



Leicester Enhanced Bus Partnership Plan 2022–2030

1 May 2022



Leicester
City Council



leicester buses
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Forward

We have recently published our draft Local Transport Plan for the next 15 years, with a vision of a vibrant and growing city that is carbon neutral, well connected and healthy. This covers all modes of transport, with better buses being at the heart of our vision and future activities.

Over the past five years significant investment has been made by both the City Council and bus operators. Network coverage has been set at a high level, bus emission standards greatly improved, digital ticketing introduced and real time bus information expanded.

However, we need to achieve much more if we are to recover from the impact of covid and provide a comprehensive high quality bus network that can meet all future needs and help the sustainable growth of our city.

Our Enhanced Partnership Plan 2022–2030 sets out an extremely ambitious, yet achievable, programme of transformational projects. It is designed to be owned and delivered in a strong effective partnership between Leicester’s bus operators and the council, with significant input from bus users, employers and neighbouring authorities.

This plan must not only deliver for those living in our city, but also for those travelling to it for employment and for all the attractions the city offers. Its development has therefore included engagement with our nearest neighbours in Leicestershire to ensure a fully integrated approach.

It is particularly focused on the next three years to assist covid recovery and provide a network that gives comprehensive affordable access across the city. Significantly, we are aiming to introduce over 200 electric buses by 2025 — half the Leicester network — and move to **100%** electric by 2030.

We are also aiming to provide much better connections to outer lying parts of our city, directly linking people to the many workplaces located outside our city centre and relieving congestion in these busy areas by giving a viable alternative to driving.

These projects will require significant investment, but we already have well over half the funds required to 2025 in place. We are confident that the remaining funds to complete this radical programme will be captured over the coming months.

Of course, our planned investment of over £250m by 2030 will give us ongoing costs to maintain this quality transport network. We are hoping these can be partly met through our proposal to introduce a local workplace parking levy, levelling up the costs of travel between car and bus users.

We very much welcome your comments on this ambitious plan and look forward to working in partnership to rapidly delivering a transformed bus network.



City Mayor — Sir Peter Soulsby



Deputy City Mayor — Cllr Adam Clarke

On behalf of the Leicester Buses Partnership

Executive Summary

The Leicester Enhanced Partnership Plan has been developed to reflect the Bus Service Improvement Plan developed between Leicester City Council and all local bus operators, following consultation with a broad range of bus users and other stakeholders, including neighbouring Leicestershire County Council.

This process has been aligned with a wider consultation process on the Council's draft Local Transport Plan 2021–2036. This includes a significant proposal to introduce a workplace parking levy — subject to Secretary of State support — which will assist in providing local finance for this bus plan.

The EP Plan sets out what is currently provided for bus users, their main issues and priorities, and the role bus travel can play in the equitable and sustainable growth of Leicester.

It concludes that the current bus network has a strong inherent base to recover from the impact of covid and for further significant growth. However, this will require a package of investment and action across a comprehensive range of areas.

The EP Plan and associated Enhanced Partnership Scheme can radically transform Leicester's bus services with:

- A 'Mainlines' urban network of 25 route groups, each with a fully branded package of radical improvements including:
 - 168 electric buses with audio-visual displays and enhanced access features.
 - additional enforced bus priority measures on 14 Mainlines
 - automated 'best fare' digital ticketing,
 - on-street real time information at all boarding stops
 - new bus shelters at main boarding stops
 - a new St Margaret's bus station
- Each 'Mainline' will consist of a route group with an integrated cross-operator timetable to a minimum frequency standard within the Leicester Urban Area:
 - every 15 mins or better daytime Monday–Saturday
 - every 30 mins evenings and Sundays
 - every 10 mins on Mainlines connecting to all key locations outside the City Centre
- A 'Greenlines' strategic network of 5 limited-stopping subsidised electric bus routes:
 - 3 cross-city express routes, each with park and ride sites at both ends.
 - inner and outer orbital bus routes
 - every 15 minutes daytime Monday–Saturday minimum frequency standard
 - 40 electric buses with audio-visual displays and enhanced access features
 - automated best fare digital ticketing
 - enforced bus priority measures on four Greenlines
- A small 'Flexlines' network of 4 demand responsive electric bus routes designed to access areas of the conurbation remote from the main bus network.
- A package of measures to integrate all bus services with joined up timetables, ticketing and information systems and promotions — all with a common, clearly understood 'Leicester Buses' integration brand shown on all buses, bus stops, bus stations and park and ride sites.
- A range of policies designed to improve the value of bus travel in relation to car travel, including targeted discounted fare trials.
- A similar funded work package for 2025–2030, with the aim being to provide financially sustainable conditions for all operators to convert the whole Leicester fleet to zero emission buses by 2030.



Around £169m is required to deliver this EP Plan over the next three financial years. Around £95m is already secured through a range of successful bids to government, together with local investment from bus operators and the city council.

However, it requires additional resources for the bus sector to recover and develop to its full potential. This is estimated to require a further £74m of funding — around £57m of capital and £17m additional revenue up to 2025.

Much of this is proposed to be locally financed, with the formal 'ask' to government of between £31m and £38m capital and £10m to £13m revenue up to 2025, depending on whether the Council is able to introduce a workplace parking levy by April 2023.

Indicative projects requiring further funds from 2025 to 2030 have also been set out within the EP Plan, with a proposed £107m of capital investment, and ongoing revenue support of around £3.5m pa.

The overall aims of this partnership will be to:

- increase bus use by **25%** from 2022/23 (predicted) to 2024/25 and **40%** by 2029/30
- increase modal share from **30%** to **32%** by 2025 and to **34%** by 2030.
- increase bus passenger satisfaction to over **85%** by 2025 and **90%** by 2030
- increase punctuality from **70%** to **85%** in 2025 and **90%** in 2030
- make **50%** of Leicester's buses electric by 2025, **100%** by 2030

The Scheme imposes requirements on both the Council and operators in order to deliver the proposals set out in the EP Plan, subject to the necessary financial resources being in place.

Introduction

1. This EP Plan sets out an approach for the next 10 years designed to radically transform bus travel, reduce congestion and help Leicester grow in a fully sustainable and accessible way.
2. Although formally ‘made’ by the City Council, it has been developed in full and close co-operation with all of Leicester’s bus operators. It therefore closely mirrors the jointly prepared Bus Services Improvement Plan 2022–2030 published in October 2021.
3. The governance for delivering many intervention measures that can improve bus services will involve a continuous partnership between the City Council and local commercial bus operators. Each partner has full independent responsibility and financial accountability for its own specific functions within an overall policy and delivery framework.
4. It is the intention to implement this EP Plan via a formal Enhanced Partnership Scheme which will be established by 1 May 2022. This will replace and subsume the existing voluntary partnership arrangements currently in existence.
5. The Leicester Enhanced Partnership Plan covers the whole of the Leicester City Council administrative area, but none of the neighbouring council areas. The Council is a unitary authority and therefore has full responsibility for all areas of public transport, together with other related areas such as highways, parking, education, planning, tourism and regeneration. The majority of trip generators across the conurbation lie within the City Council area.
6. This is a sensible and effective geographic area to deliver key Council-led intervention measures that can significantly influence bus travel, including:
 - road space reallocation and bus priority measures
 - signalling, junction and road redesign
 - traffic management policies and projects
 - infrastructure projects — bus stations, real time information, shelters etc
 - new housing and business developments
 - car parking provision and pricing, including road/workplace parking charge
 - tendered bus service provision
 - council’s own investment in electric buses for tendered services
 - discounted fares policies, including school and college travel
7. However, it is fully recognised that some specific issues relating to commercial urban bus routes and ticketing do not fit wholly within the City boundary. In general, these aspects are better aligned within Greater Leicester built-up area. This includes small parts of several neighbouring district councils — Blaby, Charnwood, NW Leicester and Hinckley, Oadby and Wigston — all within Leicestershire County Council as the local transport authority. These areas do not fall within the area of the EP Plan, but may benefit from its implementation through the Scheme.

9. In addition, some other specific aspects — such as park and ride and inter-urban commercial bus routes — focus more on the wider journey-to-work area. However, in these instances the bus interventions required relate to aspects within Greater Leicester (e.g. P&R sites and services)
10. This EP Plan has been drawn up in consultation with these neighbouring authorities and is aligned with the Leicestershire County Council EPP. There are well established senior officer and political processes in place to develop public transport at the Leicester Urban Area and wider geographic levels. There is also a memorandum of understanding across the East Midlands local transport authorities to work collaboratively to improve bus services across the region.
11. Consideration was given to establishing a formal joint Enhanced Partnership Plan and Scheme by Leicester and Leicestershire jointly but not proceeded with on the grounds that issues, priorities and funding streams differ and governance to rapidly deliver change might be too restrictive.
12. The City Council is currently out to formal consultation on its Local Transport Plan 2021–2036 (LTP). The EP Plan and Scheme fully aligns with this draft LTP but focusses on a shorter period of 2021–2030. It is more pragmatic to plan capital and revenue resources for buses over this shorter period, making it easier to manage and focus change within a partnership delivery model with bus operators.
13. It is considered that the EP Plan should be reviewed and adjusted if required by the City Council on an annual basis due to the significant dynamism within the local bus market post-covid, together with the evolving nature of securing capital and revenue funding support. There is inevitably far more focus on the period up to 2025, aligning with government’s present funding round and the highly developed plans and proposed investment of each partner.
14. The first review and subsequent revision will be completed by 1 April 2023. Subsequent revisions will be made by 1 April of each subsequent year, to align with budgetary planning.



Leicester Context

Local economy

15. Leicester is the tenth largest city in the UK, located at the heart of England. It is a compact, densely populated area at the centre of the Central Leicestershire urban conurbation with a workday population of 641,000 people. It provides a focus for economic development, regeneration, housing and business growth in the East Midlands and is the largest unitary authority in the East Midlands.
16. The Central Leicestershire area has excellent road access to the rest of the region and the UK via the M1, M69 motorways, and A46 that are part of the UK's strategic road network. North-South rail connections are good, with excellent services to London.
17. Leicester is the second fastest growing city in the country and it is estimated that the City's population will increase by **16%** between 2016 and 2041, with 30,000 more homes. Its population is characterised by its diversity, with an estimated **49%** of the population from an ethnic minority background. Nearly half the workforce commutes into Leicester daily, with over 30,000 people travelling into the city centre at peak hours (pre-covid).

Leicester provides a centre for employment, shopping, public administration, leisure, health care at three hospitals and further and higher education facilities supporting over a million residents, visitors, and workers. The city's two highly successful universities, the University of Leicester and De Montfort University have a combined total student population of around 40,000 full and part time students.

18. Over the past decade, the Leicester and Leicestershire economy has grown steadily and is currently worth £24.5 billion, equivalent to around a quarter of the East Midlands total. In 2017, productivity per worker was **3.9%** above the East Midlands average but **12.6%** below the UK average. Between 2007 and 2017, Leicester and Leicestershire recorded productivity growth of only **1%** per annum, while the UK average grew by **3.7%**.

19. The local economy continues to grow from a low base following the contraction of the textile and manufacturing industries in the 1970s/80s. The economy is diverse, but jobs are generally low waged, with a mismatch of skills and labour. There is relatively low representation of value-added businesses including financial and business services, hi-tech and creative industries. Manufacturing still features strongly, albeit below historic levels.
20. In terms of health, levels of obesity are high in the city and physical activity levels are comparatively low. Heart disease and respiratory conditions continue to be key problems in the city, exacerbated by ongoing challenges with air quality.

City Centre regeneration

21. Substantial investment in the city centre retail, leisure, cultural and housing offer, the range and quality of jobs and crucially the quality of city centre streets and spaces has helped the city centre to perform strongly in recent years.
22. There has been substantial and continued investment in the main Highcross shopping centre from its owners Hammersons which has helped the retail sector to be remarkably resilient. Whilst 'in person' retail is in decline nationally due to on-line offerings; Leicester city centre recorded its lowest retail vacancy rate in April 2019 for 10 years down **6%** to **12.2%**. This is partly attributed to the retention or remodelling of large high street store units following closures. It remains to be seen how the sector recovers from covid over medium term.
23. Facilities such as the Curve Theatre and the reopened Haymarket Theatre have helped to raise the status of the city as a regional cultural centre. Discovery and re-interment of the remains of Richard III in the cathedral, the subsequent opening of the Richard III Visitor Centre and Leicester City's Premier League success has provided a major boost to the city's national and international profile.
24. The city centre public realm has been transformed in the past 10 years through major investment in city centre streets and creation of six new public squares through the Council's 'Connecting Leicester' programme.

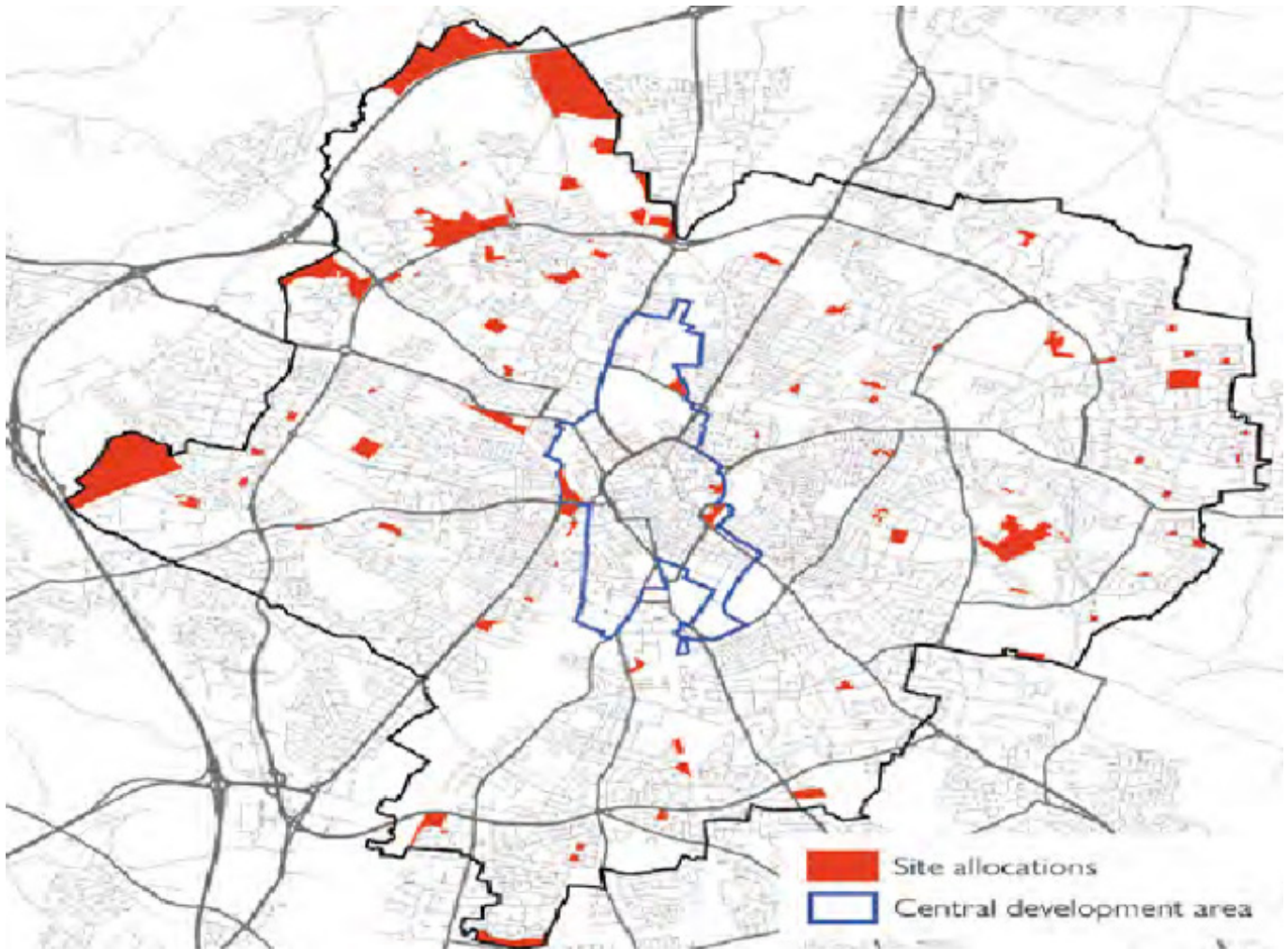
25. The city centre residential development sector is also strong. The number of homes in the heart of the city has doubled from 2011 to around 12,000 in 2018 and there is a strong pipeline of housing schemes, including more recent Private Rented Sector (PRS) housing developments.
26. On the edge of the city centre, large regeneration areas, formerly home to the City's historic textile sector are now being redeveloped for new homes and workspaces. Waterside, immediately to the west of the city centre, will deliver 3,000 homes and 50,000sqm of office space. Progress is good and accelerating with 1,000-homes and 10,000sqm of office space under construction or under contract.
30. Fosse Park to the South West of the city continues to be one of the largest and best performing out of town retail parks in the country. A recently approved expansion is now under construction. Major office-based business parks have been developed in this area in recent years due to its location on the M1.
31. The draft Leicester Local Plan 2020–2036 provides the emerging position on the strategic and spatial vision for the future of the Leicester area. The current (May 2021) housing requirement to 2036 is 29,104 dwellings and it is estimated that 45ha of additional employment land is also required.

Conurbation growth

27. To the north of the centre, the Abbey Meadows area will deliver 2,500 new homes and around 10ha of employment land (800 homes are complete or on-site to date). In partnership with the University of Leicester, building on the profile of the National Space Centre, this area will be home to a nationally significant R&D and advanced manufacturing park focussed on space and space enabled technologies. Construction works are underway and substantial committed investment from the Council, University of Leicester and the private sector will see rapid growth of this area in the next few years.
28. The recently designated Waterside Enterprise Zone provides a basis for investment in office development and space sector related investment. Retained business rates are being reinvested in delivery of workspace and related transport infrastructure linked to the TCF programme.
29. To the North and West of the city major housing growth through sustainable urban extensions is underway with an expected 30,000 homes to be built over the next 10–15 years. Some of this lies within the city at Ashton Green to the North, but is mostly within the adjoining districts of Charnwood and Blaby to the North and West. Transport connections to these areas are currently weak and will require significant investment.



32. Significant growth is being planned within the wider Leicester Urban Area on the edge of the city by both the City Council and neighbouring authorities in their local plans. It is vital that our transport networks are able to support this growth.



33. A 2020 Leicester and Leicestershire Enterprise Partnership business survey showed that:
- **58%** of Leicester city businesses indicated that reducing traffic congestion would be of benefit to their business
 - **50%** of businesses thought that improving access for customers travelling by sustainable modes is important
34. In summary, Leicester has seen significant recent growth, with further growth in the pipeline. Although some of this growth will take place within the City Centre much will take place around the edge of the conurbation, with diverse associated travel patterns which are challenging to meet by public transport.
35. This growth is likely to be harmed by both rising congestion and low productivity if it is not managed in a sustainable manner. These aspects are inevitably connected — with traffic growth affecting public transport viability and accessibility together with health issues through air pollution.
36. A range of interventions is required to address these economic, social and environmental issues, including improvement of the public transport offer and improvement of air quality for residents and visitors to the area. Leicester City Council has a good track record of investing and delivering a range of policies and programmes and has an ambitious set of plans to go much further over the next 15 years.

Summary

Current Bus Network and analysis of local services

Bus services and operators

- 37. Leicester is unusual amongst the main cities in the UK in that it does not have a dominant commercial bus operator. Around **98%** of the network is operated commercially by five operators. This makes partnership work more challenging, particularly in relation to setting network wide standards and progressing towards network wide electrification.
- 38. Services operate out of eight depots, the main four being within the Greater Leicester conurbation. The vast majority of routes operate within the Greater Leicester conurbation, covering both Leicester Unitary and Leicestershire County Council transport authorities.
- 39. Coverage along all major congested urban corridors is good, with pre-covid daytime frequencies of every 10–15 minutes. For those travelling from further afield there are express bus services on most major radials, together with 3 park and ride services directly accessible from the primary road network.
- 40. The vast majority of routes terminate in the city centre, with interchange between operators often required to access the many non-central employment, health and educational facilities.

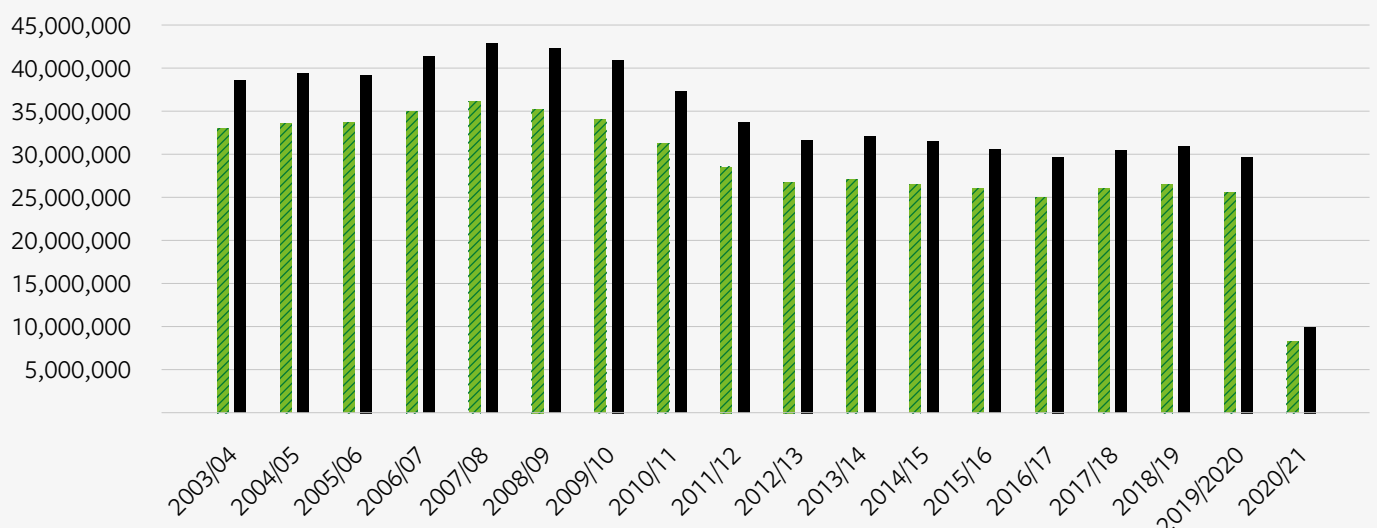
- 41. Virtually all public transport to schools, colleges and universities takes place on the mainstream commercial bus network, rather than on bespoke commissioned contracts.

Patronage trends

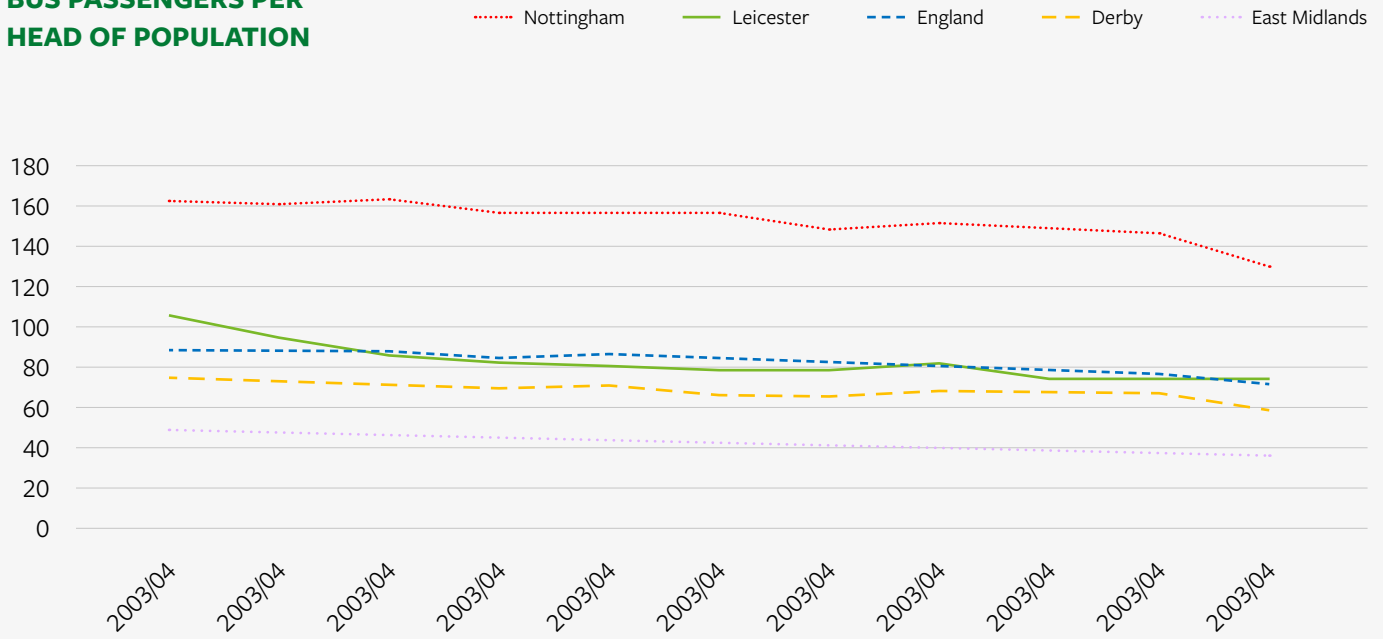
- 42. Pre-covid bus usage (boarding in Leicester City area) was around 25 million passengers p.a. and had been slightly increasing between 2017–2020, having fallen by **28%** from 2008–2017. There is approximately 5 million pa additional boardings within the County council area of Greater Leicester, giving a total of around 30million pa for the overall conurbation.
- 43. Bus patronage of 74 trips/head of population (2019/20) is in line with national average and above the average for the East Midlands. It is also in the middle of the ten core cities which range from 57 for West and South Yorkshire to Nottingham at 131 and London at 233.
- 44. Other dense urban areas such as Reading (137) and Brighton (167) also have significantly higher usage per head than Leicester.

ANNUAL BUS PATRONAGE

 City Boarding  Greater Leicester

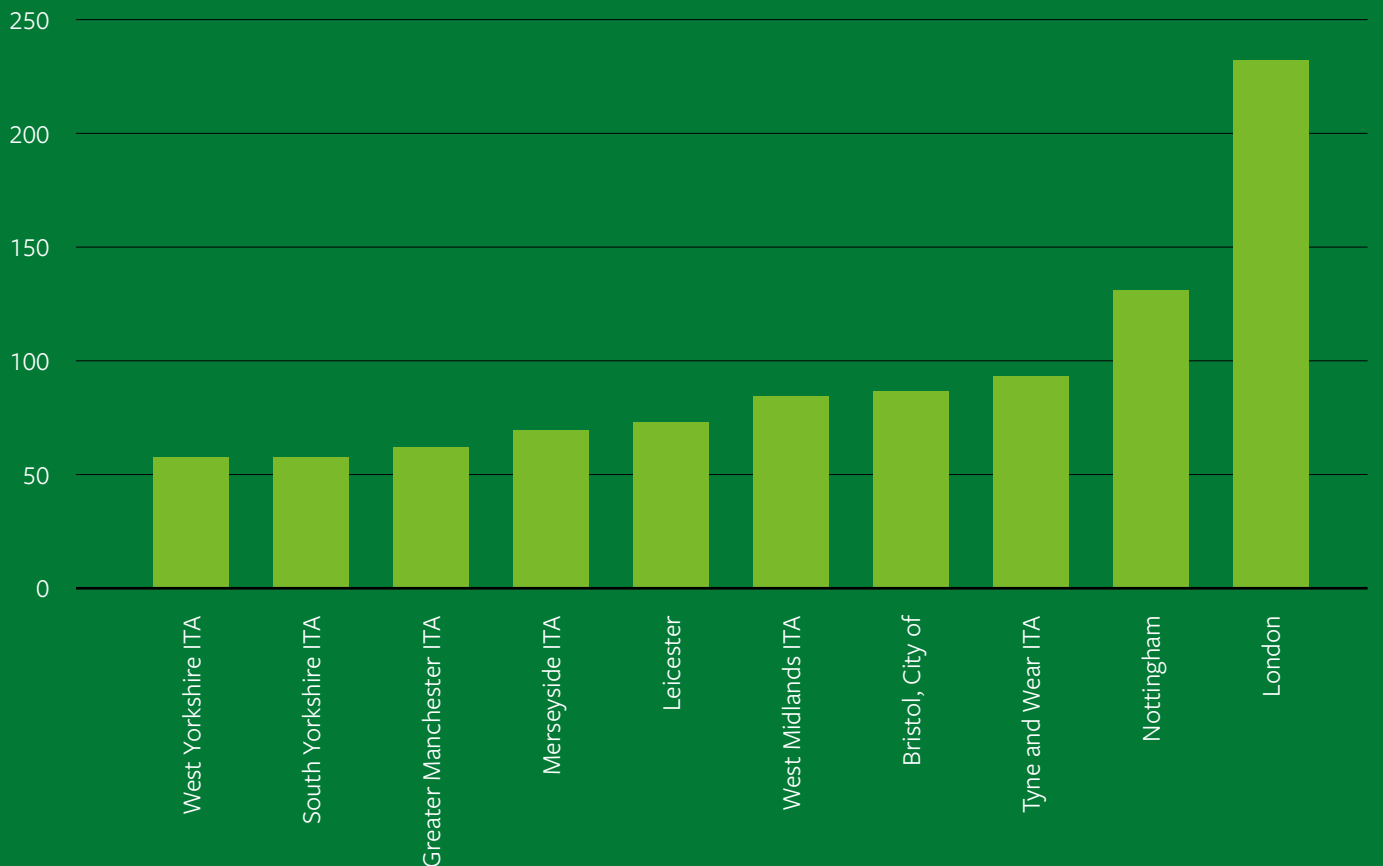


BUS PASSENGERS PER HEAD OF POPULATION



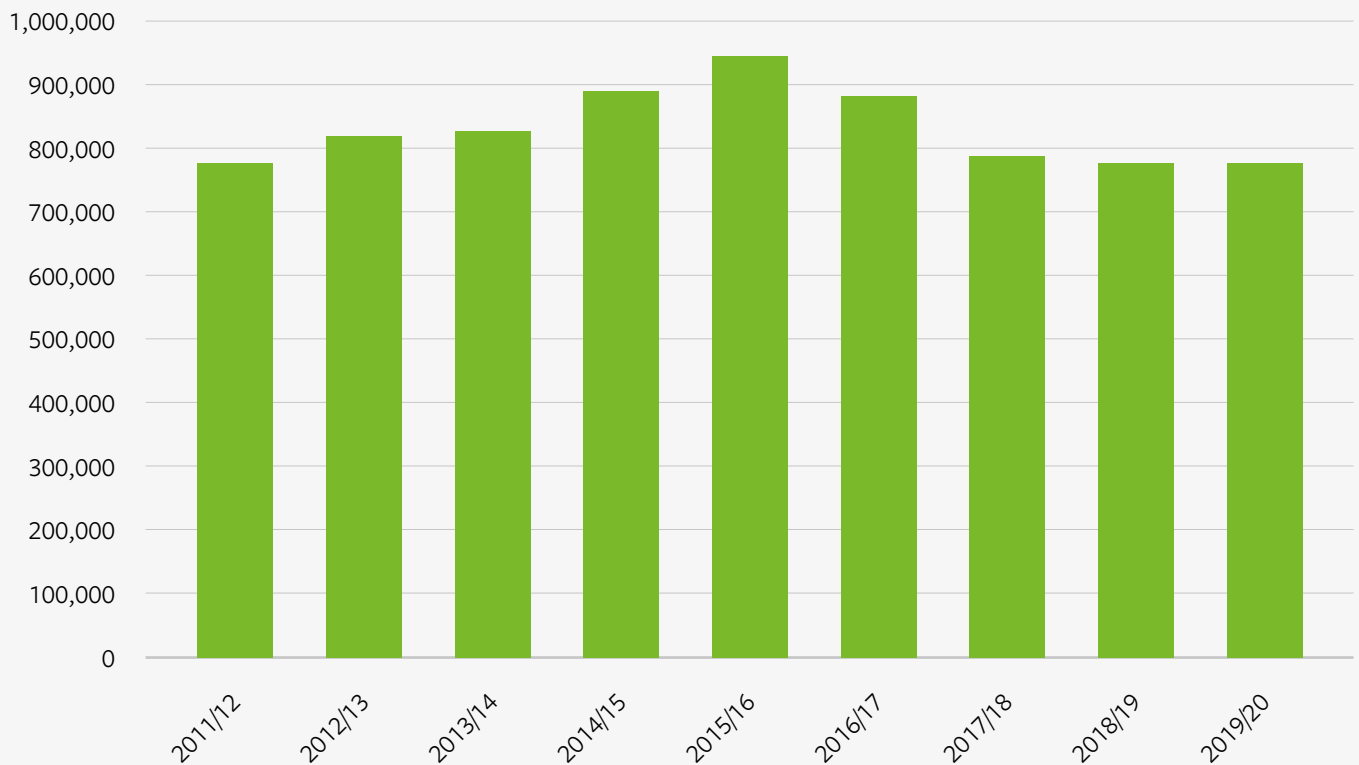
DfT Stats BUS0110a

CORE CITIES: BUS PASSENGERS PER HEAD 2019/20



45. Around a third of trips are made by elderly and disabled concessionary pass holders and a further third by educational movements.
46. The three park and ride services are currently underutilised, with parking and bus capacity available at most times. Fares have recently been lowered to £3 per car load and the buses converted to electric. However cheap commercial central parking (coupled with limited bus priority) is preventing further uptake.

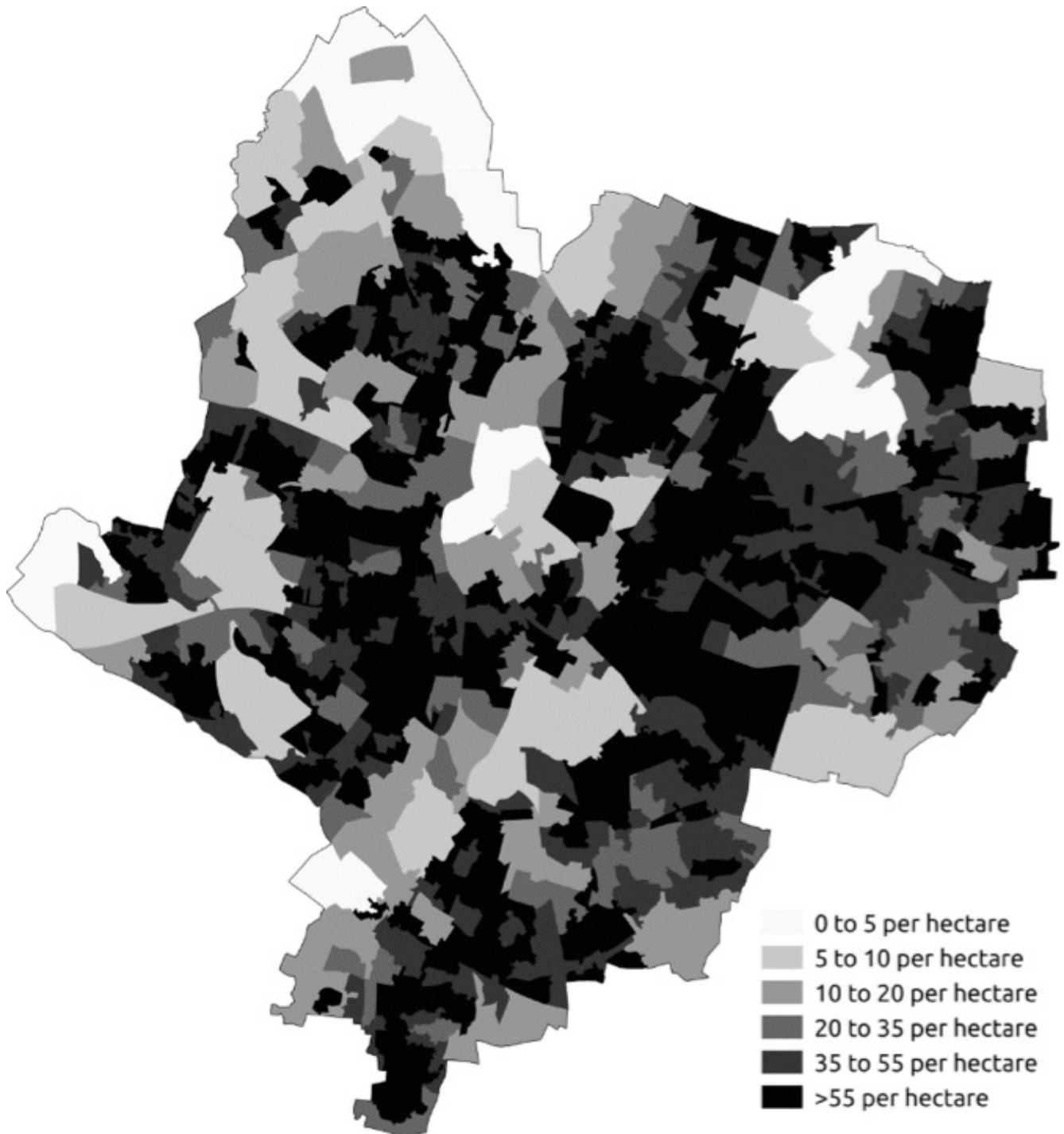
LEICESTER P&R SERVICES — TOTAL PASSENGERS



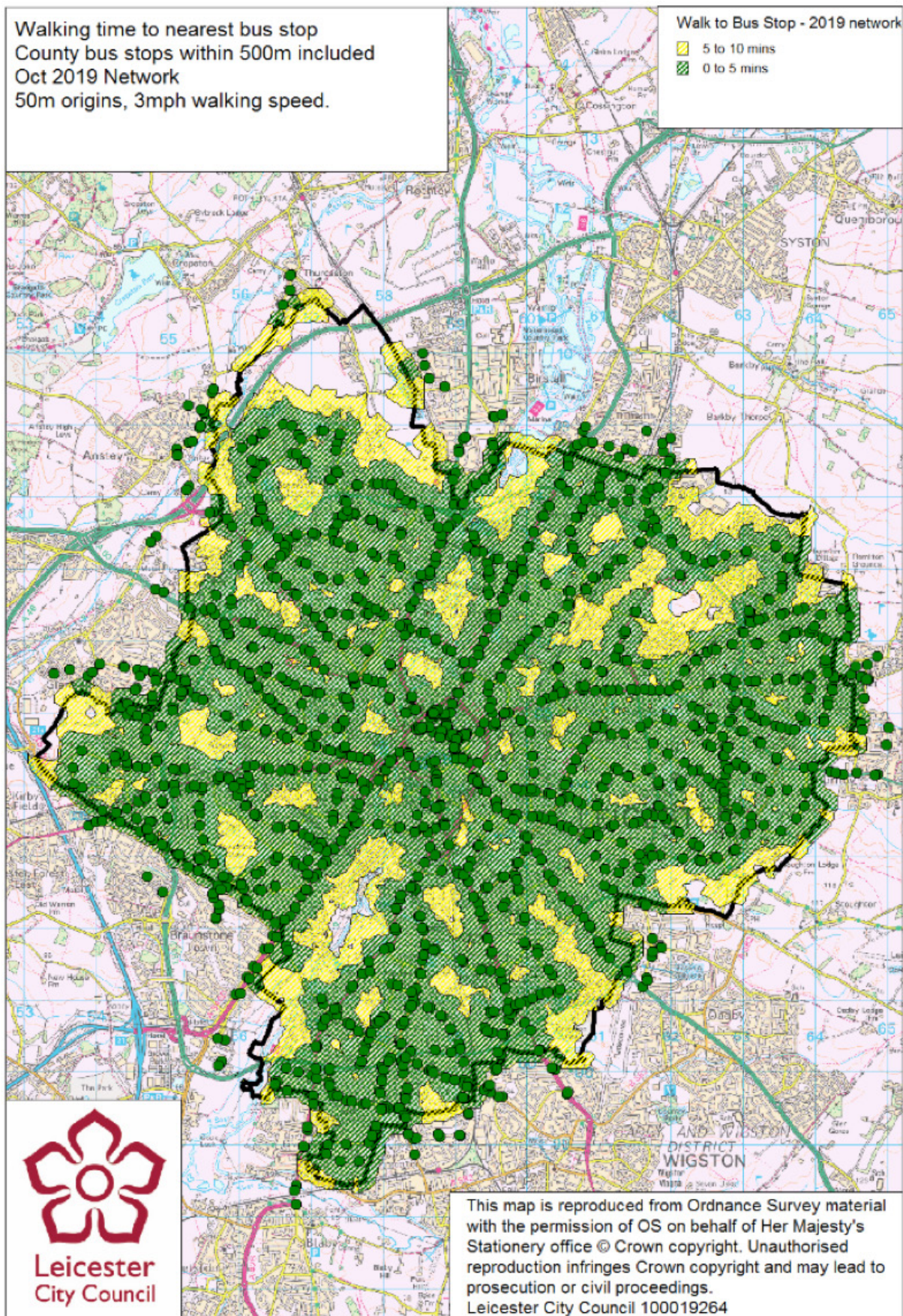
47. Since Covid, bus patronage has risen back to around **70%** of its previous levels. However, there is a large range, with more deprived areas served by higher frequency services being higher than those serving areas of higher car ownership or concessionary use. Concessionary travel is at around **60%** of former levels. For park and ride, however, levels are at around **30%** of their previous levels.

Accessibility

48. Leicester is a compact city with high pockets of population density spread throughout the conurbation, as shown by the map below.



49. Bus accessibility from residential areas to the City Centre is good. Pre-covid, all dense residential areas (above 20 per hectare) have daytime frequencies above every 15 minutes, with reasonable half hourly service levels in the evenings and Sundays. In 2019, **93%** of Leicester's households were within 400 m of a bus stop, with a half hourly or better daytime service to the city centre

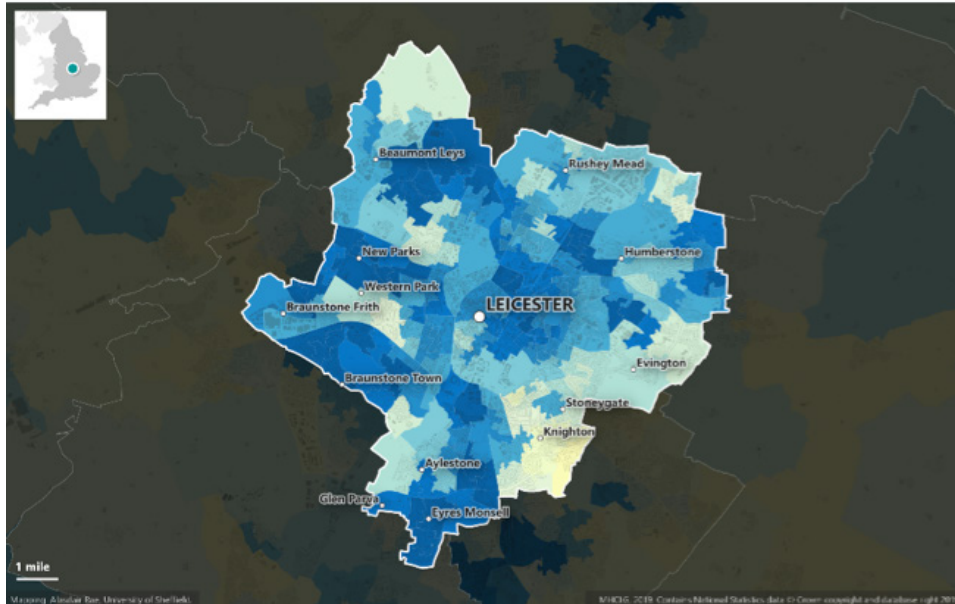


50. These areas also rank between 1 and 4 on the index of multiple deprivation

English Indices of Deprivation 2019

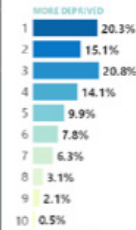


LEICESTER



Local deprivation profile

% of LSOAs in each national deprivation decile



What this map shows

This is a map of Indices of Deprivation 2019 data for Leicester. The colours on the map indicate the deprivation decile of each Lower Layer Super Output Area (LSOA) for England as a whole, and the coloured bars above indicate the proportion of LSOAs in each national deprivation decile. The most deprived areas (decile 1) are shown in blue. It is important to keep in mind that the Indices of Deprivation relate to small areas and do not tell us how deprived, or wealthy, individual people are. LSOAs have an average population of just under 1,700 (as of 2017).



