Medway Local Plan 2041 - Transport Evidence Base – Mode Shares and Trip Rate Assessment Tool to inform the traffic modelling scenarios (Stages 1 and 2)

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Medway Council
Medway Local Plan 2041

Local Plan Transport Evidence Base

Medway Local Plan 2041 - Transport Evidence Base – Mode Shares and Trip Rate Assessment Tool to inform the traffic modelling scenarios (Stages 1 and 2)

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1. Introduction

As Kent Transport Model (KTM) custodian to Kent County Council (KCC), Jacobs have been commissioned to develop the required strategic modelling necessary to provide the evidence base for the Regulation 18 and Regulation 19 Local Plan consultations for Medway Council.

The Regulation 19 commission includes the preparation of technical information to support a transport evidence base by informing on impacts and mitigation of the plan's development traffic on the network by:

- understanding ways to reduce highway trip rates associated with plan growth/growth areas
- identifying practical sustainable transport mitigation options to mitigate growth in the plan.

This Technical Note provides a summary of work undertaken in Stages 1 and 2 of the transport strategy commission.

1.1 Background

Initial Local Plan consultations took place in Autumn 2023 with the latest Regulation 18 consultation ending in September 2024. Medway Council are currently developing their pre-submission draft Local Plan.

The Council plans to publish the draft Local Plan in early 2025, which will be followed by further public consultation on specific growth plans and policies, and a Planning Inspectorate independent assessment and examination of the plan.

After examination the Local Plan will be adopted and used to make decisions on planning applications in Medway; the Council wants to have the Local Plan in place by the end of 2026.

1.2 Purpose and Scope of Work

The purpose of this Technical Note is to deliver technical information to support a transport evidence base.

The evidence base will detail/validate how the mode shares were:

- developed (e.g., a X% reduction in highway trips for developments XYZ) for the traffic modelling scenarios
- justified / based on sound evidence and research/data. This is a requirement for the TA evidence base and the modal shift requirement.

Medway Council will use the evidence base to defend their position during the Regulation 19 consultation and the examination.

Within the initial Jacobs proposal (Task Order) the Scope of Work is set out in three stages, with a short Technical Note (section of this report) provided at the end of each stage.

- Stage 1 - Existing and proposed future situation evidence gathering
- Stage 2 - Research and options identification
- *Hold Point*
- Stage 3 - High-level strategy (dependent on the Options identified in Stage 1 and Stage 2)

The key findings / rationale / justification for each task and/or this decision is provided in **bold** along with the information requested by the Highway Authority to defend their position during consultation and examination.

1.3 Report structure

The remainder of this report is structured to follows:

- Stage 1 Existing and proposed future situation evidence
- Stage 2 Research and options identification

- Stage 3 Next steps and recommendations
- Appendix A – Trip Rate Assessment Tool instructions

2. Stage 1 Existing and proposed future situation evidence

2.1 Purpose of Stage 1

The purpose of Stage 1 was to gather high-level evidence about the current situation including existing infrastructure, facilities, and services.

2.2 Inception meeting

An initial / inception meeting was held on Thursday 19 September 2024 with Andrew Bull and Michael Edwards of Medway Council to discuss the proposed scope, deliverables, timelines, and client expectations. Medway Council confirmed the proposed scope and timelines.

2.3 Proposed developments, dwellings and jobs

Medway currently has a population of around 280,000 people. Medway Council have stated a need for 1,658 homes a year and 28,000 homes by 2041 to keep up with Medway's predicted population growth.

As part of the preferred option Local Plan, to be consulted upon at Regulation 19, Medway Council have proposed 21,338 new dwellings across 100 developments sites. The sites range in size from 3 to 2,750 dwellings. In addition, the Local Plan includes 9,024 new jobs across 200,399 sqm of employment lands/commercial floorspace.

The 100 proposed development sites have been grouped into 28 geographical clusters (listed by name and number in Table 2-1 and shown in Figure 2-1). **The 100 development sites represent 21,338 new dwellings and 9,024 new jobs.**

Table 2-1: The 28 geographical clusters (groups) comprising the 100 Local Plan development sites

Group no.	Group Name	Group no.	Group Name
1	Strood Centre	15	Gillingham Gads Hill
2	Isle of Grain	16	Chatham Docks
3	Allhallows	17	Brompton Dock Road
4	Lower Rainham	18	Chatham-Rochester Centres
5	High Halstow	19	Chatham Suburban
6	Cliffe Woods	20	Lower Stoke
7	Rainham Suburban	21	Kingsnorth
8	Rochester Industrial	22	Hoo Peninsula
9	Cuxton	23	Capstone Farm Country Park
10	Sundridge Hill	24	Hempstead M2 / A278
11	Strood Suburban	25	Strood North
12	Frindsbury	26	Halling
13	Medway City Estate	27	Hempstead Rural
14	Gillingham Centre	28	Lordswood

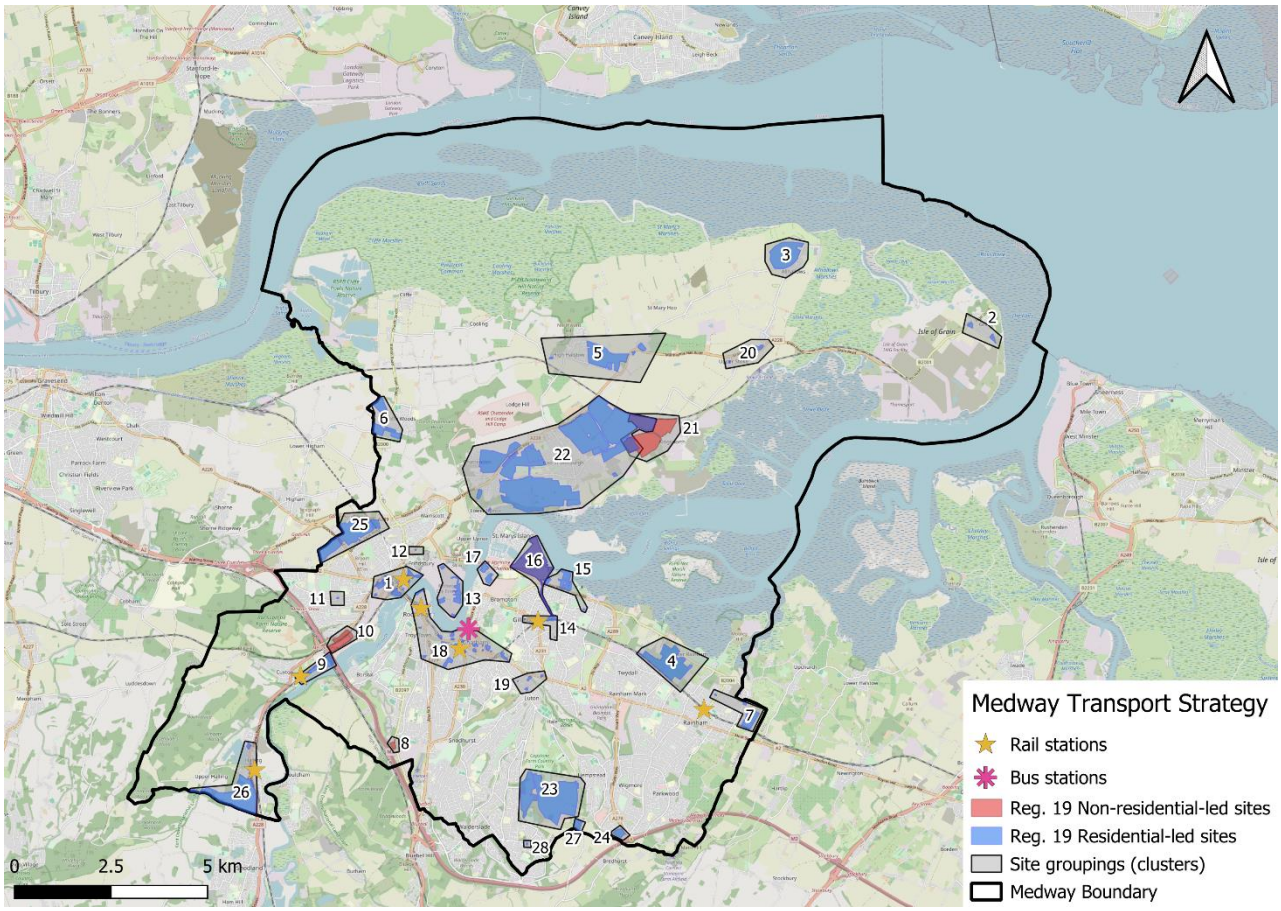

Figure 2-1: Map of the Local Plan sites and site groupings (clusters)

The clusters with the most dwellings are presented in Table 2-2.

Table 2-2: Clusters with the greatest number of dwellings

Group no.	Group Name	No. dwellings
1	Strood Centre	884
3	Lower Rainham	800
5	High Halstow	864
13	Medway City Estate	1,541
15	Gillingham Gads Hill	1,693
16	Chatham Docks	2,750
18	Chatham-Rochester Centres	1,365
22	Hoo Peninsula	5,239
23	Capstone Farm Country Park	2,675
25	Strood North	1,280
26	Halling	1,088

The clusters with the most jobs are presented in Table 2-3.

