Thurrock
Local Cycling + Walking Infrastructure Plan

January 2025

FORWARD MOTION

thurrock.gov.uk

Foreword

Walking, wheeling and cycling should be the natural and easy first choices for local trips. The benefits of active travel are well proven and will lead to happier, healthier, more economically and environmentally sustainable communities. Thurrock has developed this Local Cycling and Walking Infrastructure Plan (LCWIP) to outline how it will develop and improve the walking, wheeling and cycling network for the future. This is a revised version of the document which has taken account of comments made during public engagement in summer 2024.

Thurrock's development historically has been largely influenced by the needs of freight and industry which dominate areas along the River Thames. However, it is also home to large communities of residents who would benefit from improvements in active travel. Planning for and providing these improvements is not without significant challenges. However, Thurrock is determined that people living and working in our area should receive all of the benefits that better accessibility and a switch to more active travel can provide.

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V1 May 2024
V2 January 2025

Produced by Transport Initiatives and Urban Movement on behalf of Thurrock Council

1. Introduction

1.1 About the Thurrock LCWIP

1.1.1 What is an LCWIP?

As part of our ambitions to increase levels of walking, wheeling and cycling in Thurrock, we have developed a Local Cycling and Walking Infrastructure Plan, also known as an LCWIP.

LCWIPs are forward planning documents that set out proposals for changes to local infrastructure, designed to improve the walking and cycling environment. Since publication of the first Cycling and Walking Investment Strategy (CWIS) by the Department for Transport in 2017, local authorities have been encouraged to produce LCWIPs which are a crucial part of implementing the CWIS locally. They also are required for bids for government funding on transport, especially from Active Travel England (ATE). Government guidance on developing LCWIPs was published in 2017.

This is the first LCWIP for Thurrock, and is expected to form part of the forthcoming interim Thurrock Transport Strategy, which will act as the next Local Transport Plan 4 (LTP4) for Thurrock.

1.1.2 What is the purpose of the Thurrock LCWIP?

The Thurrock LCWIP is intended to provide a guide for officers, councillors and developers so that all future programmes align with the strategic goals of the authority with respect to walking, cycling and wheeling. 'Wheeling' refers to pedestrians using mobility aids such as wheelchairs and mobility scooters, as well as those using prams and pushchairs.

In the past, active travel or accessibility improvements often have been done in an ad hoc way. This has included projects where opportunities presented themselves either in terms of add-ons to existing programmes or where developer funding became available.

The LCWIP ensures that in future these are carried out as part of a comprehensive plan. It will also form part of the statutory Local Plan process in the future and help to shape how new large developments take place in Thurrock.

It is a "live" document in that there is scope for it to change in response to new policies or directives.

Improving the walking and cycling environment in residential areas.

Providing or improving cycle infrastructure.

1.2 About Thurrock

1.2.1 Overview

Thurrock Council lies along the River Thames immediately to the east of Greater London, in the ceremonial county of Essex. It comprises a diverse mix of urban and rural areas, with a number of densely populated towns and villages sitting side by side with rural farmland. Over half of the borough is designated as Green Belt.

Thurrock is intersected by rail lines, including the Essex Thameside corridor operated by c2c, and the Channel Tunnel rail link. It is also intersected by motorways and other major roads, notably the M25 / Dartford Crossing and the A13. These all create a high degree of severance.

The south of the borough is characterised by major retail parks, large scale industrial sites and freight depots, as well as the Port of Tilbury, now the principal port for London.

Thurrock has a population of around 176,000 people (2021 census). Between 2011 and 2021, the population grew by 11.6% and future development plans will lead to further growth.

Key settlements in Thurrock include (approximate population at 2021 census):

- Grays (44,300)
- Stanford-le-Hope (29,500)
- West Thurrock/Chafford Hundred (23,600)
- South Ockendon (22,400)
- Tilbury (14,200)
- Chadwell St Mary (10,700)
- Aveley (9,400)

Car use and ownership is above the national average but there is also a significant amount of commuter rail use, particularly from Grays, Chafford Hundred Lakeside, Ockendon and Stanford-le-Hope stations.

Walking and cycling trips are generally between residential areas and town centres, local rail stations and to some degree, schools.

Local shops and retail areas.

Local school enviroment.

1.3 Determining the scope

1.3.1 What does the LCWIP cover?

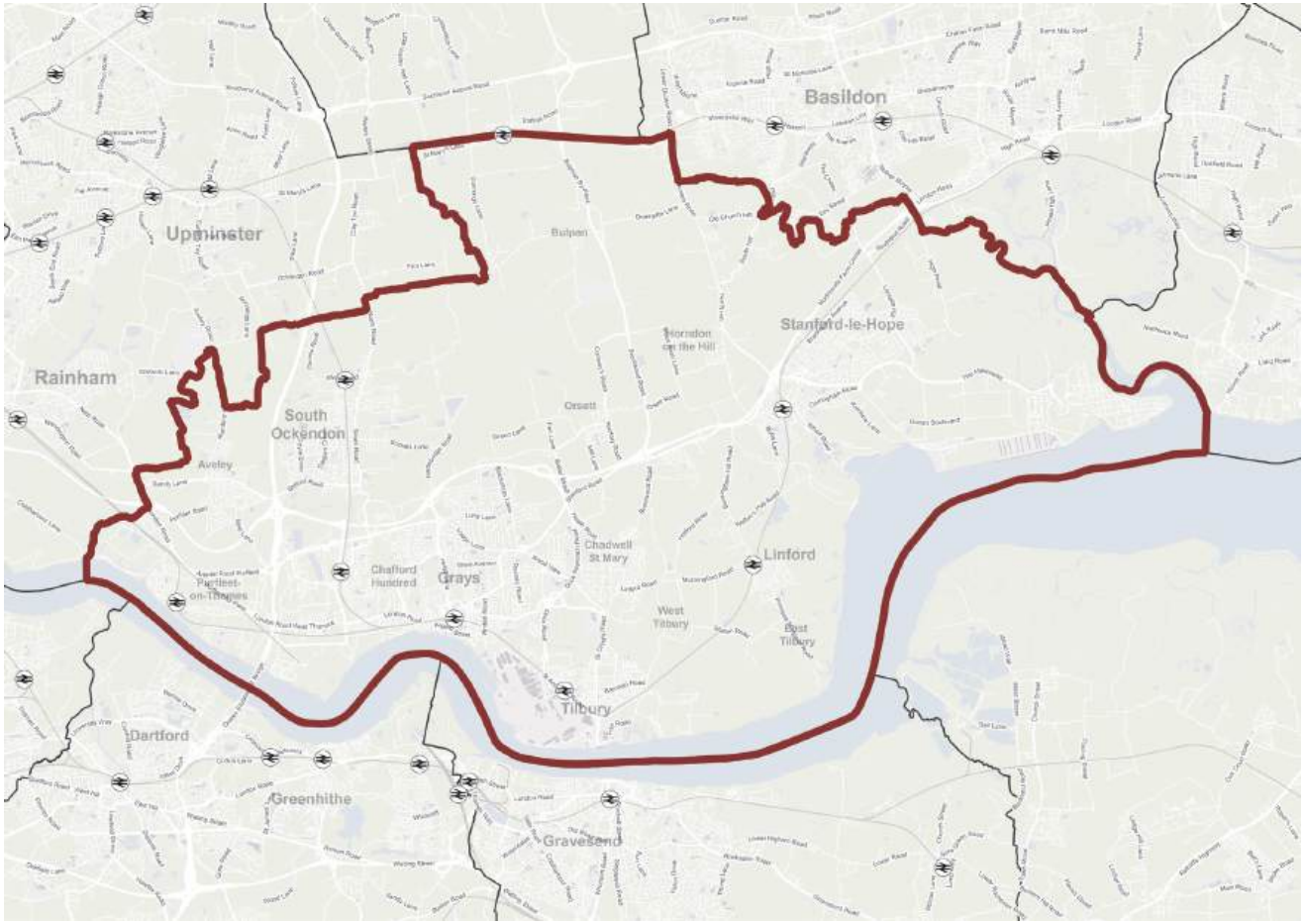
This LCWIP outlines proposed interventions that improve the walking, cycling and wheeling environment for local trips to main town centres, schools, train stations and large retail and employment sites.

LCWIPs should be revised periodically, every 5-10 years, or when any significant changes have occurred e.g. major policy changes or new developments.

1.3.2 What are the extents of the LCWIP?

We have considered the whole of Thurrock within its boundary with a focus on the main town centres. We have also given consideration to how these interventions interface with neighbouring authorities as well as the potential future Lower Thames Crossing.

In addition we have looked at how proposed new developments might be integrated with the active travel network.



2. National and regional policy

2.1 CWIS2

2.1.1 Overview

The Cycling and Walking Investment Strategy 2 (CWIS2) is the statutory government strategy to make active modes the natural choices for shorter journeys, or as part of a longer journey. The strategy recommended LCWIPs as the means of identifying and delivering improvements. The CWIS2 was published in 2023, following on from the first strategy in 2017. It set out the following goals up to 2025:

- Increase the percentage of short journeys in towns and cities that are walked or cycled from 41% in 2018 to 2019 to 46% in 2025.
- Increase walking activity, where walking activity is measured as the total number of walking stages per person per year, to 365 stages per person per year in 2025.
- Double cycling, where cycling activity is measured as the estimated total number of cycling stages made each year, from 0.8 billion stages in 2013 to 1.6 billion stages in 2025.
- Increase the percentage of children aged 5 to 10 who usually walk to school from 49% in 2014 to 55% in 2025.

Beyond 2025:

- Increase the percentage of short journeys in towns and cities that are walked or cycled to 50% in 2030 and to 55% in 2035.
- Deliver a world-class cycling and walking network in England by 2040.

2.2 Gear Change

2.2.1 Overview

Gear Change established the government's vision that "cycling and walking will be the natural first choice for many journeys with half of all journeys in towns and cities being cycled or walked by 2030".

It set out the actions required at all levels of government to make it a reality, focused on four themes:

- Better streets for cycling and people.
- Cycling and walking at the heart of decision-making.
- Empowering and encouraging local authorities.
- Enabling people to cycle and protecting them when they do.

In 2021 'Gear Change: 1 year on' was published, describing progress in the previous year and setting out the future direction of policy.

As part of the implementation of Gear Change, the DfT established a new commissioning body and inspectorate, Active Travel England (ATE) in 2022. ATE is now responsible for funding for active travel measures.

ATE will not support infrastructure design that is not consistent with DfT design guidance, such as Local Transport Note 1/20 (2020). ATE's assessment of an authority's performance on active travel will also influence the level of funding it receives both for active travel and for schemes covering other forms of transport.

2.3 Cycle infrastructure design LTN1/20

2.3.1 Overview

LTN 1/20 (DfT Local Transport Note) is the government's guidance on cycle infrastructure. It sets out the appropriate cycle facilities relative to traffic volumes and speeds. Taking account of the guidance in LTN1/20 is a key requirement to qualify for funding from ATE.

Interventions proposed in this LCWIP follow these recommendations. There are circumstances, however, where shared use footways may be the most appropriate solution. For example, on long stretches of "A road" between settlements where the pavement is unlikely to see much use by pedestrians and there are relatively few side roads that need to be crossed. Where appropriate we have included shared use pavement facilities in the recommendations.

However, inter settlement journeys are a secondary priority in this LCWIP, which focuses on short journeys into and out of town centres for work, leisure, shopping or school trips. This has been reflected in the prioritisation of individual scheme proposals.

Figure 4.1: Appropriate protection from motor traffic on highways

Speed Limit[1]	Motor Traffic Flow (pcu/24 hour)[2]	Protected Space for Cycling			Cycle Lane (mandatory/ advisory)	Mixed Traffic
		Fully Kerbed Cycle Track	Stepped Cycle Track	Light Segregation		
20 mph[3]	0					
	2000					
	4000					
	6000+					
30 mph	0					
	2000					
	4000					
	6000+					
40 mph	Any					
50+ mph	Any					

Provision suitable for most people

Provision not suitable for all people and will exclude some potential users and/or have safety concerns

Provision suitable for few people and will exclude most potential users and/or have safety concerns

Notes:

1. If the 85th percentile speed is more than 10% above the speed limit the next highest speed limit should be applied
2. The recommended provision assumes that the peak hour motor traffic flow is no more than 10% of the 24 hour flow
3. In rural areas achieving speeds of 20mph may be difficult, and so shared routes with speeds of up to 30mph will be generally acceptable with motor vehicle flows of up to 1,000 pcu per day

Extract from LTN1/20

2.4 Transport East Transport Strategy

2.4.1 Overview

Transport East is the Sub-national Transport Body for Norfolk, Suffolk, Essex, Southend-on-Sea and Thurrock. It provides a single voice for councils, business leaders and other partners on the region's transport strategy.

In 2023 it published its Transport Strategy, with a Vision of "A thriving Eastern region with safe, efficient and net zero transport networks advancing a future of inclusive and sustainable growth for decades to come". The strategy has four pathways:

- Decarbonisation to net-zero;
- Connecting growing towns and cities;
- Energising coastal and rural areas;
- Unlocking international gateways.

To achieve these there are a number of goals, including the following which support the development of active travel:

Goal 1: Reduce demand for carbon intensive trips through local living; making it easier for people to access jobs and services locally or by digital means

Goal 2: Shift modes by supporting people to switch from private car to active and passenger transport, and goods to more sustainable modes like rail.

Goal 4: Zero carbon growth by supporting authorities and developers to plan, locate and design new development that reduces the need for people to make carbon-intensive trips.

Goal 5: Improve connections and access within our urban centres through better walking, cycling and passenger transport, supporting sustainable access to services, education, training, jobs and leisure.

In particular, Goal 5 includes a commitment that Transport East will champion the development of LCWIPs, ensuring a consistent quality standard across the region.

3. Existing context

3.1 Origin and destination mapping

3.1.1 Commuting flows

The main travel to work trip alignments in and around Thurrock are shown in the plan on the following page (based on data from the 2021 census). This highlights the local nature of many trips in the area. The main flows by all modes between MSOAs in Thurrock and adjacent areas (in both directions), are shown with blue lines, with thicker lines indicating more trips. Internal trips within MSOAs are shown in red circles, with larger circles representing higher internal flows.