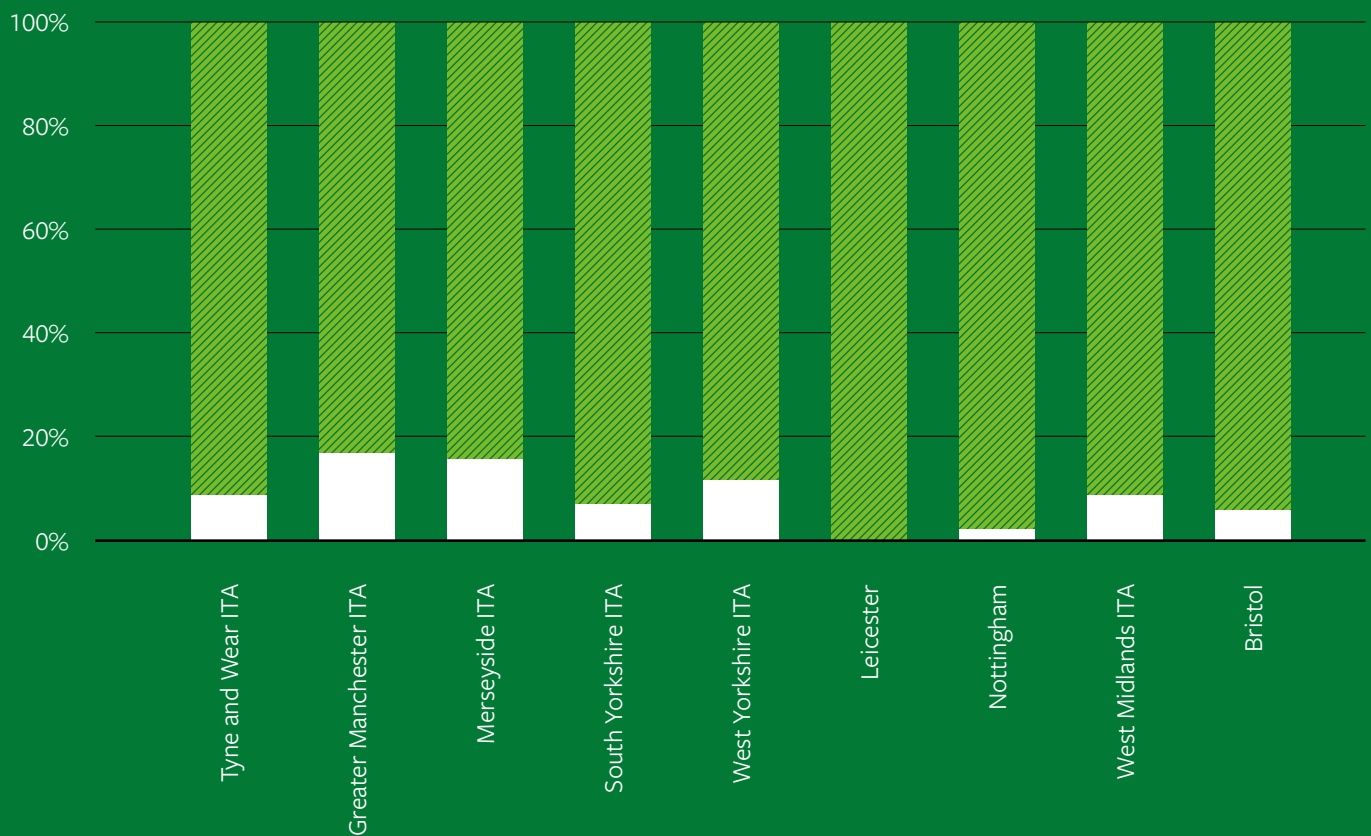
- 51. Pre-covid, other less dense and more affluent areas mostly have daytime frequencies of at least every half hour and hourly in the early evenings and Sundays.
- 52. Access to non-central education, employment, health and leisure sites across the conurbation is also good, being at least every 15 minutes in the daytime and every half hour in the early evening.
- 53. The main network deficiencies have been identified as:
 - Poor inner and outer orbital bus service provision. There is no inner area orbital service, and an outer orbital daytime-only service every hour.
 - Few cross-city bus routes, especially to growing non-central employment locations
 - Competition on several main corridors, with uncoordinated overall timetables leading to bunching and reducing overall effective frequency.
 - Complaints of poor late evening service provision, though no evidence has been found to substantiate demand.
 - Park and ride provision to the east, north east & north west of the conurbation is lacking.
- 54. For a city the size of Leicester, the base tendered service budget is very low at round £530k pa for local daytime 'gap filling' and £200k pa towards the three park and ride services. There is no support for additional late night or Sunday services on commercial services.

55. Leicester ranks as the lowest level of supported services within the Core Cities:

BUS kms (MILLIONS) OPERATED 2019/20				
Core City	Supported	Commercial	% supported	Total
Tyne and Wear ITA	5.9	62.3	9%	68.2
G Manchester ITA	13.7	68.7	17%	82.4
Merseyside ITA	8.9	48.6	16%	57.5
South Yorkshire ITA	3.4	50.5	6%	54.0
West Yorkshire ITA	9.8	76.1	11%	85.9
Leicester	0.1	12.3	1%	12.4
Nottingham	0.3	15.2	2%	15.5
West Midlands ITA	9.6	100.9	9%	110.5
Bristol	1.2	18.8	6%	20.0
Total	53.0	453.5	10%	506.6

OPERATED MILEAGE BY AREA BY TYPE

Supported Commercial

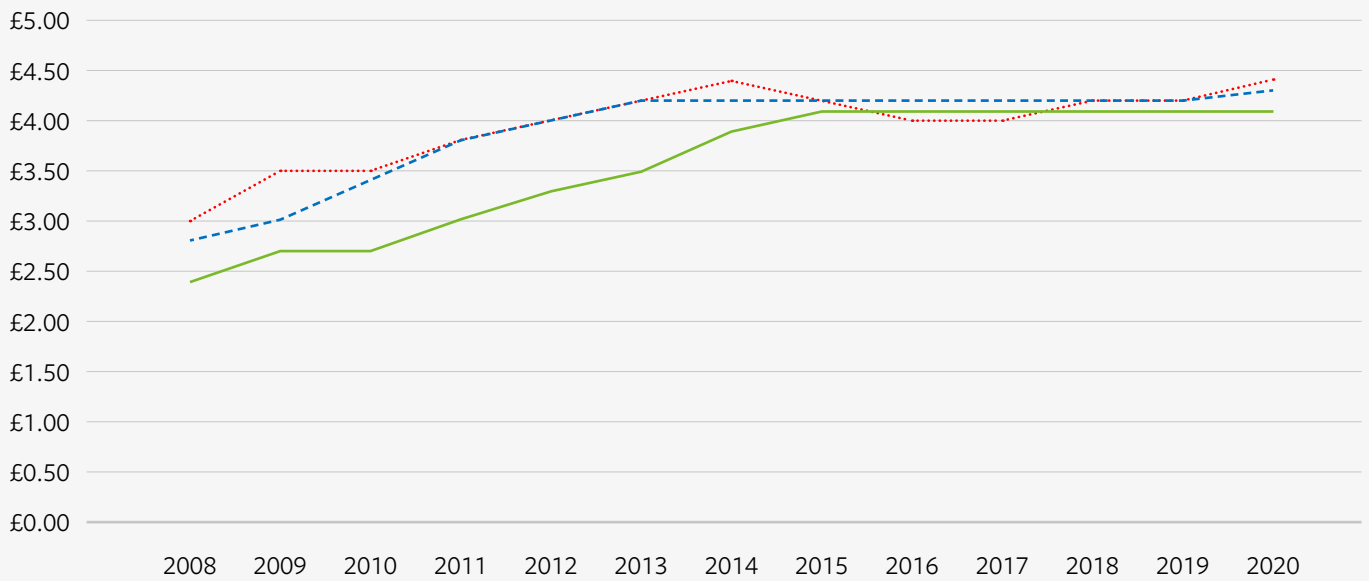


Fares

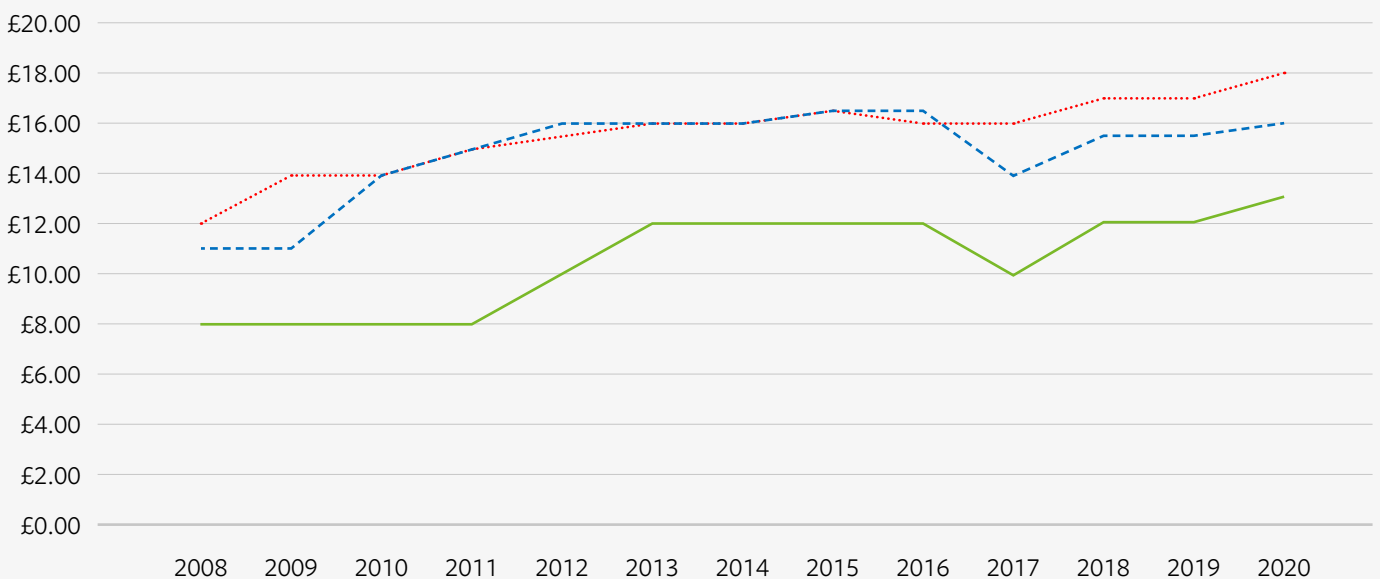
- 56. Although fare levels are on a par with comparable cities, they have risen by more than double the rate of inflation since 2006. Shorter journey fares have risen by three times the rate of inflation.
- 57. There appears to be a direct inverse link between patronage and fare levels over time.

ADULT DAY FARE OVER TIME BY MAIN OPERATORS

First Centrebus Arriva



ADULT WEEKLY FARE OVER TIME BY MAIN OPERATORS



58. Fuel duty was frozen by the Government from 2010 and petrol and diesel prices have not risen in real terms. This contrasts with the real terms increase in bus fares over the same period.
59. In local consultation, fares are seen as a key issue for accessing facilities for young persons aged between 16 and 25.
60. Over **80%** of employment, further education and health facilities lie outside the City Centre. The lack of cross city services and poor orbital services mean that access to non-central sites often requires interchange between operators.

WORKPLACE DISTRIBUTION

	Sites		Employers		Parking Spaces		Employees	
City Centre	41	15%	21	21%	3,616	11%	5,724	10%
Outside City Centre	224	85%	79	79%	28,108	89%	52,613	90%
Total	265		100		31,724		58,337	

61. The City Council operates a discretionary discount scheme for the elderly, and disabled sitting on top of the national statutory scheme. This gives half fare discount (elderly) or free fare (disabled) in the weekday morning peak and accounts for around 150,000 trips pa. It also provides a half fare rail fare subsidy for concessionary pass holders on local rail services between Leicester and Nottingham, Derby, Nuneaton, Peterborough and Kettering.
62. Until April 2020, the City Council also had a discounted half fare for residents who are unemployed and have purchased a monthly £1 pass. This covers any bus route starting or finishing in Leicester. Despite being a generous discount, take up is relatively low, accounting for around 60,000 trips pa. This is currently suspended, following a review of this area as part of the EPP consultation process and agreed post-covid response.
63. There is an established set of all-operator network 'Flexi' tickets. The range of these and media for access has broadened significantly over the past 2 years. They cover both adult, child and student markets and can be purchased on-bus and on various mobile phone ticketing platforms

FLEXI FARES — FROM 25 AUGUST 2021

	Adult	Child	Student
Day	£4.80	£4.20	N/A
Week	£18.00	£13.50	N/A
4-week	£65.00	£50.00	N/A
Year	£620.00	£450.00	£460.00
Academic Year	N/A	£440.00	£450.00
Term	N/A	£195.00	£205.00

64. However, there remains a fare premium for interchange between operators of around **14%** and no automated fare capping — though this is planned. Only around **5%** of journeys take place on all-operator tickets. This is reflected in the very low use of buses outbound from the City Centre in the morning to non-central worksite.
65. Contactless payment has been introduced in its simple ‘model 1’ form — where users ask the driver for a ticket and pay via a ‘tap on’ digital payment media. This is now in place across all buses and park and ride.
66. Automated ‘tap on — tap off’ functionality has been introduced on FirstBus, Centrebus and Arriva this year and due to be introduced on the other operators by March 2022. Passengers no longer have to ask for a given ticket in advance of travel. As well as speeding up board times this gives ‘best fare’ functionality based on the actual trips undertaken during a day or across a week on each operator.

Buses

67. The table below shows the number of buses per company on routes which operate within the Leicester City Council area, including spares that are utilised. Many of these routes also operate in areas beyond the Leicester City Council area, including Leicestershire, Rutland, Northamptonshire and Warwickshire Council areas.
68. Market share is shown both in terms of whole route boardings and on the basis of those boarding within the Leicester City Council area.

LEICESTER FLEET AND MARKET SHARE BY OPERATOR

Market Share — Trips

	Fleet Nos	Fleet Share	Whole Route	City Boarding
Arriva	205	50%	49%	45%
First	88	21%	35%	40%
Centrebus	54	13%	6%	10%
Kinch	17	4%	5%	2%
Stagecoach	34	8%	3%	1%
Roberts	15	4%	2%	1%
Total	413	100%	100%	100%

69. Roberts operate the council-subsidised park and ride network, with Centrebus operating all other socially necessary subsidised services.
70. In January 2018 the Council and bus operators signed a ‘Clean Air Zone’ partnership to ensure that all services operate with buses to ‘Euro 6’ or better emission standard by January 2020.

71. Since this date, the Council has been successful in securing and managing grant funding for operators to retrofit exhaust emission equipment to over 150 buses. By January 2020, 398 buses (**95%**) were Euro 6 standard or above, with funding and plans now in place for the others to be Euro 6 standard by January 2022.

EURO 6 COMPLIANCE

	Jan 20			Dec 21		
	Fleet Nos	Nos buses Euro 6	%	Nos buses Euro 6	%	
Arriva	205	205	100%	205	100%	
First	88	88	100%	88	100%	
Centrebus	54	47	87%	49	91%	*
Kinch	17	17	100%	17	100%	
Stagecoach	34	25	74%	34	100%	
Roberts	15	12	80%	15	100%	
Total	413	394	95%	408	99%	

* includes x5 buses converted to Euro V standard through previous CVT funds

72. There are also 27 buses used for school bus contract work and not registered as local bus services. Funding is now available to convert these to Euro 6 compliance by March 2022.
73. The Council, in partnership with Roberts Travel Group, has recently introduced eleven electric buses on the three park and ride services and four are being introduced on the Hospital Hopper by the end of 2021.
74. More significantly, the Bus Partnership has further ambitious early plans to move over half of the fleet to electric by 2025, subject to DfT ZEBRA funding bids being successful. These will be used by some **68%** of all network trips.

ELECTRIC BUS PROGRESS AND PLANS — 2021–2025

	Total	In place by 2022/3	ZEBRA Fast Track Electric 2024	ZEBRA Bid 2 before 2025	Total by 2025	Total by 2025 %
Arriva	205	0	22	36	58	28%
First	88	30	38	20	88	100%
Centrebus/Council	54	4	6	20	30	56%
Kinch	17	0	0	0	0	0%
Stagecoach	34	22	0	0	22	65%
Roberts/Council	15	14	0	1	14	93%
Total	413	70 (17%)	66 (16%)	77 (19%)	212 (51%)	

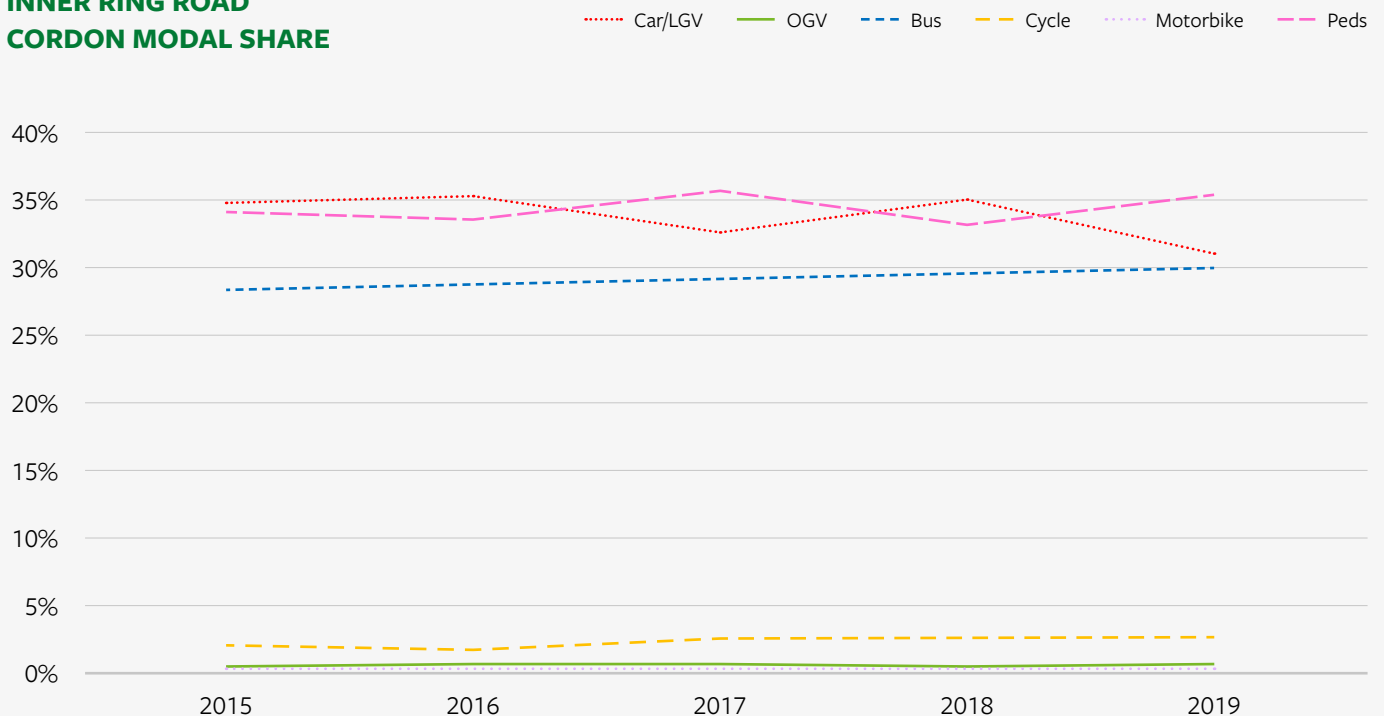
Waiting Facilities

- 75. Compared with other core Cities, there is currently a relatively low quality of waiting infrastructure, particularly for real time displays at bus stops. However, there is a financed programme of works to address this over the next 2 years.
- 76. There is already one new bus station — Haymarket bus station — with the other currently being replaced at St Margaret’s, together with swifter access directly onto the inner ring road.
- 77. There is a financed programme in place to expand real time across main bus stops outside the City Centre with an additional 575 displays to add to the 300 already in place — covering half of all stops.
- 78. There is also a shelter replacement programme currently being implemented, providing 480 high quality glass shelters at main boarding stops.

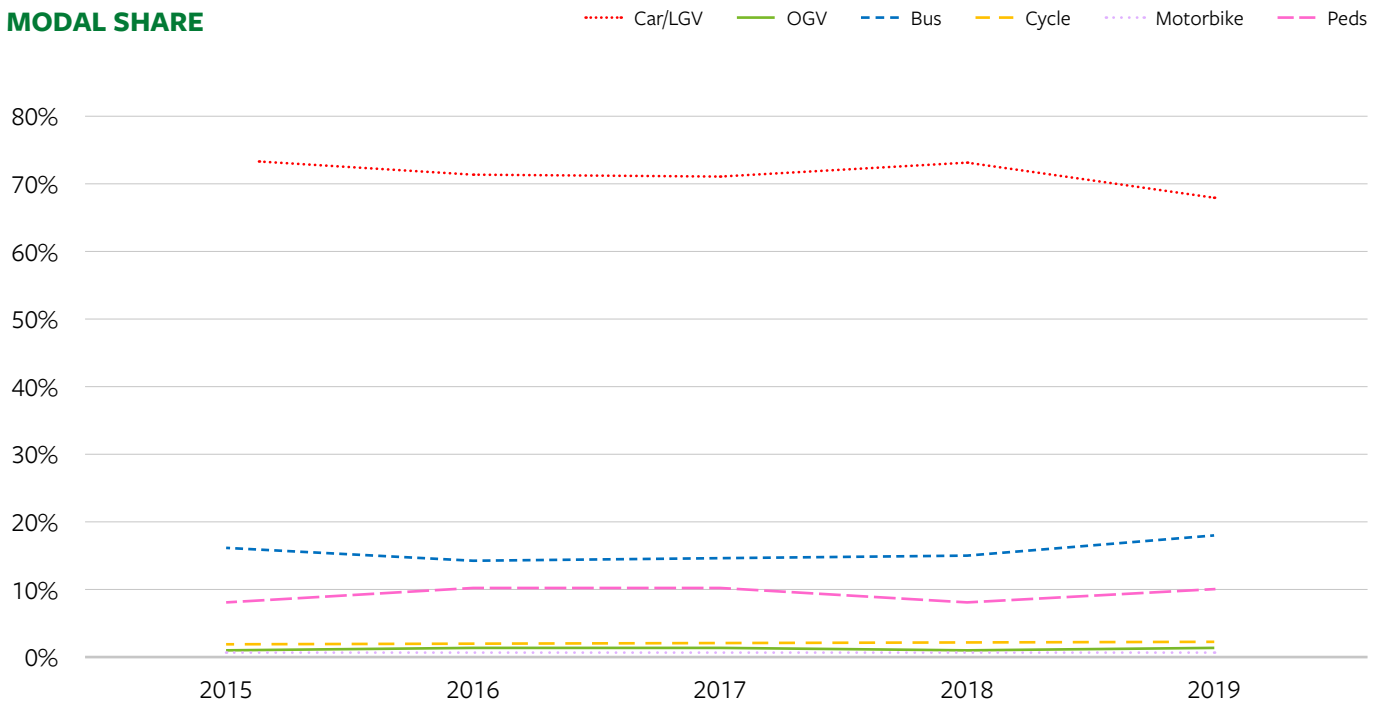
Modal Share

- 79. Modal share varies across the conurbation. Bus modal share is gradually increasing, particularly for the inner and central areas. However, it remains very low for the outer sector.

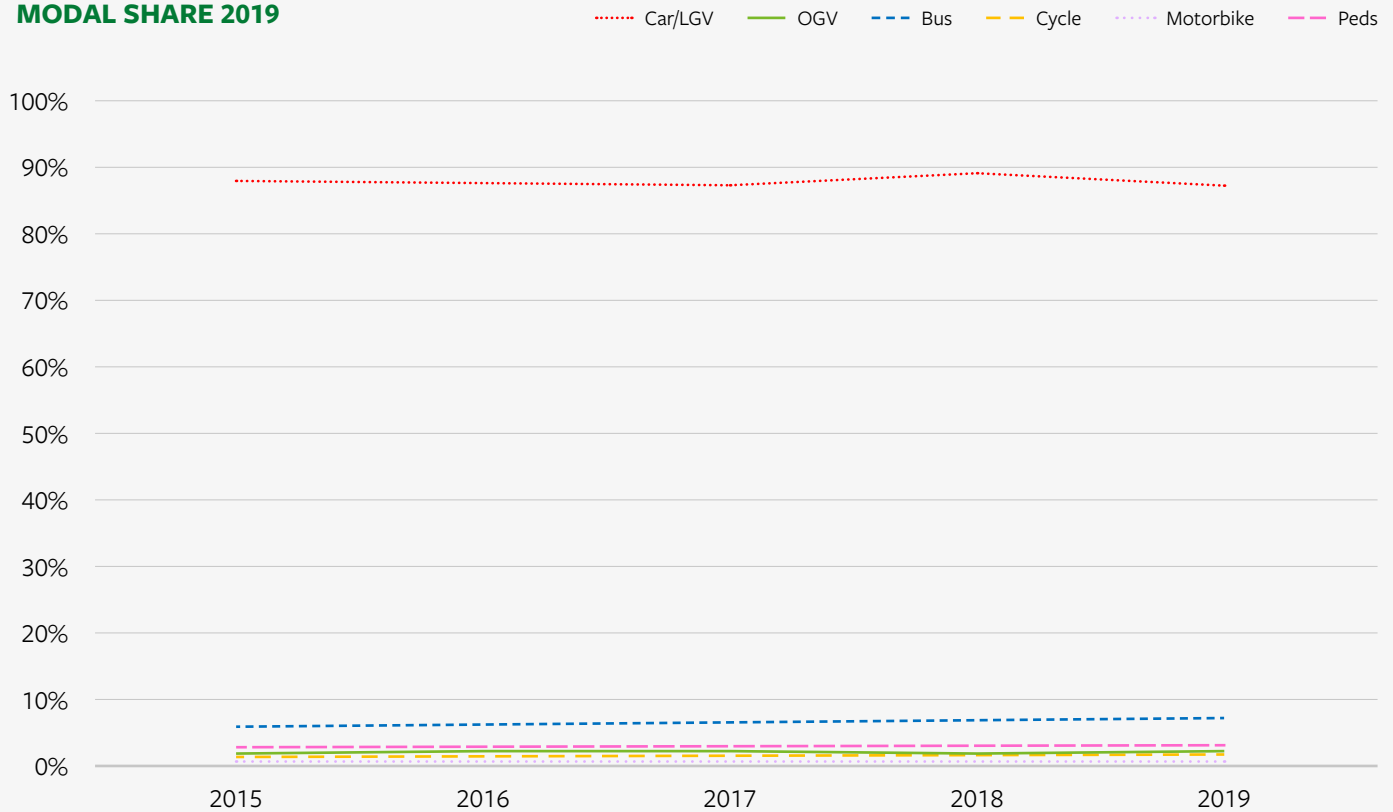
INNER RING ROAD CORDON MODAL SHARE



CENTRAL TRANSPORT ZONE MODAL SHARE



12 HOUR ORR INBOUND MODAL SHARE 2019



80. Within Leicester, **25%** of all car journeys are under 2km, the average trip in Leicester is 5km. In 2019, **93%** of Leicester’s households were within 400 m of a bus stop, with a half hourly or better daytime service to the city centre. This shows the latent potential for further modal shift if the relative attractiveness of bus travel compared to car travel was improved.

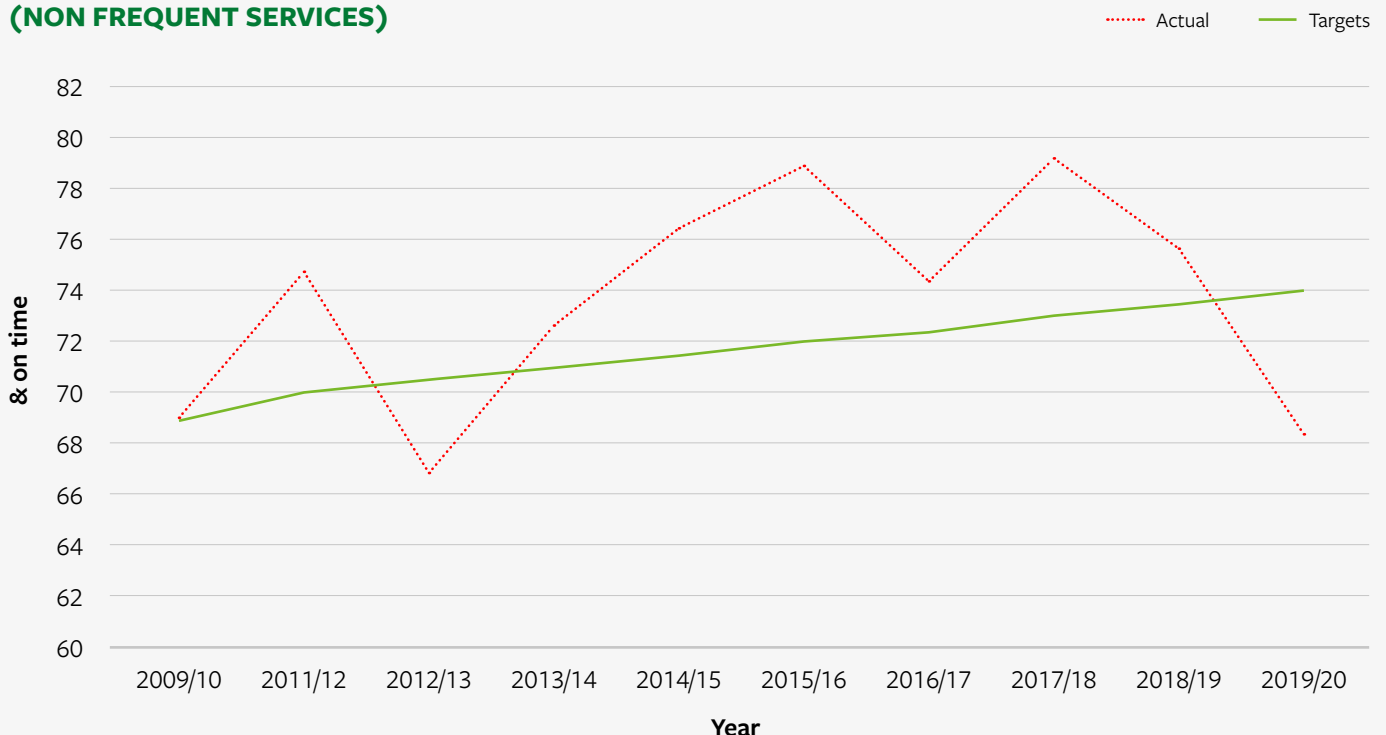
Congestion

- 81. Leicester is ranked as the 11th & 13th most congested UK city by Tomtom and Inrix respectively, while being the 10th largest city in England (in terms of population), with an historic layout of relatively narrow orbital and radial roads and no bypass or multiple lane (3+) A road of any length inside its boundary.
- 82. Annual traffic levels were only just returning to pre-Credit Crunch (2007) levels before lockdown. However, overall, traffic volumes have not been relentlessly increasing year after year as is often assumed — outer area increases being offset by reductions within the inner areas of Leicester.
- 83. Significantly, the predominant traffic growth is in central and outer orbital movements, in line with non-central location of many companies, new housing and hospitals. It is the junctions of the three orbital roads with each the main radial routes where significant delays are caused to both radial and orbital movements.
- 84. Car ownership from the 2011 census ranked Leicester in the lowest **10%** of local authorities for car ownership, with only **63%** of households owning a car or van. The average for England was **74%**.
- 85. Parking costs and availability. There is relatively cheap and plentiful central area private parking — including employer deals. Daily commuter parking costs can be as low as £3/day or lower, significantly undercutting average bus fares. There are 5000 more spaces than Nottingham, with parking costs around **40%** lower. Nottingham also has 5000 more P&R spaces than Leicester.

Bus punctuality and bus priority

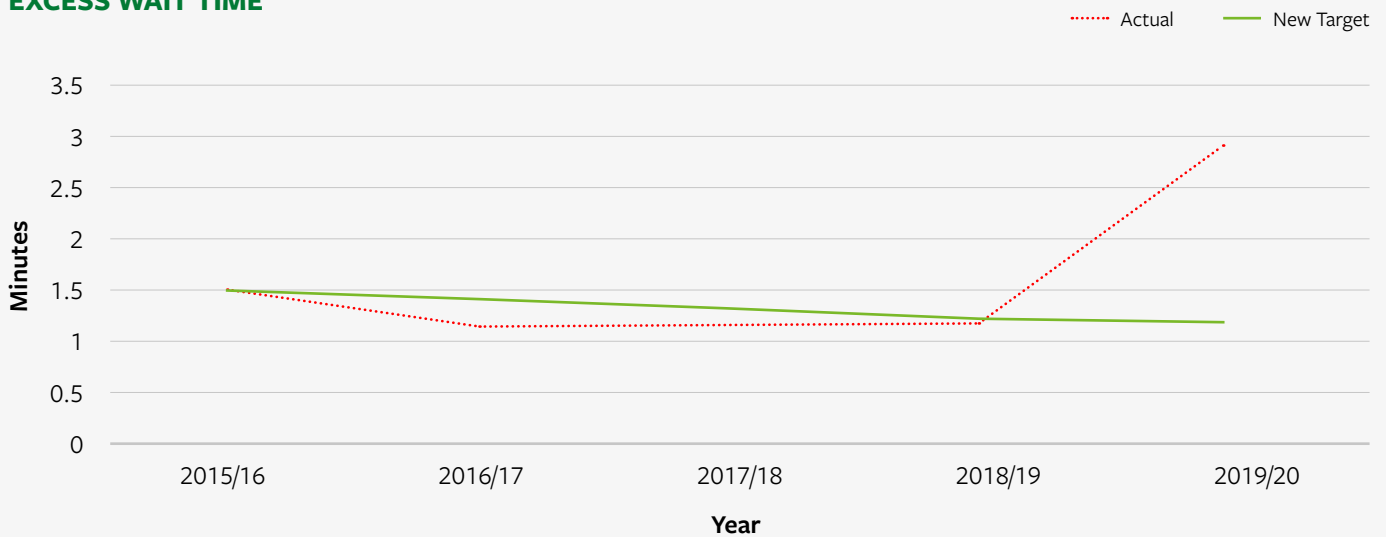
- 86. The graphs below show recorded bus punctuality across the network in relation to non-frequent and frequent services (more than 6 an hour).
- 87. Non-frequent services record the percentage of journeys which are within 1 minute early and 5 minutes late at their timing points. This was gradually improving until congestion grow from 2017.

BUS PUNCTUALITY (NON FREQUENT SERVICES)



88. Frequent services are recorded on the basis of ‘excess wait time’. This relates to amount above the average expected wait time. So, for a ten-minute frequency service passengers would expect to wait on average 5 minutes. An excess wait time of 1.25 mins equate to an average wait time of 6.25 mins. It can be seen that this measure was improving gradually until 2018/9 when it deteriorated rapidly.

BUS PUNCTUALITY — FREQUENT SERVICES EXCESS WAIT TIME



89. There has been a gradual increase in bus lane provision over time. The map below shows 13.5km of bus lane that operate at all times and 6.75km as peak hours only. This comprises of a large number of small sections focussed on the main traffic pinch points on these corridors.

LEICESTER BUS LANES — JAN 21 — LINEAR ROUTES

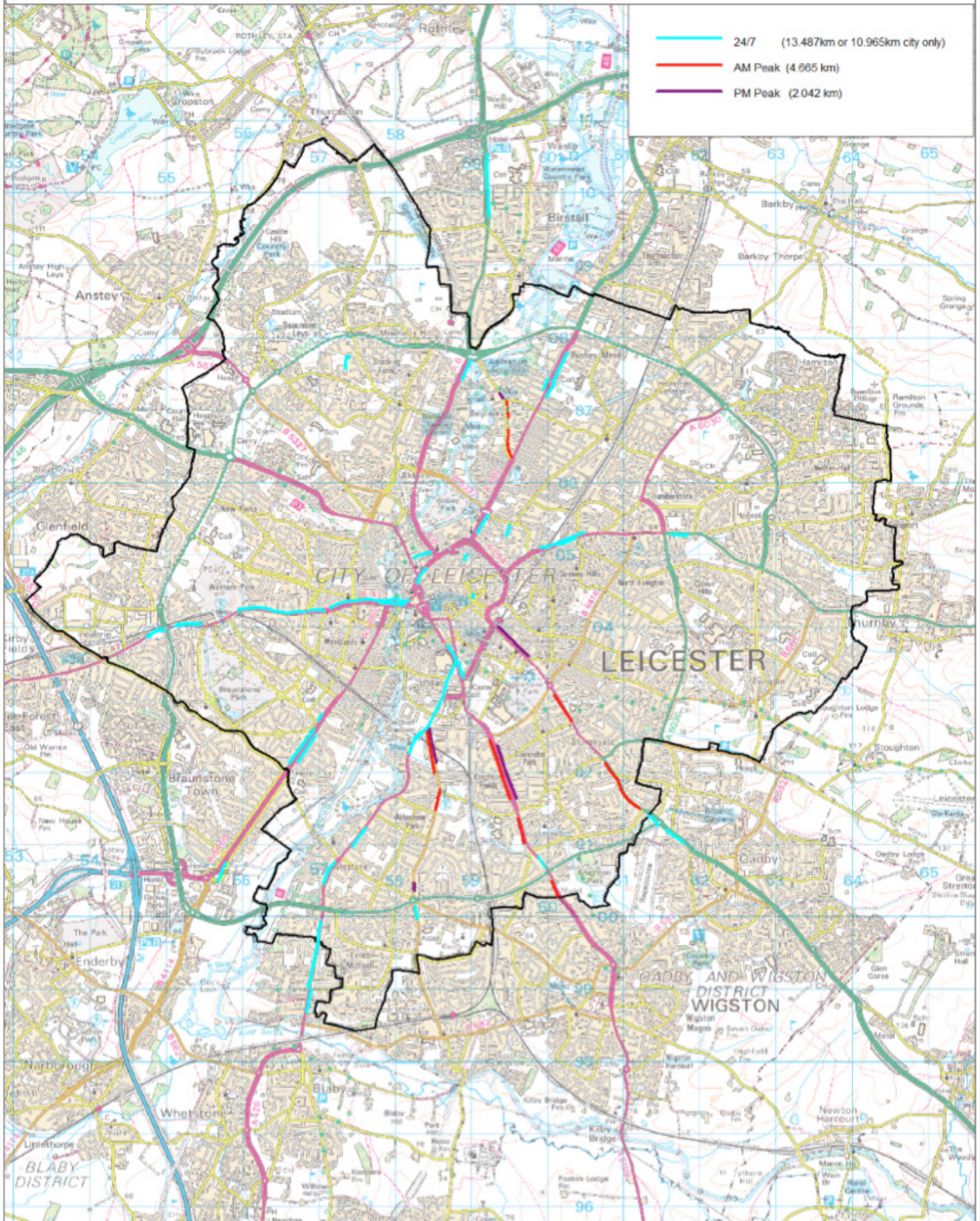
Location	In/Outbound	Detail	Period
Abbey Lane	Inbound	Red Hill Circle to Thurcaston Road Junction	At any time
Aylestone Road	Outbound	South of Banks Roads, north of Belvoir Drive	At any time
Aylestone Road	Inbound	Gas Works — Infirmary Road	At any time
Aylestone Road	Outbound	South of Saffron Lane to south of Boundary Road	At any time
Aylestone Road	Inbound	Saffron Lane — Almond Road	At any time
Glenfield Road East	Inbound	King Richards Road — West	At any time
Hinckley Road	Outbound	East Avery Hill — west of Braunstone Way	At any time
Hinckley Road	Outbound	East Braunstone Way	At any time
Hinckley Road	Outbound	Westcotes Drive — Melcroft Avenue	At any time
Hinckley Road	Inbound	North east opp Winstanley Drive — Clarefield Road	At any time
Hinckley Road	Inbound	Wyngate Drive — Frampton Avenue	At any time
Humberstone Road	Outbound	Syston Street East — Parry Street	At any time
Humberstone Road	Inbound	South west Spinney Hill Road — Opp Parry Street	At any time
Infirmary Road	Inbound	Aylestone Road to Pelham Street	At any time

LEICESTER BUS LANES — JAN 21 — LINEAR ROUTES

Location	In/Outbound	Detail	Period
Infirmary Square	Inbound	Jarrom Street — South	At any time
King Richards Road	Inbound	Henton Road — Kate Street	At any time
King Richards Road	Inbound	West of Narborough Road North	At any time
London Road	Outbound	Conduit Street — Evington Road	4–6pm M/F
London Road	Outbound	Aylestone Road — Shakespear Street	4–6pm M/F
London Road	Inbound	North of Shanklin Drive — South East Knighton Drive	7:30–9:30am M/F
London Road	Inbound	Opp St Johns Road — Opp Stanley Road	7:30–9:30am M/F
London Road	Inbound	Grace Road — Clifton Road	7:30–9:30am M/F
London Road	Inbound	Lothair Road — Aylestone Road	7:30–9:30am M/F
Loughborough	Outbound	Greenway — Holden Street	4–6pm M/F
Loughborough	Outbound	Elmdale — Belgrave Avenue	4–6pm M/F
Loughborough	Outbound	Vicarage Lane — Thurcaston Road	4–6pm M/F
Road	Outbound	Victoria Park Road — Chapel Lane	4–6pm M/F
Road	Inbound	Checketts Road — Windsor Road	7:30–9:30am M/F
Road	Inbound	Quemby — Belgrave	7:30–9:30am M/F
Lutterworth Road	Inbound	City Boundary — North of Gilmorton Avenue	At any time
Lutterworth Road	Inbound	North of Buckingham Drive — South Marsden Lane	At any time
Melton Road	Inbound	Glencoe Avenue — Stafford Street	At any time
Melton Road	Outbound	Sandringham Avenue — Lanesborough Road	At any time
Melton Road	Outbound	Segregated nearside lane at its junction with Tigers Way	At any time
Narborough Road	Inbound	North east Braunstone Lane East — Dumbleton Avenue	At any time
Narborough Road	Inbound	North east Fullhurst Avenue	At any time
Narborough Road	Inbound	Dumbleton Avenue — South east Rowley Fields Avenue	At any time
Saffron Lane	Inbound	Grace Road — Clifton Road	7:30–9:30am M/F
Saffron Lane	Inbound	Lothair Road — Aylestone Road	7:30–9:30am M/F
Saffron Lane	Outbound	Aylestone Road — Shakespeare Street	4–6pm M/F
Saffron Lane	Inbound	Opp Lydall Road — North	At any time
Saffron Lane	Outbound	Boundary 500/552 — South Boundary 570/572	At any time
St Augustines	Outbound	East of Narborough Road North	At any time
St Augustines	Inbound	Tudor Road — St Nicholas Circle	At any time
St Augustines	Outbound	Slip into Duns Lane	At any time
Uppingham Road	Inbound	Scraptoft Lane — Coleman Road	At any time
Welford Road	Inbound	Hillcrest Road — Victoria Park Road	7:30–9:30am M/F
Welford Road	Inbound	Asquith — Knighton Lane East	7:30–9:30am M/F
Welford Road	Inbound	Highgate Drive — Asquith Way	7:30–9:30am M/F
Welford Road	Outbound	Granby Halls — Tigers Way	At any time
Welford Road	Outbound	South Chestnut Street — North Knighton Street	At any time
Welford Road	Outbound	Welford Road — Infirmary Road	At any time

Existing Bus Lanes

- 24/7 (13.487km or 10.965km city only)
- AM Peak (4.665 km)
- PM Peak (2.042 km)



90. However, it also includes significant bus priority features in the City Centre impacting on the whole network as shown in the table below.

LEICESTER BUS LANE PRIORITY AND ENFORCEMENT — JAN 21 — CENTRAL AREA FACILITIES BUS LANES/GATES			
Location	Detail	Period	Restriction
Abbey Street	Junction Belgrave Gate	At any time	Bus Gate
Duns Lane	St Augustines to 30m South	At any time	Bus Gate
Vaughan Way	Right turn into Causeway	At any time	Bus Lane
Sanvey Gate	St Margarets Way — Northgates	At any time	Bus Lane
Rutland Street	Entry from Charles Street	At any time	Bus Gate
Charles Street	Halford — Rutland	At any time	Bus Lane
Belgrave Gate	84m North Bedford Street South — Charles Street	At any time	Bus Lane
Horsefair Street	Between Market Place Approach and Granby Street	At any time	Bus Gate
London Road	Interchange at Station	At any time	Bus Lane
Charles Street	Northbound Junction with Humberstone Gate	At any time	Bus Gate
Charles Street	Southbound Junction with Belgrave Gate	At any time	Bus Gate
Causeway Lane	Westbound Junction of East Bond Street	At any time	Bus Gate

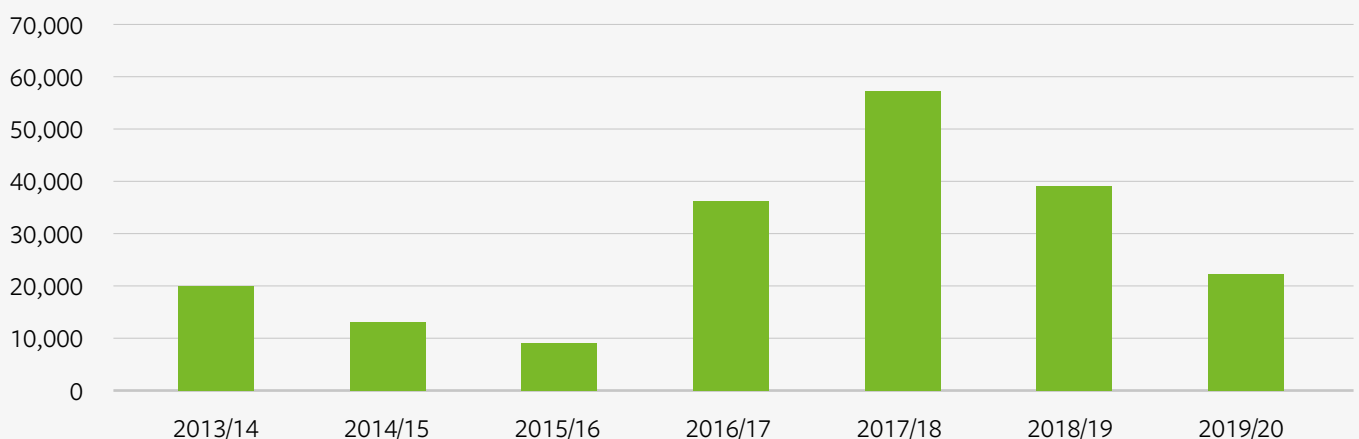
91. There are identified gaps in both the north/north west and east, corresponding with traffic pinch points. Those in the north/north west now have Transforming Cities Funding for bus priorities which are being implemented over the next 2 years. Those on the eastern corridors fall within this EP Plan for future attention (see Bus Priority section below).

92. The City Council undertakes its own enforcement of bus lane and gate adherence, using an automated camera and fining system. This is being rolled out gradually across the bus lane network, with 16 fixed cameras systems currently installed.

93. From 2017–2020 the notice levels dropped significantly, showing the effectiveness of this system on contravention. (The cameras were largely switched off for the past 18 months due to covid.) There is also an ongoing programme of introducing red routes on the main bus routes into the City Centre, with London Road already completed and others planned over the next 2 years.

94. In addition, the area traffic control centre has a programme of smart signalisation and queue relocation work designed to smooth flows and improve reliability. The Aylestone Rd has benefitted from this treatment over the past 2 years, with associated bus punctuality improvement.

BUS LANE PENALTY CHARGE NOTICES



Bus Satisfaction

95. Bus satisfaction levels in 2019 as recorded by Transport Focus are reasonable, but there is room for improvement.

- Punctuality and reliability **65%**, top authority **84%**
- Value for Money **57%**, top authority **77%**
- Journey time **82%**, top authority **90%**
- Overall **86%**, top authority **95%**

(Based on those rating 'very and fairly satisfied' in Autumn 19 Passenger Focus Survey)

Summary

96. Prior to covid, a previous significant downward patronage trend had been halted and there were signs of it starting to rise. There was a comprehensive commercial bus network, with strong bus investment, good accessibility levels and reasonable performance.
97. As the city recovers from covid, Leicester has a strong bus base from which to build, particularly given the overall predicted growth of the conurbation. However, the relative attractiveness of car travel compared with bus travel remains a significant issue, particularly for the rising number of trips required to non-central locations.
98. In addition, the commerciality of the bus network will take some time to recover to pre-covid levels and will require additional financial support in the following years to maintain pre-covid operational levels.