Table 2-3: Clusters with the greatest number of jobs

Group no.	Group Name	No. jobs
10	Sundridge Hill	1,180
16	Chatham Docks	843
21	Kingsnorth	6,901

The 12 largest clusters (no. dwellings and jobs combined) **represent 19,379 new dwellings** (91% of the total number of proposed dwellings) **and 8,924 new jobs** (99% of the total number of new jobs)**.** These clusters have planned growth of at least 850 dwellings/jobs and **could have the greatest potential for reduction in highway trip rates and delivery of sustainable transport mitigations.** The clusters are outlined in Table 2-4.

Table 2-4: Top 12 largest clusters by dwellings and jobs combined

Group no.	Group Name	No. dwellings + jobs
1	Strood Centre	884
5	High Halstow	864
10	Sundridge Hill	1,180
13	Medway City Estate	1,541
15	Gillingham Gads Hill	1,693
16	Chatham Docks	3,593
18	Chatham-Rochester Centres	1,365
21	Kingsnorth	6,901
22	Hoo Peninsula	5,239
23	Capstone Farm Country Park	2,675
25	Strood North	1,280
26	Halling	1,088
	TOTAL	**19,379 dwellings; 8,924 jobs**

The Medway Local Plan 2041 will guide all of the above-mentioned development (21,338 new dwellings and 9,024 new jobs) and use of land in Medway up to 2041 and address the needs of our growing population.

The plan's vision (vision for Medway in 2041) is to strengthen Medway's position in the economy and culture of the region, connected to its surrounding coast and countryside; with a thriving economy, where residents enjoy a good quality of life. There is a clear strategy for addressing climate change and strengthening natural assets.

The Council's vision (aspirations) for Medway is the highest quality infrastructure, with a range of affordable, quality homes in the right places, and excellent health and wellbeing services, to provide for the growth needs for Medway and our communities.

Through the new Local Plan, Medway wants to achieve (as per the Local Plan objectives) preparing for a sustainable and green future; supporting people to lead healthy lives and strengthening our communities; securing jobs and developing skills for a competitive economy; and boosting pride in Medway through quality development.

2.4 Parking standards

The Local Plan sets out Medway Council's parking standards adopted in 2001 and updated in 2004 (see Medway Council Parking Standards document Appendix A1) and residential parking standards adopted in 2001 and updated in 2010 (see Medway Council Parking Standards document Appendix A2). In the context of this piece of work, the minimum number of car parking spaces per residential dwellings are:

- 1 bedroom – 1 space
- 2 bedrooms – 1.5 spaces
- 3+ bedrooms – 2 spaces
- Visitor parking – 0.25 spaces

Reductions of the parking standards will be considered by Medway Council if the development is within an urban area that has good links to sustainable transport and where day-to-day facilities are within easy walking distance.

- **For the purposes of this work, it has been assumed that the parking standards will remain unchanged.**

2.5 Current situation and key corridors

This section presents an overview of the initial desktop research conducted as part of Stage 1, showing **which clusters are best served by existing and future transport** as well as a high level illustration of the clusters' **potential for modal shift**. This section **focusses on twelve "large clusters"** by dwellings and employment, as presented previously in Table 2-4. The Stage 2 full qualitative and quantitative analyses of the clusters are provided in the Assessment Tool (see section 3.2 and Appendix A).

The Strategic Road Network (SRN) is managed by National Highways (NH) and includes the A2 (London to Dover) and the M2 (Medway to Faversham). The M2 bounds Medway and the A2 is the main east-west route through Medway and linking Medway with Greater London.

- **The large clusters (corresponding cluster numbers shown to the left) in the closest proximity to the M2 are:**
    - **10 Sundridge Hill**
    - **23 Capstone Farm Country Park**
    - **25 Strood North**
    - **26 Halling**
- **The large clusters in the closest proximity to the A2 are:**
    - **1 Strood Centre**
    - **18 Chatham-Rochester Centres**
    - **25 Strood North**

Several A and B road corridors, maintainable at the public expense, provide north-south and east-west connectivity and access to the key urban centres of Strood, Rochester, Chatham, Gillingham and Rainham.

- **The Four Elms roundabout, urban centres and Medway tunnel are some of the most congested areas in the morning and evening peak. The largest clusters in proximity of these 'pinch points' are:**
    - **1 Strood Centre**
    - **13 Medway City Estate**
    - **15 Gillingham Gads Hill**
    - **16 Chatham Docks**
    - **18 Chatham-Rochester Centres**
    - **22 Hoo Peninsula**
    - **25 Strood North**

The River Medway severs Medway. There are three river crossings: the M2 (motorway/rail), the A2 between Rochester and Strood (road and rail) and the Medway Tunnel (Chatham Dockside to Frindsbury (road).

- **The large clusters closest to these river crossings are:**
    - **1 Strood Centre**
    - **10 Sundridge Hill**
    - **13 Medway City Estate**
    - **15 Gillingham Gads Hill**
    - **16 Chatham Docks**
    - **18 Chatham-Rochester Centres**

The main train line through Medway, with direct train trains to London, serves Strood, Rochester, Chatham, Gillingham and Rainham. Less frequent and less direct train connections are provided from Cuxton and Halling.

- **The large clusters with the greatest potential for mode shift are:**
    - **1 Strood Centre**
    - **15 Gillingham Gads Hill**
    - **16 Chatham Docks**
    - **18 Chatham-Rochester Centres**

The Medway has a 'Spoke and Hub' style bus network operated by Arriva with most routes interchanging or terminating at the Chatham's waterfront bus station.

- **The large cluster near the bus station with the greatest potential for mode shift is:**
    - **18 Chatham-Rochester Centres**

Medway has an extensive network of footways (pedestrian facilities adjacent to the highway) as well as urban and recreational footpaths. There is a growing network of on and off road, shared, segregated and traffic-free cycling routes.

- **Except for the proposed greenfield development sites, all sites have access to pedestrian amenities.**

Medway has around 80 miles of cycling infrastructure, much of which forms part of the National Cycle Network, namely completed or proposed sections of National Cycle Network Route 1 (a long-distance route in sections from Dover to the north of Scotland), Route 17 (Rochester to Maidstone), Route 177 (Northfleet in Kent and Ashford via Rochester) and Route 179 (Hoo Peninsula).

- **The large clusters best served by the existing cycle network and segments (existing and future proposed) of the NCN are:**
    - **1 Strood Centre**
    - **5 High Halstow**
    - **10 Sundridge Hill**
    - **13 Medway City Estate**
    - **15 Gillingham Gads Hill**
    - **16 Chatham Docks**

- **18 Chatham-Rochester Centres**
- **21 Kingsnorth**
- **22 Hoo Peninsula**
- **23 Capstone Farm Country Park**
- **25 Strood North**

The large clusters listed above have some level of connectivity to existing and proposed sections of the NCN and other cycle networks, based on initial desktop review. The more detailed analysis of cycling connectivity is provided in the Assessment Tool (Appendix A). The listed clusters provide an indicative overview of which sites are (or will be) close to the current and future cycle network.

2.6 Key strategies and plans (future proposed situation)

The current Medway Local Transport Plan (LTP) came into effect on 1 April 2011 following approval of Full Council. The LTP prioritises regeneration, economic competitiveness, and growth; the natural environment; connectivity; equality of opportunity; and safety, security, and public health. It is Medway's third LTP and runs until 2026. The LTP will be updated (LTP4) by 2026.

- **It is assumed that the new LTP4 will support access and connectivity to large development sites.**

Medway Council consulted on the Medway Local Cycling and Walking Infrastructure Plan (LCWIP) during winter/spring 2024. The LCWIP sets out Core Walking Zones (CWZs) centred around Chatham, Gillingham, Rainham, Rochester and Strood with a 1km radium around each town centre, 14 priority walking routes ranging in length from 0.5 to 3km providing connectivity into and through the CWZs, and ten priority cycling routes ranging in length from 2 to 8km. The LCWIP CWZs and routes are shown overlaid on the sites in Figure 2-2.

