

**BUS
FRANCHISING
IN THE
LIVERPOOL
CITY REGION**

ASSESSMENT

25 April 2023



**LIVERPOOL
CITY REGION**
COMBINED AUTHORITY

METROMAYOR
LIVERPOOL CITY REGION

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1. Purpose of the Assessment	39
1.1. Where an authority is considering making a Franchising Scheme which covers all or part of their area, they are required under Section 123B of the Transport Act 2000 to prepare an assessment of the proposed scheme.	39
1.2. On 25 September 2018, LCRCA gave notice of its intention to prepare an assessment of a proposed bus Franchising Scheme in accordance with the Transport Act. LCRCA wanted to consider bus Franchising as an alternative to the existing deregulated bus market and a VPA as it would provide a system under which LCRCA could specify which bus services would be provided within the LCR and where they would operate.	39
1.3. This Assessment covers the whole of the LCR and has been prepared by Merseytravel on behalf of LCRCA in accordance with the requirements set out in Section 123B of the Transport Act and having regard to the statutory guidance issued by the Secretary of State for Transport entitled “The Bus Services Act 2017 – Franchising Scheme Guidance as published in March 2018”. It sets out the relevant functions that LCRCA could have and exercise as a Franchising authority.	39
1.4. This Assessment describes the Franchising Scheme proposed by LCRCA, considers the effects that the scheme is likely to produce and compares the scheme against alternative options for providing bus services within the LCR. The Assessment considers a number of matters that are specifically mentioned in the Transport Act and the Franchising Guidance. It also takes account of the provisions of the national bus strategy entitled “Bus Back Better”, issued by the DfT in March 2021, which encourages local transport authorities to consider either EP or Franchising Schemes as the most appropriate way of providing local bus services.	39

- 2.1. Section 123B of the Transport Act and the Franchising Guidance recommends that the Assessment reflects, broadly, the Treasury five case business case model. The assessment should identify a number of options (Franchising and at least one other) that have the potential to achieve the objectives that LCRCA has set itself. It should then undertake a detailed assessment of the leading options to determine the benefits, impacts and costs and further determine the extent to which each option would meet those objectives. LCRCA should assess the economic, social and environmental impacts against LCRCA's objectives for local bus services in the LCR.** **39**
- 2.2. The Treasury five case model requires the following assessments to be undertaken:** **40**
- 2.2.1. The Strategic Case for making changes to the bus market considers the extent to which the bus market contributes to the transport system in the LCR and how it fits with LCRCA's local transport plan and policies including its VfB. This can include numbers of services as well as matters such as environmental policy. The Strategic Case is designed to produce a number of objectives for improving the bus network which are then considered in the light of the different options (including Franchising) for delivering those objectives. **40**
- 2.2.2. The Economic Case compares the benefits and costs of the different options for delivering LCRCA's objectives to demonstrate the VfM of each of the Delivery Options. The case will present the results of a modelling exercise for each of the relevant options available to LCRCA and compare them against a realistic "do nothing" scenario. This means that the different benefits of each option are "monetised" to give a clear comparison in terms of benefit and equivalent cost. The Franchising Guidance requires the Assessment to consider the effects of the options on passengers, LCRCA, wider society and bus operators, particularly SMO. **40**
- 2.2.3. The Commercial Case considers the extent to which LCRCA would be able to secure the continued operation of bus services under local bus contracts. In the case of the Franchising Option the Assessment will look at how the services can be procured competitively and how the procurement competitions will support the continued involvement of SMO in the LCR bus market. Another aspect of the Assessment looks at the length of any proposed franchise

contract to operate bus services and how they treat important assets which are required by Operators in order to run services, such as the buses themselves and the bus depots where they are maintained and serviced. For other options, the Assessment will consider the effects that the requirements relating to that option have on bus services. 40

2.2.4. The Financial Case considers the financial implications of the different options. It looks at them both in respect of the impacts from the initial introduction of the arrangements, including the transition costs, and in respect of their ongoing management and operation. This allows LCRCA to assess the affordability of each option over their lifespan and to make sure that it has sufficient sources of income (including income from fares in the case of the Franchising Option) to meet all of LCRCA's capital and revenue spending requirements. 40

2.2.5. The Management Case looks at how the different options could be put into effect if they were selected by LCRCA. It sets out any changes which would be required to the bus management team of LCRCA. This includes increases in staff numbers and changes in systems to support the expanded management role of Merseytravel, in order to accommodate the relevant options. Organisational changes within Merseytravel and/or LCRCA to manage the transition to the preferred option, its implementation and any ongoing support are also issue which will be considered in this case. It will also set out the risks associated with the transition to a new system of bus operations and clearly set out any contingency plans for providing replacement services should services be withdrawn during transition to the Franchising Option. 41

2.3. The Assessment also contains a conclusion that summarises the detailed assessments of the different options, including the Franchising scheme and sets out clear distinctions between the performance of the different options in achieving the objectives of LCRCA. This includes the extent to which the various options will achieve the objectives set out in the Strategic Case, the impacts on different groups in society as determined in the Economic Case and the affordability of the options as established in the Financial Case. The summary also sets out LCRCA's preferred option, including a clear rationale for that decision. 41

3. Treatment of Risks in the Assessment 41

3.1. Any significant change in a market or in the delivery of a service produces an element of risk. As a result, the management of risk is a key feature of this Assessment. Each of the five cases considers risk from the perspective of that particular case: **41**

3.1.1. The Strategic Case sets out the options and, in broad terms, how they can change the risk structure of the current bus market in the LCR. 41

3.1.2. The Economic Case sets out the VfM for each of the different Delivery Options and illustrates the distribution of benefits, costs and risks between different user groups. 41

3.1.3. The Commercial Case considers the potential risk allocation and implications under each Delivery Option. It sets out the different risks for LCRCA and the bus Operators and how those risks can be mitigated for each Delivery Option. 41

3.1.4. The Financial Case sets out a summary of the key financial risks for Franchising and EP. It also presents some sensitivities for the Franchising and EP options, where the results of the financial model would differ in different circumstances. 41

3.1.5. The Management Case sets out the operating model for the different options, which is designed to reduce and manage the risks which arise from them. There are specific risk management arrangements which deal with the transition arrangements to the Franchising Option and how such risks would be managed, particularly with respect to continuity of bus services during the transition period. Other risk management arrangements set out how ongoing risks for the Franchising Option, including revenue risk, would be managed. 42

3.2. The establishment of different risk issues across the Assessment is designed to enable decision makers in LCRCA to look at the various risks in the round and reach its decisions based on a full understanding and assessment of the risks associated with each option, including how they can be quantified, and managed. **42**

4. The Franchising Scheme 42

4.1. The Liverpool City Region Franchising Scheme for Buses provides a draft of the Franchising Scheme that LCRCA proposes to make through exercising its powers under Sections 123G and 123H of the Transport Act, should a decision be made to proceed with the Franchising Option. **42**

4.2. The proposed Franchising Scheme is made up of the following elements:	42
4.2.1. Article 3 provides that it would apply to the whole LCR area.	42
4.2.2. Article 4 sets out the single date on which the first franchise contracts may be entered into by LCRCA and the minimum amount of time that has to expire following contract award before franchised services can start to operate. This date is currently blank and will be filled in at a later date. The date is subject to any decision being made to proceed with the Franchising Scheme.	42
4.2.3. Article 5 specifies the services that would be franchised by LCRCA.	42
4.2.4. Article 6 specifies those services which would, for policy reasons, be exempt from Franchising. The list of exempt services set out in Appendix 2 of the proposed Franchising Scheme is currently blank and is subject to any decision being made to allocate any bus services to this category.	42
4.2.5. Article 7 identifies additional facilities that LCRCA considers appropriate to provide, which are the use of depots to facilitate large franchise contracts.	42
4.2.6. Article 8 specifies the basis upon which LCRCA would consult on the operation of the scheme. The date is set to allow sufficient information on the letting and operation of bus franchises to be obtained in order to provide a meaningful review of the early years of bus Franchising.	43
4.3. As well as providing the legal framework and process that Franchising Schemes must follow to be established, the Transport Act also describes variations, suspensions, revocations, interim and replacement services, amongst other regulations. The circumstances, requirements, limitations and due process are outlined in Sections 123M through 123X of the Transport Act and further information is set out in Section 7.2 of the Management Case.	43
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Glossary of Terms

Definition	Meaning
AQMA	Air Quality Management Area(s)
AQPS	Advanced Quality Partnership Scheme
Assessment	The Bus Franchising in the Liverpool City Region Assessment
BCR	Benefit-cost ratio
BEIS	Business, Energy and Industrial Strategy
Big Bus Debate	LCRCA's public consultation on bus reform which was launched in 2018
Black Book	The Demand for Public Transport: A Practical Guide (TRL, 2004)
BPC	Bus Passenger Charter
BRS	Business Rate Supplements
BRT	Bus Rapid Transit system
BSFA	Bus Services Framework Agreement
BSIP	Bus Service Improvement Plan
BSOG	The Bus Service Operators' Grant
Bus Back Better	DfT's "Bus Back Better" national bus strategy, published in March 2021
Bus Budget	The long-term forecast of LCRCA's net expenditure on bus as set out in Table 4.03 of the Financial Case
Bus Services Act	The Bus Services Act 2017
Cabinet Office Consultation Principles	Consultation principles as published and updated from time to time by the Cabinet Office
CAGR	Compound annual growth rate
CAP	LCRCA's Clean Air Plan
CAZ	Clean Air Zone
CBSSG	COVID-19 Bus Services Support Grant
CMA	Competition and Markets Authority
Code of Corporate Governance	LCRCA's Code of Corporate Governance as set out in Part 6E of the Constitution
Combined Authority	A Combined Authority in England pursuant to the Local Democracy, Economic Development and Construction Act 2009

Definition	Meaning
Commercial Case	The Commercial Case of this Assessment
Commercial Objectives	The commercial objectives of LCRCA as set out in Section 2 of the Commercial Case
Constitution	LCRCA's Constitution, July 2020 (as amended and updated from time to time)
Competition Act	Competition Act 1998
Core Scenario	The "Core Scenario" is described in Section 3.2.1 of the Financial Case
CPI	Consumer Price Index
CPO	Compulsory Purchase Order
CRSTS	LCR Sustainable Transport Settlement
DB	Defined Benefit
DC	Defined Contribution
DEFRA	The Department for Environment, Farming and Rural Affairs
Delivery Option(s)	The options for delivering bus reform within the LCR through either a Franchising Scheme or an EP
Devolution Agreement	Liverpool City Region Devolution Agreement, HM Treasury and Liverpool City Region, 2015
DfT	The Department for Transport
District	The local authority district boroughs within the LCR
DMO	Debt Management Office
Economic Case	The Economic Case set out in this Assessment
ENCTS	English National Concessionary Travel Scheme
Enhanced Partnership	A statutory Enhanced Partnership under the Transport Act 2000 (as amended by the Bus Services Act 2017)
EOP Plan	Emergency Operations Plan
EP	Enhanced Partnership(s)
EP Case	LCRCA's case for delivering bus reform within the LCR through an Enhanced Partnership
EP Engagement Board	The Enhanced Partnership Engagement Board, as described at Section 3.4.5(a) of this Management Case