Strategic Objectives

Council Objectives

99. Currently the Council is consulting on a Local Transport Plan 2021–2036 with the following overall transport objectives, which are also the objectives for this EP Plan.

ADDRESSING CLIMATE CHANGE

100. Requires a faster progression to transport changes that minimises emissions of greenhouse gases. This means minimising journeys overall and a transfer to public transport, cycling and walking and to zero emission vehicles.

FACILITATING A GROWING CITY

101. Requires a step change in public transport options and interchanges to serve both new and existing residents. This will give residents and visitors good quality alternatives to the car.

A BETTER CONNECTED CITY

102. Requires improved choice and efficiency of transport options, as well as encouraging behaviour change and managing parking. This will mean prioritising sustainable modes of transport on the highway network and where possible, rebalancing pricing signals that don't support sustainable transport.

HELPING MAKE HEALTHIER PEOPLE

103. Requires significantly better cycling and walking options and improved air quality, creating a safer, cleaner and more attractive environment for residents and visitors.

104. Bus travel has a key role to play in each of these objectives, with broad outcomes based on maximising:

- modal shift from car and numbers travelling by bus
- accessibility to the bus network — geographically and financially.
- reduction in local air pollution

National Objectives

105. The LTP objective overlap with the Department for Transport national objectives for promoting bus use in order to:
- reduce local air pollution — focussing on carbon dioxide and nitrogen oxide emissions
 - improve the whole bus experience for the bus user — to assist in modal shift and sustainable growth
 - level up — assist in local accessibility and investment in less affluent areas.

Commercial Objectives — Financial Sustainability

106. The majority of bus services in Greater Leicester are commercially operated by private companies. Their main objective is to provide the best possible service that is financially sustainable and profitable.

107. Allied to this is an additional Council objective for local bus travel to be provided in the most cost-effective way in order to:
- fulfil the Council's statutory requirements to provide safe travel to school.
 - Reduce the need for ongoing local government support by maximising the proportion of the network that is commercially operated.
108. Aligned to this is the urgent need for both the commercial and contracted bus network to recover from the impact of covid and to regain patronage revenue to the sustainable levels that existing prior to covid.

Overall

109. It is the function of this EP Plan to blend together these public and private objectives within an ongoing constructive partnership.

Issues

External Constraints

110. When addressing the key factors currently constraining bus travel, it is worth noting that several of these are down to aspects outside the remit of a traditional bus plan, but addressed within the higher-level Local Transport and Local Plans.

DERIVED DEMAND

111. People generally only travel for a specific purpose. If they have no reason to travel at certain times or to a given place, then it is largely irrelevant how good the bus service is for this type of movement.
112. If the majority of people moving to a new housing estate on the edge of the conurbation rarely need to go to Leicester for work or education, then it may be unwise to prioritise limited resources for better bus services into Leicester from this estate.
113. If few people want to go to the City Centre in the evening, then again it might be unwise to focus limited resources on better evening bus frequencies.

TRAVEL OPTIONS AND GENERALISED COST OF TRAVEL.

114. There are many different types of traveller and trips. For each situation, a person will look at the overall cost of each option available in terms of time, money and convenience.
115. For many, the relative cost of bus travel over car travel will be so great, that it is unrealistic to expect modal shift through improving the bus 'offer'. It is therefore better to focus on those types of movement and traveller where this relative gap is much lower. These are more likely to be made by those on a lower average income, who incur parking costs but live and work close to well established bus routes.
116. In addition, it is as important to prioritise resources to keep existing bus passengers using buses and not to shift to an alternative mode.

PLANNING, DEVELOPMENT AND TRAVEL DISTANCES

117. There has been a shift over several decades to travel further for work, hospital, educational and leisure activities — with changes to the way these areas are concentrated into larger units with bigger catchments, in non-central locations.
118. This will inevitably have significant impact on the viability of the bus market over time, since these locations are much easier to access by car.

ROAD SPACE AND ORBITAL ROAD NETWORK

119. Unlike some larger cities, many of Leicester's key radial routes have road widths limited by tight building lines and local shopping facilities — constraining the potential for significant dedicated road space for buses at key pinch points.
120. There are effectively three orbital roads — inner, middle and outer — in Leicester with no grade separation. The car movements on these roads are constraining key junctions on each radial, again limiting the potential for further bus priority on these radials.

POTENTIAL STRUCTURAL CHANGES SINCE COVID OUTBREAK

121. Currently it is unclear what the medium and longer term impact is of Covid on future bus travel behaviour, particularly in relation to the recent increases in:
- home working
 - online shopping and entertainment
 - car ownership
 - fear of using buses, particularly by the elderly and those with long term health conditions
122. Current evidence would indicate that the 'bounce back' from covid is likely to be different across different types of routes. Those routes which previously reliant on passengers who also had access to car or on office workers who can now permanently work from home are likely to be the slowest to recover.

Overall Focus

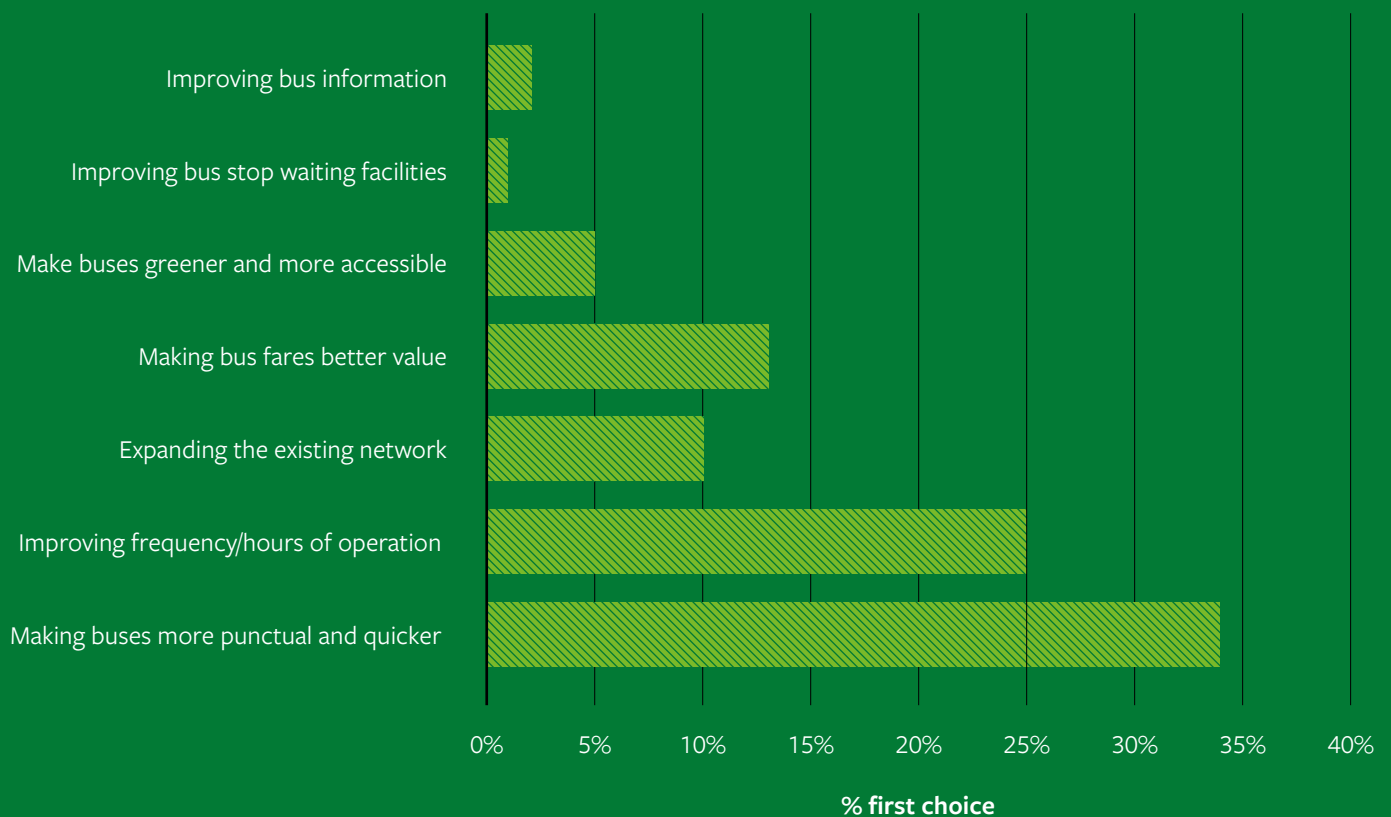
123. Given these significant external constraints on bus travel, any proposed market interventions to improve bus travel need to be specifically focussed to maximise their likelihood of success in meeting the above objectives and outcomes.
124. This focus should ideally be on the issues that impact on:
- those who currently travel by bus but could readily move to car if the relative attractiveness of bus travel diminished.
 - those who currently travel by car, but could readily move to bus if its relative attractiveness was improved.
 - those who are making key transition changes in their life — changing jobs, moving house, starting new school etc — making them more receptive to a change in mode of travel.
125. The following process has been undertaken to ascertain the key bus issues that affect such travellers, together with the likely measures that could improve the relative attractiveness of the bus:
- calibration of the current base situation in Leicester across various measures, highlighted in the overview sections above.
 - desk research to examine the reasons for differences in these measures in other cities — those higher bus usage per head of population: Nottingham, Brighton, Bristol, Newcastle and London.
 - in depth engagement with senior managers in each local bus company in Leicester.
 - consultation process with the Leicester Bus User Panel and key employers, including universities, hospitals and DWP.
 - on-line questionnaire completed by 450 users via each the main bus companies web portals.

Key Themes

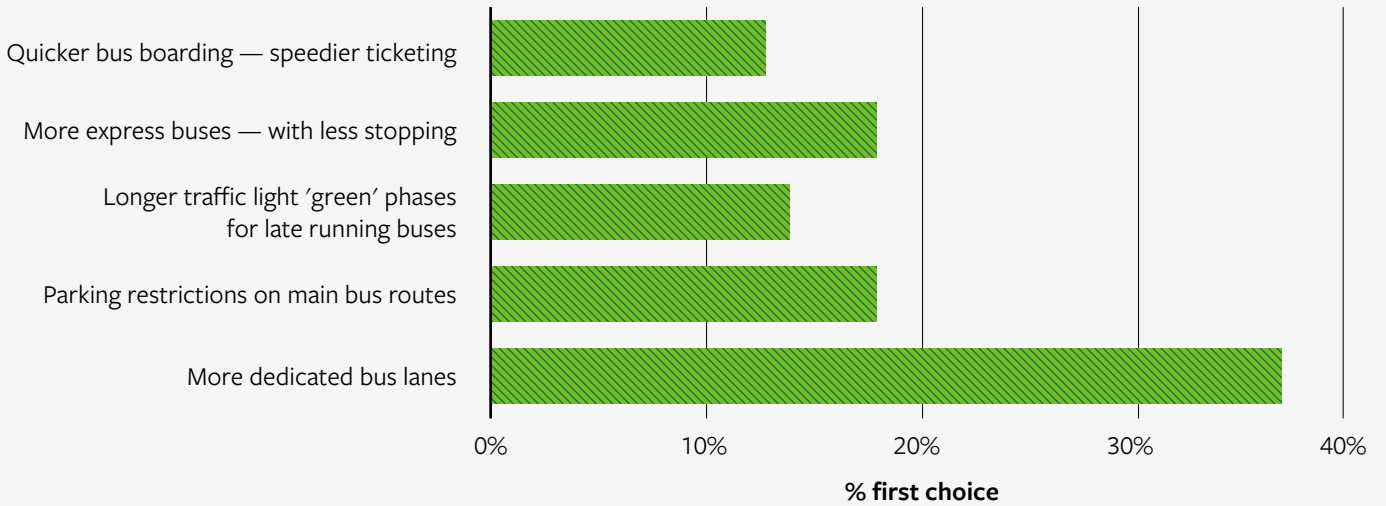
- 126. From this process, the following themes stood out.
- 127. There is a need for an urgent financial revenue support package to transition from covid back closer towards the commercially sustainable position that was in place pre-covid.
- 128. The issues for bus users and other travellers are geographically widespread and not focussed on a specific key corridor or type of movement. This reflects the geographically dispersed nature of employment, educational, hospital and residential clusters across the conurbation.

- 129. The issues for bus users are wide ranging across many aspects of bus travel and include the need to:
 - make buses more punctual and quicker
 - improve timetables of existing bus services — more frequent etc
 - expand the existing network, with additional express routes
 - make bus fares better value
 - make existing buses greener and more accessible
 - improve bus stop waiting facilities
 - improving bus information
- 130. Below are summary graphs of the first choices given by passenger for each of these intervention areas.

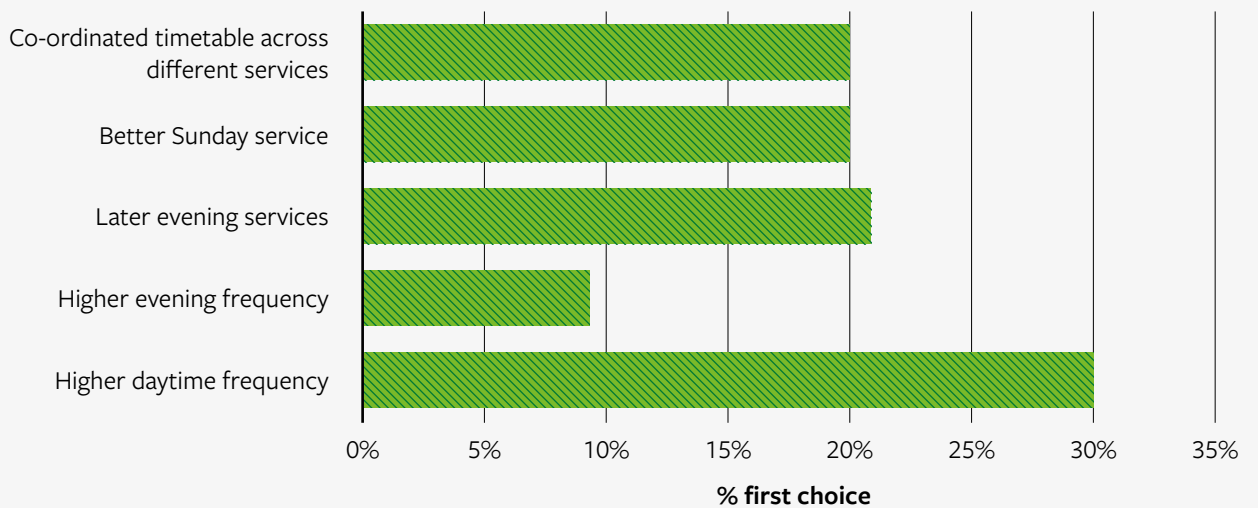
WHERE BEST TO FOCUS RESOURCES?



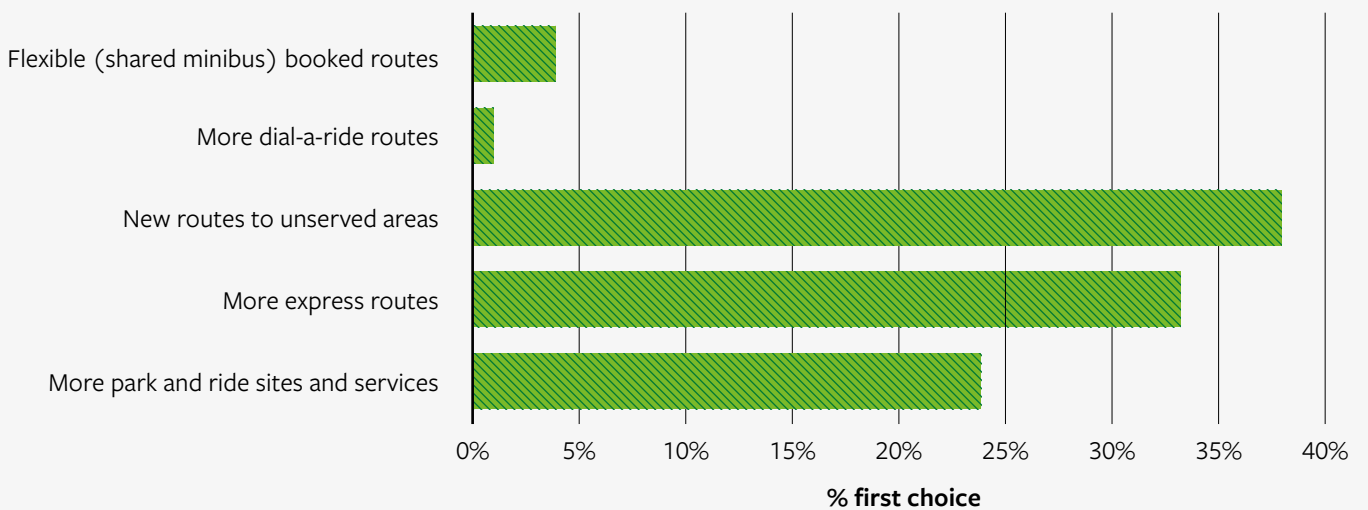
HOW BEST TO MAKE BUSES MORE RELIABLE?



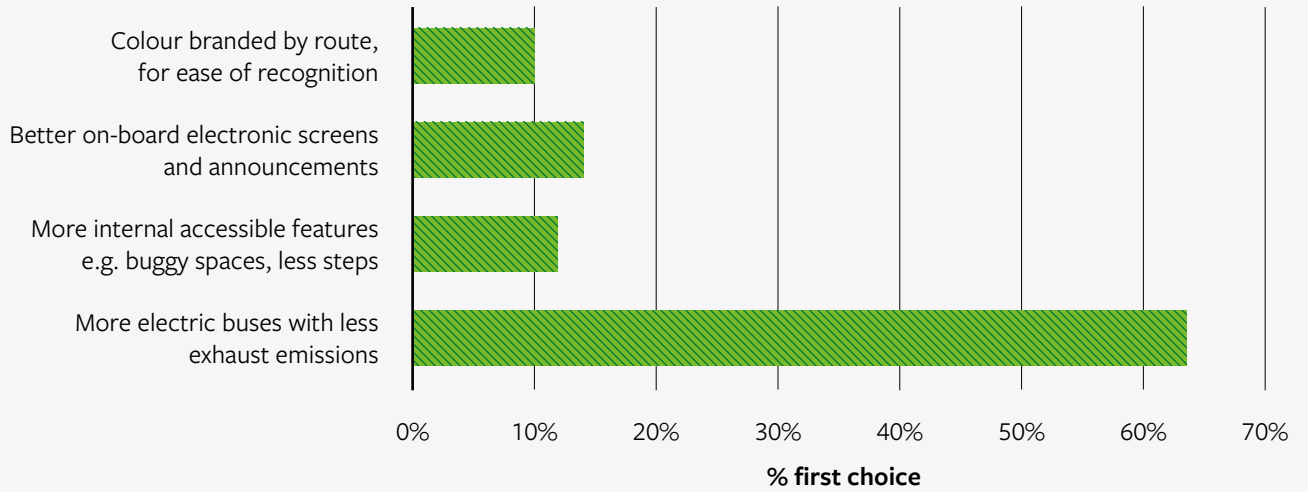
WHERE BEST TO IMPROVE SERVICE TIMES?



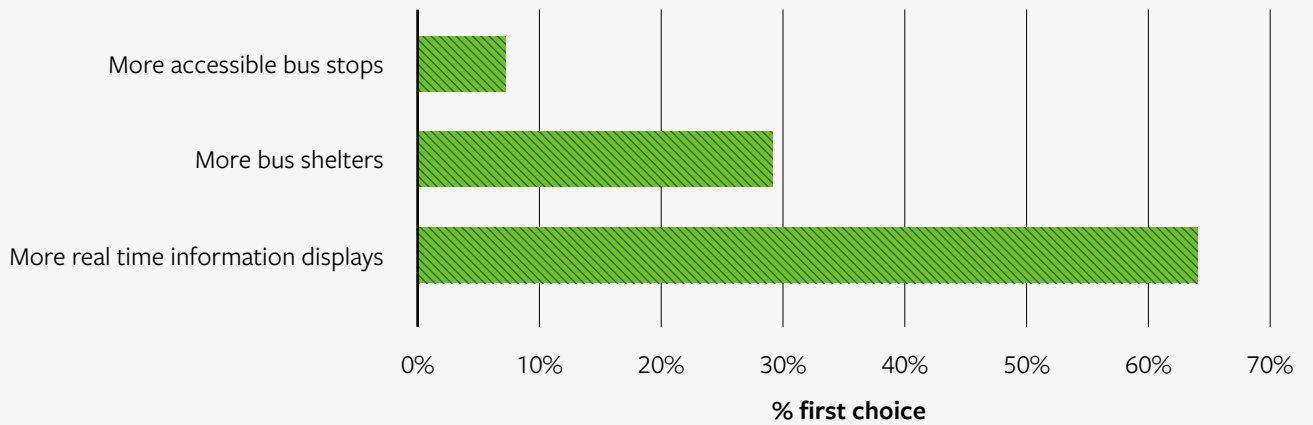
WHERE BEST TO EXPAND THE NETWORK?



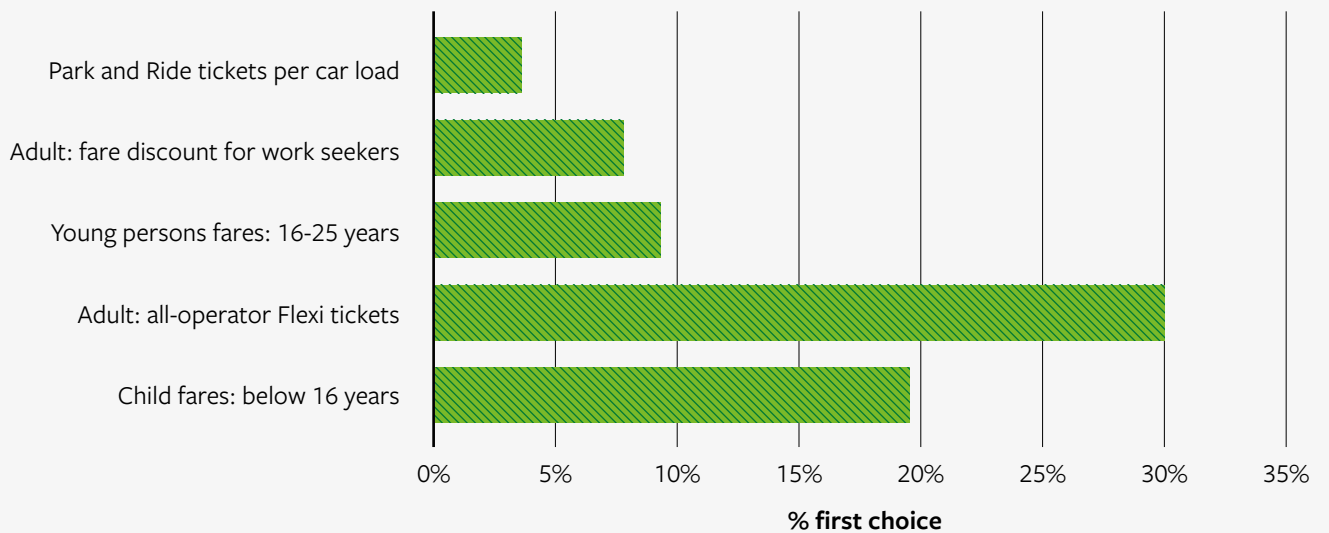
HOW TO CHANGE THE QUALITY OF BUSES?



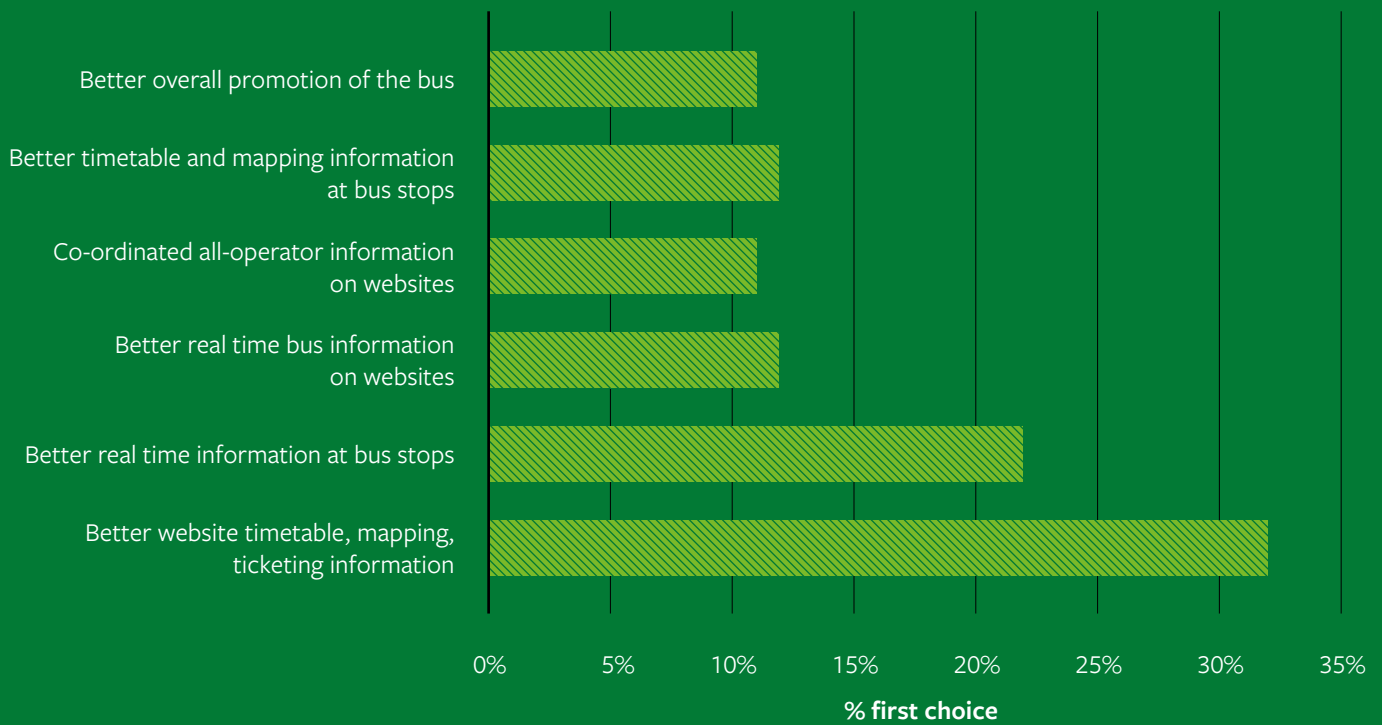
HOW TO IMPROVE WAITING FACILITIES AT STOPS?



WHERE TO MAKE BUS FARES BETTER VALUE?



WHERE BEST TO IMPROVE INFORMATION?



131. Bus travel in Leicester is particularly sensitive to fare levels, given the availability of plentiful cheap car parking, together with the relative time saving of car travel, particularly for orbital movements.
132. Orbital and cross-city movements are increasing and are significantly constraining radial movements at key junctions. They need significant attention in order to improve direct accessibility for bus users and to punctuality for radial bus movements.
133. The issues and priorities relating to those travelling from further afield are different from those living and working in urban Leicester. There is a need for a wider area limited-stopping 'metro' network, focussed on interchange at an expanded network of P&R sites and bus/rail stations.

Governance

Deregulation and franchising

134. Since 1986, bus services in Leicester have been deregulated, with private bus companies allowed to independently register and operate bus routes, setting their own timetables and fares and taking all commercial risk.
135. The registration process is determined by the Department for Transport and administered by their Traffic Commissioners. As well as meeting a range of legal vehicle standards, the service is also required to meet punctuality and reliability standards.
- Over **95%** of services should leave timing points within a tolerance window of 1 minute early and 5 minutes late
 - Over **99.5%** of registered services should operate
136. Councils are allowed to contract additional bus services that are deemed to be socially or strategically necessary, but these must not directly compete with existing commercial services.
137. In addition, the Council is not allowed to form its own new ‘municipal’ bus company to compete against existing commercial bus operations.
138. Leicester currently has a mayoral unitary governance model. As such it has direct powers over planning, highways, public transport, parking and development within its boundaries — all key areas that can influence bus travel.
139. However, it is not classed as a ‘mayoral combined authority’ and so has no direct route to move from the current deregulated regime to one which is franchised by the authority — with the Council contracting in all bus routes in an integrated way and having the ability to set fare levels.
140. Any desire to move to such a model would need to be sanctioned by the Secretary of State for Transport via a largely untested approval route. If the franchise was let on a gross cost basis, it would also require the Council to be prepared to take the revenue risk for the whole network, **98%** of which is currently taken by the private sector.

Council roles and voluntary partnerships

141. However, the Council has the following powers available to significantly influence bus travel through:
- ability to form partnerships with private bus operators to expedite and prioritise joint investment and operational changes
 - ability to bid for capital funding to invest in facilities which jointly assist all operators
 - implementing highways schemes that prioritise buses over other forms of travel
 - traffic management schemes including signalling and enforcement which assist bus flows
 - pro-bus planning policies in relation to new developments
 - pro-bus parking policies and costs at own car parks and on highway
 - ability to introduce workplace parking levy or road charging within the City Council area (subject to ministerial approval)
 - provision of contracted bus services not provided by the commercial sector.
 - purchase of Council-owned zero emission buses for use on contracted services.
 - provision of interchange and waiting facilities, including P&R sites
 - provision of integrated information and ticketing systems
142. Under the current deregulated framework, Councils can form partnerships with operators of various forms. These commit operators to operate and invest in a given way in return for the Council undertaking a range of activities which improve their commercial viability.
143. These partnerships include the current voluntary partnership in place covering:
- Operators: expansion of all-operator ticketing and the movement to Euro 6 emission standard and
 - Councils: range of bus priority and waiting infrastructure improvements along given bus routes

144. This partnership is shown in Appendix 1 and has the overall targets to:
- Increase in network bus patronage by **5%** by 2025
 - Increase overall bus user satisfaction from **87%** to **90%** by 2025
145. This voluntary partnership requires the majority of operators to agree to any change but does not link these changes to the formal bus registration system — there are no legally binding ties to ensure these changes take place.

Enhanced Bus Partnership

146. There is also the ability to set up a more structured Enhanced Bus Partnership, as long as this is acceptable to sufficient commercial bus operators.
147. Once established this legally binds each party to adhere to the commitments set out with the partnership. These are formally linked to the bus registration system and ongoing subsidy arrangements — both of which can be determined and governed at local authority level, rather than the existing national system.
148. This EP Plan and the associated Scheme form the basis of this initial Enhanced Bus Partnership. .
149. This change has the advantages of:
- binding all parties to deliver improvements to a given specification
 - devolving governance and subsidy to a local level — with associated formal input from local user groups
 - providing a clear set of targets and evidence base on which to base future changes. If this delivery mechanism does not sufficiently solve the current problems in the local bus market, this might support escalating options such as franchising
150. The current voluntary partnership is progressed on the basis of quarterly monitoring and progress meetings between senior council and bus operator representatives, together with regular updates key stakeholders and annual bus user satisfaction surveys.
151. Whilst initially the Plan and Scheme do not require devolution of the bus services registration system from the current national Traffic Commissioner to the City Council this remains under consideration.
152. It is the Council's current view that adherence to bus service registration is a local issue and should be determined locally, together with, and linked to, all ongoing subsidy to the bus industry, including Bus Service Operators Grant. This will significantly increase local accountability and transparency, making it far easier and clearer for customers and other local stakeholders to continuously engage with the EPP.
153. Fundamentally, full local devolvement will significantly strengthen the EPP and Enhanced Partnership Scheme, by formally linking agreed responsibilities, standards and funding to each registered bus service — ensuring that all parties are continuously incentivized to deliver the EPP.
154. Without full devolution, there is a very real possibility — as seen in many previous examples across the Country — for the partnership to gradually fizzle out and not be sustained in any meaningful way.
155. All partnerships must be compliant with state aid and competition regulations. Any proposed partnership restriction on competition must be in the public's interest, agreed by the majority of operators and not overly restricting any new operator wanting to enter the Leicester market.
156. Proposals for investment in expensive mass transit schemes — trams, guided busways etc — need to be considered very carefully in this context. To be economically and financially viable, such schemes usually need to restrict competition from conventional commercial buses operating along the same travel corridor. It is very unlikely that this can be agreed via a formal bus partnership and so would require the disruptive process of bus franchising along that travel corridor.
157. It should be noted, though, that Council investment in Park and Ride express services — sites, buses, operations etc — is generally allowed within the regulations. However, these must be aimed at longer distance commuters and not be priced to undermine local bus services.

Intervention Approach and Projects

Options

158. The following possible transformational approaches have been considered to address the issues and objectives outlined above:

- mass transit scheme investment on given corridor e.g. guided bus way or tram route
- franchising of the existing bus network
- establishment of a municipal bus company
- council procurement of a large fleet of electric or hydrogen buses to lease to commercial bus operators at an attractive rate
- development of a network of ‘uber-style’ flexible services based on key work places, hospital and education facilities
- significant reduction in bus fares for all bus passengers

- radically improve the existing main commercial bus network with significant electric bus investment, using new binding bus partnerships
- development of a limited-stopping strategic ‘metro’ network, with additional park and ride sites and electric buses
- road user charging to discourage commuting by car in preference of the bus — funds ringfenced for bus improvements
- introduce a workplace parking levy, improving the relative attractiveness of bus commuting, with funds ringfenced to improve buses

159. These broad approaches have been assessed in relation to both deliverability and their likely impact on the above objectives.

160. On the basis of these ratings and the support information below, the following approaches have been discounted at this point in time.

Key: ■ Relatively low implementation problems ■ Average level of implementation problems ■ High range of implementation issues

DELIVERABILITY DIFFICULTIES BY APPROACH TYPE

Board Approach	Capital Cost — Council	Revenue Cost — Council	Possible National Funding Available	Risk — Financial and Political	Difficulty to Implement	Speed of Implementation	Legislative Difficulty	Disruption to Other Road Users
Mass Transit Route	High	High	Average	High	High	High	Average	High
Bus Franchising	Low	High	High	High	High	High	High	Low
Municipal Bus Company	High	High	High	High	High	High	High	Low
Electric/Hydrogen Bus Fleet for Lease	High	Low	Low	Average	Average	Average	High	Low
Uber-style Flexible Minibus Fleet	Average	High	High	Average	Average	Average	High	Low
Universal Fares Reduction	Low	High	High	High	Average	Low	Low	Low
Main Commercial Network — Electric Bus Partnership	Low	Low	Low	Low	Low	Low	Low	Low
Limited Stopping P&R Electric Bus Network	Average	Average	Low	Low	Low	Low	Low	Low
Road User Charging	Low	Low	High	High	High	High	High	High
Workplace Parking Levy and Other Price Interventions	Low	Low	High	Average	Average	Low	Low	Low
Network Integration Package — timetables/ticketing etc.	Low	Low	Average	Low	Average	Low	Low	Low##

Key: ■ High impact on key objectives ■ Medium impact on key objectives ■ Low impact on key objectives

IMPACT LIKELY BY APPROACH TYPE									
Board Approach	Patronage	Environmental	Modal Shift from Car to Bus	Accessibility — Geographic	Accessibility — Financial	Bus Operators	Employers	Low Income	Elderly and Disabled
Mass Transit Route	Medium	Medium	High	Medium	Medium	Low	Medium	Medium	Medium
Bus Franchising	Medium	Medium	Medium	High	High	Low	Medium	High	High
Municipal Bus Company	Medium	Medium	Medium	High	High	Low	Medium	High	High
Electric/Hydrogen Bus Fleet for Lease	Medium	High	Medium	High	High	Medium	High	Medium	Medium
Uber-style Flexible Minibus Fleet	Medium	Low	Medium	High	Medium	Low	High	Medium	Medium
Universal Fares Reduction	High	Medium	Medium	High	High	Medium	High	High	Medium
Main Commercial Network — Electric Bus Partnership	High	High	Medium	High	High	High	Medium	High	High
Limited Stopping P&R Electric Bus Network	Medium	High	High	Medium	Medium	High	High	Medium	Medium
Road User Charging	Medium	Medium	Medium	Medium	Medium	High	Medium	Medium	Medium
Workplace Parking Levy and Other Price Interventions	Medium	Medium	Medium	Medium	Medium	High	Medium	Medium	Medium
Network Integration Package — timetables/ ticketing etc.	Medium	Medium	Medium	Medium	Medium	High	Medium	Medium	Medium

Mass Transit scheme

161. A more detailed note of this option is in Appendix 2. In summary, it is concluded that Leicester is a compact dense city with a diverse range and spread of travel movements. There is no clear priority corridor with a sufficiently large base level of movements to justify a mass transit scheme investment.

162. It is considered that any investment in public transport on the main commuting corridors should be based on flexible bus provision rather than fixed transit systems such as tram or guided bus:

- **Business case:** There would not be a robust business case to build a tram on any corridor in Leicester, since the current bus-base is too low and there is no control over the competing bus market — unlike in some other cities
- **Risk:** The funding, governance, build and ongoing cost risks of a tram are too great
- **Modal shift:** Modern high quality electric buses with P&R and full route enforced priority can give equivalent passenger experience and modal shift than a tram

- **Flexibility:** The unknown evolving nature of local movements is such that a fixed transit system is inflexible and expensive to change at a later date
- **Space:** There is only limited space for a few small sections of bus-only road on the main corridors to the City Centre. These can be incorporated within the current approach focus of implementing enforced bus lanes on each main bus corridor

Bus Franchising

163. This option has the potential benefits of achieving a fully integrated planned bus network, to a common high standard. It could remove network inefficiency and confusion through common timetables and fare tables. It could more directly focus operations towards targeted passenger or accessibility increases, rather a profit-focus.

164. For Leicester, this change would be particularly significant in terms of operational change and financial risk, since over **98%** of the current network is commercially operated.

165. It is currently to be determined whether the potential benefits of franchising can instead be achieved via enhanced bus partnerships, together with additional capital and revenue funding — at significantly lower risk or disruption.

Municipal Bus Company

166. There are some good examples of successfully operated municipal bus companies such as Nottingham City Transport, Reading Buses and Lothian Buses. However, there are also many examples of municipal bus companies which have struggled and been sold off since deregulation in 1986.
167. It is currently unclear whether success is due to municipal ownership or other factors such as being a single integrated urban network operator operating within a vibrant compact dense city with high complementary Council support in areas such as bus priorities.
168. Current legislation prevents the formation of a new municipal bus company. If this changes in the future this option will be reviewed. However, there will remain the uncertain prospects of a new municipal company and disruption to existing commercial operators. It will therefore be a financially and operationally risky approach unless implemented alongside bus franchising.

Electric or Hydrogen Council Bus Fleet for Lease

169. In theory, it is possible for Councils to purchase a fleet of electric or hydrogen buses and use them on commercially operated routes. This would be subject to legal compliance, open competitive access to these buses and commercial operators wanting to lease them at a concessionary rate lower to equate with diesel.
170. To have a transformative effect, the financial impact would need to be significant. The average electric bus is twice the capital cost of a diesel bus. Converting Leicester's 400 fleet to electric would cost up to £160m.
171. This option has been discounted at present, pending ongoing developments with the bus operators over their likely speed of commercial electric bus investment instead. This is set out in more detail below.

On Demand Minibus Network

172. It has been suggested by some employers located outside the City Centre that it would be beneficial to have a network of shared minibuses with flexible, demand responsive routings. These would be sufficiently adaptable to cater for a diverse range of movements at different times of day — meeting variable shift patterns.
173. Several such services have been trialled across the country, usually set up through developer contributions to serve new housing areas. Most have not been financially viable to continue on a long-term basis, due to the operational costs involved and the need to keep fares below taxi fares and close to bus fares.
174. It is considered that a dense urban conurbation should be able to sustain an efficient network of frequent radial and orbital bus services at an attractive fare level, with good interchange — at times that most people want to travel. Leicester has a good base commercial bus network from which to build and improve.
175. Promoting other options such as bookable minibuses and works buses is likely to undermine the further development of the existing good commercial bus network. Those movements not catered for by the conventional bus network are better addressed through carefully targeted approaches such as taxi vouchers or specialist dial-a-ride services.

Universal Fares Reduction

176. From 2008–18 weekly fares rose by **42%** and patronage fell by **25%**. It is highly likely that the two aspects are directly related in Leicester; with car ownership rising and parking and other driving costs falling over this period.
177. A significant subsidy of bus fares — say by **50%** — is therefore likely to have large impact on patronage. However, this will take time to take effect given the higher current number of car owners and relative inconvenience of buses to cars for many journeys.
178. With this approach it is more likely that existing bus users will travel more often, rather than car users swapping to the bus, having a reduced impact on congestion and pollution. In addition, the largest amount of this subsidy would go to directly assisting existing users, rather than being targeted at potentially new users.

179. Any significant universal reduction will be significantly expensive to maintain in the long term, with much of the subsidy paying operators for their lost fares revenue from existing bus trips.
180. It is therefore concluded that this option is a financially inefficient way to raise patronage, makes no investment in infrastructure to improve the existing bus network and is unlikely to have significant impact on modal shift.

Road User Charging

181. This is set out in more detail in the Local Transport Plan consultation process. For a compact urban unitary authority such as Leicester, it is considered that a levy on workplace parking is a more efficient local transport tax to implement than road user charging.
182. It targets those causing most congestion, spread right across the conurbation. It targets those who can more afford it — they are in employment — and is cheaper, quicker and easier to collect. The employer has the option to pay on behalf of the employer or to reallocate parking spaces for other purposes.

Proposed Approach

183. Given the above it is proposed that a five-pronged approach is adopted focussed on:
- Radical uplift to the main commercial high-frequency radial network. This will include significant investment in electric buses, coupled with a range of enforced bus priority measures, improved waiting infrastructure and automated digital fare capping
 - A strategic network of limited-stopping contracted electric bus routes — interchanging at park and ride sites, bus and rail stations. These are aimed at:
 - longer distance travellers from outside the conurbation
 - orbital direct and interchange movements, particularly focussed linking non-central workplace to areas of high deprivation
 - A small network of flexible demand responsive services aimed at remote areas of the city beyond reach of the mainstream network and those with walking limitations

- A set of integration measures designed to promote a cohesive network to a given user standard, including:
 - integrated timetables on shared bus corridors
 - integrated all-operator ticketing with ‘best fare’ capping
 - integrated branding across buses and all waiting infrastructure
 - integrated printed, mapping, electronic information and website
- Targetted pricing instruments to reduce the financial attractiveness of car travel over bus. Subject to further consultation, this could include:
 - trials of bus fare reductions targeted at key groups, particularly the young
 - workplace parking levy — to improve the relative attractiveness of bus travel over car, particularly for non-central workplaces
 - park and ride services priced significantly lower than all day central parking
 - pricing policies designed to reduce cheap all-day central area parking

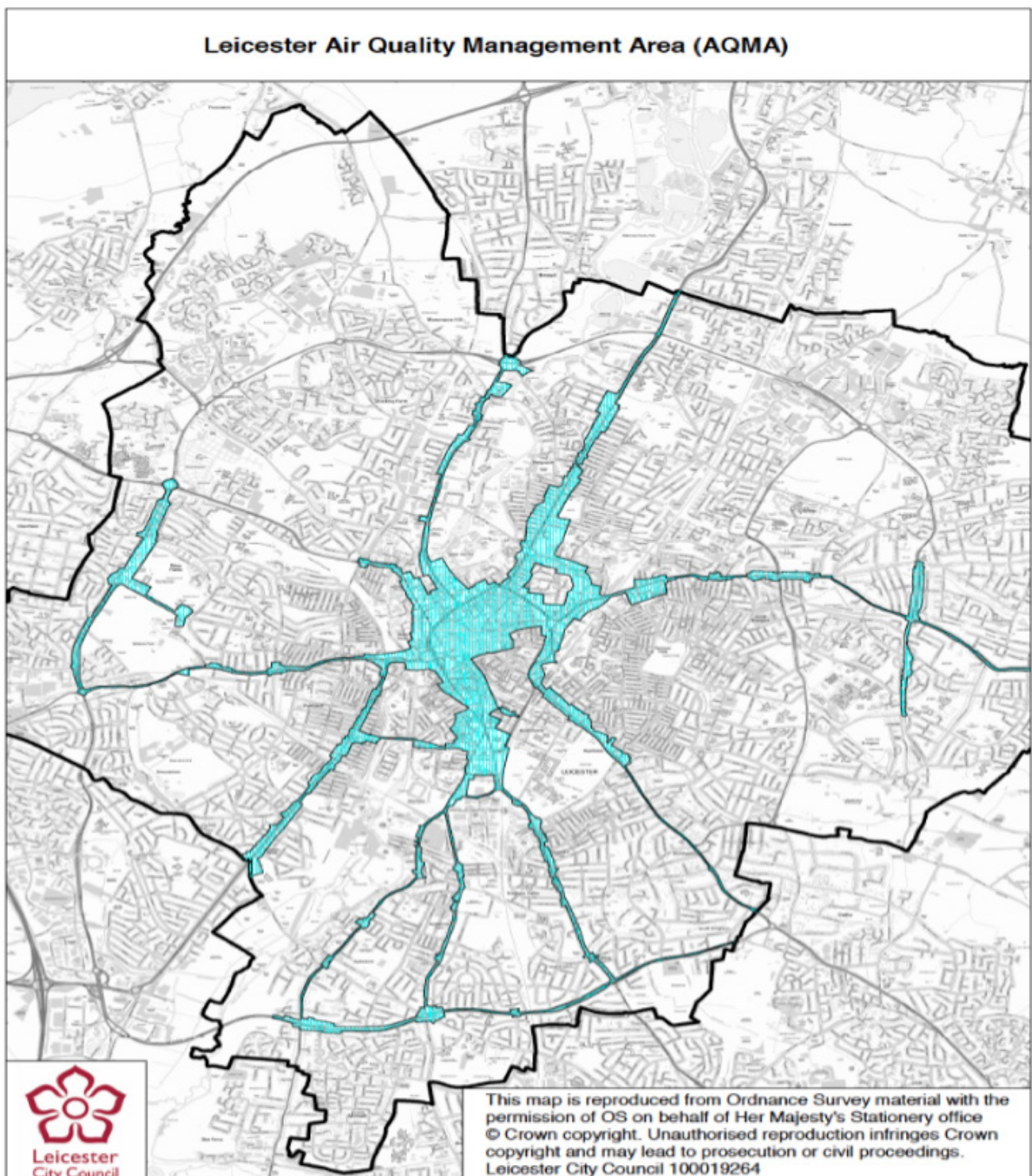
Proposed projects

184. A range of projects are set out below covering these four key approaches, covering:
- existing main commercial bus services
 - bus service network development
 - bus priority
 - bus emissions
 - infrastructure and waiting facilities
 - cost of travel
 - integration measures

Mainlines Network

Outline

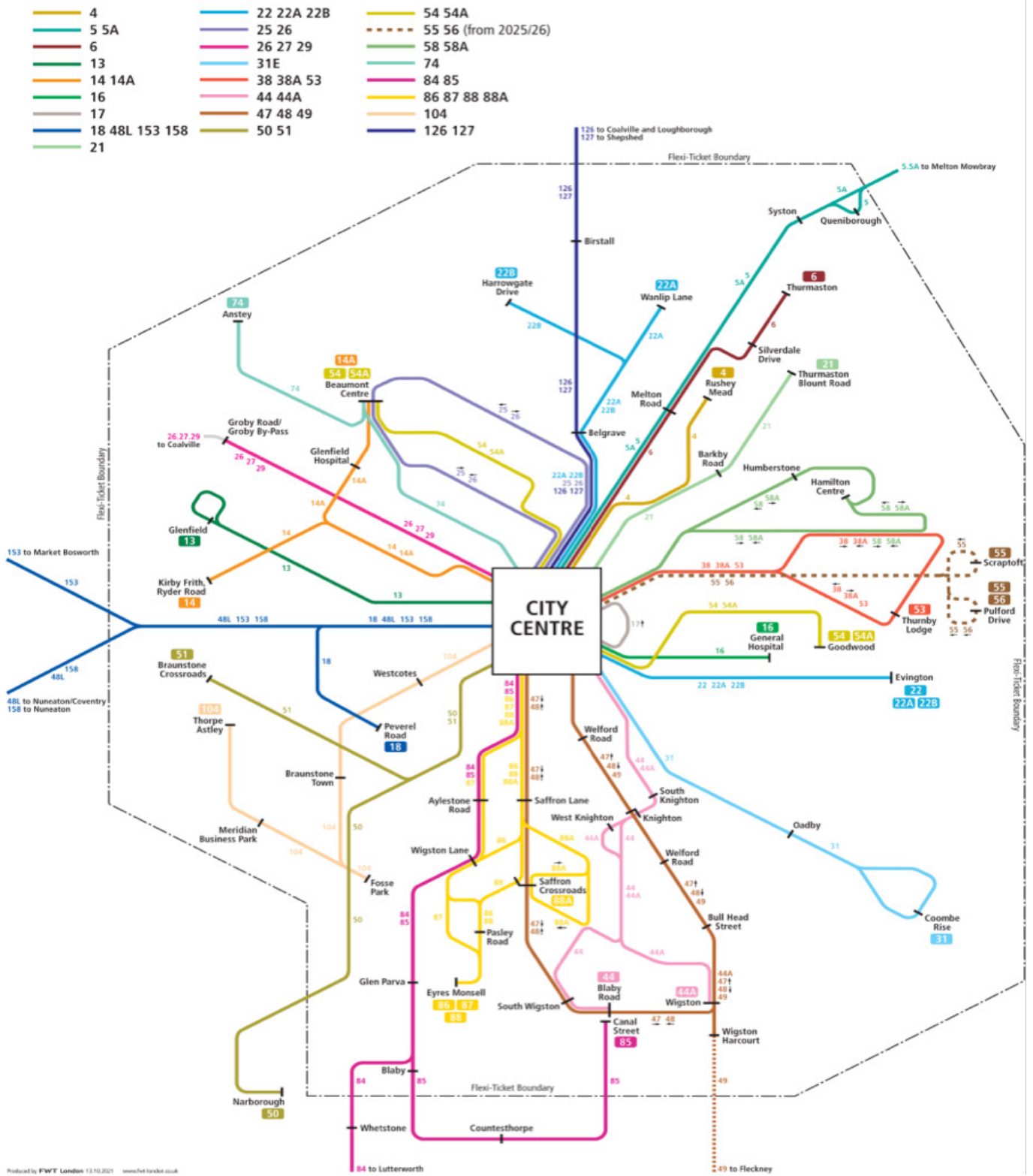
185. This looks at joined up investment to improve bus travel along the main commuting bus corridors for those living and working within the conurbation.
186. These currently account for over **85%** of all bus passenger movements in the conurbation. All of these go through the key areas of multiple deprivation and lowest car ownership in Leicester. Many of these are on corridors with air pollution issues, as identified in the map below.