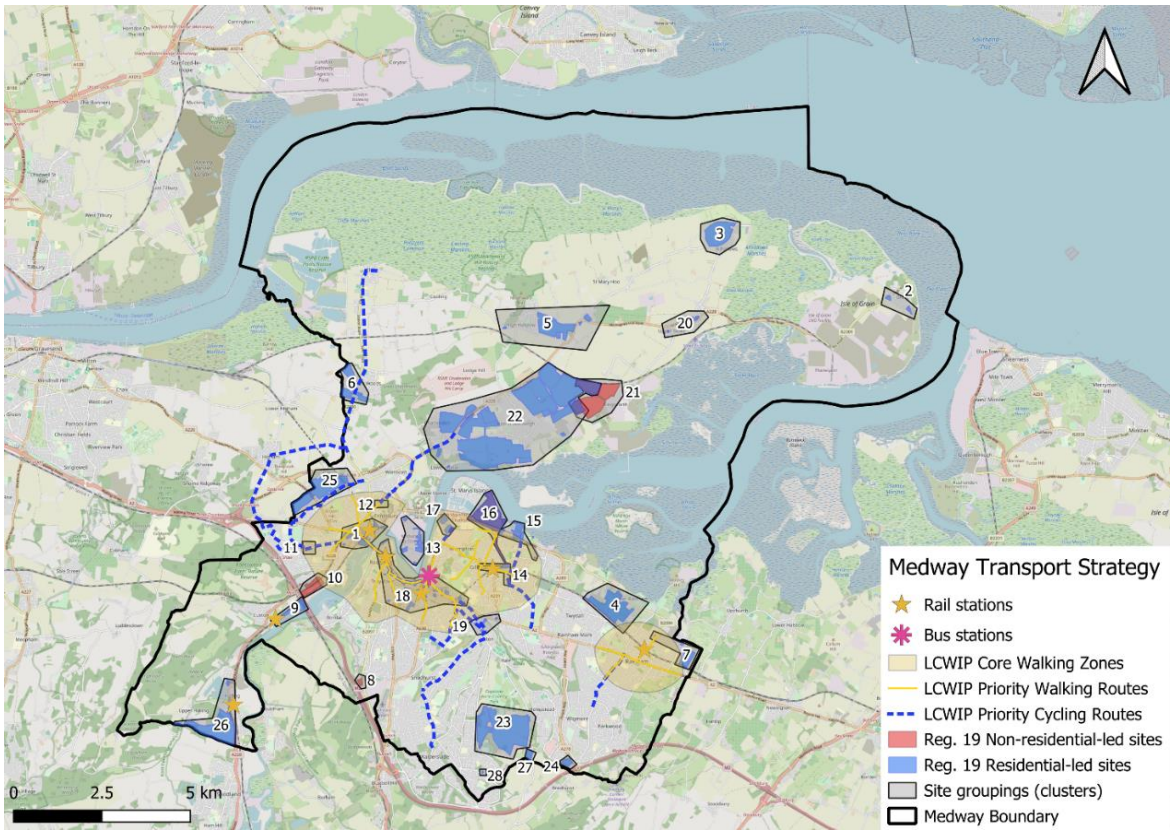

Figure 2-2: Map of LCWIP priority areas and routes with site clusters

- **The large clusters which are part of the Core Walking Zones (CWZs) are:**
    - **1 Strood Centre**
    - **18 Chatham-Rochester Centres**
- **The large clusters which will likely be best served by the proposed priority walking routes are:**
    - **1 Strood Centre**
    - **15 Gillingham Gads Hill**
    - **16 Chatham Docks**
    - **18 Chatham-Rochester Centres**
- **The large clusters which will likely be best served by the proposed priority cycling routes are:**
    - **1 Strood Centre**
    - **15 Gillingham Gads Hill**
    - **18 Chatham-Rochester Centres**
    - **25 Strood North**

Medway's Bus Service Improvement Plan (BSIP) was first published in October 2021 and updated in June 2024. The BSIP improvement programme includes additional evening and Sunday services on key routes, red routes on key parts of highway, and repairs and improvements to bus shelters. Longer-term ambitions include a new bus hub at Strood railway station and bus priority to the Hoo peninsula. Longer term transformation of the network (to be delivered by 2035) includes; ensuring that new developments provide good access for bus services and passengers, including within the site where appropriate; improved bus services to the Peninsula in conjunction with any new developments on a sustainable basis; and secure cycle hubs at bus stops in new developments to enable people to easily get from their front door to the bus stop.

- **The large clusters most supported by these proposed public transport interventions would be:**
    - **Strood Centre**
    - **Hoo Peninsula**
    - **Kingsnorth**
- **It is assumed that financial contributions towards community, public and school transport will be collected as part of the planning conditions associated with all new developments.**

2.7 Origin-Destination data

Commuter trips are made within, out of and into Medway (2011 Census data). The distances travelled to work by Medway residents are comparable with UK averages (in brackets). Longer distance trips are higher for Medway compared with UK averages due to the proximity to central London and access to high-speed rail into London.

- Shorter-distance trips
    - 18% are less than 2km (20%)
    - 23% of all trip journey to work trips are 2-5km (23%)
- Longer-distance trips
    - 16% are 5-10km (21%)

- 22% are 10-30km (26%)
- 21% of trips are 30-60km (10%)

The 2021 Census data contains workplace and commuter origin-destination (OD) data. Medway Commuter OD data by MSOA (2021) suggests that 53% of commuters work within Medway, with 28% travelling to neighbouring jurisdictions e.g., Maidstone and Dartford and around 10% travelling into London/Greater London. The 2021 Census data OD interactive mapping tool reports:

- 45% of Medway residents were working at home
- 29% travelled to work within the Medway area
- 26% travelled out of Medway for work e.g. other parts of Kent and/or London

However, the Covid-19 global pandemic, lockdown restrictions and the furlough scheme, in place in March 2021, had a significant impact on travel to work data. As such, the data may not be reflective of current commuting patterns.

- **With uncertainty surrounding the continuation of hybrid and/or 'working from home' arrangements, and technological advancements supporting remote working it is assumed that the 2011 and 2021 trends will remain relatively unchanged with a high number of local commuter trips contained within London as well as a Medway residents travelling into London.**

2.8 Modes of travel

The 2021 Census data reports the method of Travel to Work (but does not include the population working from home and those not in employment/furloughed during the pandemic). Medway trips were not dissimilar to the UK national averages.

- 72% travelled by car or van, as the driver or passenger
- 10% travelled on foot
- 9% by train
- 5% by bus, minibus or coach
- 1% by bicycle

As previously stated, the pandemic lockdowns in 2021 had a significant impact on the validity of travel data.

- **It is assumed, as a baseline for assessing trip rates for proposed developments, that 70% of trips will be made by car.**

Amongst short journeys under 5km, cycling makes up 2.3% of the total mode share while walking makes up 23.9%. Even amongst journeys under 5km, driving is still the most common mode of travel with 57% (as the driver, not including passengers of a car or van) of the total mode share. Amongst all journeys under 10km, driving makes up 63% of the total mode share, walking makes up 18% and cycling only 2%.

59% of the total Medway population live within 400 metres of high-frequency bus routes. 41% of the existing Medway population do not have access to high-frequency buses.

- **The large clusters currently <u>without</u> access to high frequency bus services (2022 data) are:**
    - **5 High Halstow**
    - **10 Sundridge Hill**
    - **13 Medway City Estate**
    - **21 Kingsnorth**
    - **22 Hoo Peninsula**
    - **23 Capstone Farm Country Park**

- **25 Strood North**
- **26 Halling**

2.9 Car ownership

Rates of car ownership in the UK are comparable with the UK national average. 19% are car-free households, 41% have access to 1 car and 40% of households have 2 or more cars or vans. It is unlikely that the pandemic created significant changes to levels of car ownership.

- **It has been assumed that the car ownership rates will remain comparable/unchanged.**

2.10 Levels of reduction required at key pressure points

The Four Elms Roundabout, the A2, the Medway Tunnel and each of the urban centres are locations with traffic pressures, particularly in the morning and evening peak.

- **The largest clusters in closest proximity to / which could potentially further impact on areas with existing high traffic congestion are:**
  - **1 Strood Centre**
  - **10 Sundridge Hill**
  - **13 Medway City Estate**
  - **15 Gillingham Gads Hill**
  - **16 Chatham Docks**
  - **18 Chatham-Rochester Centres**
  - **21 Kingsnorth**
  - **22 Hoo Peninsula**
  - **25 Strood North**

2.11 Aspirations/intentions for new developments

At this stage only information on the number of dwellings and the number of jobs and floorspace has been provided.

- **It is assumed that the town centre, inner-urban and infill development sites would likely be flats, apartments and townhouses with allocated/communal car parking whilst the proposed greenfield sites would likely to be predominately detached, semi-detached and terraced houses with private carparking/garages.**

2.12 Summary of findings and next steps

The purpose of Stage 1 was to gather information on the existing situation.

Medway Council have proposed 100 developments sites representing 21,338 new dwellings and 9,024 new jobs. For ease of assessment, the development sites have been grouped into 28 geographical clusters. The 12 largest clusters represent 19,379 new dwellings (91% of the total number of proposed dwellings) and 8,924 new jobs (99% of the total number of new jobs).

Medway is a predominantly compact urban area with good links to road, rail and bus transport. Nine of the development clusters are near the highway pressure points, e.g. the Medway Tunnel and the Four Elms Roundabout. Eight of the proposed development clusters do not currently have access to high-frequency bus services. As a result, the next stage of work (Stage 2) will assume that 70% of all trips in Medway will be made by car.

3. Stage 2 Research and options identification

3.1 Purpose of Stage 2

As per the Scope of Work, by the end of Stage 2 we will have identified options and prepared a concise Technical Note outlining:

- Recommendations of realistic measures to reduce highway traffic demand associated with growth in Medway.
- A sound evidence base to justify Medway's proposed development mode share splits / targets / internalised trips within future developments and to support reduced highway demand for use in future traffic modelling scenario testing / model runs and in considering additional highway mitigation.

3.2 Trip Rate Assessment Tool

A bespoke and tailored Excel and GIS (Geographical Information Systems) based Trip Rate Assessment Tool has been created to indicatively 'test' the 100 development sites (grouped into 28 geographical clusters).

The tool has been used to assess each of the 28 clusters based on each cluster's ability to:

- Reduce car-based trips, and subsequently reduce the trip rate in the traffic modelling scenarios
- Increase mode shares towards sustainable and active transport e.g. walking, cycling, bus and rail, and subsequently reduce the trip rate in the traffic modelling scenarios

The Trip Rate Assessment Tool is based on a two-tier / two stage assessment:

- Stage 1 assesses each of the 28 clusters against the existing opportunities to reduce trip rate e.g. existing bus routes, bus station, rail stations and cycling infrastructure. The score is based on a RAG (Red-Amber-Green) rating.
- Stage 2 assesses each of the 28 clusters against the planned/proposed projects' ability to reduce trip rates. For example, the introduction of a BRT (Bus Rapid Transit) network, and delivery of priority cycling routes as outlined in the LCWIP. The score is also based on a RAG rating.

