

London Borough of Waltham Forest

Sustainable Mobility Review

Walthamstow Town Centre

Final Report | 14 May 2024



This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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Executive Summary

This report on sustainable mobility in Walthamstow Town Centre identifies the issues heightened by continued growth and sets out a series of recommendations on resolving the requirements for servicing in the town centre and the need to further sustainable modes of travel.

The report is based on secondary research and represents an expert and external perspective on urban development challenges. The following issues were identified:

1. The growth in population and visitor numbers has increased inter-modal conflicts and is expected to continue.
2. Servicing represents an essential part of the town centre function but is not appropriately integrated.
3. Sustainable transport interventions have taken the form of additions, rather than holistic regeneration to reorient the town centre.

The report suggests the following four recommendations in response:

- A. Use recognised processes/contractors for a group of businesses working jointly in conjunction with the local authority.
- B. Provide improved and flexible parking provision in a centralised location(s) for service vehicles.
- C. The Development Plan Framework should regulate servicing in conjunction with active travel through SPDs and Area Masterplans.
- D. Incorporate technical tools such as GIS and SMCE, testing these in concert with stakeholders.

Terms of Reference

This report has been commissioned by the London Borough of Waltham Forest and is intended to advise on sustainable mobility in Walthamstow Town Centre.

Table of Contents

Introduction	4
The Big Picture	5
The Future of Walthamstow Town Centre	6
Servicing and Multi-Modality	8
Challenges	8
Recommendations	9
Summary of Recommendations	13
Conclusion	13
References	14

List of Figures

Figure 1: Existing and future cycle connectivity in Waltham Forest.

Figure 2: Separated and dedicated cycling lanes in Walthamstow Town Centre.

Figure 3: Completed, ongoing and planned developments in Walthamstow Town Centre.

Figure 4: The map of short point-to-point journeys an LGV makes in London in one day.

Figure 5: Parking Garages used as Micro-Depots for handling parcels.

Figure 6: LBWF Transport Planning Policy Framework.

Figure 7: Modal preference rasters using GIS.

Figure 8: Relative rankings of transport modes along a road.

Figure 9: Option testing along Kensington High Street.

Figure 10: Walthamstow, the best place to raise a family?

Glossary

GLA	Greater London Authority
LBWF	London Borough of Waltham Forest
SPD	Supplementary Planning Document
TfL	Transport for London
WTC	Walthamstow Town Centre

Introduction

Sustainable mobility is a notably urban concept that supports the overarching sustainable transition (LSE, 2024). Building upon the potential proximity of homes, workplaces and other functions present in cities, it proposes the prioritisation of public transport and active travel modes such as walking and cycling, as these are possible if functions are appropriately spatially organised and the necessary infrastructure is present (Banister, 2008).

This would allow both high accessibility and a high-quality environment, with the intention not being car use but to design cities such that people would not need to have a car. In this respect, it is vital that perceived as well as real safety in active travel are tackled (Pooley et al., 2013).

This report seeks to provide a set of recommendations to the London Borough of Waltham Forest ('LBWF') regarding sustainable mobility in Walthamstow Town Centre. The report sets out the big picture of LBWF's transformation from a relatively unknown into a highly successful area, with Walthamstow Town Centre lying at the centre of this growth, increasing in popularity and population. Investment in public transport and active travel has been a keystone of LBWF's strategy.

The report then outlines how the increase in population density and visitors has led to pressures on transport infrastructure, particularly around Walthamstow market and the mall. The main discussion then explores the challenge of integrating the required servicing for a growing town centre with the imperative to continue a transition to sustainable mobility.

Simply adding new transport infrastructure is insufficient. The aim of this report is to achieve a comprehensive and well considered balance between vehicular and other travel modes to support Walthamstow Town Centre's future development.

The report is based on secondary research from LBWF, government organisations such as TfL and the academic community. It is assembled as an expert, but external perspective, and therefore providing policy specific commentary on the Local Plan and other relevant regulations is beyond the scope of this report. It is suggested that LBWF investigate further into the approaches and tools presented in this report, in order to incorporate them into the governance regime for WTC.