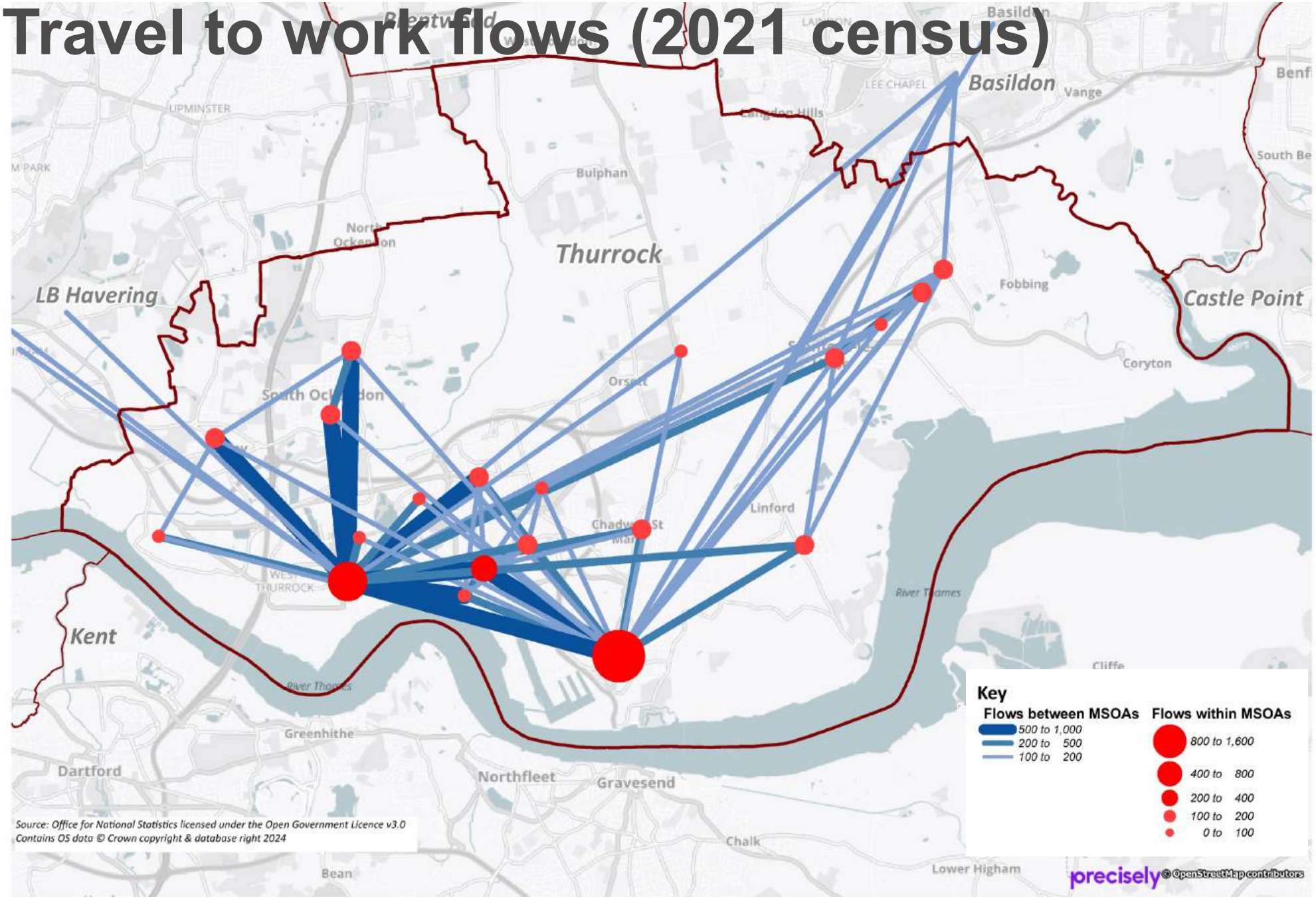
Unsurprisingly, most trips in Thurrock are within the borough itself, both within individual MSOAs* and between adjacent areas. Note the 2021 census was carried out at the tail end of a COVID-19 lockdown period, with some restrictions still in place although schools were open. However, the main flows are similar to those in the 2011 census.

The majority of these are relatively short, with the highest levels being:

- Within Tilbury and West Thurrock/ Lakeside Basin;
- Between Grays and Tilbury/West Thurrock/Lakeside Basin; and
- Between West Thurrock and Aveley and South Ockendon.

**Middle Super Output Areas are geographical areas used for data gathering and statistical analysis, with standardised populations*

Travel to work flows (2021 census)



3.2 Levels of walking and cycling

3.2.1 Overview

A range of data sources have been used to provide background information on cycling and walking in Thurrock.

The 2011 and 2021 censuses included questions on the main mode of travel to work. Trips combining cycling and other modes, including public transport, are recorded as being by the main mode. Hence trips where someone combines cycling and rail will be recorded as a train trip.

As noted previously, caution needs to be taken with data from the 2021 Census due to the COVID-19 pandemic. Nevertheless, the information can still be used to highlight areas with the highest levels of walking and cycling, especially if only those trips actually involving travel are analysed (i.e. discounting the higher levels of people working from home).

3.2.2 Cycling

Overall, 1.57% of trips to work in Thurrock were cycled (very similar to the 2011 level of 1.49%). The figure for walking to work was 6.71% (5.86% in 2011). Despite the slight increases, these are notably lower than the averages for the East region and England of 3.43% / 3.07% for cycling and 10.65% / 11.15% for walking.

The plans below show the level of cycling and walking in the 20 MSOAs in Thurrock. The levels of cycling across the council are quite low, with only the areas along the Thames between Purfleet and Tilbury having levels approaching the national average.

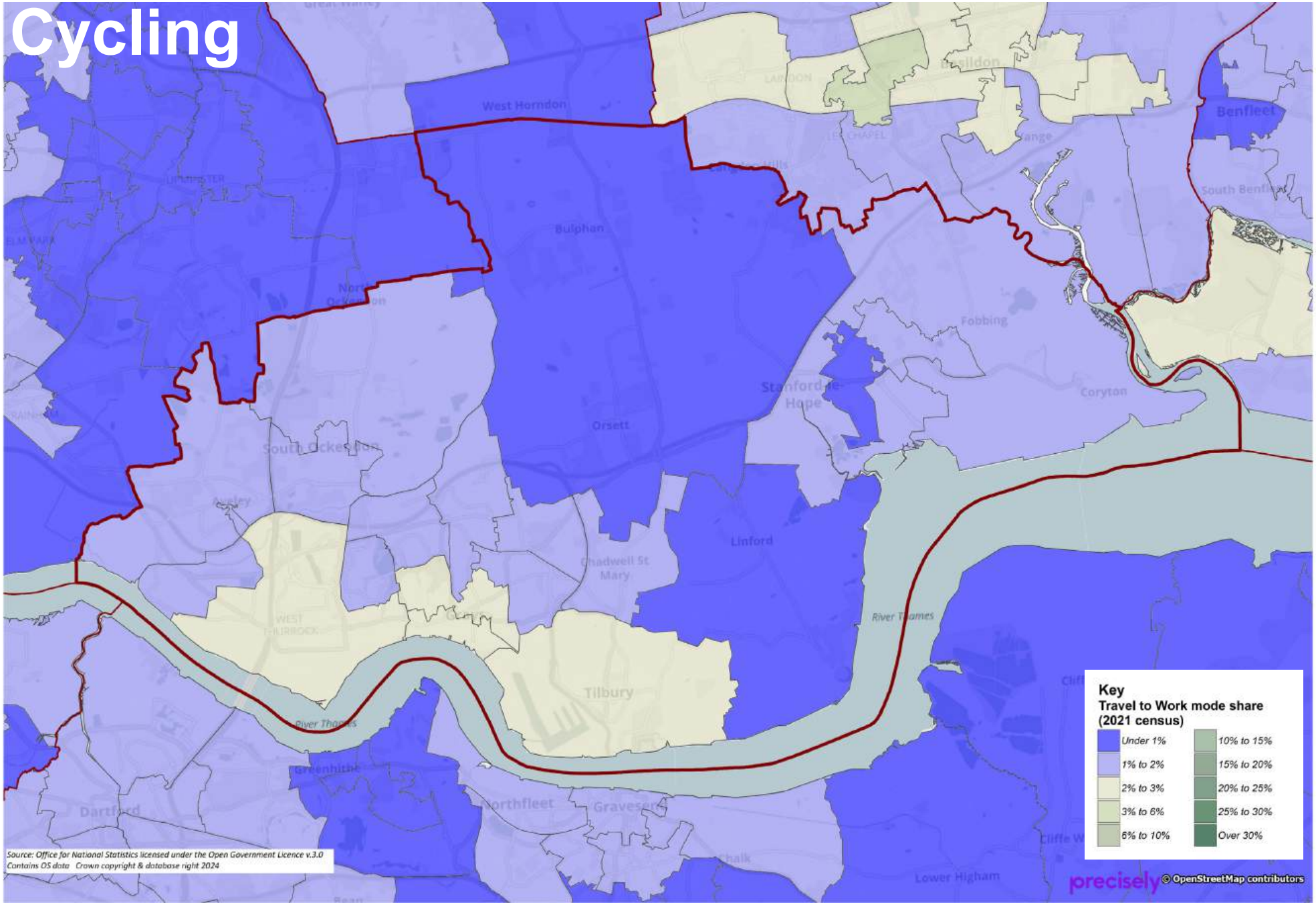
3.2.3 Walking

As with cycling, the areas along the Thames have the highest level of walking to work. These are similar to the national average.

3.2.4 Public transport

Finally, analysis of public transport shows where short trips to bus or rail services might be linked with walking and cycling. The highest levels are found in the west of Thurrock.

Cycling


West Horndon
Benfleet
Bulphan
Fobbing
Stanford-le-Hope
Coryton
Orsett
Linford
Chadwell St Mary
River Thames
Tilbury
Northfleet
Gravesend
Lower Higham
Key
Travel to Work mode share (2021 census)
Under 1%
1% to 2%
2% to 3%
3% to 6%
6% to 10%
10% to 15%
15% to 20%
20% to 25%
25% to 30%
Over 30%
Source: Office for National Statistics licensed under the Open Government Licence v.3.0
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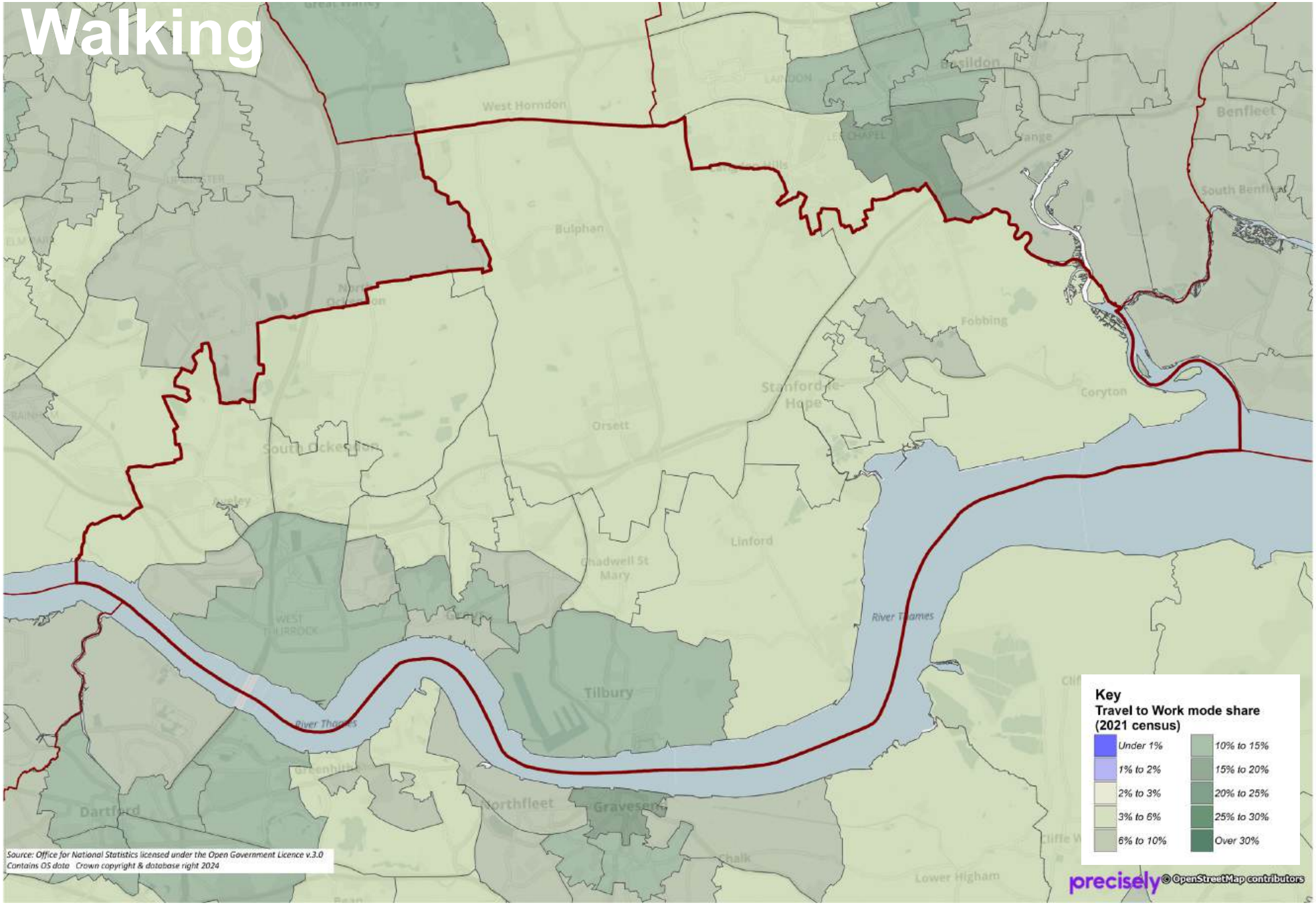
Walking


West Horndon
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Northfleet
Dartford
Chalk
Lower Higham
Benfleet
South Benfleet
Key
Travel to Work mode share
(2021 census)
Under 1%
1% to 2%
2% to 3%
3% to 6%
6% to 10%
10% to 15%
15% to 20%
20% to 25%
25% to 30%
Over 30%
Source: Office for National Statistics licensed under the Open Government Licence v.3.0
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Public transport

3.3 Propensity to cycle

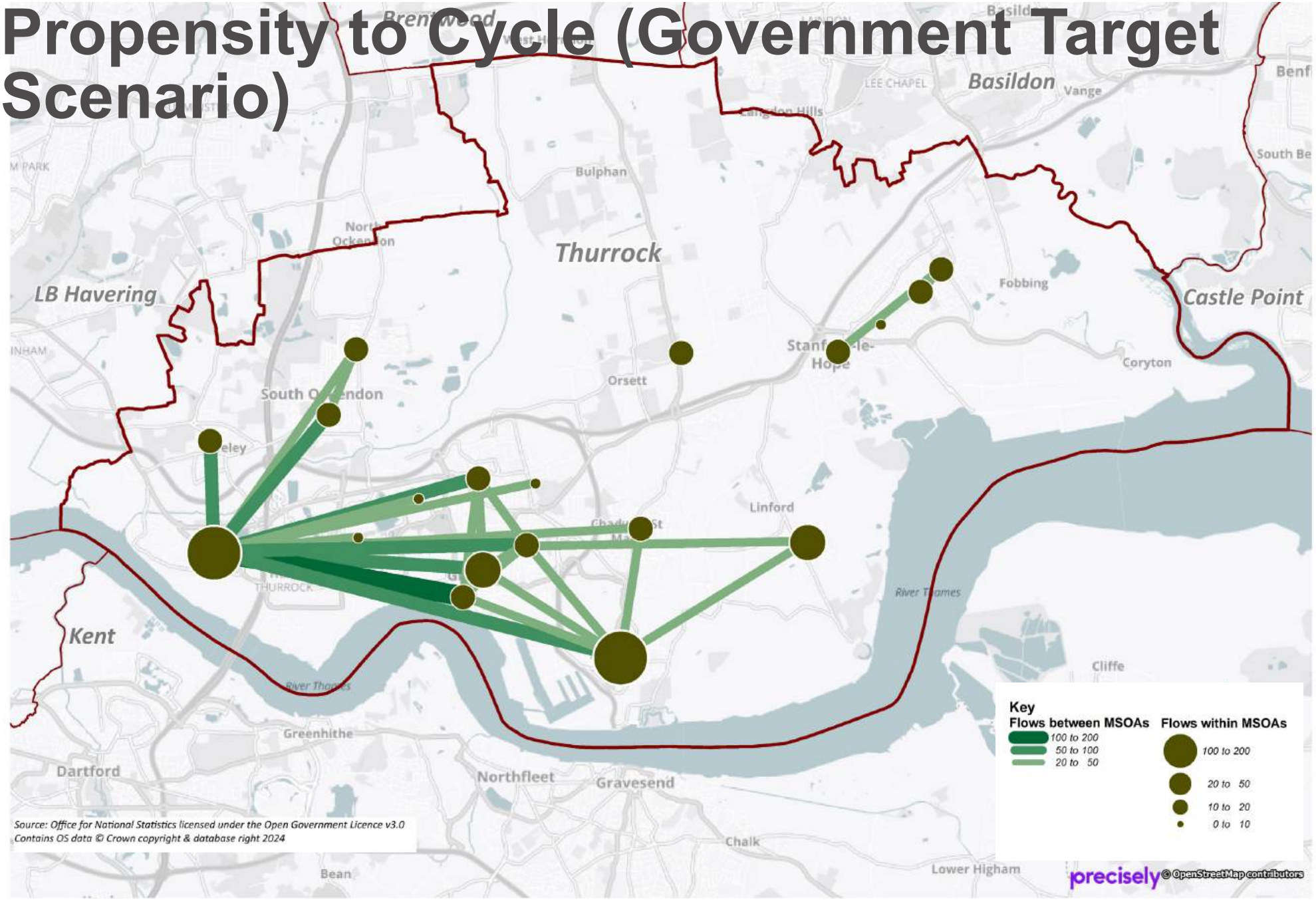
3.3.1 Overview

The DfT's Propensity to Cycle tool (www.pct.bike) provides a way to model the potential for cycling to increase. However, it is based on the 2011 census and there are no current plans to update it. Hence the information from the modelling should be used as a rough indication of which alignments and areas have the highest potential for more cycling – they are not predictions.

