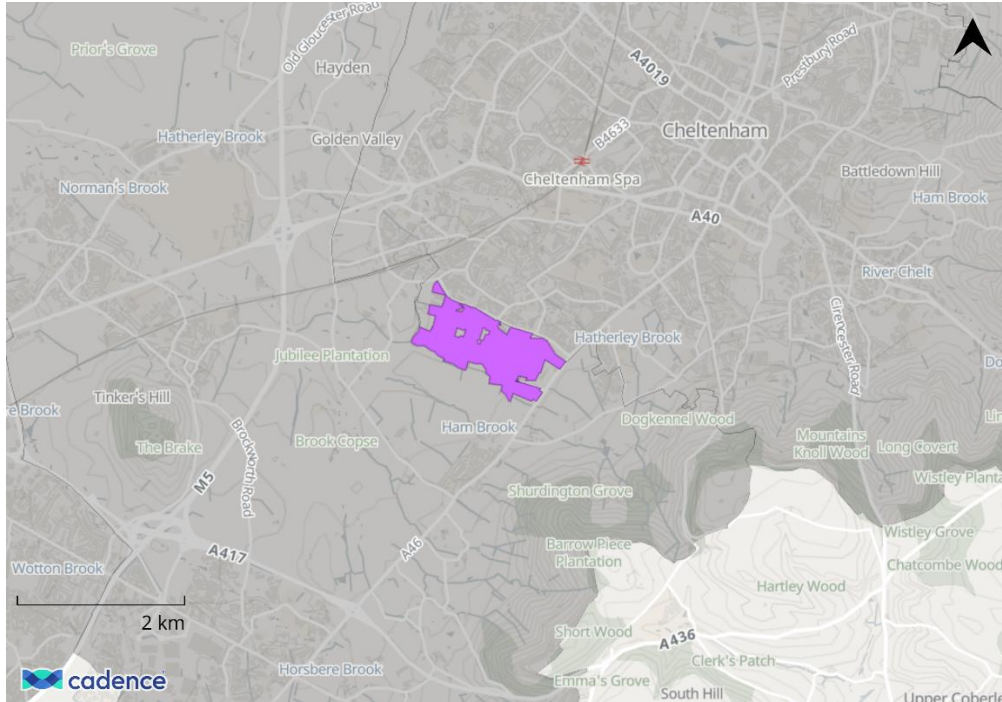


Figure 3-9: South Cheltenham Site Location

Table 3-5 shows car trip arrivals and departures for the PSO for each modelled period. The South Cheltenham site consists of 1,500 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	170	15	2	489	33	2
IP (Avg 10:00-16:00)	198	33	2	189	33	3
PM (17:00-18:00)	402	60	2	215	30	2

Table 3-5: South Cheltenham Modelled Car Trips by Period

Land north of Bishops Cleeve – Village

The Land North of Bishop's Cleeve is located to the north of the village of Bishop's Cleeve and lies within a rural area. As shown in Figure 3-10, the surrounding land comprises agricultural and undeveloped areas, reflecting a Village category. This is supported by DfT's Connectivity tool that gave a score ranging between 36 meaning lower levels of accessibility to key services and amenities.

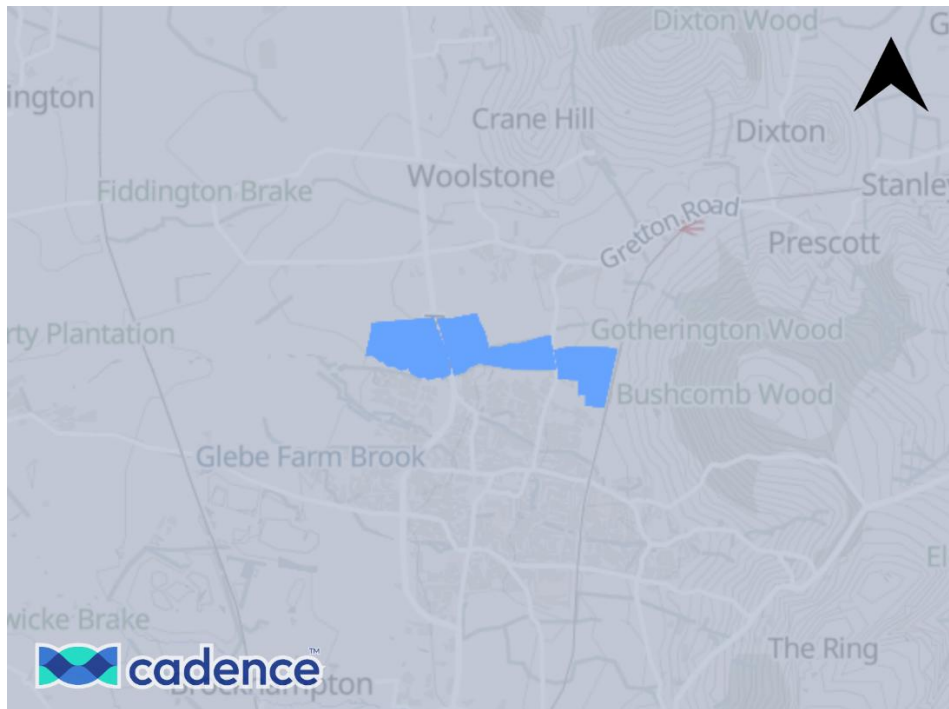


Figure 3-10: Land North of Bishop's Cleeve Site Location

The Land North of Bishop's Cleeve site consists of 800 dwellings. Table 3-6 shows car trip arrivals and departures for the PSO for each modelled period.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	114	15	2	309	20	4
IP (Avg 10:00-16:00)	110	17	1	105	17	1
PM (17:00-18:00)	254	18	1	121	11	1

Table 3-6: Land North of Bishop's Cleeve Modelled Car Trips by Period

Land at Walton Cardiff – Village

This site is located adjacent to the village of Walton Cardiff and to the east of Wheatpieces, within a predominantly rural area as shown in Figure 3-11. The DfT's connectivity score was 44 justifying its category as a Village. While the village provides a limited range of local services, access to employment and other key amenities require longer journeys. As a result, travel patterns and trip rates at this site are expected to differ from those of Residential and Residential Isolated locations.

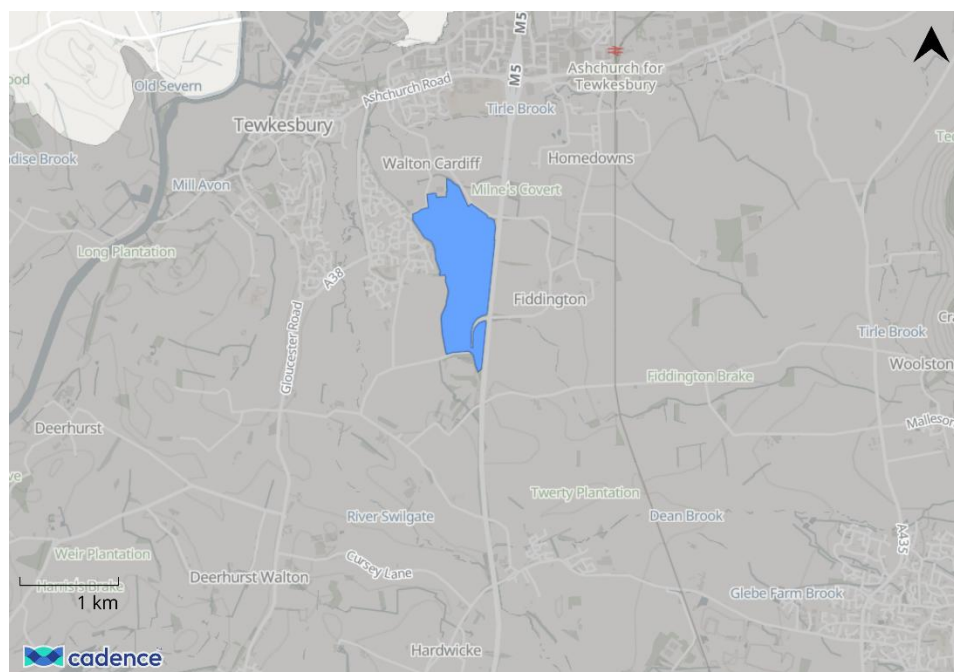


Figure 3-11: Land at Walton Cardiff Site Location

The Land at Walton Cardiff site consists of 500 dwellings. Table 3-7 shows car trip arrivals and departures for the PSO for each modelled period.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	71	10	2	193	13	3
IP (Avg 10:00-16:00)	69	11	1	66	11	1
PM (17:00-18:00)	159	12	1	76	7	1

Table 3-7: Land at Walton Cardiff Modelled Car Trips by Period

Tewkesbury Garden Communities – Residential Isolated

The Tewkesbury Garden Communities site is located to the north-east of Tewkesbury, positioned within and immediately adjacent to the existing settlement of Ashchurch for Tewkesbury. As shown in Figure 3-12, the site sits within a largely built-up area with residential development present on multiple sides, and benefits from reasonable proximity to the services of Tewkesbury town centre. The relatively contained and connected nature of these sites is consistent with a Residential Isolated classification due to its proximity to the Ashchurch for Tewkesbury railway station. This classification is further supported by the DfT's Connectivity Tool, which indicated employment overall connectivity scores in the range of 44–53 for these sites, suggesting a good level of accessibility to employment and key services.

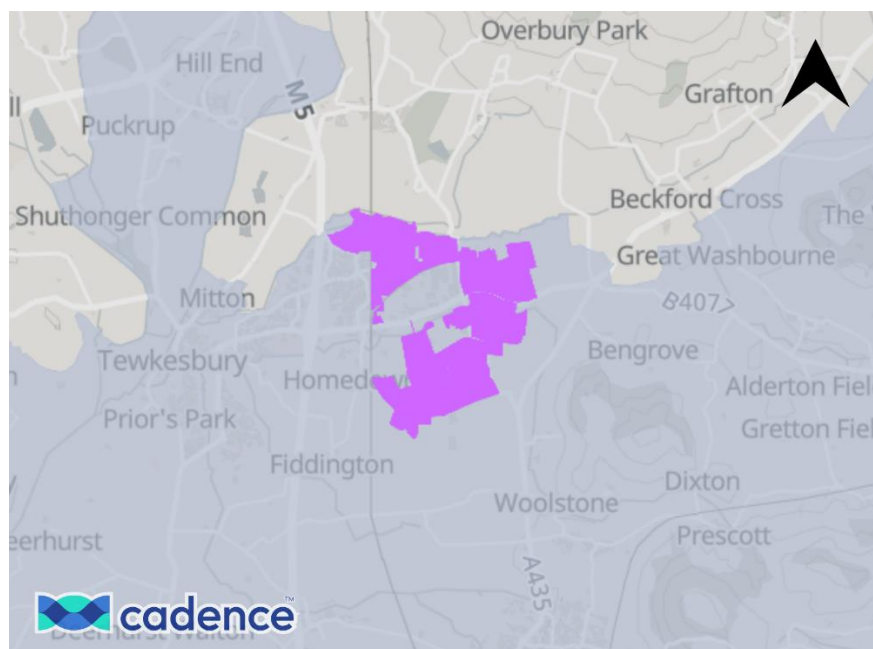


Figure 3-12: Tewkesbury Garden Communities Site Location

Table 3-8 shows car trip arrivals and departures for the PSO for each modelled period. The Tewkesbury Garden Communities site consists of 6,000 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	678	60	6	1,956	132	6
IP (Avg 10:00-16:00)	792	132	6	756	132	12
PM (17:00-18:00)	1,608	240	6	858	120	6

Table 3-8: Residential Tewkesbury Garden Communities Modelled Car Trips by Period

Land at Whaddon – Residential Isolated

The land at Whaddon site, shown in Figure 3-13, is located on the south-eastern edge of Gloucester in the vicinity of Whaddon and Matson. The site occupies a peripheral position relative to the main urban area, adjoining existing development to the north and west whilst being bordered by areas of open land. The site benefits from access to the existing highway network, including connections to the A38 and M5, and is located within reasonable proximity of the employment, education, retail and leisure opportunities available within Gloucester.

Given its location on the edge of Gloucester, its proximity to urban services and facilities, and the presence of areas of undeveloped land surrounding parts of the site, it has been categorised as Residential Isolated. This is further supported by a DfT Connectivity Tool employment score of 55.