The Big Picture

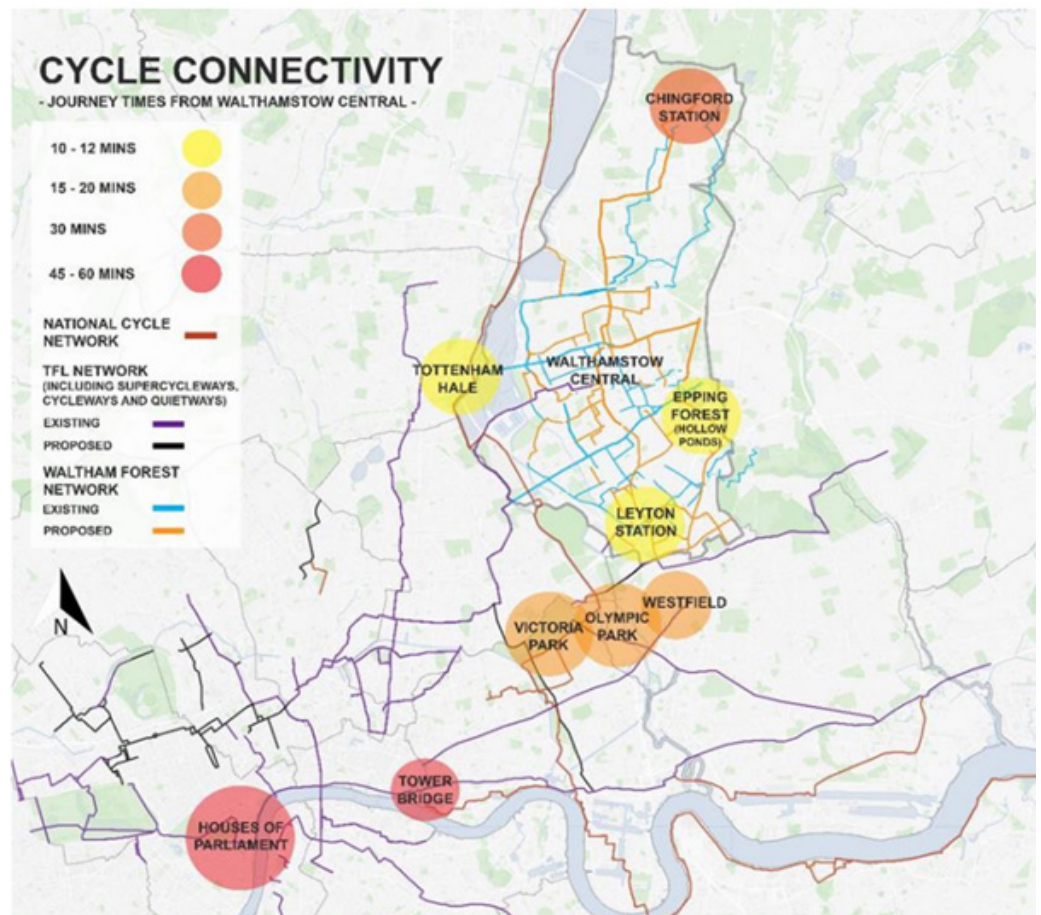
Waltham Forest has historically lagged behind the rest of London in economic growth, demographic vitality and branding (Renaisi, 2007). Yet through political will, structural change and continued determination, Waltham Forest has turned its fortunes around. By most indicators, it has grown at or faster than the London average.

The borough saw the second-largest rise in England in the employment proportion aged 16+, from 56.8% in 2011 to 61.1% in 2021 (ONS, 2021). The number of homes has been increasing faster than the housing target set out in the London Plan, one of only four boroughs to do so (HM Government, 2023). The success has not been limited to economic

regeneration. Perhaps the interventions the borough is most known for are in transport infrastructure. The opening of the London Overground in 2007 and the series of expansions since combined many small, old networks into a fully orbital network. The upgraded Victoria Line now operates with 36 trains per hour in each direction at peak times (Waltham Forest, 2020). Walthamstow Central station is served by the Victoria, Overground and acts as a major bus terminal also (see Figure 3).

These partnerships with TfL started with the ‘Mini Holland’ concept in 2013. A successful bid for initial funding of £30 million turned into a long programme of public investment into improving the public realm through sustainable mobility.