The plan shows the modelled flows using the "Government Target" scenario, which estimates how cycling levels might increase if the national level of cycling achieved the target set out in Gear Change. The area along the Thames between Purfleet-on-Thames, West Thurrock, Grays and Tilbury is shown as having the highest potential for increased cycling (both within and between MSOAs). There is also potential for routes north of Purfleet-on-Thames and to a lesser extent within Stanford-le-Hope. Based on the modelling, there appears to be a low level of potential for longer distance cycle trips across Thurrock as a whole.

Note that MSOA boundaries changed between the 2011 and 2021 census, with the Purfleet-on-Thames MSOA being split due to increased population. The link shown between Purfleet-on-Thames and Aveley is likely to be the same as that shown in the 2021 plan in 2.1.1 connecting West Thurrock and Aveley.

Propensity to Cycle (Government Target Scenario)



3.4 Travel habits

3.4.1 Frequency

Sport England's Active Lives Survey gathers data on people walking and cycling for travel (i.e. utility reasons) or leisure. The most recent survey covers the year from November 2022 to November 2023. The table to the right shows the data for Thurrock for this period (with the previous year shown in brackets). This shows that in general activity levels dropped slightly.

The chart on the next page shows the comparison of walking and cycling levels to the national and regional picture. During the survey period, 10.4% of adults in Thurrock cycled at least twice in a 28 day period (for any reason). The figure for cycling for travel is not available. 24.5% (33,500 people) cycled at least once during the entire year, with 9.4% doing so for travel. This shows that there is a sizeable number of people who do cycle, albeit infrequently, and hence might cycle more often if infrastructure were improved.

In the same period 54.9% of adults walked at least twice a week (30.4% for travel), with 84.2% of adults doing so at least once in the year (53.6% for travel).

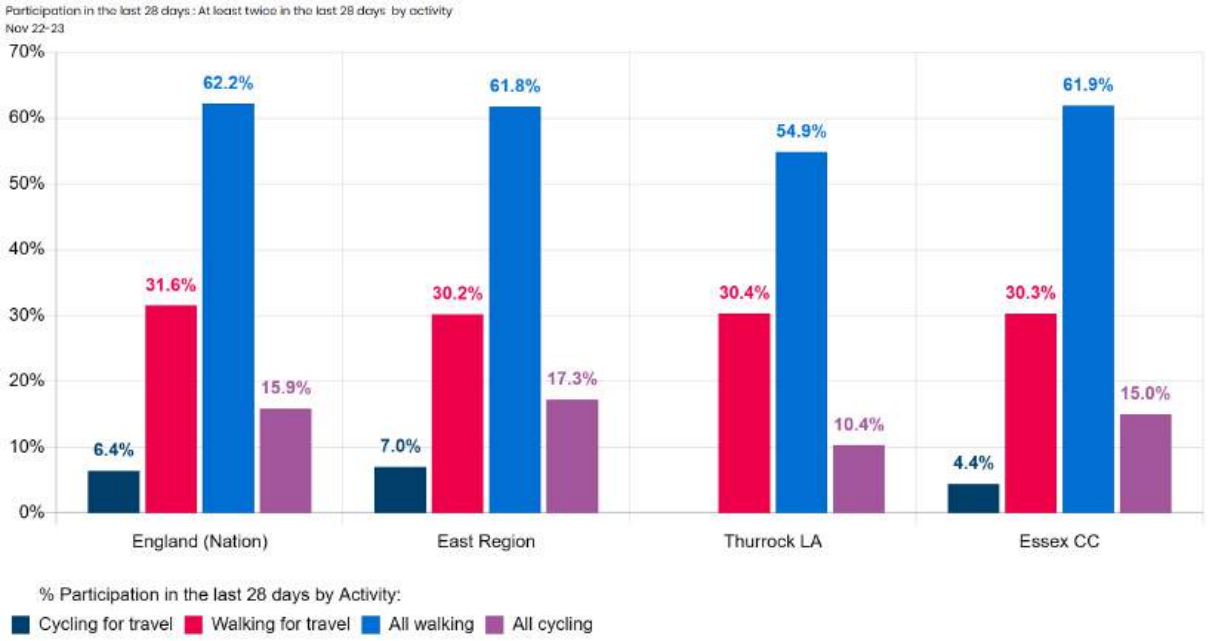
Mode and purpose	Frequency	% at least once per month	% at least once per week	% at least 5 times per week
Walking and cycling	All purposes	71.2 (72.7)	62.7 (64.2)	28.6 (33.9)
	Travel only (i.e. not leisure)	40.5 (43.6)	34.6 (32.7)	9
Walking	All purposes	39.3 (71.5)	60.3 (61.9)	27.2 (32.3)
	Travel only	39.3 (42.0)	33.3 (31.3)	8.4 (14.6)
Cycling	All purposes	8.9 (7.2)	6.8 (*)	*
	Travel only	*	*	*

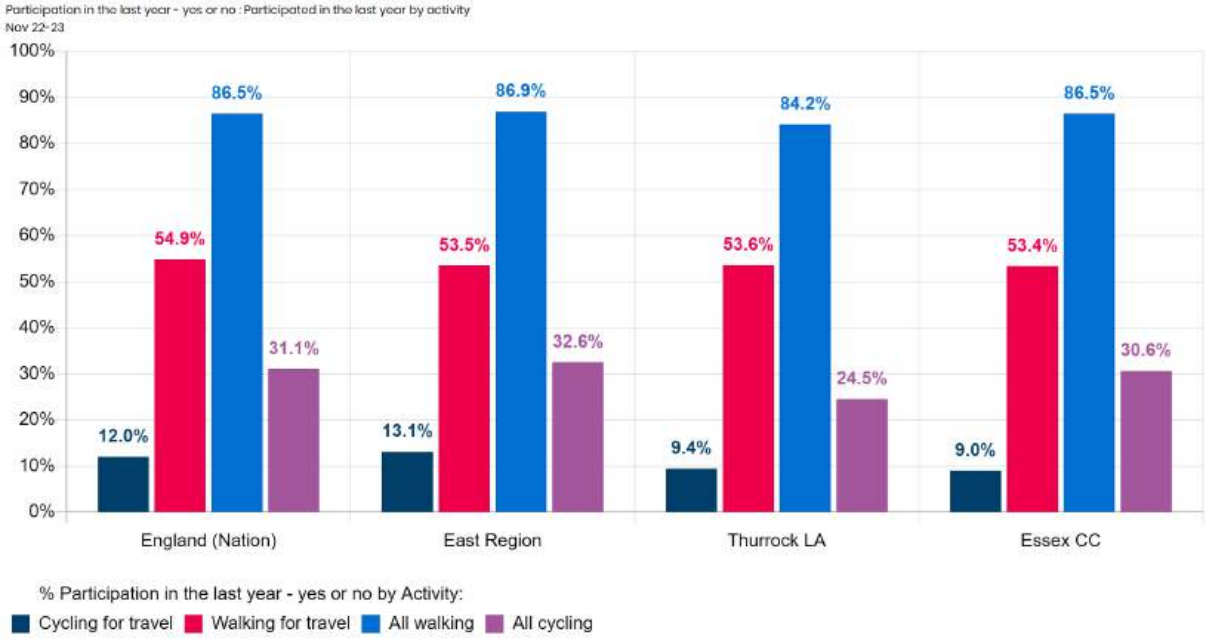
Where * is shown, data is not statistically significant.

3.4.2 Comparison to the national and regional picture

The charts to the right (from Sport England Active Lives Adult survey 2022-23) show that levels of cycling overall in Thurrock are generally lower than in the neighbouring county of Essex, as well as in the East Region and England as a whole, for partication at least twice in the last 28 days as well as at least once a year. The sample size for Thurrock during the 28 day period is too small to determine the level of cycling for travel.

However, the level of walking for travel in Thurrock is around the same as the comparison areas, at both frequencies. The overall level of walking is lower, implying there is less walking for leisure.



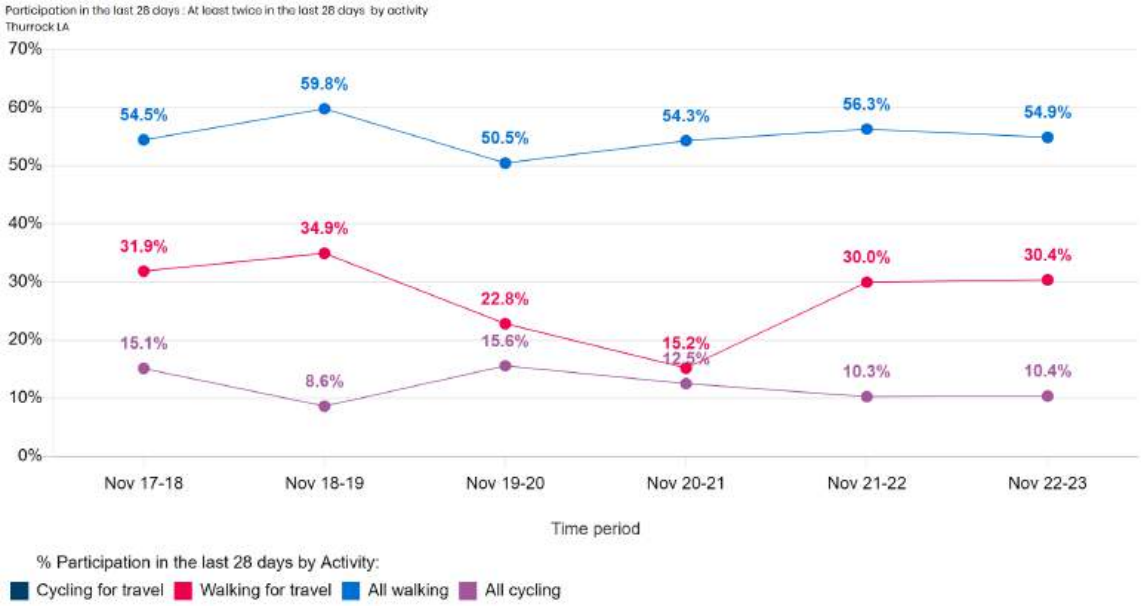


3.4.3 Change over time

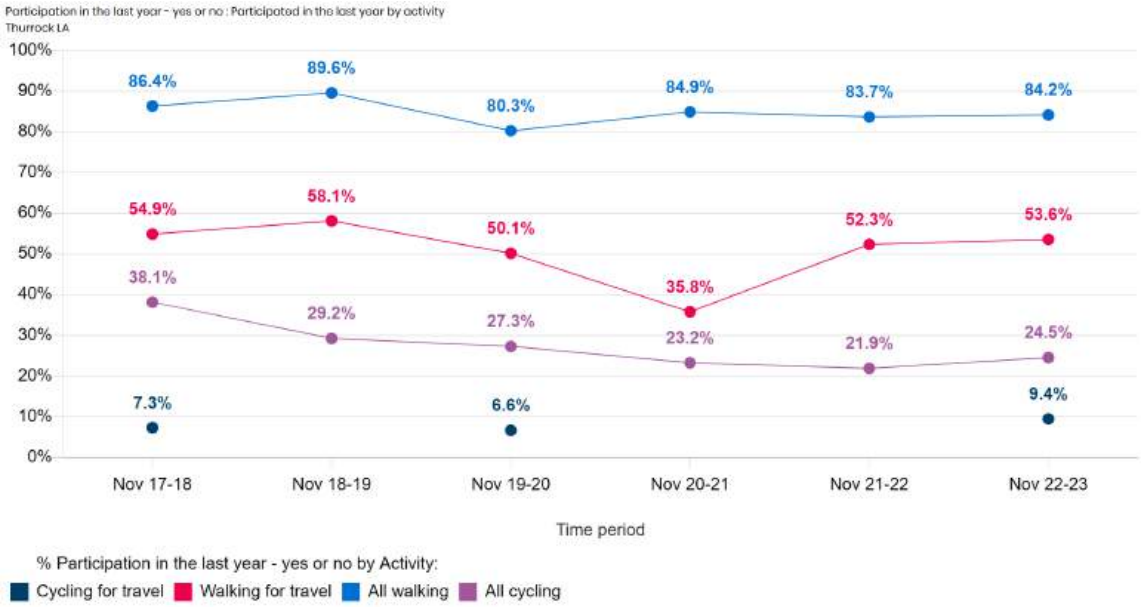
The level of people cycling in Thurrock at least twice in the last 28 days has fallen slowly over the last six years, while the level of walking has stayed relatively flat, apart from a decline in walking for travel during 2019-20 and 2020-21 (presumably due to Covid).

However, there has been a noticeable decline in those cycling at least once a year, falling by almost a third from 2017-18 to 2022-23. This is mainly due to a significant fall in cycling for leisure (not shown), from 25% of adults in 2017-18 to just 8% in 2021-22. Again, walking remaining more or less at the same level during the same period, apart from a Covid-related dip.

Graph: % participation at least twice in the last 28 days, by activity (excluding trips made for leisure)



Graph: % participation at least once in the last year, by activity (excluding trips made for leisure)



3.5 Existing walking and cycling network

3.5.1 Overview

Various cycle facilities are scattered around Thurrock. Most of these are shared use paths and shared use footways. However, many of these facilities significantly restrict the use of wheelchairs, mobility scooters and pushchairs, as well as non-standard cycles such as cargo bikes.

There are also a number of barriers and other physical features that do not allow for the wide range of wheeling appliances or nonstandard bikes to pass. These do not meet the Goverment's guidance in Inclusive Mobility (2021) and contravene the Equality Act 2010.

Facilities such as these are only appropriate where one is expecting a low level of walking, wheeling and cycling. They are not suitable against levels set by the national policy to be achieved.

To meet the government's aspiration for active travel journeys, a well interconnected network of facilities designed to carry higher volumes of cyclists will be required as well as improvements to pedestrian provision.

A comprehensive network centred around the town centres of Thurrock and focusing on key desire lines would have facilities that interconnect and provide a consistent level of service from end to end.

The recommendations contained within this LCWIP represent the starting point towards building such a network.

Existing parallel zebra crossing helps to link up walking and cycling routes.

Shared use footways.

Some barriers can prevent access for people walking, cycling and wheeling.

