BSIP Guidance Assistance - Thurrock Council



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Prepared for:

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Bus Speed and Reliability Improvement Concepts Submitted by Ensignbus



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Executive Summary

Overview

This Bus Service Improvement Plan (BSIP), represents the opportunity to make a step-change in connectivity for those who live in, work in and visit Thurrock. For many local residents, Thurrock has an efficient bus service, which provides a good level of connectivity. Fares are largely affordable, and the infrastructure is of a high quality. — Every bus stop has a timetable case provided and information therein maintained by the Council, as informed by the local operators. Most important bus stops have shelters and a contract to renew these is in place.

Despite this, there remains the potential and necessity for improvement. Commuting in Thurrock is largely undertaken by private car — only 4% of such journeys are made by bus. The range of negative externalities this causes is broad: worsened air quality, congestion, and greater volumes of carbon dioxide emissions. Increasing the proportion of motorised trips made by bus is the ultimate aim of this BSIP; the interventions described here have all been designed with this aim in mind.

Many of these interventions focus upon the frequency of these services, at all times of day, every day in the week. Providing a regular service is critical for ensuring that bus use increases. If people feel like they can 'turn up and go', with a very low risk of being stranded by bus services not running in the evening, or at the weekend, they are more likely to consider it a credible mode of transport. As volumes of passengers increase, fare revenues will increase, allowing operators to further improve services — a virtuous cycle, which has been observed elsewhere.

The interventions identified here could not be delivered by the private sector alone; neither can the council realistically solely subsidise them. As such, central government funding will be critical for their delivery. Over the past decade, Thurrock has seen its budget become increasingly stretched, with a commensurate drop in bus ridership on reducing supported services. Should the interventions in this BSIP be delivered – and the funding to do so be provided – the trend in reducing ridership should be reversed.

Growth within the borough provides this opportunity to increase patronage on sustainable modes of transport. Increasing levels of investment in new employment sites in the past ten years, and further expected growth in jobs and housing provide opportunities to encourage sustainable travel behaviours. New emerging policies such as the Local Plan and Transport Strategy will support Thurrock in promoting and making available buses through infrastructure and service enhancements. The new Local Plan projects upwards of 30,000 new home and 18,000 new jobs by 2050 in Thurrock.

In many ways, Thurrock's geography lends itself perfectly to the delivery of a networked bus service with its numerous settlements conurbations. This means that a well-designed network should provide good connectivity for residents to travel across the borough from one area to another. This BSIP is designed to help the area reach this potential, making the bus network a key part of the area's transport infrastructure, one which local communities can rely upon.

i

1 Overview

General Context

1.1 Thurrock is a Unitary Authority of approximately 174,000 people, located on the Northern side of the Thames Estuary, on the outskirts of London (context map in Figure 1.1 with more detail in Figure 1.2). Thurrock's strong road transport connections with the rest of the country form a key part of its economic offer. It is home to three nationally strategic ports, lies at one end of the Dartford Crossing, is served by the M25, and has regular rail connections to London and Essex. This good connectivity has made the area an attractive site for freight and distribution centres. For example, in 2017, Amazon situated one of its largest 'fulfilment centres' in the area and the popular Lakeside Shopping centre is home to more than 300 shops.¹





¹ https://www.amazon.jobs/en/locations/tilbury-uk

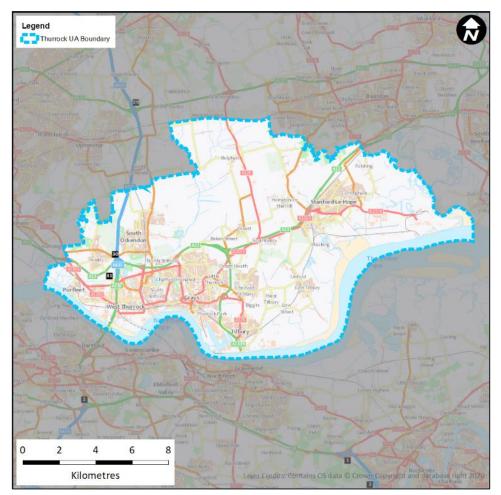


Figure 1.2: Location map of Thurrock Unitary Area

- 1.2 Thurrock's average household income -£37,116 before housing costs is relatively high in comparison to the UK national average of £34,489. However, the cost of living in southeastern England is higher than most places meaning that the average net household income after housing costs falls to £27,937, lower than the national average of £28,105.
- 1.3 Table 1.1 provides a summary breakdown of the top 10 employment categories in the Thurrock area. This breakdown highlights the fact that Education, Construction, and Transport and Storage make up a significantly higher proportion of Thurrock's economic background than is common across England. Jobs in these sectors may not be as high paying as jobs in other professional categories common the South East of England, such as financial services, business and administration, and information and communications technologies. This may go some way toward explaining why the net income after housing is lower in Thurrock than the English average.

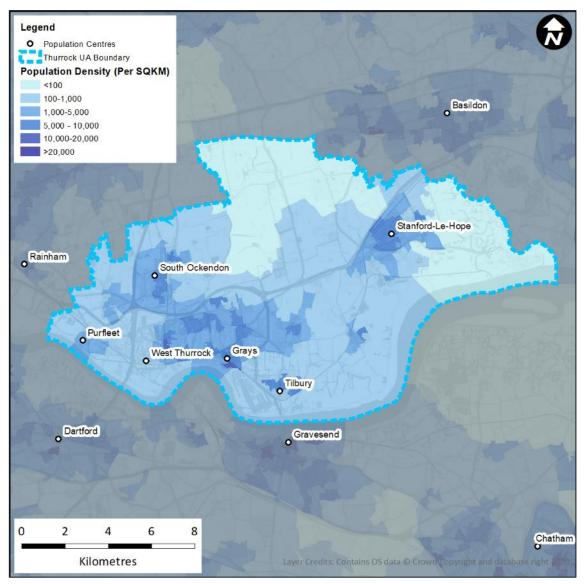
Table 1.1: Employment Breakdown: Residents of Thurrock Area

Employment Category	Percentage	England Average
Education	17.9%	8.4%
Health	11.3%	12.4%
Construction	11.0%	5.0%
Transport & storage (inc postal)	10.5%	5.0%
Retail	8.3%	9.2%
Accommodation & food services	6.6%	7.5%
Business administration & support services	6.4%	8.9%
Professional, scientific & technical	5.5%	9.2%
Manufacturing	4.5%	7.8%
Arts, entertainment, recreation & other services	4.2%	4.6%

Source: Steer Analysis of BRES Data

1.4 Currently, Thurrock's population is concentrated into three major conurbations - South Ockendon, Grays, and Stanford-Le-Hope. The northern and eastern portions of the area are more rural in nature, with significant areas of farmland and some smaller hamlets. The distribution of resident population density for Thurrock is shown in Figure 1.3.

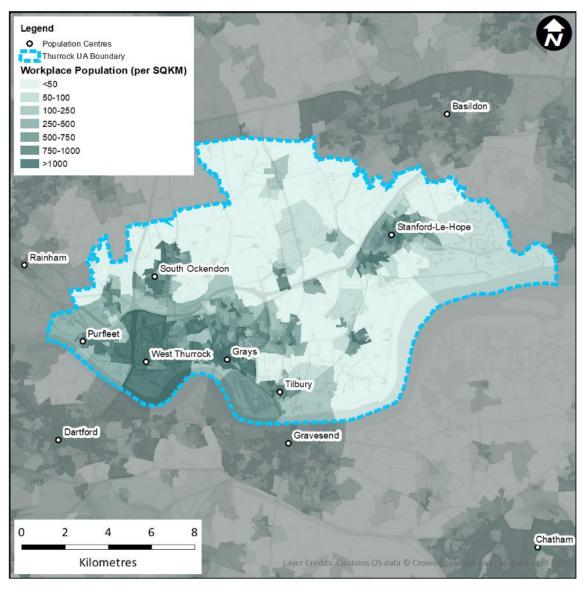
Figure 1.3: Population Density



Source: Census 2011

- 1.5 Employment density follows a similar, albeit more pronounced, trend to population density. This is illustrated in Figure 1.4. Particularly high employment densities are found along the River Thames these are traditional employment centres, historically dependent upon the docks, but now refocussed towards transportation, freight, construction and retail jobs.
- 1.6 Future development in the area is expected to be significant. As part of the Thames Gateway national growth area an area which has become a priority area for urban regeneration it is expected that between 2001 and 2026 there will be a need to provide an additional 23,250 new homes and 26,000 new jobs.²

Figure 1.4: Employment Density

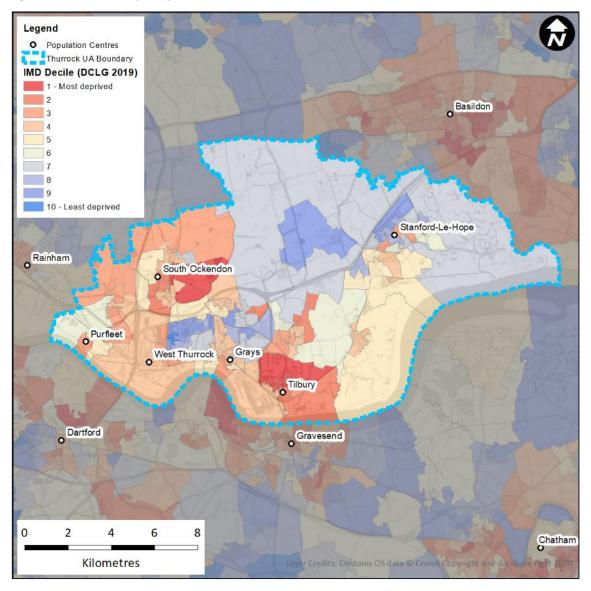


Source: Census 2011

² https://www.thurrock.gov.uk/sites/default/files/assets/documents/strategy_transport_2013.pdf

1.7 Thurrock has relatively high levels of deprivation, with several areas falling within the most deprived 10% of all areas in the country. This is illustrated by Figure 1.5. The main areas of deprivation are concentrated in the South and West of Thurrock, around Tilbury and South Ockendon. However, it is important to note that this is partially the nature of the way that the Index of Multiple Deprivation is calculated – rural areas tend to fare better when appraised using this metric, due to the lower concentrations of any single social group.

Figure 1.5: Index of Multiple Deprivation

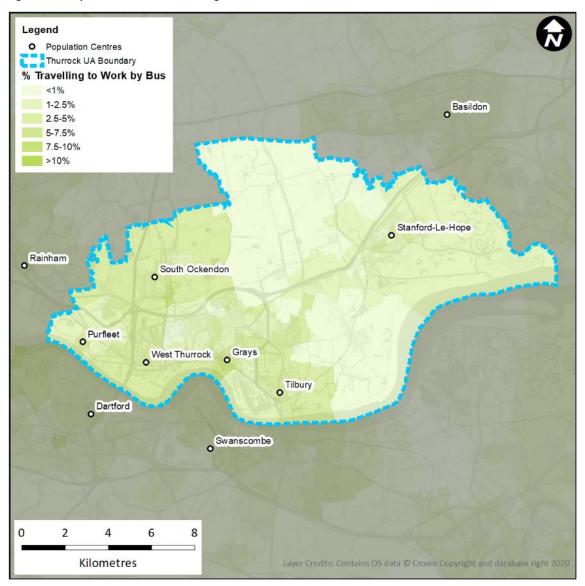


Source: Index of Multiple Deprivation, DCLG 2019

General Transport Context

1.8 Here a broad overview of Transport within Thurrock is provided. Detail about the bus network is available in Chapter 2. As mentioned above, Thurrock has relatively good connections to the rest of the country; it lies on the M25, the River Thames, and has rail links to London and south Essex. However, public transport connectivity within Thurrock is variable, leading to low public transport mode shares, and relatively high private car use. This is illustrated by Figure 1.6 and Figure 1.7. Figure 1.6 illustrates that the proportion of people using Bus to travel to work is relatively low in Thurrock, with the majority of areas below 5% mode share. In general, mode shares are higher in areas with higher population and employment densities (as shown in Figure 1.3 and Figure 1.4), and lower in more rural areas. Within Thurrock, in 2018/19 there were approximately 28 journeys per head, as compared to the England average of 77, and the London average of 247.³

Figure 1.6: Proportion of Commuters using Bus

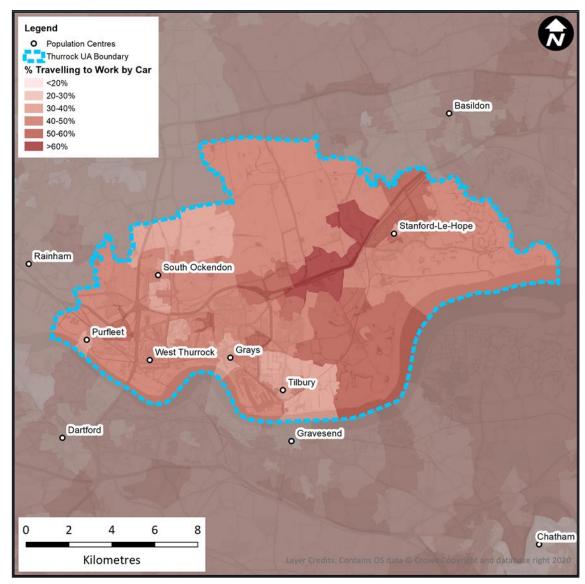


Source: Census 2011

³ Passenger journeys on local bus services per head by local authority: BUS 0110: England, from 2009/10

1.9 The low bus patronage is reflected by relatively high car usage for commuting journeys. This is illustrated by Figure 1.7. In many areas, the car is the dominant mode of transport for travelling to work, with some areas seeing a mode share greater than 60%. Unsurprisingly, Car mode share is particularly high in areas outside the main urban conurbations.