Definition	Meaning
EP Guidance	The Bus Services Act 2017 Enhanced Partnership Guidance as published by the Department for Transport
EP Plan	Enhanced Partnership plan pursuant to the to the Transport Act 2000 (as amended by the Bus Services Act 2017)
EP Scheme	Enhanced Partnership scheme pursuant to the Transport Act 2000 (as amended by the Bus Services Act 2017)
ETM	Electronic ticket machine
FCEV	Fuel cell electric vehicles
Financial Case	The Financial Case set out in this Assessment
Franchising	Bus franchising pursuant to the Transport Act 2000 (as amended by the Bus Services Act 2017)
Franchising Guidance	The Bus Services Act 2017 Franchising Scheme Guidance as published and updated from time to time by the Department for Transport
Franchising Option	LCRCA's option for delivering bus reform within the LCR through Franchising
Franchising Scheme	Bus franchising scheme pursuant to the Transport Act 2000 (as amended by the Bus Services Act 2017)
GDP	Gross Domestic Product
Gear Change Strategy	DfT's 'Gear Change Strategy – a bold vision for cycling and walking'
Green Book	"The Green Book: Central Government Guidance on Appraisal and Evaluation", as published and updated from time to time by HM Treasury
Green Book Guidance	HM Treasury's Green Book Guidance
GT	Generalised time
GVA	Gross Value Added
HyBus Pilot	Hydrogen Bus Pilot Project
HR	Human resources
ITT	Invitation to tender
KPI	Key performance indicator
KRN	Key Route Network

Definition	Meaning
LA	Local Authority
LCR	Liverpool City Region
LCR Bus Alliance	The alliance between Arriva, Stagecoach, Merseytravel and others governed by the VPA
LCRCA	Liverpool City Region Combined Authority
LCWIP	Local Cycling and Walking Infrastructure Plans
LEP	Local Enterprise Partnership
LGPS	Local Government Pension Scheme
LIS	LCR Local Industrial Strategy
Liverpool City Region Devolution Deal	Liverpool City Region Devolution Deal signed by the five LCR local authority leaders, the Mayor of Liverpool, the Chairman of LCR Local Enterprise Partnership ("LEP") and Government Ministers on 17 November 2015, as updated from time to time
Liverpool City Region Transport Model	A strategic-transport model following DfT's TAG that covers the Liverpool City Region and surrounding areas in England
Local Authorities	The local authorities within the LCR
Lots	The bus service routes within each Round that will form the basis of franchise contracts, as set out in the Commercial Case.
Lower Layer Super Output Areas	A geographic hierarchy designed to improve the reporting of small area statistics in England and Wales
LTA	Local Transport Authority
LTP	Local Transport Plan
Management Case	The Management Case set out in this Assessment
MEC	Marginal External Costs
Merseytravel	The passenger transport executive for the LCR
Merseytravel Balance Sheet	A point in time value of the assets and liabilities recognised by Merseytravel.
Mersey Tunnels	Kingsway Tunnel between Wallasey and Liverpool and Queensway Tunnel between Birkenhead and Liverpool.
Minimum Standards Charter	Minimum Standards Charter for Liverpool City Region Bus Franchising

Definition	Meaning
MRP	Minimum Revenue Provision
MPS	Minimum Performance Standard
NNDRs	Business rates charged on national non-domestic properties
NOx	Nitrogen oxides
NPV	Net Present Value
NRM	New Routemaster
NTEM	National Trip-end Model
OBC	Outline Business Case
OLEV	Office for Low Emission Vehicles
Operators	Operators of bus services within the LCR
ORR	Office of Road and Rail
PDCPG	Project Delivery & Corporate Performance Group
PDFH	Passenger Demand Forecasting Handbook, UK Rail Industry Guidance
PMO	Liverpool City Region Combined Authority Programme Management Office
PMO Handbook	Liverpool City Region Combined Authority PMO Handbook
Policy Objectives	The policy objectives outlined in Section 5.2 of the Strategic Case
Project Board	LCRCA's Project Board, as described at Section 7.2.2 of the Management Case
PVB	Present Value of Benefits
PVC	Present Value of Costs
PVR	Peak vehicle requirement
PWLB	Public Works Loan Board
Reference Case	The base case against proposed alternative bus services models will be delivered and which comprises the continuation of the LCR Bus Alliance.
Rounds	The six geographical areas LCRCA has split the bus network into, as set out in the Commercial Case.
RPI	Retail Price Index
RTI	Real time information services
RV	Residual Value

Definition	Meaning
Scheme Objectives	The scheme objectives outlined in Section 5.3 of the Strategic Cases
SDS	LCR Spatial Development Strategy
Service Permit Regime	A permit regime introduced under a Franchising Scheme pursuant to the Bus Services Act and The Franchising Schemes (Service Permits) (England) Regulations 2018
SQP	Statutory Quality Partnership
SMO	Small and Medium Operators
SOC	Strategic Outline Case
Strategic Case	The Strategic Case set out in this Assessment
TAG	DfT's Transport Appraisal Guidance
TCA	Travel Concession Authority
TfGM	Transport for Greater Manchester
TfL	Transport for London
TL	Transport Levy
Transport Act	The Transport Act 2000
TUPE	The Transfer of Undertakings (Protection of Employment) Regulations 2006
UCR	Utilities Contracts Regulations 2016
ULEB	Ultra-Low Emissions Bus
VfB	The Merseytravel Liverpool City Region "Vision for Bus"
VfM	The assessment used to measure how well each Delivery Option delivers against the objectives for reform identified in the Strategic Case.
VPA	Voluntary Partnership Agreement
WEBs	Wider Economic Benefits
White Paper	The Government's Industrial Strategy White Paper (2017)
ZEV	Zero-emissions vehicle(s)

Introduction

1. Purpose of the Assessment

- 1.1. Where an authority is considering making a Franchising Scheme which covers all or part of their area, they are required under Section 123B of the Transport Act 2000 to prepare an assessment of the proposed scheme.
- 1.2. On 25 September 2018, LCRCA gave notice of its intention to prepare an assessment of a proposed bus Franchising Scheme in accordance with the Transport Act. LCRCA wanted to consider bus Franchising as an alternative to the existing deregulated bus market and a VPA as it would provide a system under which LCRCA could specify which bus services would be provided within the LCR and where they would operate.
- 1.3. This Assessment covers the whole of the LCR and has been prepared by Merseytravel on behalf of LCRCA in accordance with the requirements set out in Section 123B of the Transport Act and having regard to the statutory guidance issued by the Secretary of State for Transport entitled “The Bus Services Act 2017 – Franchising Scheme Guidance as published in March 2018”. It sets out the relevant functions that LCRCA could have and exercise as a Franchising authority.
- 1.4. This Assessment describes the Franchising Scheme proposed by LCRCA, considers the effects that the scheme is likely to produce and compares the scheme against alternative options for providing bus services within the LCR. The Assessment considers a number of matters that are specifically mentioned in the Transport Act and the Franchising Guidance. It also takes account of the provisions of the national bus strategy entitled “Bus Back Better”, issued by the DfT in March 2021, which encourages local transport authorities to consider either EP or Franchising Schemes as the most appropriate way of providing local bus services.

2. How the Assessment Works

- 2.1. Section 123B of the Transport Act and the Franchising Guidance recommends that the Assessment reflects, broadly, the Treasury five case business case model. The assessment should identify a number of options (Franchising and at least one other) that have the potential to achieve the objectives that LCRCA has set itself. It should then undertake a detailed assessment of the leading options to determine the benefits, impacts and costs and further determine the extent to which each option would meet those objectives.

LCRCA should assess the economic, social and environmental impacts against LCRCA's objectives for local bus services in the LCR.

2.2. The Treasury five case model requires the following assessments to be undertaken:

2.2.1. The Strategic Case for making changes to the bus market considers the extent to which the bus market contributes to the transport system in the LCR and how it fits with LCRCA's local transport plan and policies including its VfB. This can include numbers of services as well as matters such as environmental policy. The Strategic Case is designed to produce a number of objectives for improving the bus network which are then considered in the light of the different options (including Franchising) for delivering those objectives.

2.2.2. The Economic Case compares the benefits and costs of the different options for delivering LCRCA's objectives to demonstrate the VfM of each of the Delivery Options. The case will present the results of a modelling exercise for each of the relevant options available to LCRCA and compare them against a realistic "do nothing" scenario. This means that the different benefits of each option are "monetised" to give a clear comparison in terms of benefit and equivalent cost. The Franchising Guidance requires the Assessment to consider the effects of the options on passengers, LCRCA, wider society and bus operators, particularly SMO.

2.2.3. The Commercial Case considers the extent to which LCRCA would be able to secure the continued operation of bus services under local bus contracts. In the case of the Franchising Option the Assessment will look at how the services can be procured competitively and how the procurement competitions will support the continued involvement of SMO in the LCR bus market. Another aspect of the Assessment looks at the length of any proposed franchise contract to operate bus services and how they treat important assets which are required by Operators in order to run services, such as the buses themselves and the bus depots where they are maintained and serviced. For other options, the Assessment will consider the effects that the requirements relating to that option have on bus services.

2.2.4. The Financial Case considers the financial implications of the different options. It looks at them both in respect of the impacts from the initial introduction of the arrangements, including the transition costs, and in respect of their ongoing management and operation. This allows LCRCA to assess the affordability of each option over their lifespan and to make sure that it has sufficient sources of income (including income

from fares in the case of the Franchising Option) to meet all of LCRCA's capital and revenue spending requirements.

2.2.5. The Management Case looks at how the different options could be put into effect if they were selected by LCRCA. It sets out any changes which would be required to the bus management team of LCRCA. This includes increases in staff numbers and changes in systems to support the expanded management role of Merseytravel, in order to accommodate the relevant options. Organisational changes within Merseytravel and/or LCRCA to manage the transition to the preferred option, its implementation and any ongoing support are also issue which will be considered in this case. It will also set out the risks associated with the transition to a new system of bus operations and clearly set out any contingency plans for providing replacement services should services be withdrawn during transition to the Franchising Option.

2.3. The Assessment also contains a conclusion that summarises the detailed assessments of the different options, including the Franchising scheme and sets out clear distinctions between the performance of the different options in achieving the objectives of LCRCA. This includes the extent to which the various options will achieve the objectives set out in the Strategic Case, the impacts on different groups in society as determined in the Economic Case and the affordability of the options as established in the Financial Case. The summary also sets out LCRCA's preferred option, including a clear rationale for that decision.