H:TS/LTP3/Air quality task group/Maps/AQMA_Leicester.wor

187. The map below shows these main route groups independent of the operator currently operating them. Many are currently served by more than one operator, with no current timetable integration or unified promotion or bus branding.

Mainlines Network



188. These route groups were operated commercially pre-covid, with a combined daytime operation of at least 4 buses an hour, with evening and weekend provision varying across each corridor.
189. However, pre-covid there was no integration between operators, effectively reducing 'available' frequencies along many corridors, particularly in the off peak. There was no simple network frequency standard for peak and off-peak travel. There was also a fare premium for travel between operators.
190. The approach set out for these services is a radical package of measures delivered under a range of formal partnerships between the operators and Council.

Intervention package

191. This will include a combination of the following:

- **significant investment in electric buses** — subject to external and local funding sources being available.
- **bus priority measures** — 24hr bus lanes, signal priority for late running buses and 'smart' traffic management, 'no stopping' red routes on key corridors.
- **traffic regulation enforcement measures** — to keep bus lanes, bus stops and red routes clear of illegal traffic.
- **parking management** — including bay widening to ensure no part-parking in bus running lanes
- **automated digital ticketing** — to speed boarding times
- **real time information displays** and bus shelters at all boarding stops.
- **integrated timetables and ticketing** across operators which share the same travel corridor — to maximise frequency and efficiency
- **accessible bus boarders** and new shelters
- **integrated information and branding** to assist customer simplification and route 'ownership'.
- **promoted as the 'Mainlines' network**, with colour coded mapping at all boarding stops, matched by colour bus branding for each route group.
- **improved frequencies at certain times** — subject to external and local funding sources being available — to give a simple clear Mainlines network timetable standard.

192. All work will build on successful partnership work already completed to date. There will be a focus on two main corridors/route groups per year for the next ten years, subject to successful funding bids.
193. The proposed investment is detailed in the separate project sections below on bus priority, signal priority, electric buses, digital ticketing and fares, real time information and waiting facilities.

Timetable integration

194. Frequencies and hours of operation for each of these key route groups will be agreed across the partnership, taking into account the efficiencies of joint timetabling on roads where there is more than one operator.

195. Those multi-operator route groups where integrated timetables, marketing and operations will be reviewed and jointly developed with operators include:

- **Beaumont Leys — City — Goodwood:** FirstBus, Centrebus
- **Evington — City:** FirstBus, Centrebus
- **Liberty Rd — Aikman Av — City:** FirstBus, Arriva, Centrebus
- **Saffron Lane & Eyres Monsell — City:** FirstBus, Arriva
- **Uppingham Rd — Humberstone Rd — City:** FirstBus, Arriva
- **Netherhall Rd — City:** FirstBus, Arriva
- **Hinckley Rd — City:** Stagecoach, Arriva, FirstBus
- **Leicester Rd — London Rd — City:** Stagecoach, Arriva
- **Melton Rd & Loughborough Rd:** Arriva, FirstBus, Kinch, Centrebus

Route Rationalisation/Simplification

196. In addition, the partnership will need to give further consideration to the rationalisation and simplification of the following routes:

- **Saffron Lane — Eyres Monsell routes:** 83–88 Group. These are currently shown as two ‘Mainline’ route groups, but require further simplification to assist customer integration.
- **Aikman Avenue & Liberty Rd routes:** FirstBus 14, Arriva 14 and Centrebus 12

197. The table below shows the proposed 25 Mainlines and their constituent routes and operators.

MAINLINES NETWORK						
Mainlines route group	First	Arriva	Centrebus	S’Coach	Kinch	Cross operator integration
4	yes	no	no	no	no	no
5, 5a	no	yes	no	no	no	no
6	no	yes	no	no	no	no
13	yes	no	no	no	no	no
14, 14, 14a	yes	yes	no	no	no	yes
16	yes	no	no	no	no	no
17	yes	no	no	no	no	no
21	yes	no	no	no	no	no
22, 22A, 22B	yes	no	yes	no	no	yes
25, 26	yes	no	no	no	no	no
26, 27, 29	no	yes	no	no	no	no
31, X3, X7	no	yes	no	yes	no	yes
38, 38a, 53	yes	yes	no	no	no	yes
44, 44a	no	yes	no	no	no	no
48, 47, 49	no	yes	no	no	no	no
55, 56	no	yes	no	no	no	no
153, 158, 48, 18	yes	yes	no	yes	no	yes
50, 51	no	yes	no	no	no	no
54, 54a	yes	no	yes	no	no	yes
58, 58a	no	yes	no	no	no	no
74	yes	no	no	no	no	no
84, 85	no	yes	no	no	no	no
86, 87, 88 group	yes	yes	no	no	no	yes
104	no	yes	no	no	no	no
126, 127, 2	no	yes	no	no	yes	no

Timetable enhancements — customer network standard

198. As a base starting point, revenue support will be focussed on achieving route group combined frequencies which are equivalent to pre-covid levels. The rationale for this is that:
- those who have since returned to bus travel are used to this higher frequency and its important to retain their loyalty
 - some the current 'lost' market is predicted to gradually return for at least part of the working week and again was used to this level of frequency before
 - these routes have the best potential for growth, since are focussed on dense urban corridors with low car ownership and higher deprivation
 - these routes pass through those areas of highest air pollution
 - they are well established routes with high local knowledge of their existence
 - these routes will have an associated package of capital investment as noted above, building on previous investment
 - higher frequency will greatly assist interchange to non-central employment, education and health locations, matched by associated work to improve fares, ticketing and information.
199. Significantly, when combined with cross-operator timetable and fares integration this will enable a branded 'Mainlines' network with a clear and simple customer proposition of:
- every 15 mins or better Monday–Saturday daytime
 - every 30 minutes or better Monday–Saturday evenings
 - every 30 minutes or better Sunday daytime
 - every 10 minutes or better on Mainlines serving all key non-central locations
200. The geography and housing mix of Leicester, together with current travel demand, is such that not all the Mainlines are likely to commercially sustain a ten-minute daytime frequency or better — either now or within 3 years of revenue support.
201. However, the Mainlines network timetable standard will be set such that there is a Monday–Saturday daytime frequency on those Mainlines serving all key non-central locations within the outer orbital. These account for 16 of the 25 Mainlines.
202. This will enable easier seamless interchange journeys in the City Centre to be readily made to access key work, health, education and leisure sites:
- Beaumont Leys Retail and Industrial Estate
 - Scudamore Rd Industrial Estate
 - Thurmaston Industrial Estate
 - Glenfield Hospital
 - Leicester County Council — County Hall
 - General Hospital
 - Space Centre and University campus
 - Abbey Park
 - Leicester College sites
 - Soar Valley College
 - Leicester University
 - Fosse Park
 - Meridian Business Park
 - University — Oadby Halls
 - District Centres — Beaumont Leys, Hamilton, Wigston, South Wigston, Oadby, Belgrave

Proposed temporary revenue support

203. Following discussions with each operator, there is now a reasonable view of what each operator would commercially provide from April 2022 on the basis of:
- national Bus Recovery Grant terminating by this date
 - concessionary fares paid on prevailing usage/fare rates from this date
 - the projected likely usage at this point of time being at **80%** of pre-covid levels.
 - cross-operator integration savings upto 8 buses pa, around £1m pa.

204. For confidentiality reasons this cannot be shown here. However, it is currently estimated that once operators have achieved some efficiency savings through joint timetabling on shared corridors and bus priority implementation, there will be a need to provide support for the equivalent of x19 additional buses across 11 of the Mainline route-groups to meet this set network frequency standard.
205. This additional frequency and timetable enhancement will focus across:
- daytime frequency — in order to assist interchange to non-central workplaces
 - evening and Sunday frequency and longer operational hours — focussing on regeneration of the City Centre, shift working and other key employment areas, particularly in the hospital sector
206. It is projected that annual net support will taper off over this period as:
- patronage grows as part of covid recovery process
 - the associated capital support package is gradually implemented — enabling costs to be reduced and attracting more passengers
 - savings are made from timetable integration on the shared corridors
207. The additional resource proposed needs to be flexibly employed since it is dependent on reaching **80%** pre-covid levels by April 2022 AND assumes no other ‘nationally imposed’ covid continuation funding, including local use of concessionary budget underspend. All proposed support is independent of any existing and EPP proposed support provided by the County Council for cross-boundary Mainline services.
208. If all the allocation is not required due to changes in the above, then it is proposed that any surplus is put towards one-off timetabled enhancements on expanding services in line with their employment of electric buses. Any temporary shortfall due to patronage levels being below predicted should be able to be financed by concessionary reimbursement underspend.
209. It should be stressed that the majority of work, education and employment locations are accessible by the core commercial bus network, justifying the proposed focus of increased revenue spend in this area.
210. Further ongoing revenue support for Mainline network timetable enhancement beyond 2025 will be based on:
- where there is complementary investment in electric buses, priority and associated infrastructure
 - those services showing best current growth
 - those services on the main AQMA corridors
 - known areas of new demand — housing, workplace relocations etc
 - surveys and other market research showing greatest demand
 - support the regeneration of the City Centre, particularly evenings and Sundays
211. The aim is to make these buses commercially sustainable by 2025 and commercial network to have reached **100%** of pre-covid patronage levels, a growth of **25%** from that predicted for 2022/3.
212. Thereafter, it is predicted there will be steady annual growth of **2.5%** until 2030, following a consistent investment programme as detailed above, giving an overall increase of **40%** from 2022/3. This will equate to an overall **10%** increase over pre-covid 2019/20 levels.

Passenger growth targets



Greenlines Network

Outline

213. This significant work package looks to establish a strategic network of five frequent limited-stopping electric bus services. There will be three cross-city and two orbital services, together with an expanded estate of free park and ride sites.

214. It will be aimed at wider area connectivity than the urban Mainlines network through the introduction of:

- cross-city routing and limited-stopping
- inner and outer orbital connections — frequency and route expansion
- park and ride site expansion
- connections to radials at interchanges — bus and rail stations

215. This network will be particularly focussed at companies and their staff who would be liable for the proposed workplace parking levy. Together with a range of discounted fares, this will give these workers a viable, attractive alternative to travelling by car and paying the levy. For those employers who choose not to pass on the levy, the Greenlines network will clearly demonstrate the direct value of the levy to the employer.

216. The majority of these workplaces are located outside the City Centre area, beyond the inner ring road, with many workers either commuting from outside the Mainlines urban network, or requiring a swift express connection from the Mainlines network.

WORKPLACE DISTRIBUTION

	Sites		Employers		Parking Spaces		Employees	
City Centre	41	15%	21	21%	3,616	11%	5,724	10%
Outside City Centre	224	85%	79	79%	28,108	89%	52,613	90%
Total	265		100		31,724		58,337	

217. The Greenlines network will be developed from 5 existing individually successful contracted routes as its base from which to expand:

- Park and Ride services — Enderby, Meynells Gorse and Birstall
- Hospital Hopper cross city service
- Outer Orbital Centrebus service 40

218. These will be expanded, joined up and radically developed in discrete stages through a five-year package of capital and revenue investment. All will eventually have 15-minute daytime frequency or better, be limited stopping and operated with electric buses.



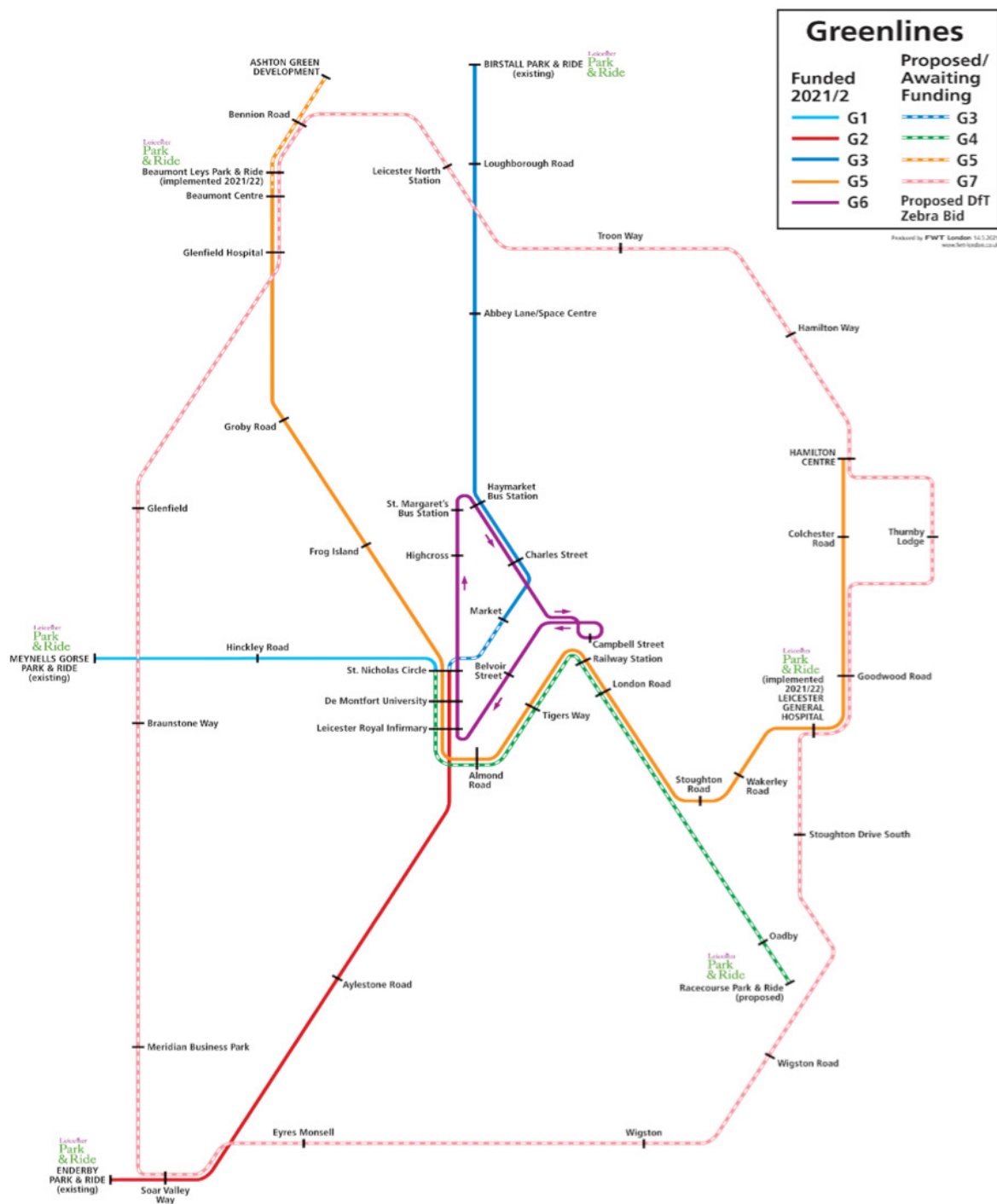
219. The three cross-city routes have been chosen because they:

- develop existing successful routes by joining them together to give greater connectivity across both the conurbation and city centre
- enable cross-city connectivity to key non-central locations — Beaumont Leys and Hamilton District Centres, Glenfield and General Hospital, Fosse Park
- to improve P&R provision from the East and from the North West of Leicester — both currently unserved by P&R
- help facilitate the significant hospital transformation programme — they improve connectivity to all three hospital sites, including park and ride connectivity to each
- are well located in relation to the strategic road network for P&R connectivity
- have approved funding to provide significant bus priority measures to add to those already previously implemented
- focus on serving areas of current housing expansion: Hallam Fields, Ashton Green and Lubbethorpe either directly or by P&R
- focus on corridors with known congestion and bus punctuality issues
- are currently contracted out, rather than run commercially. This gives the local authority the ability to directly determine all investment, including the proposed electric buses. It also gives the ability to directly subsidise fares and service levels
- aimed at wider area movements — don't compete with Mainline urban network
- provide connectivity for interchange to radials at the Train and bus stations and along the outer orbital route

220. The two orbital movements have been chosen in order to:

- promote sustainable and equitable orbital movements between district centres and non-central workplaces
- promote radial/orbital interchange
- assist radial bus routes by reducing congestion at junctions with orbital roads
- assisting non-central employers to introduce workplace parking levy by offering an improved alternative.
- reduce air pollution on two roads with the worst pollution problem in the conurbation

Leicester Greenlines Network



Intervention package

221. This network will be developed to give a radical change in the overall passenger experience through the introduction of:

- 40 new fully electric buses
- fully branded, all with distinctive green buses
- full range of bus priority measures improving reliability and journey times — bus lanes, smart signalisation, red routes and CCTV enforcement. These will build on existing extensive priority measures already in place
- introducing cross-city and cross-city centre connectivity
- automated ‘best fare’ digital capping
- discounted fares for companies paying workplace parking levy
- improving frequencies and hours of operation
- expansion of park and ride facilities to the east and north-west
- new waiting facilities — bus shelters and real time displays

222. These services are non-commercial, enabling the above changes to be delivered via operating and lease contracts, together with partnership arrangements with the Health Trust and County Council.

223. The objective of the project is to more than double passenger numbers on these routes within five years from a pre-covid base of around 1.5m passengers a year.



Greenlines G1,G2,G3 — Existing Park and Rides

224. A start has already been made on this project for the existing three park and ride services from Birstall, Enderby and Meynells Gorse P&R sites. These already operate every 15 minutes Monday–Saturday.

225. In May 2021, fully electric buses were introduced on the three park and ride services, together with a new charging station at Robert’s depot.

226. These services will be further improved by improved bus priority on Soar Valley Way and Abbey Lane/A6 over the next 2 years — already funded through TCF. This will supplement those priorities already in place on Hinkley Road and Aylestone Road.



Greenline G4 — Racecourse P&R

227. A further park and ride service to the east at Racecourse (A6 London Rd/A463 Outer Ring Road) is proposed, to complete north, south, east and west P&R coverage across the conurbation.
228. A seasonal park and ride service from this site has been successfully used in the past, but limited by operational restrictions on use of the existing Racecourse site. This will be resolved by working in partnership with the Racecourse to construct a dedicated facility which can be used throughout the year. (It should be noted, however, that no formal dialogue on this proposal has yet taken place between the Council and the Racecourse.)

Greenlines G1,G2,G3,G4 — Cross City Operations

229. It is proposed that Birstall and Enderby services (G2 and G3) are joined to give north-south connectivity. In addition, the Meynells Gorse and Racecourse services (G1 and G4) would also be joined — to give two major cross-city routes from 2025.
230. As well as giving greater P&R connectivity across the conurbation, this will also improve access to all parts of the city centre. Currently, each park and ride service only serves one part of the centre. This replicates the successful cross-city P&R based network in Oxford.
231. It is estimated that this expansion will require an additional two buses, with revenue support highlighted in the Financing section from 2025.

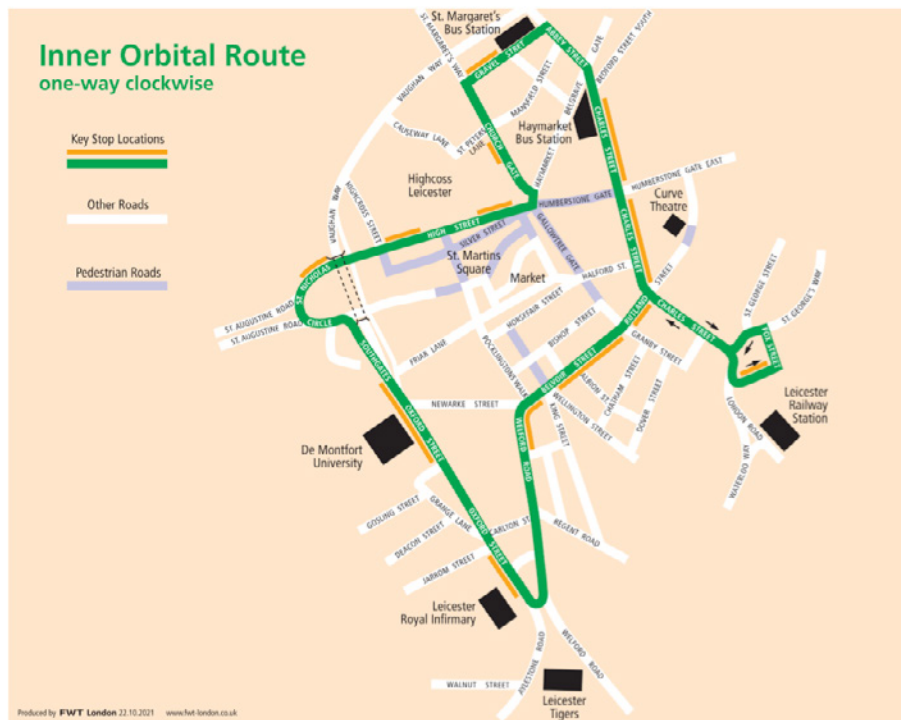
Greenline G5 — Hospital Hopper

232. It is proposed that there is an expanded package of capital and revenue works to improve the existing cross-city Hospital Hopper service, including a doubling of its frequency to every 15 minutes, weekend operation, and new electric buses and two new park and ride sites at Beaumont Leys and General Hospital.
233. As well as improving cross-city connectivity to all three hospitals, the new park and ride sites at either end, together with the increased frequency will give an alternative means of accessing the hospitals from beyond Greater Leicester — helping to relieve congestion on the radials close to the hospitals.
234. This service is being developed in a close partnership with University Hospitals Leicester, who currently subsidise the service for staff at the cost of around £650,000 pa. As well as relieving congestion, it also aims to provide inter-hospital connectivity to avoid the use of taxis. In addition, it limits the demand for space for parking, freeing it up for key hospital activities.
235. The package of improvements is being supported by a range of ‘softer’ measures designed to promote and encourage take up amongst staff, including personalised travel planning for new staff or those changing job.
236. Also proposed is an extension of the Hospital Hopper service to Ashton Green once this new housing development reaches an agreed critical mass of occupied housing, currently predicted to be 2023. A review of the various options to serve this site concluded that the most effective solution is to extend the Hospital Hopper.



Greenline G6 — Inner Orbital

237. A brand new free inner orbital electric bus service is proposed in order to provide connectivity between different parts of the City Centre and its transport interchanges — the bus stations, railway station and main on-street bus departure points.
238. This will provide connectivity to the universities, hospital, college, shopping centres, sporting venues and cultural quarter for those unable to readily make this link by foot.
239. The route chosen will enable as many of these links to be made with a reliable ten-minute frequency compact, accessible circular electric bus service using two buses. This is likely to also include operation within some pedestrianised areas such as High St, in order to increase accessibility. A possible option that fulfils these aims is shown below.



240. It is proposed that the funding for these routes will come from a blend of existing capital and revenue streams, together with future local and national funding streams as set out in the Financing chapter below.

Greenline G7 — Outer Orbital

- 241. It is proposed that the most significant area for both revenue and capital investment will be on the extensive outer orbital route.
- 242. The outer orbital (route 40) is very long route, with a round trip of 31 miles completely encircling Leicester. It uniquely connects many areas of low-income housing directly to a significant number of workplace and health facilities, together with a number of district centres. Around **60%** of such residential areas are within walking distance of this route, which accesses over **75%** of non-central workplaces.
- 243. Market analysis and consultation has shown that this route has significant potential to radically improve accessibility, by an improvement to its frequency and times of operation.



- 244. The focus of significant additional revenue support will be aimed at making the service it every 15 minutes within a 5-year period from its current hourly frequency. This will also enable the service to be a good connecting service to the Mainline network at the many locations shown in the map below.



245. This mirrors the successful approach taken in Birmingham with the development of their outer orbital route 11. This is of similar length as Leicester's (around 30 miles) and now has a frequency of every 10 minutes and operates from 0530 to midnight.

246. The objective of this is to:

- significantly improve accessibility to major peripheral workplaces:
 - hospital sites (General and Glenfield)
 - shopping areas (Tesco Hamilton, Beaumont Leys, Fosse Park, Oadby Town Centre)
 - employment areas (Pepsico Walkers Crisps, Meridian Business Park — Royal Mail, Troon Way Industrial Estate, Fosse Park, Beaumont Leys)
- give direct access to these workplaces from low car ownership housing areas in Beaumont Leys, Goodwood, Belgrave, Hamilton, Thurnby Lodge etc
- enable the service to be used to interchange with the radial commercial network — further improving accessibility

- enable the service to reduce traffic on the outer orbital, thereby improving junction times for each radial routes at its interchange

247. During 2023/4, it is the intention to move the Outer Orbital service to every half hour in line with confirmed electric bus investment. Subsequent movement to every 15 minutes in line with additional electric bus investment, extensive bus priority and further at-stop real time information investment is then proposed for 2024/5 subject to national and local funding availability.

248. Once the service has been developed to a 15-minute frequency, additional integration work will take place to promote interchange with the Mainline network. This might also be stage to look to more formally link the service into the three P&R sites on the route at Enderby, Beaumont Leys and General Hospital.

249. The combined package will represent a key demonstration scheme aimed at many workplaces who will be liable to the proposed workplace parking levy. It will directly show these workplaces what the levy can deliver, giving their employees a viable sustainable alternative to travelling by car.

Capital investment

250. It is intended that electric buses are purchased by the Council in three funding phases shown as follows. These are and will be timed to coincide with associated revenue funding streams and associated infrastructure investment.

GREENLINES ELECTRIC BUSES — INVESTMENT BY 2025

	Peak Nos		Proposed Funding		
	Now	Aim	TCF	ZEBRA FT	ZEBRA 2
G1–G3: Existing P&R	9	9	11	0	1
G4: New P&R & Join	3	3	0	0	0
G5: Hospital Hopper	4	8	4	0	4
G6: Inner Orbital	0	3	3	0	0
G7: Outer Orbital 40	4	17	0	6	11
Total	20	40	18	6	16

251. Major associated infrastructure work — described in more detail below — is planned as follows:

- St Margarets Bus Station and Mansfield St bus link 2021 (Greenline 6)
- Groby Rd bus lane 2022 (Greenline 5)
- Soar Valley Way bus priority scheme 2023/4 (Greenline 2)
- Abbey Lane (A6) bus priority scheme 2022/3 (Greenline 3)
- Outer Orbital bus priority scheme 2023/4–2024/5 (Greenline 7)
- Racecourse P&R 2024/5 (Greenline 4)
- Beaumont Leys P&R 2022/3 (Greenlines 5 and 7)
- General Hospital P&R 2022/3 (Greenlines 5 and 7)

Revenue support proposed

252. Revenue support to improve frequencies, operational times and extensions will be timed to coincide with the linked introduction of electric buses and planned bus priority and other associated capital improvements along these routes. Indicative timings and costs are shown in the Funding section below. All finances are independent of any existing and EPP proposed support provided by the County Council for the current park and ride services.
253. As with commercial services, it should also be noted that temporary revenue support will be required to continue the existing 'base' Greenlines network until patronage levels return to pre-covid levels (existing three park and rides and outer orbital 40 service).
254. There has been a significant reduction in patronage revenue on these services during covid, with this being met through government Covid support grant, planned for termination in March 2022. The nature of these services is such that post-covid growth has been much slower than on most commercial bus services and revenue/patronage unlikely to be above **50%** of pre-covid levels from April 2022.
255. It is hoped that with the planned improvements to these services from 2022–2025, that patronage/ revenue should also return to pre-covid levels by 2025.



Flexlines Network

Outline

256. One of the main objectives of both the Mainlines and Greenlines networks is to address accessibility gaps in relation to:

- orbital movements to non-central employment areas.
- improving connectivity to the City Centre to better enable trips that require interchange
- new and emerging areas of housing development, such as Waterside, Hallam Fields, Ashton Green and Lubbesthorpe

257. Two other identified accessibility gaps remain:

- pockets of housing and employment within the conurbation which are beyond walking distance of the Mainline or Greenline networks.
- those unable to easily use mainstream public transport for mobility reasons

258. These gaps are very low compared with other cities, due to the current strong coverage of the commercial network, together with the developing Greenlines strategic network.

259. These are currently accessed through a combination of four hourly day time supported bus services operated by Centrebus (81,83,162,154) and a small dial-a-ride network operated directly the City Council. These together cost around £0.5m pa in support.

260. These are both relatively poorly used and expensive to provide. Their uptake since return from covid has been slow, with revenue predicted to be at least **50%** of pre-covid levels from April 2022.

261. Overall, however, it is anticipated that these accessibility gaps within the conurbation will remain relatively low over the EP Plan period — as long as the planned development of the commercial and Greenlines strategic contracted network takes place as outlined above.

262. It is considered that there is good potential to replace these services with a small demand responsive network of four accessible electric minibuses/midibus routes. These will be aimed at areas of the city beyond 400m walking distance of the Mainlines or Greenlines networks.

263. These will be fully integrated and promoted under the overall 'Leicester Buses' network brand, accepting the same tickets and passes and shown on the integrated information portal.

264. This will be reviewed during 2022/3, once further clarity in this area and funding is determined. Within the Funding plan below, a capital allowance has been made for the purchase five of these electric buses through a future ZEBRA round.

265. In addition, it is estimated that this will require additional revenue funding of £360,000 pa from 2023/4, to supplement the existing base revenue budget.



Bus Priority

Outline

266. As outlined above there is already a good base of bus priority measures along several main bus corridors, together with an effective and expanding automated enforcement system in place.
267. This EP Plan sets out three further phases of bus priority and enforcement investment

First phase

268. For the next 2 years the crucial bus priority works will focus on for the following corridors mainly in the north-west of the conurbation:
- Groby Rd
 - A6 from City to Redhill Circle
 - Abbey Park Rd and Beaumont Leys Lane bus route
 - Anstey — Anstey Lane
 - Melton Rd
 - Soar Valley Way
269. This focus builds on the previous Connecting Leicester programme and is fully funded through the Council's successful Pinch Points and Transforming Cities Funds (TCF). These amount to a substantial programme of work, costing around £25m and will be supplemented by additional CCTV enforcement cameras on all main bus lane sections.
270. The strategic case for each scheme relating to the Transforming Cities Programme can be found on the link:

<https://www.leicester.gov.uk/your-council/policies-plans-and-strategies/transport-and-streets/transport-bids/transforming-cities-fund-bid/>

271. The rationale for proposing these routes was set out in the TCF bid and was based on:
- the rapid expansion of housing and other developments in the north-west sector
 - information from bus operators in relation to punctuality and reliability, pinch points, usage and planned electric bus investment
 - identification of bus priority schemes which can be readily and realistically delivered within a reasonable timescale
 - previous investment on other corridors in the south/south west and south east of the conurbation
272. These will be supplemented by two other approved and funded projects designed to speed boarding and improve reliability across all Mainline routes:
- traffic signal priority system for late running buses — Autumn 2023
 - digital automated ticketing and capping — Spring 2022

Second phase

273. Beyond this period, it is proposed that EPP funding bids will be made — supplemented by local contributing funds — for additional extensive bus priority and car parking management measures on:
- complete length of the orbital Centrebus 40 bus route, including outer ring road sections — one of the Greenline major development routes for the next 5+ years.
 - complete length of Humberstone Rd and Uppingham Road: First 38/38A, Arriva 53-58 group. This covers three Mainline integrated route groups.
 - the East Park Rd/Green Lane Rd corridor: eastern section of FirstBus/Centrebus Mainline (54/54A).

274. This focus reflects:

- trend data on bus punctuality over time
- traffic master data on peak and off-peak traffic speeds
- externally commissioned ‘pinch point’ surveys and suggested solutions
- where future housing growth is planned,
- the associated timing of electric bus investment plans by the bus operators
- the complex and practical issues involved in delivery of bus priorities in different areas
- bus priority work already undertaken along other corridors in previous years
- strategic aim to improve reliability and journey time for orbital movements, particularly from low-income residential areas to workplaces

Outer orbital corridor

275. The outer orbital (route 40) is very long route, with a round trip of 31 miles completely encircling Leicester. There is an extensive range of pinch points along this route which require addressing in both directions. Being an orbital service, there is no obvious place for lay over, exacerbating punctuality problems.

276. Punctuality statistics for this service both before and after covid rank as one of the lowest across the whole Leicester network — averaging around **80%** on most months.

277. This route has been assessed for pinch points in line with traffic master and other information related to difference in journey speeds throughout the day. Details of this exercise are shown in Appendix 5.

278. Unusually for Leicester, there is potential road space for bus lanes along several of these sections:

- Braunstone Way
- Glenfrith Way
- Troon Way
- Thurmaston Lane
- Goodwood Rd



279. A complete highways review of this route will take place in 2022/3, including possible changes to the route in line with analysis of current user patterns and workplace locations/times of operations along this route.
280. At this stage it is loosely estimated that the whole route requires up to £10m of capital highways investment in order to be quick and reliable for workers and other users. If funded, these works could take place in sections from 2023–2025.
281. The chief aim of this significant scheme will be to enable the service to reliably run every 15 minutes with a round trip of less than 2 hours for each bus throughout the day.
282. It should also be noted that any improvement to assist modal shift on the outer orbital will assist each of the 20+ radial bus routes which are currently held up at junctions crossing the outer orbital. These services will also be assisted by the generation of interchange trips once the orbital service improves in frequency and reliability.

Humberstone Road Bus Priority Corridor

283. Prior to the covid outbreak the punctuality of the four main bus services on this corridor averaged at **83%** of journeys being on time (within the window or 1 minute early and 5 minutes late at timing points). Recent recordings show similar levels of punctuality, though traffic levels have yet to stabilize post-covid.
284. Traffic data prior to covid, shows considerable difference in morning and afternoon speeds along several sections of this corridor. This indicates where most delay is caused, together with the potential for significant benefits.
285. This corridor requires a series of pinch points to be addressed, many relating to parking issues. These have been independently reviewed by Mott McDonald consultants for the FirstBus network. This identified several ‘pinch point sections’ causing delay and suggested a series of mitigation measures. These are laid out in Appendix 3.
286. This project could also include addressing the following aspects.
- potential for junction redesign and bus priority at Uppingham Rd/Colchester Rd junction
 - space for significant bus priority on Scraftoft Lane in advance of housing developments.
- red routes required throughout corridor to address loading and parking issues
287. A draft outline work package has been drawn up costing between £2.5m–£3m. The potential time savings in relation to the estimated scheme costs are such that this is very likely to yield a benefit-cost ratio above 2. This could realistically be implemented by 2024/5 if funded via the EPP and other local sources.

East Park Rd Bus Priority Corridor

288. This intervention looks at the eastern section of Mainline route group 54/54a. There are already two significant bus priority projects approved and financed through TCF for the western section of this route. Electric double decker buses are planned for implementation in 2024.
289. Punctuality on this long cross city route was just above **70%** during 2019/20. It is better post covid, but likely to deteriorate as traffic increases.
290. Centrebus has recently undertaken a review of the pinch points on the Centrebus 54A/FirstBus 54 route, associated with punctuality information from the on-board tracking equipment. This is detailed in Appendix 4
291. This has highlighted a range of issues which will be drawn up into a proposed detailed scheme of works covering:
- parking management and rationalisation at key pinch points noted above
 - increased enforcement of existing traffic regulation orders through more fixed cameras
 - traffic light signal reviews at certain junctions
 - traffic management alterations in some area
292. Previous costings have shown that such a programme might cost over £2m to deliver effectively.
293. All three schemes will be subject to detailed feasibility, design and consultation work in 2022/2023 to develop them up further to outline and full business case submission stages and future commissioning, should they receive then funding.

Future phases and summary

294. A decision on where to focus bus priority work in the latter half of the EPP programme will evolve over the next 5 years, in line with changes to traffic and bus route viability, together with plans for future electric bus investment.

295. The table below shows a summary of the proposed approach to bus priority work for each the proposed Mainlines and Greenlines. This is split down by work already completed, that financed by TCF and that proposed within EPP upto 2025 and beyond.

MAINLINES — BUS PRIORITIES UPTO 2025								
Network	Company	Route Group	Corridor Name(s)	Electric by 2025	Bus Priority Already in Place	TCF 2021–2024 Bus Priority Schemes Approved	BSIP upto 2025 Bus Priority Schemes Planned — Funding Bid	BSIP/WPL beyond 2025 Bus Priority Schemes Review
Mainline	FirstBus	4	Melton Road	Yes	Yes — partial	Yes — partial	Review	Review
Mainline	Arriva	5, 5a	Melton Road	Yes	Yes — partial	Yes — partial	Review	Review
Mainline	Arriva	6	Melton Road	Yes	Yes — partial	Yes — partial	Review	Review
Mainline	FirstBus	13	Glenfield Road	Yes	No	No — few delays	No — delay not significant	Review
Mainline	FirstBus, Arriva	14, 14a	Aikman Avenue, Ring Road	Yes	No	New P&R site	Yes — Ring Road section	Review
Mainline	FirstBus	16	Saviours Road	Yes	No — single lane	New P&R site	No — single lane	Review — Parking
Mainline	FirstBus	17	Sparkenhoe Street	Yes	No — single lane	No — single lane	No — single lane	Review — Parking
Mainline	Arriva, Stagecoach, FirstBus	153, 158, 48, 18	Hinckley Road	Partial	Yes — full	Complete	Complete	Complete
Mainline	FirstBus	21	Catherine Street	Yes	No — single lane	No — few delays	No — delay not significant	Review — Parking
Mainline	FirstBus, Centrebus	22	London Road, Evington Road	Partial	Yes — partial	No	Yes — parking/other	Review
Mainline	FirstBus	25, 26	Abbey Park Road, Melton Road and others	Yes	Yes — partial	Yes — partial	Complete	Review
Mainline	Arriva	26, 27, 29	Groby Road	No	Yes — partial	Yes — partial	No	Review
Mainline	Arriva, Stagecoach	31, X3, X7	London Road, Leicester Road	No	Yes — partial	Yes — red routes	No	Review
Mainline	FirstBus, Arriva	38, 38a, 53	Uppingham, Humberstone Road	Yes	Yes — partial	No	Yes — full	Complete
Mainline	Arriva	44, 44a	London Road, Queens Road	No	Yes — partial	Yes — red routes	No	Review
Mainline	Arriva	48, 47	Saffron Lane, Welford Road	Yes	Yes — Welford Road	No — limited scope	Review	Review
Mainline	Arriva	55, 56	Uppingham, Humberstone Road	No	Yes — partial	No	Yes — full	Complete
Mainline	Arriva	50, 51	Narborough Road	Yes	Yes — partial	No — delays not in City Area	No — delays not in City Area	Review
Mainline	FirstBus, Centrebus	54 west	Abbey Park Road, A6 Abbey Lane	Partial	Yes — partial	Yes — full & new P&R site	Yes — Complete	Complete
Mainline	FirstBus, Centrebus	54 east	Green Lane Road	Partial	No — single lane mainly	No	Yes — parking/other	Complete
Mainline	Arriva	58, 58a	Victoria Road East, Netherhall Road	Yes	No	No	No	Review

MAINLINES — BUS PRIORITIES UPTO 2025								
Network	Company	Route Group	Corridor Name(s)	Electric by 2025	Bus Priority Already in Place	TCF 2021–2024 Bus Priority Schemes Approved	BSIP upto 2025 Bus Priority Schemes Planned — Funding Bid	BSIP/WPL beyond 2025 Bus Priority Schemes Review
Mainline	FirstBus	74	Anstley Lane	Yes	No	Yes — full & new P&R site	Complete	Complete
Mainline	Arriva	84, 85	Lutterworth Road, Aylestone Road	No	Yes — full	No	No	Review
Mainline	Arriva, FirstBus	86, 87, 88 group	Saffron Lane	Partial	Yes — partial	Yes — partial	Single lane sections left	Review
Mainline	Arriva	104	Fosse Road South, Waltham Avenue	No	No	No	No	Review
Mainline	Arriva, Kinch	126, 127, 2	Loughborough Road	No	Yes — partial	Yes — partial	No	Review
Greenline	Roberts	P&R 303	Birstall P&R, A6 Abbey Lane	Yes	Yes — partial	Yes — full & new P&R site	Review	Review
Greenline	Roberts	P&R 203	Enderby P&R, Ring Road, Aylestone Road	Yes	Yes — full on Aylestone	Yes — Soar Valley Way Ring Road	Review	Review
Greenline	Roberts	P&R 103	Meynells P&R, Hinckley Road	Yes	Yes — full	No — complete	Review	Review
Greenline	Centrebuses	Hospital Hopper	City, Groby Road leg	Yes	No	Yes — partial	Review	Review
Greenline	Centrebuses	Outer Ring	Outer Orbital Ring Road	Yes	No	Yes — partial + review	Yes — full	Complete
Greenline	TBD	Inner Ring	City Centre Circular	Yes	Yes — almost all	Train Station section	Complete	Complete

Zero Emission Buses

Outline

296. The commercial operators have already made a formal partnership commitment for all their existing diesel bus services to meet Euro 6 emission standard by 2021. This has been now been achieved by FirstBus and Arriva, with the Centrebuses and Stagecoach on track during 2021.
297. The movement of from here to electric or other form of zero emission bus will be subject to the partnership agreeing an investment plan over the next ten years. This will be subject to the commercial viability of each service, external funds and technological changes.

