

Thurrock Council

Local Plan Evidence Base

Local Plan Transport Assessment

Reference: 00B2

Issue | 12 August 2026

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Ove Arup & Partners Limited
8 Fitzroy Street
London
W1T 4BJ
United Kingdom
[arup.com](https://www.arup.com)

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			Prepared by	Checked by	Approved by
		Name	H. Al-Siaidi H. Clark	I. Varney A. Richards	R. Goodall 
			D. Tarry S. Yu		
		Filename			
		Description			
			Prepared by	Checked by	Approved by
		Name			
		Filename			
		Description			
			Prepared by	Checked by	Approved by
		Name			

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1. Introduction

1.1 Overview

Thurrock Council (TC) is preparing a new Local Plan that will set out the vision and framework for future development of the Borough. Together the Phase 1 and Phase 2 documents outlined below provide evidence to support the development of the new Local Plan in line with *Proposed reforms to the National Planning Policy Framework*, published on 16th December 2025, and other changes to the planning system put forward by Ministry of Housing, Communities & Local Government (MHCLG).

The new Local Plan for Thurrock promotes a sustainable pattern of development that seeks to meet development needs, align growth and infrastructure, improve the environment, and mitigate and adapt to the effects of climate change in accordance with the National Planning Policy Framework (NPPF paragraph 11).

This report presents the vision-lead approach to developing transport policies and proposals that support delivery of Local Plan growth, in line with national policy requirements. An impact assessment has also been undertaken using strategic and local highway modelling to identify impacts across transport modes related to Local Plan growth and where mitigation might be required.

Ove Arup & Partners Limited (Arup) has been commissioned by TC to prepare transport evidence for the emerging Thurrock Local Plan which is delivered in two Phases:

- Phase 1: Transport Evidence:
 - a) **Baseline Transport Report** - Provides a summary of existing conditions relating to transport in Thurrock.
 - b) **Transport Assessment** (this document) – Provides a summary of the vision for Local Plan development and details how transport impacts will be mitigated.
- Phase 2:
 - a) **Infrastructure Delivery Plan** – Provides a summary of transport infrastructure necessary to accommodate Local Plan growth as developed through the Transport Assessment and engagement with infrastructure providers and key stakeholders.

1.2 Policy context

A review of transport policy relevant to Local Plan development is included in the Baseline Transport Report; however, two additional documents have also been reviewed, which have informed the Transport Assessment as summarised below:

- **Draft Thurrock Transport Strategy 2026 – 2040** (November 2025) – Aims to guide future transport investment, improve travel choices, and support sustainable growth. This represents a shift from road capacity expansion (predict and provide) to vision-led planning, emphasizing the needs of communities, environmental stewardship and inclusive mobility.
- **Thurrock Design Code** (Emerging) – This will build on the draft Thurrock Design Charter (2023) to provide prescriptive design requirements for creating healthy, beautiful, and distinctive places with a high consistent standard of design.

1.3 Duty to co-operate

The Duty to Cooperate is no longer a formal requirement for Local Plans following release of Local Plan Guidance in November 2025¹ as part of broader reforms to the plan-making system provided by the Levelling-Up and

Regeneration Act 2023. However, an outline of activities undertaken to gain agreement across organisations related to Thurrock’s Local Plan is outlined below. Summary of Duty to Cooperate activities include:

- Meetings and engagement with National Highways (24 November) to discuss impacts of the Local Plan on the Strategic Road Network and engagement with Active Travel England through the IDP process
- Strategic transport model sensitivity test of growth associated with the neighbouring Basildon Local Plan and recently consented Dunton Hills development in Brentwood with further details provided in Section 6.9.

1.4 Key transport considerations for Thurrock

A summary of transport opportunities and constraints is included in the Baseline Transport Report along with key transport considerations for Thurrock as summarised below:

- Car ownership and use are high in Thurrock, driven by journeys to work and transport networks that make sustainable travel options less attractive.
-

2.4 Monitoring and review

The Local Plan Transport Assessment and associated transport modelling is based on long-term forecasts of travel demands and patterns, which represent our current understanding and latest available data. However, as time from initial modelling increases, certainty associated with the outcomes decreases, and different outcomes may materialise to those forecast due to a range of factors.