The Tool provides a visual overview of which clusters of proposed development sites have the potential and/or validity to reduce car-based trip rates, and which do not.

Reducing the baseline from 70% of all trips made by car to 50-60% of trips made by car would help to reduce congestion at pressure point locations (the Four Elms Roundabout, the A2, the Medway Tunnel and each of the urban centres). This would require 40%-50% of all trips to be made by sustainable transport modes e.g. walking, cycling, bus or train.

The Trip Rate Assessment Tool delivers Council's two key requirements:

1. An evidence base to detail/validate how the mode shares were developed (e.g., a X% reduction in highway trips for developments XYZ) in the traffic modelling scenarios
2. A justified sound evidence and valid research/data. There is a requirement for the TA evidence base and the modal shift requirement.

The overall output of the Trip Rate Assessment Tool is:

- A list of development sites / clusters which will retain the baseline assumption in the traffic modelling scenarios that 70% of all trips will be made by made by car.

- A list of development sites / clusters which have the opportunity / potential to partially reduce the number of car trips due to existing and proposed infrastructure / interventions e.g. access to rail stations and the bus station. It is assumed for these sites that the 70% of car trips would be reduced to 60% of all trips by car, or 50% where there is already a robust network of active travel and sustainable transport in place (e.g. rail station and bus route access combined with cycling infrastructure and key walkable destinations).
- A list of development sites / clusters which have the significantly greater opportunity to reduce the number of car trips due to the size of the development and proposed infrastructure / interventions e.g. significant investment in a new BRT route. It is assumed for these sites that a 10% reduction in car trips is possible.

It should be noted that while the Trip Rate Assessment Tool analyses each cluster by each individual mode shift opportunity (proximity to bus routes, rail stations, walking destinations, future cycling investment, etc.), the rate of reduction in car mode share assigned is based on a holistic assessment of the cluster, and has been made using technical judgement. For example, certain rail stations that see higher service frequencies into London may weigh more heavily towards potential mode shift from private car compared to rail stations with lower frequency or more indirect services, and the walkability vs. convenience of driving to these rail stations will have also been considered in the final reduction.

The reduction rates provided should be taken as a point in time assessment for the Local Plan. Particularly for the future conditions assessment, they are dependent on funding to deliver LCWIP priorities and a BRT service, and changes in future working arrangements. For example, a working from home reduction will most likely correlate to overall more trips on the highway network, and vice versa. There is also much uncertainty around trip rates and changing parameters beyond control of Council, for example, if the bus network is franchised as part of devolution there could be a change in the high frequency bus service provision.

Overall, the reduction rates selected have been chosen based on a more conversative approach (compared to some overly ambitious Local Plan targets observed in other jurisdictions), with a focus on not being overly optimistic regarding the actual behaviour change that may occur with the interventions currently and proposed to be in place.

The Trip Rate Assessment Tool background and instructions are provided in **Appendix A.**

3.3 Collaborative meeting with Medway spatial planners

A collaborative meeting was held with Medway spatial planners and Jacobs transport planners on Friday 13th December 2024 to review the Trip Rate Assessment Tool in the context of the 100 proposed development sites and the requirements to identify opportunities (locations/developments sites) for modal shift, internalised trips and to reduce highway trips.

Medway Council confirmed their satisfaction with the tool and initial assessment outputs.

Medway Council noted their need to revise the number and location of some of the proposed development sites between Regulation 18 and Regulation 19. The Assessment Tool and this report have been revised to account for the reduced number of proposed sites (165 to 100), some new locations and the reduction in the total number of new dwellings and new jobs.

3.4 Mode shift achievements in new developments across Medway

Mode shift achievements and known usage of new public/active commitments in Medway e.g., modal splits and use of new facilities in Rochester Riverside and Gillingham Pier developments, is currently unknown. Medway Council were unable to provide data/case studies, and no other stakeholders have data on their actual mode share splits and trip generation.

3.5 Trip rates used by other Councils and/or TRICS

Initial desktop research and a benchmarking exercise was conducted in order to compare Medway developments and trip rates with other areas.

The Royal Town Planning Institute (RTPI) report The Location of Development 4 - Sustainable transport and the location of residential planning permissions, 2012-2021 (November 2024) concluded that:

- Accessibility of destinations from approved new homes remained broadly constant. Newly approved housing developments were similar to the existing housing stock in their journey times to destinations.
- There were inequalities between regions and between urban and rural areas. Approved homes in London were the most accessible while those in the South West and East of England are the least accessible.
- There was little or no improvement in the take up of public transport over the option of driving to local facilities from newly approved homes. The car as a mode of transport was 1.5 times faster nationally to reach key destinations from residential development, including 2 times faster to reach hospitals.
- Cycling was a competitive alternative to driving by car, taking nationally only 1.3 times as long to reach key destinations from approved new homes.
- The majority of new homes were approved within walking distance of a GP (93%) and a primary school (73%). 32% were within a 20-minute walk to large employment centres with at least 5,000 jobs and 46% to a town centre.

The research measured how many homes were given planning permission, but whether they were in locations that incentivise sustainable transport. It concluded that there has been little to no improvement following analysis of the metrics available on sustainable transport and the location of residential planning permissions (new homes approved at the end of the study period 2012-21). Driving remained the fastest mode of transport, followed by cycling, public transport and walking.

Source: https://www.rtpi.org.uk/media/18717/the-location-of-development-4.pdf

Suffolk County Council (SCC) have recently updated their monitoring requirements. Their new requirements include:

- Annual monitoring survey requirements to September each year for two weeks, the developer then submits their monitoring in October for the Council team to review in November and December.
- Working with their-parties to install cameras on compatible lampposts from the outset of the development. This will allow multi-modal continuous monitoring from the beginning of the development and provides different monitoring options.

Norfolk County Council have mode shift targets dependent on MSOA level but note that this also depends on the socio-economic characteristics of the residents. Council prefers to reduce trips rather than implement modal shift interventions and describe modal shift as "a blunt instrument". The Council does not impose repercussions on developers if trip reductions/modal shifts are not met. Council have found public transport and bike vouchers unsuccessful for reducing trips for new developments.

WestTrans is responsible for the monitoring and implementation of Development Control Travel Plans in six London Boroughs. WestTrans believe that design is the most important element; "you cannot travel plan your way out of a poor or bad design". WestTrans believe that it is hard to influence residential sites and should be done in the design – that is, if you make cycling and walking easy straight away then people will do it. WestTrans have an extensive excel database which tracks/monitors sustainable transport measures, development targets and trip reductions. WestTrans concluded that examples of good measures include car sharing schemes, car parking management, car parking restrictions on parking and cycle parking in the right place.

The TRICS Standardised Assessment Methodology (SAM) provides Council's access to trends and allows them to benchmark themselves against other local authorities on the system. However, it is costly and limited to certain months of the year for monitoring.

3.6 Internalisation achievements in new developments across Medway

Medway Council were unable to provide data/case studies, and no other stakeholders have data on the current internalisation rates and achievements in new developments across Medway. For example, there is no currently available data on the number of children living in the Rochester Riverside development and attending the new Rochester Riverside Church of England Primary School.

3.7 Key findings – Trip rates and mode shares for different new developments (Stage 1)

The potential trip rate reductions and mode shares for different new developments (clusters) was developed using the Trip Rate Assessment Tool and the methodology (as outlined in Section 3.2) based on the first stage (existing conditions) of the two-tier / two stage assessment.

- Stage 1 assessed each of the 28 clusters against the existing opportunities to reduce highway trip rates, e.g. access to existing bus routes, bus station, rail stations and cycling infrastructure. The scoring was based on a RAG (Red-Amber-Green) rating.

The key findings are presented in Table 3-1.

Table 3-1: Summary of the Stage 1 assessment results for the 12 large clusters

Development sites (clusters) with potential to reduce the Trip Rate / Mode Share from **70%** of trips by car **to 50%** of all trips by car	Development sites (clusters) with potential to reduce the Trip Rate / Mode Share from **70%** of trips by car to **60%** of all trips by car	Development sites (clusters) **remaining at 70%** of all trips by car
Strood Centre Chatham-Rochester Centres	Gillingham Gads Hill Chatham Docks	High Halstow Sundridge Hill Medway City Estate Kingsnorth Hoo Peninsula Capstone Farm Country Park Strood North Halling
Equates to 2,249 new dwellings (covering 11% of total proposed dwellings; 0% of total jobs)	**Equates to 4,443 new dwellings and 843 new jobs** (covering 21% of total proposed dwellings; 9% of total jobs)	**Equates to 12,687 new dwellings and 8,081 new jobs** (covering 59% of total proposed dwellings; 90% of total jobs)

These results illustrate that there is very **little potential for mode shift under the existing conditions** scenario (Stage 1 assessment). 59% of total proposed dwellings and 90% of total proposed jobs remain car oriented, with car mode share at approximately 70%. The findings are presented geographically in Figure 3-1.