GET A BIKE

There are many cycle shops in the borough where you can buy a brand-new bike. Choose the most convenient to you:

Corringham Cycles
47 Lampits Hill, Corringham

Evans Cycles
Thurrock Shopping Park, West Thurrock

Halfords
Lakeside Retail, Weston Avenue, West Thurrock

GO Outdoors
Thurrock Shopping Park, West Thurrock

Decathlon
Thurrock Shopping Park, West Thurrock

Thurrock Cycle Centre
55 Southend Road, Grays

Save up to 40 per cent on bikes and accessories with the **Cycle to Work Scheme**.

Need more options? Visit the community-oriented **ForwardMotion Thurrock Cycle Hub** in Tilbury for a wide range of refurbished bikes on sale, bike repairs, bike-marking and more.

Cycle Hub Thurrock
42 Calcutta Road, Tilbury, RM18 7QT

Alternatively, you can rent a bike when you visit:

RSPB Rainham Marshes
New Tank Hill Road, Purfleet

Thameview Camping
Princess Margaret Road, East Tilbury

SKILLS & TRAINING

This map is a tool to help you plan the cycle routes most suited to your skill and confidence levels.

- **Learn to ride:**
- **Adult training sessions:** one-to-one cycling training with a qualified cycling instructor.
- **Family training sessions:**

SAFETY CHECK & BASIC RULES

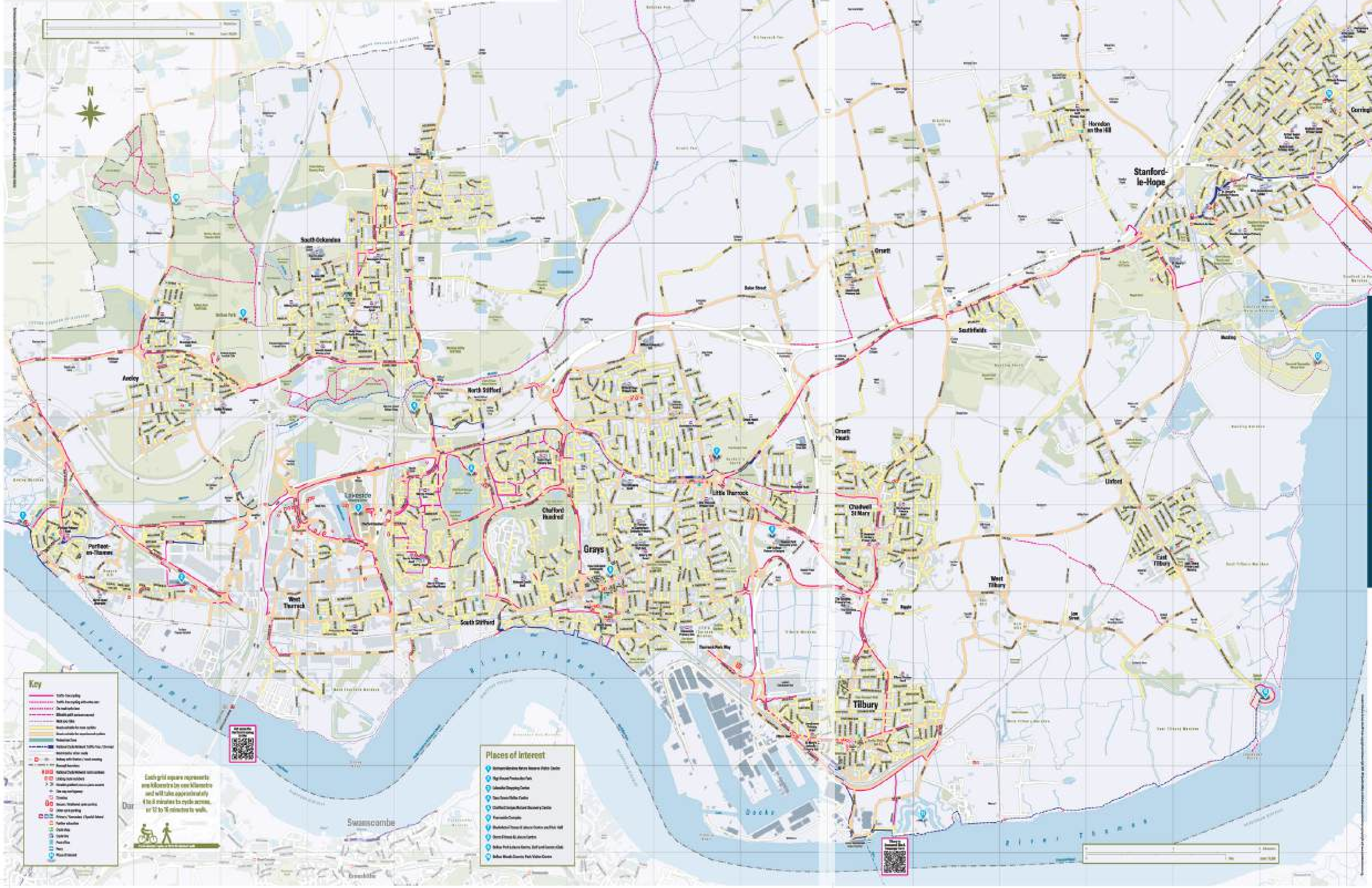
Please avoid:

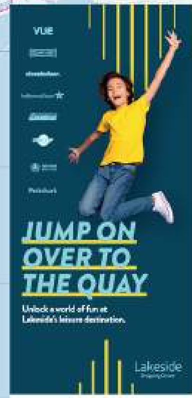
GO BEYOND

Take your bike on the train

Tilbury to Gravesend Ferry

Dartford Crossing





COMMUNITY & SUPPORT

Local Cycling Groups

Sustrans

Thurrock Cycle Forum

thurrock.gov.uk

THURROCK CYCLING MAP

3.6 Future growth and change

3.6.1 Local Plan

The new Thurrock Local Plan is a set of spatial planning and development policies that will shape the future of the borough. The policy will replace the current Core Strategy Local Plan (updated 2015).

The Thurrock Local Plan is in the process of production, and is expected to be adopted in summer 2026.

These policies and spatial plans are not finalized yet, but those areas for growth and new residential development, new employment areas and new town centres and local centres of the Local Plan will need to align with the principles set in the LCWIP by delivering high quality cycling and walking infrastructure within developments and linking them to the proposed primary and secondary walking and cycling networks.

As a live document, primary and secondary walking and cycling networks on the LCWIP shall be revised when new large development come forward.

3.6.2 Transport Strategy

The Thurrock Transport Strategy 2013-2026 is the current main policy for transport across Thurrock. It will be superseded by a new interim Thurrock Transport Strategy (TTS) which is currently being prepared by the Council, and will set out policies up to 2038.

The new TTS will help to facilitate and/or respond to significant changes around the borough, from major housing growth, town centre regeneration, major employment investment and growth, and major new infrastructure such as railway stations and the Lower Thames Crossing, should this go ahead.

3.6.3 Lower Thames Crossing proposals

The Lower Thames Crossing (LTC) is a major national infrastructure project of 14.3 miles of new road connecting the M2/A2, A13 and M25 via a new tunnel crossing the Thames estuary promoted by National Highways expected for completion in 2032, which would have a significant impact on Thurrock's nearby existing and potentially future communities.

The project has the potential to bring limited improvements for walkers, cyclists and horse riders directly as part of the project's design on its application and through additional programmes as National Highways' Users & Communities Designated Fund, integrating with Thurrock's cycling and walking network, assuming that they are implemented.

However, the Lower Thames Crossing is expected to have an overall negative impact on the Borough in several areas. These include:

- Green Belt loss;
- Road safety;
- Local traffic and wider road network impacts;
- Noise and air quality;
- Health;
- Environmental impacts during construction;
- No support for local sustainable growth;
- Lack of clarity of utility diversion impacts;
- Climate change impacts;
- Lack of achieving the impending Biodiversity Net Gain targets; and
- Creating severance by acting as a new barrier between communities and limiting opportunities for new nearby communities.

Furthermore, the Council considers there is a missed opportunity for the project to deliver walking and cycling improvements that goes beyond the minimum requirement and many other legacy, employment and skills/training opportunities are missed.

The Council's current position objects to the main elements of the LTC proposal submitted for development consent to the Planning Inspectorate and that which form the final submissions at the end of the DCO Examination.

If the Lower Thames Crossing DCO is granted by the Secretary of State (which is expected to be decided by May 2025), its direct and Designated Fund contributions to Thurrock's cycle and walking networks will need to be considered and incorporated into the LCWIP.

4. Proposed walking, wheeling and cycling network

4.1 Network map

4.1.1 Overview

If fully implemented the proposals in this LCWIP would create a continuous and interconnected network for cycling as well as improved local provisions for walking and wheeling.

Finer grained interventions around town centres are proposed to improve conditions on short local trips. Trips between residential neighbourhoods and transport hubs are also important as evidenced by travel data.

The 2021 Census data is a useful data set for understanding cycling origin/destination and demand. However, it should be noted that this data was collected during a period of national lockdown due to the COVID-19 pandemic, which impacted working patterns and travel habits.

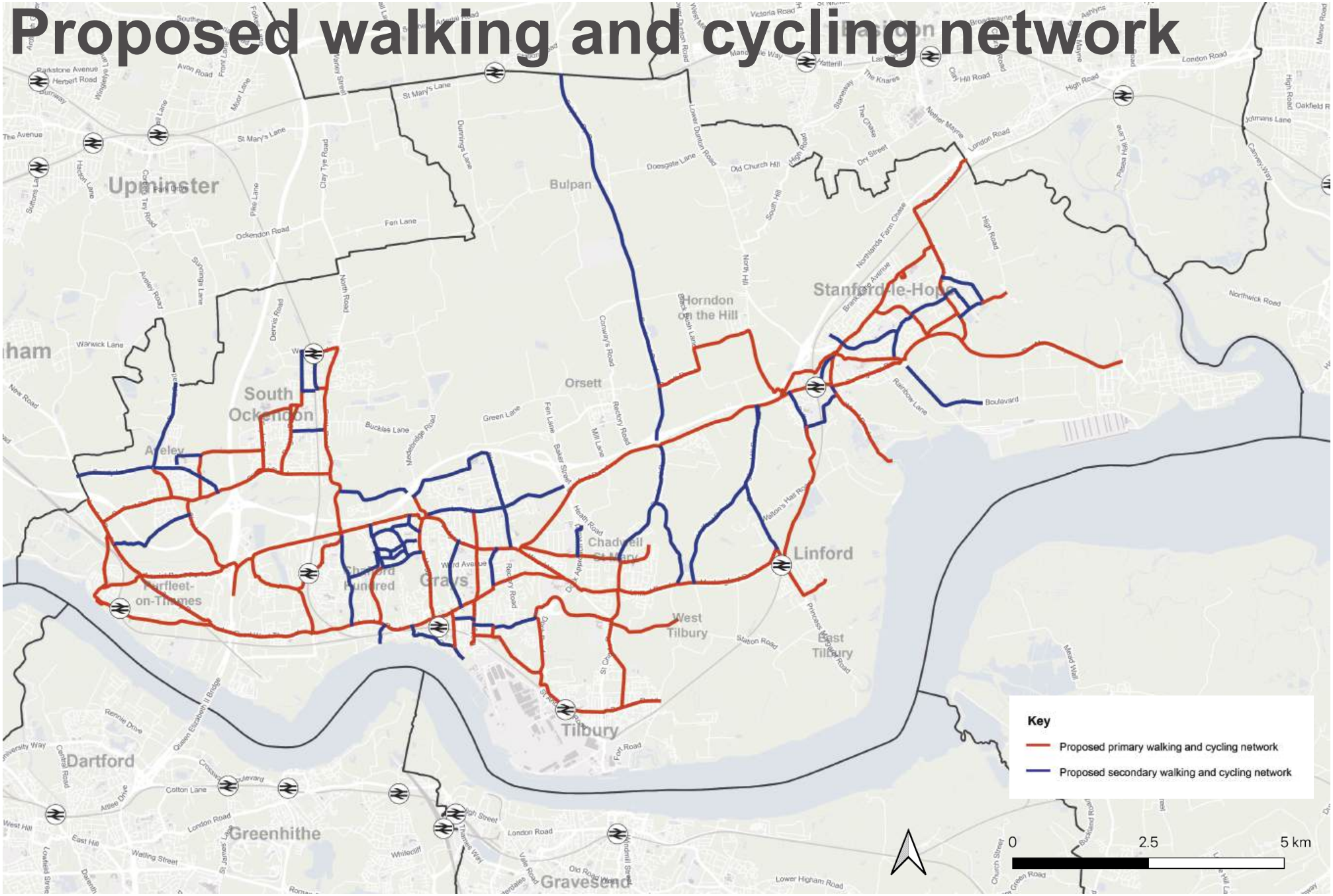
The 2021 Census data indicates that there is strong demand for work related journeys between South Ockendon, West Thurrock, and Tillbury, and to a lesser extent Stanford-le-Hope. Data from the Propensity to Cycle tool indicates that an uplift in cycling levels would probably be concentrated in the South and West of the authority area. However, the higher level of work trips between West Thurrock, Tilbury, Stanford-le-Hope and Basildon does suggest that there might be potential for a high quality cycling corridor running east-west to attract new users, especially with increased use of e-bikes.

We have set out two categories of cycling proposals, as follows:

- Primary network - high capacity routes with significant interventions and high level of service.
- Secondary Network - links and connective corridors, also access to important trip attractors.

The network proposals also include links to proposed new developments. These would only be applicable as and when these developments are fully committed.

Proposed walking and cycling network



5. Intervention types

5.1 Crossings and junctions

Junctions are key places where people walking, cycling and wheeling come into contact with motor vehicle traffic, and they can present significant barriers to active travel when poorly designed.

The borough has many major junctions with traffic signals and roundabouts that lack safe, usable and desired crossing points for people walking, cycling and wheeling.

Improving crossings and junctions for active travel is a key way to help make connections between existing and new walking, cycling and wheeling routes, or to enable access across busy streets that act as a barrier to active travel. This can help to make local trips easier and enhance access to key destinations such as schools and local centres.

LTN1/20 has detailed guidance to help select the appropriate type of crossing and junction facility and the best practice design of such features; and this should be followed as part of any scheme development or design.

Enforcement should be undertaken to ensure crossings and junctions are clear of parked vehicles.

Toucan crossing enables people walking, wheeling and cycling to cross.

Parallel zebra crossings can help to connect up walking and cycling routes.

Raised table treatment in a low traffic environment.

Signalised junction with pedestrian and cycle parallel crossings.

5.2 Protected cycle facilities

Protected cycle facilities provide separation between people walking and cycling as well as from traffic, making them safer, and encourage more people to take up cycling.

Types of protected cycle facility include:

- Stepped cycle tracks
- Fully-separated cycle tracks
- Light separated cycle tracks
- Bi-directional cycle tracks;
- With-flow cycle tracks.

Providing protected space for cycling can require additional space within the street to be repurposed. It is important that space is not taken from existing footways, and ideally uses carriageway space, or informal verges and parking areas. In Thurrock, there are several streets that could accommodate protected cycle facilities, such as Lodge Lane and Wood View.

LTN1/20 provides guidance regarding selecting and designing the appropriate type of protected cycle facility, and this should be followed as part of any scheme development.

Shared use facilities can also be appropriate where there are low numbers of users, or in more rural environments.

Bi-directional fully separated cycle track with planting.

Floating bus stop treatment.

Light separated with-flow cycle track using wand-orcas.

Bi-directional fully separated cycle track with planting.

5.3 Low traffic streets

Streets that carry less than 2,000 motor vehicles per day are considered to be low traffic streets. Many of these already exist without any intervention, typically in residential areas where there is little or no through-traffic.