A ‘Monitor and Manage’ approach will therefore be necessary to maximise the impact of policies and proposals outlined within this report to support the Thurrock Local Transport Plan Vision 2050, and adjust the approach as circumstances change over time. Progress towards the vision and objectives should therefore be regularly reviewed, ideally every 5 years.

Where outcomes diverge from those identified within this Transport Assessment or wider vision for Thurrock, further investigation will be required to identify appropriate management and mitigation measures, which prioritise uptake of sustainable travel, with highways intervention as a last resort.

3.2 Employment site allocation summary

Thurrock Council has identified both available and new employment sites across Thurrock. Sites were prioritised based on the transport principles set out in Section 2.3 and subsequent spatial option analysis to identify locations offering the greatest potential for sustainable travel and accessibility. A total of 18 potential development sites have been identified.

Figure 3-2 shows the spatial distribution of both potential and available employment sites, alongside identified transport principles and Freeport sites and Table 3-2 presents employment sites included in the preferred spatial option.

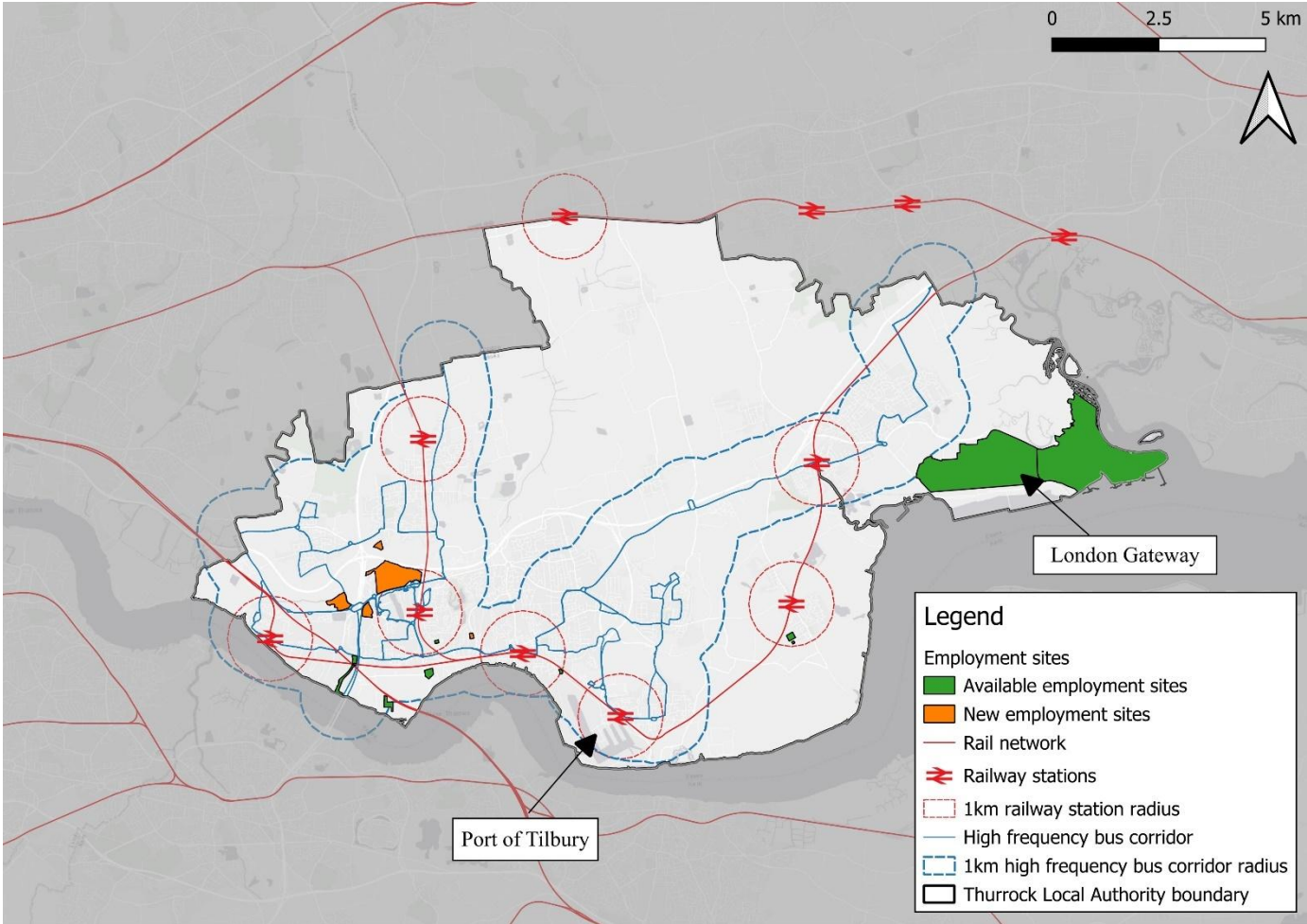


Figure 3-2: Available and new employment sites

Table 3-2: Preferred spatial option employment sites

Employment site id	Address / site name	Type	Total site area (ha)
60969/T59b	West Horndon	General employment E(g)i-iii, B2 B8	50
60981	Former Arena Essex site and fishing lake, Lakeside	Data Centre	52
61209	Purfleet-on-Thames Regeneration	General employment E(g)i-iii, B2, B8	
T81a/60989	Land South of Burnley Road, West Thurrock	General employment E(g)i-iii, B2, B8	4