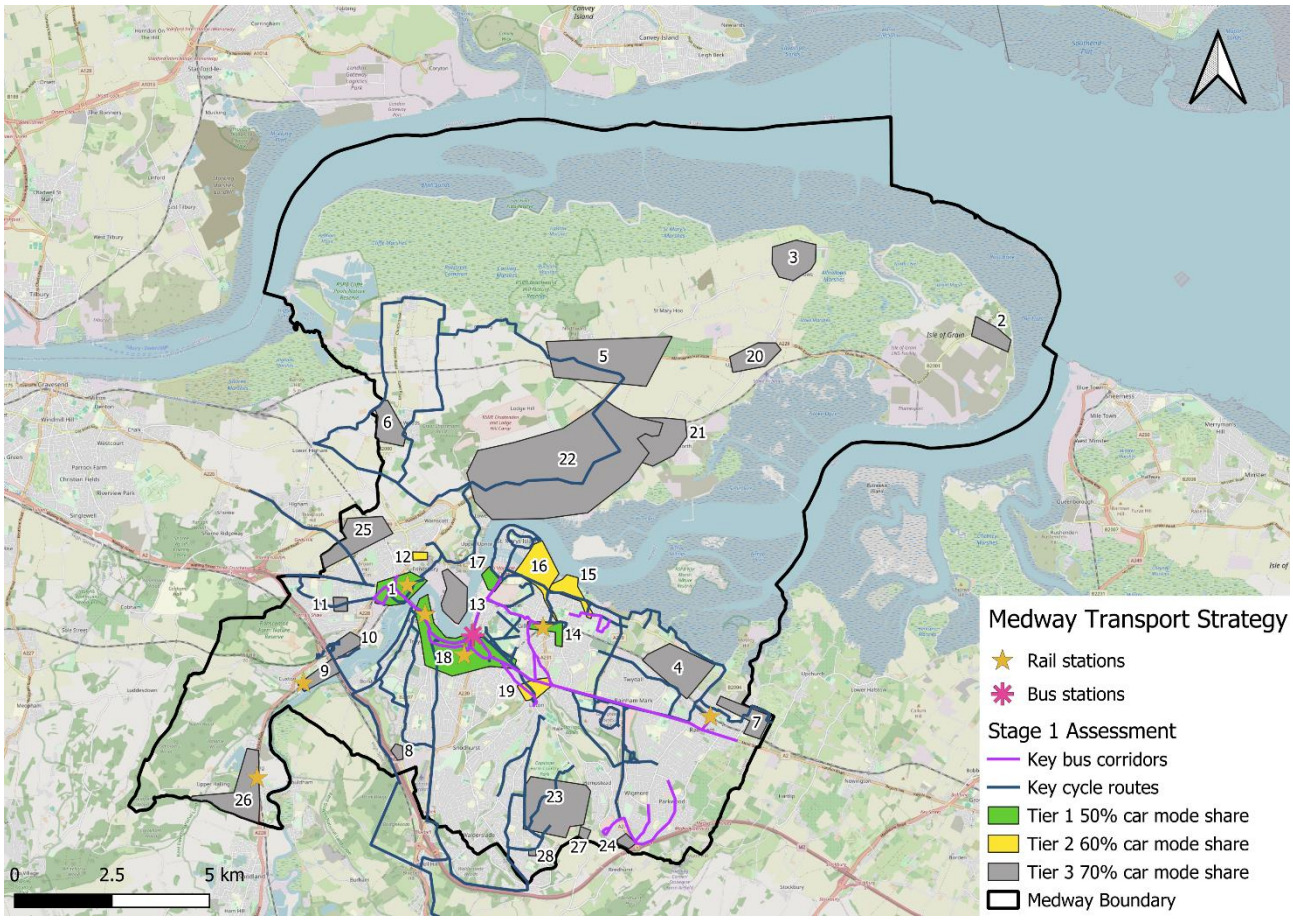

Figure 3-1: Map of the Stage 1 assessment results ("Red" rated clusters with litlte to no modal shift potential are shown in grey)

3.8 Key findings – Trip rates and mode share refinement (Stage 2)

The potential car trip rate reductions and mode shares for different new developments (clusters) was further developed using the Trip Rate Assessment Tool and the methodology (as outlined in **Section 3.2**) based on the second stage (proposed conditions) of the two-tier / two stage assessment.

- Stage 2 assessed each of the 28 clusters against the planned/proposed projects' ability to reduce trip rates. For example, the introduction of a BRT (Bus Rapid Transit) network and delivery of priority cycling routes as outlined in the LCWIP. The score is also based on a RAG rating.

The key findings are presented in Table 3-2.

Table 3-2: Summary of the Stage 2 assessment results for the 12 large clusters

Development sites (clusters) with potential to reduce the Trip Rate / Mode Share from **70%** of trips by car to **50%** of all trips by car	Development sites (clusters) with potential to reduce the Trip Rate / Mode Share from **70%** of trips by car to **60%** of all trips by car	Development sites (clusters) **remaining at 70%** of all trips by car
Strood Centre Gillingham Gads Hill Chatham Docks Chatham-Rochester Centres	Sundridge Hill Medway City Estate Kingsnorth Hoo Peninsula	High Halstow Capstone Farm Country Park Strood North Halling
Equates to 6,692 new dwellings and 843 new jobs (covering 31% of total proposed dwellings; 9% of total jobs)	**Equates to 6,780 new dwellings and 8,081 new jobs** (covering 32% of total proposed dwellings; 90% of total jobs)	**Equates to 5,907 new dwellings** (covering 28% of total proposed dwellings; 0% of total jobs)

These results illustrate that there is a **high potential for mode shift under the proposed conditions** scenario (Stage 2 assessment). Approximately two-thirds of total proposed dwellings and 99% of total employment sites have potential for at least a 10% shift from private car to sustainable modes. The findings are presented geographically in Figure 3-2.

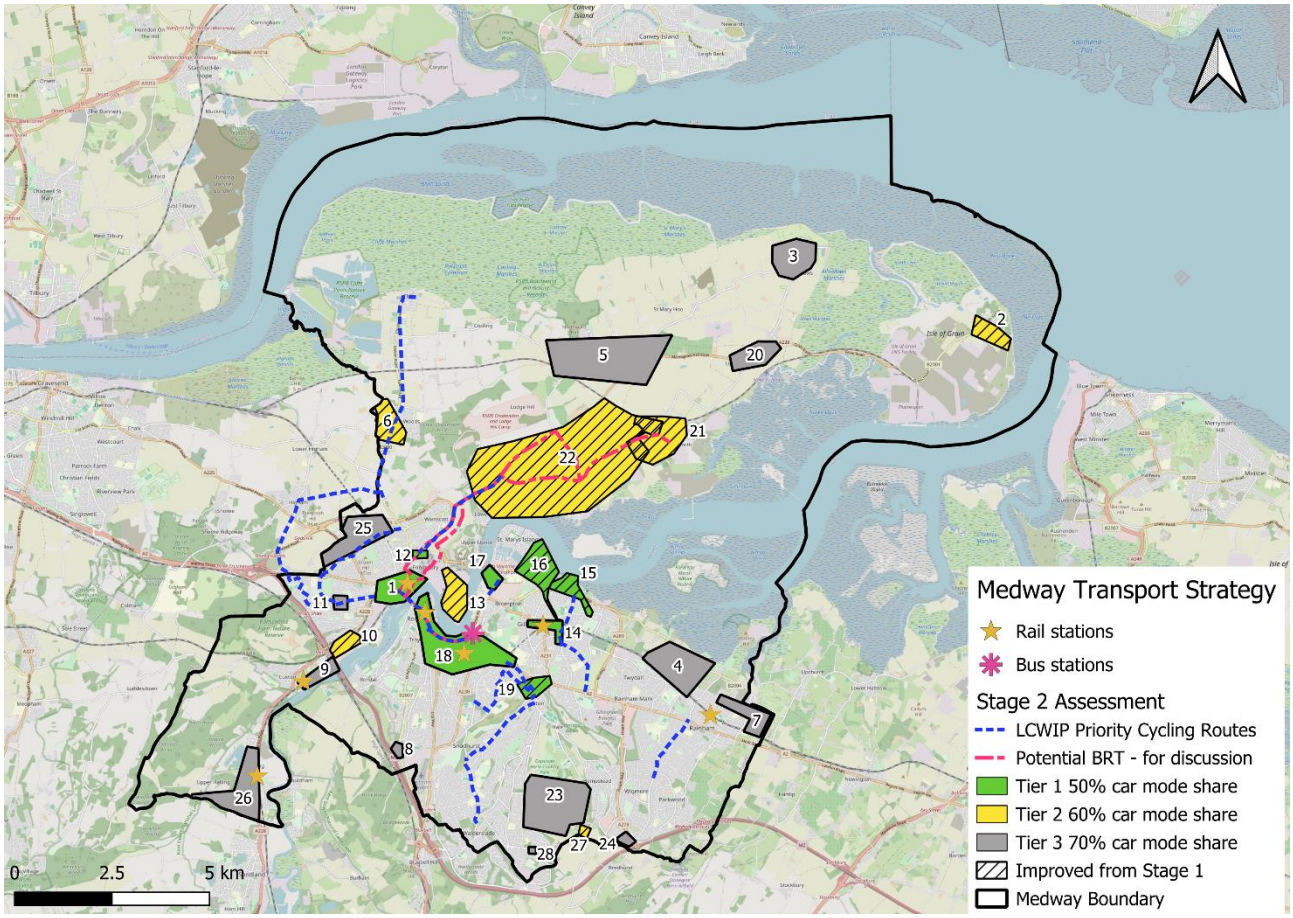

Figure 3-2: Map of the Stage 2 assessment results

3.9 Key findings – BRT vision-led approach

On 12 December 2024 the Ministry of Housing, Communities and Local Government published the new National Planning Policy Framework (NPPF).