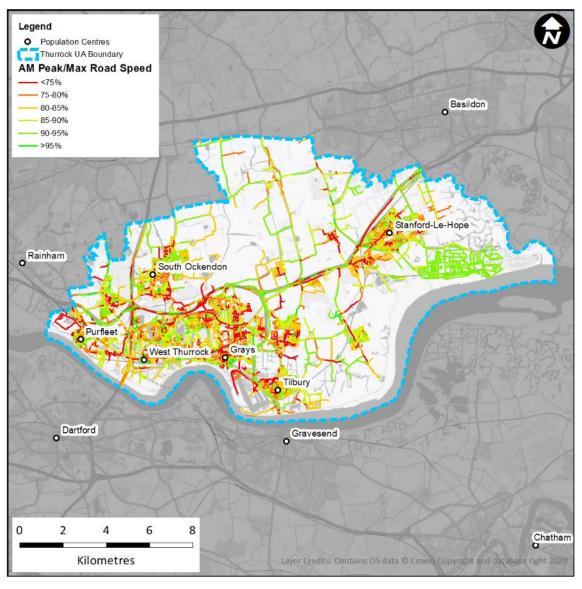
Figure 1.7: Proportion of Commuters using Car



Source: Census 2011

1.10 Congestion on the road network is illustrated in Figure 1.8, which maps the free flow speed (speed during the night when road usage is low), against congested road speeds. Congestion is a significant issue in Grays, and also causes problems in Stanford-Le-Hope. However, this fails to fully represent congestion experienced in the area. This is because congestion tends to become a major issue when the M25 and/or A13 are affected by incidents. When this happens, traffic across the area is impacted, with major spill-over congestion into the surrounding local areas.

Figure 1.8: Indicative Congestion



Source: Pitney Bowes Drivetime Data (2018)

Strategic Context

Existing Policies

Core Strategy and Policies for Management of Development (as amended) (2015)

- 1.11 The strategic framework governing transport interventions and planning within Thurrock are supported by land use policy and transport policy documents. The overarching policy is the existing Local Development Framework Core Strategy and Policies for Management and Development. This provides the planning policy framework for land use and new development within the borough. Adopted in 2015, this proposed the development of approximately 18,000 new homes by 2026 supported by 26,000 new jobs.
- 1.12 Policies within the Core Strategy support enhancements to bus networks, to help make existing communities and new developments to become more sustainable. Policy CSSP3 identifies bus service infrastructure improvements and rail station enhancements as key infrastructure needs to deliver the plan. Transport specific policies also seek to enhance the bus network. Policy CSTP 14 sought to reduce car traffic by 10% by 2026 using a broad range of measures. Policy CSTP 15 proposed to increase accessibility to places of work, education and healthcare, while Policy CSTP 16 states improvements to transport networks to minimise capacity constraints with high quality inter-urban public transport routes running on a 30-min frequency.
- 1.13 A new Local Plan is currently in development.

Thurrock Transport Strategy

- 1.14 The Thurrock Transport Strategy, adopted in 2013 sets out the strategic framework for transport provision across the borough and to support the overarching goals of the Core Strategy and Local Development Framework. The strategy recognises the wider need for transport to help deliver sustainable growth and regeneration in the borough.
- 1.15 The Transport Strategy provides a supportive local policy environment, which aligns closely with the objectives in the government's Bus Back Better documentation, and the BSIP guidance, with a number of elements within the strategy overlapping with the proposed BSIP. The most pertinent of these are summarised in Table 1.2.

Emerging Strategies

New Local Plan and Transport Strategy and Vision

- 1.16 Thurrock Council is in the process of developing a new planning policy strategy which will help support land use planning and new development within the borough until 2040. The Local Plan is indicatively looking to propose up to 32,000 new homes and up to 18,500 jobs across Thurrock over the life of the strategy. This will see new housing sites be developed, allowing new opportunities to develop sustainable communities with active and sustainable transport opportunities at the heart of their development, including bus. The new Local Plan is due to be adopted in 2023.
- 1.17 Developed alongside the Local Plan is a new Transport Strategy. Still in early development, a Vision for Transport is being developed, identifying how sustainable transport opportunities are core to the sustainability of communities within and beyond the borough. Extensive work is being undertaken to review existing provision, and those enhancements which are required to link the borough with its neighbouring communities. Both the Local Plan and Transport

Strategy will be supported by a Multi-Modal transport model. The Transport Strategy should be completed and adopted in 2022.

Table 1.2: Relevance of Thurrock Transport Strategy to the BSIP

Relevant Elements	Detail relevant to BSIP
Delivering Accessibility	 Integrating with other service providers and planners to influence where and how they deliver their services as a non-transport way of improving accessibility, especially the location of new education or hospital facilities Working with the Voluntary and Community Sector in developing Demand Responsive and Community Transport Improving connections between modes and enhancing the public realm at transport interchanges / rail stations in Tilbury, Grays, Chafford Hundred, Purfleet-on-Thames and Stanford le Hope (London Gateway) to aid access to Thurrock's key strategic economic hubs in particular Improving information and ticketing arrangements Ensuring equality of opportunity by incorporating the needs of people with mobility impairments or disabilities in the design and delivery of improvements
Tackling Congestion	- Using an intensive programme of smarter choices to deliver a modal shift, especially in urban areas, in particular workplace and school travel plans. This will support the delivery of better sustainable transport infrastructure, such as cycle routes and public transport priority - Promoting modal shift on interurban journeys through high quality public transport between growth areas, key strategic economic hubs and to other Regional Transport Nodes - Promoting capacity improvements on the Strategic Road Network, with priority for freight routes to key strategic economic hubs and interurban bus routes, where modal shift and network management are insufficient. Improvements have been identified on M25, A13 and A1014
Improving Air Quality and Addressing Climate Change	- Prioritising actions that both improve local air quality and reduce CO ₂ emissions. These will include working with partners and transport operators to increase the use of low emission vehicles or using retrofitting, better operating practices such as switching off engines or eco-driving, and beneficial car parking for low emission cars
Safer Roads	- Give priority to improving road safety in disadvantaged communities, integrating with wider programmes such as neighbourhood renewal, as well around schools and major workplaces. Again, the focus will be on reducing the adverse impact of traffic, such as traffic speed and volume, and helping support modal shift programmes

Climate Policies

1.23 Thurrock has a number of climate policies, which are broadly supportive of modal shift towards public transportation. For example, the Climate Local Thurrock plan recognises the urgency and importance of cutting carbon dioxide emissions. It provides evidence that although Thurrock cut its emissions by 37% from 2005 to 2011, transport emissions have remained essentially constant (and therefore the transport percentage has increased). To help accelerate reduction in emissions, this plan recommends following the suggestions of the Transport Strategy (as set out above), in addition to converting current bus vehicles to hybrid and/or hydrogen fuel.⁴

Overall Summary

- 1.24 Thurrock is an area with a mixed socioeconomic geography. Despite high employment, economic outcomes are not as strong as other areas with similar proximity to London. The transportation network is both one of the area's strengths and weaknesses. It provides good connectivity for freight, but is not well designed for public transportation. Moreover, the polycentric and dispersed geography mean that clear options for the development of an effective transport network are not obvious.
- 1.25 Overall, this means that public transport mode share is relatively low across the area; Bus patronage in particular is very low. As will be explored in subsequent chapters, this means that it is difficult to commercially justify the type of service provision necessary to cater for all communities effectively. This, of course, means that bus services are less attractive to potential passengers, leading to a downward spiral as regards patronage, revenues, and provision.
- 1.26 Ultimately then, there is high potential for a transformative change in the way that transportation and buses in particular are delivered across the area. The subsequent chapters outline the steps necessary to achieve this.

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⁴ Thurrock Climate Local Action Plan: Thurrock Council, 2015

2 Current Bus Offer to Passengers

Overview

- 2.1 In this chapter, an overview of Thurrock's current bus network is provided. This information, along with input from local stakeholders, has been used to develop the recommendations which are set out in Chapter 4. In particular, areas where there are significant gaps in the network, or where it is clear that improved network provision would help to alleviate underlying socioeconomic issues, have been taken forward into the recommendations for enhancement. An overall map of the Thurrock Bus network is provided in Figure 2.1.
- At the outset, it is important to note that the network of services that operators provide is based upon achieving a commercially viable service, but does not explicitly acknowledge need. A number of the current commercial services are marginal, and over recent years, changes to the network have resulted in greater concentration on the core network. Although the council financially supports a number of services, it is not able to support all of the services it would like, to provide a high-quality service to all communities.



Figure 2.1: Map of Thurrock Bus Network

Source: Thurrock Council

Accessibility

- Analysis examining the frequency of bus services by proportion and spatial location across Thurrock has been conducted to highlight locations where there is currently poor or no service provision in the AM peak period (08:00-08:59). This analysis is limited by the input data⁵ and should not be considered in terms of the absolute numbers presented below, however, it is a good indication of the relative level of service across the borough and is a useful indication of potential gaps in the service.
- 2.4 Figure 2.2 shows postcodes within 400 m of Bus Stops. They are coloured by service frequency, revealing concentrations population served by a low level of frequency.

Legend Thurrock UA Boundary Am frequency within 400m (postcode centroids) 1 or lower 2 3 4 5 or higher C D G 2 6 8 Layer Credits: Contains OS data O Grown Copyright and database right 2020 **Kilometres**

Figure 2.2: Population (Postcodes) by access to their highest bus service Frequency within 400m

2.5 The figure reveals:

• Significant parts of urban Thurrock are well served with at least three buses per hour.

⁵ The data records services at each bus stop in the hour between 08:00 and 08:59. Therefore a location with its only service at 07:55 (even though it might arrive at Grays or Basildon between 08:00 and 08:59) will show as having "no service"

Low levels of service are concentrated at the locations shown in Table 2.1.

Table 2.1: Poorly Served Communities in Thurrock

Figure 2.2	Location	Notes on Bus Service
Α	Part of South Ockendon	No service east of main road
В	Bulphan	Infrequent Monday to Saturday service to Brentwood (565). Three days a week service to Grays (265)
С	Orsett	Hourly service Monday to Saturday daytimes (5B)
D	Horndon-on-the-Hill	6 services per day (11), Monday to Friday
E	Fobbing	14 services per day, Monday to Fridays; 4 services per Saturday (11, 374)
F	East Tilbury	8 services per day, Monday to Fridays; 4 services per Saturday (374)
G	Fort Road	Just over 400m from regular service. Little housing
Н	Grays Beach	No bus service. Approx. 600m from transport interchange and 800m from Grays shopping centre
I	Badgers Dene	No bus service. Approx. 800m from transport interchange and 600m from Grays shopping centre

2.6 Other areas indicating a low level of service frequency are largely trading estates and warehouses.

Operational Structure

- 2.7 There are four operators running services in the area. These are:
 - Ensignbus
 - First Essex
 - NIBS Buses/Stephensons⁶
 - Transport for London (TfL)
- 2.8 The TfL services are provided by other operators under contract to TfL and link Thurrock with parts of Greater London.
- 2.9 Some services, particularly those operated by First, operate into Essex.
- 2.10 The high frequency services are shown in Table 2.2 (A full list of all bus services in Thurrock is provided in Appendix A).
- 2.11 This shows that while the Monday to Saturday daytime services are comprehensive, evening and Sunday services have less coverage.

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⁶ Part of the same owning group

Table 2.2: Frequent Bus Services in Thurrock Area (Approximate Buses per Hour)

Route	Links	Operator	Mon-Fri Daytime	Mon-Fri Evening	Sat Daytime	Sat Evening	Sun Daytime	Sun Evening
5A/5B	Pitsea – Basildon – Stanford-le-Hope – Grays	First Essex	2	0	2	0	0	0
22	Aveley – Lakeside – Grays	Ensignbus	3	0 ⁷	2	0 ⁷	1	18
33	Chafford Hundred – Grays	Ensignbus	2	0	1	0	0	0
44	Lakeside – Purfleet-on-Thames – Grays	Ensignbus	2	1	2	0	1	0
66	Chadwell – Tilbury – Grays	Ensignbus	2	0	2 ⁸	0	18	0
73/73A	Lakeside – Grays – Tilbury	Ensignbus	2	0 ⁷	2	0 7	2	0.5
77/77A	Aveley – Lakeside – Grays – Tilbury	Ensignbus	0 ⁹	2	0 ⁹	2	0	0
83	Lakeside – Grays – Chadwell St. Mary	Ensignbus	2	0	2	0	0	0
88	Stifford Clays – Grays	Ensignbus	1 ¹⁰	0	1	0	0	0
99	Tilbury Ferry – Tilbury Station	Ensignbus ¹¹	2	0	2	0	0	0
100	Basildon – Grays – Lakeside	First Essex	3	1	3	1	2	0
370	Lakeside – Romford	TfL ¹²	4	2	4	2	2	2
372	Lakeside – Hornchurch	TfL ¹³	3	2	3	2	2	2
X80	Chafford Hundred – Bluewater	Ensignbus	1	1	1	1	1	0

⁷ Evening service provided by service 77/77A

⁸ Part route only

⁹ Daytime service provided by services 22 and 73

¹⁰ Two buses per hour at peak times

¹¹ Supported by c2c as required by the Essex Thameside rail franchise

¹² Currently contracted to Arriva

¹³ Currently contracted to Stagecoach

- 2.12 The network is generally comprehensive, but in some areas, complex. The complexity is primarily seen where the provision of Ensignbus services to particular areas at different times of day is by different service numbers.
- 2.13 For example, Monday to Saturday early mornings routes 22 and 73 are merged to form route 77, but Monday to Saturday evenings routes 22 and 73A are merged to form route 77A. On Sundays, route 73 becomes route 73A to serve part of Chadwell served during the week by route 83.
- 2.14 This has been forced on Ensignbus to achieve reliability. Both passenger demand and the operator's preference would be to run the 77 service at all times, but the periodic instances of delay caused by traffic congestion has forced it to split the service in Grays during the daytime. This is inconvenient for passengers and costs Ensignbus resources.