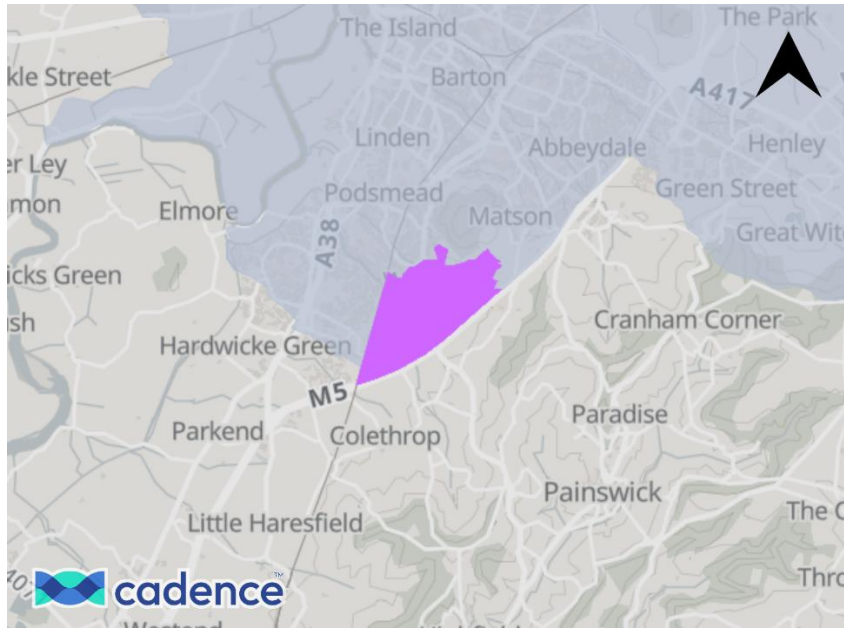


Figure 3-13: Land at Whaddon Site Location

Table 3-9 shows car trip arrivals and departures for the PSO for each modelled period. The Land at Whaddon site consists of 3,000 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	339	30	3	978	66	3
IP (Avg 10:00-16:00)	396	66	3	378	66	6
PM (17:00-18:00)	804	120	3	429	60	3

Table 3-9: Whaddon Site Modelled Car Trips by Period

Land at Mitton – Village

The Land at Mitton site is located to the north-east of Tewkesbury, between the Mitton and Northway areas. As shown in Figure 3-14, the site is surrounded by open land to the north resulting in a physical separation from existing residential neighbourhoods. The site is adjacent to B4080 that provides great levels of accessibility towards Tewkesbury. The DfT's connectivity tool indicated a connectivity score of 34. The site has been categorised as Village, reflecting its location and its separation from surrounding communities.

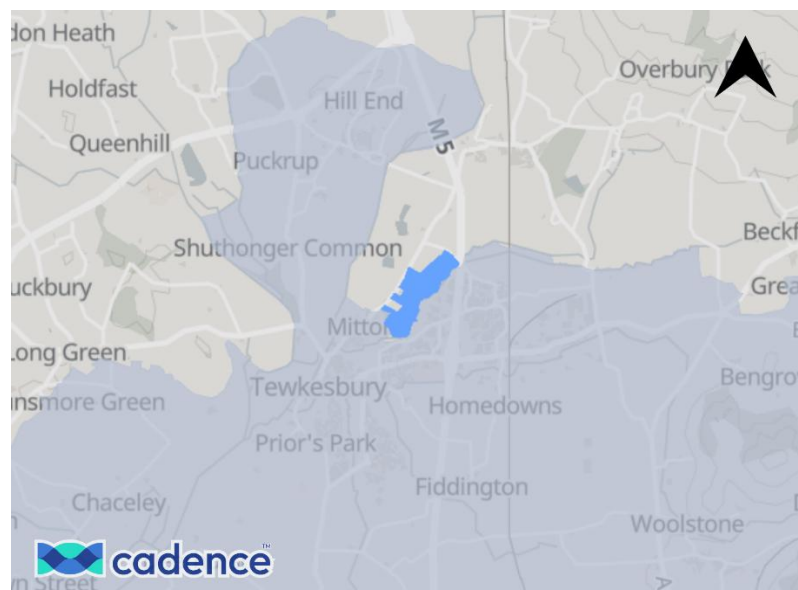


Figure 3-14: Land at Mitton Site Location

Table 3-10 shows car trip arrivals and departures for the PSO for each modelled period for the land at Mitton. The Land at Mitton site consists of 500 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	71	10	2	193	13	3
IP (Avg 10:00-16:00)	69	11	1	66	11	1
PM (17:00-18:00)	159	12	1	76	7	1

Table 3-10: Land at Mitton Modelled Car Trips by Period

Land east of Swindon Village – Residential Isolated

This site is located to the north of Cheltenham, adjacent to Wymans Brook and Cheltenham Racecourse Station. The DfT's connectivity tool indicated a connectivity score slightly over 60 meaning that the site has good proximity to services and facilities within Cheltenham including employment, education and transport infrastructure. The site is integrated with the surrounding residential areas and is near Cheltenham Racecourse railway station and has therefore been categorised as Residential Isolated. The location of the Land east of Swindon Village site is presented in Figure 3-15.

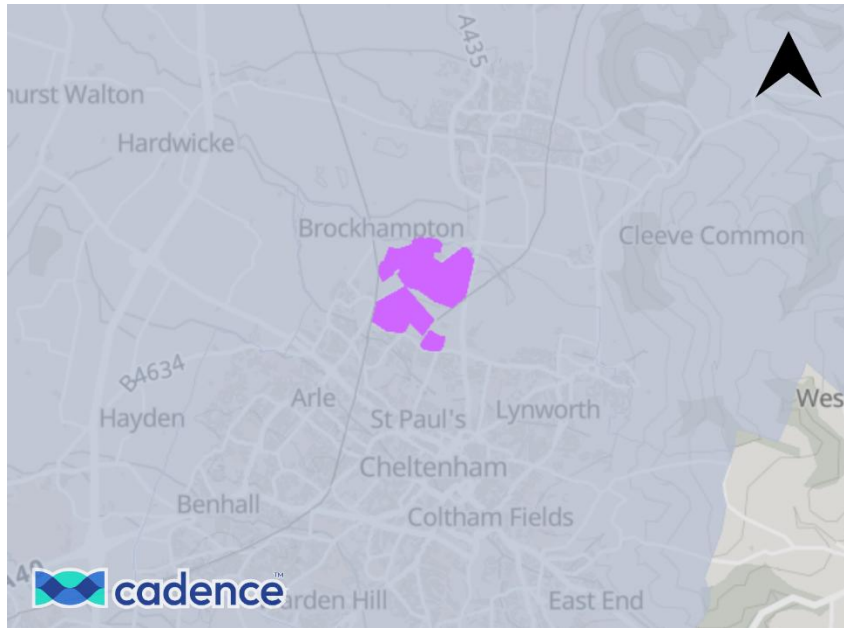


Figure 3-15: Land East of Swindon Village Site Location

Table 3-11 shows car trip arrivals and departures for the PSO for each modelled period. The Land east of Swindon Village site consists of 2,500 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	283	25	3	815	55	3
IP (Avg 10:00-16:00)	330	55	3	315	55	5
PM (17:00-18:00)	670	100	3	358	50	3

Table 3-11: Land East of Swindon Village Modelled Car Trips by Period

Safeguarded Land – Residential Isolated

The Safeguarded Land site is located to the west of Cheltenham, sitting outside the main built-up area of the town as shown in Figure 3-16. The site benefits from proximity to the M5, B4634 and B4063. However, it does not form part of the core residential network of Cheltenham and thus, it has been categorised as Residential Isolated. Its connectivity score is 49 as per the DfT's Connectivity Tool.

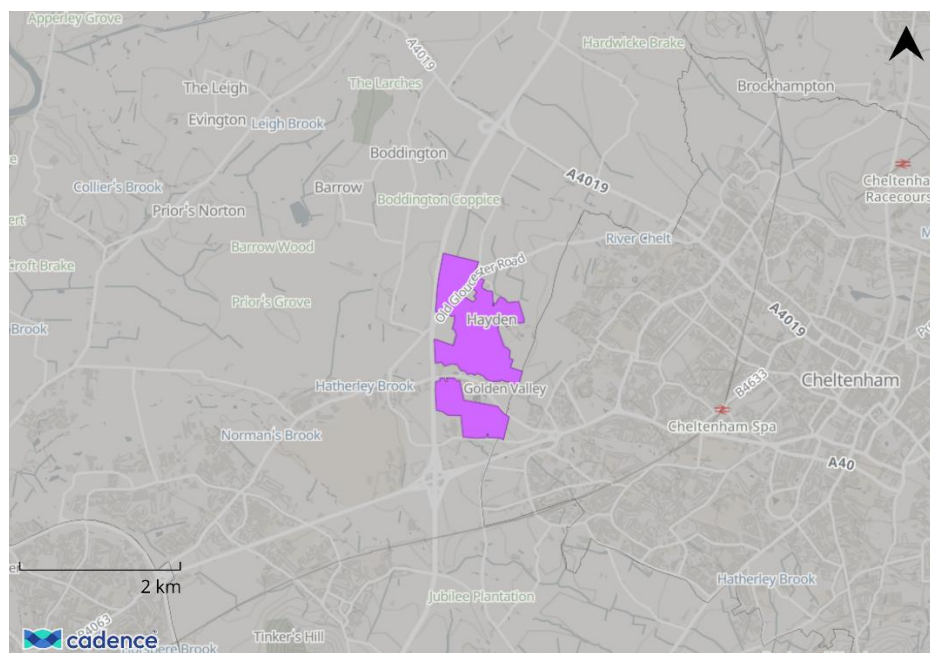


Figure 3-16: Safeguarded Land Site Location

Table 3-12 shows car trip arrivals and departures for the PSO for each modelled period. The Safeguarded Land site consists of 2,000 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	226	20	2	652	44	2
IP (Avg 10:00-16:00)	264	44	2	252	44	4
PM (17:00-18:00)	536	80	2	286	40	2

Table 3-12: Safeguarded Land Modelled Car Trips by Period

Land adjoining North West Cheltenham - Residential Isolated

This site is located to the north-west of Cheltenham, close to Uckington and Elmstone Hardwicke as shown in Figure 3-17. While it lies in relatively close proximity to Cheltenham, the site is physically separated from the town's continuous built-up area by areas of undeveloped land. The site nevertheless benefits from good accessibility to Cheltenham via strategic road infrastructure including the A4019. However, due to its separation from Cheltenham's urban residential network and the presence of surrounding undeveloped land, it has been categorised as Residential Isolated. The DfT's connectivity score was 49 justifying its category as a Residential Isolated location.

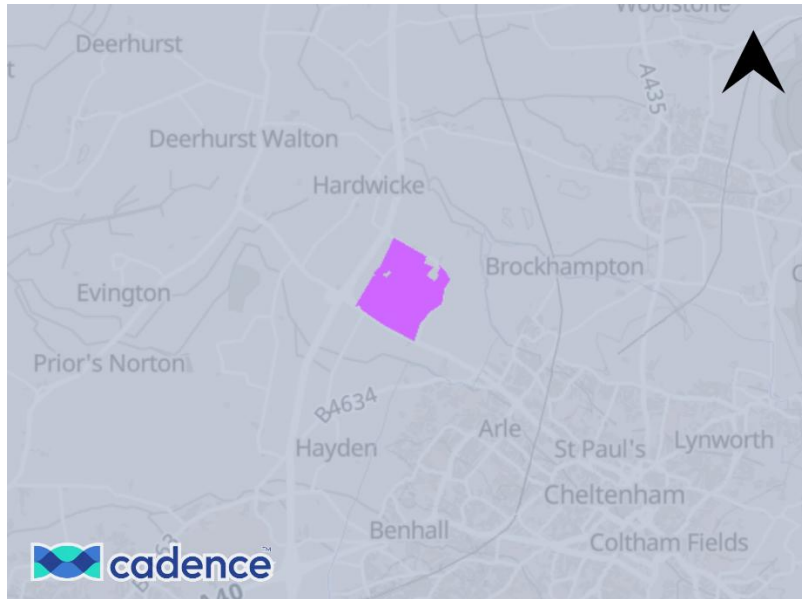


Figure 3-17: Land Adjoining North West Cheltenham Site Location

Table 3-13 shows car trip arrivals and departures for the PSO for each modelled period. The Land adjoining North West Cheltenham (North) site consists of 2,500-dwelling.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	283	25	3	815	55	3
IP (Avg 10:00-16:00)	330	55	3	315	55	5
PM (17:00-18:00)	670	100	3	358	50	3

Table 3-13: Land Adjoining North West Cheltenham Modelled Car Trips by Period

Land south of Tewkesbury – Village

This site is located to the south of Tewkesbury, positioned on the edge of the town but clearly separated from the town's continuous built-up area as shown in Figure 3-18. The DfT's connectivity score ranges from 25 to 48 and thus, this site has been categorised as Village. The site benefits from proximity to the A38 and is surrounded by undeveloped land.