Prior to 12 December 2024 the Highway Authority assessed whether development sites/proposals would result in an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe, and a safe and suitable access to the site would be provided for all users, as per paragraphs 114 and 115 of the NPPF (2023).

The NPPF (2024) now (***bold text***) states that:

- Transport issues should be considered from the earliest stages of plan-making and development proposals, ***using a vision-led approach to identify transport solutions that deliver well-designed, sustainable, and popular places*** (para 109)

and that in considering and assessing sites that may be allocated for development in plans, or specific applications for development (para 115), it should be ensured that:

- a) sustainable transport modes ***are prioritised taking account of the vision for the site***, the type of development and its location.
- d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable ***degree through a vision-led approach***.

And that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road ***network, <u>following mitigation</u>***, would be ***severe, taking into account all reasonable future scenarios*** (para 116).

In addition, that all developments that will generate significant amounts of movement should be required to provide a Travel Plan (TP), and the application should be supported by a ***vision-led*** Transport Statement (TS) or Transport Assessment (TA) so that the likely impacts of the proposal can be assessed ***and monitored***.

This move (NPPF Dec 2024) to a vision-led approach enables Medway Council to mitigate Local Plan growth by realising the vision of BRT to reduce car trips.

The potential trip rate reductions and mode shares for different new developments (clusters) has been developed using the Trip Rate Assessment Tool and the methodology (as outlined in **Section 3.2**) based on the introduction of BRT (existing conditions and BRT only).

The key findings are presented in Table 3-3.

Table 3-3: Summary of the assessment results for the 12 large clusters based on introduction of BRT (Stage 1 + BRT)

Development sites (clusters) with potential to reduce the Trip Rate / Mode Share from **70%** of trips by car to **50%** of all trips by car based on existing conditions and BRT (BRT only)	Development sites (clusters) with potential to reduce the Trip Rate / Mode Share from **70%** of trips by car to **60%** of all trips by car based on existing conditions and BRT (BRT only)	Development sites (clusters) **remaining at 70%** of all trips by car based on existing conditions and BRT (BRT only)
Strood Centre* Chatham-Rochester Centres*	Gillingham Gads Hill Chatham Docks Kingsnorth* Hoo Peninsula*	High Halstow Sundridge Hill Medway City Estate Gillingham Gads Hill Chatham Docks Capstone Farm Country Park Strood North Halling
Equates to 2,249 new dwellings	**Equates to 9,682 new dwellings and 7,744 new jobs**	**Equates to 7,448 new dwellings and 1,180 new jobs**

(covering 11% of total proposed dwellings; 0% of total jobs)	(covering 45% of total proposed dwellings; 86% of total jobs)	(covering 35% of total proposed dwellings; 13% of total jobs)

**Cluster in proximity to proposed BRT*

The primary difference between the Stage 1 existing conditions assessment and this assessment (Existing + BRT) which adds the BRT route, in relation to potential trip rate reduction, is that the proposed BRT would serve the Kingsnorth and Hoo Peninsula sites, which cover a substantial portion of the proposed dwellings and employment sites (the Kingsnorth cluster alone covers 76% of the Local Plan employment allocation, while the Hoo Peninsula cluster covers 25% of the total Local Plan residential allocation). This means that this one service has the potential for a large impact to trip rates and modal shift. The findings and potential BRT route are shown geographically in Figure 3-3.

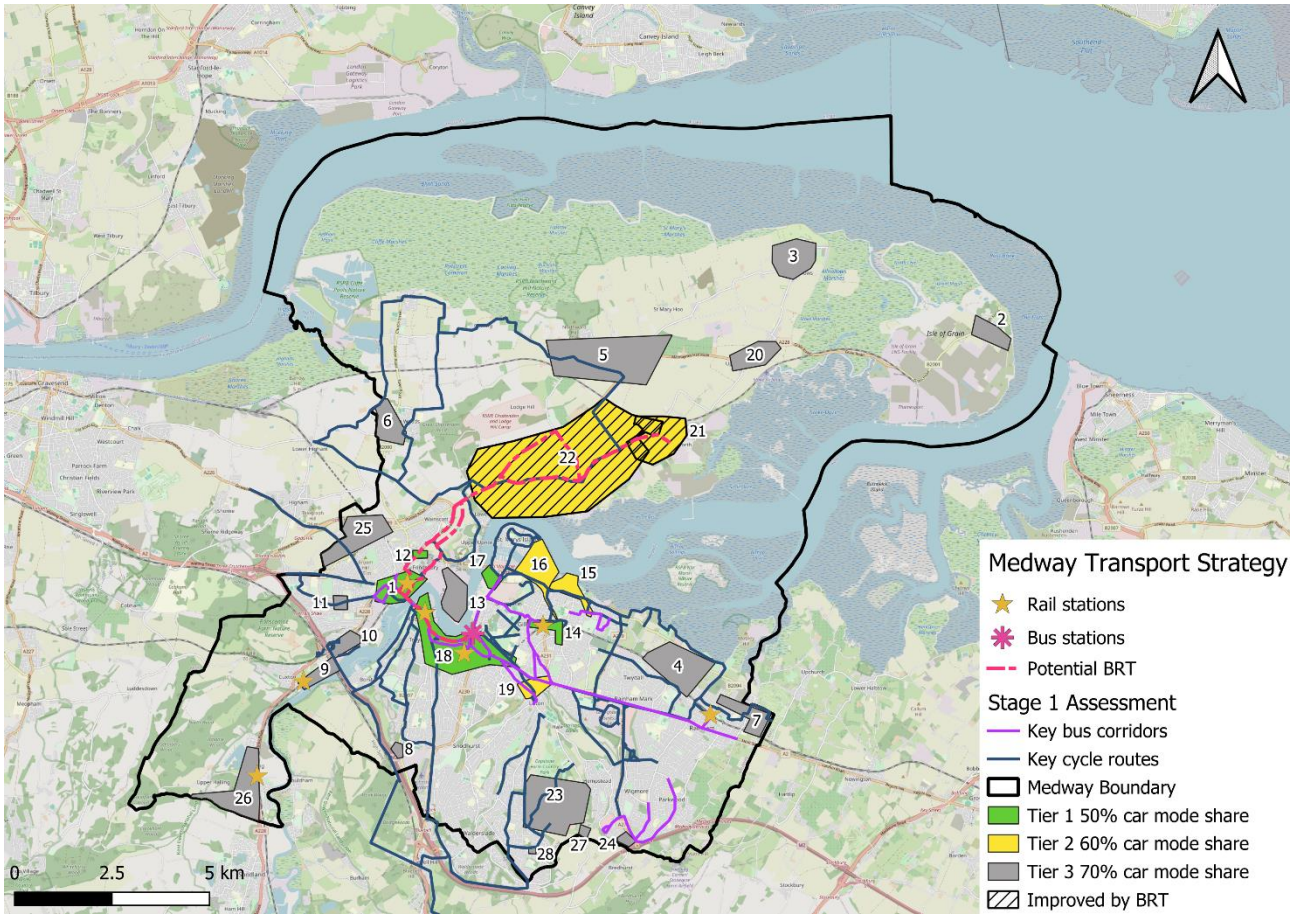

Figure 3-3: Map of the Stage 1 assessment plus BRT introduction results

3.10 Review of the impacts

The Traffic Modelling Scenarios report will detail the impacts and new outputs based on the key findings in Sections 3.7 and 3.8 (previous pages). The modelling will illustrate the impact of potential options and whether they improve the situation.

On receipt of the modelling report and outputs a meeting between transport modellers and Medway Council will be held to agree any key pinch points and the required refinements to mitigate impacts.

4. Stage 3 Next steps and recommendations

The Jacobs proposal (Task Order) proposed an over-arching strategy document that would demonstrate to the appointed Planning Inspector that the mode shares and highway mitigation measures are deliverable and justified taking into account the reasonable alternatives and based on proportionate evidence. For example:

- Early discussions with developers and transport providers to discuss the provision of high-frequency developer funded or subsidised commuter shuttle buses for employment and residential sites on the Hoo Peninsula
- Discussions with development partners to identify measures to realise the appropriate provision of housing close to new employment sites, especially on the Hoo Peninsula in the context of 'Triple Access' (see Figure 1 below) providing the right types of housing in close proximity to the right kind of jobs and the right services on site – e.g., shops, education etc on larger remote strategic sites.
- Review of car parking levels to support higher density low-car developments along key transport corridors.
- Options for car-free areas within larger developments serviced by commercially operated and financially viable car-clubs and mobility hubs.
- Processes to capitalise and maximise the existing sustainable transport opportunities.

The next step is to refine the trip rate and mode shares for each cluster, ahead of further public consultation on specific growth plans and policies, and a Planning Inspectorate independent assessment and examination of the plan.