Patronage

2.15 The number of passenger trips recorded in the borough by DfT bus statistics has shown a rise in the last two years (pre-COVID-19). The numbers are shown in Figure 2.3.

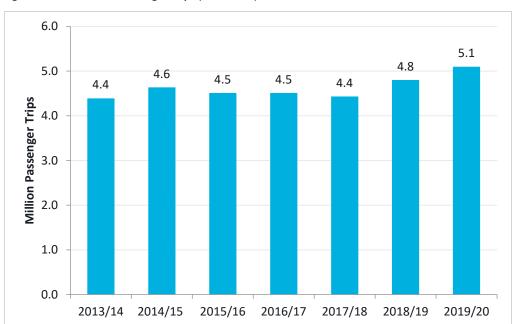


Figure 2.3: Annual Bus Passenger Trips (2013-2020)

DfT Bus Statistics Bus0109.ods

2.16 Breaking this down by operator, the corresponding graph for Ensignbus is shown in Figure 2.4. This shows that Ensignbus has driven the growth in passengers, which is largely associated with additional services for the Amazon Distribution Centre¹⁴.

17

¹⁴ Source – Thurrock Transport Officer

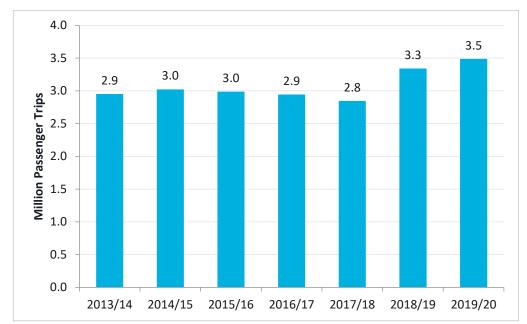


Figure 2.4: Annual Ensignbus Bus Passenger Trips (2013-2020)

- 2.17 Passenger trips on the Thurrock tendered services operated by NIBS and Stephensons are of the order of 90k per annum.
- 2.18 Data from TfL shows that the passenger numbers on its three routes into Thurrock have remained largely constant. The results for the **whole** routes are shown in Figure 2.5.

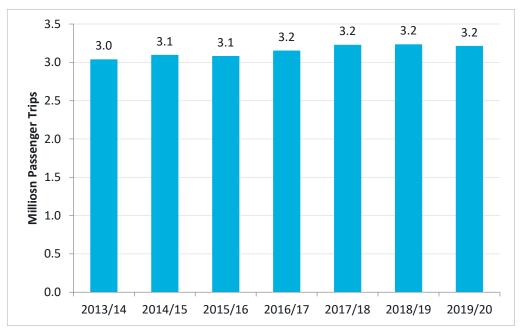


Figure 2.5: Annual TfL Bus Passenger Trips on routes 347, 370 and 372 (2013-2020)

https://tfl.gov.uk/corporate/publications-and-reports/buses-performance-data

2.19 TfL have provided access to Oyster/contactless "touch in" records for the bus stops they serve in Thurrock for the last four years. These are shown in Figure 2.6.

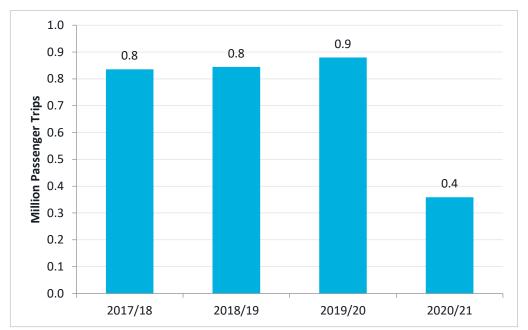


Figure 2.6: Annual TfL "touch in" Trips on routes 347, 370 and 372 within Thurrock (2017-2021)

- 2.20 This data will capture all passenger trips wholly within Thurrock together with passengers boarding in Thurrock for destinations within Greater London. It does not include passengers travelling to Thurrock from origins within Greater London.
- 2.21 First Essex have provided Covid data (Figure 3.3) which show that the average weekly Thurrock demand was approximately 12,000 per week. This suggests that First was carrying around 630,000 Thurrock passengers a year.
- 2.22 Based on the passenger numbers above, we can estimate the market share in Thurrock between the operators as shown in Figure 2.7. This shows that Ensignbus have around 70% of the market measured this way.

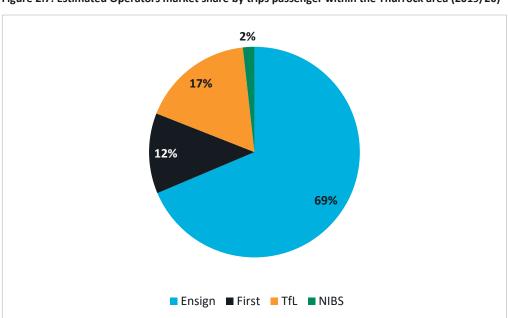


Figure 2.7: Estimated Operators market share by trips passenger within the Thurrock area (2019/20)

Source: Steer Analysis

Concessions

2.23 Trips made by concessionary pass holders have remained broadly constant until 2019/20 when a 10% dip was observed. The numbers travelling are shown in Figure 2.8.

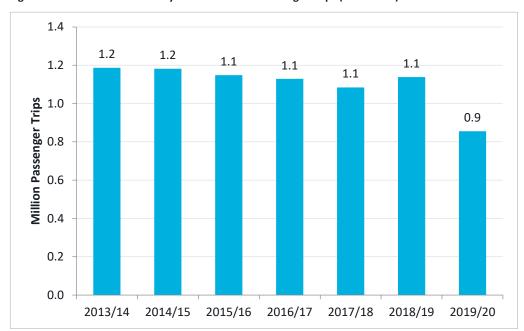


Figure 2.8: Annual Concessionary Pass Holder Bus Passenger Trips (2013-2020)

- 2.24 The fall may be due to the onset of the COVID-19 pandemic at the end of that year. Up to then no discernible effect from the rise in the female retirement age (and therefore the qualification for a bus pass) was visible.
- 2.25 There are currently 20,808 concessionary pass holders in Thurrock of which 19,137 are older persons. The remainder are those with a registered disability, 632 of whom have a Companion pass.

Mileage

2.26 The mileage operated has also risen over recent years. The changes are shown in Figure 2.9.

4.5 4.1 3.9 4.0 3.7 3.5 3.2 3.1 3.1 3.1 3.0 Million Kms 2.5 2.0 1.5 1.0 0.5 0.0 2013/14 2014/15 2015/16 2016/17 2017/18 2018/19 2019/20

Figure 2.9: Annual Bus Kilometres (2013-2020)

Analysis of DfT Bus Statistics Bus0208.ods

Supported Services

- 2.27 A total of eight services are not commercial, supported by public authorities.
- 2.28 Three services are supported by Thurrock Council and awarded through a tender process.

 These are:
 - 11 linking Purfleet-on-Thames with Basildon
 - 265 linking Bulphan with Grays
 - 374 linking Grays with Basildon
- 2.29 TfL services are also not commercially operated, but are funded by TfL (with no financial support from Thurrock Council). These are:
 - 347 linking Romford with Ockendon
 - 370 linking Romford with Lakeside
 - 372 linking Hornchurch with Lakeside
- 2.30 Two services are fully supported by Essex County Council. These are
 - 269 linking Grays with Brentwood
 - 565 linking Bulphan with Brentwood
- 2.31 These services represent approximately 22% of bus mileage in the area. ¹⁵ The services supported by Thurrock represent 7% of bus mileage.
- 2.32 The Thurrock supported services are described in Table 2.3.

21

¹⁵ DfT Bus Statistics Bus0208.ods 2019/20

Table 2.3: Subsidised Bus Services (2020/21)

Service	Operator	Gross Financial Support	Mileage	£/Mile
11	NIBS Buses	£232,815	92,484	£2.52
265	Stephensons ¹⁶	£22,200	7,748	£2.87
374	NIBS Buses	£197,128	84,512	£2.33
Total/Average		£452,143	184,744	£2.45

2.33 The funding spent on supported services within Thurrock has declined significantly over the past 10 years, as illustrated in Figure 2.10.

Figure 2.10: Funding for Supported Bus Services: 2011 – 2021



Source: Thurrock Council

2.34 This has resulted in a service being provided for every community unserved by a commercial service but has not allowed the provision of any evening or Sunday services. One community only has a service to Grays three days a week offering two return trips, one has no Saturday service and the level of service offered to all communities is unattractive. This has created isolated and increasingly inaccessible communities.

Reliability

- 2.35 The Traffic Commissioners set a reliability target that 95% of services should be within a window of tolerance of one minute early and five minutes late. The majority of services in Thurrock achieve this standard; across 2019/20, more than 91% of services ran on time, while in 2020/21 (when services were impacted by the pandemic), more than 97% of services ran on time.
- 2.36 The general characteristic of bus service time keeping in Thurrock is that most services run punctually much of the time; but that any significant disruption the adjoining trunk roads

¹⁶ While NIBS have the contract for this service, the registered service is operated by Stephensons, part of the same group.

(M25 and A13) has a disproportionate effect on congestion on the conventional street network in Thurrock. In extremis this can result in buses running many hours late. Much of the good timekeeping is delivered by the operators adding contingency time in their timetables and terminus buffer times. This "padding" slows down journey times, making the bus less attractive to passengers and adds to the operators' costs.

- 2.37 In addition, service X80 linking Lakeside and Bluewater shopping centre in Kent is particularly prone to disruption as it uses the Dartford Crossing to cross the River Thames.
- 2.38 In 2019/20, the only bus services with less than 80% of trips running on time were services 5A, 5B, and 100.¹⁷ These services are longer than most in Thurrock as they provide interurban connections with Basildon, Chelmsford and Pitsea in Essex. This increased length means that there is more opportunity for delays to accrue during service operation.
- 2.39 In recognition of this, from 1st September 2021, First Essex split the 100 service into two separate routes either side of Basildon. This introduces additional turn round time at Basildon and journey times have been lengthened between Basildon and Lakeside. To keep costs under control, the frequency has been reduced from four to three buses per hour.
- 2.40 Ensignbus states that they have "never cancelled a journey due to there not being a bus or driver available that's not to say we don't cancel journeys, but it is always caused by problems outside our control, like the Dartford Crossing being closed or delayed, heavy traffic, road works etc." This is achieved by having spare buses and drivers available at all times. This no doubt adds to Ensignbus' operating costs which, in turn, may be reflected in its fare levels.

Bus Stops

2.41 There are a total of 612 bus stops in Thurrock. 160 of these are equipped with a passenger waiting shelter.

Bus Priority

- 2.42 Bus Priority infrastructure provision is limited in Thurrock. Currently there are only three areas with significant bus priority measures;
 - Askey Farm Land/London Road, South Stifford. Eastbound, close to the junction for Askeys Farm Lane:
 - Section 1: 35 m (Figure 2.11)
 - Section 2: 35 m (Figure 2.12Error! Reference source not found.)
 - High Road, North Stifford (next to the North Stifford interchange):
 - Eastbound: 24 m (Figure 2.13)
 - Westbound: 21 m (Figure 2.14)
 - Stifford road, entering Aveley: 44 m (Figure 2.15)
- 2.43 These are generally in place to allow full size buses to use roads that have physical 6'6" width restrictions. Illustrations of these sections are provided in the figures below.

¹⁷ Thurrock Bus Statistics

¹⁸ E-mail Correspondence with Ensignbus

Figure 2.11: Askey Farm Land/London Road, South Stifford, Section 1



Source: Thurrock Council

Figure 2.12: Askey Farm Land/London Road, South Stifford, Section 2



Source: Thurrock Council

Figure 2.13: High Road, North Stifford (next to the North Stifford interchange); Eastbound



Source: Thurrock Council

Figure 2.14: High Road, North Stifford (next to the North Stifford interchange); Westbound



Source: Thurrock Council

Figure 2.15: Stifford road, entering Aveley



Source: Thurrock Council

Journey Time Changes

- 2.44 As a consequence of the limited bus priority provision and the general rise in traffic congestion, planned bus journey times have had to be lengthened in recent years to maintain punctuality and provide some resilience from delays. For example;
 - Service 44 08:30 from Lakeside to Grays: In 2010, morning peak services took 29 minutes; today these services take 33 minutes (a 14% worsening).
 - Service 73 Lakeside to Grays: in 2010, morning peak services took 10 minutes; today these services take 14 minutes (a 40% worsening).
 - Service 100 Basildon to Lakeside: In 2010, morning peak services took 57 minutes; today these services take 63 minutes (a 7% worsening).
 - Service 370 from Romford to Lakeside at 09:04: in 2010, morning peak services took 58 minutes; today these services take 62 minutes (a 7% worsening).