T35a/60850	Land East of Stoneness Road and North of Thurrock Sub Station, West Thurrock	General employment E(g)i-iii, B2, B8	3.5
T14a	Land at eastern end of Manor Way Industrial Estate, Grays	Light industrial E(g)(i-iii)	0.72
Include T52	Kerneos Site, South of London Road, West Thurrock	General employment B2 B8	6.8
T33a	Land North of Magnet Road	Light industrial and general industrial. E(g)(iii) and B2	0.61
61010	Thurrock Shopping Park Site, West Thurrock	General employment B2 B8	6.5
60900	Land at Hillside, Devonshire Close	E(g)(i-iii)	1.1
61073	Land Adjacent to A1306 and Junction 31 of M25, Purfleet-on-Thames	Light industrial and general industrial. E(g)(iii) and B2	12.4
60854, 60862	Tilbury 3	E(g)(i-iii), B2 and B8, sui generis, port operations	57.9
T07a	Land to the North West of Thames Industrial Estate, East Tilbury	E(g)(i-iii)	2.57
T07b	Land to the South West of Thames Industrial Estate, East Tilbury	E(g)(i-iii)	0.32
60984	Thames Enterprise Park and Thames Oilport	E(g)i-iii, B2 B8, sui generis, education and training	312
60976 & 60988	London Gateway		

The employment sites identified are largely concentrated in existing industrial areas, including London Gateway Port, Thames Enterprise Park and Thames Oilport, and the former Arena Essex site. Freeport sites at Tilbury and London Gateway are expected to play a key role in driving and delivering economic development and growth across the Borough. Both Freeport locations have good access to the strategic highway network and rail corridors for onward connections and distribution of freight.

Figure 3-3 shows the distribution of proposed employment types across Thurrock, comprised of a mix of commercial, industrial, data centre and general employment sites.