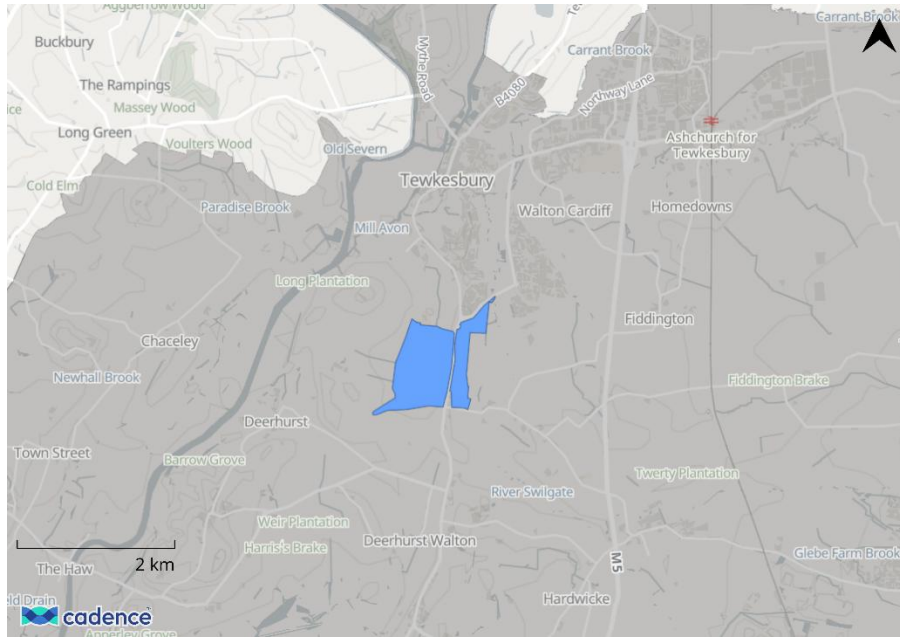


Figure 3-18: Land South of Tewkesbury Site Location

Table 3-14 shows car trip arrivals and departures for the PSO for each modelled period. The Land south of Tewkesbury site consists of 800 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	114	15	2	309	20	4
IP (Avg 10:00-16:00)	110	17	1	105	17	1
PM (17:00-18:00)	254	18	1	121	11	1

Table 3-14: Land South of Tewkesbury Modelled Car Trips by Period

East Twigworth - Village

The East Twigworth site is located to the north of Gloucester within a rural area and is clearly separate from the city's continuous built-up area. As shown in Figure 3-19, the site is surrounded by open and undeveloped land that forms a clear separation from the main urban area of Gloucester. The site has therefore been categorised as a Village. This is supported by the DfT's Connectivity tool that indicated an overall connectivity score of 39 indicating lower levels of connectivity and accessibility to key amenities when compared to sites categorised as Residential Isolated.

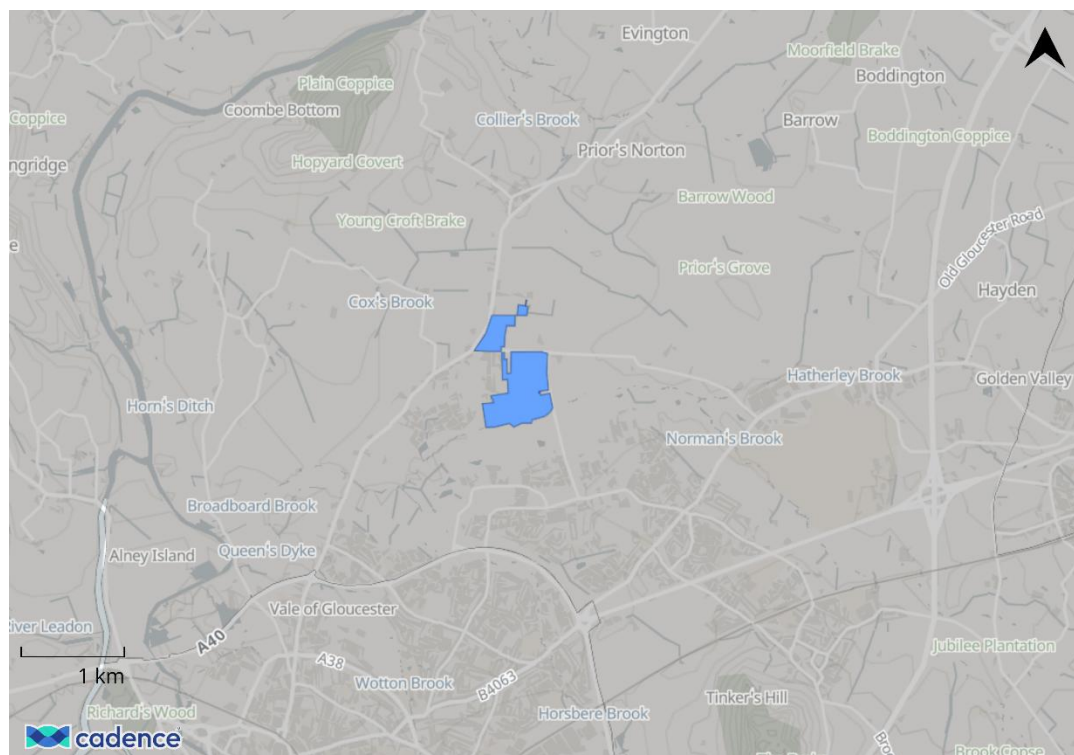


Figure 3-19: East Twigworth Site Location

Table 3-15 shows car trip arrivals and departures for the PSO for each modelled period. The East Twigworth site consists of 942 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	134	18	3	364	24	5
IP (Avg 10:00-16:00)	129	20	1	123	20	1
PM (17:00-18:00)	300	22	1	142	13	1

Table 3-15: East Twigworth Modelled Car Trips by Period

3.1.2 Employment Strategic sites

Table 3-16 summarises assumed distribution of employment type by Local Authority District based on information derived from the 2020 Gloucestershire Economic Needs Assessment (Strategic Planning Research Unit, 2020). Cheltenham and Gloucester are more office-focused, whilst Tewkesbury has a greater proportion of industrial and warehousing uses. These proportions are applied to each employment site to disaggregate total floorspace into B1 (Office), B2 (Industrial), and B8 (Warehouse) categories, which in turn inform the trip rate assumptions used in subsequent stages of the assessment.

Local Authority	Cheltenham	Gloucester	Tewkesbury	JCS Area
B1- Offices	60%	62%	24.7%	30%
B2 - Industrial	26%	9%	49.5%	40%
B8 - Warehouses	14%	29%	25.8%	50%

Table 3-16: Land Use Split by Local Authority District

Table 3-17 presents the resulting car trips generation for each PSO employment site during the AM peak (08:00–09:00), inter-peak (average hourly), and PM peak (17:00–18:00) periods, split by arrivals and departures.

Employment Site	AM		Car IP		PM	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
West Gloucester (South)	108	18	36	42	22	105
North Churchdown	23	4	7	9	5	22
Land between Smow Farm and Claydon House Farm, Tewkesbury	59	10	20	23	12	57
Land at Pamington, Tewkesbury	51	8	17	20	11	50
Safeguarded Land	89	15	30	35	19	87
Land adjoining North West Cheltenham (North)	97	16	32	38	20	94
Land south of Tewkesbury	65	11	21	25	13	63
South Churchdown	225	29	59	71	35	206
North West Cheltenham	301	39	79	96	47	276
West Cheltenham	921	73	144	188	70	761
Innsworth & Twigworth	17	2	4	5	3	15
Blackridge Sports & Community Hub	7	1	1	1	1	6
Former Quayside House, Blackfriars	3	0	0	1	0	3
Fleece Hotel and Longsmith Street Carpark	4	0	1	1	0	4
Land south of Triangle Park	25	2	4	6	2	21
Part of West Quay, the Docks	6	1	1	1	0	5
Land south of Hatherley Lane	13	1	3	4	2	12
Land at Chelt Walk	10	1	2	3	1	9
Land north-west of Grovefield Way	34	4	8	9	4	30
Gloucester Business Park	295	49	98	116	61	287
Meteor Business Park	26	4	9	10	5	25

Tewkesbury Business Park	25	4	8	10	5	24
Cleeve Business Park	142	23	47	56	30	138
Bamfurlong Industrial Park	65	11	22	25	13	63
Ashville Business Park	58	10	19	23	12	57
Malvern View Business Park	28	5	9	11	6	27
Orchard Industrial Estate	72	12	24	28	15	70
Homelands Farm	11	2	4	4	2	11
Highfield Farm	28	5	9	11	6	27
Withytrees Farm	11	2	4	4	2	10
Park Farm Industrial Estate	15	2	5	6	3	14
Knightsbridge Business Centre	23	4	8	9	5	22
Isbourne Business Centre	21	3	7	8	4	21
Brockeridge Business Park	77	13	26	30	16	75
Twittocks Farm	49	12	24	27	16	53
Land North West of M5 J10	430	101	205	230	133	464

Table 3-17: Car Trips for each Employment Site by Period

Employment Site	LGV					
	AM		IP		PM	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
West Gloucester (South)	18	14	15	16	6	10
North Churchdown	4	3	3	3	1	2
Land between Smow Farm and Claydon House Farm, Tewkesbury	10	8	8	9	3	5
Land at Pamington, Tewkesbury	9	7	7	7	3	5
Safeguarded Land	15	12	13	13	5	8
Land adjoining North West Cheltenham (North)	16	13	14	14	5	9
Land south of Tewkesbury	11	8	9	9	3	6
South Churchdown	25	18	21	21	7	14
North West Cheltenham	34	25	28	29	10	19
West Cheltenham	30	15	21	23	5	18
Innsworth & Twigworth	2	1	2	2	1	1
Blackridge Sports & Community Hub	0	0	0	0	0	0
Former Quayside House, Blackfriars	0	0	0	0	0	0
Fleece Hotel and Longsmith Street Carpark	0	0	0	0	0	0
Land south of Triangle Park	1	1	1	1	0	1
Part of West Quay, the Docks	0	0	0	0	0	0
Land south of Hatherley Lane	1	1	1	1	0	1
Land at Chelt Walk	1	1	1	1	0	0

Land north-west of Grovefield Way	3	2	2	2	1	2
Gloucester Business Park	50	38	42	43	15	27
Meteor Business Park	4	3	4	4	1	2
Tewkesbury Business Park	4	3	4	4	1	2
Cleeve Business Park	24	18	20	21	7	13
Bamfurlong Industrial Park	11	8	9	9	3	6
Ashville Business Park	10	8	8	8	3	5
Malvern View Business Park	5	4	4	4	1	3
Orchard Industrial Estate	12	9	10	10	4	7
Homelands Farm	2	1	2	2	1	1
Highfield Farm	5	4	4	4	1	3
Withytrees Farm	2	1	2	2	1	1
Park Farm Industrial Estate	3	2	2	2	1	1
Knightsbridge Business Centre	4	3	3	3	1	2
Isbourne Business Centre	4	3	3	3	1	2
Brokeridge Business Park	13	10	11	11	4	7
Twittocks Farm	14	11	12	12	4	8
Land North West of M5 J10	125	102	109	109	38	69

Table 3-18: LGV Trips for each Employment Site by Period

Employment Site	OGV					
	AM		IP		PM	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
West Gloucester (South)	8	6	8	8	5	4
North Churchdown	2	1	2	2	1	1
Land between Smow Farm and Claydon House Farm, Tewkesbury	4	3	4	4	3	2
Land at Pamington, Tewkesbury	4	3	4	4	2	2
Safeguarded Land	6	5	7	7	4	4
Land adjoining North West Cheltenham (North)	7	6	7	7	4	4
Land south of Tewkesbury	5	4	5	5	3	3
South Churchdown	11	9	11	12	7	6
North West Cheltenham	15	12	15	16	10	8
West Cheltenham	3	3	5	6	1	1
Innsworth & Twigworth	1	1	1	1	1	0
Blackridge Sports & Community Hub	0	0	0	0	0	0
Former Quayside House, Blackfriars	0	0	0	0	0	0
Fleece Hotel and Longsmith Street Carpark	0	0	0	0	0	0

Land south of Triangle Park	1	1	1	1	1	0
Part of West Quay, the Docks	0	0	0	0	0	0
Land south of Hatherley Lane	0	0	0	0	0	0
Land at Chelt Walk	0	0	0	0	0	0
Land north-west of Grovefield Way	1	1	1	1	1	1
Gloucester Business Park	21	17	22	22	13	12
Meteor Business Park	2	2	2	2	1	1
Tewkesbury Business Park	2	1	2	2	1	1
Cleeve Business Park	10	8	10	11	6	6
Bamfurlong Industrial Park	5	4	5	5	3	3
Ashville Business Park	4	3	4	4	3	2
Malvern View Business Park	2	2	2	2	1	1
Orchard Industrial Estate	5	4	5	5	3	3
Homelands Farm	1	1	1	1	1	0
Highfield Farm	2	2	2	2	1	1
Withytrees Farm	1	1	1	1	0	0
Park Farm Industrial Estate	1	1	1	1	1	1
Knightsbridge Business Centre	2	1	2	2	1	1
Isbourne Business Centre	2	1	2	2	1	1
Brockridge Business Park	6	5	6	6	4	3
Twittocks Farm	6	5	6	7	4	3
Land North West of M5 J10	38	29	40	40	19	18

Table 3-19: OGV Trips for each Employment Site by Period

3.2 Cotswold

3.2.1 Residential Sites

Figure 3-20 and Figure 3-21 displays how each of the strategic residential PSO sites have been categorised. Sites classified as Residential Isolated are highlighted in purple and are located in the vicinity of the continuous built-up area whereas sites in yellow represent village locations.