3. *Treatment of Risks in the Assessment*

3.1. Any significant change in a market or in the delivery of a service produces an element of risk. As a result, the management of risk is a key feature of this Assessment. Each of the five cases considers risk from the perspective of that particular case:

3.1.1. The Strategic Case sets out the options and, in broad terms, how they can change the risk structure of the current bus market in the LCR.

3.1.2. The Economic Case sets out the VfM for each of the different Delivery Options and illustrates the distribution of benefits, costs and risks between different user groups.

3.1.3. The Commercial Case considers the potential risk allocation and implications under each Delivery Option. It sets out the different risks for LCRCA and the bus Operators and how those risks can be mitigated for each Delivery Option.

3.1.4. The Financial Case sets out a summary of the key financial risks for Franchising and EP. It also presents some sensitivities

for the Franchising and EP options, where the results of the financial model would differ in different circumstances.

- 3.1.5. The Management Case sets out the operating model for the different options, which is designed to reduce and manage the risks which arise from them. There are specific risk management arrangements which deal with the transition arrangements to the Franchising Option and how such risks would be managed, particularly with respect to continuity of bus services during the transition period. Other risk management arrangements set out how ongoing risks for the Franchising Option, including revenue risk, would be managed.
- 3.2. The establishment of different risk issues across the Assessment is designed to enable decision makers in LCRCA to look at the various risks in the round and reach its decisions based on a full understanding and assessment of the risks associated with each option, including how they can be quantified, and managed.

4. *The Franchising Scheme*

- 4.1. The Liverpool City Region Franchising Scheme for Buses provides a draft of the Franchising Scheme that LCRCA proposes to make through exercising its powers under Sections 123G and 123H of the Transport Act, should a decision be made to proceed with the Franchising Option.
- 4.2. The proposed Franchising Scheme is made up of the following elements:
 - 4.2.1. Article 3 provides that it would apply to the whole LCR area.
 - 4.2.2. Article 4 sets out the single date on which the first franchise contracts may be entered into by LCRCA and the minimum amount of time that has to expire following contract award before franchised services can start to operate. This date is currently blank and will be filled in at a later date. The date is subject to any decision being made to proceed with the Franchising Scheme.
 - 4.2.3. Article 5 specifies the services that would be franchised by LCRCA.
 - 4.2.4. Article 6 specifies those services which would, for policy reasons, be exempt from Franchising. The list of exempt services set out in Appendix 2 of the proposed Franchising Scheme is currently blank and is subject to any decision being made to allocate any bus services to this category.
 - 4.2.5. Article 7 identifies additional facilities that LCRCA considers appropriate to provide, which are the use of depots to facilitate large franchise contracts.

- 4.2.6. Article 8 specifies the basis upon which LCRCAs would consult on the operation of the scheme. The date is set to allow sufficient information on the letting and operation of bus franchises to be obtained in order to provide a meaningful review of the early years of bus Franchising.
- 4.3. As well as providing the legal framework and process that Franchising Schemes must follow to be established, the Transport Act also describes variations, suspensions, revocations, interim and replacement services, amongst other regulations. The circumstances, requirements, limitations and due process are outlined in Sections 123M through 123X of the Transport Act and further information is set out in Section 7.2 of the Management Case.

5. *The Assessment*

- 5.1. The Assessment is made up of the following Sections:
 - 5.1.1. Strategic Case.
 - 5.1.2. Economic Case.
 - 5.1.3. Commercial Case.
 - 5.1.4. Financial Case.
 - 5.1.5. Management Case.
 - 5.1.6. Review and Conclusion.

The Strategic Case

Introduction

The purpose of this Strategic Case is to set out the rationale for alternative bus Delivery Options in the LCR with reference to the Green Book Guidance requirements and the Franchising Guidance.

Green Book Guidance requires that a compelling case for change, from the current delivery of bus services is made. This starts from a detailed understanding of the current situation, includes an explanation of what is proposed, describes the expected outcomes and explains how these fit with local and national government policies and objectives.

To address these requirements in the context of bus services in the LCR, this Strategic Case:

- (a) sets out the policy context applicable to the LCR, transport and the provision of bus services and how bus Delivery Options will contribute to these policies;
- (b) describes the aims and objectives of LCRCA and the role that bus services play in relation to those aims and objectives;
- (c) explains how local bus services fit into the transport system in the LCR, and how they contribute to LCRCA's overall objectives;
- (d) describes the challenges that have been identified to realising 'the case for change' and how changes to the provision of local bus services could help address these challenges; and
- (e) explains the interventions and regulatory options available to LCRCA, the process of shortlisting those options, and their anticipated outcomes on the aims and objectives set by the VfB.

To address the requirements of both the Green Book Guidance and Franchising Guidance, this Strategic Case is structured as follows:

- (a) Section 2 – Strategic context: LCRCA priorities
An overview of national, sub-national and local policy and strategy as applicable to transport in the LCR and, in particular, to the provision of bus services (points (a) and (b) above).
- (b) Section 3 – The role of bus and provision of bus services
Describes the vital importance of existing bus services connecting residents with employment and education opportunities, access to retail, leisure and health care and the role these services have in delivering the growth ambitions for the LCR, through increased productivity, reducing carbon emissions and enabling better access to opportunities (point (c) above).

(c) Section 4 – The case for change

Sets out the level of influence currently achieved by the public sector to achieve its objectives, against the funding provided to private operators and the network enhancements, fare and ticketing innovations and fleet replacement objectives of LCRCA's VfB (point (d) above, and the first key activity from the Franchising Guidance).

(d) Section 5 – Scheme objectives

Introduces the objectives which form the basis for option shortlisting within this Strategic Case, and for the more detailed assessment of shortlisted options – which is set out across this Assessment (part of point (e) above, and the second key activity from the Franchising Guidance).

(e) Section 6 – Delivery Options generation and refinement

Describes the regulatory options available to LCRCA to improve bus services, summarises how effectively the initiatives included in the VfB could be delivered under each Delivery Option, and identifies the shortlist of options which are considered in this Assessment (part of point (e) above, and the third key activity from the Franchising Guidance).

(f) Section 7 – Summary

Sets out the importance of bus to the LCR, the VfB that will support growth to the local economy, the limitations of the existing delivery model, the advantages of the tools offered by the Bus Services Act and the options shortlisted for assessment in this document.

The fourth activity from the Franchising Guidance (“detailed assessment of options”) is presented particularly within the Economic Case of this Assessment, but also within the other cases. The fifth and final activity (“selection of preferred option”) is set out within the closing summary Section.

1. *Geographic area considered in this Assessment*

This Assessment considers the case for regulatory reform to bus service delivery within the LCR, a combined authority area led by an elected Metro Mayor, which brings together six adjacent and closely connected local authorities in the north-west of England:

- Halton;
- Knowsley;
- Liverpool;
- Sefton;
- St Helens; and
- Wirral.

LCRCA came into being in 2014, comprising the five local authorities forming Merseyside with the addition of Halton, which had previously been separate. Along with other strategic policy areas, the six local authorities have responsibility for transport. This had been the case for Merseyside authorities before 2014 under the Merseyside Integrated Transport Authority and Merseyside Passenger Transport Executive known as Merseytravel. The previous separation of Halton can still be seen in some remaining differences from other parts of LCR, for example in public transport ticketing.

This assessment covers the entirety of the LCR, the largest possible extent for bus reform; in this it is consistent with the 2021 LCR Bus Service Improvement Plan (described later in this Strategic Case). The strong relationship between the LCR's urban centre is represented in a bus network which includes many connecting and cross-area services. Bus operators serve wide and overlapping areas from their depot locations. There are clear reasons for this Assessment to propose to make changes in bus regulation over this area.

2. Strategic context: LCRCA priorities

2.1. Introduction

National, sub-national and local policy and strategy set the framework for the direction and evolution of public services, including public transport. The policy context defines the objectives and principal drivers for change.

This Section sets out the policy context applicable to the LCR, transport and the provision of bus services, demonstrating how this context 'sets the scene' for bus reform.

It starts by setting out the overarching context for change in bus service provision. The devolution of transport decision-making and funding powers to the LCR as a result of the Liverpool City Region Devolution Deal, combined with the Bus Services Act mean that LCRCA is able to explore alternative bus service delivery options in order to ensure that buses play a significant and full part in supporting its wider economic, social and environmental objectives.

The Sections that follow provide further detail of LCRCA's wider economic, social and environmental objectives, highlighting the role that buses currently play in contributing to those objectives.

2.2. Devolution and the Bus Services Act: devolved powers for the LCR

The Liverpool City Region Devolution Deal (enacted from May 2017) and the Bus Services Act provided significantly enhanced decision-making and spending powers to local government. In the context of transport and bus reform, LCRCA now has far greater control over the transport agenda and the ability to propose the full range of alternative models of bus service delivery.

2.2.1. The Liverpool City Region Devolution Deal

The Liverpool City Region Devolution Deal was signed by the five LCR local authority leaders, the Mayor of Liverpool, the Chairman of LCR Local Enterprise Partnership and Government Ministers on 17 November 2015. Since May 2017, LCRCA and the elected 'Metro Mayor' have had greater control over areas such as transport, skills, research and innovation, business support, and spatial planning.

Under the terms of the Devolution Agreement¹, LCRCA has responsibility for a devolved and consolidated local transport budget, and:

- (a) the ability to franchise bus services in the city region, subject to necessary legislation (see Section that follows on the Bus Services Act) and local consultation; and
- (b) new powers for management and maintenance of a KRN² of local roads.

2.2.2. The Bus Services Act 2017

The Bus Services Act received Royal Assent in April 2017. The Bus Services Act permits LTAs to propose alternative bus service delivery options, including new partnership options and Franchising, with decision-making powers at the local level.

The combination of the Liverpool City Region Devolution Deal and the Bus Services Act therefore give LCRCA the opportunity to consider, and power to implement, models of bus service delivery that would better respond to the LCR's specific economic, social and environmental objectives.

2.2.3. Bus Back Better: national bus strategy for England

In March 2021, the DfT launched the National Bus Strategy *Bus Back Better*, setting out its long-term vision for bus provision in England. The strategy details what future bus services should look like to passengers, and the role LTAs and bus operators have, to improve those services.

The strategy recognises the benefits of greater cooperation between LTAs and bus operators, observed during the COVID-19 pandemic, and the benefits of better, coordinated and cheaper bus fares of the model used in London.

Overall, the strategy stipulates greater involvement of LTAs in specifying and improving bus provision and notes that

1 Liverpool City Region Devolution Agreement, HM Treasury and Liverpool City Region, 2015.

2 The Key Route Network (KRN) is a network of strategically important local roads which is managed and maintained by the Combined Authority through a single asset management plan. See also 2.2.3 and 3.4.