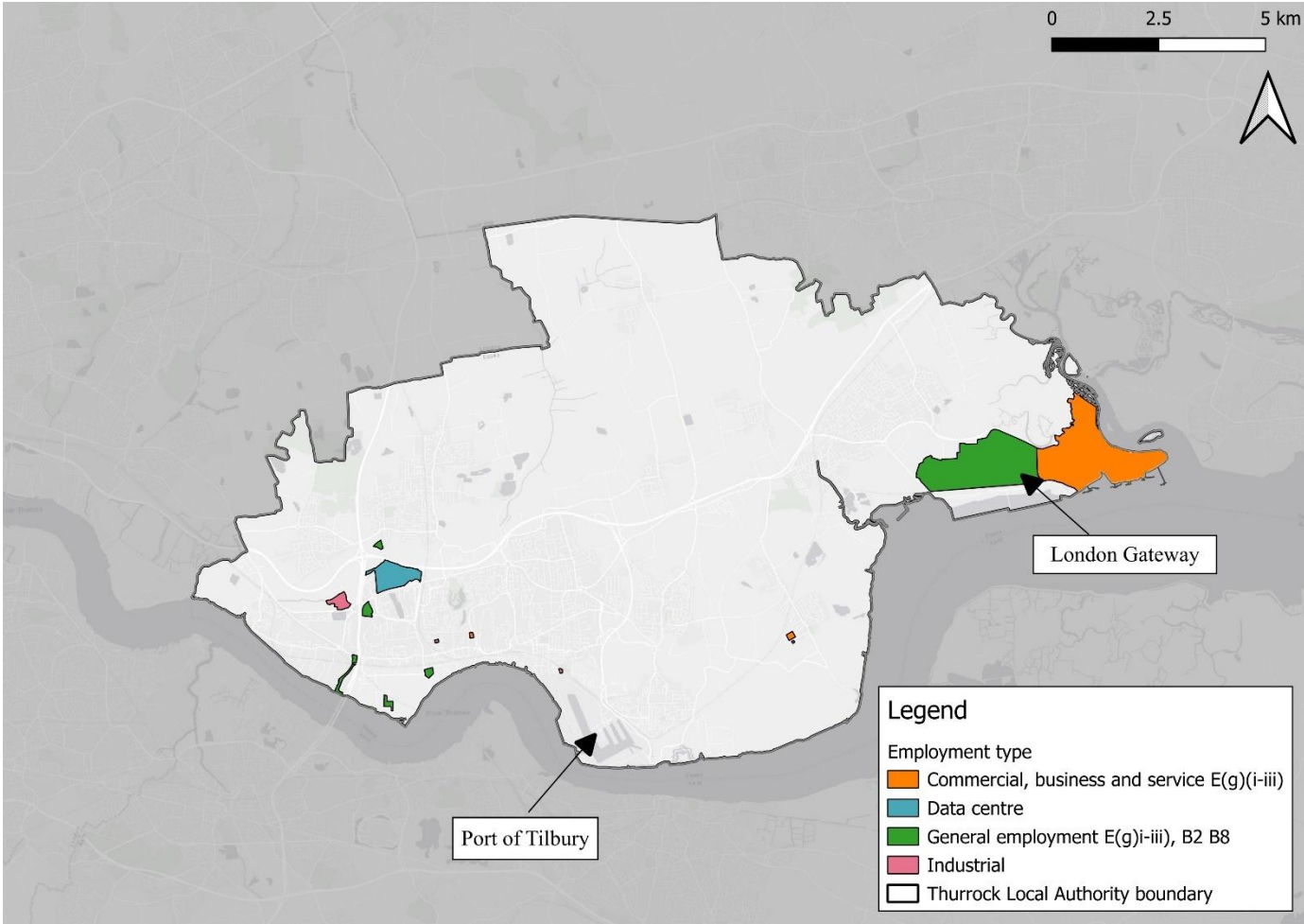


Figure 3-3: Employment types

Table 4-2: MCA analysis

Project type	Project area	Main scheme	Driving need	Project nature	Score
Local Railway	Grays, South Stifford & Little Thurrock	Grays station upgrade (platform 3 extension) and closure of High Street level crossing	Railway capacity /Severance issue /Pedestrian and cycle connectivity	Longstanding strategic issue	Essential
Active Travel	East Tilbury /Stanford-le-Hope	East Tilbury – Stanford-le-Hope active travel link – Dedicated path along the railway line between Princess Margaret Road and Butts Lane	Pedestrian and cycle connectivity	Longstanding local issue	Essential
Sustainable Transport corridors	Cross boundary projects	Canvey Island Sustainable link – Bus and active travel link between the A1014 Manorway and Canvey Island	Severance issue/Bus connectivity /Pedestrian and cycle connectivity	Longstanding strategic issue	Essential
Local Railway	Stanford-le-Hope	Construction of Stanford-le-Hope station building	-	Growth-led	Essential
Active Travel	East Tilbury /Chadwell St Mary	East Tilbury – Chadwell St Mary active travel link – Dedicated path along Muckingford Road between Princess Margaret Road and Cross Keys	Pedestrian and cycle connectivity	Longstanding local issue	Essential
Sustainable Transport corridors	Aveley /South Ockendon	Oak & Ash Plantation sustainable bridge – Bus and active travel link across the M25 between Aveley and South Ockendon	Bus connectivity /Severance issue /Pedestrian and cycle connectivity	Longstanding local issue	Essential
Local Railway	Purfleet-on-Thames	Station building relocation linked to new active travel bridge across railway line	Railway capacity /Severance issue /Pedestrian and cycle connectivity	Growth-led	Essential
Active Travel	West Thurrock	Pedestrian and cycle improvements across the M25/A282 – Path along A1090 London Road under the bridge	Severance issue /Pedestrian and cycle connectivity	Longstanding local issue	Desirable
Active Travel	Lakeside, Chafford Hundred and Stifford Clays	Walking and cycle improvements across the M25/A282 – A1306 Arterial Road	Severance issue /Pedestrian and cycle connectivity	Longstanding local issue	Desirable
Active Travel	Grays, South Stifford & Little Thurrock/ Tilbury	Tilbury – Grays active travel link – Bridge over the creek linking Thurrock Park Way with Elm Road open space and FP 186	Pedestrian and cycle connectivity	Longstanding local issue	Desirable
Sustainable Transport corridors	Grays, South Stifford & Little Thurrock	London Road – Orsett Road/Southend Road bus and active travel corridor	Bus reliability /Pedestrian and cycle connectivity	Longstanding strategic issue	Desirable