Figure 3-20: South Cotswold Strategic Residential Sites

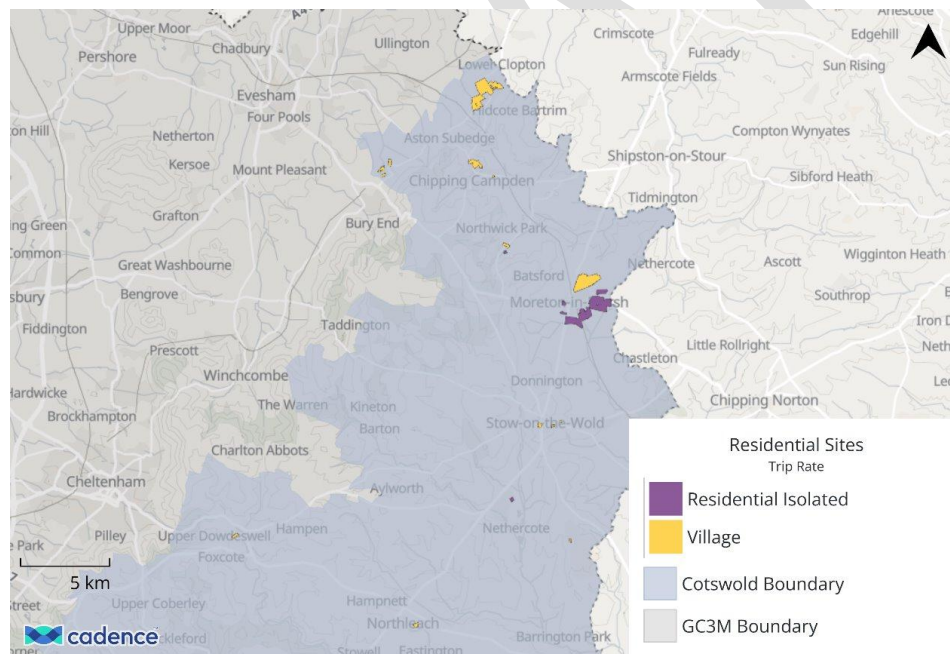


Figure 3-21: North Cotswold Strategic Residential Sites

Figure 3-22 to Figure 3-25 Figure 3-5 illustrate the spatial distribution and magnitude of AM and PM peak arrivals and departures across the residential development sites in the Cotswold District PSO.