Low traffic streets enable people to cycle safely and comfortably in the carriageway. They also can make it easier and more pleasant to walk due to the reduced risk of road danger by making it easier to cross.

Where streets have greater levels of motor vehicle traffic, but do not form part of the main road network, measures such as modal filters can be considered to allow people walking and cycling to pass through, preventing through-traffic but retaining access for local residents and visitors. This can be done through:

- Camera-enforced restrictions such as bus gates, which allow certain permitted vehicles to pass through;
- Bollards (fixed or lockable) which are a cheaper and simpler method.

The introduction of 20mph speed limits where appropriate would further increase safety and ambience for everyone.

Planting to help narrow the carriageway and calm traffic.

Cycling on a low traffic residential street.

Diagonal modal filter with integrated tree planting and informal crossings.

Cycle street treatment with contrasting surfacing in a median strip.

5.4 Accessibility programme

The accessibility of the street environment is very important for enabling people of all abilities to move around Thurrock safely and comfortably.

There are many examples of street design and defects around Thurrock that do not meet accessibility standards set out in the Department for Transport's Inclusive Mobility (2021) guidance. This creates barriers, particularly for disabled people. Key issues include poorly designed side road junctions, missing dropped kerbs, staggered barriers, narrow or poor quality surfacing on footways, and reduced footway width due to vegetation, street clutter or pavement parking.

A programme of improvements to address these problems would help to enable more people to walk, wheel and cycle in their everyday lives. Improvements could include: decluttering footways; resurfacing footways; removing or redesigning barriers; and narrowing the carriageway, reducing the corner radii and introducing flush surfaces and tactile paving at side road junctions. A programme to review and remove unnecessary sections of guard rail (as was done by TfL across London) would also improve accessibility. There is no evidence that guard rail increases safety.

Poorly placed and designed barriers restrict people cycling and wheeling.

Side road junctions are very wide and lack dropped kerbs and tactile paving.

Footways narrowed by vegetation, street clutter, pavement parking or unneccesary guard rail.

Poor quality footway surfaces cause tripping hazards.

6. Proposed interventions

6.1 Overview of interventions

6.1.1 Overview

The following plans set out the key interventions to help improve provision in Thurrock for walking, wheeling and cycling.

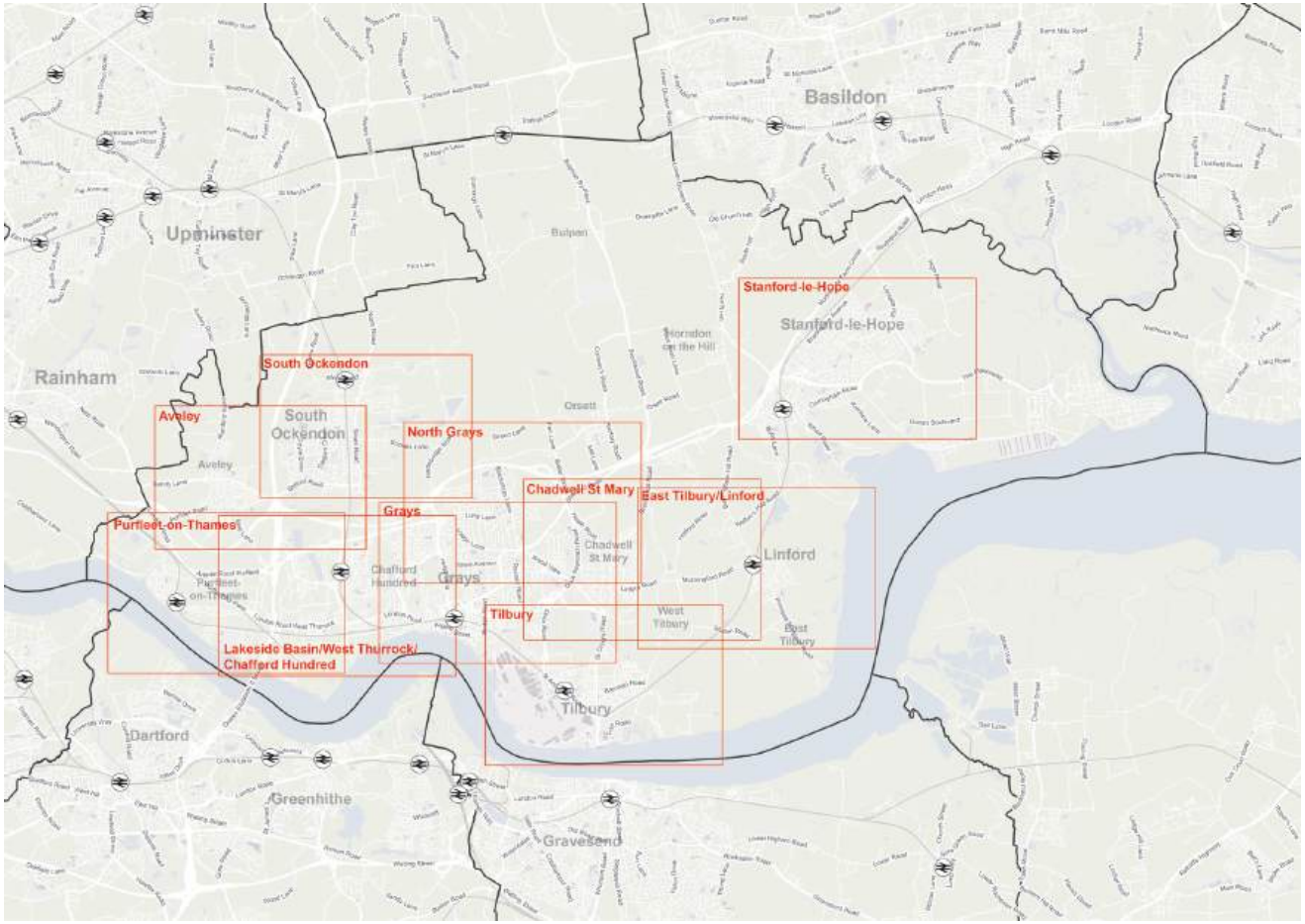
The proposals include measures to improve the quality of footways, and crossing points for people walking, wheeling and cycling.

Also included are measures to create new or improved cycle links such as providing separated cycle tracks on busy streets. Creating routes along residential streets can also help to improve local cycling links, through the introduction of measures to reduce traffic volumes and/or speeds.

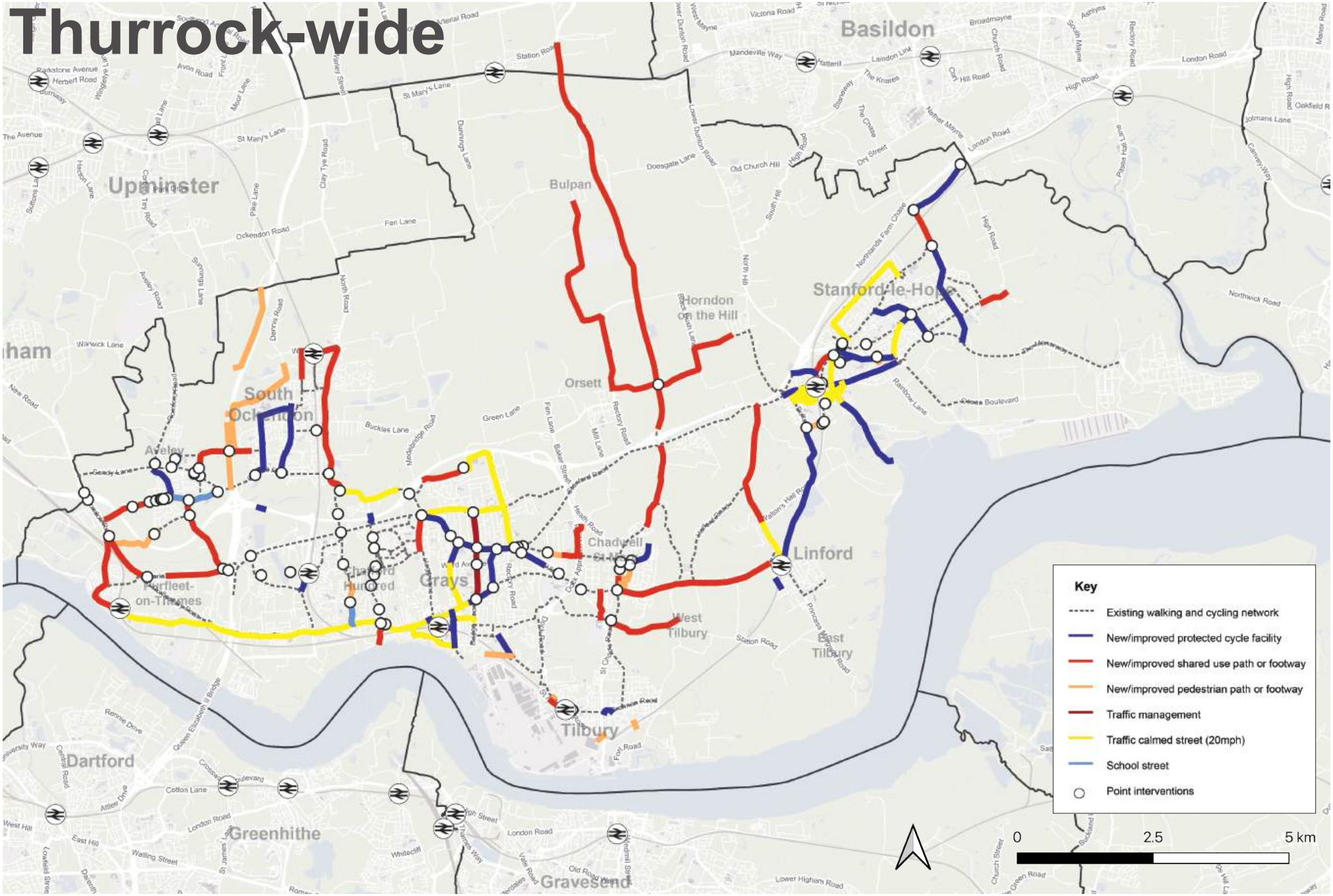
Measures to improve walking and cycling provision at junctions are also set out. This could include introducing formal crossing points for walking, wheeling and cycling at large roundabouts.

Other measures include major schemes to redesign large junctions, as well as smaller schemes to remove or redesign barriers or to address a specific walking or cycling infrastructure issue.