Government funding will be made available for LTAs to deliver improvements set out in BSIPs, as described below. Within the strategy, the Government states an intention to consult on strengthening the KRN approach. A KRN covers a collection of locally important strategic routes intended to integrate highways across a city region, largely cutting across multiple local authority boundaries. This allows for roads to be managed in a strategic way to improve traffic flow, reduce congestion, introduce bus priority, or cycle infrastructure across a city region. The consultation could result in Mayoral Combined Authorities having increased powers over their KRN, for instance in the allocation of road space and new infrastructure. Further detail about the LCR KRN is in Section 3.4.

Bus Back Better expects ambitious KRN bus priority programmes and other road space reallocation measures. It states an intention to increase mayoral powers over KRN, similar to the powers that apply already in London, that would enable integrated highways and transport authority status at Combined Authority level for these roads. Expectation of plans for bus lanes on high frequency routes as part of a corridor approach is also included in the BSIP Guidance to local authorities' document. This is seen as a key measure to make buses an alternative option to car and incentivise more people to change modes by increasing reliability and reducing journey times.

To access these funds, LTAs were required to do two things:

- Produce a BSIP by November 2021³; this was to set out whether current services meet the expectations of the Bus Back Better strategy; and
- Make an EP (one of the regulatory options described in Section 6.2 of this Assessment) for the same area as the BSIP by 1 April 2022⁴ (except Mayoral Combined Authorities which have started the statutory process of Franchising bus services, such as LCRCA).

Whilst the strategy does not prescribe the most appropriate regulatory option to be taken by LTAs, it notes that:

- I EP offers more flexibility than Franchising; and
- II Franchising can be an effective way of correcting a market failure and the Government supports its use where it is in the best interests of passengers and where it would not needlessly delay the provision of better services.

3 See Section 2.5.5.

4 In January 2022 DfT extended the deadline for making an Enhanced Partnership, instead requesting a draft Plan and Scheme by the end of April 2022.

2.2.4. Gear Change: a bold vision for cycling and walking

The DfT's vision for cycling and walking, *Gear Change*, complements *Bus Back Better* in that the emphasis is on the need for bold change to achieve the Government's net zero goals by 2050. *Gear Change* highlights that cycling, walking and using the bus are all part of the Government's agenda to deliver a transport system that works for everyone, regardless of their needs. It emphasises the need to give meaningful space to pedestrians and cyclists, as well as buses, through prioritisation over other vehicles.

The Liverpool City Region Local Cycling and Walking Infrastructure Plan⁵ sets out a network of up to 600 km of cycling and walking routes to be delivered across three phases, the majority of the corridors also being bus routes. It can be expected that significant walking and cycling improvements will be implemented on bus corridors as a result of these national and local policies.

2.3. A vision for growth

The LCR has a large and growing economy, worth £32.8 billion GVA in 2019 and with output increasing by 3% in the five years up to 2019⁶. It has the second highest incidence of high-growth firms in the country, second only to London, and the LCR is internationally renowned for its rich physical environment and heritage buildings, as well as for its internationally renowned waterfront.

However, the LCR faces many significant economic and social challenges; it underperforms on various metrics and indicators on which "*it still compares unfavourably with many city regions in the UK and beyond*"⁷. The long-standing socio-economic challenges, which limit the LCR's economic performance and competitiveness, are summarised here in Table 1.1.

5 LCR-LCWIP-Final-1.pdf (liverpoolcityregion-ca.gov.uk).

6 Regional gross value added (balanced) by industry: city and enterprise regions, ONS, 2021.

7 The State of Liverpool City Region Report: Making the Most of Devolution, University of Liverpool and Liverpool John Moore's University (2015).

Table 1.1: LCR's socio-economic challenges

Socio-economic challenge	Evidence
Wealth gap	Per head of population, the LCR economy produces around £21,500 of GVA. This compares to around £29,000 nationally, representing a 25% shortfall. Over the last five years with data available (2015 to 2020), GVA per head has only grown by 8% in the LCR compared to 10% nationally. The LCR's lower GVA per head is partly driven by its lower than average productivity (see below).
Business gap	The LCR has low business birth and survival rates, a relatively small stock of businesses, coupled with an over-dependence on public sector jobs. Output gaps reflect the relatively low density of jobs and businesses in the LCR, with the sixth lowest employment density and fourth lowest business density out of all LEAs. The number of businesses per 100 working age residents in the LCR is 5.4 compared to 7.9 per 100 working age residents nationally.
Jobs gap	Following a continuous fall in unemployment between 2010 – 2018, in 2019, the LCR's unemployment rate increased to 4.2% and in 2021 the unemployment rate was 4.6%. Though other Combined Authority areas also experienced an increase, the LCR had one of the lowest employment rates among them (73.6%, compared to the national average 74.9%). 37% of neighbourhoods fall in the top 10% of most employment deprived neighbourhoods nationally. As of 2019, the LCR's economic inactivity rate of 24.3% was one of the highest rates in the country. However, this decreased to 22.9% in 2021 and, by 2045, it is expected to come down to roughly national and regional averages at 11%. This represents a decrease in the number economically inactive of around 105,000.

Socio-economic challenge	Evidence
Worklessness	Levels of long-term (31.7%) and temporary sick (4.8%) are higher than the respective national averages – 25.5% and 2.2%. Though not the worst performing amongst Combined Authorities, there is a high work claimant rate (4.6% in the LCR against 3.7% nationally) and high proportions of workless households (17.4% in the LCR, 14% nationally).
Productivity gap	In 2020, productivity in the LCR, measured as GVA per hour worked, was £35.30 per hour, 12% below than the GB national average (around £40 per hour). Growth is low since 2009, with the LCR's productivity increasing by 9% against a 20% national increase.
Skills gap	The skills gap has reduced over recent years. Since 2014, the number of working age residents with the highest-level qualifications has increased by 12 percentage points to 39.4% (compared with the GB national average of 43.6%). However, 7.9% still lack any formal qualifications (compared with the GB average of 6.6%).
Spatially concentrated deprivation	The LCR is home to some of the country's most disadvantaged neighbourhoods. Almost half of its neighbourhoods are in the top 20% most deprived nationally, while around a third are in the top 10% most deprived. There is a particular concentration of deprivation running from east Wirral, through north Liverpool and south Sefton, to north Knowsley. Liverpool and Knowsley are among the most deprived local authorities nationally (ranked 4th and 3rd worst respectively in 2019). Deprivation is linked to poor health outcomes – almost half of the LCR neighbourhoods are within the top 10% most health deprived within England. Within most areas of the LCR healthy life expectancy is below the national average and is particularly low within areas impacted by high levels of deprivation.

The COVID-19 pandemic has exacerbated the socio-economic challenges highlighted above, though its long-term impacts remain relatively uncertain, the UK is now in the recovery stage from the pandemic. The LCRCA “Building Back Better: Our Economic Recovery Plan” (described in further detail below) notes some of the key impacts of the COVID-19 pandemic on the LCR:

- Most businesses experienced a decrease in revenue due to the pandemic which has led to unemployment. A high proportion of the LCR workforce is in sectors most affected by the pandemic: the visitor and cultural economy and large manufacturing base were particularly affected by the first lockdown in 2020. Sectors in LCR which employ a notably higher proportion of the workforce compared to the national average include Public Administration and Defence; Compulsory Social Security, Human Health and Social Work Activities and Arts, Entertainment and Recreation⁸.
- COVID-19 exposed health inequalities in the LCR which already had poor health outcomes prior to the pandemic, inhibiting the number of people able to work. The communities with high prevalence of long-term health conditions are most at risk from long-term complications from COVID-19 – the health and economic impacts of COVID-19 risk widening inequalities and further entrenching deprivation in communities.
- The pandemic has had a proportionally higher impact on deprived areas such as the LCR (almost one third of all Lower Layer Super Output Areas in the LCR are in the most deprived decile nationally). Low income households have less financial security, are more exposed to risk of job losses, as well as suffering from poorer health and are very often where housing quality is poorest and fuel poverty greatest.
- In addition, the LCR's Plan for Prosperity is a long-term innovative economic and place-based strategy which sets priorities until 2035. It sets the strategic direction for the region on a number of items in the post-COVID era – transport being a key element of this. Further detail on the Plan for Prosperity is set out in Section 2.3.1 below.

A stronger, higher performing and more competitive LCR economy is needed to deliver improved prosperity and quality of life, and to address the long-standing and persistent socio-economic challenges that the LCR continues to face, which have been exacerbated by the COVID-19 pandemic. As the LCR moves into the post-COVID era, a more efficient and improved bus service across the areas will be a key element of the LCR addressing the issues relating to access to jobs, education and services and in achieving its strategic vision to be a fairer, stronger and cleaner city region.

2.3.1. Plan for Prosperity

The draft Plan for Prosperity, prepared by LCRCA is a long-term economic and place-based vision over the next decade and beyond. The plan will help the LCR respond to the changing policy and economic environment, provide a long-term strategic narrative and act as a point of orientation for policies and strategies.

8 Source: ONS Business Register and Employment Survey, Liverpool City Region Labour Market Profile 2020.

The draft Plan for Prosperity sets out a new approach to growing the economy which proactively builds the wealth of the LCR's communities and supports good businesses to innovate, grow, and flourish; promotes the health and wellbeing of people, communities, and the natural environment; and disrupts and dismantles the structural inequalities that have unjustly impacted the lives of too many residents.

Consistent with the LCRCA Corporate Plan, the draft plan expands on the distinctive components for each of key messages of the Metro Mayor manifesto, for a Fairer City Region, a Cleaner City Region and a Stronger City Region.

The draft Plan for Prosperity includes an objective relating to *"Integrated Infrastructure for a Connected City Region"* to "adopt a fully strategic approach to infrastructure that delivers clean, sustainable growth and shared prosperity for all our communities and businesses". An overarching strategic, integrated approach across transport, energy, digital, and grey infrastructure aims to achieve a modern, low carbon infrastructure system. This will involve challenging some historic assumptions and conventions about how the LCR plans for movement.

Local bus transformation is a key element of the Plan for Prosperity's intentions to *"strengthen and improve the City Region's public transport services and networks that support modal shift and serve our economic ambitions"*, highlighting the role of the BSIP in setting out actions to achieve this transformation in line with available funding. To achieve the aim of being a fully connected city region, the plan sets out objectives for new rail rolling stock and addressing rail capacity constraints, supporting walking and cycling across the LCR (by implementing the LCWIP), securing Northern Powerhouse Rail and supporting the clean growth of freight and logistics.

The publication of the Integrated Rail Plan in November 2021 presented downgrades to the initial plans for Northern Powerhouse Rail. Despite these changes, the Plan for Prosperity still intends for LCRCA to meet the principles of extra train capacity, optimised journey times and minimal disruption from line upgrades.