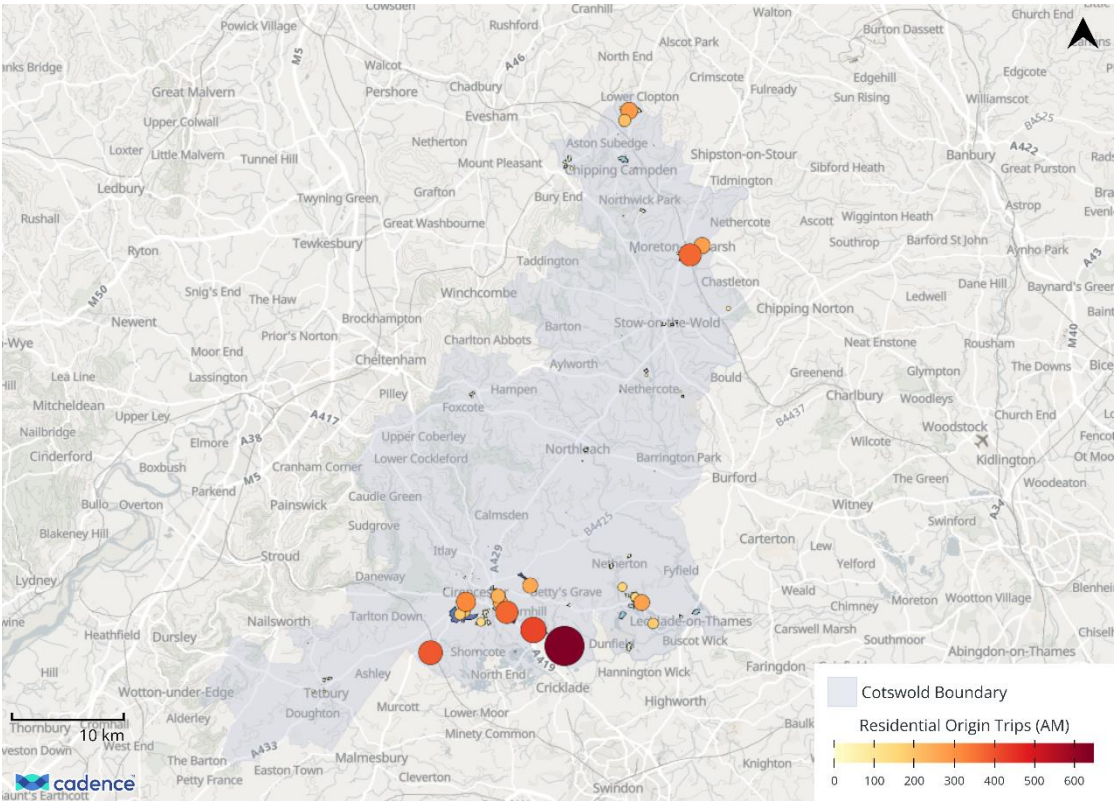


Figure 3-22: AM Departures for Residential Development Sites

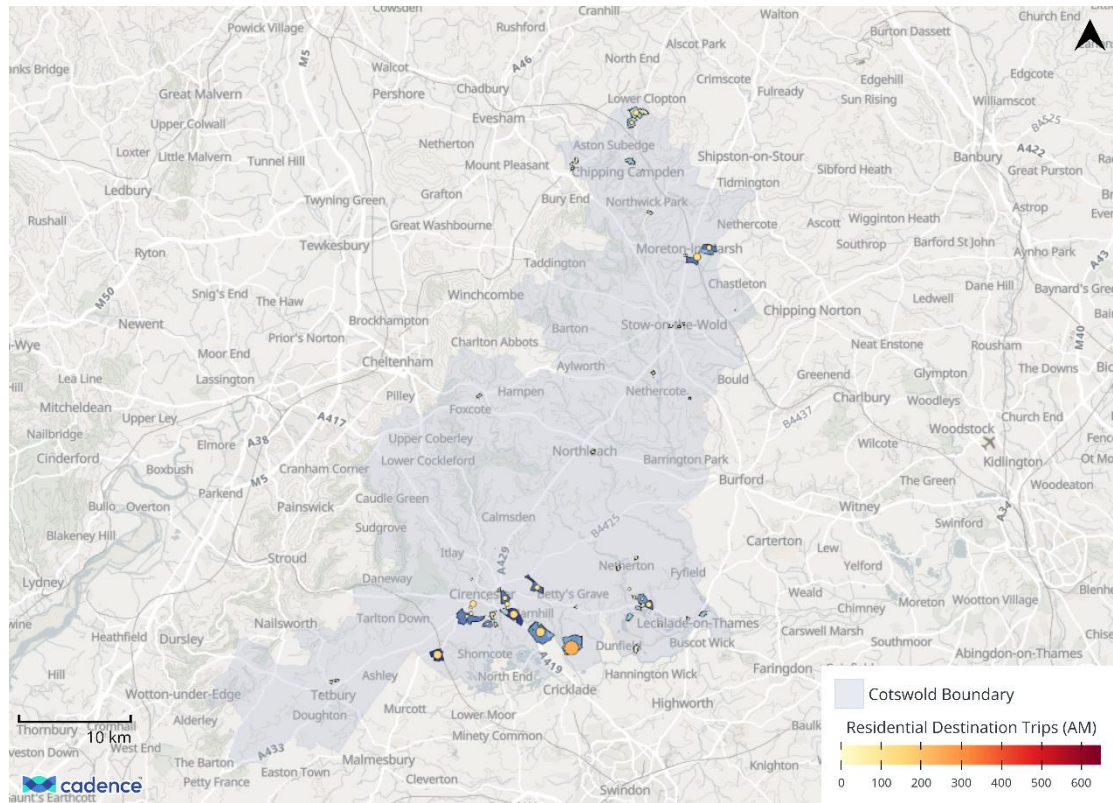


Figure 3-23: AM Arrivals for Residential Development Sites

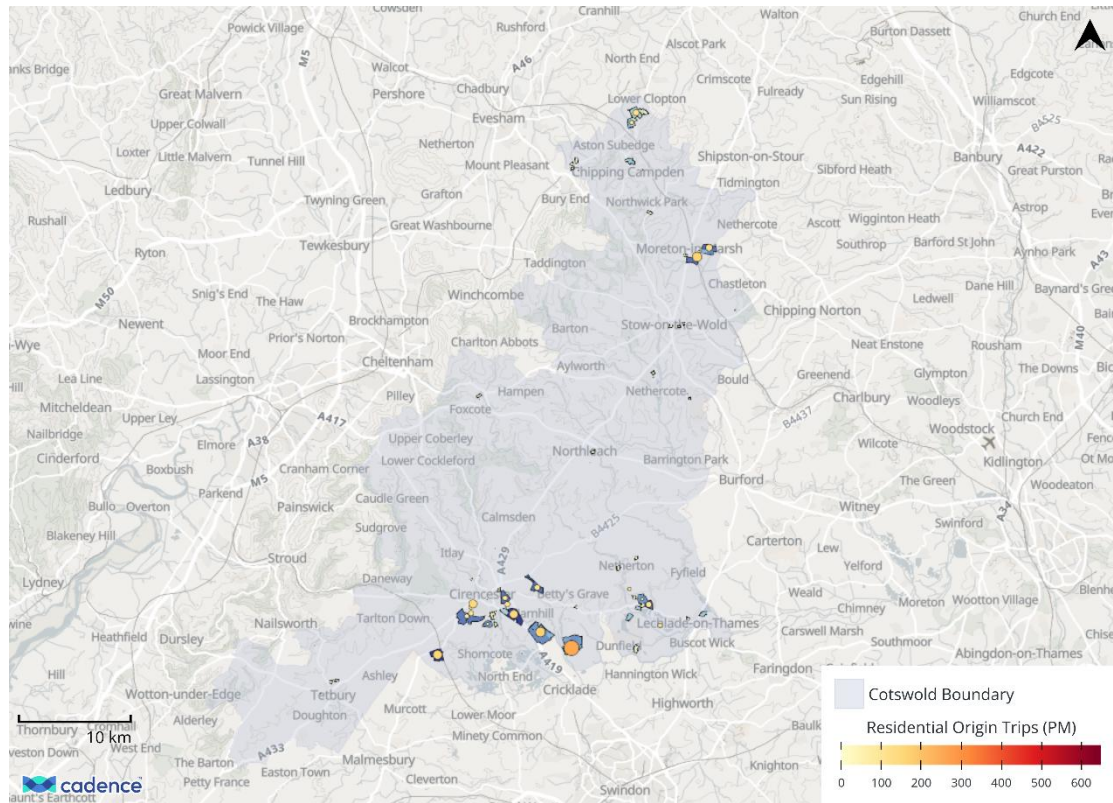


Figure 3-24: PM Departures for Residential Development Sites

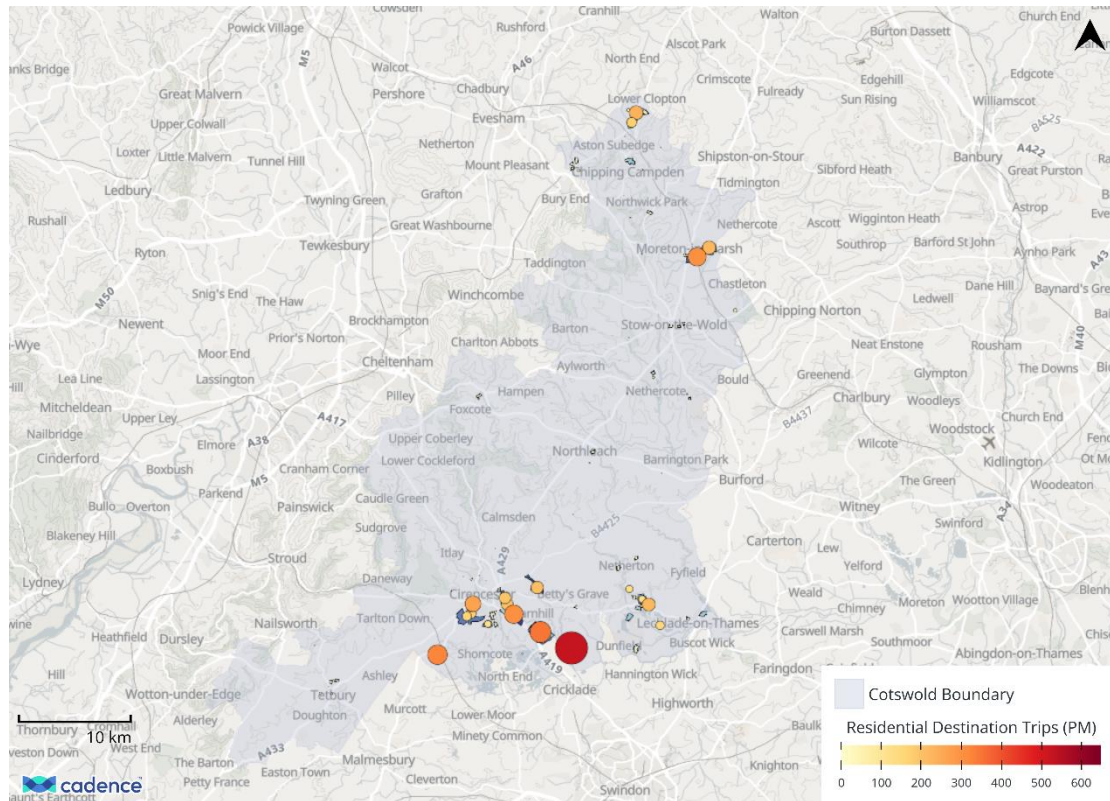


Figure 3-25: PM Arrivals for Residential Development Sites

Phase 2-f: Land at Chesterton Farm, Cranhams Lane, GL7 6JP – Residential Isolated

The Chesterton Farm site is located to the south-west of Cirencester, situated on the western edge of the town where development transitions into open agricultural land. As shown in Figure 3-26, the site adjoins the existing residential area of Chesterton but is bordered to the south and west by undeveloped farmland. Despite its edge-of-town position, the site benefits from proximity to the services and facilities of Cirencester and has reasonable connectivity to the surrounding street network. This is supported by the DfT's Connectivity Tool, which indicated a residential overall connectivity score of 59. Given that the site is located on the periphery of Cirencester and is bordered by predominantly non-residential land uses, the expected travel patterns are those of a Residential Isolated location.

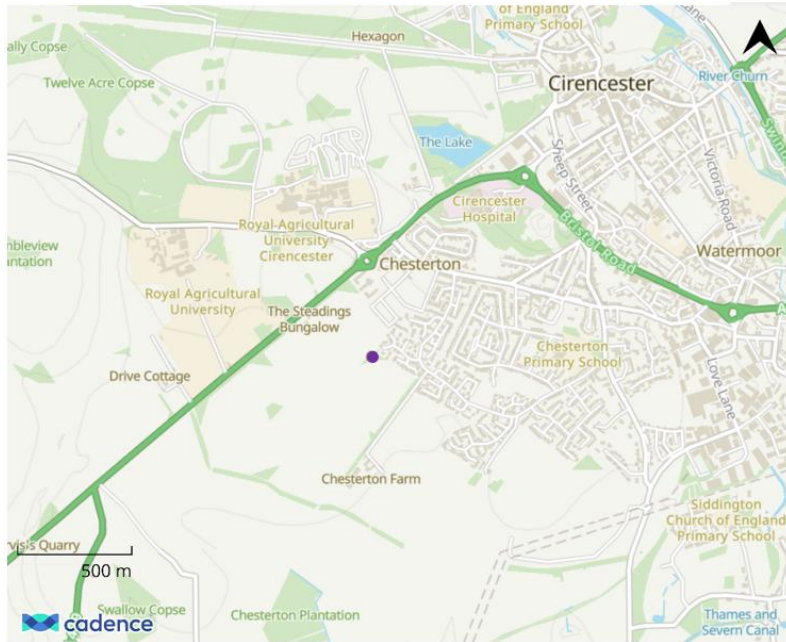


Figure 3-26: Phase 2-f: Land at Chesterton Farm, Cranhams Lane, GL7 6JP Site Location

Table 3-20 shows car trip arrivals and departures for the PSO for each modelled period. The Chesterton Farm Phase 2-f site consists of 549 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	62	5	1	179	12	1
IP (Avg 10:00-16:00)	72	12	1	69	12	1
PM (17:00-18:00)	147	22	1	79	11	1

Table 3-20: Phase 2-f: Land at Chesterton Farm, Cranhams Lane Modelled Car Trips by Period

Phase 3a-i: Land at Chesterton Farm, Cranhams Lane, GL7 6JP – Residential Isolated

Phase 3a-I, in Figure 3-27, forms a subsequent phase of the same wider Chesterton Farm residential development above. The site is located on the south-western edge of Cirencester, adjoining the existing residential area of Chesterton while remaining associated with the surrounding open land. The Chesterton Farm site has been categorised as Residential Isolated based on its south-west Cirencester location, moderate connectivity score of 59 from the DfT's Connectivity Tool, and reasonable access to the services and facilities of the town.

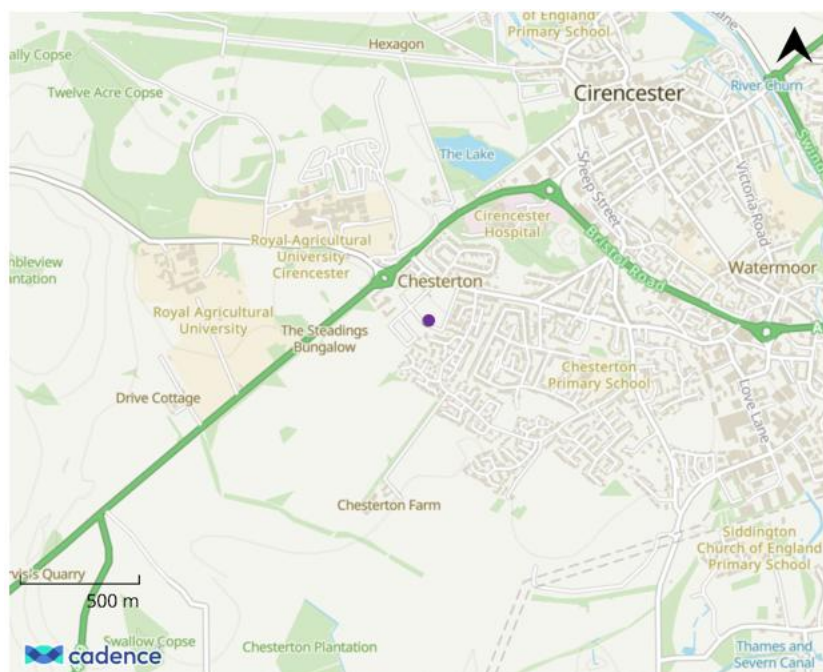


Figure 3-27: Phase 3a-i: Land at Chesterton Farm, Cranhams Lane, GL7 6JP Site Location

Table 3-21 shows car trip arrivals and departures for the PSO for each modelled period. The Phase 3a-i site consists of 982 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	111	10	1	320	22	1
IP (Avg 10:00-16:00)	130	22	1	124	22	2
PM (17:00-18:00)	263	39	1	140	20	1

Table 3-21: Phase 3a-i: Land at Chesterton Farm, Cranhams Lane Modelled Car Trips by Period

Land south-west of Preston between Cirencester Road (A419) and A419T - Village Location

The site is located to the south-east of Cirencester, as shown in Figure 3-28 within a predominantly rural setting and separated from the main urban area by areas of open land. While the site benefits from access to the A419 and A417, which provide connections to Cirencester and the wider strategic highway network, it is not directly integrated with the continuous built-up area of the town. The surrounding area is characterised by largely undeveloped land and rural uses, with access to a wide range of employment, education, retail and leisure facilities generally requiring travel to Cirencester or other nearby settlements and thus, the site has been categorised as Village. The DfT's Connectivity Tool indicated an overall employment connectivity score of 50. However, connectivity score does not determine site classification. The site remains physically separated from the main urban area and is located within a rural context, with travel patterns expected to be characterised by longer journey

lengths and a greater reliance on private vehicles than would typically be expected within a residential location.

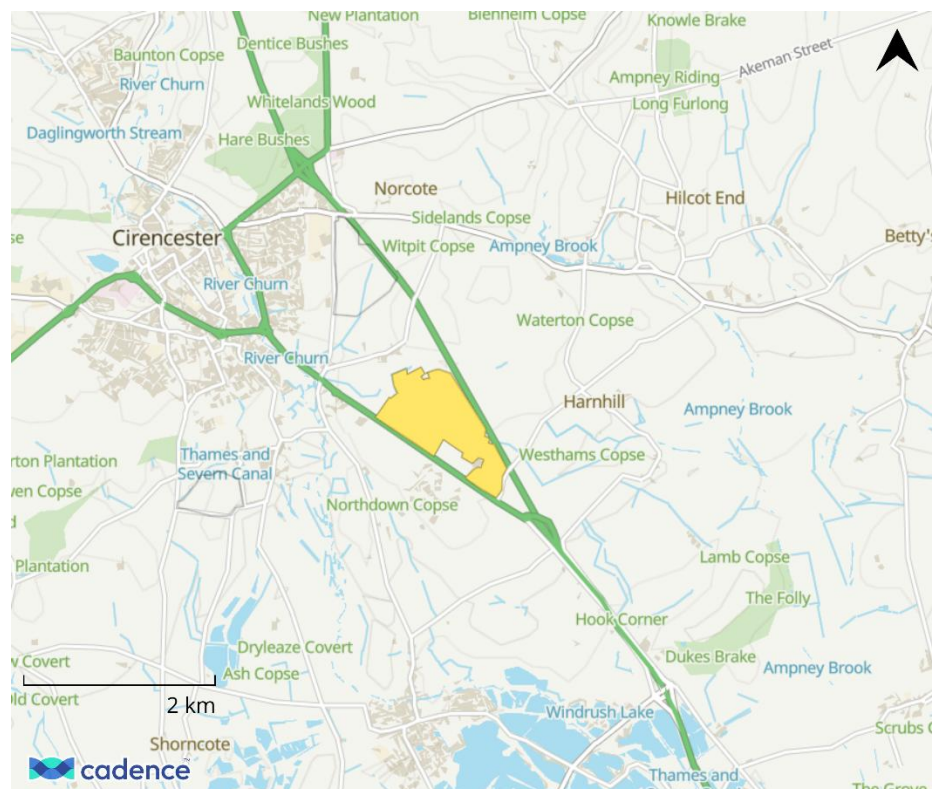


Figure 3-28: Land south-west of Preston between Cirencester Road (A419) and A419T Site Location

Table 3-22 shows car trip arrivals and departures for the PSO for each modelled period. The Land south-west of Preston between Cirencester Road (A419) and A419T site consists of 960 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	136	18	3	371	24	5
IP (Avg 10:00-16:00)	132	20	1	126	20	1
PM (17:00-18:00)	305	22	1	145	13	1

Table 3-22: Land south-west of Preston between Cirencester Road (A419) and A419T Modelled Car Trips by Period

Land east of Kingshill Lane - Village

The Land east of Kingshill Lane site is located to the east of Cirencester as shown in Figure 3-29. Although situated within the wider vicinity of Cirencester, the site is located within a predominantly rural area and is surrounded by open land. The site benefits from access to both the A419 and A417, which provide strategic connections to the wider road network. However, access to a full range of employment, education, retail and leisure opportunities is likely to

require longer journeys, reflecting travel patterns that are more characteristic of rural locations than sites located within the continuous urban area. The site has therefore been categorised as Village. The DfT's Connectivity Tool indicated an employment overall connectivity score of 50. However, connectivity score does not determine site classification. The site remains physically separated from the main urban area and is located within a rural context, with travel patterns expected to be characterised by longer journey lengths and a greater reliance on private vehicles than would typically be expected within a residential location.