Progress to date

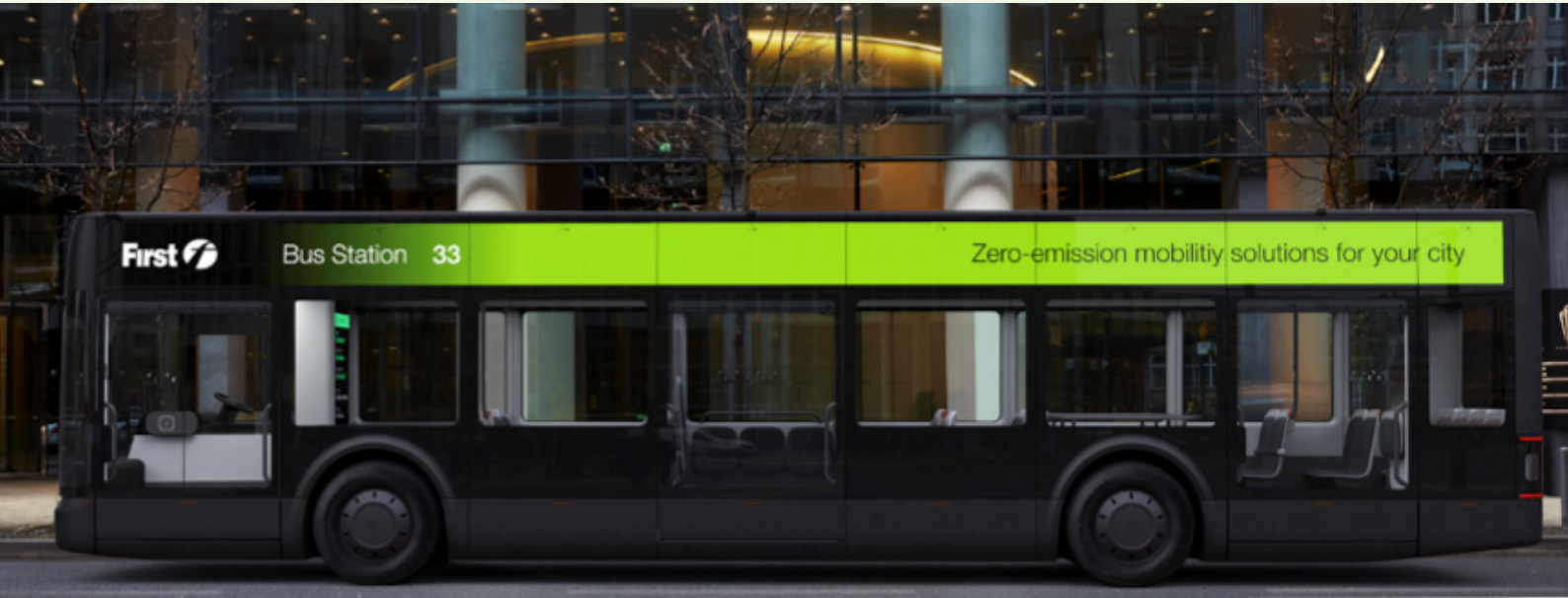
298. The existing three park and ride services went fully electric in May 2021, with the Hospital Hopper also going electric in early 2022 and a new inner orbital electric bus service funded from Autumn 2022. These x18 buses are all owned by the City Council and contracted to existing operators.

299. They will be supplemented by a further 22 electric buses now committed on Stagecoach 48 Coventry — Leicester service by 2024 as part of the Electric Town Project.

ZEBRA Fast Track Bid

300. The partnership of FirstBus, Arriva and Leicester City Council has recently been successful with a bid to government for funding to assist in the introduction of 96 electric buses by 2024 as part of the DfT Zero Emission Bus Regional Areas Funds (ZEBRA).
301. This will consist of introducing electric buses on 14 Mainlines (21 routes) with an overall investment of £47m. £28m will be from local funds and £19m from the ZEBRA bid. The local funds will be largely from FirstBus and Arriva, but also include £1.3m from the City Council towards the Greenlines project — for the outer orbital 40 route.

303. Once implemented this will lead to a third of Leicester’s fleet being electric by 2024, with around **50%** of annual travel being made on these buses.



Further ZEBRA bids before 2025

304. It is proposed that another ZEBRA bid is made in the next two years to introduce at least a further 76 electric buses before 2025. This will consist of at least 56 Mainline commercial electric buses and 16 additional Greenlines electric buses.

305. For the contracted Greenlines fleet, the EP Plan is to bid once a decision to introduce WPL is approved. This is likely to be within the next 18 months and will be matched by complementary capital schemes and ongoing revenue support from WPL.

306. If this overall plan is fully funded, this will lead to **50%** of the fleet being electric by 2025 used by and estimated **68%** of all passenger trips.

ELECTRIC BUS PROGRESS AND PLANS — 2021–2025

	Total	In place by 2022/3	ZEBRA Fast Track Electric 2024	ZEBRA Bid 2 before 2025	Total by 2025	Total by 2025 %
Arriva	205	0	22	36	58	28%
First	88	30	38	20	88	100%
Centrebus/Council	54	4	6	20	30	56%
Kinch	17	0	0	0	0	0%
Stagecoach	34	22	0	0	22	65%
Roberts/Council	15	14	0	1	14	93%
Total	413	70 (17%)	66 (16%)	77 (19%)	212 (51%)	

PASSENGERS TRAVELLING ON ELECTRIC BUSES BY 2025 ALL ROUTES COMING INTO LEICESTER BASED ON PRECOVID 2019/20 PAX

Bus Type	Status	Passenger pa	% passengers
Electric	Already Committed	2,811,266	7.5%
Electric	ZEBRA Fast Track	15,995,884	42.9%
Electric	ZEBRA Bid 2	6,,628,000	17.8%
Electric	By 2025	25,435,150	68.2%
Diesel Euro 6	In place	11,865,323	31.8%

Further investment in zero emission buses

307. Plans for further electrification on commercial bus services between 2026–30 will depend on:

- the business case of each operator and commercial prospects of each route
- prevailing available capital and revenue subsidies
- attractive national BSOG incentives
- success of Leicester to get funding and approval to deliver complementary investment in bus priorities and waiting infrastructure

- prevailing vibrancy of Leicester and new developments
- technical changes to the electric bus market, particularly in relation to expected battery cost and range.
- prevailing electricity costs in relation to diesel
- ability and costs associated with electric power upgrade

308. It is anticipated at this stage that the partnership will be able to confirm future zero emission bus plans within the next 2 years, with a view to agreeing a path for full fleet electrification by 2030. At present the following phasing is assumed.

ELECTRIC BUS INDICATIVE INVESTMENT PLANS — BEYOND 2025

	Total	Previous Investment before 2025	ZEBRA Phase 3 — 2026/27	ZEBRA Phase 4 — 2027/28	ZEBRA Phase 5 — 2029/30	Total by 2030 %
Arriva	205	58	50	50	47	100%
First	88	88	0	0	0	100%
Centrebus/Council	54	25	9	10	10	100%
Kinch	17	0	5	5	7	100%
Stagecoach	34	22	0	6	6	100%
Roberts/Council	15	15	0	0	0	100%
Total	413	208	64	71	70	100%



Infrastructure and Waiting Facilities

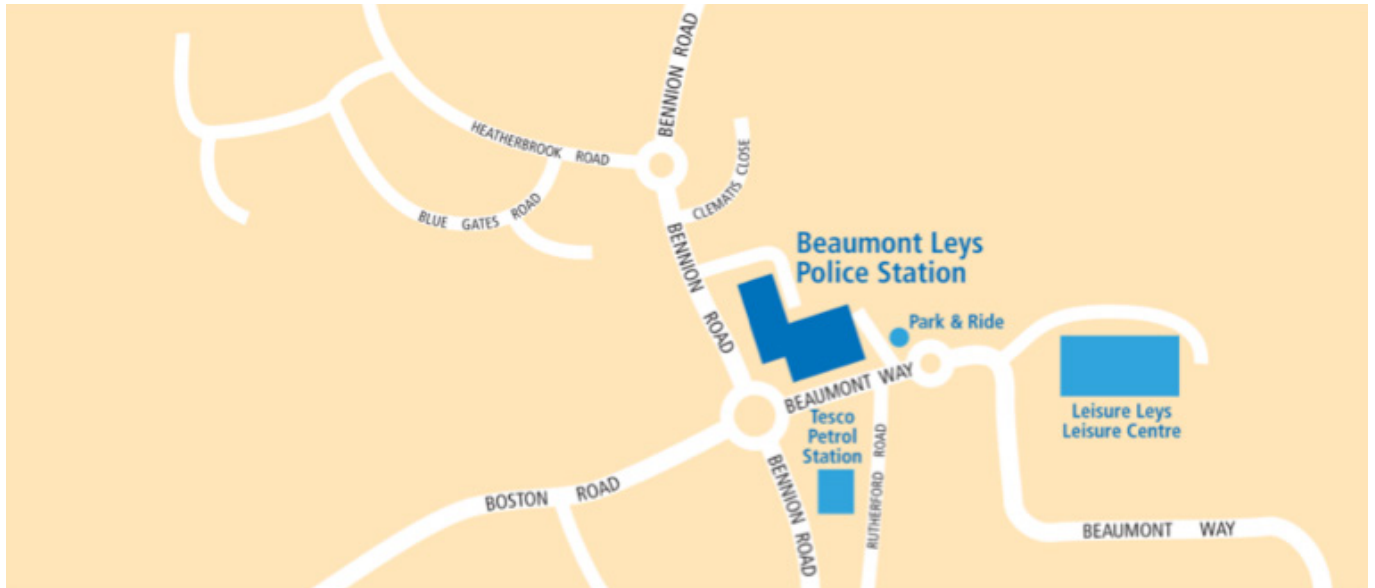
Bus Stations

309. Traditionally the capital cost of waiting infrastructure at bus stops and bus stations is funded by local and central government. It is generally located on public highway or council-owned land and open for use by all operators. There is little commercial incentive for an operator to provide this, particularly as it is unable to restrict its use to just its own services.
310. Revenue costs tend to be met by a combination of operator and council revenue funds, together with other income streams such as advertising contracts.
311. Leicester already has a relatively new and well-equipped bus station at Haymarket.
312. All funds are in place for the £13.5m replacement of St Margaret's Bus Station with a state-of-the-art new bus station. Work has already commenced and it is due to be completed by Summer 2022.

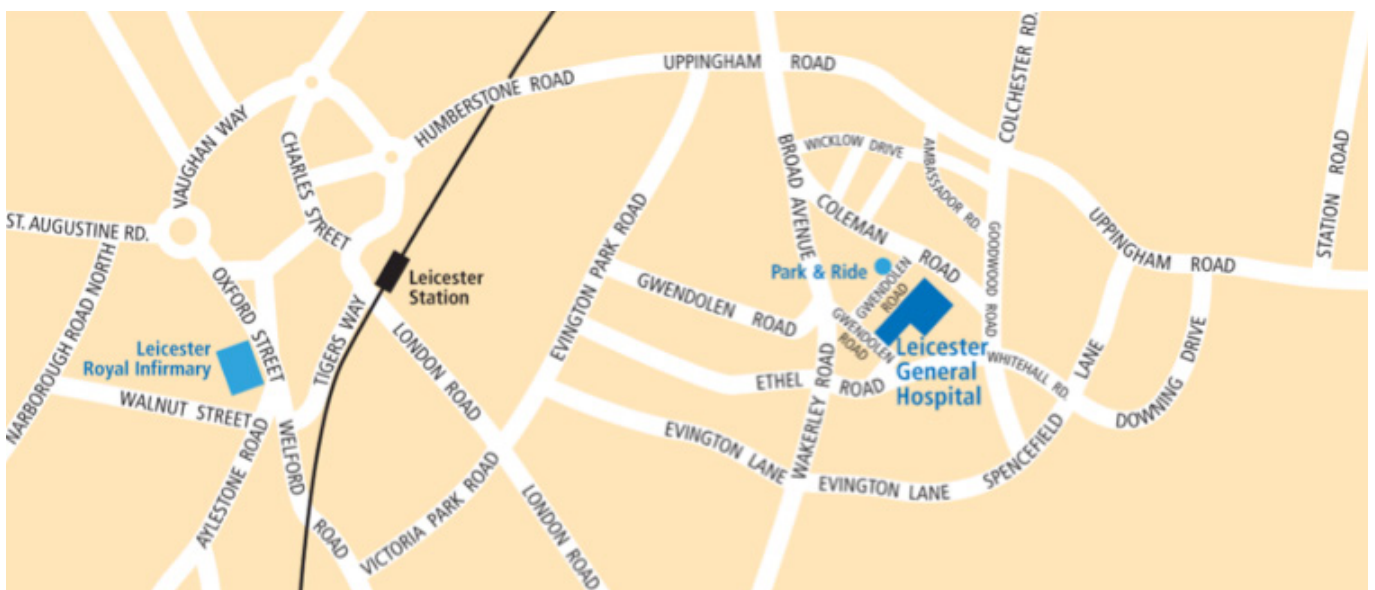


Park and Ride sites

313. There are already three high quality park and ride sites to the South, South West and North of Leicester, on the edge of the conurbation close to the strategic road network, with around 1500 spaces in total. The cost for staffing and maintaining these sites is split equally between the City and County Council.
314. There are also financed plans to establish a further small site in 2022/3 to the North West at Beaumont Leys just off the Western Bypass (A46), with around 300 spaces.



315. In addition, in partnership with University Hospitals Leicester, a smaller temporary development site (of around 90 spaces) is planned to the East of Leicester at the General Hospital close to the A6030/A47. It is hoped to bring this into operation in early 2022.



316. Both of these sites are situated on existing Mainlines and Greenlines routes — radial and orbital. They will be managed such that only users with valid tickets on these bus services can access the site free of charge.

The remaining geographical ‘gap’ in P&R provision has been identified to the South East of the conurbation close to the Leicester Rd (A6). A temporary facility at the Racecourse has already worked successfully in previous years.



317. This is sited reasonably close to an existing high frequency Mainline service. In addition, the Greenlines development plan proposes to extend the existing Meynells Gorse P&R service across the City Centre to the Racecourse, giving a cross city express route with P&R at either end.

318. It is currently proposed that a partnership is established between the Racecourse and City Council to share a park and ride facility on the edge of the Racecourse site — already provided with suitable access roads. It should be noted, however, that no formal dialogue on this proposal has yet taken place between the Council and the Racecourse.

319. Subject to agreement with the Racecourse, it is proposed that full feasibility, consultation and initial design is undertaken in 2023/24 to take this scheme forward to outline and then full business case approval stage.

Bus Stop facilities

320. In addition, all existing bus shelters will be replaced and their stock increased to cover the majority of all main boarding stops, with expected completion by October 2022.
321. The provision of real time information at bus stations and the City Centre is well advanced, with over 300 stop and large format interchange electronic displays.
322. In addition, around half of all boarding stops outside the City Centre will have smart real time bus stop poles, funded by £3.77m of existing Transforming Cities Funds.
323. These will be battery driven and provide next-bus bus arrival and other service information via electronic displays and text-to-speech facility — so fully accessible to all travellers. Over 575 of these units will be installed by the end of 2022.



324. In addition, over 700 other less-used and alighting stops will have similar high quality stop totems over the next 2 years but without real time displays, also funded through Transforming Cities Funds. These can readily be upgraded to include real time units when usage level rise and additional funds are available.

325. It is proposed that EPP capital and revenue funding bids look for funds to expand this system further by another 600 units. This will enable all boarding stops to have real time totems, enabling continuous communication to all passengers at all times. This is included within the Funding section below.

326. There has already been a long programme of works to improve the accessibility of many bus stops, through the provision of raised kerbs and bus promontories — bringing the stop out beyond a line of parked cars. This work will continue on an individual scheme basis as part of the above bus priority work and other highways and road maintenance work.



Cost of travel

Existing pricing

327. As already noted, fare levels on commercial bus services are set and determined by each private bus operator.
328. The City Council has a statutory duty to provide off peak weekday and all-day weekend travel to those residents qualifying on grounds of age (above 66) or disability (various). It pays operators for any concessionary trip starting within the Council area, by any qualifying resident.
329. The City Council also currently funds discretionary free peak bus travel for those with qualifying disabilities and half fare peak travel for those of a qualifying age (currently 67 years old). This applies to both mainstream buses and park and ride, but for City residents only.
330. In total, around 8.6m concessionary trips are made each year at the cost of £9.0m pa. Around 150,000 of these are made at the non-statutory times.
331. Until April 2020, the City Council also had a discounted half fare for residents who are unemployed and have purchased a monthly £1 pass. This covers any bus route starting or finishing in Leicester. Despite being a generous discount, its take up is relatively low, accounting for around 60,000 trips pa. This is currently suspended, following a review of this area as part of the EPP consultation process and agreed post-covid response.
332. In addition, around 350 pupils are eligible for free school travel on grounds of low income and travel distance. These pupils are now issued with all-operator flexi passes, giving unlimited travel at all times, including weekends and holidays.
333. It is currently planned that these schemes will continue subject to funding availability and ongoing legislation relating to the English National Concessionary Travel Scheme.
334. The five areas have been identified from consultation as requiring consideration for targeted discount over the next three years, as bus services recover from Covid and the network has sufficient spare capacity.

Flexi fares premium

335. This refers the price of Flexi all-operator tickets in relation to single-operator equivalent. The Flexi prices are commercially set by the operator consortium and are between **0%** and **30%** higher than similar single-operator products.

FLEXI FARE — DIFFERENCE OVER MID-PRICED SINGLE OPERATOR PRODUCTS

	Adult	Child	Student
Day	9%	20%	N/A
Week	0%	4%	N/A
4-week	30%	27%	N/A
Year	10%	29%	16%
Academic Year	N/A	26%	14%
Term	N/A	N/A	N/A

FLEXI FARE — PREMIUM

	Adult	Child	Student
Day	9%	20%	N/A
Week	0%	4%	N/A
4-week	16%	4%	N/A
Year	10%	7%	8%
Academic Year	N/A	9%	11%
Term	N/A	N/A	14%

336. Although these tickets give greater choice than single operator tickets, their premium has a detrimental effect on:

- facilitating cross-city movements to non-central workplaces, health and educational facilities
- utilising significantly underused contra-flow bus capacity
- integrating timetables across operators on shared routes, to give even headways, bring about capacity efficiencies and promote a branded Mainlines network
- orbital congestion — since it is expensive to do interchange trips
- simplicity and ease of user understanding of the cost of travel

337. It is suggested that subsidy is used to remove these premia for at least 2 years, whilst the integrated Mainlines branded network is set up and additional capacity is provided. Each operator will be underwritten to ensure it is worse off, taking into account any growth in sales over this period.

Young persons between 16–25

338. This area repeatedly comes up through correspondence, focus groups and market research as requiring strong consideration. Of particular note is the significant change in fare between child and adult at the age of 16, at a time when young persons are often in either education or low-paid employment.

ADULT: CHILD/STUDENT DIFFERENTIAL AUG21			
	Arriva	First	Flexi
Day	23%	26%	14%
Week	33%	38%	33%
4-week	17%	27%	30%
Year	33%	61%	38%
Average	27%	38%	29%
Child:Student Year	1%	13%	2%
Student:Adult Year	32%	43%	35%

339. The above table shows an increase of between **14%** and **61%** depending on product type when moving from 'Child' to 'Adult'. However, for those 'Students' in full time education, who purchase a yearly pass, the change is significantly lower.

340. It is proposed that EPP funding is sought to trial giving a standard discount over adult fares for all those between 19 and 24 years of age, including on day, week and four weekly Flexi passes. This will be done in conjunction with the County Council who have similar proposals within their EPP.

Fares on Evenings and Sundays

341. City Centre parking in the evenings and on Sundays is between £1–£2 for both on-street and multi-storey car parks. It is thought that this might have an impact on bus use at these times. In Nottingham, 'off peak' car park charges have risen significantly over the past 3 years, and this has been matched by discounted group/family bus tickets, together with lower P&R fares.

342. It is proposed that a EPP-financed trial takes place in 2023/4 to examine the impact of similar reductions in bus fares at these times. This might take the form of a discounted 'group' Flexi ticket for use on both mainstream buses and park and ride.



Continuation post-2025

343. The objective of these trials is to be to assess the impact on
- overall usage of each highlighted sector
 - user accessibility to key facilities, particularly by those with low income
344. The data used from the above trials, together with other user research, will be used to inform the partnership on the viability and use of any continuation post-2025. This will be subject to availability of local funding through the introduction of workplace parking levy or some other local source.

Network Integration

Outline

345. There is good evidence (e.g. KPMG bus review for DfT 2016) to show the value that passengers place on a clear, easy-to-understand integrated network, with few barriers to interchange between routes and operators.
346. This is also supported in areas where a single operator dominates and that operator has a strong customer-focused network approach e.g. Lothian Transport, Brighton and Hove Buses, Reading Buses.

347. In addition, there is potential in Leicester to increase usage to a growing number non-central locations through improved connectivity measures. This could be delivered with no additional costs of service provision. In the morning peak, buses have significant unused space outbound from the City Centre, with this being reversed in the evening peak.
348. Key non-central employment and educational establishments account for over **80%** of peak movements, as shown by the table below.

WORKPLACE DISTRIBUTION

	Sites		Employers		Parking Spaces		Employees	
City Centre	41	15%	21	21%	3,616	11%	5,724	10%
Outside City Centre	224	85%	79	79%	28,108	89%	52,613	90%
Total	265		100		31,724		58,337	

349. Franchising has the simplicity of being able to contractually determine a network which is fully integrated in terms of routes, timetables, information, ticketing, operating standards, promotions and branding.
350. A Bus Partnership has potential to significantly address each of these areas, but will also require room for each operator to specify and promote its own individual services and to maintain open competition.
351. This will inevitably be a difficult area to negotiate and require significant ongoing management to ensure consistent adherence and support.
352. It should also be noted that this is the main area highlighted by members of the Bus User Panel and other stakeholders as lacking within the current draft Bus Plan.
353. The process of getting strong Partnership integration under will entail the agreement of a discrete series of work packages to ensure continuous traction and consistency in relation to:
- **Timetables and routes** — on shared corridors and for certain connections
 - **Fares and ticketing** — flexi price, range, capping and sales portals
 - **Information** — at stops, bus stations, buses, web and other outlets
 - **Network branding** — stops, bus stations, buses and information outlets
 - **Network charter and promotion** — for key sectors e.g. education, hospital, leisure, employment
354. This would apply to the following Mainline bus corridors.
- **Beaumont Leys — Goodwood:** FirstBus, Centrebus
 - **Evington — City:** FirstBus, Centrebus
 - **Liberty Rd — Aikman Av — City:** FirstBus, Arriva, Centrebus
 - **Saffron Lane — Eyres Monsell — City:** FirstBus, Arriva
 - **Uppingham Rd — Humberstone Rd — City:** FirstBus, Arriva
 - **Netherhall Rd — City:** FirstBus, Arriva
 - **Hinckley Rd — City:** Stagecoach, Arriva, FirstBus
 - **Leicester Rd — London Rd — City:** Stagecoach, Arriva
 - **Melton Rd & Loughborough Rd:** Arriva, FirstBus, Kinch, Centrebus
357. In addition, the partnership will need to give further consideration to the rationalisation and simplification of the following routes:
- Saffron Lane & Eyres Monsell routes: 83–88 Group. These are currently shown as two ‘Mainline’ route groups, but require further simplification to assist customer integration
 - Aikman Avenue & Liberty Rd routes. FirstBus 14, Arriva 14 and Centrebus 12. These need rationalisation to give commonality of route throughout
358. In addition, as outlined above, there will be review of the subsidised networks, with the aim to rationalise limited resources into developing and integrating the ‘Greenlines’ cohesive network, supplemented by a small ‘On Demand’ accessible network — as set out in the specific sections above.
359. Establish three set registration dates each year, with three ‘supplementary’ ones which can only be used by majority agreement. Set dates to be the start of each school term, supplementary dates to be the start of each half term.
360. Tidy up the odd case of the same route number being used for different services with different operators.
- Arriva 47,48 and Stagecoach 48,48L
 - FirstBus 25,6 and Arriva 26

Integration — timetables and routes

354. Leicester has a dense urban bus network, so it is inevitable that many routes will overlap on key roads approaching the City Centre. It also has a long running competition on certain corridors. There are no set agreed registration dates, with any operator able to register a service change at any point in time.
355. It is suggested to rationalise this network timetable integration across operators should be progressed using existing ‘Qualifying Agreement’ partnership legislation, endorsed by the City Council following a competition test.

Integration — Ticketing

FLEXI SCHEME

361. The Council currently co-ordinates and leads the joint development of multi-operator ticketing products. These are branded as Flexi tickets and allow unlimited travel on all operators within the Greater Leicester Flexi zone for a given period.
362. All aspects of this scheme are controlled by commercial agreement of the operators, under an agreed roadmap. The objective is to facilitate joined up travel between different operators, particularly to non-central employment and educational locations.
363. The product range has recently been expanded to include longer period passes and student and child variants. In addition, this range can be purchased on-bus or via each operator's mobile ticketing/web platforms. On bus purchase can be made via contactless payment.

DIGITAL 'BEST FARE' CAPPING

364. Unlike in London and some other cities, advanced payment is required, meaning the user has to anticipate future movements and know all fare options. This reduces flexibility and perceived user value for money.
365. The partnership has therefore agreed to develop best fare 'capping', with post payment made on the basis of actual journey undertaken. Agreement and funding has been secured by the City Council to implement this during 2021 and 2022.
366. Users will simple 'tap on' and 'tap off' using given digital media (bankers card or phone app), with payment then made automatically at the end of the day on the basis of the cheapest fare available for the journeys undertaken across any operator. There will also be a weekly 'cheapest fare' cap.
367. This advanced functionality will also speed up boarding times by removing any required for a transaction with the bus driver. It is currently planned for introduction on all commercial and contracted bus services by April 2022 as part of the wider operator-lead national initiative called Project Coral. Leicester will be first City to introduce this functionality.

368. Further work will be undertaken during 2022/3 to further develop this portal — with automation to operator revenue apportionment and more developed online user interrogation facilities.
369. Because this will not be available to those without bank accounts, cash payment will be retained for the foreseeable future.

STANDARDISATION OF TICKET DEFINITION

370. To assist integration, user understanding and the expansion of flexi tickets, it is proposed that the partnership looks to get agreement to standardise definitions across all ticket products in relation to:
- age of a 'child' — 16, 18 or 19 years
 - student definition and term/year dates
 - boundaries for unlimited travel products
 - month and 4-week
 - times covered by a 'day'
 - capping methodology across each operator — day, week, rolling week etc

Integration — information

371. Each operator has well established information channels for its own services — covering timetables, fares and ticketing, journey planning and upcoming changes.
372. User surveys show reasonable levels of satisfaction, but this is lower for:
- real time information provision
 - printed information and mapping at bus stops
 - integrated information for movements and ticketing across operators
373. To this end, it is the following sources of integrated printed and electronic information are proposed:
- all-operator timetables, ticketing and service information at all stops and bus stations, to the same agreed Partnership standard
 - provision of bus stop real time 'totems' (being installed at all bus stops, with upto 4 timetable cases at each — see above

- Greater Leicester all-routes maps
 - at all non-central bus shelters and both bus stations
 - to take away from both bus stations
- all-operator real time information and disruption messaging at all main boarding stops and interchanges
- all-operator ticketing and information web portal
 - scheduled and real time journey planner
 - upcoming service changes
 - service disruptions — planned and unplanned
 - full details of flexi ticketing
 - sales portal for mobile flexi tickets
 - information on Flexi capping history and transactions
 - park and ride information and ticketing
 - partnership details
 - customer charter details

374. It is proposed that the partnership is organised such that:

- a lead operator looks after all aspects of the totems (outside the City Centre), including maintenance, production and posting of network timetables, and report monitoring of the real time displays (where present)
- city council looks after all aspects of information and infrastructure related to bus shelters, bus stations, park and ride and city centre/interchange stops
- a lead operator manages the content and development of the all-operator web-based ticketing and information portal.

375. In addition, it is proposed that all Mainline buses are equipped with audio-visual displays by the end of 2024/5, giving next-bus stop announcements and other dynamic service information. These will be fitted as standard for the electric buses, and can be transferred across from existing diesel buses as they replaced.

Integration — Network Branding

376. In Leicester, there is currently a large number of bus operators running routes with a diverse range of brands and liveries, most of which relate to the operator company rather than the individual route. Each operator puts information out at stops, bus stations and on the website in different formats, styles and standards.

377. In addition, there is also branding by the Councils at various points of the network, together with other transport brands such as Choose How You Move, Flexi and Traveline. There are many maps which are colour-coded by route, but other information relating to those routes, and the bus livery itself is in a different colour.

378. The overall impact to a potential new user can be confusing, complex and off-putting. Most larger cities in the UK and Europe have spent considerable time in making the network simpler and easier to understand via unified network branding and marketing tools.

379. It is proposed that a single 'network' brand is adopted throughout Greater Leicester. This approach is common in all other larger cities in the UK. To work widely and consistently by all partners this material must complement and not compete with individual operator brands.

380. This brand would be used in the following areas:

- all bus stops and bus stations within the Greater Leicester Flexi Zone — in visual 'flag' form
- all-operator website for ticketing, information etc
- all buses — exterior and interior referencing
- all printed information relating to integrated transport — timetables, maps, fares information etc at stops and bus stations
- all integrated marketing, including partnership project and scheme promotions
- Customer charter work

381. The Partnership has employed an outside design agency to come up with a range of options, focussing on ‘Leicester Buses’ as the key overarching name.



It is proposed that this design will be adopted in line with:

- the roll out of integrated printed information at bus stop totems in 2022
- the introduction of automated capping and its associated web portal in 2022
- the interior design of the new St Margarets Bus Station in 2022
- the introduction of new electric buses on each ZEBRA route in 2022 onwards

Integration — Route branding

382. There is now good evidence across the country that passengers respond favourably to route colour branding, both through mapping tools and via an all-over bus livery and bus stop infrastructure to a given colour.
383. The function of such branding can be to:
- integrate across routes serving common points
 - integrate and promote groups of routes with common frequencies or standards
 - help passengers locally identify with ‘their’ buses,
 - promotes customer ownership and loyalty
 - can help customers to screen out the perceived ‘noise’ of other buses
 - links mapping, bus and waiting infrastructure by a common colour thread
 - assists those who struggle to comprehend route numbering
384. Trentbarton were pioneers in this area, dropping route numbering altogether in most instances. However, for urban networks, best practice is to also retain route numbers, having a colour brand for a route group sharing a large common corridor section — as adopted by Nottingham City Transport for over 15 years.
385. Vehicle branding that uses a generic company brand is seen to be of much less help to passengers once there is a common ticketing and information structure in place, particularly when there is all-operator capping, as is shortly to be introduced in Leicester.
386. Currently in Leicester, there is a confusing range of bus brands, largely based on each operator company, but also involving some individual colour route and route-group branding. This gives the network a feel of being unco-ordinated, fragmented and disjointed — with no common customer-driven set of standards. These also have no navigational relationship to any of the colour-coded bus maps or to other printed on-street information.
387. Different options for bus branding have been considered in terms of both assisting the customer and being operationally practical.
- individual route
 - route-group
 - high frequency services only
 - road corridor
 - geographical sector
 - common network
388. Branding of over 80 individual routes was rejected as being impractical and adding little value to the route numbering system. Corridor branding was rejected due to the existence of several circular and cross-city routes which serve more than one corridor. Sector branding was seen to provide some limited ‘ownership’ value but little navigational value.

Mainline route-group branding

389. Full colour branding applied to each cross-operator route group or 'Mainline' with a combined 15 minute frequency or better has strong potential. This could be applied as an overall bus colour brand for each route group, flowing through to all printed information, mapping and marketing. An example is shown below.

MAINLINES NETWORK						
Mainlines route group	First	Arriva	Centrebus	S'Coach	Kinch	Cross operator integration
4	yes	no	no	no	no	no
5, 5a	no	yes	no	no	no	no
6	no	yes	no	no	no	no
13	yes	no	no	no	no	no
14, 14, 14a	yes	yes	no	no	no	yes
16	yes	no	no	no	no	no
17	yes	no	no	no	no	no
21	yes	no	no	no	no	no
22, 22A, 22B	yes	no	yes	no	no	yes
25, 26	yes	no	no	no	no	no
26, 27, 29	no	yes	no	no	no	no
31, X3, X7	no	yes	no	yes	no	yes
38, 38a, 53	yes	yes	no	no	no	yes
44, 44a	no	yes	no	no	no	no
48, 47, 49	no	yes	no	no	no	no
55, 56	no	yes	no	no	no	no
153, 158, 48, 18	yes	yes	no	yes	no	yes
50, 51	no	yes	no	no	no	no
54, 54a	yes	no	yes	no	no	yes
58, 58a	no	yes	no	no	no	no
74	yes	no	no	no	no	no
84, 85	no	yes	no	no	no	no
86, 87, 88 group	yes	yes	no	no	no	yes
104	no	yes	no	no	no	no
126, 127, 2	no	yes	no	no	yes	no

390. This would give a distinct colour to most corridors where the routes diverge beyond the conurbation, whilst retaining colour difference where circular and cross-city urban routes share corridors with other routes.

391. Those services which are not traditional urban stopping services or are infrequent will not form part of this cohesive branded network in the first instance:

- Orbital routes e.g. 40
- Park and Ride routes e.g. 103
- Longer distance routes e.g. Skylink
- Infrequent services/Dial A Ride etc
- Others e.g. Hospital Hopper

392. Attached is an example of a 'Mainlines' network map showing these proposals in schematic format. Geographic versions will also be drawn up. These would be widely displayed across the network in bus stations and at the proposed network of bus stop totems.

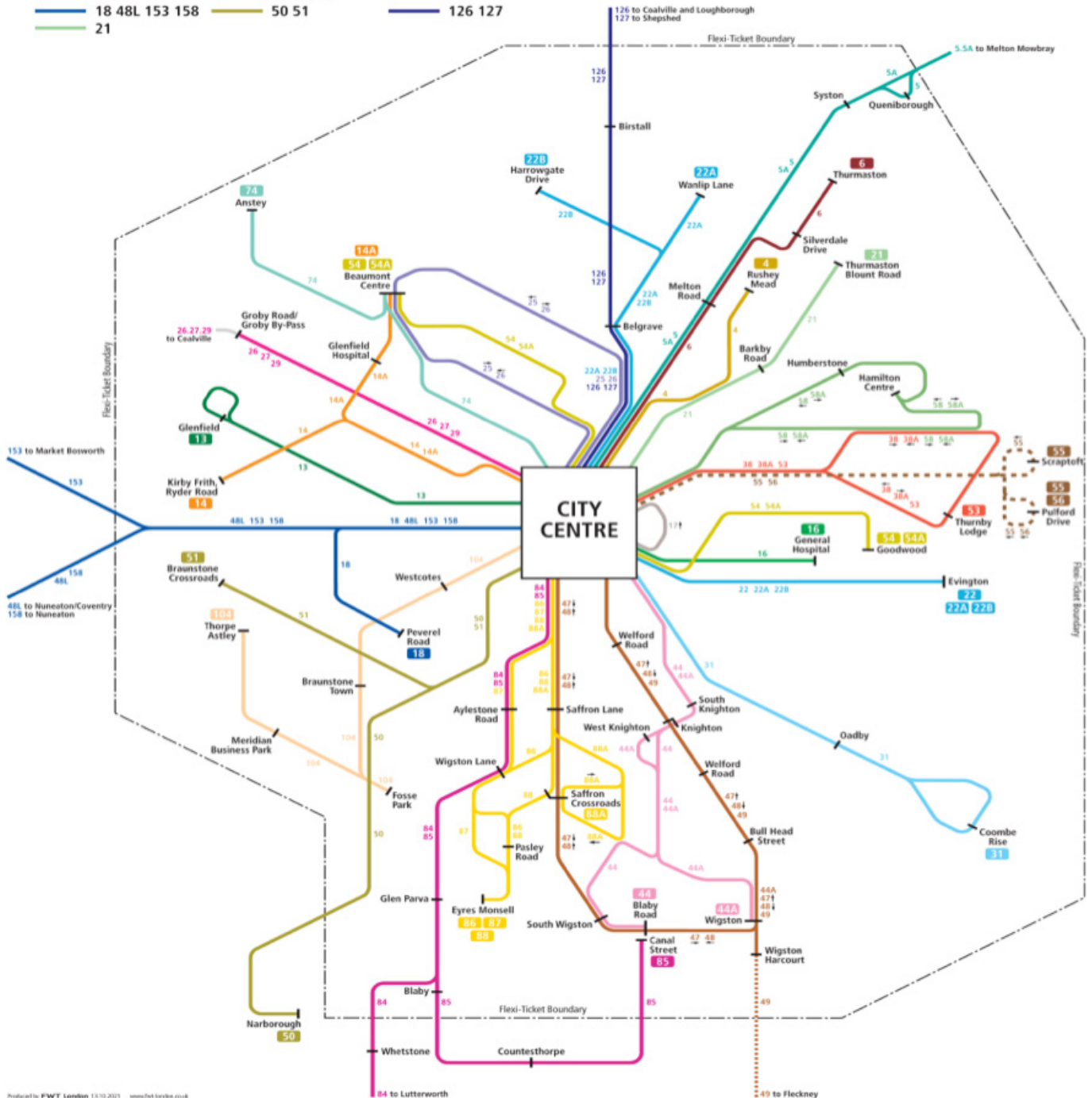
393. This colour branding could also be used on the top of each bus stop totem, again to assist customer navigation and loyalty.

394. However, this level of branding — to 25 different colours — could be operationally difficult for operators to apply to their bus fleets, placing too many restrictions on bus utilisation and placement. It would also add significant additional ongoing costs.

395. It is also questionable whether there would be too many colour brands (25) for each to readily distinguishable by customers.

Mainlines Network

- | | | |
|----------------|------------|----------------------|
| 4 | 22 22A 22B | 54 54A |
| 5 5A | 25 26 | 55 56 (from 2025/26) |
| 6 | 26 27 29 | 58 58A |
| 13 | 31E | 74 |
| 14 14A | 38 38A 53 | 84 85 |
| 16 | 44 44A | 86 87 88 88A |
| 17 | 47 48 49 | 104 |
| 18 48L 153 158 | 50 51 | 126 127 |
| 21 | | |



Produced by FWT London 13/01/2021 www.fwt-london.co.uk

Mainlines — high frequency branding

396. Some bus networks give a different brand to the higher frequency routes, those with a daytime frequency of every 10 minutes or better. This is done on the basis that customers do not require a timetable for these — they just turn up and go. They are also the best ones to for cross-city journeys involving interchange.
397. The geography and housing mix of Leicester, together with current travel demand, is such that only 12 of these 24 Mainlines can realistically commercially sustain a ten minute daytime frequency or better — either now or within 3 years of revenue support.
398. Several high frequency route groups split along their main corridor, with each section beyond the split only sustaining a frequency of every 15–20 minutes.
399. Separately bus colour branding these twelve Mainlines — either as a block or separately may serve some customer use, but would exclude the other well used other Mainlines.
400. Significantly, there are many areas of the city where Mainlines merge as they get nearer to the City Centre, with these areas also having a 10 minute or better daytime frequency, spread across more than one Mainline route-group.
401. It is therefore proposed that all roads with a ten minute of better daytime frequency could be marketed via a separate stop-based branding and mapping exercise, rather than through bus branding. For instance, each relevant totem could have a ‘Every 10 mins’ highly visual colour banner.

‘Mainlines’ network brand

402. An alternative option is to have all buses that reach the ‘Mainlines’ timetable standard to be painted the same colour. This will give customers the reassurance that any such branded bus service on a given road has the same integrated network standard.
403. This could be supplemented by colour coded sub-branding of each Mainline at
- maps at all stops
 - each totem on each mainline road
 - electronic destination blinds on each bus
404. This option would also be consistent with the approach also taken with the Greenlines network — with all buses painted a unifying green.

Conclusions

405. An external agency specialising in bus branding and promotion has been employed to draw up some options, market test and steer the Partnership to the best bus branding options, consistent with the recommended over-arching ‘Leicester Bus’ integration brand.
406. The full suite of brands will be agreed within the next 3 months, for formal agreement within the Enhanced Partnership Scheme.

Intervention Policies

Outline

407. As well as the above bus-specific investment interventions, a range of pro-bus policy intervention tools are also proposed for adoption or continuation. These include the following:

- Workplace Parking Levy
- Car Parking policies
- Planning and Development Policies

Workplace Parking Levy

408. Consultation is currently taking place to introduction of workplace parking levy from April 2023 for all workplaces in the Leicester City area with over a threshold number of parking spaces.

409. The funds raised from this levy would be ringfenced to support sustainable transport initiatives. They would also be used as required 'local funding match' to enable the Council to bid for external central government funding opportunities.

410. Significantly for bus travel, this would be a way of rebalancing the costs of commuting by bus and by car. Car commuters often receive the benefit of free parking at work while bus commuters must pay commercial fares. In recent years bus fares have risen much faster than driving costs. The WPL is proposed to be set above the cost of an annual bus pass.

411. Such a policy was introduced in Nottingham in 2011 to provide funds for tram, bus and rail investment, with modal shift resulting both from this investment and the impact of the levy itself on travel choice.

412. More details on this proposal are shown in the link below.

https://consultations.leicester.gov.uk/communications/ltp4/supporting_documents/Workplace%20Parking%20Levy.pdf

Council Parking policies

413. The council has approximately 1,600 off-street and 1,600 on-street parking spaces in the City Centre. There are 1,500 parking spaces at three park and ride sites located in non-congested peripheral locations, with poor current utilisation.

414. All day parking charges are set at a level significantly above both park and ride and daily Leicester bus fares. For the two main multi-storey car parks it is £6 for 6 hours and £8 for 8 hours. Park and ride fares are currently set at £3 per day, with average Leicester single operator bus fares at £4.33.

415. However, parking charges for evenings and Sundays are set currently set low at £1–£2 for unlimited stay. This is to encourage people to the City Centre during off peak, uncongested times. Park and ride services do not run during these periods. However, evening and Sunday bus fares are no different to other peak times.

416. To promote the financially sustainable viability of 'Mainline' standard half-hourly bus frequencies in the evenings and Sundays it is proposed that the EPP funding package trials:

- reducing bus fares and raising parking costs
- enhancing the park and ride timetable to include evening and Sundays

417. This has been successfully trialled in Nottingham over the past 3 years.

Planning and development policies

418. The Core strategy was adopted in July 2014 and sets out the spatial planning strategy for the city and objectives and policies for new development.

<https://www.leicester.gov.uk/media/179023/core-strategy-adopted-july-2014.pdf>

419. Core Strategy Policy 14 covers the transport network, stipulating that all development should be easily accessible by alternative means of travel to the car, promoting sustainable modes of transport such as public transport, cycling and walking and be located to minimise the need to travel.

420. This will be achieved through:

- new development being designed and located so that it is within close walking distance to frequent high quality bus services;
- providing park and ride in appropriate major edge of urban developments such as Sustainable Urban Extensions;
- identifying and safeguarding land for new city centre bus station and interchange facilities and for the Quality Public Transport Corridors;
- the delivery of highways and transport improvements as guided by the statutory Local Transport Plan.

421. Core Strategy Policy 15 has the key aim of reducing Leicester's contribution to climate change by the following policies that manage congestion on the City roads.

- reviewing Leicester's Car Parking Strategy to ensure that Leicester City Centre attracts inward investment that reduces the potential to travel by car;
- preparing a Supplementary Planning Document for Parking Standards and Travel Plans;
- requiring travel plans for large scale development;

- supporting a proposed hierarchy of parking enforcement zones;
- no additional new public and contract car parking provision (long stay or short stay; temporary or permanent) not associated with new development will be acceptable in the City Centre unless a need is identified by the City Wide Parking Strategy;
- ensuring that parking for residential development is of the highest design quality and use land efficiency does not compromise viability and the need for high quality regeneration. It should be appropriate for the type of dwelling and its location and takes into account the amount of available existing off street and on street car parking and the availability of public transport.

422. The draft Local Transport Plan 2021–36 is currently out for consultation and set out a range of proposed interventions designed to promote the sustainable development of the conurbation, focussing on

- developing connected sustainable transport corridors and stations
- improving transport within local neighbourhoods
- managing demand for car use

<https://consultations.leicester.gov.uk/communications/ltpl4/>

Customer Representation and Charter

Outline

423. Over the next 6 months a Bus Passenger Charter (BPC) will be established in full consultation with relevant stakeholders. This will set out for passengers what they can expect from both Leicester's bus operators and the Council as part of the EPP.

424. It will set out the commitments made between local authorities/bus operators and the passengers they serve to ensure certain standards are met for each journey. It will be developed using guidelines advised by Transport Focus.

425. To enable the Partnership to draw up these commitments, this EPP will require approval of funding and confirmation of proposed delivery dates of each intervention.

426. The charter will be reviewed on a yearly basis, with consultation on any revised versions.

427. It will also provide a place to commit publicly to developing transport provision in a manner which eliminates unlawful discrimination and promotes equality of opportunity.

428. The BPC will be published on the proposed Leicester Bus Partnership website and cross referenced from participating bus operators websites. It will also be accessible in non-digital and other forms to ensure full access by all passengers.
429. The BPC will set out certain standards of service to passengers, including:
- punctuality and reliability
 - cleanliness of bus — inside and out
 - cleanliness of waiting infrastructure
 - accessibility of buses and related infrastructure to groups with protected characteristics,
 - information standards
 - ticketing and fares e.g. best fare capping
430. It will include a mechanism for redress and feedback at a local level and means to ensure these standards are met.
431. The BPC will also be used to communicate to passengers the intervention programme and tangible outcomes to expect to from the Leicester EPP

Equality Impact Assessment

432. Individual equality impact assessments are being made as part of the business case process for each intervention project.
433. This has already been done for the following projects:
- Electric buses ZEBRA bid (Appendix 6)
 - Real time information at bus stops
 - Digital ticketing
434. Further assessments will be carried out as each project is funded, refined and the full detail determined following consultation. Those coming forward over the next 6 months in relation to the Transforming Cities Fund programme include:
- City Centre inner orbital service
 - Abbey Lane (A6) Bus Priority Scheme
 - Abbey Park Rd Bus Priority Scheme
 - Anstey Lane Bus Priority Scheme
435. These assessments will also include service development of the Mainlines, Greenlines and Flexlines projects in terms of routes and frequency changes, as well as their capital elements.



Funding

Summary

436. Below is a summary of the proposed funding streams to finance this programme over the current national spending period to 2025. Options are shown with and without the availability of a local Workplace Parking Levy revenue stream.