Sustainable Transport corridors	Cross boundary projects	Tilbury Pontoon Extension – extension to Tilbury Landing Stage to support north south and east-west passenger movements on the River Thames	Severance issue/ ferry connectivity /Pedestrian and cycle connectivity	Recent strategic challenge	Desirable
Local Railway	Crossboundary projects	Cross-river railway connectivity opportunities	Bus reliability /Pedestrian and cycle connectivity	Longstanding strategic issue	Desirable
Active Travel	Purfleet-onThames	Active travel bridge across railway line by Timber Board Mills	Severance issue/ ferry connectivity /Pedestrian and cycle connectivity	Recent strategic challenge	Beneficial
Active Travel	East Tilbury	Active travel link across Princess Margaret Road level crossing	Railway capacity	Longstanding strategic issue	Beneficial
Local Railway	South Ockendon	Dynamic loop on the railway line between Ockendon and Upminster	Pedestrian and cycle connectivity	Longstanding local issue	Beneficial
Active Travel	Southfields & Orsett	Shared path along A128 Brentwood Road	Pedestrian and cycle connectivity	Longstanding local issue	Beneficial
Local Railway	Stanford-le-Hope	Elect			

Principle	Ref	Principle outcome							
		severance between neighbourhoods caused by major infrastructure.							
	3.6	New development should make efficient use of land, preserving our open countryside as much as possible. Densities should be optimised in areas that are well served by local public transport, facilities, open spaces, and local services. By bringing people together in walkable compact neighbourhoods, we can better support the vitality of our town centres and provision of new transport connections.	✓		✓			✓	
4 Resilient & Sustainable Futures	4.2	We want to ensure that what we build today is robust, adaptable and easy to maintain. Proposals should demonstrate how buildings and developments can adapt to different seasons and ranges of weather using primarily passive methods.							✓

6. Local Plan impact assessment

6.1 Overview and ‘Monitor and Manage’ approach

The Local Plan Transport Assessment and associated modelling is based on long-term forecasts of travel demands and patterns, which represent our current understanding and latest available data. However, as time from initial modelling increases, certainty associated with the outcomes decreases, and outcomes may materialise differently to forecasts, due to a range of factors. For example, changes to national policies, and long-term impacts of national and local policies on travel behaviour and, individual response to transport conditions which may cause peak spreading.