Figure 1:
Existing and future cycle connectivity in Waltham Forest.
Source: Arup (2021)



Over 29 km of cycle lanes, 62 pedestrian crossings and three cycle hire schemes meeting different needs has been implemented. The Mini Holland principles were codified in a joint design guide in 2015, and has become the basis for a whole TfL programme of investment into outer London boroughs (TfL, 2024).

Waltham Forest promotes sustainable travel through more than physical interventions. It

currently runs three separate cycle schemes, with children's, cargo, electric and foldable bikes on loan or with assisted purchase.

The evidence base for the recently adopted Local Plan showcases the borough's continued commitment to delivering sustainable transport infrastructure (see Figure 1 above; Arup, 2020; Arup, 2021).

The Future of Walthamstow Town Centre

Walthamstow Town Centre has good levels of sustainable transport infrastructure, and they have a pipeline of projects to further provision of cycle lanes (see Figure 2) and public transport accessibility, including a new step free access point to the Victoria line station from the 17&Central mall (see Figure 3). The High Street is pedestrianised for much of the day,

restricted to servicing vehicles only. However, the area continues to see high vehicle use and faces new problems brought on by high economic growth and quality of life.

From 2012 to 2020, house prices increased by 122%, faster than any other borough (Lloyds, 2022). The borough has responded by concen-