By delivering the plan, LCRCA is aiming for the LCR to be a fully connected city region by 2035, where all people, businesses and communities have access to the opportunities that the LCR economy offers. The LCR's infrastructure will be clean, sustainable, and accessible, supporting climate change adaptation and mitigation. This will be evident from achieving successful modal shift: where transport reform has resulted in a sustainable and affordable "London-style" system that means

levels of walking and cycling, rail, bus, and ferry patronage are the primary modes for journeys (targets for this will be set out in the next LTP).

2.3.2. Spatial Development Strategy

The first LCR Spatial Development Strategy (“SDS”) will be a statutory planning document setting out a strategic framework for the development and use of land looking ahead at least 15 years. It will form part of the ‘development plan’ for the LCR constituent local authorities alongside their own Local Plans and Neighbourhood Plans. The SDS will be a planning framework for the LCR that shapes new development and growth, guiding the plans of the constituent LAs and will be an important consideration in determination of planning applications. It applies only to new developments.

The SDS should positively influence bus demand and usage by prioritising development in locations where walking, cycling and public transport usage are attractive and viable. Development proposals will be expected to be allocated and designed around the principle of the 15-minute neighbourhood, where LCR residents are able to access a wide range of key services and facilities within a 15-minute walk or cycle ride of their residence, or else conveniently by public transport.

Engagement with public and stakeholders has been undertaken to inform the development of the plan, ahead of a public consultation in summer 2022, statutory consultation spring 2023, with the plan scheduled for Examination in Public in autumn 2023 before publication in 2024.

2.3.3. Relevant economic plans/industrial strategies of neighbouring authorities

Given the existence of 40 cross boundary bus routes and a high level of economic interaction between the LCR and neighbouring authorities, the policy context in LCRCA’s neighbouring authorities is relevant to this Strategic Case. In a wider geographical context, The Mersey Dee Alliance, at the North Wales and North West England border region, has facilitated a close functional relationship between the LCR and neighbouring authorities, such as Cheshire West and North East Wales. LCRCA neighbours, and is served by, bus services from Greater Manchester (where Greater Manchester Combined Authority sets economic and transport policies), Cheshire (Cheshire West and Chester Council), Lancashire (Lancashire County Council) and Warrington (Warrington Borough Council). The economic and industrial strategies of these authorities will be impacted to some degree by bus reform in LCRCA. The key strategies of each authority are provided in the table below.

Table 1.1A Key strategies of each Neighbouring Authority

Socio-economic challenge	Evidence
Greater Manchester Combined Authority	The 'Local Industrial Strategy (2019)' sets out support to improve the transport system through bus reform across the region including improving bus service quality, reliability and mode integration. Greater Manchester Combined Authority is in the process of implementing a Franchising scheme.
Cheshire West and Cheshire Council	The 'Stronger Futures: A four-year plan for recovery and renewal following COVID-19 (2020-24)' sets out the ambition to improve bus services for users. A forthcoming Industrial Strategy joint with Warrington Borough Council is being developed. Collaboration with bus operators to develop an Enhanced Partnership agreement is still ongoing.
Lancashire County Council	Lancashire County Council is currently developing a Local Industrial Strategy. The published evidence base discusses the low use of bus services and the ambition to improve this. An Enhanced Partnership was agreed and passed objection period in February 2022.
Warrington Borough Council	An Enhanced Partnership was agreed and passed objection period in February 2022. A forthcoming Industrial Strategy joint with Cheshire West and Cheshire Council is being developed, with an updated delivery plan for 2022/23. Warrington have an effective Enhanced Partnership Plan and Scheme since July 2022.

Being based in the same national policy context, there is considerable overlap and complementarity between LCRCA plans and vision for growth in its economy and equivalents for its neighbouring authorities. To that extent, bus reform proposals which contribute to the implementation of LCRCA policy are also likely to support its neighbours in the same.

2.4. Clean growth: net zero and improved air quality

2.4.1. Net zero and the Climate Action Plan

In June 2019 the Government announced a target to bring all greenhouse gas emissions to net zero by 2050, compared to

the previous target of at least 80% reduction from 1990 levels. LCRCA has set an ambitious target to become net zero by 2040, and in May 2019 declared a climate emergency.

The Department for Transport's 'Decarbonising Transport' published in 2021 re-emphasises the need to reform and reshape the role of buses in UK cities, with a focus on reaching net zero. The plan highlights the need to accelerate bus reform to ensure the UK, and particularly cities, do not fall into a car-based recovery. The plan highlights road traffic was growing in cities ahead of the pandemic and as cities move into the post-COVID era, solutions to stop a car-led recovery must be accelerated. Key to plans for bus are an increase in zero emission buses in the fleet, and Government expects the cost savings from such buses to be reinvested in more frequent services, lower fares and other improvements.

In 2018, the LCR produced almost 7,000 kilotonnes (kt) of CO₂; a reduction of approximately 4,500 kt CO₂ (40%) since 2005⁹. The sectoral split shows that carbon emissions have fallen in the industrial and commercial and domestic sectors but there would appear to be no tangible improvement in transport emissions, including in the broadly 67% of the CO₂ from cars (as per LCRCA's Transport Decarbonisation Pathway).

'Clean growth' was one of four strategic priorities for the LIS, and LCRCA's Transport Plan includes delivering a transport system which is "*green and healthy*" as part of its VfB, as well as having a strategic objective to develop a system which addresses poor air quality and supports progress towards the net zero target.

LCRCA developed a Climate Action Plan to detail the action that needs to be taken and the required pace of change to achieve net zero carbon emissions in the LCR by 2040. The "*Year One Climate Action Plan for 2021/22*" published by LCRCA, sets the foundation for LCRCA to meet its climate goal. This has been built upon in the "*Pathway to Net Zero*" document, which sets out the scale of challenges and a long-term strategic vision as to how to achieve LCR's net zero target. The role of LCR's transport system, including its buses, in delivering the Climate Action Plan will be significant.

The planned action in respect of public transport and buses includes greening the bus fleet (including a trial of hydrogen buses, as above); encouraging and supporting public transport use as an alternative to the private car for longer distance trips; and making public transport trips more efficient

9 The "Year One Climate Action Plan for 2021/22" published by LCRCA.

by giving buses greater priority. The transport actions include actions delivered through other strategies mentioned elsewhere in the document.

These measures are vital to LCRCA reaching its net zero goal by 2040 – a decade ahead of the goal set by Government.

Transport for the North's ("TfN") Decarbonisation Strategy outlines a regional commitment to a near-zero carbon surface transport network by 2045. The strategy estimates future emissions based on Future Travel Scenarios and establishes the necessary trajectories to reach net zero within carbon budgets via Decarbonisation Pathways. Policy measures for individual authorities have been identified to achieve TfN's Decarbonisation Trajectory.

The strategy shows that in three out of four scenarios there will be increased demand for bus, despite increases in active travel and varying levels of home working. The strategy shows that under current assumed plans and policies, net zero will not be reached and that local areas will need to look at additional policies, including encouraging modal shift, improving the quality of public transport, and reducing fares.

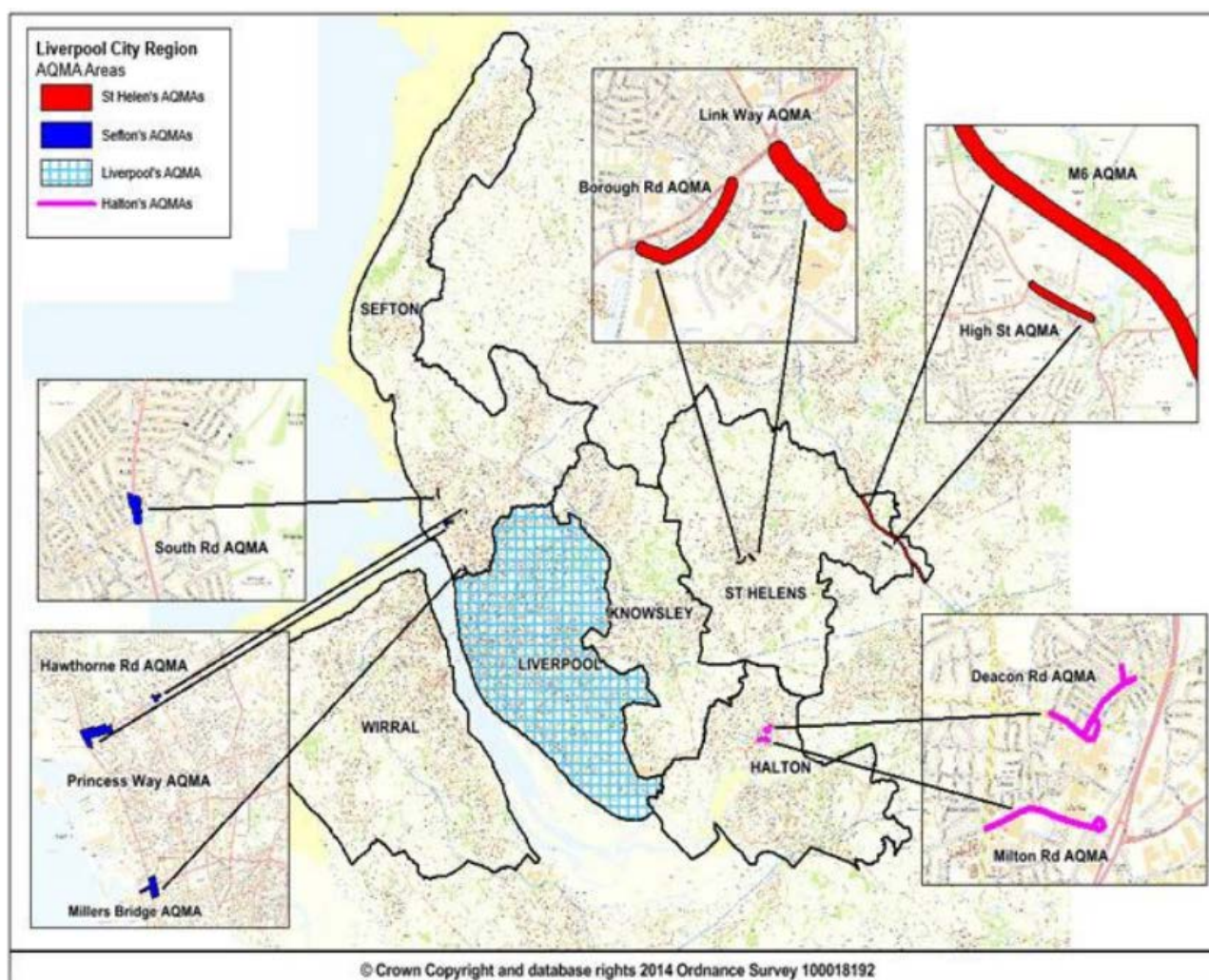
Air Quality Management Areas

Poor air quality is managed through AQMA, identified areas in which the air quality is poor and national air quality objectives are not being met. Local Authorities with one or more AQMA must have an action plan for achieving compliance with the national air quality objectives.