WORKPLACE DISTRIBUTION					
Capital	Source	2022/23	2023/24	2024/25	Total
Total	Total	£58,739	£47,953	£45,078	£151,700
	DfT	£38,161	£26,683	£21,881	£86,726
	LCC/Operator	£20,578	£21,270	£23,197	£65,044
Total Secured	Total	£58,589	£36,094	—	£94,683
	DfT	£38,049	£17,789	—	£55,838
	LCC/Operator	£20,540	£18,305	—	£38,845
Total Unsecured (with WPL)	Total	£150	£11,859	£45,078	£57,087
	DfT	£113	£8,894	£21,881	£30,888
	LCC/Operator	£38	£2,965	£23,197	£26,199
Total Unsecured (without WPL)	Total	£150	£11,859	£45,078	£57,087
	DfT	£150	£11,859	£26,200	£38,209
	LCC/Operator	—	—	£18,878	£18,878
Revenue	Source	2022/23	2023/24	2024/25	Total
BSIP Funding (with WPL)	Total	£4,360	£6,220	£6,490	£17,070
	DfT — BSIP	£2,616	£3,732	£3,894	£10,242
	LCC	£1,744	£2,488	£2,596	£6,828
BSIP Funding (without WPL)	Total	£4,360	£6,220	£6,490	£17,070
	DfT — BSIP	£2,616	£4,847	£5,575	£13,037
	LCC	£1,744	£1,373	£916	£4,033

437. In summary to deliver the full scope of this EP Plan over the next three years will need:

- total additional expenditure of nearly £169m
- around £95m of this is already captured through national and local funds
- there remains a funding gap of £57m of capital and around £17m additional revenue
- the ‘ask’ to DfT is for £31m–£38m of capital and £10m–£13m of revenue, the range dependent on whether the Council can implement WPL by 2023

438. The assumptions between local and national funding contributions assumed within this table above are that:

- capital schemes other than electric bus project have **25%** local input. This is currently assumed to come from workplace parking levy
- electric bus projects are financed under current ZEBRA funding rules in terms of national and local financing contributions amounts
- operator electric bus investment up to 2025 is in line with their current plans
- revenue-based activity is financed locally with input from temporary underspend in concessionary fares budgets, together with an option for funding from workplace parking levy should this be successfully introduced from April 2023
- concessionary fares reimbursement methodology is in line with pre-covid DfT guidance
- existing Council bus revenue budgets are maintained at current levels

439. If workplace parking levy is not implemented from April 2023, other options for local financing match will be reviewed. Project delivery could be scaled down or temporarily postponed until a local contribution is confirmed.

440. Below is the current Council revenue budget for buses. As can be seen, this is largely to finance the statutory national concessionary fares scheme. Unlike many other authorities, Leicester is starting from a very low base in terms of on-going support for buses.

441. The Council does raise some income from operators through bus station departure fees and some from shelter advertising. In addition, there is a revenue stream from fines for bus lane violation, but this fluctuates and will diminish over time. All income streams currently support discretionary bus expenditure.

COUNCIL REVENUE BUDGET	
Base Budget (£s)	2021/22
Park and Ride — service and site (net)	£200
Other subsidised services (net)	£375
Real time information system	£64
Bus shelters and advertising (net)	-£122
Concessions — statutory and discretionary	£9,155
Ticketing	£80
Bus stations	£828
Bus station departure frees	-£180
Clean bus technology running costs	£73
Public transport operations team	£118
Bus lane enforcement (net)	£1,118
Total	£9,473

442. Below is a summary of the proposed capital and revenue investment up to 2025 in each proposed intervention area.

OVERALL FUNDING PER INTERVENTION AREA					
£s		2022/23	2023/24	2024/25	Total
Bus network optimisation and frequency standards	Revenue	£3,270	£2,180	£1,090	£6,540
Bus network — strategic developments	Revenue	—	£1,600	£2,960	£4,560
Improved reliability: bus priorities	Capital	£17,320	£16,590	£7,000	£40,910
Zero Emission Bus investment	Capital	£20,519	£27,554	£34,078	£82,151
Infrastructure and waiting facilities	Capital	£19,925	£3,384	£4,000	£27,309
Infrastructure maintenance	Revenue	—	£600	£600	£1,200
Integration measures: branding and ticketing	Capital	£975	£426	—	£1,401
Integration measures: staff and promotions	Revenue	£340	£340	£340	£1,020
Discounted costs of bus travel	Revenue	£750	£1,500	£1,500	£3,750
Total	Total	£63,099	£54,173	£51,568	£168,840
	Capital	£58,739	£47,953	£45,078	£151,770
	Revenue	£4,360	£6,220	£6,490	£17,070

443. Below is a summary of the proposed indicative capital and revenue investment for the period 2025 to 2030 in each intervention area. Again, this is set out on the basis of workplace parking levy being implemented AND successful future DfT funding.

OVERALL FUNDING PER INTERVENTION AREA							
£s		2025/26	2026/27	2027/28	2028/29	2029/30	Total
Bus network optimisation and frequency standards	Revenue	—	—	—	—	—	—
Bus network — strategic developments	Revenue	£2,960	£2,664	£2,398	£2,158	£1,942	£12,121
Improved reliability: bus priorities	Capital	£4,000	£2,000	£1,000	£2,000	£2,000	£11,000
Zero Emission Bus investment	Capital	—	£30,720	£33,120	—	£32,640	£96,480
Infrastructure and waiting facilities	Capital	—	—	—	—	—	—
Infrastructure maintenance	Revenue	£600	£600	£600	£600	£600	£3,000
Integration measures: branding and ticketing	Capital	—	—	—	—	—	—
Integration measures: staff and promotions	Revenue	£340	£340	£340	£340	£340	£1,700
Discounted costs of bus travel	Revenue	£250	£250	£250	£250	£250	£1,250
Total	Total	£8,150	£36,574	£37,708	£5,348	£37,772	£125,551
	Capital	£4,000	£32,720	£34,120	£2,000	£34,640	£107,480
	Revenue	£4,150	£3,854	£3,588	£3,348	£3,132	£18,071

444. The sequencing of delivery of each project will be determined by the timing, source and amount of each funding stream. There will be no commitment to any investment until there are the ongoing funding streams in place for their continued operation or maintenance.
445. The following should also be noted:
- all Mainlines network optimisation expenditure is planned to be completed by the end of 2024/25, with no further support predicted for commercial services
 - all future Greenlines network development and electric bus investment will only take place once ongoing revenue support beyond 2024/5 is secured. This is currently planned to be once there is confirmation of WPL
 - all other capital investment up to 2024/5 will be made on the basis of maintenance funding being contained within existing local budgets and is not reliant on either WPL or future DfT funding
446. In the event of DfT EPP funding being constrained, priority will be given to:
- those areas which specifically focus on improving accessibility to work, hospitals and educational facilities for lower income residents
 - areas that directly support confirmed investment in electric bus routes
 - speed of delivery to assist post-covid recovery
 - assisting the effective delivery and development of the EPP/EPS programme
447. On this basis, the following ranking for unfunded areas up to 2025 is proposed:
- maintaining the ongoing viability of the Mainlines network to its frequency standard
 - maintaining and developing the Outer Orbital and Hospital Hopper Greenlines service frequencies
 - discounted targeted fares schemes
 - staffing
 - electric bus investment in commercial services — to reach **50%** by 2025
 - bus priority schemes on Humberstone Rd and Outer Orbital
448. It should be noted that this ranking is skewed towards revenue funding over the next three years. This reflects the facts that:
- there is already a significant programme of funded and programmed capital projects
 - there is an urgent need to kick-start buses following covid with revenue-funded areas which directly and quickly support ongoing secured capital investment
 - planned future local revenue funds from WPL and other sources are not yet secured, or might be delayed
 - the Council's base level of revenue expenditure is low compared to other similar sized cities

Workplan

449. The following draft workplan below has been drawn up on the basis of:

- the above funding streams being available to the timescales shown
- approval of all parties via the Enhanced Partnership Scheme process
- current known external factors impacting on the Leicester bus market

450. The EP Plan shows those projects which are already funded, and those that await EPP/ZEBRA funding, together with their associated council and operator local financing match.

Key:

- Already Financed
- BSIP/ZEBRA: Capital and Revenue 2025
- BSIP/ZEBRA: Capital and Revenue 2026–30
- Work in progress period

PROPOSED WORK PROGRAMME											
Project Area	Project	Status	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Mainlines Network	Frequency enhancement to mainline std	BSIP/ZEBRA: 2025		WIP	WIP	WIP					
Mainlines Network	Cross-operator timetable integration	BSIP/ZEBRA: 2025		WIP	WIP						
Mainlines Network	Targetted timetable changes — Electric bus	BSIP/ZEBRA: 2025					WIP	WIP	WIP	WIP	WIP
Greenlines Network	Inner Orbital new service	Financed		WIP	WIP	WIP	WIP	WIP	WIP	WIP	WIP
Greenlines Network	Outer Orbital — frequency increase 1	BSIP/ZEBRA: 2025			WIP	WIP	WIP	WIP	WIP	WIP	WIP
Greenlines Network	Outer Orbital — frequency increase 2	BSIP/ZEBRA: 2025				WIP	WIP	WIP	WIP	WIP	WIP
Greenlines Network	Hospital Hopper — frequency increase	BSIP/ZEBRA: 2025			WIP	WIP	WIP	WIP	WIP	WIP	WIP
Greenlines Network	Hospital Hopper — Ashton Green extension	Financed					WIP	WIP	WIP	WIP	WIP
Greenlines Network	Cross City P&R inc Racecourse	BSIP/ZEBRA: 2025				WIP	WIP	WIP	WIP	WIP	WIP
Flexilines Network	New network	BSIP/ZEBRA: 2025			WIP	WIP	WIP	WIP	WIP	WIP	WIP
Electric Bus — Mainlines	FirstBus — stage 1	Financed		WIP							
Electric Bus — Mainlines	FirstBus — stage 2	BSIP/ZEBRA: 2025			WIP						
Electric Bus — Mainlines	Arriva — stage 1	Financed			WIP						
Electric Bus — Mainlines	Arriva — stage 2	BSIP/ZEBRA: 2025				WIP					
Electric Bus — Mainlines	Arriva — stage 3	BSIP/ZEBRA: 2026–30					WIP	WIP			
Electric Bus — Mainlines	Arriva — stage 4	BSIP/ZEBRA: 2026–30						WIP	WIP		
Electric Bus — Mainlines	Arriva — stage 5	BSIP/ZEBRA: 2026–30								WIP	WIP
Electric Bus — Mainlines	Stagecoach — stage 1	Financed				WIP					
Electric Bus — Mainlines	Others — Kinchbus/Centrebus	BSIP/ZEBRA: 2026–30					WIP	WIP	WIP	WIP	WIP
Electric Bus — Greenlines	Existing P&R services	Financed	WIP								
Electric Bus — Greenlines	Inner Orbital	Financed		WIP							
Electric Bus — Greenlines	Outer Orbital — stage 1	Financed			WIP						
Electric Bus — Greenlines	Outer Orbital — stage 2	BSIP/ZEBRA: 2025				WIP					
Electric Bus — Greenlines	Outer Orbital — stage 3	BSIP/ZEBRA: 2025				WIP	WIP				
Electric Bus — Greenlines	Hospital Hopper — stage 1	Financed		WIP							

PROPOSED WORK PROGRAMME

Project Area	Project	Status	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Electric Bus — Greenlines	Hospital Hopper — stage 2	BSIP/ZEBRA: 2025				WIP					
Electric Bus — Greenlines	Cross City P&R and Racecourse increase	BSIP/ZEBRA: 2025				WIP	WIP				
Electric Bus — Flexilines	All network	BSIP/ZEBRA: 2025				WIP	WIP				
Bus Priorities — Bus lanes	Groby Lane	Financed	WIP								
Bus Priorities — Bus lanes	Soar Valley Way	Financed			WIP						
Bus Priorities — Bus lanes	Melton Road (A607)	Financed		WIP							
Bus Priorities — Bus lanes	St Margaret's to Birstall (A6)	Financed		WIP							
Bus Priorities — Bus lanes	Anstey Lane (A5630)	Financed			WIP						
Bus Priorities — Bus lanes	Abbey Park Road / Beaumont Leys Lane	Financed		WIP							
Bus Priorities — Bus lanes	Outer Orbital — sections	BSIP/ZEBRA: 2025		WIP	WIP	WIP					
Bus Priorities — Bus lanes	Humberstone Road / Uppingham Road	BSIP/ZEBRA: 2025			WIP	WIP					
Bus Priorities — Bus lanes	East Park Road — Goodwood	BSIP/ZEBRA: 2025			WIP	WIP					
Bus Priorities — Bus lanes	Glenfield Road	BSIP/ZEBRA: 2026-30					WIP				
Bus Priorities — Bus lanes	Aikman Avenue	BSIP/ZEBRA: 2026-30					WIP				
Bus Priorities — Bus lanes	Saviours Road — parking review	BSIP/ZEBRA: 2026-30						WIP			
Bus Priorities — Bus lanes	Sparkenhoe Street — parking review	BSIP/ZEBRA: 2026-30						WIP			
Bus Priorities — Bus lanes	Catherine Street — parking review	BSIP/ZEBRA: 2026-30							WIP		
Bus Priorities — Bus lanes	Saffron Lane — extension/ review	BSIP/ZEBRA: 2026-30							WIP	WIP	
Bus Priorities — Bus lanes	Narborough Road — extension/review	BSIP/ZEBRA: 2026-30								WIP	WIP
Bus Priorities — Management	Red routes	Financed	WIP	WIP	WIP	WIP					
Bus Priorities — Management	Camera enforcement	Financed	WIP	WIP	WIP	WIP					
Bus Priorities — Management	Traffic light signal priority	Financed			WIP	WIP					
Infrastructure and Facilities	St Margarets Bus Stations	Financed		WIP							
Infrastructure and Facilities	Beaumont Leys P&R	Financed		WIP							
Infrastructure and Facilities	General P&R	Financed	WIP								
Infrastructure and Facilities	Racecourse P&R	BSIP/ZEBRA: 2025				WIP					
Infrastructure and Facilities	Real-time information totems — stage 1	Financed		WIP							
Infrastructure and Facilities	Other stop totems	Financed			WIP						
Infrastructure and Facilities	Real-time information totems — stage 2	BSIP/ZEBRA: 2025				WIP					
Infrastructure and Facilities	Bus shelter replacement programme	Financed	WIP	WIP							
Ticketing Systems	Digital Capping — single operator	Financed	WIP								
Ticketing Systems	Digital Capping — all operator	Financed		WIP							
Ticketing Systems	Expansion of Flexi products	BSIP/ZEBRA: 2025	WIP	WIP	WIP	WIP					
Integration measures	Leicester Bus Partnership Branding	BSIP/ZEBRA: 2025		WIP							
Integration measures	Route Branding	BSIP/ZEBRA: 2025			WIP						
Integration measures	Integrated information project	BSIP/ZEBRA: 2025		WIP	WIP	WIP					
Integration measures	Targetted marketing campaigns	BSIP/ZEBRA: 2025		WIP	WIP	WIP	WIP	WIP	WIP	WIP	WIP

PROPOSED WORK PROGRAMME

Project Area	Project	Status	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30
Cost Initiatives	Workplace Parking Levy	Financed			WIP	WIP	WIP	WIP	WIP	WIP	WIP
Cost Initiatives	Targetted Fares: Flexi Premium	BSIP/ZEBRA: 2025		WIP							
Cost Initiatives	Targetted Fares: Young Persons	BSIP/ZEBRA: 2025		WIP	WIP						
Cost Initiatives	Targetted Fares: Group Travel	BSIP/ZEBRA: 2025			WIP						
Cost Initiatives	Targetted Fares: P&R	BSIP/ZEBRA: 2025			WIP	WIP					

451. Clearly there will need to be flexibility in specification and delivery times of those projects which are not yet funded. There are also significant linkages between several projects. Significantly, a decision on future Greenlines electric bus investment will only take place once there is certainty on long term operational funding — both nationally and locally.

Outputs

Key programme outputs

452. The following key outputs are proposed by the end of 2025:

- ‘Mainlines’ urban network of 25 route groups each with a fully branded package of transformative improvements including:
 - 168 electric buses with audio-visual displays and enhanced access features
 - enforced bus priority measures on 14 Mainlines
 - automated ‘best fare’ digital ticketing
 - on-street real time information at all boarding stops
 - new bus shelters at main boarding stops
 - a new bus station
- each ‘Mainline’ will consist of a route group with an integrated timetable to a minimum frequency standard within Greater Leicester:
 - every 15 mins or better daytime Monday–Saturday
 - every 30 mins evenings and Sundays
 - every 10 mins on eleven Mainlines connecting to all key locations outside the City Centre
- ‘Greenlines’ strategic network of 5 limited-stopping subsidised electric bus routes:
 - 3 cross-city express routes with park and ride sites at each end
 - Inner and outer orbital routes
 - every 15 minutes daytime Monday–Saturday minimum frequency standard
 - 40 electric buses with audio-visual displays and enhanced access features
 - automated best fare digital ticketing
 - significant bus priorities on 4 Greenlines
- a small ‘Flexlines’ network of 4 demand responsive electric bus routes designed to access areas of the conurbation remote from the main bus network
- a package of measures to integrate all bus services with joined up timetables, fares ticketing and information systems — all to a common, clearly understood ‘Leicester Buses’ integration brand shown on all buses, bus stops, bus stations and park and ride sites
- a range of implemented policies designed to improve the value of bus travel in relation to car travel
- a similar funded work package for 2025–2030, with the aim being to provide financially sustainable conditions for all operators to upgrade the whole Leicester fleet to zero emission buses by 2030

Key outputs by project area

453. Below is a table of the key proposed outputs over the period 2022–2025 for each intervention package.

BSIP OUTPUTS TO 2025			
Project Area	Project	Quantity	Measure
Mainlines Network	Timetable enhancement to Mainline std	11	Mainlines
	Cross-operator timetables integration	8	Mainlines
Greenlines Network	Inner Orbital new service	1	Greenlines
	Outer Orbital — frequency increase 1	1	Greenlines
	Outer Orbital — frequency increase 2	1	Greenlines
	Hospital Hopper — frequency increase	1	Greenlines
	Hospital Hopper — Ashton Green extension	1	Greenlines
	Cross City P&R inc Racecourse	2	Greenlines
Flexilines Network	New network	5	Routes
Electric Bus — Mainlines	FirstBus — stage 1	68	Buses
	FirstBus — stage 2	20	Buses
	Arriva — stage 1	22	Buses
	Arriva — stage 2	36	Buses
	Stagecoach — stage 1	22	Buses
Electric Bus — Greenlines	Existing P&R services	11	Buses
	Inner Orbital	3	Buses
	Outer Orbital — stage 1	6	Buses
	Outer Orbital — stage 2	4	Buses
	Outer Orbital — stage 3	2	Buses
	Hospital Hopper — stage 1	4	Buses
	Hospital Hopper — stage 2	4	Buses
	Cross City P&R and Racecourse increase	1	Buses
Electric Bus — Flexilines	All network	5	Buses
Bus Priorities — bus lanes	Groby Lane	1	Pinchpoints / bus lane sections
	Soar Valley Way	1	Pinchpoints / bus lane sections
	Melton Road (A607)	1	Pinchpoints / bus lane sections
	St Margaret's to Birstall (A6)	4	Pinchpoints / bus lane sections
	Anstey Lane (A5630)	3	Pinchpoints / bus lane sections
	Abbey Park Road / Beaumont Leys Lane	4	Pinchpoints / bus lane sections
	Outer Orbital — sections	10	Pinchpoints
	Humberstone Road / Uppingham Road	12	Pinchpoints
	East Park Road — Goodwood	11	Pinchpoints
Bus Priorities — management	Red routes	10	Mainlines — part
	Camera enforcement	10	Mainlines — part
Facilities	St Margaret's Bus Station	18	Bus bays
	Beaumont Leys P&R	300	Parking spaces (est)
	General P&R	70	Parking spaces (est)
	Racecourse P&R	800	Parking spaces (est)
	Real-time information totems — stage 1	575	Units
	Other stop totems	600	Units
	Real-time information totems — stage 2	600	Units
	Bus shelter replacement programme	479	Units

BSIP OUTPUTS TO 2025			
Project Area	Project	Quantity	Measure
Ticketing	Digital Capping — single operator	6	Operators
	Digital Capping — all operators	6	Operators
	Expansion of Flexi products	10	New ticket types
Integration	Leicester Bus branding	1200	Bus stops
	Leicester Bus branding	413	Buses
	Leicester Bus branding	9	Interchanges (Bus Station / P&R)
	Route branding	380	Mainline and Greenline buses
	Integrated information project	1200	Bus stops
	Integrated information project	480	Bus shelters
	Integrated information project	9	Interchanges
	Integrated information project	1	Website
	Targetted marketing campaigns	3	One per year
Cost Initiatives	Workplace Parking Levy	1	Whole LCC area
	Targetted fares initiative — Flexi Premia	12	Main Flexi ticket types reduced
	Targetted fares initiative — Young Persons	4	Main Flexi ticket types
	Targetted fares initiative — Group off peak	5	Operators participating
	Targetted fares initiative — P&R	1	Operators participating

Outcomes, Targets and Monitoring

Impact Measurement

454. The impact of these EPP intervention project outputs on the EP Plan's objectives will be measured using the following indicators.

MEASURING IMPACT OF INTERVENTIONS ON OBJECTIVES		
Objective	Owner	Outcome Measures
Addressing climate change	Local Transport Plan	Bus fleet CO ₂ emissions
		Operating mileage — registered bus services
Facilitate a growing city sustainably	Local Transport Plan	Reduction on bus CO ₂ emissions
		Patronage — boardings in LCC area
		Modal split — inner cordon
		Modal split — outer cordon

MEASURING IMPACT OF INTERVENTIONS ON OBJECTIVES

Objective	Owner	Outcome Measures
A better connected city	Local Transport Plan	Patronage — Mainlines
		Patronage — Greenlines
		Patronage — Flexilines
		% households within 400m of half hourly or better bus services
		Patronage use — workers
		Patronage use — concessions
Helping make healthier people	Local Transport Plan	Patronage use — workers
		Bus fleet CO ₂ emissions
		Bus fleet NOx emissions
		Bus fleet PM2.5 emissions
Reduce local air pollution	National	Operating mileage — registered bus services
		Bus fleet CO ₂ emissions
		Bus fleet NOx emissions
		Bus fleet PM2.5 emissions
		Operating mileage — registered bus services
		Patronage — boardings in LCC area
Improve the whole bus experience for the bus user	National	Modal split — inner cordon
		Bus user satisfaction — total
		Bus user satisfaction — on board journey time
		Bus user satisfaction — punctuality
		Bus user satisfaction — value for money
		Bus user satisfaction — waiting facilities
		Bus user satisfaction — information
		Patronage — boardings in LCC area
		Modal shift — inner cordon
Modal shift — outer cordon		
Levelling up — assist regeneration/accessibility	National	Patronage use — concessions
		Patronage use — workers
		Percentage households within 400m of half hourly or better bus service
		Bus user satisfaction — value for money
		Bus patronage — Flexi-lines
Financial sustainability	Operators	Commercial services — registered mileage
		Patronage — non-frequent services
		Patronage — frequent services
		Patronage — Mainlines

455. Across the whole intervention programme, the following key indicators are proposed for regular monitoring of the overall impact on objectives and target setting:

- Bus patronage — boarding in City Council area
- Modal share — inner cordon
- Modal share — outer cordon
- Punctuality — non-frequency services
- Bus user satisfaction — punctuality and reliability
- Bus user satisfaction — on board journey time
- Bus user satisfaction — value for money
- Proportion of Leicester Bus fleet that is electric
- Annual Operated mileage — all registered buses

Targetted Outcomes

456. The following key target outcomes are proposed from the above 10-year EP Plan:

BSIP OUTCOMES AND TARGETS						
	Actual 2018/19	Actual 2019/20	Estimate 2022/23	Target 2024/25	Target 2029/30	Notes
Passenger numbers	26,483,594	25,625,550	20,500,440	25,625,550	28,992,958	a
Passenger growth from 2022/23	—	—	—	25%	41%	b
Punctuality	76%	68%	70%	80%	85%	c
Modal share (inner cordon)	29%	30%	28%	32%	34%	d
Modal share (outer cordon)	6%	7%	6%	10%	12%	d
Passenger Satisfaction						e
Punctuality/reliability	72%	65%	70%	75%	80%	
Value for money	62%	57%	60%	70%	75%	
Journey time	83%	82%	84%	90%	90%	
Overall	87%	86%	84%	90%	90%	
Proportion of fleet electric	0%	0%	18%	50%	100%	f

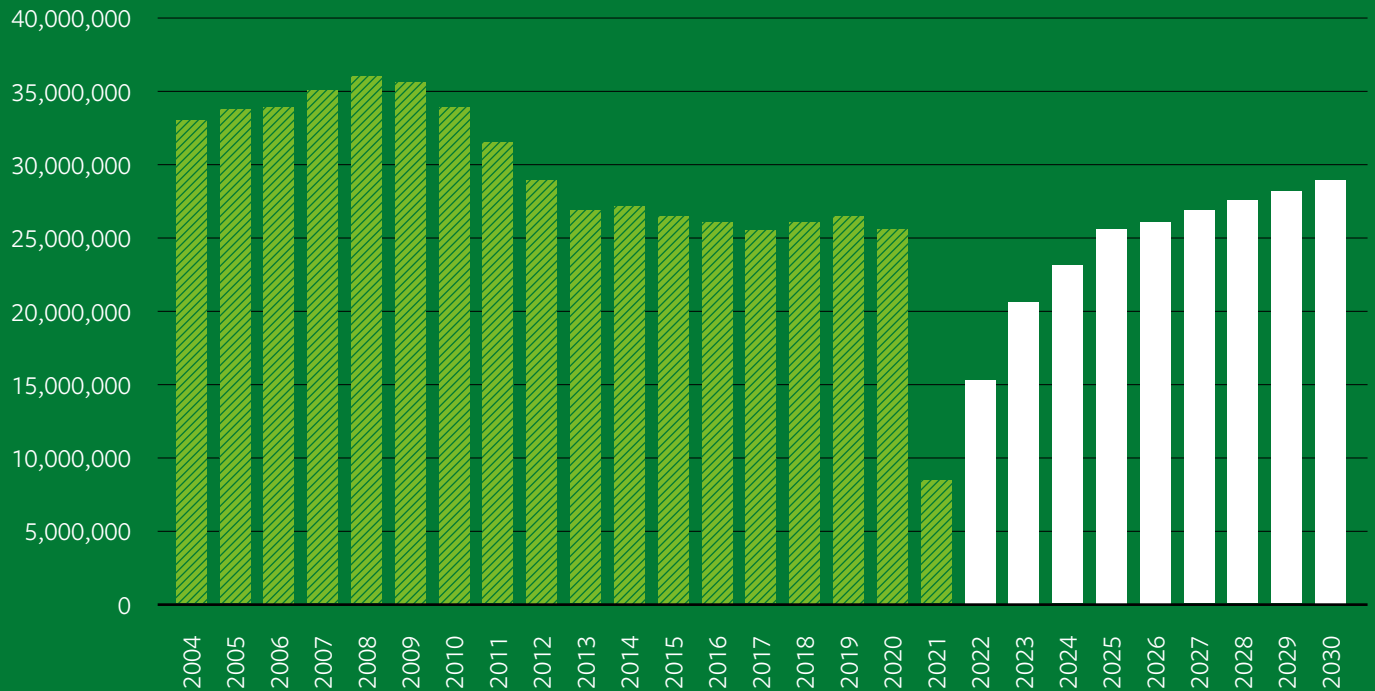
Notes:

- Annual nos boarding in Leicester City Area
- Estimated post-covid full year base figure
- % of non-frequent service within registration window of tolerance
- Modal a share at innter-city cordon point
- As measured annually by Transport Focus
- In operation

457. These are felt to be realistic and achievable passenger targets. They are based on the impact on bus use of similar workplans in Nottingham since 2000, and Bristol since 2010 together with forecasting work done for Leeds on a similar integrated work package which is currently part way through implementation.

BUS TRIPS STARTING IN LEICESTER CITY AREA (PA)

City Boarding Estimate/Target



458. There are various ways to measure the impact of the intervention package on the environment including

- monitoring air pollution at key points around Leicester
- registered pollution levels of each Euro bus type, factored by their annual operating mileage
- estimate of pollution savings from modal shift from car to bus

459. However, by 2022 all diesel buses in Leicester will be to Euro 6 standard, with a given CO2 emission per mile emitted. Electric buses have zero CO2 emissions. Its is therefore deemed that the most pragmatic measure of progress here is simply the proportion of the fleet that is electric in each year.

Evaluation

460. A six-monthly performance report will be produced, setting out progress of the EPP against the planned outputs, outcomes and targets as set out in the two tables above:

- EPP Outputs to 2025 table
- EPP Outcomes and Targets to 2025 table

461. All information will be published on the Leicester Bus Partnership website. This reporting will be used as the basis for a yearly review and amendment of the EPP.

Next Steps

462. This EP Plan has been drawn up with all Leicester’s bus operators following the publishing of the National Bus Strategy by the Department of Transport. It takes into account the guidance of the Department in relation to its scope, suggested areas of intervention, ambition and future potential funding streams. Letters of support from Leicester’s operators are shown in Appendix 7
463. An overview of this EP Plan is shown in Appendix 8, as requested by the Department.
464. The Scheme is intended to implement those policies of the Enhanced Partnership Plan that can be delivered over the period of the Scheme through a series of interventions using the resources (including funding) available to all partners. These include the following new facilities and measures:
- up to 20 locally enforced bus priority and red route schemes
 - over 450 new bus shelters and bus stop totem
 - a new bus station
 - two new park and ride sites
 - over 600 new real time displays
 - at least 40 new electric buses
 - comprehensive network branding and website
 - all-operator digital fare capping and contactless ticketing
 - fixed registration change dates
 - joint timetabling on shared routes
 - commitment to consult on introducing a workplace parking levy
465. The governance mechanisms within the Scheme allow for further elements of the EP Plan to be implemented, if resources become available and agreement on implementation is reached under the governance processes set out in the Scheme.
466. The Scheme and relevant interventions are introduced following consultation with Leicestershire County Council — the sole neighbouring local transport authority. With significant cross boundary bus services, these measures in the Scheme will also enhance standards beyond the City Council EP Plan area, particularly in relation to bus priority, electric bus investment, digital capping and joint timetabling.
467. This legislation also has the potential for local devolution of the bus service registration and enforcement powers, currently undertaken by the Traffic Commissioner. The partnership considers that this power will not be immediately required from April 2022 in order to effect the EP Plan. However, subsequent six-monthly reviews of the Scheme will consider this future option in the light of ongoing progress.
468. In addition, over the next year, consideration will be given to establish a formal Customer Charter and Citizens Bus Panel.
469. It is noted that the City Council currently has a relatively small team dealing with buses, mainly in relation to bus facilities management and bus lane enforcement. (The small amount of tendered work is undertaken by the County Council.) To effectively manage this future partnership process, it is proposed that a separate Bus Partnership Team is formed, funding for which has been included within the overall funding package.



470. This new team will carry out the following new tasks.

- Intervention schemes — programme and project management
- Bus service tendering and ongoing management
- Tendering of Council-owned electric buses and charging equipment
- Grant management for commercial electric buses
- EP Plan and Scheme development and ongoing management
- Management and administration of expanded integrated ticketing schemes, real time information systems, integrated printed information at bus stops and branding work
- Management and development of customer charter and local citizens panel
- Ongoing monitoring and evaluation of whole EP Plan
- Bus service registration and enforcement — if devolved
- External bidding for project areas, including future ZEBRA bids and other capital schemes not yet funded

471. Given the scale of the proposals, it is planned that this team will start to be formed during 2022.

Appendix 1

Memorandum of Understanding Leicester Better Buses Partnership 2020–2024 November 2019

Leicester City Council
Arriva Bus Midlands
First Leicester
Centrebus
Kinchbus

Introduction

This Memorandum of Understanding follows recent discussions between the parties above directed towards creating a partnership to improve all registered bus services across Leicester.

The Leicester Better Buses Partnership voluntarily brings together all main parties involved in bus travel to deliver a joint action plan over the next four years. The overall aim is to increase patronage by **5%** across the main bus route network.

The members of this partnership will be the local bus operators of Leicester and the City Council. All will agree to deliver the actions set out in this plan, to regularly monitor and publish yearly progress reports, and to highlight all ongoing issues in a timely manner.

Vision

A transformative change in bus travel, making it quicker, more reliable, affordable and sustainable.

Key Objectives

The key objectives of the Partnership are to:

- Facilitate sustainable economic and housing growth
- Help reduce congestion through measures to promote modal shift
- Improve equitable access to work, education and health facilities
- Improved local air quality
- Improve commercially viability of the main bus network

The strategic context behind this plan is outlined in the Leicester Bus Strategy 2020–2028

Key Outputs

- Deliver four demonstration ‘rapid transit’ bus corridors by 2024
- Ensure all registered bus services meet Euro VI diesel standard by end 2020 (In accordance with the Bus Clean Air Zone Partnership Jan 2018)
- All contracted P&R buses to be fully electric by 2025
- All operator plan to move to zero emission buses on all main bus routes by an agreed date
- Agreed rolling five year network development plans to facilitate economic and housing growth
- Widen the range and retail network for all-operator Flexi tickets
- Introduce all-operator automated (model 2) contactless ticketing across all operators with single and multi-operator capping where customer, alliance and operator requirements define it is required
- Introduce an integrated all operator discounted travel scheme for young persons between 16 and under 19 years old
- Agreed Main Route Network promotional programme with clear user understanding

Key Targets

- **10%** increase in bus patronage on TCF growth route network by 2025
- **5%** increase in bus patronage across whole main route network by 2025
- Overall bus user satisfaction to increase from **87%** to **90%** by 2025.
- Reduction in journey times and improvement in punctuality of Main Bus Network (daytime 15 minute frequency or better)
- No deterioration in frequency or hours of operation of Main Bus Network

Key Deliverables — City Council

BUS PRIORITY HIGHWAYS MEASURES

- Bus reliability ‘pinch points’ programme — up to 2021
 - **A50 Groby Rd** — new 24/7 bus lane inbound between Mary Rd and Blackbird Rd
 - **Narborough Rd** — Smart Cities solution using traffic signals to gate traffic at Fullhurst Avenue, allowing busses to bypass the queuing traffic in existing bus lanes
 - **Welford Road** — Review of existing bus lanes and extension of inbound bus lane towards Wigston
 - **Humberstone Rd** — Additional enforcement of existing bus lanes
 - **Uppingham Road** — Changes to lining inbound to increase compliance and additional enforcement
 - **Burleys Way** — new junction for egress from St Margaret’s Bus Station
 - **Mansfield St** — New road to link with Belgrave Gate
 - **Welford Rd** — Smart Cities solution using traffic signals to gate traffic at Chapel Ln junction allowing busses to bypass congestion.
 - **Abbey Lane** — Smart Cities solution using traffic signals to gate traffic at Thurcaston Road junction allowing busses to bypass congestion
 - **Beaumont Leys Ln** — developer funded new bus lane inbound to Red Hill Way
 - **Anstey Lane** — Capacity improvements between A46 and Krefeld Way
 - **Ravensbridge Drive** — Capacity improvements between Abbey Lane and Blackbird
 - **Rd/Fosse Rd North** — northbound buslane
- Bus Demonstration Schemes: one per year from 2020–2024
 - Anstey — Beaumont Leys — Anstey Lane — St Margarets Way — City Centre
 - Birstall — Red Hill Circle — Abbey Lane — St Margarets Way — City Centre
 - Beaumont Leys Lane — Abbey Lane — Abbey Park Rd — Belgrave Rd — City Centre
 - Melton Road — Belgrave Rd — City Centre
- Bus Priority Enforcement System Enforcement Cameras at:
 - Groby Rd at Blackbird Rd
 - Uppingham Rd near Oak Street
 - Uppingham Road at Mornington Street
 - Narborough Road at Fullhurst Avenue
 - Duns Lane in both directions
 - Aylestone Road at Rawdykes Rd
 - Specific locations along demonstration bus corridors above
 - Red Route TRO application to Main Bus Network: 2020–1
 - City Centre inner ring road
 - Bus Demonstration corridors
 - Other Main Bus routes
- Signalised priority to late running buses — at least 10 key signalised junctions by end 2022

IMPROVED PARK AND RIDE — REDUCING CONGESTION ON KEY CORRIDORS

- Improved frequency and reliability to existing three contracted P&R services
- New P&R site at Beaumont Leys District Centre to City Centre and Glenfield served by existing bus services in the area

PASSENGER WAITING FACILITIES

- Refurbished St Margaret’s Bus Station
- Install new bus shelters along all main bus routes and all key stops
- Maintain all bus station and shelters to agreed maintenance standards
- Real time displays and improved waiting facilities installed at all stops on Main Bus Route Network

FARES AND SMART TICKETING

- Co-ordinate and administer the introduction and promotion of multi-operator ‘Flexi’ ticket purchases on each operator’s mobile and contactless ticketing platforms
- Co-ordinate and administers the widen of the range of flexi tickets, to include season and under 19 options
- Introduce contactless Model 2 automated EMV ticketing on all subsidised services, including P&R
- Co-ordination of all-operator commercial capping schemes
- Co-ordination of all-operator travel scheme for 16–19 year olds
- Lead and co-ordinate appropriate Advanced Ticketing Schemes required to formally introduce the above all-operator ticketing arrangements

GREENING THE FLEET

- Fully Electric buses on all subsidised P&R services

MAIN BUS ROUTE NETWORK

- Co-ordination of promotional plan to promote the legibility of the Main Bus Route Network concept
- Co-ordination of Main Bus Network development plan

PARKING

- Introduce Workplace Parking Levy within 3 years, subject to successful consultation
- Ringfence a significant proportion of WPL income for the improvement and development of the existing bus network
- Look to expand peripheral park and ride facilities for long term parking, with central area parking aimed at short stay parking only

Key Deliverables — Bus Operators

GREENING THE FLEET

- All registered bus network to meet Euro VI emissions standards by end Dec 2020. This will be in accordance with the Bus Clean Air Zone Partnership Jan 2018
- Operators to examine options for moving to fleetwide zero emission bus provision by 2030, subject to progress with Workplace Parking Levy, wider Leicester transport strategy and individual operator business plan approval and the availability of external grants

TICKETING

- Introduce multi-operator ‘Flexi’ ticket purchases on each operator’s mobile and contactless ticketing platforms
- Widen range of flexi tickets, to include season and under 19 options
- Implementation of model 2 touch-in/touch out cEMV contactless ticketing with single and multi-operator capping. This will be subject to where customer, partnership and operator requirements define it is required
- Implementation of an agreed commercial unified discounted ticketing scheme for 16–18 year olds
- Review future fares policy framework

ROUTE AND NETWORK OPTIMISATION

- Participation in Qualifying Agreements to achieve route timetable optimisation and ticket integration on three agreed corridors
- Full participation in network development planning process — in line with major housing growth. This will include the development of demand responsive transport solutions as well as the main bus network
- Promotion of the Main Bus Network in all standard operator-led local channels
- Work towards a jointly agreed local branding of four demonstration bus corridors
- Bespoke travel planning work with all key businesses impacted by proposed future Workplace Parking Levy

Delivery plan timescales

An agreed set of timescales for the delivery of each element of the above plan will be agreed by partners by July 2020, subject to funding availability and future ownership dynamics.

Funding

All deliverables are subject to

- a) a successful Council funding bid to the Department for Transport Transforming Cities Fund — to be announced by March 2020
- b) further external 'Green Bus' ULEB funding streams being available
- c) agreed yearly business and investment plans by each operator
- d) LCC's development of Workplace Parking proposals and the wider Leicester transport strategy

Monitoring

Quarterly and annual progress reports on this agreed plan will be presented to the Senior Bus Managers meeting over the full four-year period. All issues with delivery and any required changes will be agreed at this forum.

Publicity

Co-ordinated publicity will be held and periodic intervals to promote the delivery of each milestone within this plan.

Partnership Stakeholders

Leicester City Council

Signature :

Position : Director PTE/D

Name:

Date:

Arriva Bus Midlands

Signature :

Position : AREA MANAGING DIRECTOR

Name:

Date:

First Leicester

Signature :

Position : COMMERCIAL DIRECTOR

Name:

Date:

Centrebus

Signature :

Position : MANAGING DIRECTOR

Name:

Date:

Kinchbus

Signature :

Position : Director of Commercial Services

Name:

Date:

Appendix 2

Mass Transit Investment in Leicester August 2022

Introduction

1. Time has been spent in analysing Leicester's current public transport provision and looking at the various options to address its current and future needs.
2. A summary appreciation of this is required before looking specifically at the relative benefits of investment in each public transport mode.

Current public transport provision

3. The majority of public transport journeys within the conurbation take place via conventional bus travel on deregulated commercial bus services. Longer distance public transport movements consist of a limited suburban rail network, three park and ride services and longer distance bus services on most radials.
4. There is a core 'hub and spoke' network of routes along the main urban corridors with daytime frequencies of every 15 minutes or better. Most corridors consist of a main route, together with several other routes serving more distance locations — providing a combined high frequency on the main urban section.
5. There are only three cross-city routes, despite the fact that over **75%** of employment, educational and health facilities lie outside the City Centre. To access these facilities, interchange is required, often between different companies. It is harder to maintain reliability on longer cross-city routes unless significant bus priority is provided throughout.
6. After ten years of declining use (**28%** from 2008–17) there has been a slight growth in the past three years. However, there is low bus usage to non-central employment, health and educational locations.
7. There are good levels of bus accessibility with over **90%** of households being within walking distance of a regular bus service to the City Centre.
8. Bus patronage of 76 trips/head of population (2015/16) is approximately **50%** of best performing comparable cities (Nottingham (149); Brighton (160)) — (update)
9. Recorded overall bus punctuality of **79%** compared to **89%** in Nottingham in 2017/8.
10. Cost of bus travel rose by more than double rate of inflation since from 2007–17, but was static over the past three years. It is highlighted as key issue for accessing facilities for young persons aged 16+. Until very recently there was a **25%** fare premium for interchange between operators, leading to significant financial costs to access growing number of peripheral employment sites.
11. All operators are on track to meet a fleet-wide Euro6 emissions standard by early 2021. However, there are no formal commitments at this point in time to move to ultra low emission (electric, hydrogen etc) on any route.
12. Low quality of waiting infrastructure, particularly real time information at stops on key bus routes, shelters and St Margarets bus station
13. There are only three Park&Ride services — serving the north, west and south-west of the conurbation. These are relatively underused at present due to a combination of their fare (compared to parking), frequency, reliability and speed.
14. Leicester's bus network receives reasonably high levels of public satisfaction on most indicators, but there is room for improvement:
 - a) Punctuality and reliability **72%**, (top Authority **81%**)
 - b) Value for Money **62%**, (top authority **81%**)
 - c) Journey time **83%**, (top authority **92%**)

Aims and objectives

15. 15. Leicester's draft Local Transport Plan sets out the aims and objectives of the City Council in relation to public transport to helping to
- facilitate sustainable growth across the conurbation
 - reduce congestion and improve road network efficiency
 - improve the equitable access to jobs, educational, health and retail facilities
 - improve local air quality
16. 16. These priorities have to be set in the context of:
- a dense conurbation with limited room for significant expansion of road capacity on most busy radial routes
 - few, if any, opportunities for developing off-road dedicated transit corridors
 - low car ownership in many areas of the City
 - housing expansion planned in several outer-lying locations
 - employment, education and health facilities being spread widely across the conurbation, with over **75%** of work taking place outside the City Centre
 - a vibrant, expanding City Centre
 - significant dynamic locational changes taking place within the health and other key employment sectors
- quickly deliverable and affordable in order to address immediate problems
 - carefully implemented and not disrupt the road network for a sustained period of time
 - work in partnership and not in competition with the existing improving commercial bus network provision
 - high quality and good value in relation to other alternatives, particular car
 - address both longer distance travel — often with modal interchange — and also shorter urban travel
 - of high environment impact to improve air and noise pollution
18. Any intervention is likely to take more than one approach in order to address the various travelling markets:
- improving mass transit along the key commuting corridors
 - improving accessibility to housing and employment located off the main 'high-demand' corridors
 - addressing affordability aspects related to commercial ticketing — looking at discounted ticketing for key groups
19. The section below explores the main options for the key commuting corridors. There are separate reports and work programmes related to the other two markets above.

Strategic approach

17. Given the above it is clear that any significant additional investment in Leicester's public transport needs to be:
- geographically wide-ranging and not focussed specifically on one isolated corridor
 - flexible in its development to accommodate dynamic changes taking place, some currently unknown
20. This is looked at in relation to the approach set out above, the current public transport provision in Leicester, the external documented constraints/changes taking place and the needs of the travelling public.

Tram or Bus-based investment on Key Commuting Corridors

High Quality and Good Passenger Value

21. Technical changes over the past five years are such that high quality bus-based solutions can now give a user experience that is very close to that delivered by a tram route, but at no more than **20%** of the cost.
22. These are some of the features now being employed on some high-end bus projects.
 - Fully electric buses with no in-service charging required. Includes high capacity buses — double deckers and articulated buses — with similar passenger travelling conditions to a tram
 - Low floor and kneeling, with dedicated buggy and wheelchair spaces
 - In vehicle passenger information displays, audio announcements, double glazing and other high quality features such as USB points
 - Automated contactless ticketing with ‘best fare’ capping — no need for driver interface/delay or for platform vending equipment
 - Automated Vehicle tracking and fleet management to improve punctuality and reliability
 - Real time passenger and tracking information at all stops
 - Traffic light signal priority systems for late running buses
 - CCTV enforced bus lanes, bus-only roads and red routes — improve journey times and punctuality
 - High quality waiting facilities with level boarding
 - Park and ride facilities — free parking and seamless interchange
23. The cheaper cost will both keep fare levels down and allow a significantly greater number and range of travellers to be affected.
24. Good examples of bus-based schemes with comparable quality and passenger growth are the Belfast Glider, Cambridge Busway, Bristol Metrobus, Hampshire Eclipse, Thames Gateway Fastrack. Trentbarton’s is also an excellent example of consistently high quality branded buses.
25. These modern bus-based schemes are achieving comparable modal shift to a tram corridor, particularly those with P&R facilities, limited stopping cross-city travel and full-length priority.
26. In addition, many of the enhanced highways features can also be used by other more buses, getting more use out of the investment.
27. There is some evidence that tram systems attract inward investment and tourism. This however, is also taking place on some of the above bus-based transit system, particularly the Cambridge Busway, Belfast Glider and Thames Fastrack. It is also cheaper, quicker and more flexible to install bus-based system within new development areas as they develop.

Geographical coverage and flexibility

28. A tram route, due to its fixed track, only goes between two main points on a corridor. In Leicester, most corridors are served by bus routes going to a number of different locations. Replacing the main part of the corridor with a fixed tram route will require many travellers to have the cost and inconvenience of interchange.
29. Once built, any subsequent change to the location of key traffic generators on that corridor away from the tram route will require long walk connections or additional bus interchange. This has happened in Nottingham with subsequent development of both university campuses taking place away from the tram route.
30. A tram route, also gets much of its journey time saving by having around half the stops of a conventional bus service. This significantly reduces accessibility, particularly for those with limited walking difficulties.
31. Demonstration bus routes can be developed along two different lines — conventional urban stopping services, or limited stopping interchange services with P&R provision — each to suit distinctly different user markets.
32. The cost of implementing a bus-based approach means that around five times the geographical area will be able to be covered for the same budget, significantly improving sustainable accessibility levels.