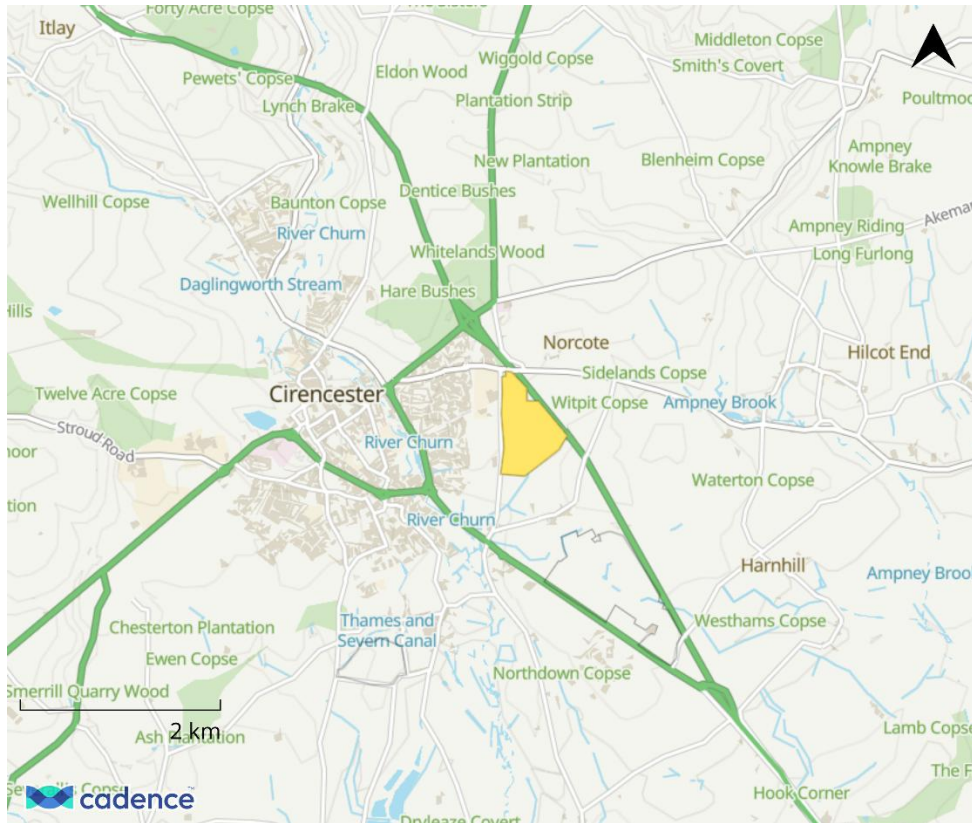


Figure 3-29: Land east of Kingshill Lane Site Location

Table 3-23 shows car trip arrivals and departures for the PSO for each modelled period. The Land east of Kingshill Lane site consists of 613 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	87	12	2	237	15	3
IP (Avg 10:00-16:00)	84	13	1	80	13	1
PM (17:00-18:00)	195	14	1	93	9	1

Table 3-23: Land east of Kingshill Lane Modelled Car Trips by Period

Land south-west of Kemble - Village

This site is located to the south-west of Cirencester, adjacent to the village of Kemble and is surrounded by open and undeveloped land as shown in Figure 3-30. While Kemble railway station is in proximity and offers an important strategic rail connection, access to employment and key amenities and services remains limited within the immediate vicinity. The site has therefore been categorised as Village. The classification is further supported by the DfT's Connectivity Tool, which showed a score of 24. This score suggests a low level of accessibility, consistent with a village location where access to employment and other key services typically requires longer journeys compared to urban residential areas.

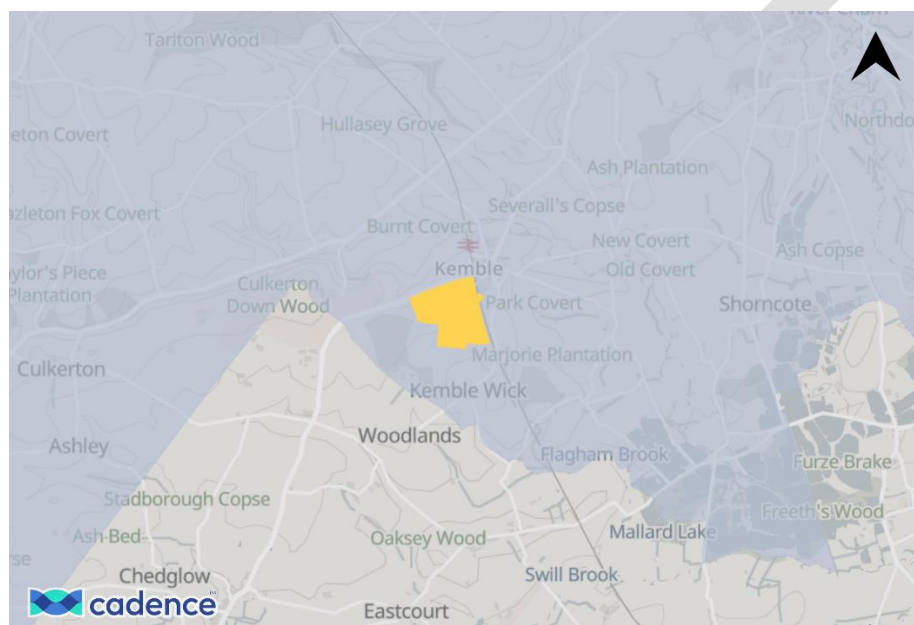


Figure 3-30: Land south-west of Kemble Site Location

Table 3-24 shows car trip arrivals and departures for the PSO for each modelled period. The Land south-west of Kemble site consists of 1,020 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	145	19	3	394	26	5
IP (Avg 10:00-16:00)	140	21	1	134	21	1
PM (17:00-18:00)	324	23	1	154	14	1

Table 3-24: Land south-west of Kemble Modelled Car Trips by Period

Fire Service College (Site A) – Residential Isolated

The Fire Service College Site A, shown in Figure 3-31, is located on the eastern edge of Moreton-in-Marsh town. While the site lies adjacent to the urban area and benefits from access to the

services, facilities and railway station within Moreton-in-Marsh, it is situated on the periphery of the settlement and is bordered by predominantly rural and undeveloped land to the east and south. The site is therefore categorised as Residential Isolated. The classification is further supported by the DfT's Connectivity Tool, which showed a score of 42.

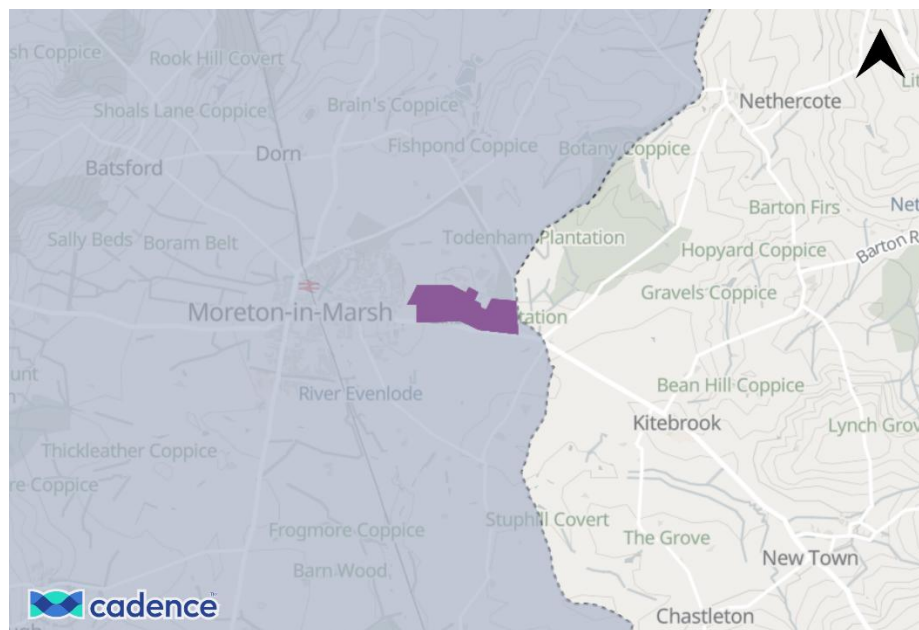


Figure 3-31: Fire Service College (Site A) Site Location

Table 3-25 shows car trip arrivals and departures for the PSO for each modelled period. The Fire Service College Site A consists of 833 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	94	8	1	272	18	1
IP (Avg 10:00-16:00)	110	18	1	105	18	2
PM (17:00-18:00)	223	33	1	119	17	1

Table 3-25: Fire Service College (Site A) Modelled Car Trips by Period

Ampney Crucis - Village

This site is located to the east of Cirencester, in the vicinity of Hilcot End, within a rural area surrounded by open land. The site is physically separated from the main urban area of Cirencester, with extensive undeveloped land lying between the site and the town, resulting in a distinct rural setting. Whilst the site benefits from access to the local road network and connections towards Cirencester and surrounding settlements, access to a full range of employment, education, retail and leisure facilities is likely to require travel beyond the immediate area.

As a result, the site is categorised as Village. The classification is further supported by the DfT's Connectivity Tool, which showed a score of 21.

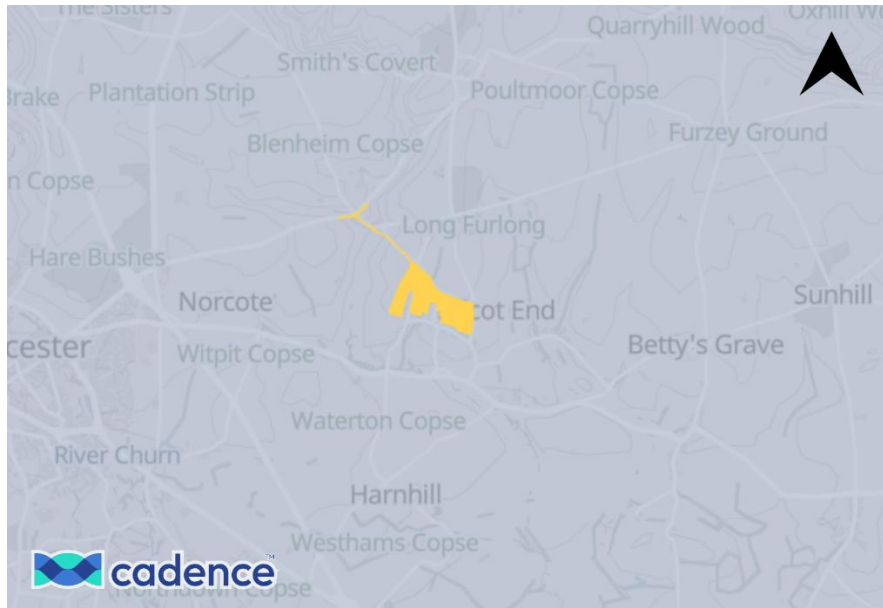


Figure 3-32: Ampney Crucis Site Location

Table 3-26 shows car trip arrivals and departures for the PSO for each modelled period. The Ampney Crucis site consists of 660 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	94	13	2	255	17	3
IP (Avg 10:00-16:00)	90	14	1	86	14	1
PM (17:00-18:00)	210	15	1	100	9	1

Table 3-26: Land north of Clark's Lane and south of Old Canal Modelled Car Trips by Period

Mickleton – Village

This site is located in the vicinity of Mickleton, a rural village situated to the north of the Cotswolds. The site is surrounded predominantly by open land with development in the area generally comprising rural communities. Whilst Mickleton provides access to a limited range of local facilities and services, residents are likely to rely on nearby towns and larger settlements for a wider range of employment, retail, education and leisure opportunities.