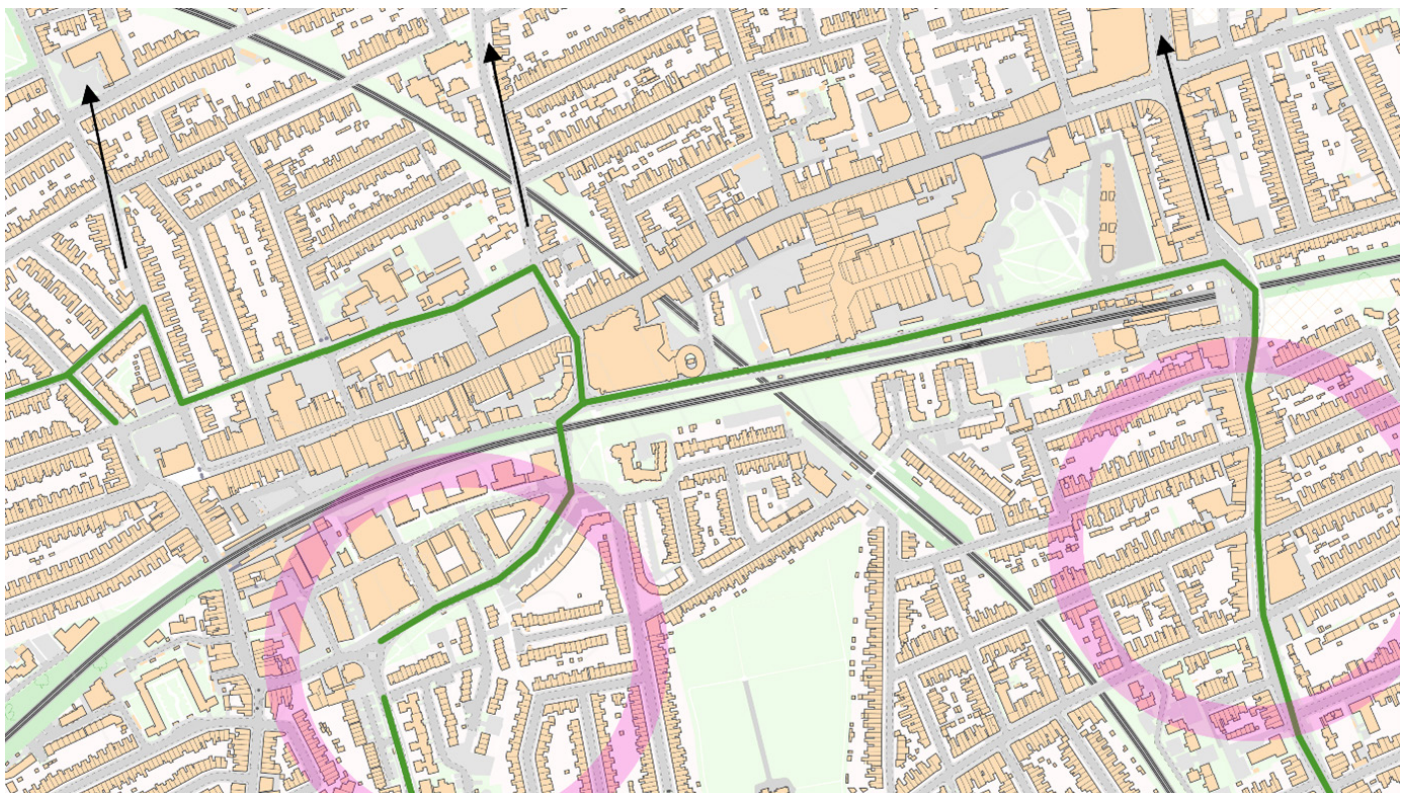


Figure 2: Separated and dedicated cycling lanes. The circles indicate recent interventions, while the arrows show where future lanes are in the pipeline.

trating development in WTC, approving permissions and joint venturing in high density developments (Waltham Forest, 2024). The population in 2021 was 11,500 (ONS, 2021). The South Grove / St James Quarter, 17&Central and Juniper House projects combined already contribute over 1100 homes. This has the potential to significantly increase the population in the town centre by 10-30%, with accompanying pressure on transport systems.

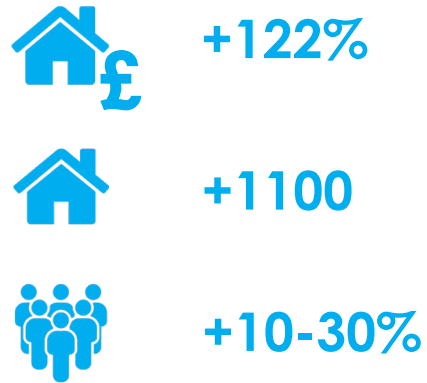


Figure 3: Completed, ongoing and planned developments in WTC with reference to Underground and Overground stations.

The mall is currently serviced from Selborne Road, while Walthamstow market is currently serviced by vehicles parking on the small roads right up to the shared surface of the High Street.

The latter in particular causes congestion and pollution in the residential north portion of the town centre. The market traders use outdated vans which are inefficient and cause high pollution. Research suggests that smaller retail units are often responsible for considerable freight activity, and large retail units should not be assumed to generate the largest traffic (Cherrett et al., 2012).

The active travel interventions so far have been alongside continued vehicular use in Walthamstow Town Centre. Pedestrians, cyclists and vehicles are in close proximity on busy roads, each with a diminished slice of the available space. Sustainable mobility seeks transition, not addition. Rather than grafting new modes of travel into existing networks, comprehensive change is necessary to manage the increase in population, alongside the challenges of servicing an economically successful town centre.

Servicing and Multi-Modality

The Challenge

Urban logistics is a major challenge in the sustainable transition within transport. Cities depend on a significant flow of commodities in, out and within their boundaries. Servicing by nature often requires vehicles to be parked in proximity to the premises being serviced. This can be a point of conflict with initiatives to increase sustainable transport modes such as walking and cycling (Browne et al., 2021).

This is especially true for town centres, as they hold a range of functions such as retail, leisure and hospitality that require high degrees of servicing while also being prime places to encourage sustainable travel. In the UK, the average High Street business can expect up to 10 core goods and 7.6 service visits per week in non-peak trading periods with up to 25% additional trips in holiday periods (Cherrett et al., 2012).

It is crucial that the town centre functions that make Walthamstow grow and prosper are supported. At the same time, goods vehicles emit a greater proportion of pollutants than other vehicles, and cause conflicts at the kerbside with pedestrians and cyclists. There is limited space for unloading, and deliveries may need to be transferred by hand.

The increasing population, wealth and activity of WTC will increase the extent of this problem (Conway & Conway, 2021). While overall motorised traffic has fallen in London, the absolute volume of urban freight has grown, and further the expected speed of response has increased.

In particular, the increase in light goods vehicles (LGVs) becomes an issue when combined with the emphasis in urban infrastructure on walking, cycling and public transport. Growth in E-commerce has led to the rise of last-mile

delivery models, and the number of LGVs is expected to increase further (TfL, 2023). Unlike HGVs, LGVs are used not only for bulk goods but also parcel delivery, provision of services, and commuting. LGVs make a high number of trips within a short timeframe, often short point to point journeys within an area (see Figure 4).