Parking

2.45 Thurrock Council is in the process of preparing a parking strategy considering the scope of parking across the unitary authority. The three tables presented below show the current number of parking spaces across the borough and their distribution.

Table 2.4: Total On-Street and Off-Street Spaces (2018)

Location	Number of Spaces
Marked bays for off-street parking	1,161
Marked bays for on-street parking	1,255
Off-street parking spaces not marked out as individual bays	78
On-street parking spaces not marked out as individual bays	195

Source: Parking Policy and Strategy, Thurrock Council (2020)

Table 2.5: Car Parks in Grays (2018

Location	Number of Spaces
Darnley Road (off-street short stay)	30
Argent Street (off-street long stay)	42
Cromwell Road (off-street long stay)	60
Crown Road (off-street long stay)	96
Station House, opposite rail station main entrance (off-street long stay)	10
Grays Beach, Thames Road (off-street long stay)	48
Multi-storey car park	740
Morrison's supermarket	540
Grays Station	168

Source: Parking Policy and Strategy, Thurrock Council (2020)

Table 2.6: Car Parks Outside Grays (2018)

Location	Number of Spaces	Charges
Gordon Road (Grover Walk), Corringham	112	Free
Gordon Road (Police station), Corringham	53	Free
Giffords Cross, Corringham	78	Free
Defoe Parade, Chadwell St Mary	56	Free
Lodge Lane, Grays (Socketts Heath)	56	Free
Cornwell House, Purfleet-on-Thames	100	Pay
Canterbury Parade, South Ockendon	100	Pay ¹⁹

Source: Parking Policy and Strategy, Thurrock Council (2020)

2.52 The total direct cost of parking enforcement in Thurrock in 2018/19 was £579,201. Adding in the administration, infrastructure and capital costs, this figure comes to £701,401. However, parking enforcement remains a net generator of income for the area – in 2018/19 once the income from charges is considered, the net income from parking is £406,951.²⁰

Current Staffing

2.53 Thurrock has five key staff members working on buses in the Thurrock Passenger Transport Unit (PTU). Their job titles and roles are explained in Table 2.7Table 2.4.

¹⁹ Free up to 1 hour, 1 to 2 hours – 60p, over 2 hours £2.10

 $^{{\}color{red}^{20}} \ \underline{\text{https://www.patrol-uk.info/annual reports/Thurrock/Thurrock-Council-Figure 2.parking annual report 2019.pdf}$

Table 2.7: Staff working on Public Transportation

Title	Task	Time per week spent on public transport
Passenger Transport Manager (Team Leader)	Passenger transport, school transport procurement	10%
Transport Officer	School transport procurement	0%
Transport Officer	Public transport	100%
Information and Monitoring Assistant	Public transport, other	95%
Senior Project Manager	Public Transport	20%

- 2.54 The PTU provides daily customer service on a variety of issues ranging from requests for new bus stops through to quality of service and safety of passengers, and provision of concessionary passes.
- 2.55 The PTU also works in connection with the Procurement team for the tendering and deployment of contracts for local supported bus services. These are invariably large-scale projects which can take some months to complete.
- 2.56 PTU has a dedicated Monitoring and Information Officer that regularly inspects and checks local bus services at certain areas/points within the borough. A total of 23 local bus routes are monitored at 11 sites at least twice every month. Monitoring sites include (but are not limited to) passenger interchanges at Grays and Lakeside Bus Stations, Socketts Heath Parade, Purfleet and Ockendon Rail stations. The team monitors most bus shelters and stops within the borough and carries out condition checks to ensure these are functioning sufficiently (sample images of the types of shelters which can be found in the Thurrock area are in Appendix C). Any vandalism or substantial damage is reported to a maintenance contractor for remedial action. Any small-scale maintenance required is usually completed by the team themselves in –house.
- 2.57 Bus services are monitored for their punctuality and to ensure their timetable remains reliable. Additionally, operational issues are checked and reported if necessary. Home to School transport routes are monitored periodically, and when necessary, specific route checks are undertaken. This is usually as a result of a customer enquiry/concern.

3 Covid – 19

Patronage

- 3.1 From March 2020, passenger numbers were significantly hit by the onset of the Covid 19 pandemic.
- 3.2 Ensignbus has provided quarterly patronage data which is shown in Figure 3.1:

Figure 3.1: Quarterly Ensignbus Patronage during the Pandemic



- 3.3 This shows that patronage dropped to around 20% of pre-Covid levels in 2020 Q2 and has recovered to just under 70% in 2021 Q2. Over the 2020/21 financial year patronage was at 38% of 2019/20 levels.
- 3.4 The reduction in commuter traffic, particularly into London will have had a significant knockon effect on Ensignbus patronage feeding into Grays station.
- 3.5 TfL figures (Figure 3.2) show that the 2020/21 patronage on their three routes in Thurrock was 41% of that in 2019/20.

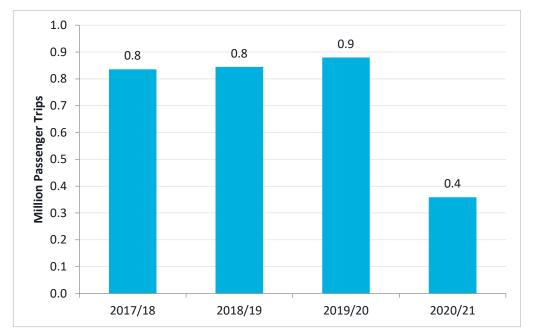


Figure 3.2: Annual TfL "touch in" Trips on routes 347, 370 and 372 within Thurrock (2017-2021)

- 3.6 First have provided a display of graphs for demand in Thurrock over the pandemic period. This is shown in Figure 3.3. The graphs show a similar story of slow recovery from 2019 levels, with patronage approximately half of that from pre-Covid.
- 3.7 Early advice from the Government following the easing of national lockdown measures encouraged active or personal modes of travel such as the car, rather than passenger transport modes such as buses and trains. The subsequent response by the population has resulted in significant reductions in bus travel across the country since early 2020, with patronage levels failing to recover to 2019 levels.
- 3.8 The opportunities provided by enforced lockdown for more people to work from home has also meant a new way of working away from the office, negating the traditional commute. The reduction in rail commuter travel has therefore had a knock on effect on commuters using the bus to access railway stations. If, as projected, there is not a return to office working on a full-time basis by workers, this will inevitably result in a long-term reduction in patronage and therefore income for bus operators.
- There is still a nervousness amongst some sections of the community to return to prepandemic travel levels, and for some the need to make a journey by bus has changed, and in some cases eliminated. Taken with the evidence provided by Ensign, TfL and First Essex, there are real concerns regarding the opportunity for patronage levels to recover in the short-to medium-term, impacting on the profitability of operators, and the viability of their routes. At present, the Thurrock network relies entirely on Government and Local Authority funding to survive, and is likely to be the case for the foreseeable future.

First 6 Bus Total Weekly Passengers over time by Local Autl 🖈 🗈 🔽 🗠 First Bus Passengers Recovery Index by Local Authority District (Top **Covid19 Recovery** 10 by passenger volume) vs Baseline Year-on-Year Trend (7 day Local Authority Dis... • Thurrock **First Bus Passengers** rolling average) by Local Authority Local Authority Dist... • Thurrock over time PaxRecoveryIndexYoBaselineY ... 10K OpCo/Market TotalPax Select all (Blank) (Blank) 5K ✓ □ Aberdeen ✓ ☐ Aircoach ✓ □ Cymru ✓ Essex ✓ □ FEC Mar 2021 May 2021 Jul 2021 Sep 2021 Jul 2020 Jan 2021 Jul 2021 Glasgow Week commencing Week commencing Year on BaselineYear (Mar19-Feb20) Weekly Pas: 🖈 🖟 s 🔽 € 🖾 \cdots Local Authority District Total Weekly Passengers over time time by Week Commencing Epping Forest ● Total Pax This Year ● Total Pax Last Year ● TotalPax 2 Years Ago LADname 2021 01/08/2021 08/08/2021 15/08/2021 22/08/2021 29/08/2021 Harlow Maldon Thurrock -41% -35% -28% -48% Redbridge Total 41% -37% -35% -40% -28% -48% Rochford Total Passengers ☐ Southend-on-Sea Tendring Thurrock Demographic Select all Adult Child/Youth/Student Mar 2021 May 2021 Jul 2021 OAP/Disabled Concession Week Commencing

Figure 3.3: First Bus Passenger Demand in Thurrock during the Covid-19 Pandemic

4 Improvement Plans

Overview

- 4.1 This section of the plan provides an overview of the Improvement Plans and the areas they will focus on. These plans have been developed through collaboration with bus operators in Thurrock and through public engagement with residents and other stakeholders, and examination of the information in the preceding chapters. Ultimately this means that the plans for improvement here are based upon a detailed understanding of the local geography, developed through experience, and quantitative analysis.
- In particular, stakeholders identified a need for more comprehensive timetabling on existing routes. A primary objective of BSIP's is to offer bus services over a larger part of the day and during more days of the week; as we have seen from the table of frequent services (Table 2.2). While there is some need to provide additional routes, this was not seen as a particularly key priority.
- 4.3 This BSIP is therefore focussed on providing higher levels of service, thus providing a more attractive service, ultimately generating additional patronage, to ensure that service improvements can be maintained without public financial support. This aligns with the BSIP guidance, which that BSIPs should "describe in outline how LTAs and operators in an area can achieve the overarching goal of the National Bus Strategy to grow bus patronage: both to build it back after the pandemic and then to increase it and raise buses' mode share."²¹ This can be considered the ultimate aim of this BSIP, and all elements of it build in this direction.
- 4.4 This chapter is built around 'Proposals for Improvement' section of Chapter 2 of the UK National Bus Strategy: Bus Service Improvement Plans Guidance.²²

Proposals for Improvement

4.5 Each section below describes a category which must be fulfilled as part of the BSIP's movement towards achieving the goal above. Presented here are high level ideas and ambitions, more specific interventions and objectives have been outlined in Chapter 5.

Bus Promotion

- 4.6 Alongside the various detailed improvements described below, Thurrock proposes to work collaboratively with operators and other stakeholders to develop an effectively funded, comprehensive bus promotion scheme.
- 4.7 This is intended to promote the use of buses as an effective means of undertaking other activities: leisure, going to work, visiting friends & family, education, shopping, sports activities, etc.

²¹ pp. 12 (Emphasis Added); <u>National Bus Strategy: Bus Service Improvement Plans Guidance to local authorities and bus operators</u>, Department for Transport, May 2021

²² Ibid.

4.8 It will make merit of the fact that bus travel is a means to achieving other things.

More Frequent and Comprehensive

- 4.9 The BSIP guidance states that there should be "turn-up-and-go services on major routes and feeder or demand-responsive services to lower-density places."
- 4.10 Based on the evidence presented in previous chapters, we propose that specific services are targeted to provide a more frequent and comprehensive service across Thurrock. These improvements will target areas with poor provision or with demand that is in excess of the current offer.
- 4.11 Those proposed are ones that are considered to have a reasonable chance of commercial success after a period of "kickstart" support.
- 4.12 The proposals contain a mixture of:
 - frequency enhancements on major routes;
 - improvements to the current Thurrock supported network;
 - enhancements to Sunday services

Better Integrated

4.13 This includes both with other modes and between bus services. The BSIP guidance states that this should be "including more bus-rail interchange and integration and inter-bus transfers". Within Thurrock, this issue is particularity pertinent around Ockendon station. Proposed interventions will target this location and attempt to ensure a higher level of bus-rail compatibility.

Bus Speed and Reliability

- 4.14 The BSIP guidance states that there should be "bus priority wherever necessary and where there is room"; ultimately this is to help make buses faster and more reliable.
- 4.15 It has been shown in Chapter 2, that bus reliability is generally good across the area. However, bus priority measures are presently limited. As part of the improvements to the overall network, we propose several key areas (detailed in Chapter 5) where it would be useful to think about putting key infrastructural elements in place to help improve bus speed and reliability.

Cheaper, simpler fares

- 4.16 The BSIP guidance states that there should be "more low, flat fares in towns and cities, lower point-to-point fares elsewhere, and more daily price capping everywhere".
- 4.17 Simplifying fares in Thurrock is complex, reflective of the multi-operator network in the area:
 - Ensignbus and First offer their own commercially based fares
 - NIBS/Stephenson's charge fares in accordance with their Thurrock and Essex contracts
 - TfL services charge standard Oyster fares in line with the rest of Greater London
- 4.18 Thurrock Council proposes to work closely with the bus operators on this matter through the Enhanced Partnership process. It is hoped to be possible to, ultimately, deliver cheaper, simpler fares across the area. First steps could involve introducing flat fares in the evenings and at the weekend this is something which will need to be carefully investigated and consulted upon before introducing.

- 4.19 Thurrock would like to commission research on the impact on both passengers and operators as any changes must be sustainable in the medium to long term.
- 4.20 This BSIP includes a proposal to fit separate tap-off smartcard/contactless readers on all buses which will put in place the technology to support touch-on/touch-off charging with capping.
- 4.21 In the medium term the aim is to deliver multi-modal fares which stretch across Bus, Ferry and Rail services, connecting these together to deliver a truly integrated system. However, it is acknowledged that this is unlikely to be a straightforward issue to deliver given the need to involve both TfL and the rail industry.