Speed and Disruption of Delivery

33. A bus-based solution can be delivered in around **20%** of the time of a tram project.
34. A typical tram route takes around 10 years to complete from concept to operation due the complexity of build, finance and legislation involved. A bus-based corridor enhancement can be easily delivered within 2 years.
35. A tram project will require significant diversions of utilities for a significant period of time, causing disruption to many road users, residents and businesses.

Business case — affordability

36. A typical cross city tram route could cost between £300m–£500m to construct and would require around 8–10 million passengers pa to use it to make it financially viable.
37. To justify this level of investment, a tram route would have to replace (upgrade) an existing bus-based corridor, where there is already a significant level of public transport movement between two fixed points.
38. No existing cross-city bus corridor (including P&R) in Leicester currently carries any more than 3million passengers per annum — unlike Nottingham which has twice the level of base bus patronage.
39. The reality of the situation is therefore that no corridor upgrade to a tram would attract sufficient additional modal shift to justify its cost.
40. However, a bus-based solution could be the stepping stone for building up patronage along a corridor in advance of further upgrading to a tram at a later date.

Business case — build and cost risk

41. The inflexible nature of a tram route, its high fixed cost and length of time and complexity of delivery make this option an inherently riskier option than a bus-based solution.
42. The recent experiences of Edinburgh's and Nottingham's tram construction projects have clearly shown the cost and time risks involved are potentially great.
43. A bus-based solution spreads the risk between the local transport authority and the bus operator — with the bus operator normally purchasing the bus and taking ongoing revenue risk. The LTA normally only finances the highways and infrastructure elements.

44. A tram-based project is conventionally funded with significantly more capital and revenue input from the local authority — reflecting the increased costs and risks involved.
45. A bus-based solution is more able to ride out exogenous shocks (e.g. Covid) by having a significantly lower fixed cost base, less sunk costs and flexibility to rapidly adjust routes and vehicle size.

Business case — governance risk

46. Bus services are deregulated outside of London, with joint improvement delivered under legal partnership arrangements between the local authority and private bus operators. These arrangements can facilitate a given quality of delivery but don't allow the local transport authority to give exclusivity rights to a given operator or determine service or fare levels.
47. On tram corridors, the legislation allows franchising and the local authority to give exclusive rights of operation to a given operator. This can ensure a given level and quality of service for a set period of time. However, it prevents quick commercially driven changes to service delivery in responsive to market demand.
48. More significantly, a local authority is unable to stop a commercial bus operator from competing with a tram service — along the same broad corridor. The nearer that a bus operator match the quality, speed, reliability and fares of a tram service, the easier it is to compete. In Leicester, the density of each corridor, number of junctions with orbital crossings and lack of off-road space make it unlikely for any franchised tram route to be able to compete with a bus-based commercial alternative. This makes the business case and risk of such a project very high. In Nottingham and Edinburgh this risk was much less due the municipal ownership of the main bus company giving the local authority a degree of control over bus/tram competition.
49. The build complexity of a tram — with construction regulations akin to a train system — requires specialist expertise not common within local authority or operator organisations. This is very different to bus-based components where the combined authority and operator expertise is significant.
50. Any build process will also be complicated by the politics of straddling differing council areas. This is likely to be far greater for a tram scheme due the intrusive, disruptive nature of its build and its greater cost and build risk.

Business case — commercial bus market destabilisation risk.

51. Commercial bus services in Leicester operate at relatively modest profit margins. The introduction of a tram is likely to significantly impact on these margins particularly on those routes which mirror part of the tram route — both in terms of fare revenue and operation.
52. This will mean that it is very likely that services to parts of the conurbation sited beyond or close to any proposed tram route would become commercially unviable and require ongoing support. This has been shown in Nottingham in the past 10 years by the significant increase in supported bus service to upto £3m pa. Leicester's current support levels are around £0.5m pa.

Environmental

53. The weight and design of modern electric buses, with regenerative braking, is such that the electrical energy consumption per kilometre operated is significantly lower than heavier trams.
54. All cross-city routes within the Leicester conurbation can now be operated with buses which require overnight charging only — when electricity is at its cheapest.
55. There are also good examples emerging of battery storage systems — fed by PV panels at bus depots and P&R sites — being used to overnight charge electric buses. E.g. Newport.
56. The dedicated segregated nature of a tram system makes it more likely to impact on the local built environment and could displace walking and cycling links. For a compact city such as Leicester, it would also add a significant additional health and safety risk, particularly at key junctions which would require very careful design to ameliorate.

Summary and Conclusions

57. Leicester is a compact dense city with a diverse range and spread of travel movements. It is considered that any investment in public transport on the main commuting corridors should be bus-based rather than tram-based.
 - a) **Modal shift** — Modern high quality electric buses with P&R and full route priority can give equivalent passenger experience and modal shift than a tram
 - b) **Business case** — There would not be a robust business case to build a tram on any corridor in Leicester, since the current bus-base is too low and there is no control over the competing bus market — unlike in some other cities
 - c) **Risk** — The funding, governance, build and ongoing cost risks of a tram are too great
58. Given the current public transport provision in Leicester and relative costs and benefits of modern bus-based investment versus tram, it is recommended that
 - a) Leicester develops a high-end bus-based approach over the next 5 years
 - b) Further consideration is given to a tram-based (or equivalent) solution to upgrade and replace key enhanced bus routes once they have become more established and better used

Appendix 3

Humberstone Road Bus Priority Corridor

1. Prior to the covid outbreak the punctuality of the four main bus services on this corridor averaged at **83%** of journeys being on time (within the window or 1 minute early and 5 minutes late at timing points). Recent recordings show similar levels of punctuality, though traffic levels have yet to stabilize post-covid.
2. Traffic data prior to covid, shows considerable difference in morning and afternoon speeds along several sections of this corridor. This shows where most delay is caused, together with the potential for significant benefits.

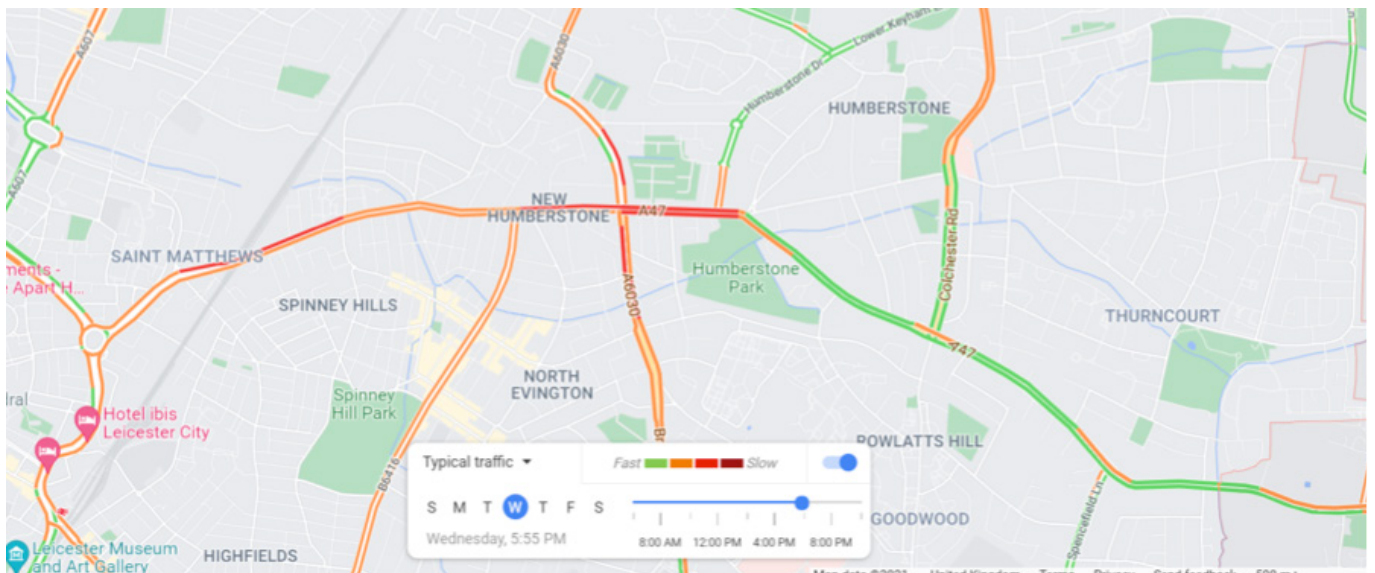
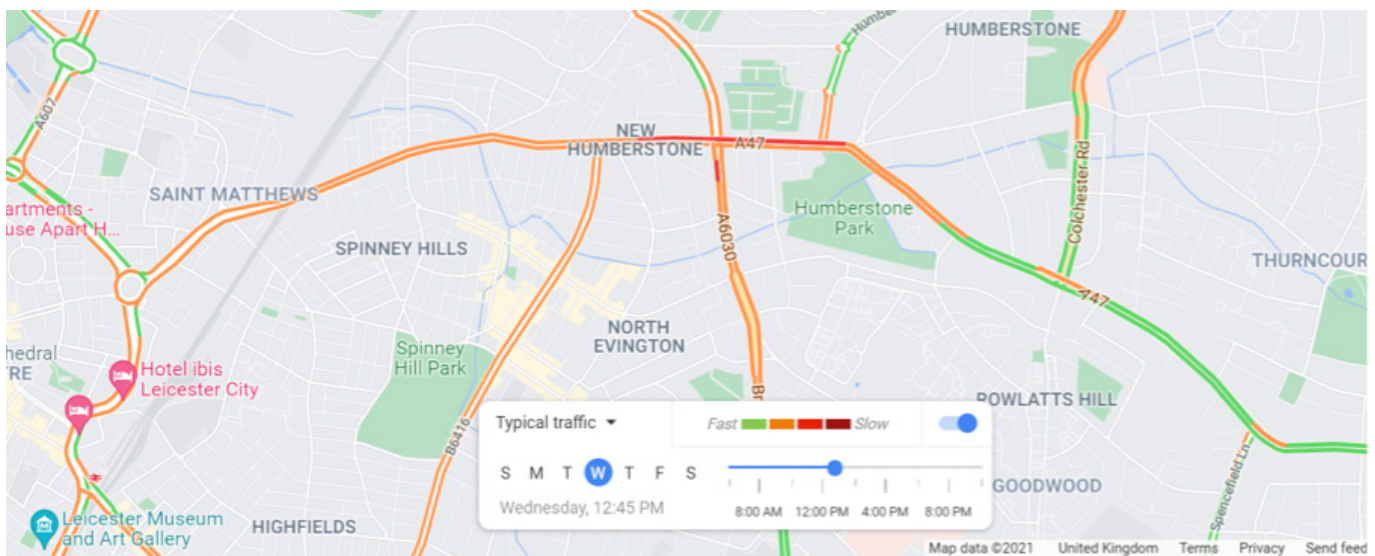
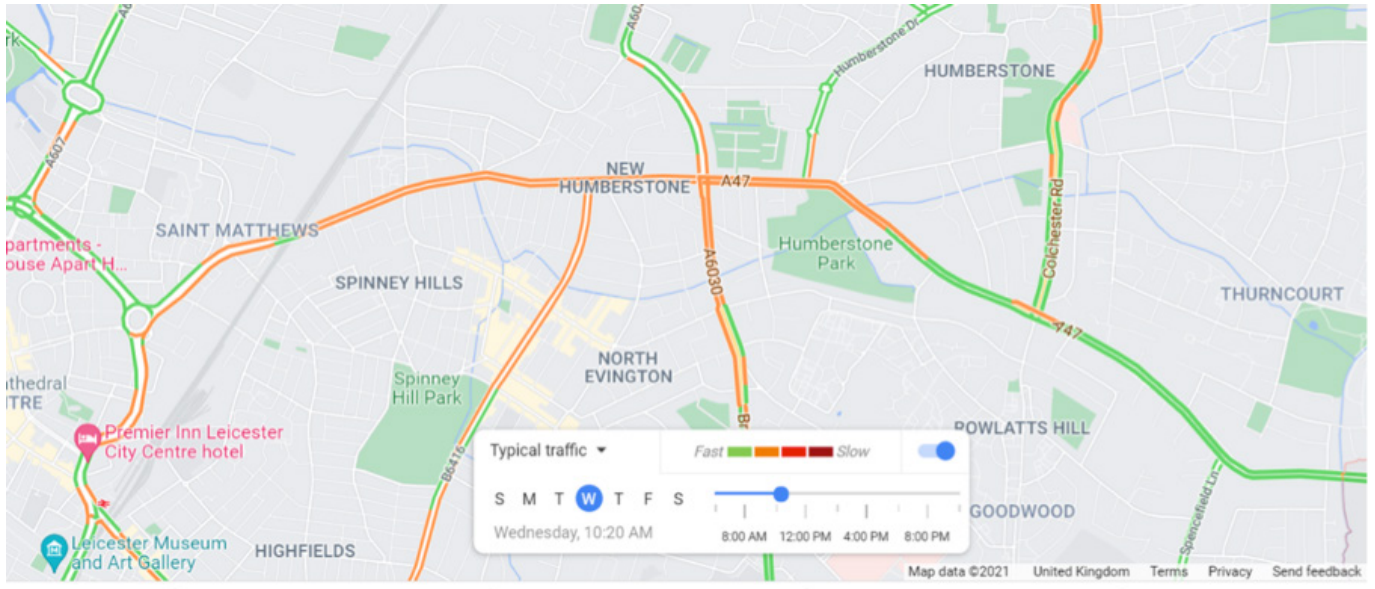
HUMBERSTONE ROAD — TRAFFIC MASTER DATA — INBOUND

Traffic Sector: Scraptoft — City	Length (kms)	Morning speed (km/hr)	Evening speed (km/hr)	Morning time (mins)	Evening time (mins)	Travel time difference (mins)
6_1	2.0	35.7	44.2	3.3	2.7	0.6
6_2	0.9	31.9	30.9	1.7	1.7	-0.1
6_3	2.7	12.6	12.4	12.8	13.0	-0.2
6_4	2.7	15.8	19.5	10.2	8.3	1.9
6_5	2.7	13.9	16.4	11.7	9.9	1.8
6_6	2.7	2.9	20.3	6.8	8.0	-1.2
6_7	2.7	17.6	17.6	9.1	9.2	-0.1

HUMBERSTONE ROAD — TRAFFIC MASTER DATA — OUTBOUND

Traffic Sector: Scraptoft — City	Length (kms)	Morning speed (km/hr)	Evening speed (km/hr)	Morning time (mins)	Evening time (mins)	Travel time difference (mins)
6_1	2.0	19.6	31.37	6.1	3.8	-2.3
6_2	0.9	27.0	27.06	2.0	2.0	0.0
6_3	2.7	20.2	15.25	8.0	10.6	2.6
6_4	2.7	15.4	8.29	10.5	19.5	9.0
6_5	2.7	20.8	16.51	7.8	9.8	2.0
6_6	2.7	25.5	12.39	6.4	13.1	6.7
6_7	2.7	27.2	12.00	6.0	13.5	7.5

3. Below are post-covid google traffic data for this corridor, showing the differences across the day. It is noticeable that there is significant midday congestion, as well as in the morning and evening peaks.



4. This corridor requires a series of pinch points to be addressed, many relating to parking issues. These have been independently reviewed by Mott McDonald consultants for the FirstBus network. This identified several ‘pinch point sections’ causing delay and suggested a series of mitigation measures.



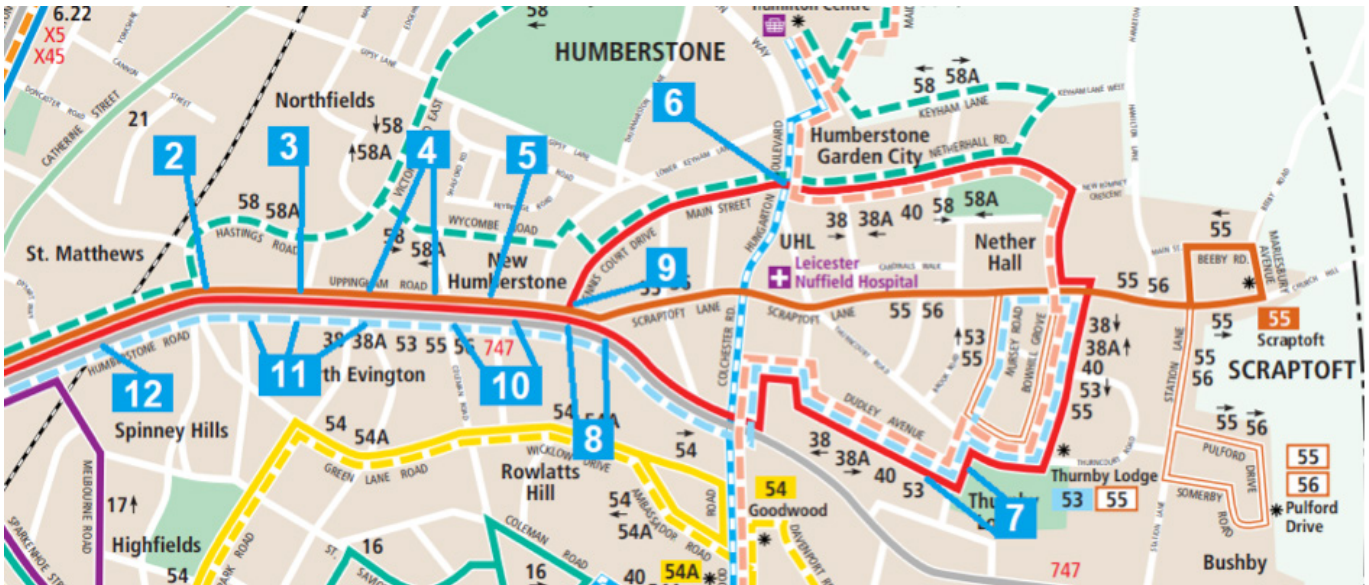
1. HUMBERSTONE GATE/HUMBERSTONE ROAD/ST GEORGE'S WAY

This has a high level of bus services using this central area street as well as being an important access point to the pedestrian section of the city centre. The issues that cause delay at Humberstone Gate are:

- rat running through this section, unnecessary traffic blocking signalised junctions
- inbound to Charles St — short signal phasing
- outbound from the City — difficulty entering the roundabout from Humberstone Gate

Suggested mitigation options are:

- closure or reversal of Rutland Street one way system at the Humberstone Gate / Humberstone Rd / Wharf Street S / Rutland Street junction
- review street layout for identification of a more optimal arrangement
- enforcement of restrictions
- review of junction Charles Street / Humberstone Gate signalling to optimise signal timings to prioritise bus-heavy movements and hence reduce passenger delays
- signalisation or other bus priority measures to allow easier movement onto St Georges Way roundabout



2. HUMBERSTONE ROAD / FOREST ROAD JUNCTION

This junction benefits from a bus lane in an outbound direction, however straight after the junction there is a bus stop which also forms a bottle neck merger. Other vehicles are highly reluctant to merge in turn at this bottle neck which can leave the bus waiting to merge.

Possible solution: the bus stop could be moved to before the junction and more signage re:merging provided.

- review of parking layout for optimisation; and
- review of crossing points and pedestrian desire lines to better meet demand and potentially reduce conflict with general traffic
- Immediately following the traffic signals, two lanes merge into one which can again form an uncomfortable bottle neck. These two lanes could be narrowed to one as they normally work in that manner here anyway due to the smaller width of the road. Large vehicles have to straddle

3. HUMBERSTONE ROAD / UPPINGHAM ROAD / OVERTON ROAD JUNCTION

This section of the network is a congested road with numerous shop fronts and residential dwellings. The issues identified are:

- pinch points created by parked vehicles encroaching on the narrow carriageway; and
- parking on yellow lines and vehicles not respecting restrictions

Suggested mitigation options are:

- enforcement of parking restrictions to reduce the number of pinchpoints created;
- review of the road network entering and exiting Humberstone Road to reduce the number of conflicts through increasing the number of one-way routes;

4. UPPINGHAM ROAD FROM KITCHENER ROAD TO THE PORTWEY

Outbound throughout the day, particularly at peak times, there can be high levels of congestion on this stretch of road due to:

- high level of on-street parking and the narrow carriageway width.
- pinch points created by parked vehicles encroaching on the narrow carriageway
- parking on yellow lines and vehicles not respecting restrictions

Suggested mitigation measures put forward are:

- enforcement of parking restrictions to reduce the number of pinch points created;
- review of the road network entering and exiting Evington Road to reduce conflicts by increasing the number of one-way routes;
- review of parking layout for optimisation; and
- review of crossing points and pedestrian desire lines
- There might be sufficient space to implement a combined Bus Lane / Cycle Lane

5. LOADING OUTSIDE WILKINSONS

Articulated lorries often load/unload on the main road outside of the Wilkinson store despite there being a traffic signalled pedestrian crossing located there too. Causes particular bus delays at peak times.

Possible solution: no loading restriction/red route/redesign to give dedicated parking

6. HUNGARTON BOULEVARD / NETHERHALL ROAD / STEINS LANE JUNCTION

Attempting to exit the Netherhall Road and Steins Lane junctions onto Hungarton Boulevard causes delays during peak time.

Possible solution: bus priority traffic signal responders would help significantly here to give buses a greater opportunity of keeping to time with an easier process of pulling out of the junctions.

7. PARKING AROUND THURNBY MEAD PRIMARY ACADEMY

Parents drop their children off here at the start and end of the school day. Inconsiderate parking causes issues which can see two buses coming in opposite directions unable to manoeuvre through the parked cars at the same time due to a lack of space and causing unnecessary delays.

Possible solution: dedicated drop off/pick up off main road/red route etc

8. TROCADERO TRAFFIC SIGNALS

The traffic signals on the inbound approach along Uppingham Road can often cause delays in peak periods.

Possible solution: signals better synchronized with other signals further along Uppingham Road

9. TENNIS COURT DRIVE ONTO SCRAPTOFT LANE

Buses have a difficult task at this junction pulling out across a “Keep Clear” box at the right moment otherwise they will block the road for other traffic coming from the Uppingham Road direction. At times, the “Keep Clear” box can often be filled with cars heading west along Scraftoft Road.

Possible solution: “Keep Clear” be changed to a Yellow box to emphasise the need not to enter the box?

10. RETAIL ALONG UPPINGHAM ROAD

There is a Bus Lane along this stretch of Uppingham Road, but it renders useless despite the advisory signage that only buses/taxis/cycles can enter at any time. The bus lane is often filled with parked cars, loading/unloading vehicles, cars wishing to turn into a side street etc.

Possible solution: more enforcement be enabled here as this would really help buses keep to time in the area

11. DELAYS ALONG UPPINGHAM ROAD

This stretch of Uppingham Road is very wide, but only has one inbound lane.

Parked cars along this stretch of road could be relocated to give more space.

Possible solution: utilize space better by creating a combined Bus Lane/Cycle Lane to combat the delays experienced in peak times

12. HUMBERSTONE RD INBOUND APPROACH TO RAILWAY BRIDGE.

This section has significant delay inbound due to its proximity to the City Centre, with the bridge section constrained to single lane inbound, two lanes outbound (one of which is a bus lane). There is reasonable pedestrian flow under the bridge, preventing road widening.

Suggested mitigation options are:

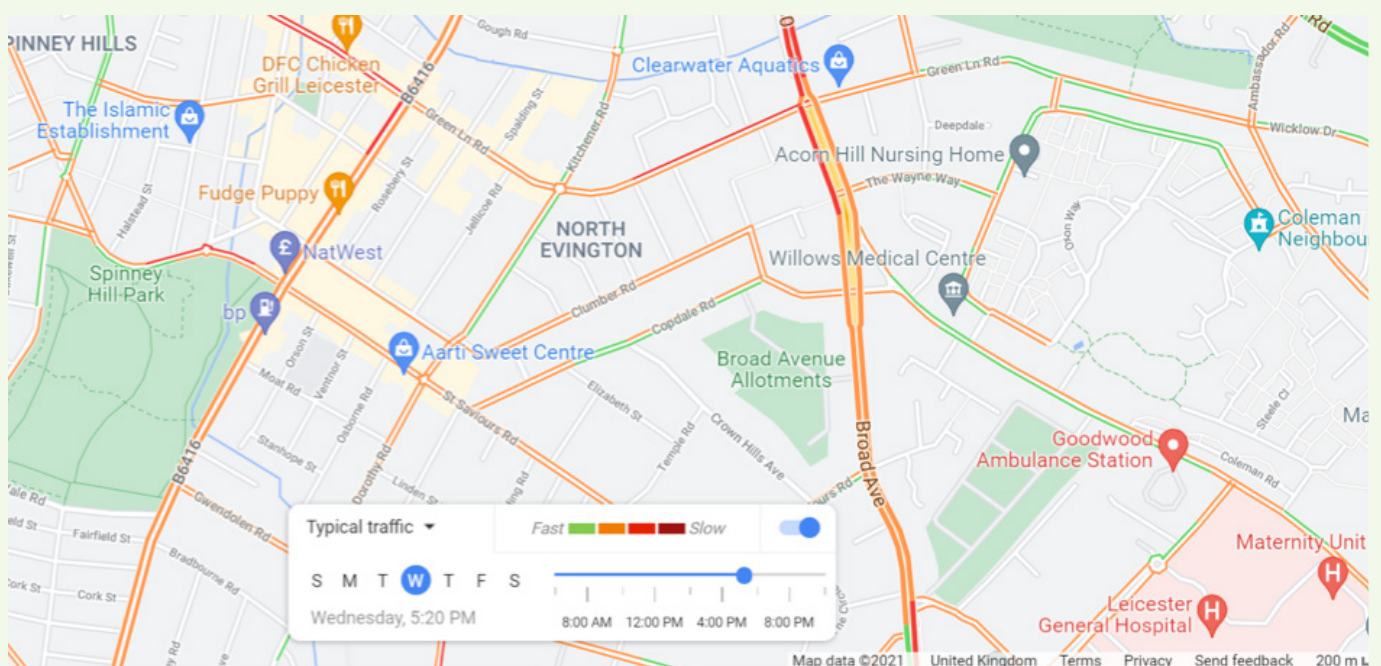
- extend inbound bus lane to closer to the bridge and give buses signal priority under the bridge
- replace outbound bus lane with central ‘tidal’ bus lane: inbound in morning peak, outbound in evening peak
- look at potential to split the road, by utilising alternative possible routes to get under the railway

5. This project could also include addressing the following aspects.
 - potential for junction redesign and bus priority at Uppingham Rd/Colchester Rd junction
 - space for significant bus priority on Scraftoft Lane in advance of housing developments
 - red routes required throughout corridor to address loading and parking issues
6. A draft outline work package has been drawn up costing between £2.5m–£3m. The potential time savings in relation to the estimated scheme costs are such that this is very likely to yield a benefit-cost ratio above 2. This could realistically be implemented by 2024/5 if funded via the EPP and other local sources.

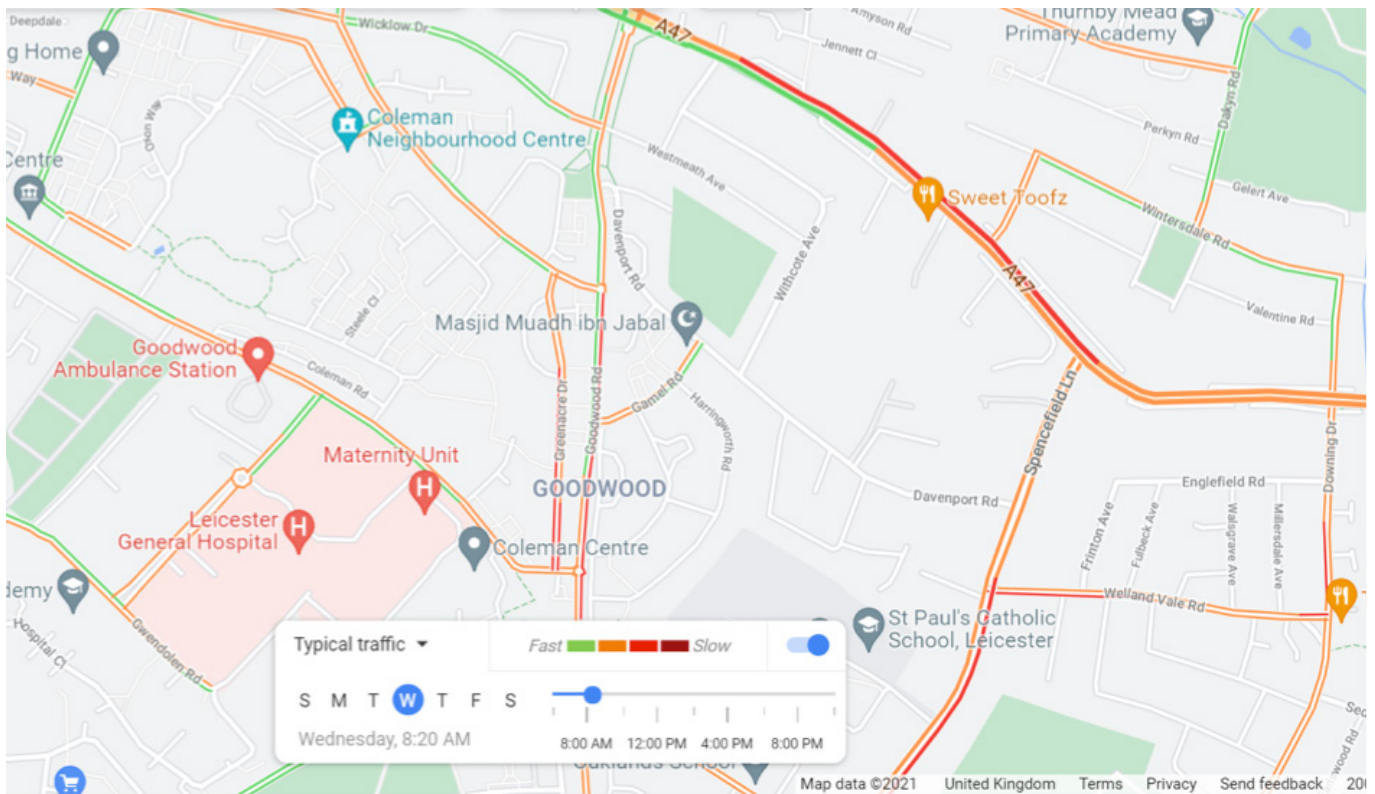
Appendix 4

East Park Rd Bus Priority Corridor

1. This service is one of the few cross-city services in the Leicester network and is jointly operated by Firstbus and Centrebus upto every 6 minutes in the daytime and every 15 minutes in the evening.
2. There are already two significant bus priority projects approved and financed through TCF for the western section of this route.
 - Abbey Lane (A6) bus priority scheme
 - Abbey Park Rd bus priority scheme
3. Electric double decker buses are planned for implementation in 2024.
4. This intervention looks at the eastern section of Mainline route group 54/54a between the City Centre and Goodwood.
5. Punctuality on this long cross city route was just above **70%** during 2019/20. It is slightly better post covid, but deteriorating as traffic increases.
6. Below is the google traffic snapshot data for the middle section of this route in the evening peak.



7. In the morning peak it is the easterly section of the route — around the General Hospital that is more congested.



8. Centrebus has recently undertaken a review of the pinch points on the Centrebus 54A/FirstBus 54 route, associated with punctuality information from the on-board tracking equipment. This has shown the following issues and suggested potential intervention measures, on the section to the east of the City Centre.



1. DAVENPORT ROAD & GAMEL ROAD — THE GOODWOOD TERMINAL LOOP

Parking is main problem, which has increased considerably since the opening of the mosque. In addition, the roads are used by vehicles rat running to and from Evington. As a consequence, buses face oncoming traffic and both parties have little opportunity to pass. This means cars regularly mount pavements to pass buses, which is a danger to the increased numbers of pedestrians in the area. One solution could be to make Davenport Road one way from Walshe Road to Gamel Road and to make Gamel Road one way from Davenport Road to Goodwood Road.

2. AMBASSADOR ROAD

On street parking, particularly on the east side between Thomasson Road & Goodwood Road and the west side between Allinson Close & Wicklow Drive. The status of the bus needs raising by having all bus stops marked out with clearway markings to allow for effective enforcement.

3. WICKLOW DRIVE & GREEN LANE ROAD

On street parking, particularly around bus stops. The status of the bus needs raising by having all bus stops marked out with clearway markings to allow for effective enforcement.

4. GREEN LANE ROAD / COLEMAN ROAD SIGNALISED JUNCTION

The progress of buses heading eastbound and westbound is often impeded by large numbers of vehicles turning right in front of them. Right turning traffic is an inefficient process because the manoeuvre is reliant on gaps in oncoming traffic. Possible intervention: run Green Lane Road eastbound and westbound on separate green phases.

5. EAST PARK ROAD / GREEN LANE ROAD SIGNALISED JUNCTION

The progress of buses is often impeded by vehicles turning right in front of them.

6. EAST PARK ROAD / ST. PETER'S ROAD SIGNALISED JUNCTION

Again, the progress of buses is often impeded by vehicles turning right in front of them.

7. EAST PARK ROAD

The biggest hindrances to buses are vehicles which are parked, creating a narrower carriageway, and vehicles undertaking manoeuvres related to parking, which slows traffic flow right down. The section between Nottingham Road and St. Saviour's Road is particularly problematic. The status of the bus needs raising by having all bus stops marked out with clearway markings to allow for effective enforcement.

8. EVINGTON ROAD

The biggest hindrances to buses are parked vehicles, creating a narrower carriageway, and vehicles undertaking manoeuvres related to parking, which slows traffic flow right down. The status of the bus needs raising by having all bus stops marked out with clearway markings to allow for effective enforcement.

9. LONDON ROAD

Vehicles turning right from London Road (particularly onto Highfield Street) and onto London Road, where they block half of the carriageway to do so (particularly from DeMontfort Street, Prebend Street, Saxby Street and Mill Hill Lane, despite the latter two being prohibited manoeuvres).

10. UNIVERSITY ROAD AND GRANVILLE ROAD

Slow going due to vehicles carrying out parking manoeuvres.

11. CHARLES STREET / HUMBERSTONE GATE TRAFFIC SIGNALS

The overall cycle here is too long, which holds up buses. Humberstone Gate West usually gets a green signal even if there are no vehicles waiting. Possible intervention: Charles Street northbound and southbound each have their own, separate green phase; this would permit traffic turning right from Charles Street northbound onto Humberstone Gate East to flow in an unimpeded manner.

9. This has highlighted a range of issues which will be drawn up into a proposed detailed scheme of works covering:
- parking management and rationalisation at key pinch points noted above
 - increased enforcement of existing traffic regulation orders through more fixed cameras
 - traffic light signal reviews at certain junctions
 - traffic management alterations in some area
10. Previous costings have shown that such a programme might cost upto £2m to deliver effectively.

Appendix 5

Outer orbital corridor

1. The outer orbital service (Centrebus route 40) is a very long route, with a round trip of 31 miles completely encircling Leicester. It currently operates hourly in both directions from around 0530–1930 Monday–Saturday with a peak vehicle requirement of 4 buses.
2. There is an extensive number of congested sections along this route which require addressing in both directions. Being an orbital service, there is no obvious place for lay over, exacerbating punctuality problems.
3. Punctuality statistics for this service both before and after covid rank as one of the lowest across the whole Leicester network — averaging around **80%** on most months.
4. Below are the pre-covid Traffic Master data pre-covid speeds for each section of the outer orbital currently used by the service. This shows the relative time differences between morning and evening peak travel.

OUTER ORBITAL — TRAFFIC MASTER DATA — CLOCKWISE

Road	Traffic sector	Length (kms)	Morning speed (km/hr)	Evening speed (km/hr)	Morning time (mins)	Evening time (mins)	Travel time difference (mins)
Braunstone Way	14_1	4.1	42.9	37.2	5.7	6.6	-0.9
Glenhills Way	15_3	2.6	17.8	22.9	8.9	6.9	2.0
Soar Valley Way	15_4	2.6	23.4	34.7	6.8	4.6	2.2
Stoughton Road	16_3	1.6	18.4	21.2	5.2	4.5	0.7
Wigston Road	16_4	2.5	21.6	17.3	6.9	8.6	-1.7
Glenfirth Way	17_1	2.5	28.2	18.1	5.2	8.1	-2.9
Troon Way	18_2	2.8	26.6	30.7	6.4	5.5	0.9
Thurmaston Lane	18_3	4.0	31.5	26.8	7.7	9.1	-1.4
Aylestone Lane	20_1	9.1	16.8	24.6	32.4	22.2	10.3

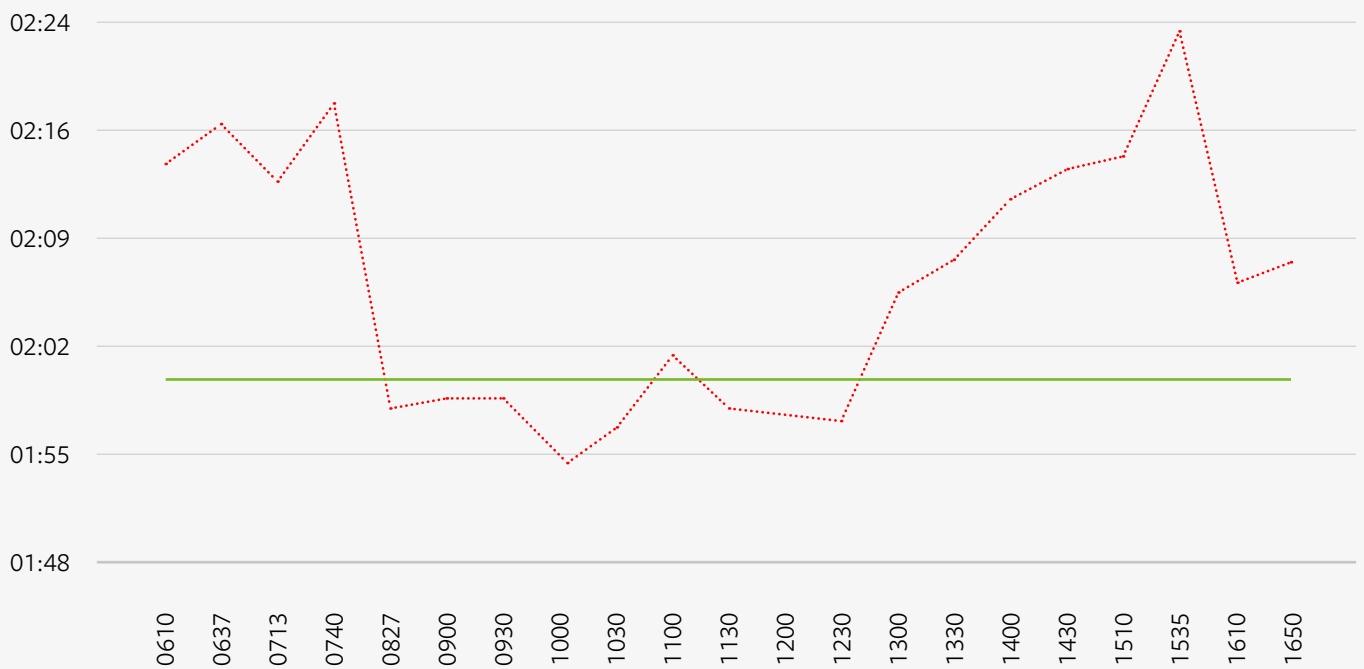
OUTER ORBITAL — TRAFFIC MASTER DATA — ANTI-CLOCKWISE

Road	Traffic sector	Length (kms)	Morning speed (km/hr)	Evening speed (km/hr)	Morning time (mins)	Evening time (mins)	Travel time difference (mins)
Braunstone Way	14_1	4.1	48.2	38.1	5.1	6.4	-1.3
Glenhills Way	15_3	2.6	15.9	15.4	10.0	10.3	-0.3
Soar Valley Way	15_4	2.6	32.9	11.2	4.8	15.2	-9.3
Stoughton Road	16_3	1.6	28.2	35.0	3.4	2.7	0.7
Wigston Road	16_4	2.5	16.9	21.5	8.8	6.9	1.9
Glenfirth Way	17_1	2.5	30.2	31.7	4.9	4.7	0.2
Troon Way	18_2	2.8	10.9	20.0	15.5	8.5	7.0
Thurmaston Lane	18_3	4.0	26.4	32.7	9.2	7.4	1.8
Aylestone Lane	20_1	9.1	22.7	24.9	24.0	21.9	2.1

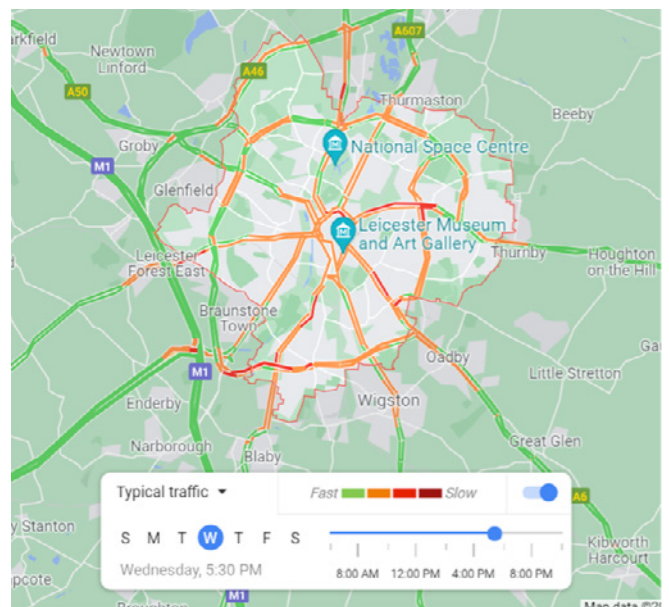
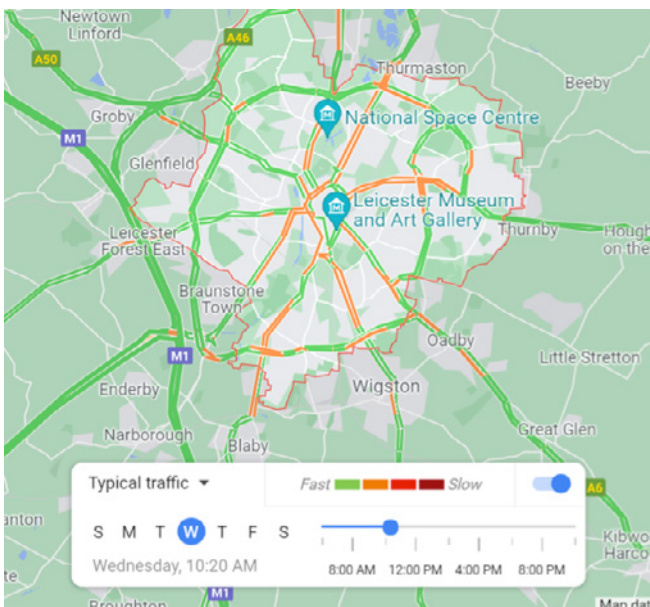
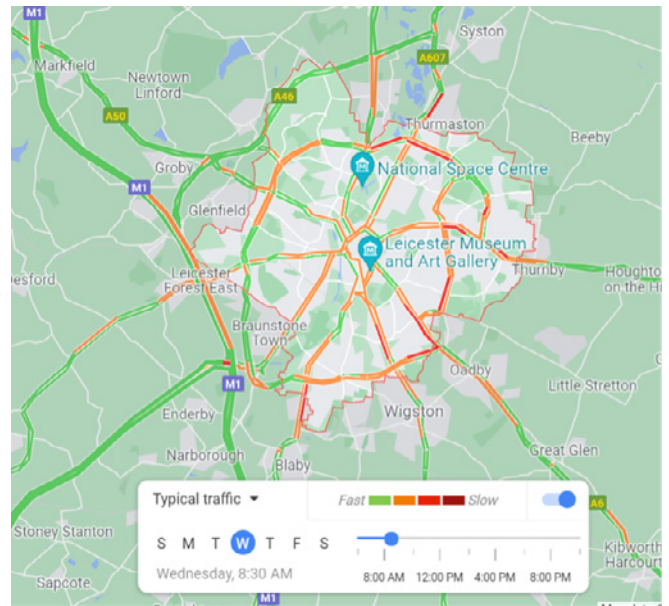
5. What is also noticeable on this route is the difference between peak and off-peak actual post-covid bus journey times against scheduled times as shown by the graph below from mid-October 2021.

OUTER ORBITAL SERVICE — OPERATING TIMES

Actual Scheduled

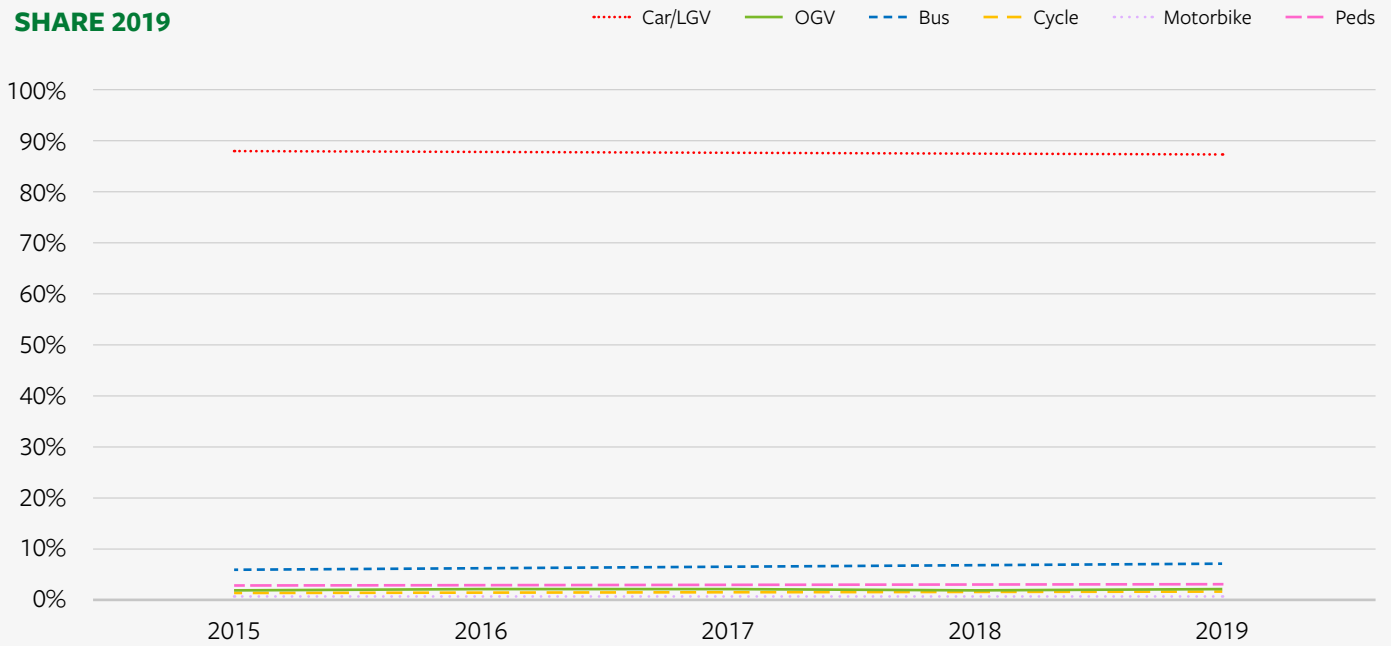


- The recent Google traffic snapshots comparing the morning and evening peaks with daytime off-peak, also show this contrast. They also show the relative significance of the outer ring road in relation to overall congestion across the conurbation.