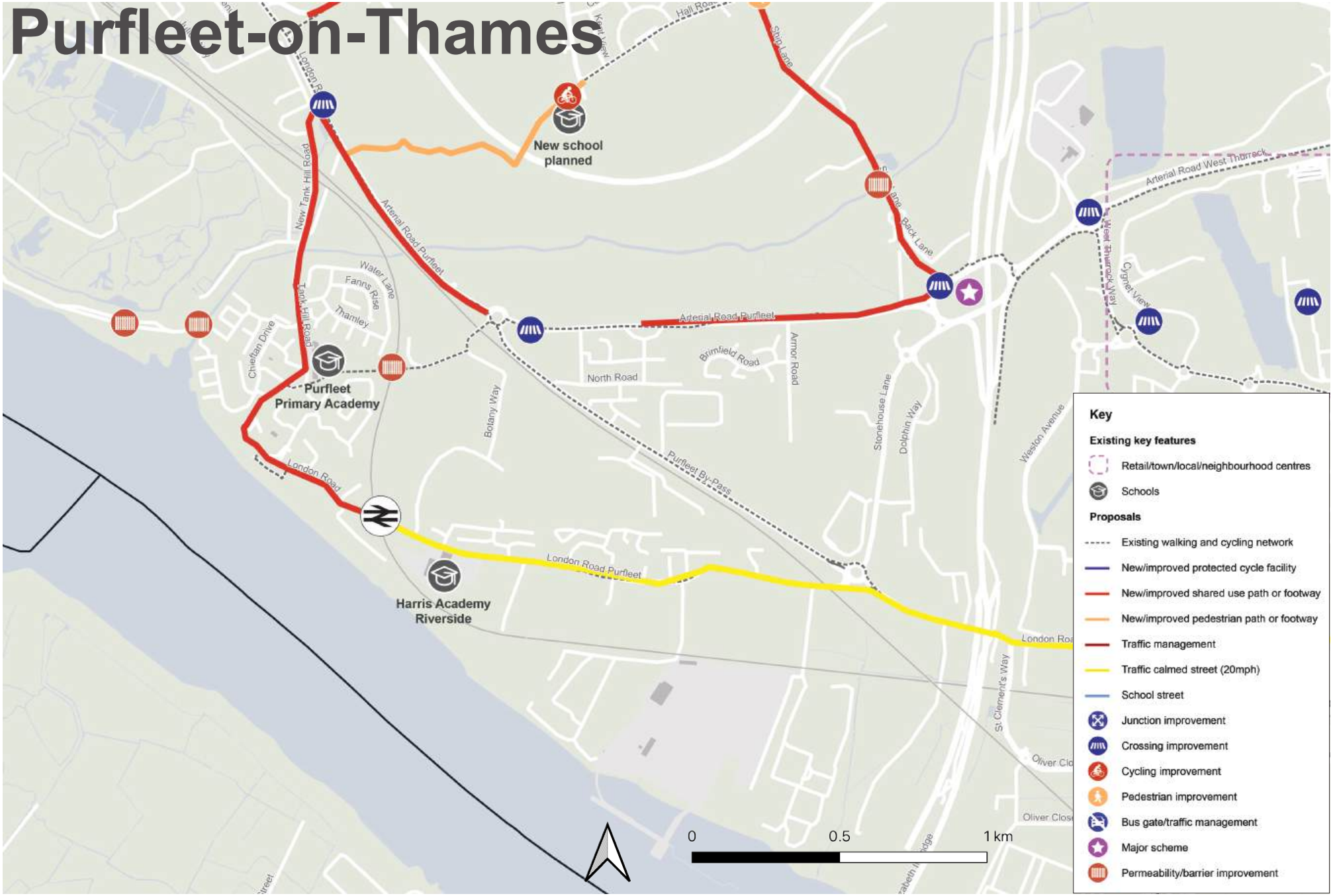
Map: intervention map boundaries



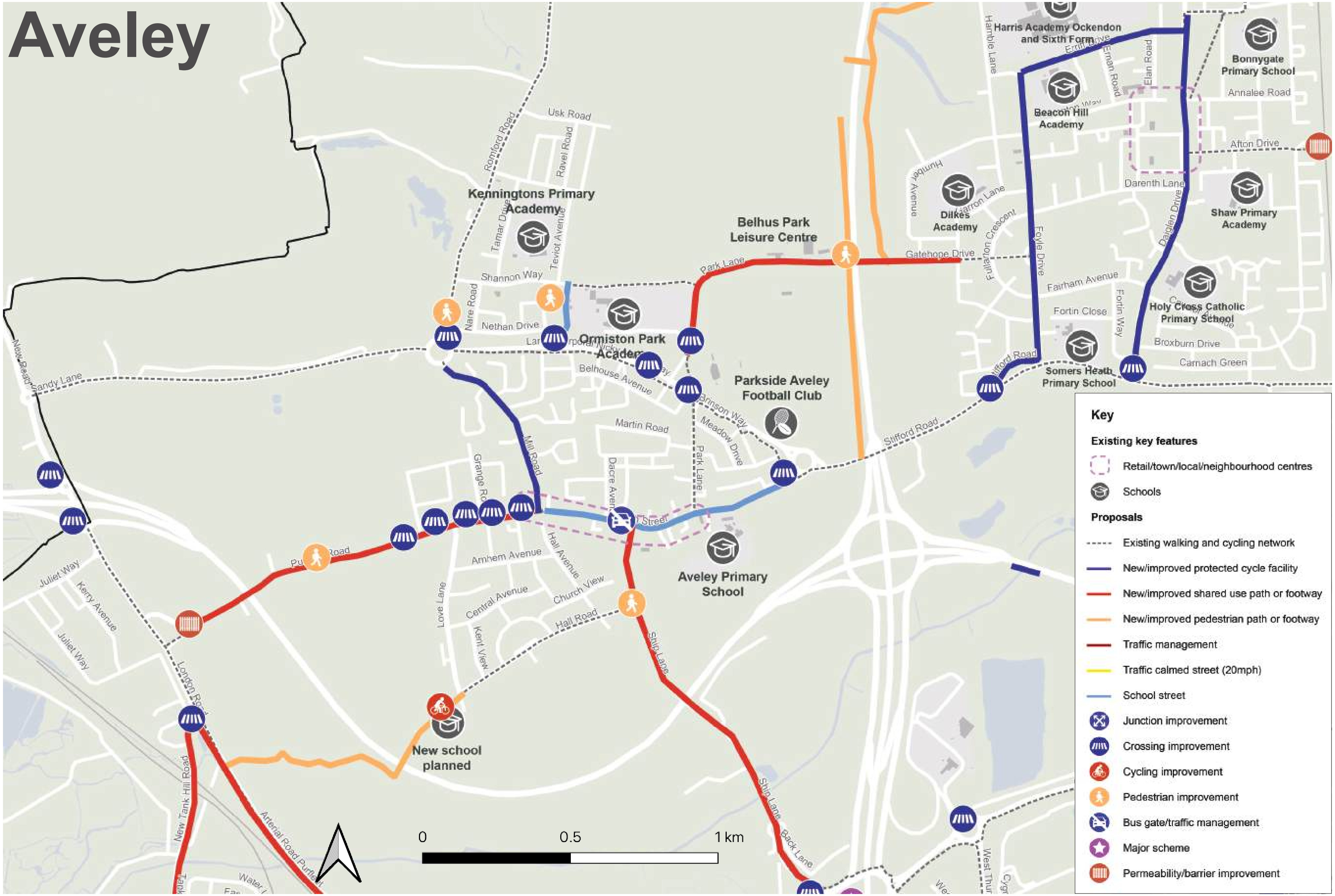
Thurrock-wide



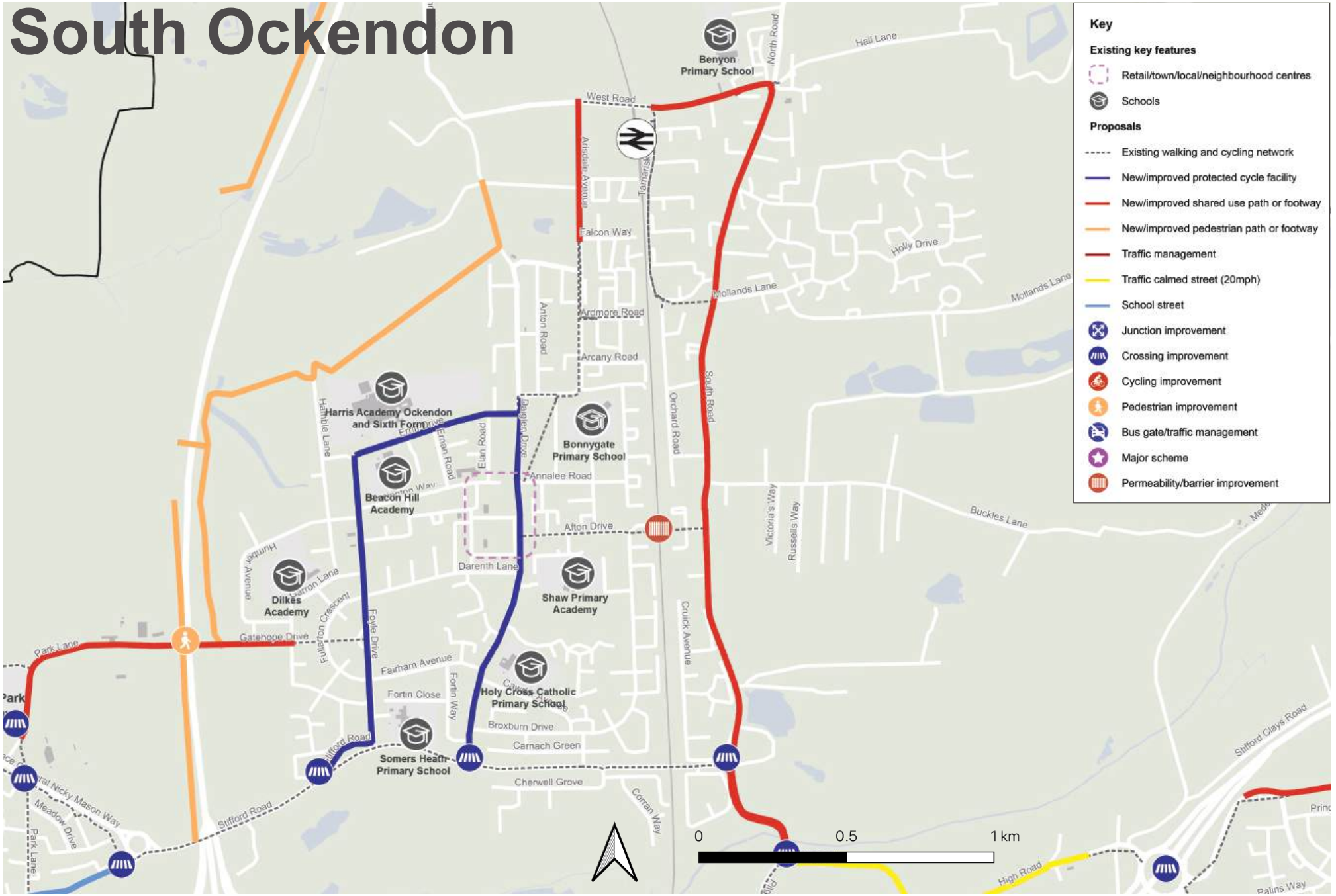
Purfleet-on-Thames



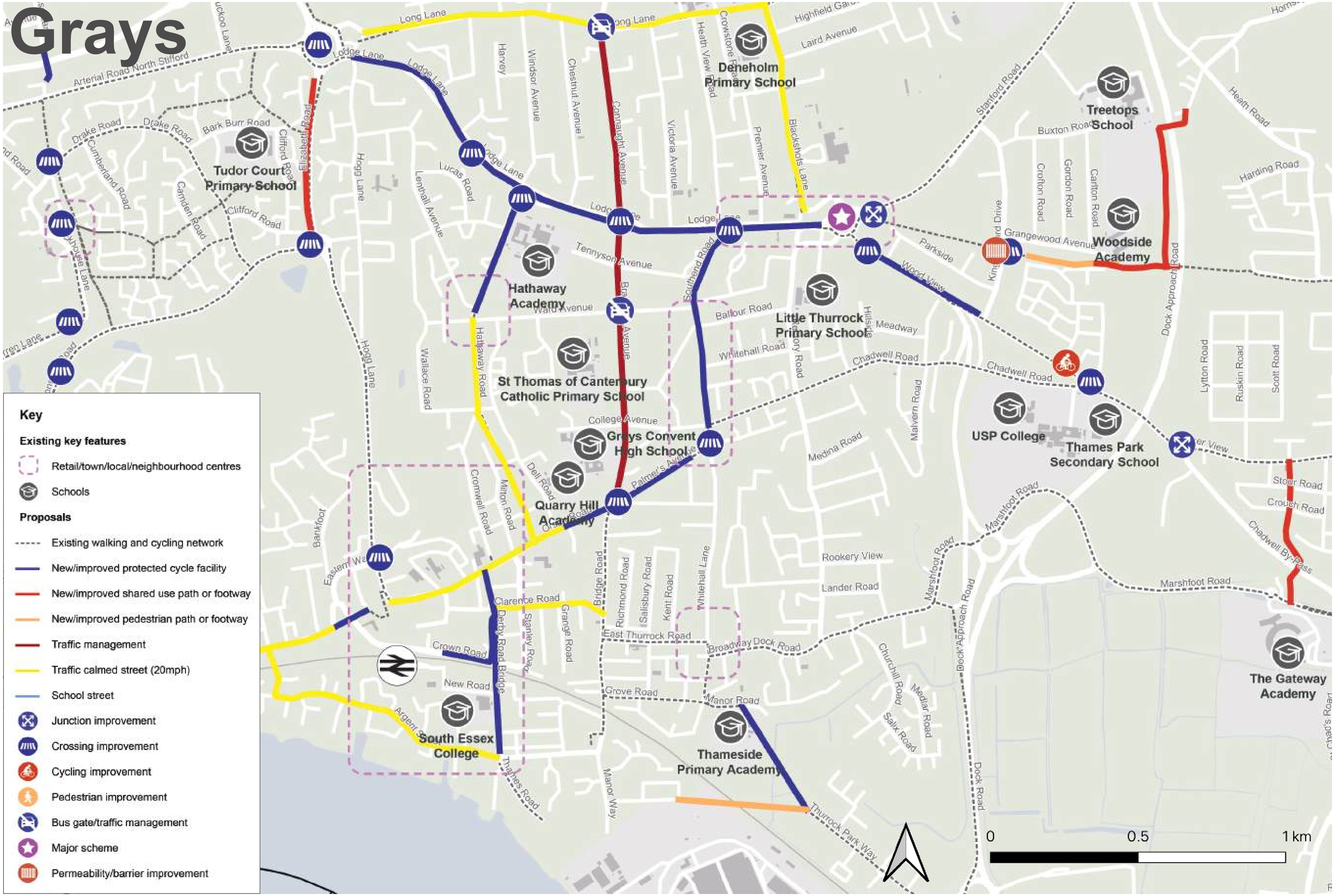
Aveley


Kenningtons Primary Academy
Belhus Park Leisure Centre
Ormiston Park Academy
Parkside Aveley Football Club
Aveley Primary School
New school planned
Harris Academy Ockendon and Sixth Form
Bonnygate Primary School
Beacon Hill Academy
Dilkes Academy
Shaw Primary Academy
Holy Cross Catholic Primary School
Somers Heath Primary School
Usk Road
Romford Road
Ravel Road
Tamar Drive
Teviot Avenue
Shannon Way
Nethan Drive
Nare Road
Sandy Lane
New Road
Park Lane
Belhouse Avenue
Martin Road
Mill Road
Grange Road
Dacre Avenue
Brinson Way
Meadow Drive
Stifford Road
Gatehope Drive
Fairham Avenue
Fortin Close
Fortin Way
Foyle Drive
Broxburn Drive
Carnach Green
Darenth Lane
Dalgiels Drive
Afton Drive
Annalee Road
Elan Road
Erman Road
Humber Avenue
Fullarton Crescent
Yarron Lane
Hamble Lane
Arnhem Avenue
Hall Avenue
Central Avenue
Church View
Hall Road
Love Lane
Kent View
Ship Lane
Back Lane
Juliet Way
Kerry Avenue
London Road
New Tank Hill Road
Arterial Road Purfleet
West Thurrock
0
0.5
1 km
Key
Existing key features
Retail/town/local/neighbourhood centres
Schools
Proposals
Existing walking and cycling network
New/improved protected cycle facility
New/improved shared use path or footway
New/improved pedestrian path or footway
Traffic management
Traffic calmed street (20mph)
School street
Junction improvement
Crossing improvement
Cycling improvement
Pedestrian improvement
Bus gate/traffic management
Major scheme
Permeability/barrier improvement

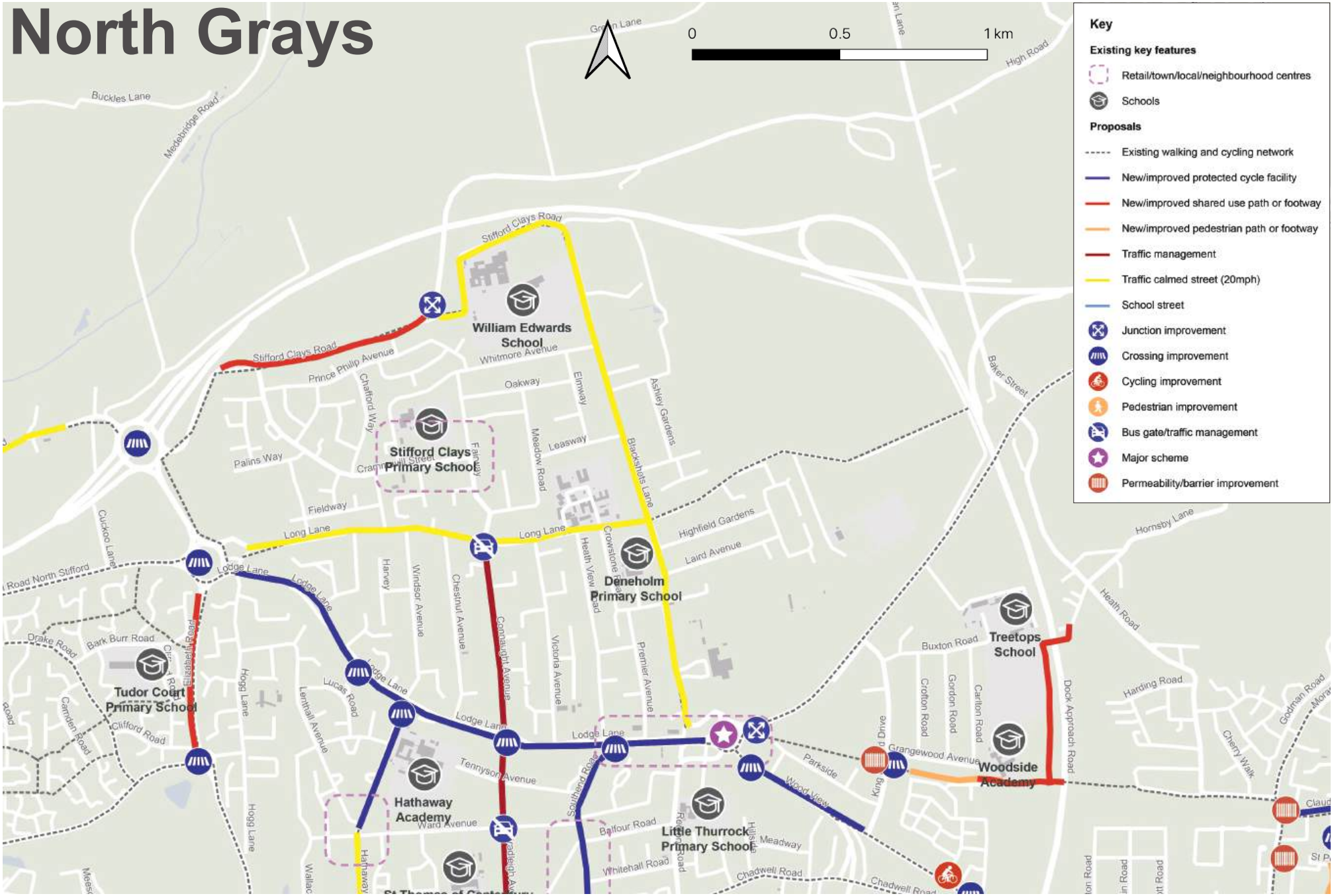
South Ockendon



Lakeside Basin, West Thurrock and Chafford Hundred


Grays
Key
Existing key features
Retail/town/local/neighbourhood centres
Schools
Proposals
Existing walking and cycling network
New/improved protected cycle facility
New/improved shared use path or footway
New/improved pedestrian path or footway
Traffic management
Traffic calmed street (20mph)
School street
Junction improvement
Crossing improvement
Cycling improvement
Pedestrian improvement
Bus gate/traffic management
Major scheme
Permeability/barrier improvement
Deneholm Primary School
Treetops School
Tudor Court Primary School
Woodside Academy
Hathaway Academy
Little Thurrock Primary School
St Thomas of Canterbury Catholic Primary School
Grays Convent High School
Quarry Hill Academy
USP College
Thames Park Secondary School
The Gateway Academy
South Essex College
Thameside Primary Academy
Arterial Road North Stifford
Long Lane
Lodge Lane
Highfield Gardens
Laird Avenue
Stanford Road
Heath Road
Harding Road
Buxton Road
Crofton Road
Gordon Road
Carlton Road
Grangewood Avenue
Drake Road
Bark Burr Road
Clifford Road
Elizabeth Road
Cumberland Road
Camden Road
Hogg Lane
Lenthall Avenue
Lucas Road
Windsor Avenue
Chestnut Avenue
Connaught Avenue
Victoria Avenue
Premier Avenue
Blackshots Lane
Tennyson Avenue
Southend Road
Balfour Road
Whitehall Road
Meadway
Chadwell Road
Parkside
Wood View
Dock Approach Road
Hathaway Road
Wallace Road
College Avenue
Medina Road
Malvern Road
Marshfoot Road
Lytton Road
Ruskin Road
Scott Road
Stour Road
Crouch Road
Chadwell By-Pass
Cromwell Road
Milton Road
Dell Road
Palmer's Avenue
Bankfoot
Eastern Way
Clarence Road
Derby Road Bridge
Stanley Road
Grange Road
Bridge Road
Richmond Road
Salisbury Road
Kent Road
Whitehall Lane
Rookery View
Lander Road
East Thurrock Road
Broadway
Dock Road
Crown Road
New Road
Grove Road
Manor Road
Churchill Road
Salix Road
Argent Street
Thames Road
Manor Way
Thurrock Park Way
0
0.5
1 km