Figure 4: The map of short point-to-point journeys an LGV makes in London in one day. Source: Allen et al. (2018)

This means that the road reallocation that has taken place as part of the shift to sustainable transport has led to increased delays on the road and kerbside conflicts (Allen et al., 2018).

Managing urban freight requires a major shift in design and stakeholder management. While the planning regime is able to regulate the level of additional servicing and the times in which servicing is carried out through delivery and servicing plans and planning conditions, these apply only to new developments, and do not address the existing conflict (TfL, 2018).

The transition towards sustainable mobility requires better management of the urban logistics which are essential to the proper functioning of the town centre.

Recommendations

Local authorities have the potential to be key drivers of sustainable logistics strategies.

Use recognised processes/contractors for a group of businesses working jointly in conjunction with the local authority. This could be arranged respectively for each type of business, as the market traders and the mall for example would operate differently. Collaborative procurement can drive significant cost reductions and streamlining of operations.

It also has the potential to better regulate and standardise disparate servicing regimes, that may have different vehicles and different timings, with a lack of coordination and ensuing disruption to the proper functioning of the town centre. Under this model, the local authority would act as the management ‘landlord’, similar to those running large multi-retailer shopping centres.



Figure 5:
Parking Garages used as Micro-Depots for handling parcels. Source: Parking Network (2021)

Provide improved and flexible parking provision in a centralised location(s) for service vehicles. A notable aspect of WTC is its relative concentration in a small area, and along one axis. A designated parking area, potentially underground in conjunction with the mall redevelopment could readily service most of the retail units.

For instance, ‘pay-as-you-leave’ car park charging systems could encourage short-stay service vehicles to park off-street. The recommended option would be for LBWF to rent out parking in short or medium term leases, depending on the type and reputation of business involved.

This can be timed as well, to utilise space efficiently, as different businesses will have differing requirements for servicing throughout the day-night cycle. If the slot is not occupied efficiently, at the end of the lease the local authority can offer the space to another business.

In particular, a network of managed centralised service nodes would cut down on LGVs parking in inappropriate locations, including pavements as they seek to get as close as possible to the end recipient (see Figure 5 for example).

Critically, taking servicing off-street will lead to fewer kerbside conflicts, lower traffic on the road and greater room for further active travel infrastructure interventions. This would create a much better environment overall in the town centre.

The existing planning system can aid with implementing interventions. A recognised/joint servicing strategy could be inserted through an updated Walthamstow Town Centre AAP, which is significantly outdated, or as a completely separate SPD on Sustainable Transport, which does not currently exist.

This is a particular issue as there is also no SPD covering Public Realm concerns. The new SPD should include Delivery and Servicing initiatives and regulations specific to each town centre across the borough (see Figure 6).