A ‘Monitor and Manage’ approach will therefore be required to maximise the impact of policies and proposals outlined within this report, and adjust the approach where issues are identified. Many of the proposals and mitigation measures identified within this Assessment will require further refinement and investigation with Thurrock Council, National Highways and developers when developments in the Local Plan come forward.

More strategically a strategy and modelling review at intervals throughout the plan period will need to be undertaken to understand progress against meeting Thurrock’s Local Transport Plan Vision 2050 objectives and identify if developments are being delivered aligned to the strategy. Where outcomes diverge from those identified within this Assessment further investigation will be required to identify appropriate management and mitigation measures, which prioritise uptake of sustainable travel and highways intervention as a last resort.

This section continues by summarising transport modelling assumptions, infrastructure improvements have been assumed to be delivered and incorporated into the transport model, comparison of site specific demand for major Local Plan allocations at West Horndon, South Ockendon and Lower Langdon, which are supported by separate site-specific assessment reports, and then provides a summary of impacts and potential mitigation.

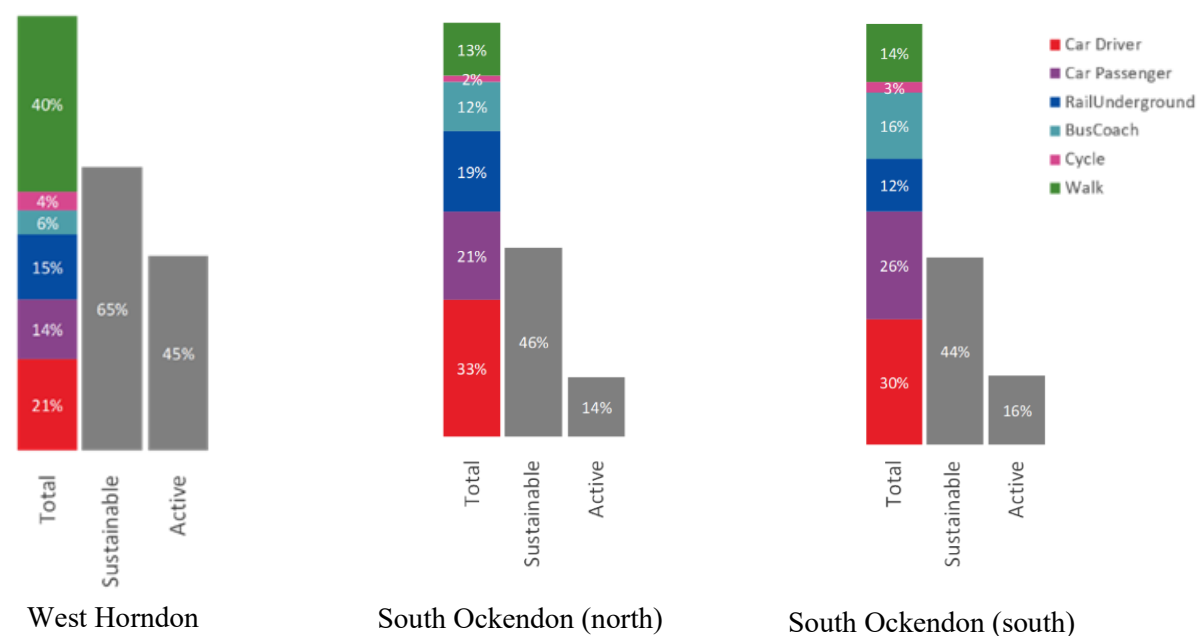
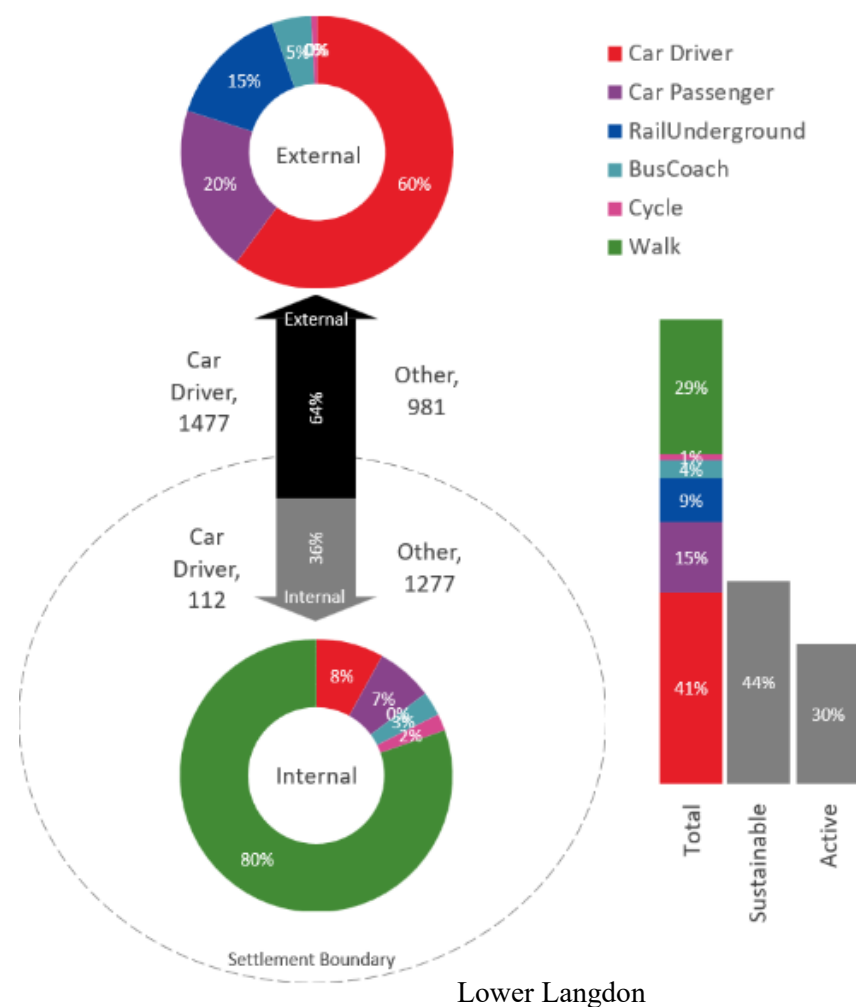


Figure 6-3: Arup site specific assessment AM peak hour total residential mode shares

The mode shares for AM peak hour residential trips are shown in Figure 6-4 for Lower Langdon.



82706 - M25 / A13 Mardyke Junction

Existing:

Scenario 1: 'AF AM Peak' (FG1: 'AM Peak', Plan 1: 'Network Control Plan 1')

Scenario 2: 'AF IP Peak' (FG2: 'Inter Peak', Plan 1: 'Network Control Plan 1')

Scenario 3: 'AF PM Peak' (FG3: 'PM Peak', Plan 1: 'Network Control Plan 1')

Scenario 4: 'AF Sat Peak' (FG4: 'SAT Peak', Plan 1: 'Network Control Plan 1')

Mitigated:

Scenario 1: 'AF AM Peak' (FG1: 'AM Peak', Plan 1: 'Network Control Plan 1')

Scenario 2: 'AF IP Peak' (FG2: 'Inter Peak', Plan 1: 'Network Control Plan 1')

Scenario 3: 'AF PM Peak' (FG3: 'PM Peak', Plan 1: 'Network Control Plan 1')

Scenario 4: 'AF Sat Peak' (FG4: 'SAT Peak', Plan 1: 'Network Control Plan 1')