In 2009 the whole of the City of Liverpool was designated as an AQMA. Halton, Sefton and St Helens also have AQMAs – typically these cover a small area such as a town centre or high street, or a specific junction.

The AQMA action plans for the City of Liverpool, Halton, Sefton and St Helens pre-date LCRCA's Initial Air Quality Action Plan, but contain similar actions, namely actions to green the bus fleet, supporting mode shift from private car to public transport, and improving the efficiency of bus journeys within and through the AQMA. The locations of LCRCA's AQMA are shown in Figure 1.1.

Figure 1.1: Air Quality Management Areas in the LCR



Building Back Better – Improving our Air Quality

The COVID-19 pandemic has highlighted the vulnerability of people and the economy to health and environmental factors. It has highlighted the link between the effects of poor air quality on people's health, particularly susceptibility to cardiovascular and respiratory conditions¹⁰. Both of which can mean people are more vulnerable to severe symptoms of COVID-19. The links between poor air quality and its effect on people's health during the pandemic has reaffirmed the importance of the measures set out in the Air Quality Action Plan and the urgency to tackle poor air quality and address its harm to health¹¹. Typically, areas of high social deprivation suffer more disproportionately from poor air quality leading

¹⁰ Office for National Statistics: Does exposure to air pollution increase the risk of dying from the coronavirus (COVID-19)?, August 2020.

¹¹ Building Back Better – Improving our Air Quality, LCRCA, 2020.

to higher levels of those suffering with respiratory and cardiovascular diseases¹² which can also have an adverse effect on the severity of COVID-19 symptoms.

The “*LCR Building Back Better – Improving our Air Quality*”¹³ plan supports and supplements the “*Economic Recovery Plan: Building Back Better*”. The plan aims to support the constituent Local Authorities in their mandate to reduce harmful atmospheric emissions to within statutory levels in the shortest possible time, and preferably, to better and exceed these minimum target standards. This is in tandem to achieving the net zero carbon target by 2040. The plan lists transport policies and interventions as short-term actions that will have beneficial impact on air quality: walking and cycling upgrades through the LCWIP programme, behaviour change campaigns to encourage use of alternative travel modes to the car, and promoting clean fuels and technologies. Longer term actions include improved urban traffic control systems, vehicle scrappage and incentives to use clean vehicles.

The need to rapidly improve air quality in the LCR is clear and a range of measures are all needed to improve the situation. Amongst those are the need to reduce harmful emissions from the bus fleet.

2.4.2. Clean Air Zones

Many cities across the UK have been mandated by Government to produce a Clean Air Plan (“CAP”) to bring air quality within the prescribed limits within the shortest possible time. These mandates include a requirement to investigate Clean Air Zone (“CAZ”) options.

The Department for Environment, Farming and Rural Affairs (“DEFRA”) has mandated that actions be taken in the shortest possible timeframe; this is understood to be by the end of the 2022/23 financial year (subject to DEFRA agreement of a Final Business Case developed by Liverpool City Council (LCC) regarding the CAZ).

In its Climate Action Plan outlined above, LCRCA committed to completing the outline business case for CAP, including for the consideration of a charging city centre CAZ. Implementation of a CAZ may boost bus use as the cost of using other motorised modes to access the city centre would increase. Liverpool City

12 Towards a Green Future for Liverpool City Region (2019) [https://www.liverpool.ac.uk/media/livacuk/publicpolicyandpractice/reports/Towards,a,Cleaner,and,Greener,City,\(Long,Version\).pdf](https://www.liverpool.ac.uk/media/livacuk/publicpolicyandpractice/reports/Towards,a,Cleaner,and,Greener,City,(Long,Version).pdf).

13 Microsoft Word - LCRCA AIR QUALITY ACTION PLAN 2020.docx (liverpoolcityregion-ca.gov.uk).

Council was mandated to develop a CAZ, for which there are several potential different classes, which vary according to the type of vehicles that would be subject to CAZ restrictions or charges. Implementation of a “Class D” zone around the city would include private cars thus providing a degree of traffic restraint and a fiscal incentive to shift from car to bus. Sefton Council is also considering options around how to improve air quality within the borough. The shortlist of options explored by Liverpool City Council included¹⁴, with relevance to buses:

- (a) Charging buses, coaches, taxis and private hire vehicles (and potentially HGVs, LGVs and private cars in addition) that do not meet the required Euro standards for the vehicle type to enter a CAZ (boundary to be defined);
- (b) Increased parkway (Park and Ride) provision for rail and bus services;
- (c) Incentivising the accelerated roll-out of electric buses; and
- (d) Improving public transport accessibility to Liverpool City Centre (with a focus on bus in the short-term).

In July 2022 LCC elected not to introduce a CAZ, on grounds that its modelling showed that none of the options it examined would address all of the forecast exceedances. It also concluded, partly informed by experience in Greater Manchester, that by the earliest time it was likely that a CAZ could be introduced (2025) Liverpool would only have one remaining exceedance – which wouldn’t be solved by a CAZ in any case.

A number of non-CAZ measures are being developed by LCC to bring air quality levels within the legal limits, including addressing bus fleet emissions, and to significantly improve air quality and avoid Liverpool from exceeding dangerous air quality levels.

2.4.3. Net Zero and Clean Air Quality plans of neighbouring authorities

LCRCA’s neighbouring authorities have also all declared climate emergencies within the past three years, and all have air quality action plans (or equivalent) and current AQMA. All have commitments to become carbon neutral (see table below).

14 Liverpool City Council Clean Air Plan Strategic Outline Case, AECOM, 2019.

Table 1.1B Carbon Neutral Dates

Neighbouring Authorities	Carbon Neutral date
Greater Manchester Combined Authority	Carbon Neutral by 2038
Cheshire West and Cheshire Council	Carbon Neutral by 2045
Lancashire County Council	Carbon Neutral by 2030
Warrington Borough Council	Carbon Neutral by 2030

LCRCA's neighbouring authorities have also all declared climate emergencies within the past three years, and all have air quality action plans (or equivalent) and current AQMA. All have commitments to become carbon neutral (see table below).

Neighbouring authority proposals for Clean Air Zones would potentially affect and be supported by improving emissions standards of bus services operating between those areas and the LCR. Chester and Cheshire West Council and Warrington Borough Council both intend to explore a CAZ as set out in their Transport Strategies. Lancashire has no published CAZ plans.

Being based in the same national policy context, there is considerable overlap and complementarity between LCRCA plans and policies to achieve net zero and clean air, and those of its neighbouring authorities. To that extent, bus reform proposals which contribute to the implementation of LCRCA policy are also likely to support its neighbours in the same.

2.5. LCR strategic transport priorities

LCRCA is responsible for delivering the transport agenda for the LCR which it sets out in the Transport Plan, Bus Strategy and VfB, summarised below.

2.5.1. LCRCA Transport Plan

LCRCA's current Transport Plan is a statement of current priorities for transport, building on the two statutory Local Transport Plans for Merseyside and Halton from 2011, and a move towards a new statutory transport plan for the LCR.

The core vision for the LCR's transport system is one which:

- (a) is comprehensive, affordable and reliable;
- (b) is integrated and easy to use;

- (c) supports the development of new and existing communities; and
- (d) is green and healthy.

“The Liverpool City Region is a growing economy, with a 5% growth rate in 2018 tracking above the national average. But we still face challenges relating to workforce productivity, labour market inactivity and attracting investment. Good quality transport networks, both within the region and beyond it, can help support a sustainable growth pattern which benefits our people and businesses”¹⁵.

The transport plan sets five strategic objectives for the transport system:

- (a) **To support inclusive economic growth across a thriving city region**, by developing a transport network that effectively and efficiently connects people, freight, businesses and visitors, and in a way that is fully integrated with wider policy objectives;
- (b) **To exploit the city region’s role as a global gateway** that is served by all forms of transport that supports the Northern Powerhouse and Transport for the North’s aims to rebalance the UK’s economy, through economic agglomeration and decongestion benefits;
- (c) To deliver the objectives above through **a new mobility culture, where transport services are modern, safe, clean, healthy and inclusive**. This has a focus on boosting healthy forms of travel for short trips and where the public transport networks are the modes of choice;
- (d) **To develop a mobility system that enhances the health and wellbeing of LCR citizens**. This will include the development of a liveable and resilient LCR that addresses the challenges of poor air quality and supports the move to a net zero carbon LCR by 2040; and
- (e) **To secure a transport network that is well maintained, safe and resilient**.

The Transport Plan recognises the important role that the LCR’s bus networks have in the overall transport mix and the critical role they have in the public transport network; buses are the “backbone” of the LCR’s public transport network, with around 80% of public transport journeys made by bus, pre-COVID. Two of the priority actions under strategic objective three (to deliver a new mobility culture, where transport services are modern, safe, clean, healthy and inclusive), are focused on the LCR’s bus networks:

15 Liverpool City Region Combined Authority Transport Plan, 2019.

- (a) **Priority action 3.1: Delivering growth in bus quality and patronage.** To use available funding sources, including the Transforming Cities Fund, to progress the collective approach to an enhanced local bus offer and accelerate the delivery of infrastructure requirements, improved vehicle standards and better journey times, reliability and overall competitiveness; and
- (b) **Priority action 3.2: Testing devolved bus powers.** To consider the opportunities set out within the Liverpool City Region Devolution Deal and Bus Services Act related to new forms of ownership and control of local bus services.

Strategic objective 4 is to develop a mobility system that enhances the health and wellbeing of LCR citizens. The priorities are to decarbonise the motorised transport network; tackle poor air quality; and to create high quality places where people walk, cycle and use public transport. In the context of LCR's public transport network, priority action 4.1 is particularly relevant:

- (a) **Priority action 4.1: Promoting clean alternatives to fossil fuels.** LCRCA will commission the development of options for 'greening' the transport system, including but not limited to, a comprehensive electric vehicle charging network, further rollout of a hydrogen powered bus network, and options to minimise the impact of the freight and logistics sector through innovative 'last mile' solutions.

2.5.2. LCR Local Transport Plan 4

The next statutory LTP (LTP 4, or the fourth iteration of the plan) is at its first stage of development: agreeing and engaging stakeholders on a draft vision for transport. The LTP will set out a vision, policies, a delivery programme and metrics to gauge success and overall performance in the delivery of its objectives. The LCRCA LTP will replace two outdated LTPs in the LCR: the Merseyside LTP 3 developed by Merseytravel for the Integrated Transport Authority, and a separate, but aligned plan for Halton prior to the formation of the Combined Authority. The plans contained long-term strategies extending to 2026 and short term, 5-year delivery plans. LTP will set out a plan to 2040 and will also supersede the non-statutory Combined Authority Transport Plan described in Section 2.5.1 above that was developed as a bridge between the statutory plans and more recent priorities.