Easier to understand

- 4.22 The BSIP guidance states that there should be "simpler routes, common numbering, coordinated timetable change dates, good publicity, and comprehensive information online."
- 4.23 The numbering of routes already avoids any duplication, so already meets the need for basic numbering clarity.
- 4.24 Much of the network is straightforward and clear, but some elements of Ensignbus' services exhibit variations in route number between daytimes, evenings and Sundays. Most of these variations are a direct consequence of variable levels of traffic congestion at different times of day.
- 4.25 Through the Thurrock Enhanced Partnership, the co-ordination of service change dates will be sought, including agreement with Essex and TfL.
- 4.26 At present, marketing, publicity and service information is largely decentralised with each operator producing their own materials. Thurrock Council provide some systematic information by producing a comprehensive map (Figure 2.1) and brochures for its tendered services (Appendix B). TfL service timetables are included on its website to fill the gap that these are not available from TfL. As noted above, Thurrock proposes to introduce a collaborative bus marketing scheme.
- 4.27 As with fares, establishing a unified branding and market image for Thurrock will be challenging due to cross-border services.
- 4.28 Providing more real-time signage would significantly help people to understand service provision and frequency. Real-time service signage is expected to help increase patronage. Real-time information costs around £8,000 per site to provide and maintain for five years. In addition, improved audio-visual announcements on buses would improve the quality of the service for users, particularly those with visual impairments.

Easier to use

4.29 Delivering the above improvements should result in a transport network that is easier to understand.

Quality of Fleet

- 4.30 As described in Chapter 2, the quality of Thurrock's bus fleet is high. All the commercial operators have invested significantly in their fleets.
- 4.31 By the end of the year (2021), all of the Ensign commercially run services will be Euro VI with the exception of six Euro V double decker vehicles, while First Essex are currently upgrading their Enviro 400s to Euro VI. Both operators have hybrid buses in their fleets. TfL services are

- all Euro VI or better. Crucially, this means that the only buses in the area which are not Euro VI are those which are provided on routes financially supported by Essex and Thurrock.
- 4.32 In the light of this current investment in Euro VI fleets, it is not considered appropriate to consider zero emission buses in this funding round. Rather it should be deferred until the Euro VI fleet is due for replacement, or sooner should the comparative cost become more positive. It is expected that the change to zero emission will become market led as the maturity of the technology improves. Co-ordination with the planning of the supporting infrastructure will be needed.

Monitoring

- 4.33 Where implementation of the above measures takes place, there is a requirement to ensure these have had a positive impact for bus users.
- 4.34 Re-establishing bus user satisfaction surveys will enable the council to identify whether there is awareness of enhancements implemented and if these are increasing opportunity, as well recording further enhancements into the BSIP.

Public Engagement

- 4.35 To ensure that there is support for the BSIP, and allow local residents to propose opportunities and considerations, public engagement has been undertaken to identify the priorities for improvement. The online form for this engagement can be found here: https://consult.thurrock.gov.uk/bus-service. This portal explains what the BSIP is for and offers an open format ability for contributors to respond with ideas and comments. Two hundred and fifty posters have been produced to help enable awareness of residents to the public engagement, with 130 displayed on buses. The remainder are being displayed at bus stops in each community and at community centres.
- 4.36 Community Liaison Officers are informing their contacts to make them aware of the engagement. All elected members have been contacted by email and 60 members of the Bus Users Group have been invited to respond. A meeting has been held with the Department for Work and Pensions to seek information from them about where people find access to work difficult because of the bus service. A direct approach has been made to seven stakeholders such as Chamber of Commerce, and Lakeside Shopping Centre. It is envisaged that these invitations to the community will continue indefinitely.
- 4.37 The engagement process will continue beyond the Bus Service Improvement Plan into the development of the Enhanced Partnership.
- 4.38 The Public Engagement Portal went live on 3 August 2021. After 35 days, a total of 84 respondents had participated via the online portal, with a further 16 responses submitted to the Council via email and via post. The large volume of data collected through this Public Engagement will help the Council to better understand the perception of buses by residents. A full summary of all responses has not been complied, but the following key themes support the proposed measures listed in this chapter.
- 4.39 Initial responses received by the Council via email and post highlight the following:
 - a higher level of service frequency is the key requirement,
 - concerns raised about the effect of a probable health service reorganisation (a network of four GP "superhubs" is proposed) on accessing healthcare,
 - concerns on the effect of changes in educational opportunities, and
 - space issues at Grays Bus Station.

- 4.40 Information received into the Council via the engagement portal allowed for the collection of a richer database of responses. High level responses showed:
 - 70% of respondents use the bus at least monthly, however only 60% of respondents perceived themselves to be regular bus users.
 - Two thirds of respondents had used the bus within the previous month, and the majority of these respondents had used the bus in the past week.
 - Of the 30% of respondents who hadn't used the bus in the last six months, all had not used the bus prior to the first national lockdown in March 2020.
 - The primary purpose for using the bus by respondents was to undertake journeys for utility, recreation and leisure, with shopping, for leisure, and meeting friends and family as the three most popular answers. Travelling for work was the next most popular answer.
 - Bus users were most likely to purchase their ticket via contactless means (52%), with concessionary fare travel the next popular (35%). Only 20% of respondents used cash to purchase their tickets.
 - Return journey tickets were the most likely purchase (37%) followed by single journey (17%) and Day and Monthly passes (15% each).
 - There was a mixed response towards ticket pricing. While some responses identified that prices were reasonable (28%), especially those as part of a multi-day pass, there was a perception that prices were too high or expensive by nearly half of respondents (47%).
 - Safety on buses was of minimal concern to respondents, with 100% of bus users expressing that they felt safe using the bus (84% always, 16% sometimes). Only one respondents from non-users stated they did not feel safe using the bus, with 97% perceiving buses to be safe or somewhat safe. Concerns raised were related to mask wearing as a result of the Covid-19 pandemic, behaviour of school children following the end of the school day or anti-social behaviour. Two comments related to physical safety specific to trips and falls. Security was a greater concern for non-users.
 - When asked about punctuality of buses, 80% of respondents had a favourable view, with 4% stating always and 76% stating usually. A similar response was seen amongst non-users, though 33% viewed services as punctual and reliable and 46% stating somewhat.
 - Service frequency saw 45% of bus users state that services did not run frequently enough in Thurrock. Amongst non-users this increased to 53% stating no, and 38% stating somewhat.
 - Nearly two thirds of bus users felt comfortable being able to access bus information. Over 50% of non-users also stated they would feel comfortable accessing information to enable them to use the bus for their next journey.
 - Over 75% of bus users did feel there was either insufficient infrastructure to help them use the bus.
 - Almost all respondents (98%) were residents of the borough, and only two (2%) stated they lived outside Thurrock but worked or studied in the borough.
- 4.41 Within the public engagement portal, sought to identify what improvements would bus users like to see. This was split into two questions, the first regarding improvements to the bus itself, and the second in regard to the whole journey including the travel at either end of bus travel.
- 4.42 Of the 49 responses to the first question, 38 were related to either increasing frequency of services (21 responses) or increasing the number of routes (17 responses). Nine responses related to payment options and the cost of ticket prices and ten responses related to bus information and on-board vehicle features. The second question provided similar answers o the first and the same themes.

- 4.43 Through this public engagement exercise, the Council has identified an opportunity to remain engaged with respondents. Two thirds of respondents were happy to engage in the future with the Council to get further views about buses in particular, and over 70% wished to be engaged with the new upcoming Transport Strategy, though only 40% wanted to contribute to focus groups to discuss other transport related issues within the borough.
- 4.44 Specific to the BSIP, 88% of participants in the online public engagement portal wished to be informed of the publication of the Thurrock Bus Service Improvement Plan.

5 Delivery

Overview

- 5.1 This chapter expands on the areas highlighted in Chapter 4 and provides more specific interventions relating to each of the targeted areas:
 - Bus Promotion;
 - More Frequent and Comprehensive services;
 - Better Integrated services;
 - Bus Speed and Reliability;
 - Cheaper, simpler fares;
 - Easier to understand services;
 - Quality of Fleet; and
 - Monitoring
- 5.2 Under each, the proposals which Thurrock Council will bring forwards as part of the BSIP are outlined and specific objectives identified.

Bus Promotion

5.3 £100,000 funding is sought to develop a comprehensive bus promotion scheme working collaboratively with operators and stakeholders.

Objective:

To provide an effective bus promotion scheme for all bus services in Thurrock. :

More Frequent and Comprehensive

- 5.4 To increase the offer of more frequent and comprehensive services, the following specific interventions are proposed.
- 5.5 For clarity in reading this section, Figure 2.2 is repeated below as Figure 5.1.

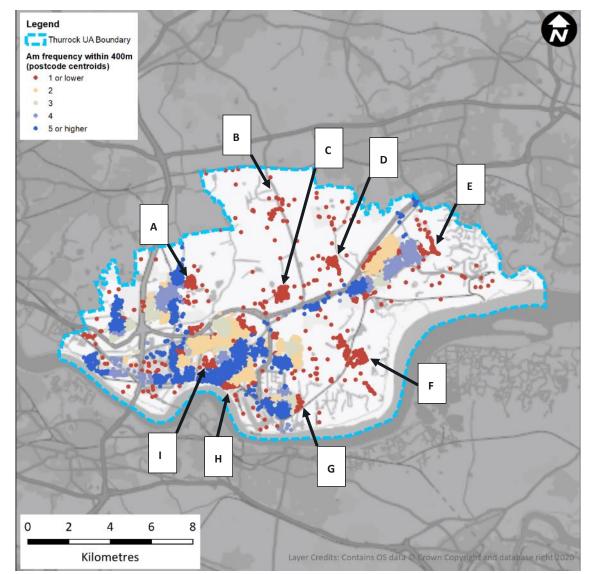


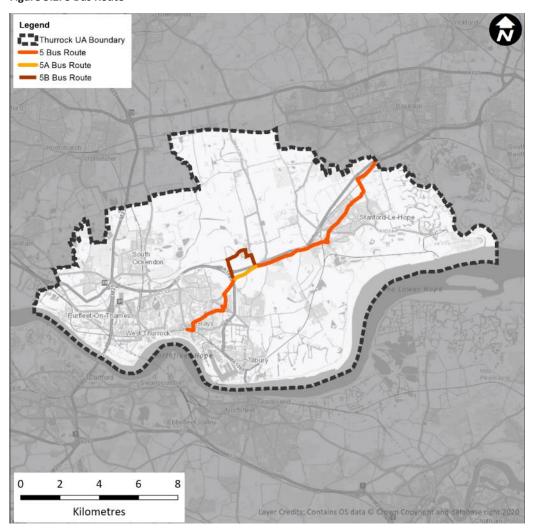
Figure 5.1: Population (Postcodes) by access to their highest bus service Frequency within 400m

Services 5A and 5B

- 5.6 Services 5A and 5B (Figure 5.2) combine to provide a half-hourly service between Grays, Stanford-le-Hope, Basildon and Pitsea²³. The only difference between services 5A and 5B is that 5B takes a slightly longer route to serve the village of Orsett, including Orsett Hospital. Thus, Orsett only has an hourly service. In the past Orsett was served half-hourly, but as traffic congestion slowed the service down over time, the operator was able to avoid the cost of an additional bus by the rerouting of half the service.
- 5.7 Orsett has been highlighted in the analysis (Community C in Figure 5.1) as an area with poor connectivity to the bus service.
- 5.8 Services 5A and 5B are provided commercially by First.
- 5.9 There is no evening or Sunday service.

²³ Outside Thurrock, these services are joined by service 5 to provide four buses per hour between Basildon and Pitsea.

Figure 5.2: 5 Bus Route



- 5.10 By converting 5A services to 5B services, this would help to effectively fill a gap in the service provision for the area. To do so will require one extra vehicle. It is noted that this will then provide a generous layover time at Grays this may provide the opportunity to enhance other services. First will need some pump priming financial assistance to fund the additional bus and associated operating costs.
- 5.11 The projected gross cost for running all weekday journeys using the 5B route and providing a daytime hourly 5B service on Sundays is approximately £200,000 per annum.

Objective:

To provide a minimum half-hourly Monday to Saturday and hourly Sunday service to Orsett.

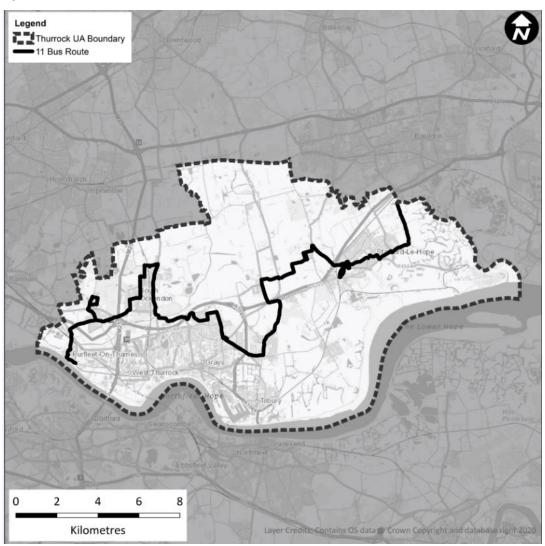
Service 11

- 5.12 Service 11 (Figure 5.3) links Purfleet-on-Thames, Aveley, Ockendon, Chadwell St Mary, Stanford-le-Hope, Fobbing, Basildon Hospital and Basildon with a Monday to Friday two hourly service frequency. There is no Saturday or Sunday service.
- 5.13 It is a socially necessary service funded by Thurrock Council linking a number of isolated locations with local centres at Purfleet-on-Thames, Stanford-le-Hope and Basildon. Improving the frequency will provide major benefits to isolated and deprived communities within the

Borough. Parts of the service serve areas of future housing and employment development and it is important to have a basic usable bus service in place which can be improved as these developments come on stream.