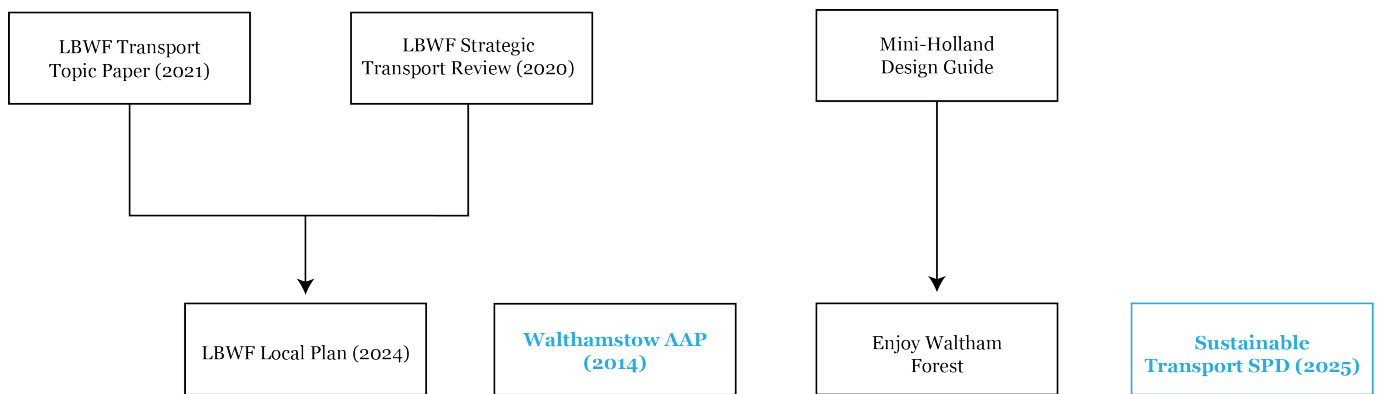


Figure 6: Current LBWF Transport Planning Policy Framework with suggested changes.

However, the planning system will need new tools to manage multi-modality. Sustainable mobility inherently requires multiple modes of travel, each mode fits a specific type of journey. In the context of servicing and active travel, there are safety concerns, borne out in increased accidents as the number of journeys by active travel has risen (Ram et al., 2022).

Implementation would require a better understanding of servicing activity in the town centre, with regards to movements on the road and parking locations. Understanding when and how to separate transport modes, or in some cases, completely restrict access to a particular mode requires the incorporation of tools beyond what the planning system currently uses (Gonzales, 2010).

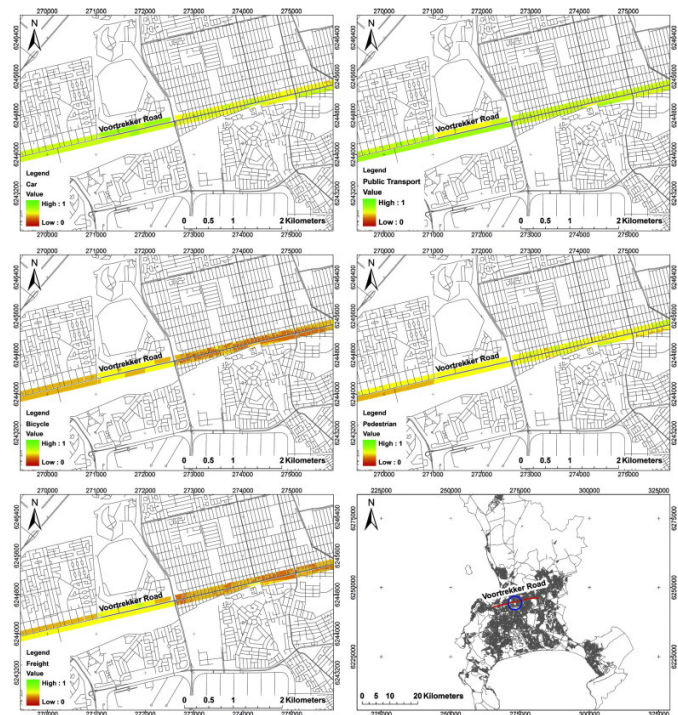


Figure 7: Modal preference rasters using GIS. Source: Beukes (2011)