The emerging high-level vision is *"to plan for, and deliver a clean, safe, resilient, accessible and inclusive 'London-standard transport system for the movement of people, goods and freight in a way*

that delivers our economic, social and environmental ambitions, and in particular, a net zero carbon emitting city region by 2040”

The draft goals are:

- (a) Goal 1: Ensure that transport supports post-pandemic recovery, sustainable growth and development, and that the transport plan, Plan for Prosperity, Climate Action Plan and Spatial Development Strategy are fully aligned;
- (b) Goal 2: Achieve net-zero carbon emissions by 2040 whilst safeguarding and enhancing our environment;
- (c) Goal 3: Improving health and quality of life through transport – safer, more attractive streets and places used by zero emission transport;
- (d) Goal 4: Ensuring that the transport network and assets are resilient, responsive to the effects of climate change, and are well maintained;
- (e) Goal 5: Ensuring that we respond to uncertainty and change but also innovation and new technologies; and

This vision and emerging goals will be subject to public consultation during 2022.

2.5.3. The LCRCA Vision for Bus (VfB)

The ‘Big Bus Debate’, launched by the Metro Mayor in October 2018, sought the views of the people of the LCR on bus services. Details of the research and engagement exercise findings are described later in this document¹⁶.

Following this engagement, a VfB was developed and adopted by LCRCA in July 2019¹⁷. Its intention is to tackle the issues identified by customers, further support the aims of the Bus Strategy, capture new innovations and technology in the sector and the region, and better recognise the important role of bus services in improving air quality through greener buses and encouraging modal shift from car. The VfB has three key themes:

- (a) Network design (hours of operation, service frequencies, network coverage and integration);
- (b) Punctuality and reliability of bus services; and
- (c) Ticketing and the cost of travel.

The VfB aligns closely with the (subsequent) national Bus Back Better strategy as shown in Table 1.2:

¹⁶ See Table 1.7.

¹⁷ <http://moderngov.merseytravel.uk.net/ieListDocuments.aspx?CId=364&MId=4198>.

Table 1.2: Alignment of LCR VfB with DfT Bus Back Better Strategy

Theme	Vision for Bus	Bus Back Better	Alignment
Hours of operation	Services running across the network between 05:00 and 00:00, and on core bus corridors 24 hours a day	More services should operate in the evenings, weekends, and at night	✓
Service frequency	A service frequency principle adopted, setting out improvements in bus frequency in the early morning, evening and weekend, and setting a minimum frequency of one bus per hour on all routes between 05:00 and 00:00	In urban areas, “turn up and go” services where passengers do not need a timetable	✓
Fares	A city-region wide fare zone(s); A framework for ticketing; Availability of “short-hop” and “hoppa” tickets; Account-based contactless, mobile and smart ticketing and the removal of cash as far as possible in order to speed up boarding times; Availability of good value multi-Operator and multi-modal tickets; Fare capping; Bus fares rises pegged to inflation; The retention of the enhanced concessionary travel scheme	More low, flat fares in towns and cities, lower point-to-point fares elsewhere, and more daily price capping everywhere	✓
Branding	One brand for the LCR bus network, linked to a wider transport brand and identity	Local branding that reflects the community and not the operator should be adopted	✓
Vehicles	Phasing in of zero/ultra-low emission buses including ultra-low emission Euro 6, electric and hydrogen powered buses	Local branding that reflects the community and not the operator should be adopted	✓

2.5.4. Liverpool City Region Bus Service Improvement Plan (BSIP)

The LCR BSIP was published in October 2021¹⁸, setting out the investment plans to improve the bus service for the LCR. The plan is aligned to the VfB and Bus Back Better, focusing on improving services to be more frequent, reliable, affordable, and easy to use. The BSIP covers the period 2022 – 2025 and will include annual reviews and measure the progress against the objectives and target every six months.

The BSIP sets out five priorities that will help to meet the VfB as well as the objectives set out on Bus Back Better. The measures are aimed to deliver changes that will increase patronage by making bus travel more accessible and attractive to users. The five priorities are as follow:

- **Quick and reliable bus journeys** – scaling up and delivery of the first five Green Bus Routes as well as the proposal to introduce a bus rapid transit system for the region. Green routes will comprise priority lanes, junction upgrades to give bus priority, reviews of parking and loading restrictions, traffic signals that will give buses priority, transport and mobility hubs, bus stop and shelter upgrades, bus stop build outs to improve accessibility and high quality, digital, real-time passenger information. BRT will initially comprise two routes, at Wirral's Left Bank area and Liverpool's Knowledge Quarter (KQ Liverpool). Features of a BRT system for the LCR would be dedicated bus infrastructure, junction and signal priority measures, along most or all of the route, enabling highly reliable journeys which also benefit existing routes, industry-leading zero emission buses, full integration with the LCR's transport network and high-quality stops and passenger information.
- **A comprehensive and integrated bus network** – by improving the network's frequencies and greater off-peak provision of services as well as the network and infrastructure integration in Halton as part of the region's transport system. To increase service levels in line with the LCR's network design principles, a 39% increase in bus provision is required in Halton – 27 additional buses as well as one-off investments in stop infrastructure and upgrades. To enhance the bus network across LCR, the BSIP includes a framework with six defining categories relating to the type of service provided. Minimum levels of service are set out for each service category. Those categories of bus service are:

18 https://www.liverpoolcityregion-ca.gov.uk/wp-content/uploads/LCR_BSIP_2021.pdf.

- Arterial (Core 1): Highest frequency routes and 24-hour service;
 - Arterial (Core 2): High frequency routes;
 - Orbital (Core 2): Cross city/town routes offering high level of connections;
 - Feeder (Core 3): Local frequency routes connecting to other routes and transport hubs;
 - Express: Limited stop services offering quicker and more direct journey times, particularly where the rail network is not an option; and
 - School: Single journeys providing links where journeys on the general network are not possible or additional capacity is required.
- **Straight forward ticketing and great value fares** – with affordable fares, supporting better value and multi-Operator daily, weekly, and monthly tickets and delivering contactless ticketing with fare caps. The LCR's existing multi-modal ticketing scheme provides the framework for an approach focused on single bus fares and multi-Operator daily, weekly, and monthly tickets valid across all buses; and off-peak daily, weekly and monthly tickets available across all bus, rail and ferry services. An initial period of three years will allow for the impact of more affordable tickets to be assessed and to act as a catalyst for a return to public transport and of modal shift. The tap and go experience will mean that passengers will tap their contactless payment card, smartphone or smartwatch when they start their bus journey with a daily or weekly capping system.
 - **An excellent passenger experience** – working with local operators and consulting with passengers and stakeholders LCRCA will establish the region's first Bus Passenger Charter ("BPC"). The BPC will set out how to use bus services and what passengers can expect from bus operators delivering local bus services across the LCR. Based on the branding principles of the MetroCard roll out, the goal is to support the introduction of MetroBus branding across the bus network as part of a clear, local identity for the transport network.
 - **An emission-free bus system** – scaling up the deployment of zero emission buses by building on the HyBus Pilot. The BSIP includes proposals to introduce zero-emission buses in addition to the 12 electric buses already delivered in partnership with Arriva and 20

higher-powered buses in addition to the buses already committed through The HyBus Pilot. BSIP also outlines plans for a 50-bus zero emission conversion project and ongoing fleet replacement programmes.

The BSIP includes various aspirational targets¹⁹, with core targets summarised in Table 1.3.

Table 1.3: Summary of core BSIP targets

Target	2019/20	2024/25	2029/30
On time performance (network)	84%	85%	95%
Fare paying patronage (indexed)	100	105	150
Average passenger satisfaction	92%	92%	92%
% of fleet zero emission	1%	17%	70% (100% in 2035)

In April 2022, the Government announced the allocation of BSIP funding to Local Authorities. The LCR received £12.3m of revenue funding, which was allocated by LCRCA to set the single adult fare at £2 across the region.

As described in LCR's BSIP proposal from October 2021, the ambitions set out to achieve the growth and sustainability plans in the region require funding to deliver the initiatives in the priority areas described above in this Section.

The Assessment, in line with the guidance, identifies how each of the delivery models can help deliver the initiatives set out in the VfB and BSIP across these priority areas, acknowledging that these would require funding which would need to be identified to deliver them.

2.5.5. LCR Sustainable Transport Settlement

The LCR Sustainable Transport Settlement includes investment in measures that will improve bus journeys in the region through introduction of Green Bus Corridors and wider bus priority and infrastructure measures on key corridors.

¹⁹ These targets were set independently from the demand forecasting which informs this Assessment.

There will be benefits to bus services from region-wide investment in the KRN and local road maintenance aligned geographically to the CRSTS investment in bus and active travel, that will deliver safety, reliability and journey quality improvements for all road users.

The package includes 20 new hydrogen buses and interventions to improve bus journeys, as part of local packages of which also improve active travel infrastructure and public realm. The key bus-related improvements include:

- The **Cross River Corridor** encompasses the economic and cultural heart of the city region, focused on Liverpool city centre on the eastern side of the River Mersey and Birkenhead on the west side, in Wirral. Benefits to buses will arise from modernisation of the Kingsway and Queensway tunnel approaches and toll plazas to reduce congestion and improve journey time reliability for critical cross-river bus services.
- The **Mersey Gateway** draws together the advanced manufacturing and science clusters along the Mersey Estuary in Halton and south Liverpool. A Green Bus Corridor will be delivered linking Garston to Liverpool city centre. A combination of traffic signal upgrades, priority lanes and remodelled junctions, the corridor will deliver improved bus journey times and reliability.
- The **Eastern Gateway** is the LCR's central residential belt, linking Liverpool, Knowsley and St Helens and beyond to neighbouring Warrington and Greater Manchester. A new Green Bus Corridor will provide a new high-quality public transport link between St Helens and Liverpool city centre via Knowsley's key employment areas, served by the LCR's first hydrogen buses. This will address worsening journey time and passenger satisfaction issues and provide a clean, reliable service on a corridor with comparatively low levels of car ownership.
- The LCR's **Coastal Corridor** extends from the docks to the north of Liverpool city centre to Southport. The introduction of a Green Bus Corridor between Liverpool and Crosby will deliver a high-quality route that connects Liverpool city centre to the Port and high value energy facilities to the north.

The submitted CRSTS package comprised £792.4m of capital investment, anticipated to bring substantial benefit. In the Government's 2021 Autumn Budget and Spending Review, LCRCA was allocated £710m subject to business

case (submitted in January 2022) and future DfT oversight requirements for individual schemes over £50m, or including any spend after 2026/27, or where there are any remaining specific DfT concerns.