5.14 It serves communities A, C, D and E in Figure 5.1.

Figure 5.3: 11 Bus Route



- 5.15 We propose that the route is also operated on a Saturday. To do this will require funding for approximately two to three years. After this it is expected that the enhanced service will have seen sufficient additional patronage that the subsidy required will be no greater than that currently in place from Thurrock Council.
- 5.16 Estimates suggest that this will cost about £80,000 per annum.

Objective:

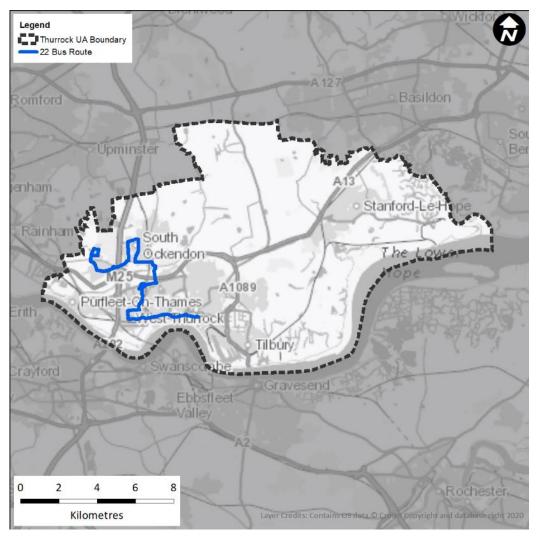
To provide a Saturday service comparable to the Monday to Friday service for route 11.

Service 22

5.17 Service 22 (Figure 5.4) links Aveley, Lakeside and Grays. It runs every 20 minutes, Mondays to Fridays, every 30 minutes on Saturdays and hourly on Sundays. It is part of Ensignbus' core

commercial network. However, the bulk of the Thurrock core network runs at 15-minute intervals, leaving service 22 (and the 100, see below) as an inconsistent outlier. Improving to a 15-minute service frequency would provide a consistency in service levels into Grays, the main urban centre in the South of Thurrock.

Figure 5.4: 22 Bus Route



- 5.18 To achieve this improvement, an additional two vehicles will be required.
- 5.19 A gross cost estimate of approximately £350,000 per annum has been projected.

Objective:

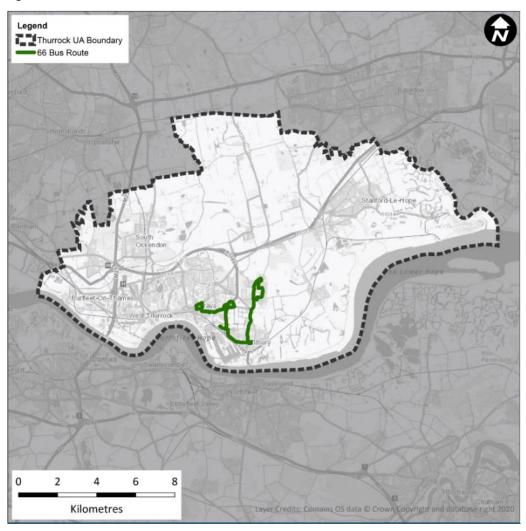
To improve the Service 22's frequency to 15-minute intervals, Mondays to Fridays, and from every 30 minutes to every 20 minutes on Saturdays.

Service 66

5.20 Service 66 (Figure 5.5) links Grays, Tilbury and Chadwell St Marys. It runs every half hour Mondays to Saturdays and hourly on Sundays. However, there is no evening service after 19:00 and on Saturdays and Sundays there is no service after 17:30. The section of route between Tilbury and Chadwell St Marys is not served on Saturdays and Sundays. It provides vital connectivity for the Tilbury area, including the Amazon warehouse located there. Many of

the employees in the Tilbury area do not work 'normal' office hours but work shifts with varying start times and lengths. It is operated commercially by Ensignbus.

Figure 5.5: 66 Bus Route



- 5.21 It is proposed that an hourly Monday to Saturday evening service is provided and that Saturday service is enhanced to include the section between Tilbury and Chadwell St Marys. This will improve connectivity to Tilbury and ensure that a wide range of workers have access to the transport network at most times of day.
- 5.22 In consultation with the service provider, the Council has projected an annual gross cost estimate of approximately £150,000.

Objective:

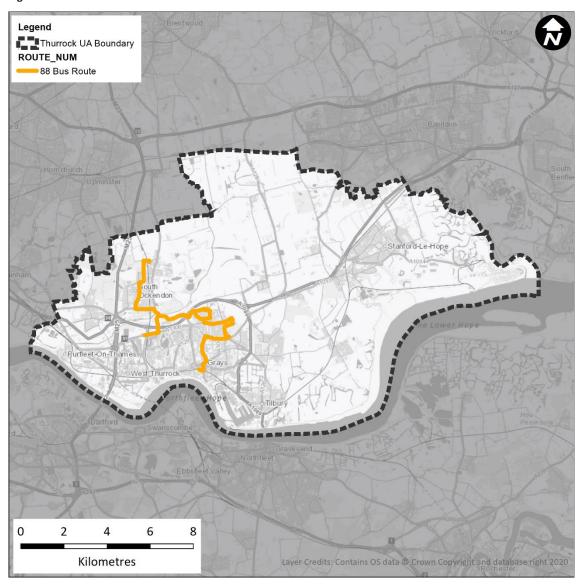
To enhance Service 66 so as to provide an evening service and a Saturday link between Tilbury and Chadwell St Marys.

Service 88

5.23 Service 88 links Stifford Clays with Grays and runs hourly Monday to Saturdays with additional peak buses during the week. As noted below (5.38), Ockendon station is poorly served by bus, so it is proposed to extend service 88 to link Stifford Clays with Lakeside and Ockendon station. The service will operate between 06:00 and 22:00, Monday to Saturday.

5.24 In consultation with the service provider, the Council has projected an annual gross cost estimate of approximately £900,000.

Figure 5.6: 88 Bus Route



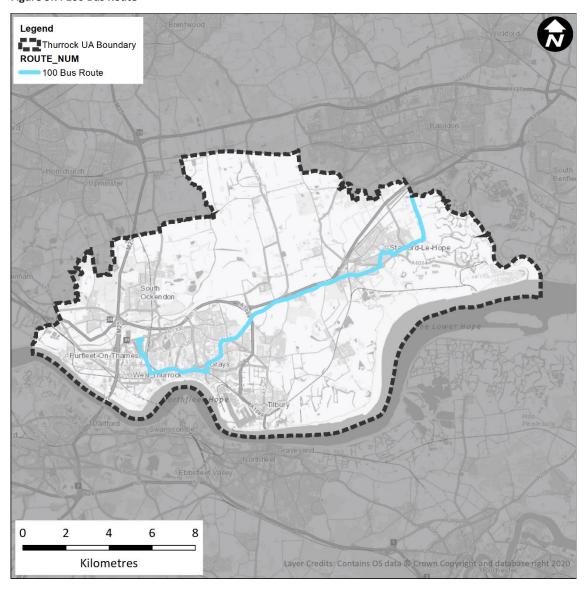
Objective:

To extend service 88 to link Stifford Clays with Lakeside and Ockendon; thereby significantly improving bus access to Ockendon station.

Service 100

5.25 Service 100 links Basildon, Basildon Hospital, Stanford-le-Hope, Grays and Lakeside with at a Monday to Saturday service frequency of approximately 20 minutes. On Sundays it operates every 30 minutes, but there is no Sunday evening service.

Figure 5.7: 100 Bus Route



- 5.26 It is operated commercially by First.
- 5.27 It is proposed that the Monday to Saturday service is enhanced to every 15 minutes to provide a "turn up and go" service and that a Sunday evening service is added.
- 5.28 In consultation with the service provider, the Council has projected gross cost estimates for this change at approximately £200,000 per annum.

Objective:

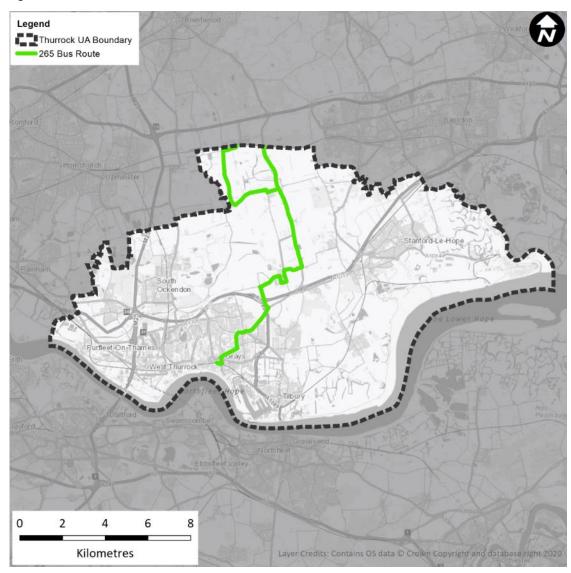
To provide a Monday to Saturday "turn up and go" service and Sunday evening service on route 100.

Service 265

5.29 The 265 service (Figure 5.8) connects West Horndon to Grays. Currently the service only runs on Mondays, Wednesdays and Fridays. We propose that the current service provision is replicated on Tuesdays and Thursdays, providing access to the Grays to residents throughout the working week.

5.30 It serves communities B and C in Figure 5.1.

Figure 5.8: 265 Bus Route



5.31 This improvement could be implemented at the cost of around £20,000 per annum. It is unlikely that this cost would ever be recovered through fare revenue so an ongoing subsidy will be required

Objective:

To provide a Monday to Friday service on 265.

Service 374

- 5.32 Service 374 (Figure 5.9) links Basildon, Basildon Hospital, Fobbing, Stanford-le-Hope, East Tilbury, Chadwell St Mary and Grays at a Monday to Friday service frequency of approximately 90 minutes and a Saturday frequency of around 3 hours.
- 5.33 It is a socially necessary service funded by Thurrock Council linking a number of isolated locations with local centres at Grays, Stanford-le-Hope and Basildon. Improving the frequency will provide major benefits to isolated and deprived communities within the Borough. Parts of

the service serve areas of future housing and employment development and it is important to have a basic usable bus service in place which can be improved as these developments come on stream.

- 5.34 It serves communities E and F in Figure 5.1.
- 5.35 It is proposed that the service frequency should be improved to hourly, Monday to Saturday. To do this will likely require additional funding for approximately two to three years, to pay for an additional vehicle on the route, and deliver a marketing campaign to make the route widely known around the area. After the growth period, it is expected that the enhanced service will have seen sufficient additional patronage that the subsidy required will be no greater than that currently in place from Thurrock Council.

Legend
Thurrock UA Boundary
374 Bus Route

South
Octor of Transcol

South
Covence

Further Conditions
South
Covence

South
Cov

Figure 5.9: 374 Bus Service Route

5.36 Estimates for the gross cost of this enhancement is approximately £200,000 per annum.

Objective:

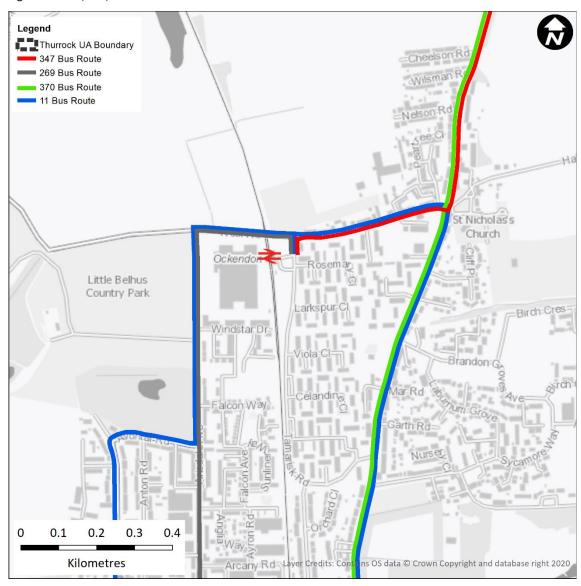
To provide a minimum of one bus per hour along route 374, Monday to Saturday daytimes.

Better Integrated

Ockendon Station

5.37 Ockendon station, on the c2c route between Upminster and Grays has frequent²⁴ train services to London and Southend. The station has no car parking provision. Whilst the station is served by routes, 11, 269 and 347 (Figure 5.10), all of these routes are infrequent and uncoordinated. TfL route 370 (which runs every 15 minutes) passes near the station, but the nearest stops are 500 m away. To provide a reliable all day interchange, a better bus service level to the station is desirable.

Figure 5.10: 11, 269, 347 and 370 Bus Routes



- 5.38 Diverting the frequent TfL service 370 was rejected as having a too poor effect on existing 370 customers. After discussion with Ensignbus, it is proposed to extend service 88 to terminate at Ockendon station every 30 minutes connecting with trains to and from London (Figure 5.6).
- 5.39 The cost is provided in paragraph 5.24.