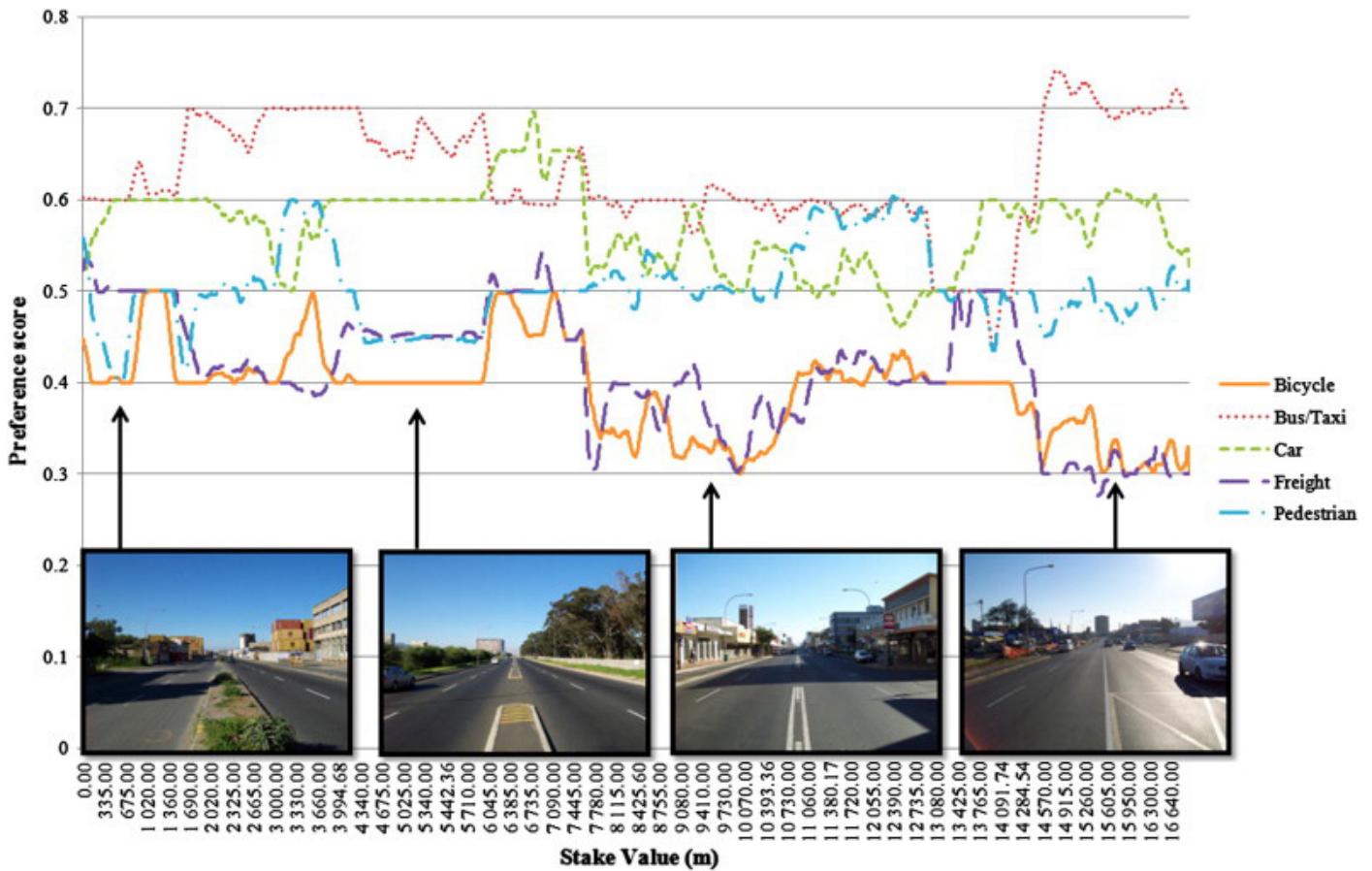


Figure 8:
Relative rankings of transport modes along a road.
Source: Beukes (2011)

The planning of access through an area cannot rely on traffic factors such as vehicle speed, volume and footfall only. Nor can it take different modes in isolation. Factors such as the adjacent land uses, socio-economic characteristics of the population and the physical context of the road need to be holistically considered.

Systems such as GIS have been used successfully to perform Spatial Multi Criteria Evaluations (SMCE), using sources such as census and environmental data to quantitatively demonstrate which user should have priority and to what extent, within a hyper specific spatial context (Beukes, 2011; see Figures 7 and 8).

Options can then be developed and tested with design professionals and stakeholders. This can set out options based on different scenarios regarding the future population and economic activity of the town centre (see Figure 9).

Options should also be based on different design solutions that test the degree of separation between modes, the amount of road space given, restriction on certain modes, and in the case of servicing, where designated

delivery areas would be located (Bosetti et al., 2022). These can draw on the SMCE analysis described above.

Finally, engagement with a range of groups is key to understanding the needs of town centre users and refining the options. Rigorously justifying the process behind the decision to implement the type of cycle lane or a loading area in a particular location is vital to creating a successful town centre.