North Grays


0
0.5
1 km
Key
Existing key features
Retail/town/local/neighbourhood centres
Schools
Proposals
Existing walking and cycling network
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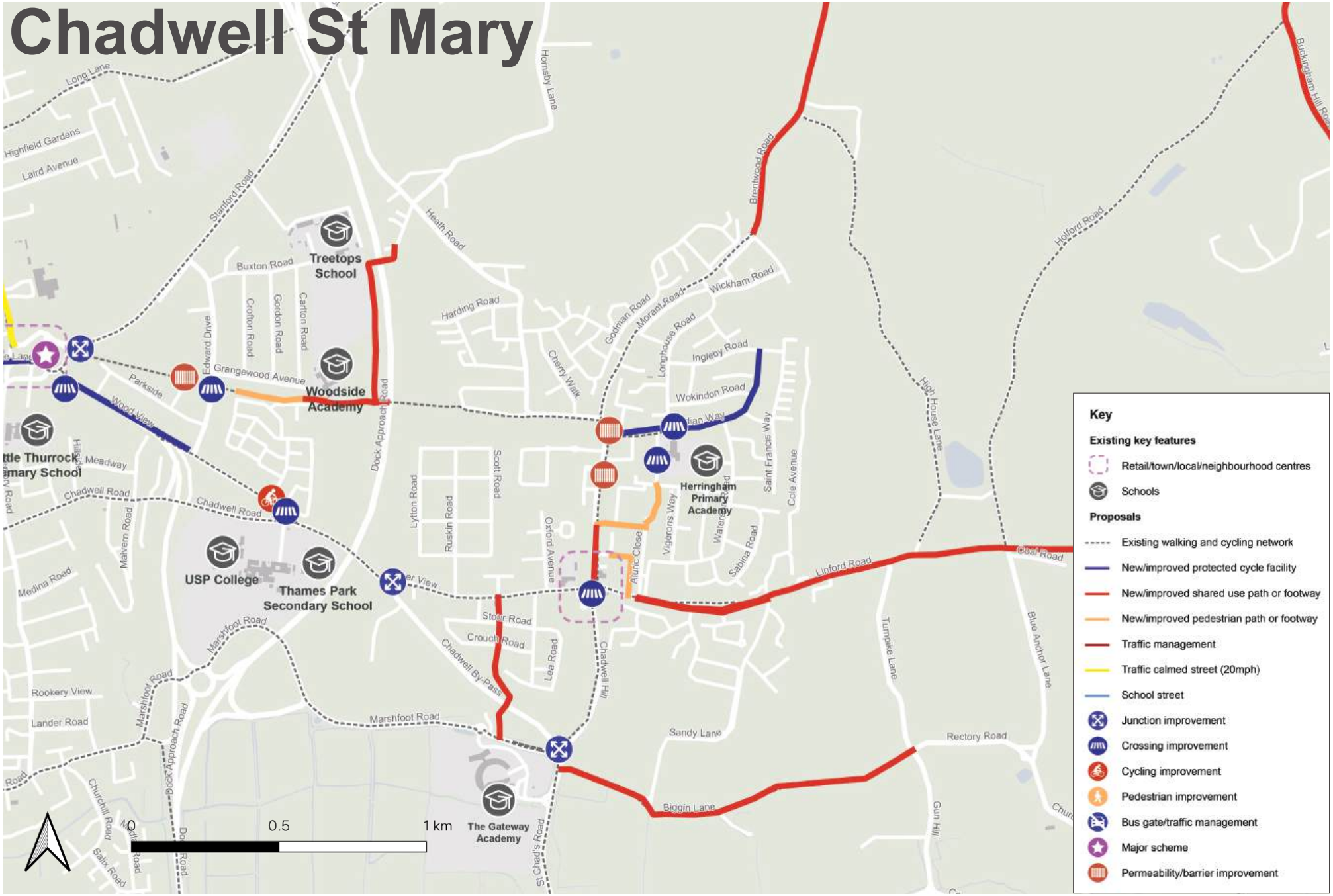
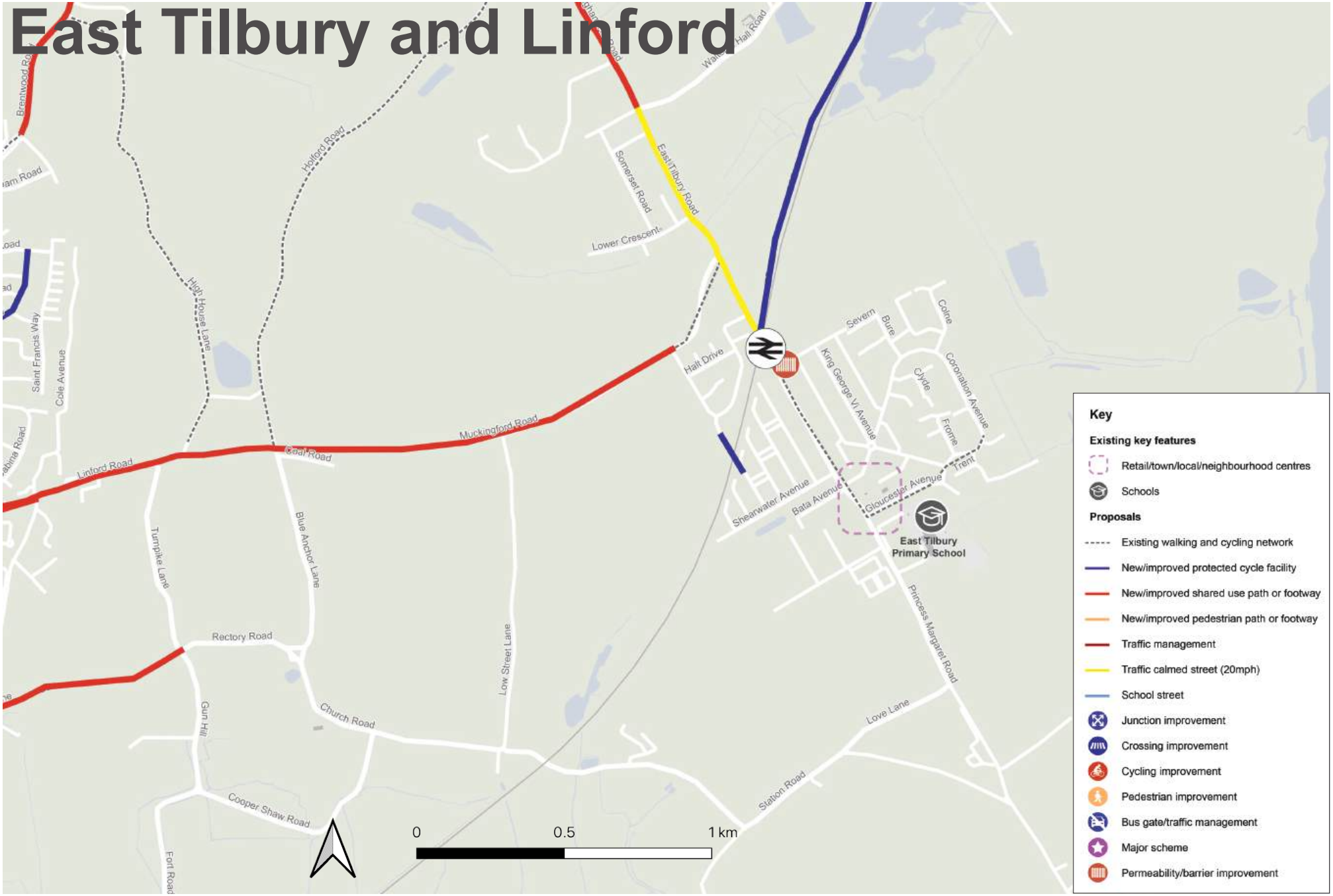
School street
Junction improvement
Crossing improvement
Cycling improvement
Pedestrian improvement
Bus gate/traffic management
Major scheme
Permeability/barrier improvement
William Edwards School
Stifford Clays Primary School
Deneholm Primary School
Tudor Court Primary School
Hathaway Academy
Little Thurrock Primary School
Treetops School
Woodside Academy
Stifford Clays Road
Prince Philip Avenue
Whitmore Avenue
Oakway
Elmway
Ashley Gardens
Baker Street
Palins Way
Chafford Way
Meadow Road
Leasway
Blackshots Lane
Fieldway
Long Lane
Highfield Gardens
Laird Avenue
Hornsby Lane
Heath Road
Lodge Lane
Harvey
Windsor Avenue
Chestnut Avenue
Connaught Avenue
Victoria Avenue
Premier Avenue
Crowstone Road
Heath View Road
Buckles Lane
Medebridge Road
Cuckoo Lane
Drake Road
Bark Burr Road
Elizabeth Road
Clifford Road
Hogg Lane
Lucas Road
Lenthall Avenue
Tennyson Avenue
Ward Avenue
Southend Road
Balfour Road
Whitehall Road
Chadwell Road
Meadway
Wood View
Parkside
Grangewood Avenue
Buxton Road
Crofton Road
Gordon Road
Carlton Road
Dock Approach Road
Harding Road
Cherry Walk
Godman Road