The key tasks (as proposed in the Stage 3 Task Order) are likely to include:

- Discussion around the provision of high-frequency bus rapid transit (BRT) routes/network
    - Including meeting with bus operators
- Developing an over-arching strategy (during plan making) with a vision-led approach to identify transport solutions that deliver well-designed, sustainable, and popular places (as per NPPF 2024 para 109)
- Developing a tailored list of developer led/funded interventions for each of the clusters to ensure that a) sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location and d) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach (as per NPPF 2024 para 115). Measures are likely to comprise:
    - Infrastructure measures e.g., BRT
    - Enforcement measures e.g. Controlled parking zones (CPZ's)
    - Behaviour Change measures
    - Technological and digital considerations for implementation e.g., work at home spaces in all new dwellings
- Identifying options to ensure that vision-led transport statements or transport assessments can be assessed and monitored (NPPF 2024 para 118).
- Identifying and drafting the key components for Planning Conditions and Financial Obligations for each of the three tiers of development sites (the 70%, 60% and 50% mode share types).

Appendix A. Trip Rate Assessment Tool Instructions

A.1 Site Group Assessment Overview

Excel document name: "Site Group Assessment"

Purpose: To assess groupings of development sites for modal shift potential.

Tabs:

- "Site info" tab
    - This tab lists each site and corresponding development information (no. dwellings, jobs, etc.), network inputs (location type, zone), trip rates and trip generation.
    - As sites are added, removed or adjusted (e.g. more dwellings are added), this sheet can be manually edited.
    - Each of the 100 individual development sites have been assigned to a geographically-based cluster (group), ranging from 1-28 in column A.
        - The purpose of the groupings is to make the modal shift assessment more manageable in scale – sites that are in close proximity can be assessed in a similar way.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	ID		Group	Development Information			Network Inputs			AM Peak (08:00 -09:00)					
2				All Developments						Trip Rate			Trip Generation		
3	Site_ID	Reference	Group	HH, Dwellings	No Jobs	HH + Jobs	Location	Explic	Final Z	Destina	Origins	Two-W	Destina	Origins	Two-W
4	2063	SNF15	1	350.00	0.00	350.00	Town Centre	Y	400033	0.05	0.13	0.18	17.5	43.8	61.3
5	2016	SNF41	1	216.00	0.00	216.00	Edge of Town Centre	Y	400006	0.04	0.19	0.23	9.3	40.8	50.1
6	2017	SNF35	1	171.00	0.00	171.00	Neighbourhood Centre	Y	400007	0.00	0.11	0.11	0.0	19.0	19.0
7	2079	SNF34	1	52.00	0.00	52.00	Town Centre		115001	0.05	0.13	0.18	2.6	6.5	9.1
8	2003	SNF9	1	40.00	0.00	40.00	Town Centre		115001	0.05	0.13	0.18	2.0	5.0	7.0
9	2077	SNF8	1	19.00	0.00	19.00	Town Centre		115000	0.05	0.13	0.18	1.0	2.4	3.3
10	2061	SNF20	1	15.00	0.00	15.00	Edge of Town Centre		110025	0.04	0.19	0.23	0.6	2.8	3.5
11	2092	SNF38	1	12.00	0.00	12.00	Town Centre		110022	0.12	0.39	0.51	1.4	4.7	6.1
12	2075	SNF30	1	9.00	0.00	9.00	Town Centre		115001	0.05	0.13	0.18	0.5	1.1	1.6
13	2022	AS25	2	34.00	0.00	34.00	Neighbourhood Centre		110002	0.14	0.30	0.44	4.7	10.1	14.8
14	2042	AS28	2	9.00	0.00	9.00	Neighbourhood Centre		110002	0.14	0.30	0.44	1.3	2.7	3.9

Figure 4-1: Snapshot of the "Site info" tab

- "Group info summary" tab – Part 1
    - This tabs lists each of the 28 groups defined in the "Site info" tab, assigns reference names to each group and provides the corresponding information:
        - Sites included by Local Plan reference
        - The sum of each group's sites' dwellings, jobs, and floorspace
    - The site references and dwelling/job/floorspace sums are calculated for each group with formulae, so that any information updated in the "Site info" tab is pulled through automatically

	B	C	D	E	F	G
1	Development Information					
2						
3	Group	Sites in Group	Group Name	HH, Dwellings	No Jobs	HH + Jobs
4	1	SNF15, SNF41, SNF35, SNF34, SNF9, SNF8, S	Strood Centre	884	0	884
5	2	AS25, AS28	Isle of Grain	43	0	43
6	3	AS21	Allhallows	50	0	50
7	4	RN9	Lower Rainham	800	0	800
8	5	HHH26, HHH29, AS6, HHH15, AS2	High Halstow	864	0	864
9	6	SR4, SR14, SR7	Cliffe Woods	236	0	236
10	7	RN30, RN31, RN29, RN22	Rainham Suburban	192	0	192
11	8	RWB5	Rochester Industrial	0	100	100
12	9	CHR14	Cuxton	49	0	49
13	10	CHR18, CHR17, CHR16	Sundridge Hill	0	1180	1180
14	11	SW6	Strood Suburban	6	0	6
15	12	SNF44	Frindsbury	6	0	6
16	13	SR37, SR31, SR36, SR40, SR38, SR30, SR34	Medway City Estate	1541	0	1541
17	14	GS37, GS8, W4	Gillingham Centre	147	0	147
18	15	GN15, GN6, GN3, GN8	Gillingham Gads Hill	1693	0	1693
19	16	SMI6	Chatham Docks	2750	843	3593
20	17	CCB35, CCB25	Brompton Dock Road	157	0	157
21	18	CCB37, CCB49, FP10, FP11, FP25, FP1, RWB	Chatham-Rochester Centres	1365	0	1365
22	19	L9, L12, GS35, L11, L7	Chatham Suburban	60	0	60
23	20	AS14, AS16, AS11	Lower Stoke	60	0	60
24	21	HHH35	Kingsnorth	0	6901	6901
25	22	HHH12, HHH22 & HHH31, HHH6, HHH8, HHH	Hoo Peninsula	5239	0	5239
26	23	LW8, LW4, LW10	Capstone Farm Country Park	2675	0	2675
27	24	HW6	Hempstead M2 / A278	88	0	88
28	25	SNF3, SNF1, SR5	Strood North	1280	0	1280
29	26	CHR4, CHR6	Halling	1088	0	1088
30	27	HW11	Hempstead Rural	60	0	60
31	28	LW5	Lordswood	5	0	5

Figure 4-2: Snapshot of the "Group info summary" tab. Orange highlights are visual aids to show the sites with the highest combined dwellings and jobs

- "Group assessment" tab
    - This tab provides an easy to follow assessment of the modal shift potential of each group.
    - Information from the "Group info" tab is pulled through using formulae in this tab for ease of reference.
    - The group assessment is based on red-amber-green ratings (presented as yes / partial / no) and has been conducted in two distinct stages:
        - Stage 1: modal shift potential based on current infrastructure. This includes an analysis of each group's access to:
            - Rail stations
            - Key bus routes
            - Major bus station / interchange
            - Existing cycling route
            - Local / internal walking destinations
        - Stage 2: modal shift potential based on potential future infrastructure / interventions. This includes an analysis of the following factors:

- Future / proposed cycle routes
- Potential Medway Fastrack route
- Internalisation, i.e. self-containment and/or with neighbouring sites.

▪ More information is provided on the criteria and scoring justification below.

o Following each stage an overall modal shift "tier" is assigned based on the proximity criteria assessment. There are three tiers:

▪ Tier 1: high reduction potential (50% car mode share)

▪ Tier 2: some reduction potential (60% car mode share)

▪ Tier 3: negligible/ no reduction potential (70% car mode share)

o Based on the tier assigned, the site groups may be able to have their car trip reduced accordingly.

	B	C	D	E	F	G	H
7		**Group no.**	**1**	**2**	**3**	**4**	**5**
8		**Site LP refs.**	SNF15, SNF41, SNF35, SNF34, SNF9, SNF8, SNF20, SNF38, SNF30	AS25, AS28	AS21	RN9	HHH26, HHH29, AS6, HHH15, AS2
9		**Site name**	Strood Centre	Isle of Grain	Allhallows	Lower Rainham	High Halstow
10	Key Site Group Information	**Housing allocation?**	Yes	Yes	Yes	Yes	Yes
11		No. dwellings	884	43	50	800	864
12		**Employment allocation?**	No	No	No	No	No
13		No. jobs	-	-	-	-	-
14		**Housing+jobs**	884	43	50	800	864
15							
16	Stage 1 Assessment - based on existing network conditions	**Rail station?**	Yes	No	No	No	No
17		Justification +/- 800m to station	Strood rail station within 800m of majority of site	Nearest rail station approx. 20km away	Nearest rail station approx. 15km away	Nearest rail station approx. 3km away	Nearest rail station approx. 10km away
18		**Key bus route?**	Yes	No	No	No	No
19		Justification +/- 400m to bus stops on key bus route (>4 regular rte corridor)	Key corridors fall within group	Regular rtes: 1 (191)	Regular rtes: 1 (191)	Site falls approx. 1km from key bus rte	Regular rtes: 2 (191,193)
20		**Major bus station / interchange (Chatham)**	No	No	No	No	No
21		Justification +/- 800m to station	Not in vicinity of Waterfront bus station	Not in vicinity of Waterfront bus station	Not in vicinity of Waterfront bus station	Not in vicinity of Waterfront bus station	Not in vicinity of Waterfront bus station
22		**Cycling - existing?**	Yes	No	No	Partial	Partial
23		Justification +/- 400m to routes	Site located along existing corridors - busiest roads have separate multi-use path available	No existing cycle routes near.	No existing cycle routes near.	Site falls between several key cycle corridors (approx. 500m distance)	Site located near existing corridors; however, route is broken / advisory
24		**Local / internal walking destinations?**	Yes	Partial	Partial	Partial	No
25		Justification +/- 800m to shops, schools	Shops, schools within 800m	No schools, limited shops	Schools within 800m	School within 800m, very limited shops	School outside 800m, very limited shops
26	Stage 1 score tally	Yes	4	0	0	0	0
27		Partial	0	1	1	2	1
28		No	1	4	4	3	4
29	Stage 1 Assessment - Reduction opportunities	**Level of car use reduction opportunity:** **Tier 1**: high reduction (50% car mode share) **Tier 2**: some possible (60% car mode share) **Tier 3**: negligible/ none possible (70% car mode share)	Tier 1: 50% car	Tier 3: 70% car	Tier 3: 70% car	Tier 3: 70% car	Tier 3: 70% car