Figure 9:
Option testing along Kensington High Street. Source: Centre for London (2022)

Populations	Pre-pandemic trend (2010s)	During pandemic	Scenario 1 More space for all	Scenario 2 Nearly normal	Scenario 3 Local is beautiful	Scenario 4 Roaring Twenties
Resident Population	Decline	Decline	Decline	Decline	Steady	Steady/Growth
Worker Population	Growth	Decline	Decline	Steady/Growth	Decline	Growth
Visitor Population	Growth	Decline	Steady/Growth	Growth	Decline	Growth
Through traffic	Growth	Decline	Decline	Steady/Growth	Decline	Growth

Scenario	Intensified challenges	Opportunities
Scenario 1: More space for all	Peak visitor demand at main attractions (as visitor numbers recover, especially during weekends/high season)	More space for walking and micromobility Less pressure on roads and the kerbside Reduced commuting peaks Less demand for parking
Scenario 2: Nearly normal	Road congestion Discouraging car, taxi and PHV use Peak visitor demand at main attractions (same reason as above)	Reduced commuting peaks
Scenario 3: Local is beautiful	Manage decline of high street retail	More space for walking and micromobility Less pressure on the kerbside Reduced commuting peaks
Scenario 4: Roaring Twenties	Congestion on road, pavements and in stations Promoting public transport Reduced commuting peaks	More revenue from public transport
Common to all scenarios	Managing growth in local deliveries Enabling shift to micromobility Supporting high street retail and vitality	Enabling shift to micromobility Supporting high street retail and vitality

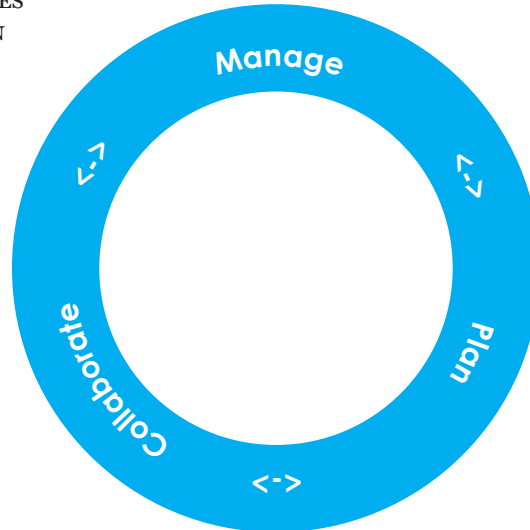
Summary of Recommendations

USE RECOGNISED PROCESSES / CONTRACTORS FOR A GROUP OF BUSINESSES WORKING JOINTLY IN CONJUNCTION WITH THE LOCAL AUTHORITY.

THE DEVELOPMENT PLAN FRAMEWORK SHOULD REGULATE SERVICING IN CONJUNCTION WITH ACTIVE TRAVEL THROUGH SPDs AND AREA MASTER-PLANS.

PROVIDE IMPROVED AND FLEXIBLE PARKING PROVISION IN A CENTRALISED LOCATION(S) FOR SERVICE VEHICLES.

INCORPORATE TECHNICAL TOOLS SUCH AS GIS AND SMCE, TESTING THESE IN CONCERT WITH STAKE-HOLDERS.



Conclusion

Waltham Forest has experienced growth across a number of aspects since its low point in the early 2000s. Perhaps its greatest success however was its ability to build a vision of a different kind of city, a place that was safe, welcoming, green and sustainable (TimeOut, 2023).

Newer generations of residents identify with Waltham Forest, and not just their neighbourhood (Esom, 2014). 80% of residents are proud to live in Waltham Forest and 85% feeling a strong sense of belonging (Phil Batty & Sam Hunt, 2019). The borough has a young population more vulnerable to vehicles, and also more likely to take up active travel (Arup, 2021). There is great potential in Walthamstow Town Centre.

Waltham Forest has done well as a borough, particularly in creating a vision of sustainable mobility that Londoners can get behind. But in Walthamstow Town Centre, this vision is under threat. Success has led to a conflict



Figure 10: Walthamstow, the best place to raise a family? Source: TimeOut (2023)

between servicing the town centre, and the rapidly increasing population and visitors that the town centre serves.

Yet with its track record and thriving population, the borough may be the best placed to recognise, plan and respond. The opportunity is there for Waltham Forest to take a leadership role in tackling the challenges brought about by sustainable transition and economic growth, building a comprehensive and robust framework for sustainable mobility in Walthamstow Town Centre.

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