²⁴ Half hourly all day with additional peak services to/from London

Objective:

To better improve bus service levels at Ockendon station

Superbus Services

- 5.40 First has recently divided service 100 into two sections removing a direct link between Chelmsford and Thurrock.
- 5.41 After discussions with First, Thurrock proposes to reinstate and improve this connection by extending the existing X10 service. Currently this links Stansted and Basildon hourly seven days a week.
- 5.42 It is proposed to extend this to serve Grays and Lakeside on a limited stop basis using main roads without serving other communities off the A13. All trips would be extended, seven days a week.
- 5.43 In consultation with the service provider, the Council has projected an annual gross cost estimate of approximately £650,000

Objective:

To extend service X10 to provide a fast link between Lakeside, Grays, Basildon, Chelmsford and Stansted Airport.

Demand Responsive Services

- 5.44 A number of rural communities within Thurrock East and West Tilbury, Linford, Horndon on the Hill, and Fobbing have no evening services. These largely rural or brownfield areas are unlikely to generate enough demand for a regular bus service to these areas. Provision of demand responsive transport (DRT) at these times would be a logical solution.
- 5.45 Thurrock Council has engaged with DRT application provider Tandem, who has experience setting up services in areas with similar geographies to this. This service will require subsidy, but on a per-trip basis, rather than paying for the fixed costs of a standard bus service or the use of larger DRT vehicles.
- 5.46 In addition, along with no fixed costs, there are no ongoing subscription fees just a small fee per passenger journey lowering the cost of trialling new services. There are small initial set up costs and there will be an ongoing need for promotional expenditure. There are also options for blended models, using a combination of buses during peak hours and demand responsive taxis off-peak.
- 5.47 Indicative pricing for the Tandem services is shown in Table 5.1Error! Reference source not found. The locations are cross referred back to Figure 5.1.

Table 5.1: Approximate Gross Cost per taxi trip for Tandem Services

Location Served	Figure 5.1 map reference	To/from Basildon	To/from Lakeside
Horndon on the Hill	D	£14.50	£23.00
Fobbing	Е	£8.50	£29.00
East Tilbury	F	£23.00	£17.50

- 5.48 Tandem states that they would aim to secure better prices after formal negotiation with local partners.
- 5.49 Ultimately this means that this form of service has potential to offer better value for money than attempting to develop a conventional bus service to these areas for evenings and Sundays. If successful, it will make the case to provide fixed route services at these times to some areas.
- 5.50 The intended concept is for the user to pay the daytime bus fare and Thurrock Council would pay the difference to Tandem. This is likely to result in an average subsidy of around £20 per passenger trip. 30 customers per day, 350 days a year would result in an average annual cost of £200,000.

Objective:

To seek funding to support a DRT trial for evening and Sunday provision to smaller communities unserved by conventional buses

Bus Speed and Journey Time Reliability

Bus Speed and Journey Time Reliability Improvement Measures on Lakeside - London Road - Grays - Socketts Heath corridor

5.51 Currently London Road is a key route along which significant numbers of Thurrock's buses run. It is also one of the areas of Grays with the highest levels of air pollution multiple designated Air Quality Management Areas, largely generated by the high levels of road traffic along this corridor. Measures to remove through car use, reduce local car use and improve bus speeds would be beneficial to the provision of cost-effective bus services in Thurrock and help improve air quality. Details of the optimum scheme are still to be worked through, but this is route a high priority for intervention and supported by bus operators whose services travel along this route.

Objective:

To seek funding to investigate Bus Speed and Journey Time Reliability Improvement on the London Road – Grays – Socketts Heath corridor

Traffic Light Priority

5.52 Traffic Signals in Thurrock are managed through a central system, however they are not optimised to support bus movements. Enhancing the traffic signal systems to cooperate with oncoming buses would help to support bus services in Thurrock, and minimise delays.

Objective:

To seek funding to investigate and implement Traffic Signal Optimisation to support Bus Movements across Thurrock.

5.53 Through our consultation with operators, Ensignbus have identified key locations within their network where their services experience regular delays. These require further investigation to determine what opportunities could be provided and are shown in Appendix D.

Cheaper, simpler fares

- 5.54 Paragraph 4.16 above refers to BSIP guidance requiring a greater emphasis on enhancing fare structures to help reduce the costs for users. Early engagement has been undertaken with operators within the borough, and the challenges that need to be explored further to enable measures such as simplification of fares, price capping and integrated tickets to be implemented have been identified.
- 5.55 However, it has been noted that investing in "tap-off" smart/contactless card readers mounted at appropriate locations²⁵ at bus exits would permit the introduction of "tap-on, tap-off" (in effect post) purchase of tickets which could then subsequently be used to facilitate capping. Thurrock Council will continue to work with our operators to move towards this goal.
- 5.56 Outcomes from the public engagement demonstrated a clear desire by communities and bus users for enhancements to bus ticketing so that payments for journeys are easier, and that ticketing and fares across different bus operators can be simplified and reduced and integrated with other modes such as rail.
- 5.57 The Council wishes to commission the following research projects as intermediate steps towards cheaper simpler fares:

Objective:

Research a flat fare structure for Thurrock in the evenings and at the Weekend.

Objective:

Procure "tap off" card readers for all buses used on local services in Thurrock, together with full sets of card readers for the Tilbury – Gravesend ferry.

Objective:

Provide an integrated multi-modal and multi-operator ticket in Thurrock.

Easier to understand

- The National Bus Strategy and BSIP guidance puts an emphasis on demystifying buses and making them easier to use and understand by all users. To support this aim, Thurrock Council will look to expand its provision of information for all users to help make it easier to understand when are where the bus goes, and making this information more accessible o more users through audio and visual mediums.
- 5.59 The Council already has invested in Real Time Passenger information displays, however some of these have reached the end of their design life, and the technologies have been surpassed. A programme of renewal is funded to replace the legacy estate of older dot-matrix displays,

 $^{^{25}}$ i.e. away from the boarding flow where passengers use the tap-on reader on the driver's ticket machine

but there remains a large number of stops which could benefit from the provision of RTPI. Each display costs £8,500 with an annual maintenance cost of approximately £200.

- To support Real Time information, the Council also wishes to support all users, particularly those with visual impairments and users who are unfamiliar with the bus route. The provision of audio-visual announcements on buses will enable this measure to be undertaken. The Council is aware of at least 60 buses within fleets in the borough which will require retrofitting with audio-visual announcements. Costs are identified at being approximately £8,000 per vehicle, though there is a reduction in price for single decker vehicles. This approximates to a minimum sum of £480,000 to retrofit the remaining fleet, but additional vehicles may also be identified.
- 5.61 The Council would also like to further enhance the information available about bus service provision in the borough. The development of high quality information and timetables, with a more accessible and attractive website with higher awareness will help to achieve this. A sum of £100,000 will help to support this measure, involving specialist creative content and design support to help deliver information to the intended audience. Collaborative working with other Essex Authorities could enhance this outcome and be supported by the ForwardMotion brand that was developed by Thurrock, Southend and Essex Councils through the DfT Access Fund.
- 5.62 The Council wishes to implement the following three objectives linked to this theme.

Objective:

Add a series of real-time information stands to bus stops.

Objective:

Retrofit audio-visual announcements to buses.

Objective:

Provide high quality printed timetable and map information. Provide one -stop website providing all maps, timetables and fares for all operators in Thurrock

Quality of Fleet

5.63 Within a few months, the only non-Euro VI buses running in Thurrock will be those used on Council subsidised services and six Euro V buses operated by Ensignbus. NIBS/Stephensons has informed the council that to convert these services to Euro VI would cost £23,000 per annum, per bus, for Ensignbus the cost is £20,000 per vehicle. Indicative pricing for converting the services to Euro VI for three years is provided in Table 5.2.

Table 5.2: Indicative cost to convert Thurrock fleet to Euro VI

	11	374	265	Ensignbus
Number of vehicles	2	3	1	6
Cost per vehicle	£23,000	£23,000	£23,000	£20,000
Cost per annum	£46,000	£69,000	£23,000	-
Cost for three years	£138,000	£207,000	£69,000	£120,000
Total			£414,000	£120,000

Source: Thurrock Council

5.64 The two objectives relating to this theme are set out below:

Objective:

To convert the subsidised fleet to Euro VI technology.

Thurrock, and the operators within the area, also recognise that there will be a need to keep moving towards new technologies, particularly those which reduce emissions from buses. As such, Thurrock would like to undertake a study to optimise the introduction of zero-carbon buses, to make sure that their fleet remains at the forefront of bus technology.

Objective:

To undertake research and studies to help understand new Bus technologies.

5.66 Thurrock, and the operators within the area, would like to consider the retrofitting of USB charging points to the fleet so that all buses offer this provision. Indicative costs established through engagement with operators is approximately £2000 for a single decker bus, and £4000 for a double decker bus.

Objective:

Fund the installation of USB chargers on existing buses.

Monitoring

- 5.67 Ongoing monitoring of bus services is crucial, in particular where investment has been made to enhance the service through a range of measures. In addition, understanding the level of satisfaction by users is also critical. Thurrock Council would like to undertake annual monitoring of Bus Passenger Satisfaction as well as monitoring and evaluation of schemes implemented through the BSIP.
- 5.68 The Council has determined a sum of £30,000 per year is required to complete and report on Bus Passenger Satisfaction within the borough and provide monitoring and evaluation of measures.

Objective:

Fund annual Bus Passenger Satisfaction surveys and undertake monitoring and evaluation.

6 Reporting

Summary

- 6.1 Thurrock Council will publish six-monthly performance figures against the targets set down in this BSIP. These are given in Table 7.2.
- 6.2 These will be made available on the Thurrock Council website and local bus operators will be encouraged to include them on their websites too.
- 6.3 Thurrock Council will seek to engage with key stakeholders, such as the Thurrock Bus User Group, to discuss the outcomes of targets and where further enhancements can be made. This will also provide an opportunity to review measures listed within the BSIP.
- 6.4 Hard copies will be made available on request.

7 Overview Table

Introduction

7.1 This section summarises the key outputs of the BSIP and how it meets requirements set out in the Strategy. The purpose of this section is to give readers, including passengers and the Department, an overview of the commitments in the BSIP which Thurrock and bus operators will work towards to improve local bus services.

Table 7.1: BSIP Overview Table Template

BSIP Overview Table Template	
Name of authority or authorities:	Thurrock Council
Franchising or Enhanced Partnership (or both):	Enhanced Partnership
Date of publication:	29 October 2021
Date of next annual update:	31 October 2022
URL of the published report:	https://www.thurrock.gov.uk/travel- strategies/strategy-documents

Table 7.2: BSIP Targets

Targets	2018/19	2019/20	Target for 2024/25	Description of how each will be measured (max 50 words)
Journey Time:	N/A	N/A	>1.0	This will be measures as a Bus Passenger Satisfaction Index against a baseline undertaken through annual monitoring. Year 1 survey will be given a score of 1.0, and annual scores will be rated against this index
Reliability:	91.2%	91.2%	95%	Based on reliability data compiled by Thurrock Council for the Traffic Commissioner
Passenger Numbers:	4.8 million	5.1 million	5.5 million	Based on combined annual

				passenger numbers recorded from all bus operators within Thurrock
Average passenger satisfaction:	89% ²⁶	83% ²⁷	90%	Determined through annual Bus Passenger Satisfaction Survey

Table 7.3: Delivery Details

Delivery – Does your BSIP detail policies to:	Yes/No	Explanation (max 50 words)
Make	improvements to bus services and	planning
	More frequent and reliable service	S
Review service frequency	Yes	
Increase demand responsive services	Yes	To help rural communities in Thurrock gain better connectivity, subsidised, 'Tandem' services will be provided. This will provide value-for-money, demandresponsive services.
Consideration of bus rapid transport networks	No.	The polycentric geography of Thurrock means that there are limited options for a singular infrastructure intervention (such as a BRT) network. As such, attention has been focussed on improving the existing bus network, rather than developing a high-profile, but low-benefit rapid transit system.
Improver	nents to planning/integration with c	other modes
Integrate services with other modes	Yes.	The BSIP will develop better connections between C2C train services stopping at Ockendon and routes 11, 269, and 374. This will involve rerouting some services, in order to provide closer connections between the bus stops and the rail station.
Simplify services	Yes.	Implementation of Bus Speed and Reliability measures will enable simplification of the network due to the need to

 $^{^{26}}$ Bus Passenger Survey Autumn 2019, Passenger Focus – England-wide score

²⁷ The route ahead: getting passengers back on buses, June 2021, Passenger Focus – England-wide score

		remove congestion contingency currently built in at busy times of day.
Review socially necessary services	Yes.	This document is founded on accessibility analysis, which cross-checked service frequencies against population density. This has ensured that all of the suggested changes put in place will benefit communities which are presently underserved by the network.
Invest in Superbus networks	Yes	Provision of fast service linking Thurrock with Stansted Airport
	Improvements to fares and ticketin	g
Lower fares	Yes	A longer term study to review and negotiate fares and integrate fares and ticketing between bus operators, the ferry and rail operator c2c who provide links between 7 stations in Thurrock with a more direct journey than by bus
Simplify fares	Yes	See above.
Integrate ticketing between operators and transport	Yes	See above.
Make i	mprovements to bus passenger ex Higher spec. buses	perience
Invest in improved bus specifications	Yes.	Currently the majority of the bus network in Thurrock is relatively modern – almost all vehicles are Euro VI. This funding will be used to convert the remaining buses to Euro VI standards.
Invest in accessible and inclusive bus services	Yes.	Enhanced audio and visual information for bus users both at stops and on services
Protect personal safety of bus passengers	No	Not perceived to be a major issue in Thurrock
Improve buses for tourists	No	Not relevant to Thurrock
Invest in decarbonisation	Yes.	This document sets out a desire for research funding, which should help bus operators to make informed decisions about how best to move towards decarbonisation, as the technology becomes available.
In	nprovements to passenger engagen	nent

Passenger charter	Yes.	All operators have existing passenger charters in operation.
Strengthen network identity	Yes	Plans include focus on greater levels of passenger information.
Improve bus information	Yes.	New shelters will be delivered, with real-time information. Additionally, a marketing campaign will be undertaken, which will allow help to improve awareness of the Thurrock bus brand.
	Other	
Public Engagement – existing users, stakeholders and non-users	Yes	Public engagement strategy will continue to assess priorities for action.
Monitoring	Yes	Undertaking Bus Passenger Satisfaction surveys to monitor performance and perceptions of performance

A Thurrock Bus Services

A.1 Table A-1 shows the frequent bus services in Thurrock, while table A-2 shows those that only operate occasionally.