Figure 4-3: Snapshot of "Group assessment" tab

- "Group info summary" tab – Part 2
    - In addition to basic information on the groups as previously described, this tab summarises the results of the "Group assessment" tab (i.e. the level of car trip reduction possible after each stage of assessment)
    - It also summarises the sites where there is trip rate reduction opportunity from the 70% baseline, totalling the number of dwellings and jobs that may see mode share impacts.

	B	D	H	I	J	K	L	M	N	O
1		Development I	Assessment Summary				Reduction Opportunity Summary			
2										
3	Group	Group Name	Stage 1 Assessment - Existing conditions (no intervention reduction opportunities)	Stage 2 Assessment - Future conditions (new measures creating add'l reduction opportunitie	Improved in Stage 2?		Improved from base 70% car mode share?	HH, Dwellings with reduction opportunity	No Jobs with reduction opportunity	HH + Jobs with reduction opportunity
4	1	Strood Centre	Tier 1: 50% car	Tier 1: 50% car	No change		Yes	884	0	884
5	2	Isle of Grain	Tier 3: 70% car	Tier 2: 60% car	Improved		Yes	43	0	43
6	3	Allhallows	Tier 3: 70% car	Tier 3: 70% car	No change		No car trip rate red			
7	4	Lower Rainham	Tier 3: 70% car	Tier 3: 70% car	No change		No car trip rate red			
8	5	High Halstow	Tier 3: 70% car	Tier 3: 70% car	No change		No car trip rate red			
9	6	Cliffe Woods	Tier 3: 70% car	Tier 2: 60% car	Improved		Yes	236	0	236
10	7	Rainham Suburban	Tier 3: 70% car	Tier 3: 70% car	No change		No car trip rate red			
11	8	Rochester Industrial	Tier 3: 70% car	Tier 3: 70% car	No change		No car trip rate red			
12	9	Cuxton	Tier 3: 70% car	Tier 3: 70% car	No change		No car trip rate red			
13	10	Sundridge Hill	Tier 3: 70% car	Tier 2: 60% car	Improved		Yes	0	1180	1180
14	11	Strood Suburban	Tier 3: 70% car	Tier 3: 70% car	No change		No car trip rate red			
15	12	Frindsbury	Tier 2: 60% car	Tier 1: 50% car	Improved		Yes	6	0	6
16	13	Medway City Estate	Tier 3: 70% car	Tier 2: 60% car	Improved		Yes	1541	0	1541
17	14	Gillingham Centre	Tier 1: 50% car	Tier 1: 50% car	No change		Yes	147	0	147
18	15	Gillingham Gads Hill	Tier 2: 60% car	Tier 1: 50% car	Improved		Yes	1693	0	1693
19	16	Chatham Docks	Tier 2: 60% car	Tier 1: 50% car	Improved		Yes	2750	843	3593
20	17	Brompton Dock Road	Tier 1: 50% car	Tier 1: 50% car	No change		Yes	157	0	157
21	18	Chatham-Rochester Centres	Tier 1: 50% car	Tier 1: 50% car	No change		Yes	1365	0	1365
22	19	Chatham Suburban	Tier 2: 60% car	Tier 1: 50% car	Improved		Yes	60	0	60
23	20	Lower Stoke	Tier 3: 70% car	Tier 3: 70% car	No change		No car trip rate red			
24	21	Kingsnorth	Tier 3: 70% car	Tier 2: 60% car	Improved		Yes	0	6901	6901
25	22	Hoo Peninsula	Tier 3: 70% car	Tier 2: 60% car	Improved		Yes	5239	0	5239
26	23	Capstone Farm Country Park	Tier 3: 70% car	Tier 3: 70% car	No change		No car trip rate red			
27	24	Hempstead M2 / A278	Tier 3: 70% car	Tier 3: 70% car	No change		No car trip rate red			
28	25	Strood North	Tier 3: 70% car	Tier 3: 70% car	No change		No car trip rate red			
29	26	Halling	Tier 3: 70% car	Tier 3: 70% car	No change		No car trip rate red			
30	27	Hempstead Rural	Tier 3: 70% car	Tier 2: 60% car	Improved		Yes	60	0	60
31	28	Lordswood	Tier 3: 70% car	Tier 3: 70% car	No change		No car trip rate red			
32					Total no. where reduction possible -->			14,181	8,924	23,105
33					% total where reduction possible -->			66%	99%	76%

Figure 4-4: The "Group info summary" tab also shows the results of the assessment summary and the reduction opportunity sites

- Editing tabs:
    - To add a new site:
        - Enter the associated information into the "Site info" tab
        - Assign the site to a group in the "Site info" tab column A
        - Ensure formulae in the "Group info" and "Group assessment" tabs include the correct ranges
    - Sites can be removed by deleting their corresponding rows in the "Site info" tab
    - Site info can be edited directly in the "Site info" tab

A.2 Site Group Assessment Criteria

As described above, the group assessment is based on red-amber-green ratings (presented as yes / partial / no) of each criterion across two stages.

A.2.1 Stage 1 Assessment

Stage 1 assesses modal shift potential based on **current infrastructure**.

A.2.1.1 Rail stations

Consider the distance from a cluster to the nearest station. The following are rough benchmarks for providing ratings – the local context should be considered, including severance issues, services provided at the station, frequencies, etc.

- If less than or close to 800m → **green**
- If 1-2km (dependent on local conditions, walkability) → **amber**
- If >2km → **red**

A.2.1.2 Key bus routes

Consider the number of regular bus routes in +/- 400m proximity to a cluster. The following are rough benchmarks for scoring – the local context should be considered, including severance issues, service frequency, the proportion of the site that falls near to bus routes, etc.

- If four or more regular routes are in proximity → **green**
- If four or more regular routes are farther but still walkable, or fewer than four are nearby → **amber**
- If few routes are nearby, or routes are only at low frequency → **red**

A.2.1.3 Major bus station / interchange

Only one bus station is currently in the study area. The +/- 800m distance of clusters from this station was considered for assessment.

A.2.1.4 Existing cycling route

Consider the number of cycle routes in +/- 400m proximity to a cluster. The following are rough benchmarks for scoring – the local context should be considered, including route quality, severance issues, etc.

- If grade-separated/protected cycleways are available for a significant proportion of the route in proximity to the site → **green**
- If route is broken / advisory or slightly outside proximity → **amber**
- If no routes are nearby or provision is very limited → **red**

A.2.1.5 Local / internal walking destinations

Consider the walking destinations in +/- 800m proximity to a cluster. The following are rough benchmarks for scoring – the local context should be considered, including quality / size of shops, severance issues, likelihood of driving as being more convenient to make a shopping trip, etc.

- If several shops and schools are within walking distance of most of the cluster → **green**
- If some shops and no schools or vice versa are within walking distance or there are many of both located just outside of 800m (or a mix thereof) → **amber**
- If very limited or no shops or schools are within 800m walking distance → **red**

A.2.2 Stage 2 Assessment

Stage 2 assesses modal shift potential based on potential future infrastructure / interventions, which links the scoring to potential developer contributions.

A.2.2.1 Potential Medway Fastrack route

Consider whether the proposed BRT route is within +/- 400m proximity to a cluster (or most of a cluster). The following are rough benchmarks for scoring – the local context should be considered, including severance issues, the proportion of the site that falls near to bus routes, etc.

- If site is located mostly along BRT corridor → **green**
- If site is partially along BRT corridor (may pick up some patronage from residents/employees) → **amber**
- If site is not along proposed corridor → **red**

A.2.2.2 Future / proposed cycle routes

Consider whether the LCWIP priority cycle routes are within +/- 400m proximity to a cluster (or most of a cluster). The following are rough benchmarks for scoring – the local context should be considered, including severance issues, route quality, traffic levels, seasonal variations in behaviour, etc.

- If grade-separated/protected LCWIP routes are to improve cycling provision along a significant proportion of the route in proximity to the site → **green**
- If LCWIP route is slightly outside proximity or not judged to achieve high usage → **amber**
- If no LCWIP routes are nearby or provision is very limited → **red**

A.2.2.3 Internalisation

Scoring for internalisation was based on potential for travel being self-contained and/or kept within neighbouring sites. For example, mixed use sites, or residential groups that are next to employment groups, there may be an opportunity for trips to be contained between the two. The rating of this depends largely on the provision of sustainable mode measures by the developers linking the developments.