7. Cordon count data for the outer ring road show a low, but slightly rising level of bus usage.

12 HOUR ORR INBOUND MODAL SHARE 2019



8. The map below shows a summary of the main congested roads with potential for bus lanes together junction pinch points that are currently delaying the service.



9. Key 'pinch point' delays identified, where additional enforcement, junction design or signal priority could be amended, are as described as follows:

Outer Orbital 40 service — clockwise pinch points

- a) Paisley Road, Glenhills Way (yellow box Junction): it is difficult to turn left on to Glenhills Way due to queueing traffic. Solution: better enforcement of the yellow box markings on the road and/or traffic lights that give buses priority when entering Glenhills Way
- Glenhills Way, Aylestone Drive (yellow box Junction): the bus is delayed when turning right from Glenhills Way to Aylestone Drive. Solution: better enforcement of the yellow box junction and/or traffic lights that give buses priority when turning right on to Aylestone Drive
- b) Wigston Lane, Lutterworth Road (signal controlled junction): there is queueing traffic at this junction where the bus turns left on to Lutterworth Road. Solution: better enforcement of the yellow box junction on Lutterworth Road to allow more cars through the lights and bus priority at the traffic lights
- c) Withers Way, Lubbesthorpe Way (roundabout): there is queueing traffic at this junction which delays the bus as it turns left on to Lubbesthorpe Way using the first exit from the roundabout. Solution: bus lane on approach to the roundabout
- d) Checketts Road, Melton Road, Marfitt Street (signal controlled junction): there is queueing traffic at this junction which delays the bus as it crosses Melton Rd from Checketts Road and enters Marfitt Street. Solution: bus priority at the traffic lights

Outer orbital 40 service — anticlockwise pinchpoints

- e) Narborough Road South, Soar Valley Way (signal controlled junction): there is queueing traffic at this junction which delays the bus as it turns left from Narborough Road South on to Soar Valley Way. Solution: increase the number of lanes that can turn left on to Soar Valley Way (currently only 1 of 4) and/or provide bus priority at the traffic lights
- f) Soar Valley Way, Lutterworth Road (signal controlled junction): there is queueing traffic at this junction which delays the bus as it turns left from Soar Valley Way on to Lutterworth Road. Solution: bus priority at the traffic lights
- g) Sturdee Road, Saffron Lane: queueing traffic delays the bus at this junction as it turns left from Sturdee Road into Saffron Lane
- h) Leicester Road, Wakes Road: there is queueing traffic at this junction as the bus turns right from Leicester Road on to Wakes Road and then queues towards the McDonalds island
- i) Manor Road, Stoughton Drive South: queueing traffic delays the bus as it turns right from Manor Rd into Stoughton Drive South. Particularly at peak times
10. Unusually for Leicester, there is potential road space for bus lanes along several of the congested sections shown in the traffic information and map above:
- Braunstone Way
 - Glenfrith Way
 - Troon Way
 - Thurmaston Lane
 - Goodwood Rd
 - Soar Valley Way — already within the TCF first phase priority schemes for an anticlockwise bus lane
11. Clearly, there would be substantial cost involved in bus lane construction on these significant largely-dualled sections. This is only likely to be justified on the basis of the service being at a much higher frequency and with a strong prediction of significantly greater future usage than is currently the case. This is the overall strategic route development plan for this service, together with electric bus operation and improved infrastructure, ticketing, discounted fares and real time information.

12. A complete highways review of this route will take place in 2022/3, including possible changes to the route in line with analysis of current user patterns and workplace locations/times of operations along this route.
13. At this stage it is broadly estimated that the whole route requires at least £10m of capital highways investment in order to be quick and reliable for workers and other users. If funded, these works could take place in sections from 2023–2025.
14. The chief aim of this significant scheme will be to
 - enable the service to reliably do a round trip in both directions within 2 hours throughout the day
 - assist in business case for increased subsidy to move the service to every 15 minutes
 - assist in business case for investment in electric buses and other associated infrastructure
15. It should also be noted that any improvement to assist modal shift on the outer orbital will assist each of the 20+ radial bus routes which are currently held up at junctions crossing the outer orbital. These services will also be assisted by the generation of interchange trips once the orbital service improves in frequency and reliability.

Appendix 6

Leicester Electric Bus Bid (ZEBRA)

Equality Impact Assessment

Context

1. Leicester City Council, Arriva and FirstBus are together applying for government funding towards the purchase of up to 96 fully electric buses. If successful this will represent an overall investment of over £40m, with around £18m from Government grant.
2. These buses will be introduced on many bus corridors in Leicester within the next 3 years — all of which are designated air quality management zones. Full route details are shown below. They will replace the existing diesel buses used on these routes.
3. The bidding process is competitive and Leicester has been shortlisted along with five other areas following its successful outline bid submission.
4. The City Council is now completing a full business case for submission by 20 August 2021. Part of this includes early consultation with different users that will be impacted by this proposed investment.
5. The buses will be a range of single and double decker buses similar in overall design and capacity to those already in operation within Leicester. However, they will have many additional features, similar to the ‘Greenlines’ buses recently introduced on Leicester’s Park and Ride services:
 - a) A significant reduction in greenhouse gas emissions, removing over 3,640 tonnes of Carbon Dioxide from the local atmosphere each year and over 1,180 kg of Nitrogen Oxide — equivalent to removing around 800 cars from our congested roads each year
 - b) A quiet electric motor, powered by a set of on-board batteries, with energy efficient regenerative braking
 - c) Overnight charging at each depot, with no in-service charging delays. The overnight charge will last for a full day of operation
 - d) Power will be purchased from certified renewable ‘green’ energy tariffs. There is also potential to use solar power energy through panels installed at each bus depot in the future

- e) Enhanced accessibility features such as:
- additional room for a second wheelchair or two unfolded buggies
 - dedicated seats with leg room for an assistance dog
 - on-board screens showing next bus arrival information
 - on-board public address systems alerting passengers of the oncoming stop and other route/timetable information
 - acoustic bus alert system for pedestrians when travelling at low speeds in areas of high pedestrian usage
- f) Digital contactless fare capping through tap in/ tap out, smart readers — giving the best daily or weekly fare for the trips undertaken, across any operator
- g) Distinctive eye-catching livery — both inside and out. There will be a full high-profile marketing plan associated with the launch of each new electric service
- h) A range of other route features funded by other successful bids, including:
- Additional bus priority measures — enforced bus lanes, rationalised parking etc
 - Traffic light signal priority for late running buses
 - Real time information displays at all boarding stops
 - New bus shelters
6. There will be no change to the service timetables, fares or routes associated with these changes, with the needs of current users continuing to be met.

Equality Implications and Obligations

7. This section considers the aims of the Public Sector Equality Duty that are relevant to this proposal.

ELIMINATE UNLAWFUL DISCRIMINATION, HARASSMENT AND VICTIMISATION

8. Bus users in Leicester are disproportionately likely to be from disadvantaged groups, with a greater proportion than its total population being:
- Elderly
 - Having various disabilities, including those associated with breathing difficulties
 - From low-income households
 - From households without access to a car
 - From single-parent families
 - Young
 - From BAME groups
 - From LGBT groups
9. These groups are also more likely to live within the dense urban housing sited within the official air quality management areas in Leicester.
10. This proposal will see significant investment in electric buses, replacing more polluting existing diesel buses. It will be spread across the whole network, but focussed on the main bus corridors/air quality management areas, so disproportionately benefits those with protected characteristics.
11. The investment will also help to make the services more financially sustainable, since there will be associated reductions in fuel and maintenance costs. This will also help to keep fares down, particularly when also linked to other associated route improvement noted.
12. The buses will also be specified with enhanced accessibility features (noted above) compared with the current buses — specifically assisting bus travel for those with certain disabilities.

ADVANCE EQUALITY OF OPPORTUNITY BETWEEN DIFFERENT GROUPS

13. This will be achieved through the following:
14. The routes chosen for this investment are those that travel along the main air quality management areas of Leicester — the main areas of dense lower income housing, where the greatest number of bus users are located.
15. Specification to include specific enhanced accessibility features including:
 - additional room for a second wheelchair or two unfolded buggies
 - dedicated seats with leg room for an assistance dog
 - on-board screens showing next bus arrival information
 - on-board public address systems alerting passengers of oncoming stop and other route/ timetable information
 - acoustic bus alert system for pedestrians when travelling at low speeds in areas of high pedestrian usage
16. Improving financial viability and therefore continuation of the services by reducing their operating costs.
17. This will help address specific issues to travel which impact on those with specific protected characteristics
 - Ability to see when the next stop is, in order to alight the bus at the correct part of the route
 - Ability to hear the audible bus stopping signal and public 'next stop' announcements
 - To access the bus when the statutory wheelchair space is being used — other wheelchair users
 - To access the bus when no pushchair space — single parents of young children
 - Ability to hear when the electric bus is approaching the bus stop or travelling in heavily pedestrianised areas

FOSTER GOOD RELATIONS BETWEEN DIFFERENT GROUPS

18. Creating more opportunities to use public transport will benefit all users, including both disabled / non-disabled people and children / elderly people.
19. The improved public transport access will also encourage community cohesion. Improvements to transport links between areas/wards will also improve community cohesion and access to employment

Characteristics of those Impacted

LEICESTER POPULATION

20. Overall, the age profile for Leicester is generally younger compared to the rest of East Midlands and nationally. In 2011, **55%** of the population were under the age of 34 (compared to **43%** in East Midlands) and **8%** over the age of 70.
21. In 2011, over a quarter (32,447) of city households included a person with a long-term health problem or disability that limits the person's day-to-day activities, and has lasted, or is expected to last, at least 12 months. This includes problems that are related to old age.
22. Leicester is one of the most ethnically and culturally diverse places in the UK, with a broad population breakdown by ethnic group as follows (Census 2011):
 - **51%** White
 - **36%** Asian/Asian British (of whom **28%** are of Indian heritage)
 - **6%** Black/African/Caribbean/Black British
 - **4%** Mixed/multiple ethnic groups
 - **3%** Other ethnic group

BUS USER CHARACTERISTICS

23. A breakdown of Leicester travelling public can be shown by the following split in trip making by ticket type.
24. Detailed profile breakdowns are only known for the West Midlands but are likely to be reasonably similar for Leicester, given the similarity in overall population characteristics and bus network coverage (with the exception of BAME proportion):
 - The proportion of users from the 16–24 age group is **26%**
 - The proportion of over 60's around **23%**
 - **51%** of bus users are aged 25–59
 - Commuters and scholars were younger than the average traveller, while shoppers tend to be 60+ (**49%**)
25. Bus users come from the younger and older age groups within the conurbation.
 - The proportion of users from the 16–24 age group is **26%**
 - The proportion of over 60's around **23%**
 - **51%** of bus users are aged 25–59
 - Commuters and scholars were younger than the average traveller, while shoppers tend to be 60+ (**49%**)
26. Typically bus users were more likely to be female (**65%**) rather than male (**35%**).
 - The female bias was noted amongst all groups, peaking at **72%** amongst shoppers
 - Women are also more likely to be from lower income households
27. Manual work continues to be the most dominant occupation with:
 - **24%** in semi-skilled/unskilled manual work
 - **15%** in skilled manual work
 - **18%** in clerical/administrative work
 - Students account for **14%**
28. The proportion working full time was **44%**, **18%** worked part time, while **16%** stated they were not in paid work.
 - bus users continue to be disproportionately from the less affluent C2DE backgrounds (**60%**)
 - The Mosaic profile of bus users also suggests a less affluent market with a disproportionate number coming from Ex Council Community (**15%**), Suburban Mindsets (**12%**) and Claimant Culture (**11%**)
29. Bus users continue to be more likely to live in a household without a car (**52%**), just **48%** lived in a car owning household.
 - Bus users were increasingly likely to state that they did not have a car available to travel in for the journey they were making by bus (**77%**)
 - At **79%** commuters were least likely to have a car available to use
 - Scholars were most likely to have a car available — albeit at **74%** a lack of car was still common

How Protected Groups Dependent on Bus Travel

30. Bus users in Leicester are disproportionately likely to be from disadvantaged groups, with a greater proportion than its total population being:
 - Elderly
 - Having various disabilities, including those associated with breathing difficulties
 - Identify as Female
 - Identify as LGBT
 - From low-income households
 - From households without access to a car
 - From single-parent families
 - Young
 - From BAME groups
31. For young people (under 25), cost could be a barrier to increased public transport use. However, bus use is likely to be an important transport mode. Younger people are at a higher risk of road accidents than those in older age brackets. This bid will reduce the operating costs of bus travel and therefore help keep down bus fares.
32. The bus is a key mode of transport for older people, with the majority holding passes for free travel. The greatest barrier to increased public transport use amongst older people is bus service accessibility and concern about anti-social behaviour¹. This bid will both improve the financial sustainability of bus services and introduce a significant number of buses (**25%** of the whole fleet) with improved on-board accessibility features.

1 Transport for London, Understanding the travel needs of London's diverse communities, Older People, April 2012

33. Disabled people are more likely to be dependent on buses for all journey purposes, as they are less likely than average to have access to or be able to drive a car. Barriers to use are likely to depend on their particular impairment. For many, physical accessibility is an important driver of public transport use and is often exacerbated at peak travel times when passenger numbers are high. This bid will both improve the financial sustainability of bus services and introduce a significant number of buses (**25%** of the whole fleet) with improved on-board accessibility features.
34. The following groups are statistically more likely to live within the dense urban housing sited within the official air quality management areas in Leicester:
- Those with disabilities, particularly related to breathing
 - BAME groups
 - Single parent mothers with young children
 - Elderly persons
35. The routes on which the electric buses will be introduced have been chosen on the basis of being the main services along each air quality management area in Leicester. The bid accounts for **42%** of all routes across these polluted corridors, using **25%** of the whole fleet. This rises to over **50%** of all routes once all other planned investment in electric buses has taken place by 2024.

BUS ROUTES ON EACH AQMA

Air Quality Management Area	Electric Committed	Electric ZEBRA	Diesel Euro 6	Total	ZEBRA Electric	All Electric
City Centre / Inner Ring Road	5	20	29	54	37%	46%
Ring Road — Glenhills Way / Braunstone Way	1	1	0	2	50%	100%
Ring Road — New Parks Way	0	1	0	1	100%	100%
Ring Road — Colchester Road / Goodwood Road	1	2	0	3	67%	100%
Abbey Land	1	2	0	3	67%	100%
Melton Road	0	3	7	10	30%	30%
Dysart Way	0	0	0	0	0%	0%
Humberstone Road / Uppingham Road	0	2	3	5	40%	40%
London Road	1	3	4	8	38%	50%
Welford Road	0	2	1	3	67%	67%
Saffron Lane	0	2	3	5	40%	40%
Aylestone Road	0	3	2	5	60%	60%
Narborough Road / Braunstone Gate	1	2	0	3	67%	100%
Hinckley Road	1	1	3	5	20%	40%
Northgate	0	3	1	4	75%	75%
Total	11	47	53	111	42%	52%

36. In relation to mental health specifically, evidence shows that access to public transport is a key determinant in a person's chances of achieving maximum recovery and being part of their community. Research undertaken by the mental Health Action Group in 2011 identified that **83%** of respondents said public transport was 'very important' to their mental health. 'It has the potential to 'liberate' a person from the downward spiral of poor mental health, social isolation, poor life opportunities and to engage them with education, cultural opportunities, voluntary employment and paid employment.' Barriers to accessing public transport for those with mental health issues include cost, overcrowding, unreliability, and transport staff who are poorly trained in mental health.
37. Women are more likely to be the primary carer at home, which contributes to a lower employment rate amongst women compared to men. When travelling, women are more likely to be the primary carer at home, which contributes to a lower employment rate amongst women compared to men. When travelling, women are more likely than men to be travelling with buggies, accompanying children and/or shopping, which can affect mode choice. This bid will both improve the financial sustainability of bus services and introduce a significant number of buses (**25%** of the whole fleet) with improved on-board accessibility features.
40. Appendix 1 shows the process by which the City Council is now engaging online with the accessibility user groups for transport projects, together with some examples of ongoing funded projects under consultation. This group has representatives from Mosaic, Leicester Disabled Persons Action Group, Vista and the Council's own disabled employee group. It meets every 4 months and if successful a progress report on this bid will be submitted to a future meeting.
41. The City Council also has an active Bus User Panel, with representative from elderly persons organisations and various persons representing different disabilities. Their understanding of the details of buses and bus travel is well developed and many are quick to participate in consultation of projects, at any stage of their development.
42. The attached Appendix 2 briefing note and very simple survey was undertaken through email and postal correspondence with member of the Bus User Panel.
43. In addition, a more comprehensive online survey was distributed to FirstBus and Centrebus users via their online email database and through their social media. This is shown on the weblink below:

https://forms.office.com/Pages/ResponsePage.aspx?id=udIGGZV0HESkXg3itl7XpbtLH_cIN2JNozhAoydh0VtUNE42OVg0S1VKS FJSVUhQM0c4SzlWOFY5Ni4u

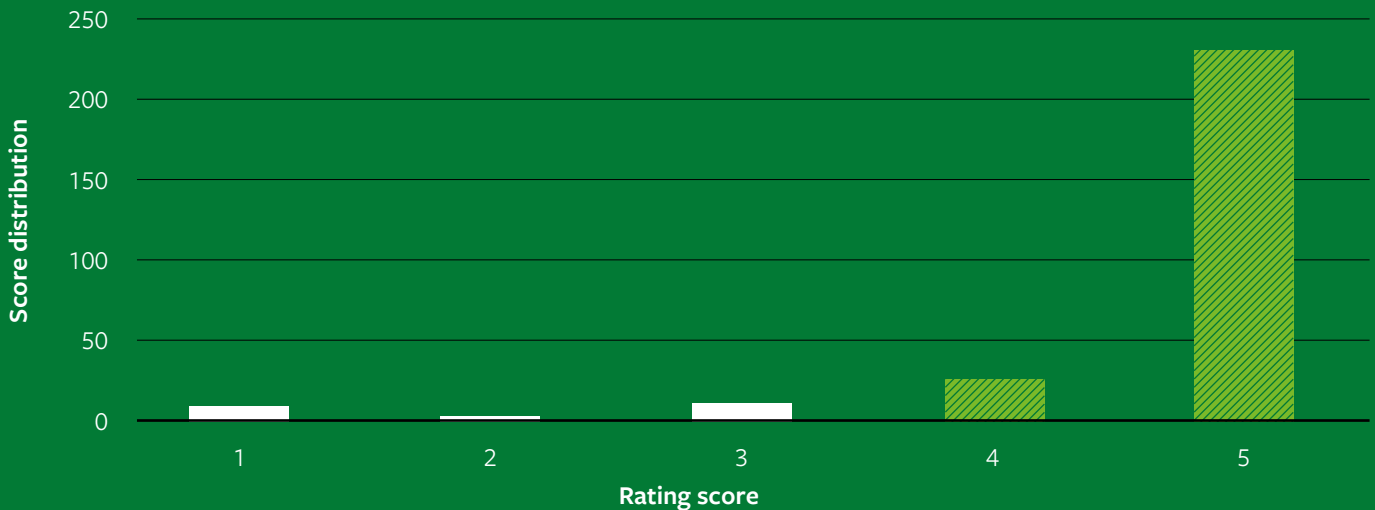
Continuous Engagement

38. The outline ZEBRA electric bus bid was submitted to the Department for Transport (DfT) in May 2021 and shortlisted in mid-June 2021, with full submission due for mid-August 2021. Clearly a comprehensive consultation process has not been feasible under the time available.
39. However, since lockdown Leicester City Council has established a reasonably effective on-line system for consultation with:
- various representatives from a broad range of different user groups
 - existing bus users with registered email addresses through FirstBus
 - key stakeholders from employment, health and educational establishments
44. There were 313 responses from the FirstBus Leicester electronic version of the survey — sent to their active customer database.
45. Responses were strongly in support of the proposals and are summarized below. Questions were not set to mandatory to allow customers to comment on areas they had something to contribute. It should be noted this is a sample of engaged bus users, so likely to be supportive of bus improvements and may not be representative of the broader community.

46. A summary of their responses

Do you agree with the council making this bid?

91% RATED BETWEEN "4-5" FOR THIS QUESTION



47. In terms of the potential features on board the proposed electric buses, ratings were given between 1 (lowest) and 5 (highest) and scored as follows:

- Additional room for a second wheelchair or two unfolded buggies **4.65**
- Dedicated seats with leg room for an assistance dog **4.53**
- On-board screens showing next bus arrival information **4.74**
- On-board public address systems alerting passengers of oncoming stop and other route/ timetable information **4.64**
- Acoustic bus alert system for pedestrians when travelling at low speeds in areas of high pedestrian usage. **4.4**

48. In terms of complementary work to enhance these proposed electric bus routes, ratings were given between 1 (lowest) and 5 (highest) as follows:

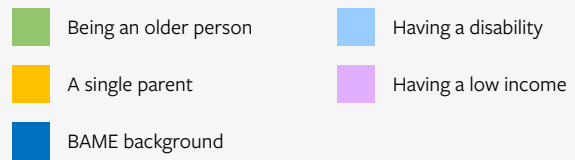
- Digital fare capping — to give best value day or weekly fare for trips made during that period **4.71**

- All electric power drawn from renewable source **4.71**
- A new identity/look and promotion of bus travel **4.47**
- Additional bus priority measures such as enforced bus lanes, changes to parking schemes etc **4.30**
- Traffic light signal priority for late running buses **4.41**
- Real time information displays at all boarding stops **4.82**
- New bus shelters **4.46**

49. Verbatim comments were broadly supportive of the bid but reflect customer requirements that reliability, with a friendly driver and at a reasonable price continue to be key priorities for bus users and these developments should have a positive impact on core service delivery.

50. In addition, **90%** of respondents also supported further bids.

51. It is instructive to note the demographic information given by respondents (note: some customers may fall into more than one category). For brevity these asked respondents whether which categories they felt the fell into:



- Being an older person
- Having a disability that makes travel difficult
- A single parent with one or more children below school age
- Having a low income with limited access to a car
- Coming from a Black, Asian or Minority Ethnic background.

52. In addition, there is wider consultation currently ongoing related to Leicester’s Local Transport Plan 2024–39. Within this plan is a proposal for significant investment in electric buses across Leicester over the next 5 years, complemented by a range of promotional bus measures. To partially fund this package, the plan is proposing the introduction of a workplace parking levy and as such will be engaging with all major employers over the next 6 months to take this forward.

Possible Negative Impacts and Mitigations

53. The following areas have potential to impact adversely on either all bus traveller or certain disadvantaged groups. These have been raised through the consultation process and through online research.

REDUCED CAPACITY

54. Some electric buses have a lower seating capacity than the diesel buses they are replacing due to the space required to house batteries. In addition, there is potential for some routes to move from being double deckers to single deckers as a result of this change. This has potential to reduce access to a seat — which can present more of a disadvantage for those with disabilities, the elderly or with small children.

55. This aspect will be mitigated against by specifying larger buses with similar levels of seating than present, and by providing duplicate buses at key peak times.

NOISE — BUS TOO QUIET

56. This can present a potential problem for those with visual impairment, particularly in city centre areas where there is a lot of conflict between bus and pedestrian movements.

57. This aspect will be mitigated against by ensuring that the buses are specified with an automated acoustic alert system, activated at low travelling speeds and/or in given locations.

TRAVELLING INFORMATION.

58. Those with visual or hearing impairments stated they often find it difficult to navigate whilst on the bus. The same can apply to wheelchair users who are facing backwards from other passengers.

59. This will be mitigated by the following

- Double sided on-board passenger information screens — visible from both sides
- On board public address system
- On-board USB points at all seats — for user to charge their own mobile comms devices.
- Expansion of real time displays in the programme at stops, all with text to speech audio buttons

INTERIOR STEPS

60. Design constraints related to battery buses make them difficult to specify as being totally low floor, with no internal steps. This can present a difficult for those with visual or ambulant difficulties.
61. This will be mitigated by the following
- Continuously step free for two thirds of the bus floor area from the driver cab onwards
 - Contrasting floor covering and step material
 - Hand rails and stopping buttons at every seat

BUS ROUTE RECOGNITION

62. Buses that are all very similar in terms of shape and colour can make it difficult to some people with visual impairment to easily identify their particular service.
63. This will be mitigated by having distinct strong colour branding for each route and by retain individual route numbering shown on LED displays at the front, side and rear of the bus.
64. In line with the recommendations of the National Bus Strategy — the overall network numbering will be adjusted to remove duplication of the same route number across different operators.

RELIABILITY — RUN OUT OF POWER

65. Electric buses have the potential to run out of power during operation. A broken down bus will have disproportionate impact on more vulnerable groups since they are often less able to find alternative option (e.g. walk, taxi).
66. This will be mitigated by specifying the following
- Operating miles of each service is less than **80%** of the bus's battery capacity
 - Drivers fully trained in regenerative braking — to save power
 - Remote diagnostics equipment — so that operations manager can be alerted if any buses is getting below its due state of charge at any point in a day's operation
 - Smart remote overnight charging system — not reliant on human error
 - Spares, warranty and maintenance systems

EXPENSE — REDUCE VIABILITY OF THE ROUTES

67. Electric buses are about twice the cost of diesel buses to purchase. This could potentially have the impact of reducing the commercial viability of the service, leading to either service reductions and/or fare increases.
68. This will be mitigated by
- A robust commercial business plan to ensure no adverse service changes
 - Accessing government capital grant to reduce the difference by **75%**
 - Savings from fuel and maintenance, reinforced by driver training related to maximise regenerative braking savings
 - Extended warranties
 - Bus service operation grant of £0.22 per km for first three years at least
 - Investigating ways to produce, store and use solar power at each depot

SAFETY

69. This area has come out as of high concern for many female and younger travellers. Also seen as an issue for some LGBT travelers. This will be mitigated by some of the proposed complementary measures noted, including
- Better, illuminated waiting facilities
 - Real time information at bus stops, with text-to-speech audio buttons
 - Digital and smart ticketing — removing need to carry cash, speeds boarding
 - Continuous driver awareness training
 - CCTV on buses and in bus stations — address hate crime too

TICKETING

70. Although digital and smart ticketing was seen as a good safety measure, it was also noted that there is significant unbanked section of residents in Leicester (**8%**). They will be assisted through the following
- concessionary smart cards for those unbanked who are either elderly, disabled or young or unemployed
 - cash retained on the buses — the electric buses will retain cash handling, trays and hoppers

OTHER FEATURES

71. There are several other aspects which have been noted as being required to make travel easier for many groups. These include additional buggy space, step free interior design, frequent grab rails and stop buttons, language barriers, stop accessibility and user behaviour. These will be addressed as follows:
- bus specification includes specific design improvements to assist accessibility e.g. step free for more than two thirds of bus floor area
 - additional programme of works to make bus stops more accessible
 - advanced driver customer care training
 - general campaigns to improve user behaviour
 - availability of information in different languages

Monitoring Ongoing Impact of Proposal

72. The ongoing impact of this proposal will be monitored by the following methods
73. Measurement
- Usage on each electric routes against other routes
 - Usage changes per route split by user groups: elderly persons and disabled persons travel passes, discounted young persons passes, fare paying adults
 - Take up of concessionary travel passes
 - Air quality measurement at key locations across the city
74. Quarterly passenger satisfaction surveys related to travel on these buses — against other similar authorities. Using independent Transport Focus survey analysis.
75. Regular reports and feedback from:
- Leicester Transport Accessibility Panel
 - Leicester Bus User Panel
 - Operator and council social media platforms
76. Further online local surveys to regular bus users on established email databases, covering and separately identifying all disadvantaged groups.

Information Used for Assessment

77. This assessment has used the following data sources:
- Age UK, The Future of Transport in an Ageing Society, 2015
 - Department for Transport, Young People's Travel — What's Changed and Why?, 2018
 - Public Health England — Leicester City Health Profile 2018
 - NHS Leicester City Clinical Commissioning Group, The Health of the Population, 2017
 - Transport for London, Understanding the travel needs of London's diverse communities, April 2012 <http://content.tfl.gov.uk/travel-in-london-understanding-our-diverse-communities.pdf>
 - Department for Transport, Travel by car access, household income, household type, NS-SEC and mobility status NTS0702, 2018
 - Leicester City Council, Local Transport Plan (2011–2026)
 - Census 2011 <https://www.ons.gov.uk/census/2011census>
 - NOMIS <https://www.nomisweb.co.uk/customererrors/nodatASET.asp#>
 - Mental Health Action Group, Mental Health and Public Transport, September 2011
 - Department for Transport, Transport for Everyone: an action to promote equality, 2012
 - West Midlands Bus Users Profile 2015 — <https://data.birmingham.gov.uk/dataset/bus-rail-and-metro-user-profiles>

Conclusions

78. The above overview equality impact assessment shows the following main points:
- a) Leicester has a diverse population with high dependency on bus travel
 - b) There is very strong support for the proposed bid across all types of traveller
 - c) The proposal should greatly improve the quality of life of many users, though care needs to be taken in ensuring the specification is properly tailored to all needs
 - d) Continuous monitoring is required to ensure this investment consistently meets all users' needs

Appendix 7

Bus Operators Letters of Support

Arriva, FirstBus, Centrebus, Stagecoach, Kinchbus, and Roberts Travel Group



Leicester City Council
115 Charles Street
Leicester
LE1 1FZ

19/10/21

Dear Sirs,

Leicester City Council – Bus Service Improvement Plan

In response to *Bus Back Better*, the National Bus Strategy for England, Leicester City Council has consulted with us in developing a Bus Service Improvement Plan (BSIP). The BSIP recognises the cross-boundary nature of many services, and we are supportive of the City Council's partnership approach in delivery of BSIP measures across the greater Leicester urban area.

We believe that the BSIP document created in partnership between the Council, ourselves, and other operators creates an exciting opportunity to deliver an integrated and inclusive transport network across the greater Leicester urban area, sustaining the existing level of service, and better connecting places, communities and economic assets within the region and beyond.

A focus on public transport will prioritise investment in a sustainable future, supporting a green recovery from Covid-19 and tackling the climate emergency through the decarbonisation of the transport sector.

Arriva fully support Leicester City Council's BSIP and the measures contained within it. As a major bus operator we are making every effort to regrow customer demand following the pandemic, and we welcome the future funding from DfT to help support that recovery and build upon it to deliver the BSIP's ambitious targets on patronage growth, reliability, punctuality, journey times and overall passenger satisfaction.

Kind regards



Andrew Godley
Commercial Director

Arriva Midlands
Westmoreland Avenue
Thurmaston
Leicester
LE4 8PH

Tel 0116 264 0400
Fax 0116 260 8620

www.arrivabus.co.uk

Arriva Midlands is the trading name of the following companies, each of which has its registered office address at 1 Admiral Way, Gouford International Business Park, Sandeford 383 30P: Arriva Midlands Limited (22142079), Arriva Midlands North Limited (21356302), Arriva The Shires Limited (22116512) and Centrebus Holdings Limited (26344272).





28 October 2021

Andy Gibbons
Transport Strategy and Programmes
Leicester City Council
City Hall
115 Charles Street
Leicester
LE1 1FZ

First Leicester
Abbey Lane
Leicester
LE4 0DA
www.firstbus.co.uk

Dear Andy,

Leicester City Bus Service Improvement Plan

I am very pleased to support the submission of the Leicester City Bus Service Improvement Plan.

The Leicester bus market is an important of the wider First Bus operation. First Leicester is an active member of the local partnership established many years ago. Local partners have worked closely together to ensure services operated for key workers throughout the pandemic.

We have locally been working for some time on the delivery of many of the elements which were subsequently contained within the Government's National Bus Strategy. We have worked closely with Leicester City Authority to develop this Plan participating in workshops, reviewing content and endorsing proposals. The Bus Service Improvement Plan is therefore a product of close collaboration with Leicester City Authority.

This is a very strong, customer focused plan and First Leicester will play its part in delivering a transformation for bus passengers in our region.

The Plan represents a healthy level of ambition. We support the proposals in the plan for:

- Financial support in 2022-23 as we transition out of the effects of the pandemic to a bus service for the future.
- Additional bus priority building upon the successful Transforming Cities initiatives.
- Network substantial changes to the local bus network introducing cross city and express services.
- Accelerating the move to multi-operator capping to kick start the market.



Leicester CityBus Limited
Registered in England number 2000072
First Leicester, Abbey Lane, Leicester, LE4 0DA

First Bus are nationally and locally implementing a range of successful schemes to enhance the bus offer for passengers:

- We have committed to achieve a 100% zero emission bus fleet by 2035, buying our last diesel buses in 2022. In Leicester we have been successful in a zero emission bid to Zebra for 68 electric buses.
- We have partnered Leicester City local authority in delivery their ambitious Transforming Cities Fund programme
- We have transformed our emissions performance, with over 100% of our local fleet now Euro VI.
- We are embracing the rollout of multi-operator capped ticketing nationally and are playing a key role in delivering of England-leading schemes.
- We will be leveraging our proven digital capabilities to partner our local authorities as they develop App, DRT and MaaS solutions.

We therefore commend this BSIP to the Department and look forward to continuing to work in partnership to ensure its delivery.

Yours sincerely



Nigel Eggleton
Managing Director First South Yorkshire and Midlands

Centrebus

Centrebus Ltd.

43 Wenlock Way
Leicester
LE4 9HU

Tel:0116 298 7222

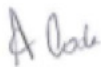
Andy Gibbons
Programme Manager
Transport Strategy and Programmes
Leicester City Council

RE: LEICESTER CITY COUNCIL – BUS SERVICE IMPROVEMENT PLAN

In response to the National Bus Strategy for England, 'Bus Back Better' Leicester City Council has developed a Bus Service Improvement Plan (BSIP) with full consultation and support of all bus operators within the conurbation of Leicester. The plan recognises the cross-boundary services and as such, the measures contained within the BSIP have been co-ordinated with the neighbouring authority of Leicestershire County Council. Leicester City Council have engaged with key stakeholders and conducted a passenger survey to understand key issues with existing bus services in Leicester and key areas of improvements.

Centrebus fully supports Leicester City Council's BSIP and the measures contained within it. As a bus operator in Leicester, we are making every effort to recover from the Covid Pandemic, we welcome the funding from DfT to help with the recovery and deliver significant improvements to bus services in Leicester and help deliver our ambitious targets on patronage growth, reliability, punctuality, journey times and overall passenger satisfaction.

Kind Regards



Andy Cook
Bus Network Manager
Centrebus & High Peak Buses



Leicester City Council
115 Charles Street
Leicester
LE1 1FZ

19th October 2021

To whom it may concern

Letter of Support to the Leicester City Council Bus Service Improvement Plan

We are pleased to submit this letter of support accompanying the Leicester City Council Bus Service Improvement Plan (BSIP). Bus operators worked in partnership with Leicester City Council in developing the BSIP. We believe that the vision for improving bus services presented in the Leicester BSIP complements the Government's aim to transform bus services as we recover from the covid-19 pandemic and the urgent need to reduce private car use.

Whilst we are only a minor operator in the city, we are committed towards establishing an Enhanced Partnership with the Council to achieve the vision and ambitions set out in the Leicester BSIP. This will help reduce the reliance on the private car for travel, increase the mode share for bus travel, reduce congestion on the local highway network and counter the adverse impacts on the environment, whilst providing inclusive access to education, employment and leisure opportunities across Leicester City and further afield. We are particularly supportive of the continued bus priority and infrastructure measures coming through and the opportunity to look at overall parking policies to encourage greater uptake of bus.

Alongside Leicester City Council, we look forward to receiving the response of the Department for Transport setting out how much of the £3billion funding associated with the National Bus Strategy will be allocated to Leicester.

Yours sincerely

Patrick Stringer
Commercial Director

Stagecoach Midlands, Main Road, Far Cotton, Northampton, NN4 8ES
stagecoachbus.com

Registered Office: Stagecoach Services Limited, One Stockport Exchange, 20 Railway Road, Stockport, SK1 2EN. (Registered in England & Wales No 1588210)



Andy Gibbons
Programme Manager
Transport Strategy and Programmes
Leicester City Council

25 October 2021

Dear Andy

Leicester City Council – Bus Service Improvement Plan

I can confirm that Leicester City Council has consulted with us extensively as it has developed its Bus Service Improvement Plan (BSIP) in response to the National Bus Strategy. I also understand that there has been extensive consultation with a wide range of other stakeholders and neighbouring Local Transport Authorities.

During the development of the BSIP there have been a number of Bus Operator meetings where measures and targets have been discussed and agreed, and all operators have been provided with the opportunity to comment on these.

We believe that the BSIP developed in partnership between the Council, ourselves, other operators and stakeholders creates an exciting opportunity to build "bus back better", and through collaborative working will result in a step change in service provision helping to deliver passenger growth and increased levels of customer satisfaction over its lifetime.

Kinchbus fully support Leicester City Council's BSIP and the measures contained within it. As a business we are making every effort to regrow customer demand following the pandemic, and we welcome the future funding from DfT to help support that recovery.

Yours sincerely

Tom Morgan
Group Commercial Director
Kinchbus

Unit 3, Sullivan Way, Loughborough, LE11 5QS
kinchbus.co.uk
01509 260104

Registered in England No. 2116469 as Kinchbus Limited,
Mansfield Road, Heanor, Derbyshire DE75 79G



Roberts

TRAVEL GROUP

Leicester City Council
115 Charles Street
Leicester
LE1 1FZ

27th October 2021

Dear Sirs,

Letter of Support to the Leicester City Council - Bus Services Improvement Plan

We currently operate the Council's Park and Ride services on three sites around the city and fully support Leicester City Council's Bus Services Improvement Plan.

The Council have had the foresight to invest in electric vehicles on the Park and Ride service and are committed to providing efficient frequent public transport using zero emissions vehicles.

Yours faithfully



Jonathan Hunt
Managing Director
Roberts Travel Group

The Limes, Midland Road, Hugglescote, Leicestershire LE67 2FX
T: 01530 817 444 | E: info@robertstravelgroup.co.uk | W: www.robertstravelgroup.co.uk



Registered Office: The Limes, Midland Road, Hugglescote, Leicestershire LE67 2FX Registered No. 0882106, Roberts Tours Registered in England No. 306776, Roberts Coaches Registered in England 0817317, VAT No. 818838643

Appendix 8

Department for Transport EPP Overview

Name of authority: Leicester City Council

Enhanced Partnership Plan: Enhanced Partnership Scheme

Date of publication: 31 October 2022

Date of next annual update: 31 October 2023

URL of published report:

<https://www.leicester.gov.uk/your-council/policies-plans-and-strategies/transport-and-streets>

BSIP OUTCOMES AND TARGETS						
	Actual 2018/19	Actual 2019/20	Estimate 2022/23	Target 2024/25	Target 2029/30	Notes
Passenger numbers	26,483,594	25,625,550	20,500,440	25,625,550	28,992,958	a
Passenger growth from 2022/23	—	—	—	25%	41%	b
Punctuality	76%	68%	70%	80%	85%	c
Modal share (inner cordon)	29%	30%	28%	32%	34%	d
Modal share (outer cordon)	6%	7%	6%	10%	12%	d
Passenger Satisfaction						e
Punctuality/reliability	72%	65%	70%	75%	80%	
Value for money	62%	57%	60%	70%	75%	
Journey time	83%	82%	84%	90%	90%	
Overall	87%	86%	84%	90%	90%	
Proportion of fleet electric	0%	0%	18%	50%	100%	f

Notes:

- a. Annual nos boarding in Leicester City Area
- b. Estimated post-covid full year base figure
- c. % of non-frequent service within registration window of tolerance
- d. Modal a share at innter-city cordon point
- e. As measured annually by Transport Focus
- f. In operation

MAKE IMPROVEMENTS TO BUS SERVICES AND PLANNING

Area	Addressed by BSIP	Summary of proposals
More punctual and reliable services	Yes	Well developed schemes to implement significant bus priority on 5 main bus corridors by 2023 and a further 3 by 2025. Board times to be reduced by touch in – touch out digital ‘best fare capping’ by March 2022 on all buses. Automated traffic signal priority for all late running buses to be introduced network wide by 2023
Review/improve service frequency	Yes	Finance package put forward to improve daytime/evening frequencies on the main network in order to give a minimum timetable standard of every 15 mins daytime, every 30mins evening. Also finance package to increase frequencies of orbital and cross-city strategic ‘Greenlines’ P&R network to every 15 mins daytime.
Increase bus priority measures	Yes	Well developed schemes to implement significant bus priority on 5 main bus corridors by 2023 and a further 3 by 2025. Automated traffic signal priority for all late running buses to be introduced network wide by 2023.
Increase demand responsive services	Yes	Plan to merge dial a ride and low frequency tendered services to a small DRT network with electric midibuses.
Consideration of bus rapid transport networks	Yes	Review has already been done across the whole of the conurbation. Conclusion that it is best to focus on 21 main bus corridors and focus on significant bus priority on each, backed by electric buses, rather than focus all investment in one main BRT corridor — insufficient room for dedicated bus sections, demand spread throughout the conurbation.
Expansion of strategic network/P&R	Yes	Well developed and costed plans to widen strategic network with three additional park and ride sites and a network of 5 cross city and orbital limited stopping electric bus services — the Greenlines network. This has already begun with the electrification of four of these services.

IMPROVEMENTS TO PLANNING / INTEGRATION WITH OTHER MODES

Area	Addressed by BSIP	Summary of proposals
Integrate services across operators	Yes	Proposals to integrated timetables across bus operators on the 8 of their 21 main bus corridors shared by more than one operator. Two already completed, with other planned for completion in 2022/23. Complemented by integrated information and ticketing.
Integrate services with other transport modes	Yes	Plans for new inner orbital free frequent bus service linking the train station and both bus stations to all main points of interest across the City Centre, including hospital, university, shopping centre, tourist and sporting venues.
Simplify services	Yes	Well developed plans for a simplification of the main frequent network into 21 integrated branded route groups, timetabled across operators. Have a key simple standard of every 15 mins or better daytimes, every 30 mins evening and Sundays.
Review socially necessary services	Yes	Plan to merge dial a ride and low frequency tendered services to a small DRT network with electric midibuses, to give a common flexible approach to all the areas outside of walking distance of main bus routes.
Invest in Superbus networks	Yes	Well developed plans to implement a broad package of measures including bus priorities, electric buses, real-time information, branding and fare capping on each of 21 main bus corridors — building on previous investment. Each will be progressed by project area, with 8 having new bus priority by 2025, 11 having full electric bus operation and all having real-time information at all boarding stops.

IMPROVEMENTS TO FARES AND TICKETING

Area	Addressed by BSIP	Summary of proposals
Lower fares	Yes	These will be subject to trials before long term implementation. Looking at reduced fares for workseekers, young persons between 16 and 18 and reduced 'fare premium' for all-operator ticket prices. Also maintenance of current peak discounts to elderly and disabled residents.
Simplify fares	Yes	Already introduced simplification of automated best fare capping on three main operators. All-operator best fare capping to be introduced by April 2022, as 'trailblazer' in Project Coral. Also plan to simplify ticketing by having common boundaries for each operator's day tickets, same 'child' definition and same option for student tickets across operators.
Integrate ticketing between operators	Yes	Already introduced simplification of automated best fare capping on three main operators. All-operator best fare capping to be introduced by April 2022, as 'trailblazer' in Project Coral.

MAKE IMPROVEMENTS TO BUS PASSENGER EXPERIENCE

Area	Addressed by BSIP	Summary of proposals
Higher spec buses	Yes	The plan will introduce at least 100 new fully branded electric buses complete with additional PSVAR features such as additional leg room for guide dogs, in service audio and visual announcements and additional wheelchair space.
Invest in improved bus specifications	Yes	As well as above, these buses will have full internal branding, wi-fi at all seats, laminate flooring and real-time information announcements — visually and audibly.
Invest in accessible and inclusive bus services	Yes	Plan to invest in small accessible DRT network to access hard to reach areas and those unable to use conventional buses.
Protect personal safety of bus passengers	Yes	All buses already have contactless ticketing to reduce contact through coin handling and on board CCTV. Also have audible and visual next stop announcement to assist safe egress from the bus.
Improve buses for tourists	Yes	Plans for network branding on buses, maps and all bus stops in order to simplify and make network accessible to infrequent users such as tourists. Free inner orbital bus linking bus/rail stations to all main tourist attractions in City Centre. Also main Greenline link to the Space Centre to be made free for those boarding in the City Centre.
Invest in decarbonisation	Yes	Already introduced 15 electric buses, with further 96 planned through ZEBRA fast track bid and further 20 through Coventry Electric Bus town project.

IMPROVEMENTS TO PASSENGER ENGAGEMENT

Area	Addressed by BSIP	Summary of proposals
Passenger charter	Yes	Already will established bus user group and on-line user survey process through operator social media and Transport Focus. Plan constructed to have set of agreed passenger standards for each area of bus travel.
Strengthen network identity	Yes	Well developed and commenced plans to introduce a 'Leicester Buses' overarching integrated network brand and two other sub-brands: Mainlines and Greenlines, representing main urban services and wider area interchange services respectively.
Improve bus information	Yes	Well developed plans to expand existing estate of stop and interchange real-time displays to all boarding stops and all new electric buses. Also financed project for all-operator website providing real-time, journey planning and integrated fares information and for integrated printed information at each bus stop.

OTHER

Area	Addressed by BSIP	Summary of proposals
Expansion of strategic network/P&R	Yes	Well developed and costed plans to widen strategic network with three additional park and ride sites and a network of 5 cross city and orbital limited stopping electric bus services — the Greenlines network. This has already begun with the electrification of four of these services.
Public parking policies — City Centre	Yes	Continuation of policy to increase the all-day costs of parking on-street and at council run car parks, together with policy for low all day parking at all park and ride sites.
Workplace parking charging policies	Yes	Formal consultation currently ongoing to introduce Workplace Parking Levy at above the cost of an annual bus pass by April 2023, subject to secretary of state approval.