Consequently, the Mickleton site is categorised as Village. The classification is further supported by the DfT's Connectivity Tool, which showed a score of 29.

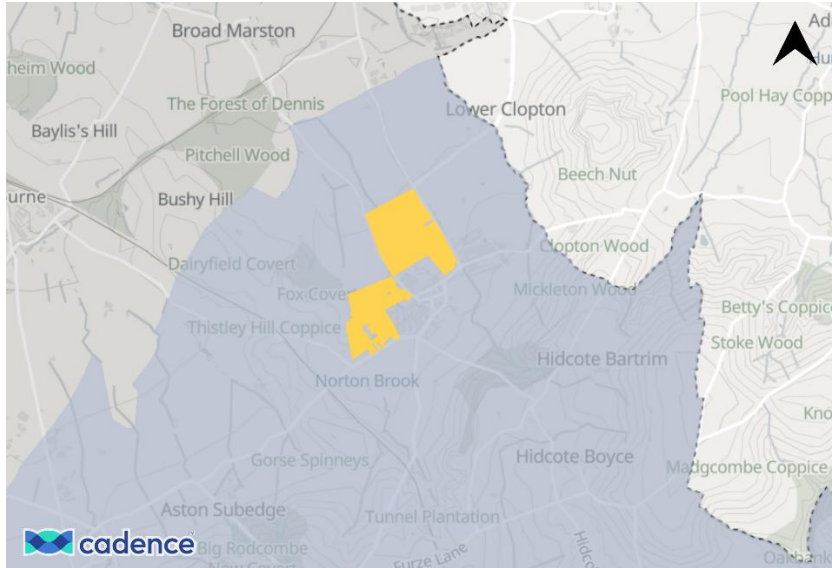


Figure 3-33: Mickleton site Location

Error! Reference source not found. shows car trip arrivals and departures for the PSO for each modelled period. The Mickleton site consists of 1,264 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	179	24	4	488	32	6
IP (Avg 10:00-16:00)	173	27	1	166	27	1
PM (17:00-18:00)	402	29	1	191	18	1

Table 3-27: Mickleton Modelled Car Trips by Period

Land south of Driffield – Village

The land south of Driffield is located in the wider Down Ampney and Cotswold Water Park area, surrounded by open land with limited development in the immediate vicinity. The site is physically separated from larger urban centres, resulting in a rural setting. Given its rural context, the surrounding undeveloped land, and the need for residents to travel further to access key services and facilities, the site has been categorised as Village. The DfT's Connectivity Tool showed a connectivity score of 22, also consistent with a village location.

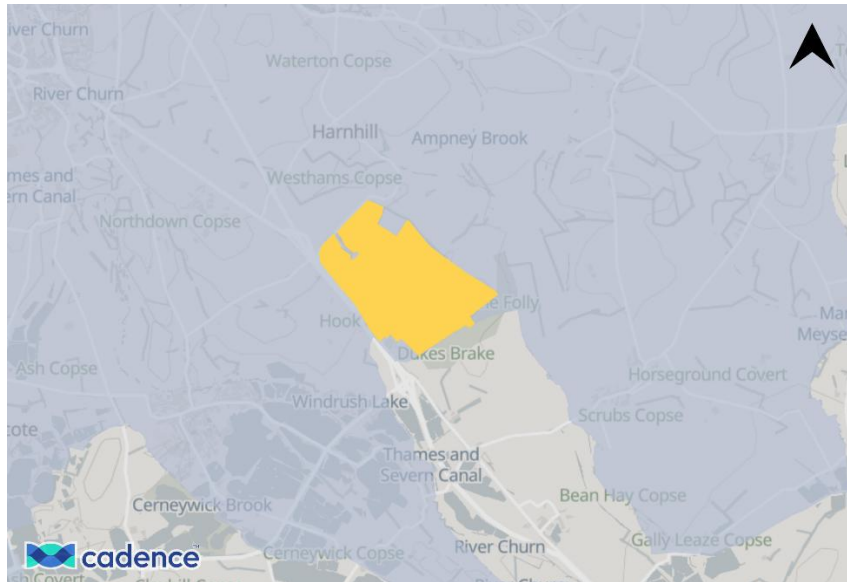


Figure 3-34: Land south of Driffield site Location

Error! Reference source not found. shows car trip arrivals and departures for the PSO for each modelled period. The land south of Driffield site consists of 1,090 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	155	21	3	421	27	5
IP (Avg 10:00-16:00)	149	23	1	143	23	1
PM (17:00-18:00)	347	25	1	165	15	1

Table 3-28: Land south of Driffield Modelled Car Trips by Period

Land at Down Ampney – Village

The land at Down Ampney site is located in the vicinity of Down Ampney as shown in Figure 3-35 **Error! Reference source not found.**, a rural village situated to the south-east of Cirencester. The site lies within a rural area and is physically separated from larger urban areas. Whilst the site benefits from connections to the local highway network, enabling access to Cirencester, Fairford and surrounding villages, access to a wider range of services and facilities requires travel to nearby towns and settlements.

The DfT's Connectivity Tool showed a connectivity score of 22, meaning low levels of accessibility to services and amenities, consistent with a village location. Consequently, the site has been categorised as Village.

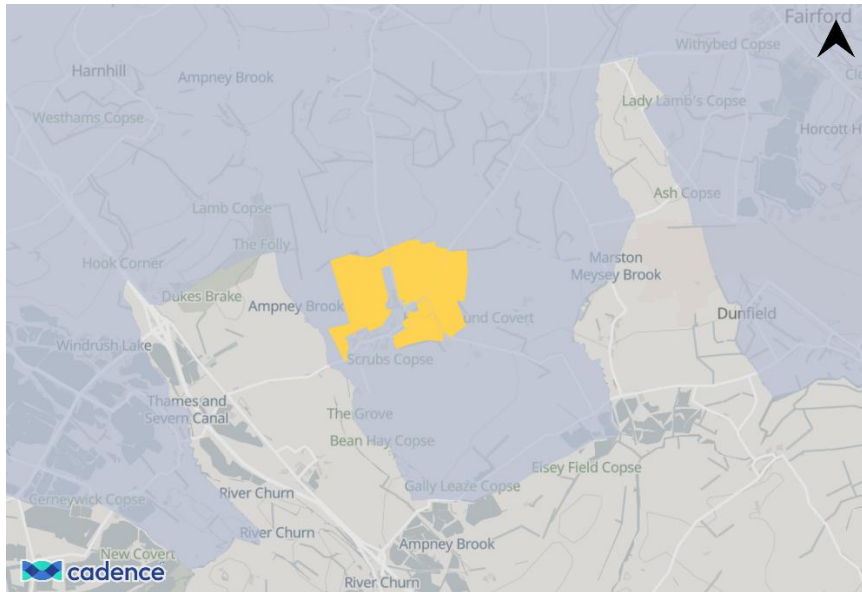


Figure 3-35: Land at Down Ampney site Location

Error! Reference source not found. shows car trip arrivals and departures for the PSO for each modelled period. The land at Down Ampney site consists of 1,660 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	236	32	5	641	42	8
IP (Avg 10:00-16:00)	227	35	2	217	35	2
PM (17:00-18:00)	528	38	2	251	23	2

Table 3-29: Land at Down Ampney Modelled Car Trips by Period

Land at Moreton-in-Marsh – Residential Isolated

The Land at Moreton-in-Marsh site, shown in Figure 3-36, is located on the eastern side of Moreton-in-Marsh and comprises a number of sites situated on the edge of the existing settlements. Whilst the site benefits from proximity to the town centre, local services, community facilities and Moreton-in-Marsh railway station, it is bordered to the east by predominantly rural land uses and open land.

The site is well positioned to access employment, education, retail and leisure opportunities within Moreton-in-Marsh. However, due to its location on the edge of the existing settlement, it is categorised as Residential Isolated. The DfT's Connectivity Tool showed a connectivity score of 45.

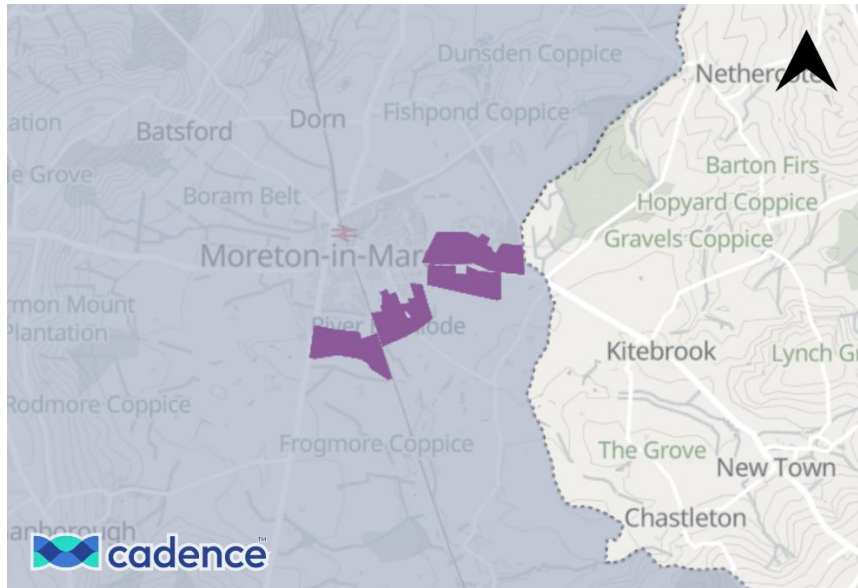


Figure 3-36: Land at Moreton in Marsh site Location

Error! Reference source not found. shows car trip arrivals and departures for the PSO for each modelled period. The land at Moreton in Marsh site consists of 1,129 dwellings.

Modelled Period	Arrivals			Departures		
	Car	LGV	OGV	Car	LGV	OGV
AM (08:00-09:00)	128	11	1	368	25	1
IP (Avg 10:00-16:00)	149	25	1	142	25	2
PM (17:00-18:00)	303	45	1	161	23	1

Table 3-30: Land at Moreton in Marsh Modelled Car Trips by Period

3.2.2 Employment Strategic sites

Table 3-31 summarises the assumed employment land-use distribution for Cotswold. These proportions are applied consistently to each employment site to disaggregate the total floorspace into B1 (Office), B2 (Industrial), and B8 (Warehouse) categories. The resulting land-use split is then used to inform the trip rate assumptions applied in subsequent stages of the assessment. Industrial uses (B2) comprise the largest share of employment land use at 49.5%, followed by warehouses (B8) at 25.8%, and office uses (B1) at 24.7%.

Local Authority	Cotswold
B1- Offices	24.7%
B2 - Industrial	49.5%

B8 - Warehouses

25.8%

Table 3-31: Employment Land Use Split

Table 3-32 shows car trips generation for each PSO employment site for each modelled periods, split by arrivals and departures. Overall, the largest trip volumes are associated with the Land south of Cotswold Airport, Fosse Farm, the Cotswold Airport and the Land south-west of Preston between Cirencester Road (A419) and the A419T. Of these, Cotswold Airport and Land south-west of Preston are strategic employment sites, both of which record consistently high inbound trips during the AM peak and high outbound trips during the PM peak, reflecting their scale and strategic employment function.