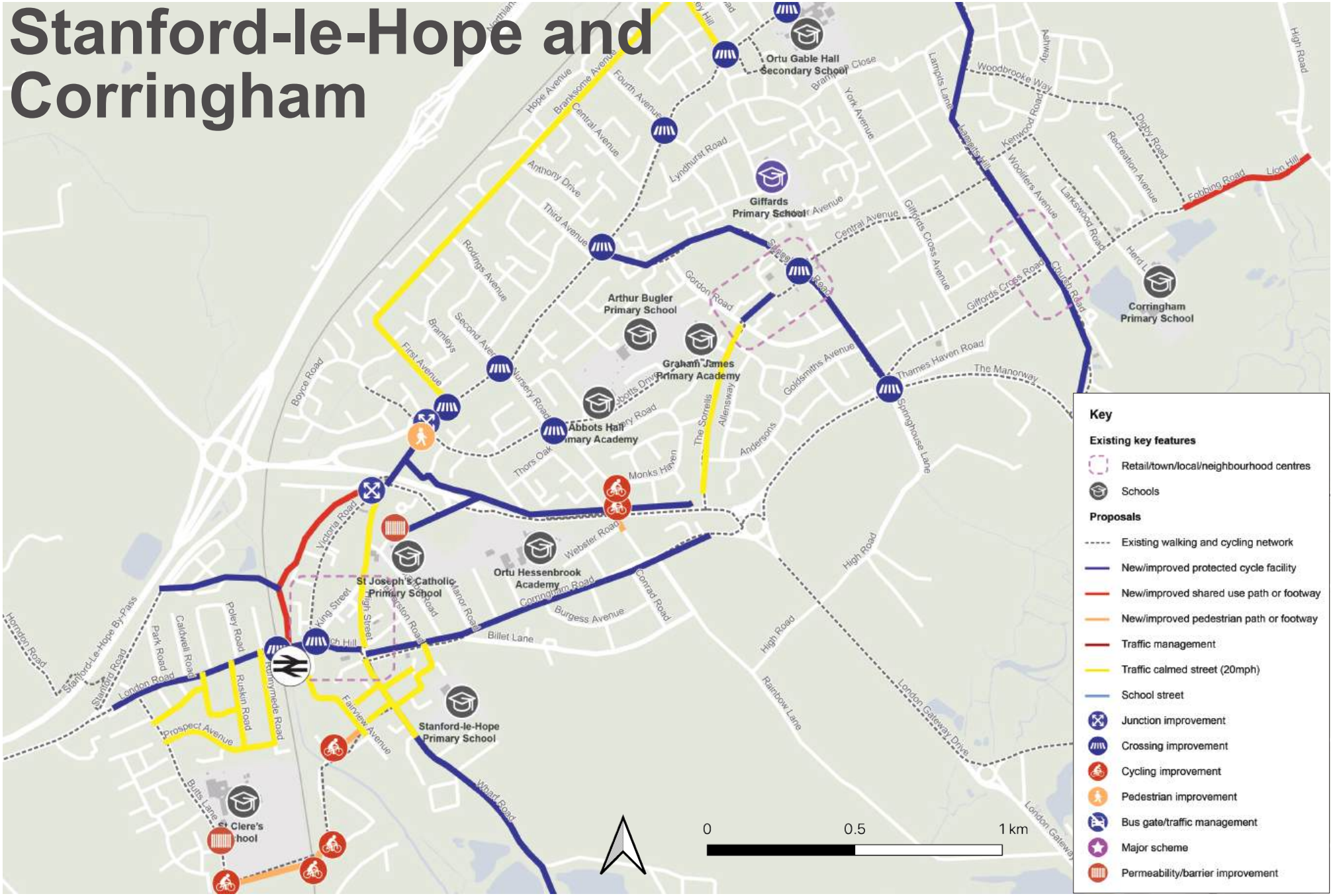
Chadwell St Mary



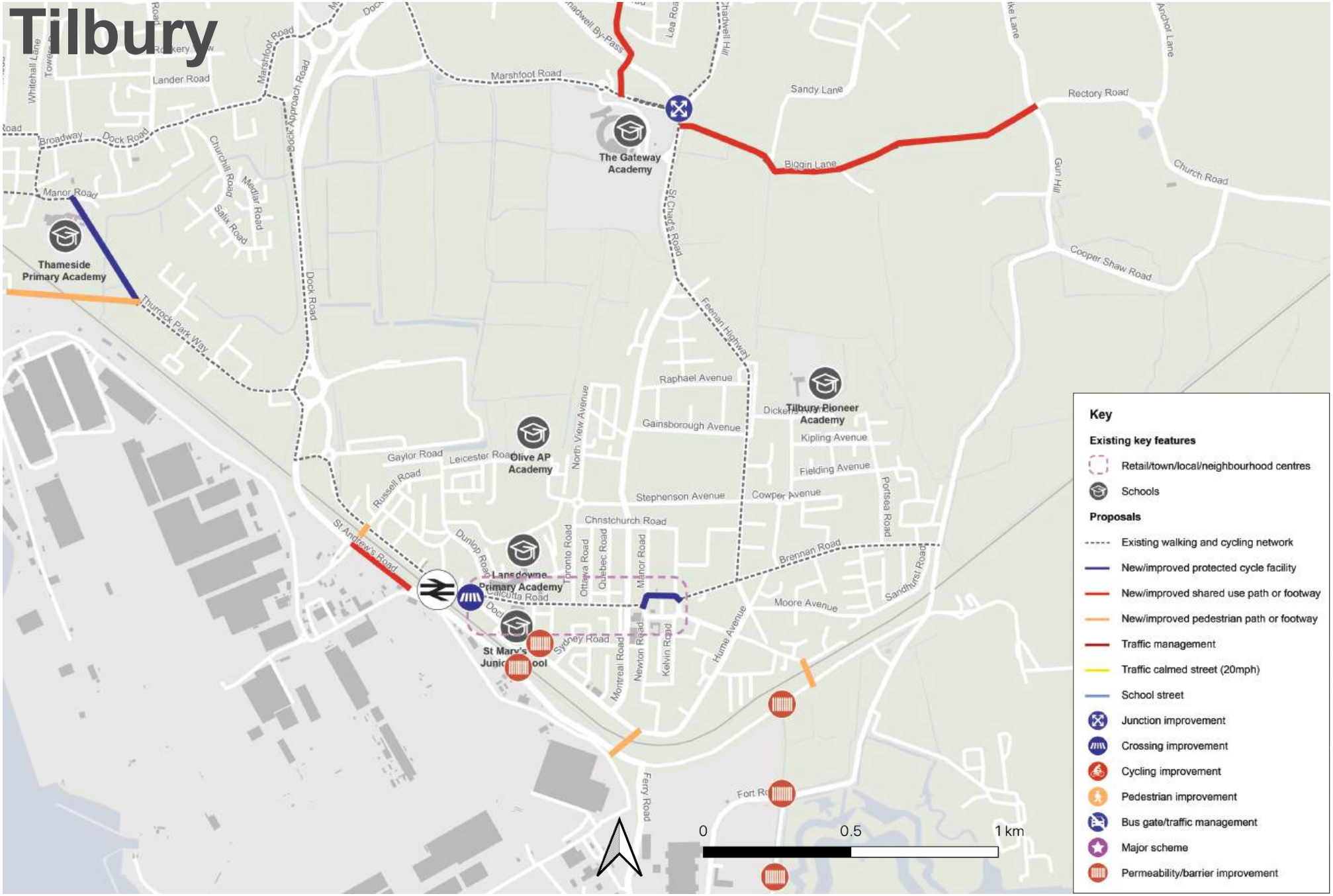
East Tilbury and Linford



Stanford-le-Hope and Corringham



Tilbury


Marshfoot Road
Lander Road
Broadway
Dock Road
Manor Road
Churchill Road
Salix Road
Medlar Road
Dock Approach Road
Thameside Primary Academy
Thurrock Park Way
Dock Road
Chadwell By-Pass
Lea Road
Chadwell Hill
The Gateway Academy
Sandy Lane
Rectory Road
Biggin Lane
Church Road
Gun Hill
Archer Lane
Cooper Shaw Road
St Chad's Road
Feenan Highway
Raphael Avenue
Gainsborough Avenue
Tilbury Pioneer Academy
Kipling Avenue
Fielding Avenue
Portsea Road
Gaylor Road
Leicester Road
Olive AP Academy
North View Avenue
Russell Road
Stephenson Avenue
Cowper Avenue
Chnstchurch Road
St Andrew's Road
Dunlop Road
Toronto Road
Ottawa Road
Quebec Road
Manor Road
Brennan Road
Sandhurst Road
Lansdowne Primary Academy
Calcutta Road
Moore Avenue
Sydney Road
Montreal Road
Newton Road
Kelvin Road
Hume Avenue
Ferry Road
Fort Rd
0
0.5
1 km
Key
Existing key features
Retail/town/local/neighbourhood centres
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New/improved protected cycle facility
New/improved shared use path or footway
New/improved pedestrian path or footway
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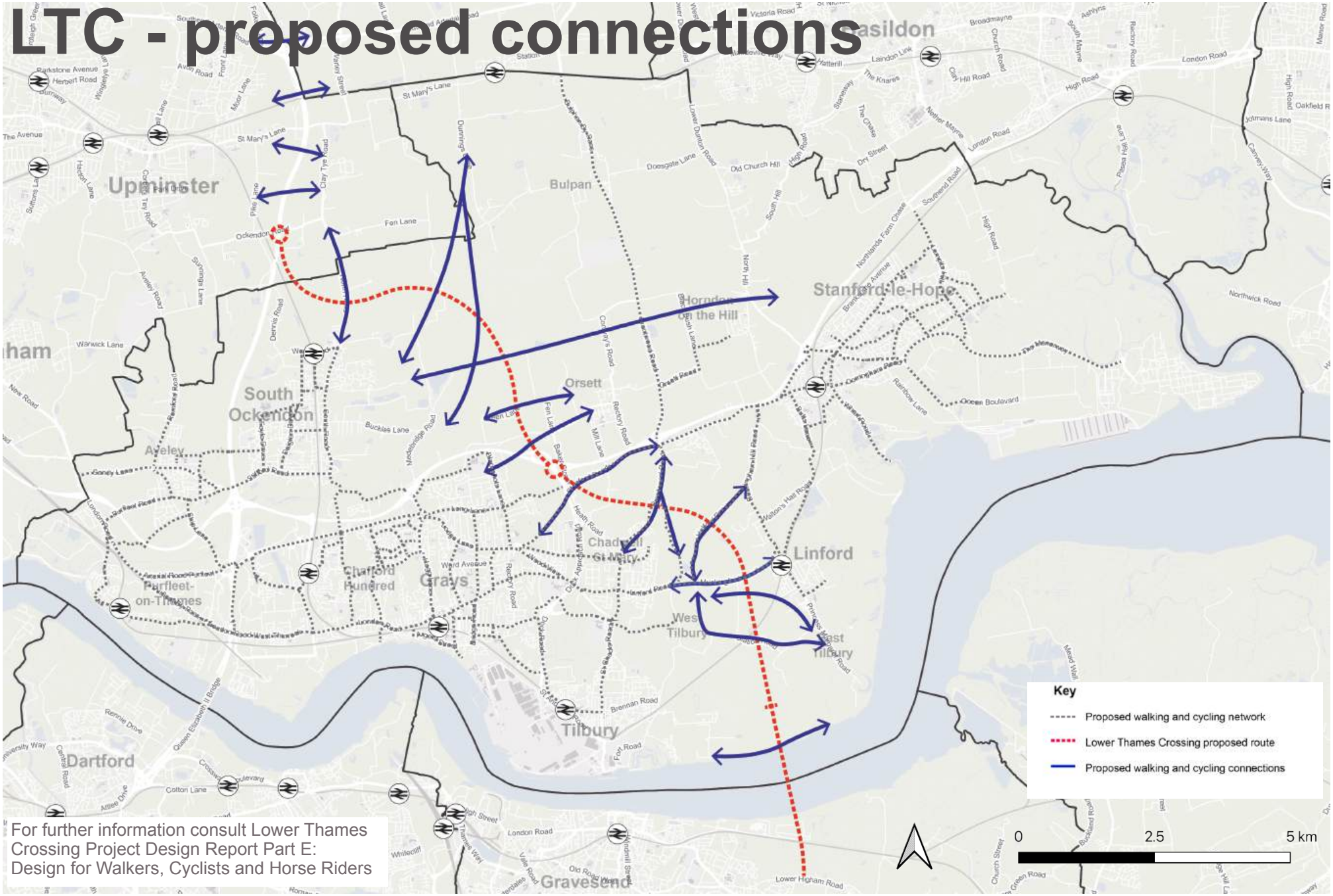
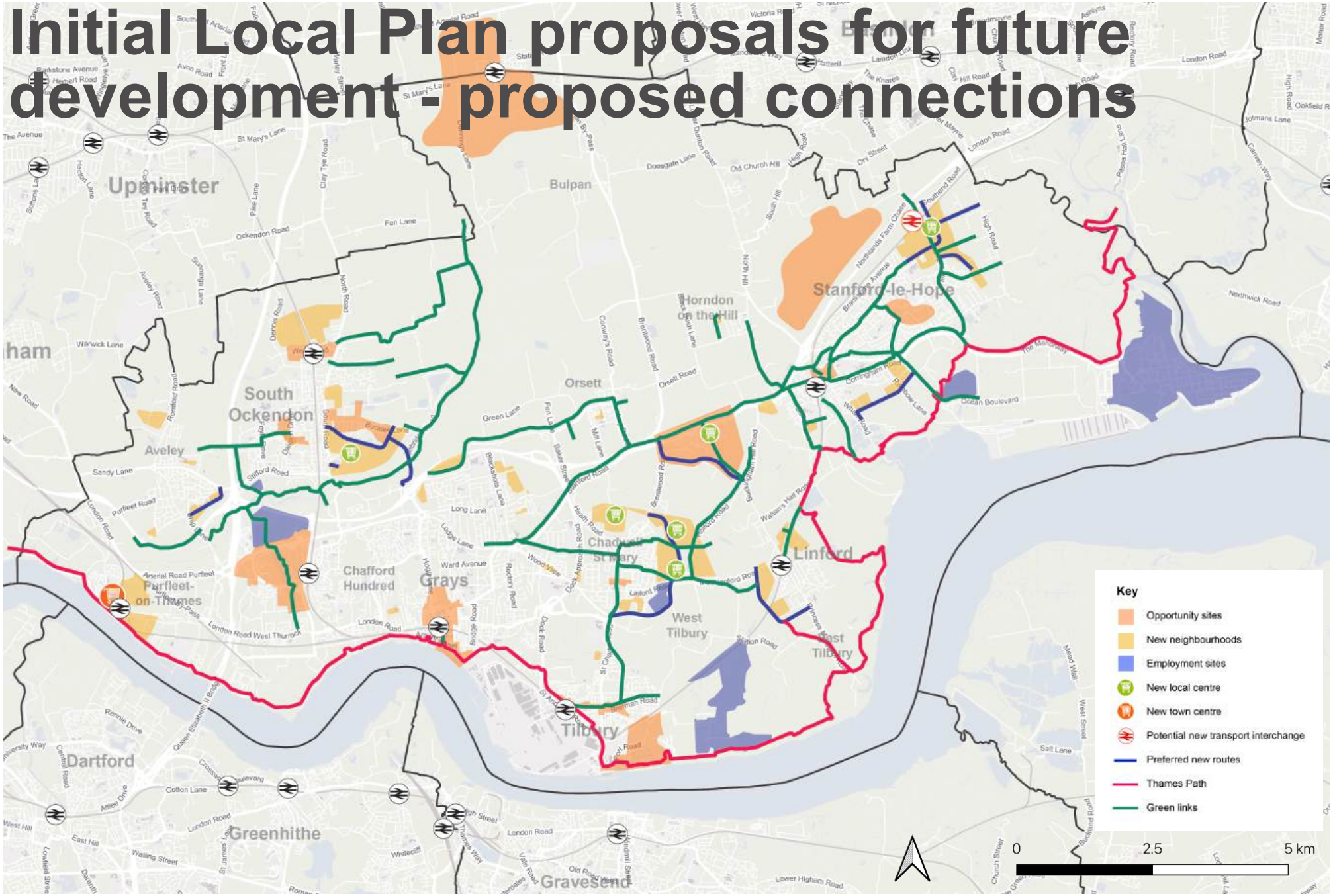
Traffic calmed street (20mph)
School street
Junction improvement
Crossing improvement
Cycling improvement
Pedestrian improvement
Bus gate/traffic management
Major scheme
Permeability/barrier improvement

LTC - proposed connections



For further information consult Lower Thames Crossing Project Design Report Part E: Design for Walkers, Cyclists and Horse Riders

Initial Local Plan proposals for future development - proposed connections



7. Prioritisation

7.1 Methodology

7.1.1 Overview

The LCWIP guidance requires schemes to be prioritised. It suggests various ways to achieve this, but states that the key factors are a matter for the local authority to decide.

Based on local requirements, several key factors have been used to establish the priority for schemes. These capture a range of benefits.

- **Local TA** - Local Trip Attractors (Rail, Town Centers, Leisure Facilities, Shopping Centers)
- **School** - How well does the facility help with school journeys
- **Delivery** - How easy will the scheme be to deliver
- **Cost** - Will the scheme be expensive to deliver
- **Cycle** - Benefit to the cycling network
- **Walk** - Benefit to the walking and wheeling network
- **Obesity levels**
- **Place Need Classification** - areas of greatest physical activity or social need (as identified by Sport England)
- **Score/RAG** - Sum of scores, for guidance only. There are some schemes that score lower (e.g. due to high cost) but are essential to the network. Each scheme must be judged in the round.

Each proposal has been given a numerical score in each category according to the criteria in the table.

Scores have been allocated using the best judgement of the consultants and officers, in the absence of specific scheme designs.

These can be found in Appendix A - LCWIP measures.

Scoring criteria	
Local TAs	
1	Does not benefit accessibility to the facility
2	Access improvements on existing links to a single facility
3	Access improvements on existing links to several facilities
4	Creating new access point or connection to a single facility
5	Creating new access point or connection to several facilities
Delivery	
1	Major challenges to deliver including large land acquisition, large consultation or significant environmental or technical issues
2	Major challenges to deliver including some land acquisition, local consultation or medium environmental or technical issues
3	Little challenges to deliver including parking removal, focalized environmental or technical issues
4	Little challenges to deliver including public land repurpose or small technical issues
5	No environmental or technical issues, no land acquisition or repurpose and no consultation required
Cost	
0	Do minimum - E.g. no TRO or simply removal of a fixed barrier or similar
-1	TRO needed or simple signage changes in a small area
-2	Some digging required or kerb lines moved or as -1 but over a larger area
-3	Much digging required at multiple sites or involvement of signals, National Rail or external highway authorities and service providers
-4	Major scheme - and/or large land purchase or use of non-highway land

Scoring criteria	
Cycle/walk	
1	Improvement of safety, attractiveness or comfort on existing minor link
2	Integral safety, attractiveness and comfort improvements on existing minor link
3	Integral safety, attractiveness and comfort improvements on existing link of major relevance to the wider network
4	New link with highest standard for safety, attractiveness and comfort with minor relevance on the network
5	New link with highest standard for safety, attractiveness and comfort in a direct way and integral to the wider network
Place Need Classification (PNC)	
	Scores as 5 minus average of adult and child scores for PNC
Obesity	
1	11.1% to 27.8%
2	27.9% to 32.0%
3	32.1% to 35.7%
4	35.8% to 40.6%
5	40.7% to 55.8%

8. Next steps

8.1 Next steps

8.1.1 Overview

The LCWIP document sets out walking, wheeling and cycling interventions that may be eligible for the receipt of funding from national government - particularly Active Travel England. The LCWIP would form a key component of the funding bid process.

All the interventions contained within the LCWIP would require further work and public engagement to progress them through the design stages to construction. This typically includes:

- Feasibility design
- Concept design
- Detailed design
- Technical design

Following this, schemes can be constructed.

The LCWIP will also form part of wider Council spatial policies including the forthcoming Thurrock Local Plan and the Thurrock Transport Strategy. This enables schemes to be delivered or funded through other means, such as the planning process (i.e. by developers) or as part of other major transport projects.