Table A.1: Frequent Bus Services in Thurrock Area

Route	Links	Operator		Approximate Buses per hour				
			IV	londay – Friday		Saturday	Sunday	
			Daytime	Evening	Daytime	Evening	Daytime	Evening
5A/5B	Pitsea – Basildon – Stanford-le- Hope – Grays	First Essex	2	0	2	0	0	0
22	Aveley – Lakeside – Grays	Ensignbus	3	0 ²⁸	2	0 ²⁸	1	1 ²⁹
33	Chafford Hundred – Grays	Ensignbus	2	0	1	0	0	0
44	Lakeside – Purfleet-on-Thames – Grays	Ensignbus	2	1	2	0	1	0
66	Chadwell – Tilbury – Grays	Ensignbus	2	0	2 ²⁹	0	1 ²⁹	0
73/73A	Lakeside – Grays – Chadwell – Tilbury	Ensignbus	2	O ²⁸	2	O ²⁸	2	0.5

²⁸ Evening service provided by service 77/77A

²⁹ Part route only

Route	Links	Operator	erator Approximate Buses per hour					
			M	Monday – Friday Saturday		Sunday		
			Daytime	Evening	Daytime	Evening	Daytime	Evening
77/77A	Aveley – Lakeside – Grays – Chadwell – Tilbury	Ensignbus	O 30	2	0 ³¹	2	0	0
83	Lakeside – Grays – Chadwell St. Mary	Ensignbus	2	0	2	0	0	0
88	Stifford Clays – Grays	Ensignbus	2	0	1	0	0	0
99	Tilbury Ferry – Tilbury Station	Ensignbus 31	2	0	2	0	0	0
100	Chelmsford – Basildon– Grays – Lakeside	First Essex	4	1	3	1	2	0
370	Lakeside – Romford	TfL ³²	4	2	4	2	2	2
372	Lakeside – Hornchurch	TfL ³³	3	2	3	2	2	2
X80	Chafford Hundred – Bluewater	Ensignbus	1	1	1	1	1	0

Table A.2: Occasional Bus Services in Thurrock Area

Route	Links	Operator	Monday – Friday	Saturday	Sunday	Note
5X	Wickford – Basildon – Grays	First	College service	No service	No service	

³⁰ Daytime service provided by services 22 and 73

³¹ Supported by c2c as required by the Essex Thameside rail franchise

³² Currently contracted to Arriva

³³ Currently contracted to Stagecoach

Route	Links	Operator	Monday – Friday	Saturday	Sunday	Note
11	Purfleet-on-Thames – Aveley – South Ockendon – Stanford-le-Hope – Fobbing – Basildon	NIBS Buses	6 services per day	No service	No service	Supported by Thurrock
25	Purfleet-on-Thames – William Edwards School	Ensignbus	School Service	No service	No service	
27	Socketts Heath – Hassenbrook Academy	Ensignbus	School Service	No service	No service	
32	Aveley – Grays	Ensignbus	School Service	No service	No service	
265	West Horndon – Bulphan - Grays	Stephensons	2 full services Mon, Wed and Fri Only.	No service	No service	Supported by Thurrock
269	Grays – South Ockendon –Brentwood	NIBS Buses	4/5 services per day	4/5 services per day	No service	Supported by Essex County Council
347	Ockendon – Romford	TfL ³⁴	4 services per day	4 services per day	No service	Supported by TfL
374	Grays – Chadwell – East Tilbury – Stanford-le-Hope – Fobbing – Basildon	NIBS Buses	8 services per day	4 services per day	No service	Supported by Thurrock
51	Chafford Hundred – Grays – Tilbury – Orsett – Pitsea	NIBS Buses	School Service	No service	No service	
565	Bulphan – West Horndon – Brentwood	First Essex	7 services per day	4 services per day	No service	Supported by Essex County Council
Z1	Aveley – Lakeside – Grays – Chadwell – Tilbury – Amazon Tilbury	Ensignbus	4/5 services per day at peak hours	4/5 services per day at peak hours	4/5 services per day at peak hours	
Z2	Canning Town – Barking – Dagenham – Rainham – Amazon Tilbury	Ensignbus	19 services per day at peak hours	19 services per day at peak hours	19 services per day at peak hours	
Z4	Pitsea – Basildon – Corringham – Stanford-le-Hope – Amazon Tilbury	Ensignbus	4/5 services per day at peak hours	4/5 services per day at peak hours	4/5 services per day at peak hours	

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³⁴ Currently contracted to Blue Triangle

B Publicity Material

B.1 Below, samples of the material currently used to advertise bus services in Thurrock are presented.

Figure B.1: Service 11 & 374 Leaflet

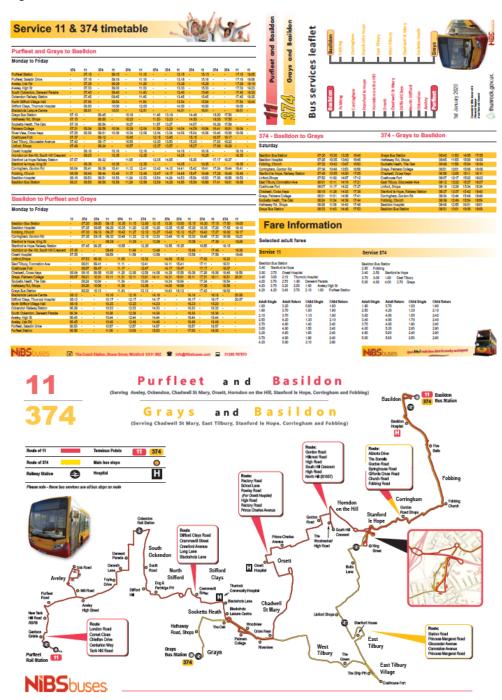
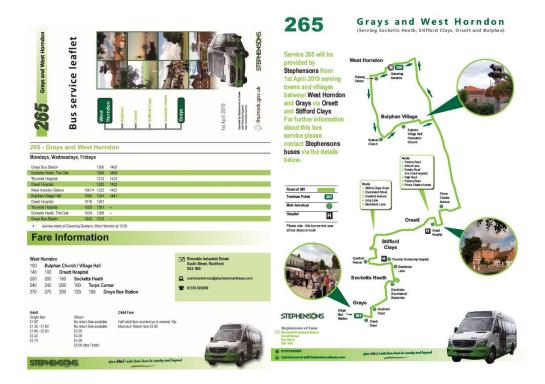


Figure B.2: Service 265 Leaflet



C Bus Shelter Design

Figure C.1: Sample Bus Shelter



C.1 There are 160 sheltered bus stops within Thurrock, with a combination of those funded directly by the local authority, and some funded through an arrangement with Clear Channel, on which advertising was sold. The contract with the supplier came to an end in 2019, and the Council has implemented a new refresh programme. A sum of £1.26m has been allocated to replace 90 of the 160 shelters, and a decision will be made in the future whether to fund or remove those shelters not initially prioritised. An example of a new shelter as part of the renewal programme is shown in Figure C-1. In addition, shelters which had a legacy Real Time Passenger Information display, will be replaced as part of the programme. These Real Time displays have become obsolete, with parts being sourced from other live or damaged units. They will be replaced by modern LED display with sizing and form factor appropriate to the location. Digital advertising is also being led in-house on shelters and Real Time displays, allowing the Council to generate a revenue to ensure the ongoing maintenance of real time displays and shelters.

D Bus Speed and Journey Time Reliability Improvement Concepts Submitted by Ensignbus

D.1 Ensignbus have submitted four plans showing potential bus speed and journey time reliability schemes that would benefit their bus operations.

Figure D.1: Ensignbus Plan 1

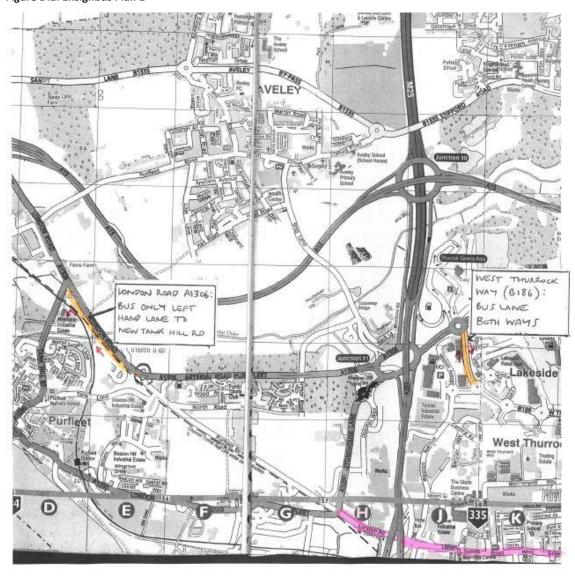


Figure D.2: Ensignbus Plan 2

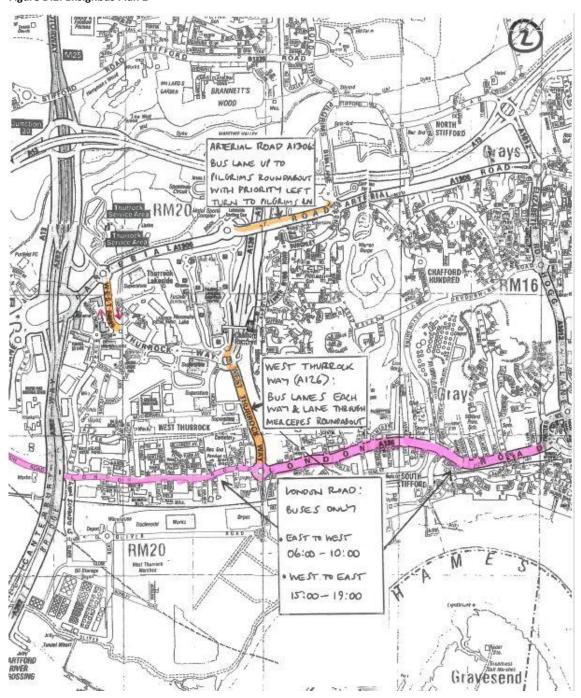


Figure D.3: Ensignbus Plan 3

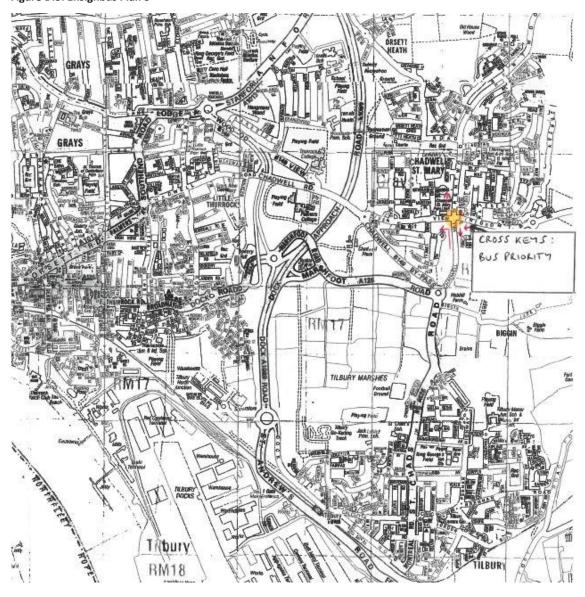
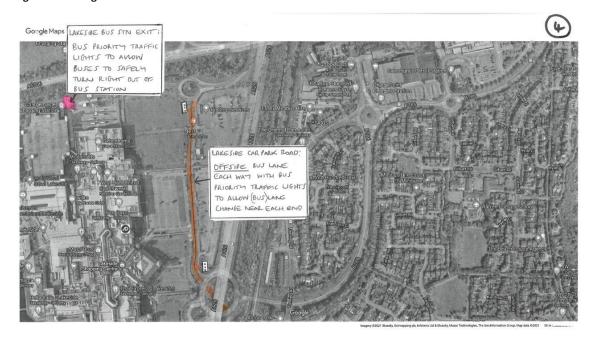


Figure D.4: Ensignbus Plan 4



Control Information

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