Employment Site	AM		Car IP		PM	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Phase 3a-i: Land at Chesterton Farm, Cranhams Lane, GL7 6JP	100	17	33	39	21	97
Land north of Bourton Industrial Park	62	10	21	24	13	60
Land west of Battlebrook Drive, Station Road	11	2	4	4	2	11
Land north of B4632 and east of employment estate	33	5	11	13	7	32
Steadings southern extension, Cirencester	19	3	6	7	4	18
Land south-west of Preston between Cirencester Road (A419) and A419T	110	18	37	43	23	107
Land east of Kingshill Lane	11	2	4	4	2	11
Fosse Farm	110	18	37	43	23	107
Land north-east of Fairford	44	7	15	17	9	43
Land south-west of Kemble	11	2	4	4	2	11
Cotswold Airport	107	18	36	42	22	104
Land south of Cotswold Airport	179	30	60	70	37	174
Land at Prospect Gardens, Stratford Road, GL55 6SR	11	2	4	4	2	11
Fire Service College (Site C)	44	7	15	17	9	43
M89	17	3	5	6	3	16
Land north of Clark's Lane and south of Old Canal	11	2	4	4	2	11

Table 3-32: Car Trips for each Employment Site by Period

Employment Site	LGV					
	AM		IP		PM	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Phase 3a-i: Land at Chesterton Farm, Cranhams Lane, GL7 6JP	17	13	14	15	5	9
Land north of Bourton Industrial Park	10	8	9	9	3	6
Land west of Battlebrook Drive, Station Road	2	1	2	2	1	1
Land north of B4632 and east of employment estate	6	4	5	5	2	3
Steadings southern extension, Cirencester	3	2	3	3	1	2
Land south-west of Preston between Cirencester Road (A419) and A419T	19	14	16	16	6	10
Land east of Kingshill Lane	2	1	2	2	1	1
Fosse Farm	19	14	16	16	6	10
Land north-east of Fairford	7	6	6	6	2	4
Land south-west of Kemble	2	1	2	2	1	1
Cotswold Airport	18	14	15	16	6	10
Land south of Cotswold Airport	30	23	26	26	9	16
Land at Prospect Gardens, Stratford Road, GL55 6SR	2	1	2	2	1	1
Fire Service College (Site C)	7	6	6	6	2	4
M89	3	2	2	2	1	2
Land north of Clark's Lane and south of Old Canal	2	1	2	2	1	1

Table 3-33: LGV Trips for each Employment Site by Period

Employment Site	OGV					
	AM		IP		PM	
	Arrivals	Departures	Arrivals	Departures	Arrivals	Departures
Phase 3a-i: Land at Chesterton Farm, Cranhams Lane, GL7 6JP	7	6	7	8	5	4
Land north of Bourton Industrial Park	4	4	5	5	3	2
Land west of Battlebrook Drive, Station Road	1	1	1	1	1	0

Land north of B4632 and east of employment estate	2	2	2	3	2	1
Steadings southern extension, Cirencester	1	1	1	1	1	1
Land south-west of Preston between Cirencester Road (A419) and A419T	8	6	8	8	5	4
Land east of Kingshill Lane	1	1	1	1	1	0
Fosse Farm	8	6	8	8	5	4
Land north-east of Fairford	3	3	3	3	2	2
Land south-west of Kemble	1	1	1	1	1	0
Cotswold Airport	8	6	8	8	5	4
Land south of Cotswold Airport	13	10	13	14	8	7
Land at Prospect Gardens, Stratford Road, GL55 6SR	1	1	1	1	1	0
Fire Service College (Site C)	3	3	3	3	2	2
M89	1	1	1	1	1	1
Land north of Clark's Lane and south of Old Canal	1	1	1	1	1	0

Table 3-34: OGV Trips for each Employment Site by Period

4 Trip Rate Comparison and Justification

4.1 Trip Rate Comparison

WSP working on behalf of National Highways, provided local comparator peak hour vehicle trips per dwelling, on the 20th of April 2026. Table 4-1 and Table 4-2 show the comparison with the vehicle trips per dwelling for the three location types outlined in section 1 that were used for the PSO modelling, for the AM and PM peak hour respectively. The weighted average total vehicle trips per dwelling (AM 2-way vehicle trip rate is 0.51 for SLP and 0.54 for Cotswold) of the three location types used in the PSO modelling for the AM peak hour broadly falls in the middle of the range (i.e. 0.51 or 0.54 is approximately middle of the range 0.29-0.63) provided by National Highways, as can be seen in Table 4-1. The weighted average total vehicle trips per dwelling (PM 2-way vehicle trip rate is 0.48 for SLP and 0.50 for Cotswold) of the three location types used in the PSO modelling for the PM peak hour falls in the middle of the range (i.e. 0.48 or 0.50 is approximately middle of the range 0.36-0.62) provided by National Highways, as can be seen in Table 4-2.

Authority	Area Type	Housing Type	Arrivals	Departures	Total (2-way)
South Worcs	Parkway	5,000 dwellings	0.08	0.21	0.29
North Somerset	TC /Edge of TC	Private/Affordable Housing	0.10	0.33	0.43
Cotswold & SLP	Generic	Residential	0.12	0.313	0.43
Wiltshire	Generic	Weighted Average (33/67)	0.12	0.33	0.44
North Somerset	Wolverhill & Bristol Edge	Private/Affordable Housing	0.13	0.34	0.46
Cotswold & SLP	Generic	Residential - Isolated	0.124	0.349	0.47
North Somerset	Nailsea & Backwell / Pill	Private/Affordable Housing	0.14	0.35	0.48
Glos County	West of Cheltenham	Residential	0.20	0.31	0.51
SLP	Weighted Average	Residential	0.14	0.37	0.51
Cotswold	Weighted Average	Residential	0.15	0.39	0.54
Stroud	Stroud Valleys	Residential	0.14	0.41	0.55
Stroud	Stonehouse	Residential	0.14	0.41	0.55
South Worcs	Generic	Residential	0.16	0.41	0.57

Cotswold & SLP	Generic	Village	0.164	0.416	0.58
Stroud	Gloucester Fringe	Residential	0.17	0.42	0.59
Stroud	Cam & Dursley	Residential	0.11	0.51	0.61
Stroud	Berkeley & Sharpness	Residential	0.18	0.46	0.63

Table 4-1 Total Vehicles Trips in the AM Peak Hour per residential dwelling

Authority	Area Type	Housing Type	Arrivals	Departures	Total (2-way)
South Worcs	Parkway	5,000 dwellings	0.24	0.12	0.36
North Somerset	TC /Edge of TC	Private/Affordable Housing	0.27	0.14	0.41
Wiltshire	Generic	Weighted Average (33/67)	0.29	0.14	0.43
Cotswold & SLP	Generic	Residential	0.293	0.145	0.44
Cotswold & SLP	Generic	Residential - Isolated	0.309	0.164	0.47
SLP	Weighted Average	Residential	0.32	0.16	0.48
North Somerset	Nailsea & Backwell / Pill	Private/Affordable Housing	0.34	0.15	0.49
North Somerset	Wolverhill & Bristol Edge	Private/Affordable Housing	0.34	0.15	0.49
Glos County	West of Cheltenham	Residential	0.30	0.20	0.49
Cotswold	Weighted Average	Residential	0.33	0.17	0.50
Cotswold & SLP	Generic	Village	0.342	0.166	0.51
Stroud	Cam & Dursley	Residential	0.32	0.19	0.51
South Worcs	Generic	Residential	0.32	0.19	0.51
Stroud	Berkeley & Sharpness	Residential	0.43	0.17	0.60
Stroud	Gloucester Fringe	Residential	0.39	0.22	0.61
Stroud	Stroud Valleys	Residential	0.40	0.23	0.62
Stroud	Stonehouse	Residential	0.40	0.23	0.62

Table 4-2 Total Vehicles Trips in the PM Peak Hour per residential dwelling

4.2 Trip Rate Justification

When drawing a comparison between the trip rates used for the PSO modelling and those from elsewhere as shown in Table 4-1 and Table 4-2, the following should be noted which supports the justification of the trip rates used:

- No internalisation reduction factor has been applied for the SLP and Cotswold local plan vehicle trips per dwelling for the PSO modelling.
- Stroud and Worcestershire authorities comparators show the highest vehicle trips per dwelling in both Table 4-1 and Table 4-2, all come from 2021 reporting and are based on pre-pandemic trip rates. It is well known that residential car trip rates post pandemic have fallen, car driver trips fell by 6% between 2019 and 2024, with overall commuting trips down by 21% largely due to the rise of hybrid and home working (NTS-2024: Household car availability and trends in car trips (Chart 20), DfT). The surveys that inform the Cotswold and SLP trip rates are based on post pandemic data where lower car trip rates would be expected.
- The strategic transport modelling work for the transport evidence base for a local plan covers a large area and a significant number of development sites it therefore must be strategic and proportionate in nature, as opposed to a detailed transport assessment for individual developments site applications. Instead, a proportionate approach has been adopted using three trip rate categories by location type.
- The trip rates should be seen within the 'Vision & Validate' methodology, as outlined in the Vision & Validate Technical note (SLP, Cotswold) to a future based approach to integrated land use and transport planning. It is a relatively new requirement for the local plan making process, included in the December 2024 revision of the National Planning Policy Framework. It replaces traditional reactive approaches with one that is goal-led, policy-aligned, and focused on sustainable outcomes. At its core, it aims to identify transport solutions that deliver the future we want, rather than providing for a scenario based on how we have done things in the past.
- Trip rates for the West of Cheltenham developments were agreed with National Highways and Gloucestershire County Council to determine the capacity of the existing M5 J10 and local highway arrangements. The weighted average vehicle trips per dwelling for SLP are the same or within 0.01 of the equivalent West of Cheltenham vehicle trips across each peak hour and the Cotswold only deviates by 0.02 vehicle trips per dwelling.

4.3 Benchmarking

Error! Reference source not found. Table 4-3 below shows the comparison of the A46 WG TRICS derived Standard trip rates, broken down by location and a raw average, against a comparative range of trip rates which is broadly in line with existing planning applications. To enable a consistent assessment, the total vehicles and people metrics account for all observed movements within TRICS (e.g. some modes such as motorcycle, taxi and PSV trip rates are not included separately in the modelling assessment). The purpose of the table below is to provide a

comparative assessment between the TRICS analysis undertaken for existing planning applications within the study area and the TRICS derived standard trip rates. Note, for the purpose of modelling these standard trip rates are then adjusted using TEMPRO data for car passenger observations and some modes are excluded.

Location	Total Vehicles		Cyclist		Walk		PT		Total People	
	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Residential Zone	0.40	0.44	0.02	0.02	0.17	0.09	0.04	0.04	0.85	0.84
Residential Zone Isolated	0.50	0.51	0.02	0.02	0.11	0.06	0.05	0.04	0.96	0.98
Village	0.57	0.48	0.02	0.01	0.11	0.09	0.05	0.04	1.11	0.85
Average	0.49	0.48	0.02	0.02	0.13	0.08	0.04	0.04	0.97	0.89
Estimated Lower Range	0.46	0.47	0.01	0.01	0.01	0.05	0.01	0.01	0.86	0.79
Estimated Upper Range	0.57	0.63	0.03	0.04	0.27	0.18	0.03	0.03	1.04	0.97

Table 4-3: Trip Rate (per hour per dwelling) A46 WG Benchmarking - TRICS

On average, trip rates across all modes fall within the estimated comparative ranges. The only minor exception is Public Transport (combined), which deviates slightly by 0.01 trips.

For Total Vehicles, the Residential Zone shows slightly lower trip rates than the estimated range, while the Village and Residential Zone Isolated locations fall within the expected range. In particular, the general Residential Zone, which represents areas with lower car generation, has slightly lower car trip rates than estimated. Overall, both the range of trip rates across location categories and the average total vehicle trip rates are broadly in line with expectations.

For Total People, average trip rates are within the estimated range. A small deviation of 0.01 trips was observed in the Residential Zone during the weekday morning peak (08:00-09:00). In some specific periods, slightly higher trip rates were recorded including:

- Residential Zone Isolated (average weekday afternoon peak (17:00-18:00))
- Village (average weekday morning peak (08:00-09:00))

These deviations are primarily related to vehicle occupant observations, which are in the majority car passengers. This is not considered significant, as the modelling process utilises TEMPRO data for Car passengers. Overall, the analysis indicates a good level of consistency between estimated ranges and observed values by location category.

Table 4-4 presents the average weekday morning (08:00-09:00) and afternoon (17:00-18:00) car driver trip rates from the TRICS assessment.

Data Source	Location	AM	PM
TRICS	Residential Zone	0.273	0.349
	Residential Zone Isolated	0.344	0.427
	Village	0.368	0.380
	Average	0.328	0.385

Table 4-4: Trip Rate (average period per dwelling) A4 WG Benchmarking - TRICS

4.4 Conclusion

Given what is outlined in sections 4.1, 4.2 and 4.3 above, it is considered that the trip rates used for the PSO modelling for SLP and Cotswold local plan are appropriate and proportionate given the strategic nature of the work. If, however stakeholders have concerns, it would be possible to undertake sensitivity testing using higher (or lower trip rates), it is acknowledged that there is a degree subjectivity in the selection of trip rates. Given the evidence described in this TN, it would not be expected that such sensitivity tests would materially change the conclusions of the PSO modelling results for SLP and Cotswold local plan and its resultant impact on the network nor the likely intervention requirements.