2.5.6. Relevant transport policies of neighbouring authorities

Given the presence of 40 cross boundary bus routes between LCR and neighbouring authorities, the approach taken to regulation of buses and other transport policy in the LCR's neighbouring authorities is relevant to this Strategic Case. Of particular relevance are neighbouring authority approaches to bus reform (where authorities are now required to either create an EP or introduce Franchising in order to access funding) and any proposals for CAZs that would potentially affect the emissions standards of bus services operating into those areas from LCR.

The LCR is served by bus services from Greater Manchester (where Greater Manchester Combined Authority is responsible for bus and air quality policy), Cheshire (Cheshire West and Chester Council), Lancashire (Lancashire County Council) and Warrington (Warrington Borough Council).

Greater Manchester has made a political commitment to bus Franchising, proposing three Franchising Scheme sub-areas: A, B and C, with Area A bordering the LCR. In Cheshire West and Chester, Lancashire and Warrington there are currently no published plans for Franchising, which case would require Secretary of State approval. Each authority published a BSIP last year in accordance with the Bus Back Better strategy, and they are all working towards developing EP plans which will secure eligibility for BSIP funding.

The relevant transport policies of neighbouring authorities are shown in the table below.

Table 1.3A Relevant Transport Policies of Neighbouring Authorities

Neighbouring authority	Relevant Plans
Greater Manchester Combined Authority	- Greater Manchester's Transport Strategy 2040 (2021) set out the role of bus across the region. It has an ambition to reform its bus market with potential for more integration between the transport system. - Greater Manchester's BSIP (2021) sets out its objectives to improve the bus network across the region and introduce Franchising.
Cheshire West and Chester Council	- Cheshire West and Chester's Local Transport Strategy (2017-2030) set out priorities to improve local bus services and facilities as well as the integration between bus and rail services. - Cheshire West & Chester published its BSIP in 2022 with ambitions for an EP. Its priorities include an integrated network, bus priority measures, and more frequent services. - Cheshire & Warrington Bus Strategy (2017)
Lancashire County Council	- Lancashire County Council's Local Transport Plan (2011-2021) set out key actions to improve the role of the bus, including mode interchanges, and better bus services across the region. - Lancashire's BSIP (October 2021) sets out its ambitions to provide an EP for the region providing improved services and routes for passengers.

Neighbouring authority	Relevant Plans
Warrington Borough Council	• Warrington's Local Transport Plan 4 (2019) sets out the Borough's ambition to grow bus patronage across the region. The routeing of services, price of bus fares and unreliability are all key areas to address. • Warrington's BSIP (October 2021) sets out its ambitions to provide an EP. It aims to provide improved services and routes for passengers. • Cheshire & Warrington Bus Strategy (2017)

Being based in the same national policy context, there is considerable overlap and complementarity between LCRCA transport plans and policies, and those of its neighbouring authorities. To that extent, bus reform proposals which contribute to the implementation of LCRCA policy are also likely to support its neighbours in the same. There could be particular advantages, for example in encouraging operator competition and consolidating good practice, of Greater Manchester and the LCR following a similar approach to bus reform.

2.6. Conclusions

In May 2017, a series of housing, transport, planning and policing powers were devolved to LCRCA and its elected Metro Mayor as a result of the Liverpool City Region Devolution Deal. The Liverpool City Region Devolution Deal, in combination with the Bus Services Act and the Bus Back Better strategy, give LCRCA the opportunity to investigate and implement alternative models of bus service provision which better respond to the LCR's economic, social and environmental objectives.

This Section has described LCRCA's bold and ambitious plans for economic growth: to deliver 100,000 new jobs and for LCR to be a £50 billion economy (a near doubling from today's level) by 2040. All growth should be clean and inclusive: the LCR has a target to achieve net zero carbon emissions by 2040 and LCRCA has developed a Climate Action Plan to implement radical measures to achieve the required reduction in carbon.

Achieving these ambitions requires targeted action on significant and stubborn social and economic issues where the LCR underperforms on several metrics relative to other city regions, namely gaps in wealth, business activity, jobs, productivity and skills, worklessness and spatially concentrated deprivation. The COVID-19 pandemic has had significant

impact in a number of sectors and has highlighted the existing health and economic inequality in the LCR. Due to the significant role played in the LCR economy by hospitality, tourism and manufacturing sectors, the LCR economy has been disproportionately affected by the pandemic compared to other regions.

Transport has a significant role to play in delivering clean growth, in tackling issues relating to economic and social underperformance and in recovery from the pandemic; this role is recognised in LCRCA's Transport Plan, Recovery Plan, Climate Action Plan, *"Building Back Better – Improving Our Air Quality Plan"* as well as the emerging *"Plan for Prosperity and Spatial Development Strategy"*. The Transport Plan's strategic objectives include supporting inclusive economic growth; supporting the LCR's role as a global gateway; and delivering a new mobility culture, where transport services are modern, safe, healthy and inclusive. The LCRCA Recovery Plan provides a co-ordinated package of measures to support recovery from the impacts of the COVID-19 pandemic, including investment in hydrogen buses.

The draft LTP vision for a *clean, safe, resilient, accessible and inclusive "London-standard" transport system* indicates the level of ambition to significantly improve bus provision in the LCR.

Buses are at the heart of the LCR's transport system, with journeys by bus representing almost eight out of every ten public transport journeys in the LCR. As set out in this Section, public transport has a significant role to play in the delivery of the LCR's clean growth ambitions, and in its recovery from the COVID-19 pandemic. Bus must therefore be at the forefront of the transport response. The LCR sets out a package of measures for network and service evolution to first halt, then reverse, the long-term decline in bus patronage, and to allow bus to play a full part in delivering on LCR's economic and social ambitions.

Recognising the importance of bus in achieving the strategic aims of LCRCA, the BSIP has ambitious targets to drive growth of fare-paying bus patronage. LCRCA has secured a large package of investment through CRSTS to improve bus journeys, through region-wide investment in the KRN improvements such as signal upgrades, priority lanes and remodelled junctions on some of the key corridors in the city region. However, the CRSTS package covers only a proportion of the overall bus network in the LCR and is primarily focused on highways infrastructure improvements. A more extensive investment in high quality bus corridors and additional measures to address affordability, reliability and attractiveness of bus travel will be required to achieve the targets set out in the BSIP.

3. *The role of bus and provision of bus services*

3.1. Introduction

The role of bus services, which carried around 80% of the LCR's public transport trips pre-COVID, is of vital importance to the LCR and its economy. The current bus network provides a wide coverage of reasonably frequent services connecting LCR residents with employment and education, and offering access to retail, leisure and health care opportunities. However, this relies on the provision of the current levels of bus services, which could be reduced over time in the absence of additional funding as described later on in this Chapter.

Not only do bus services play a key role in the delivery of growth ambitions in the LCR, through supporting increased productivity, reducing carbon emissions towards the goal of climate neutrality, and enabling better access to opportunities; all of these driven by a better provision of connectivity throughout the LCR, but bus services can also have a big impact in targeting transport-related social exclusion (TRSE)

Transport for the North commissioned research²⁰ to understand the impacts of TRSE and this will provide inputs for the transport-related social exclusion programme.

The significance of bus use across the LCR is demonstrated by the following statistics:

- of all Local Authorities within the North West, in 2019/20 the LCR had the highest level of bus journeys per head of population, at 67.8 journeys per person, compared with a region average of 50.0 journeys per head (having decreased to 48.7 journeys per person in 2021/22, impacted by COVID-19);²¹
- bus is the most important public transport mode for travel to work in the LCR with 12% of journeys to work within the LCR being undertaken on buses²² – in addition to the 6% who use rail.

Although these figures may paint a positive picture of relatively high bus usage in the LCR, it is important to note that, outside of London, bus passenger volumes have shown a long-term decline and DfT forecasts (pre-COVID-19) showed that this underlying market decline would continue. Chart 1.1 shows that the number of bus journeys made per head of population has declined from 79 to 68 in the 10 years from 2009/10 to 2018/19.

This predicted picture of long-term decline is replicated in the LCR with some temporary respite provided with the introduction of the

20 Transport-related social exclusion in the North of England, TfN. September 2022.

21 Table BUS0110a, Department for Transport, 2020 and January 2023.

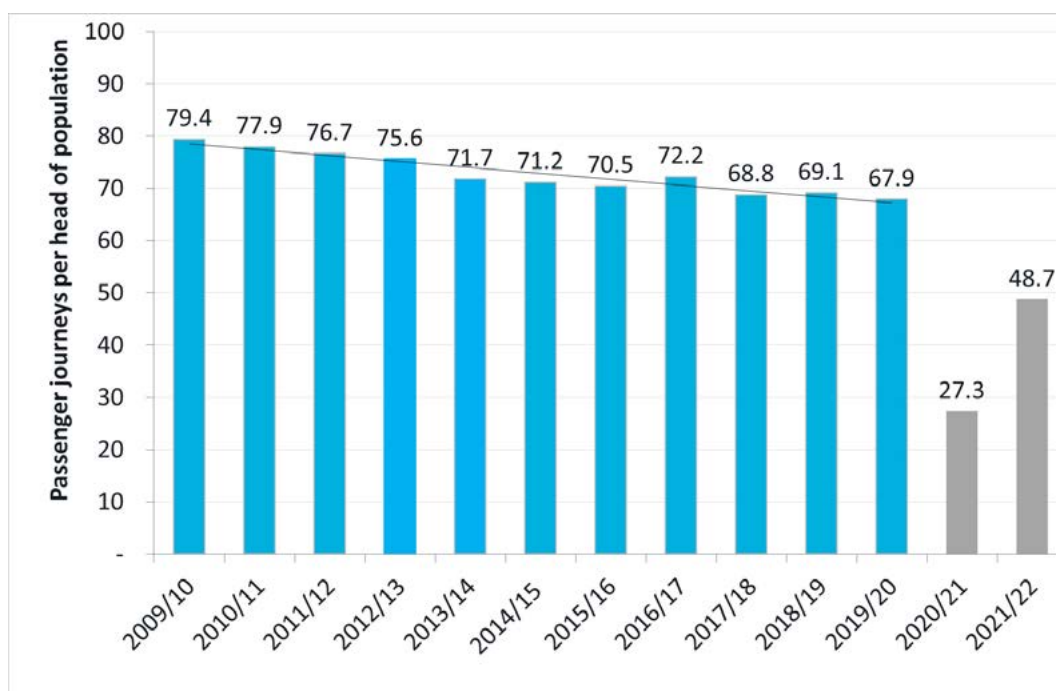
22 WU03EW dataset, Census 2011 – data from Census 2021 not applicable as Census day was during a COVID-19 lockdown which skewed the validity of the data collected.

MyTicket scheme (multi-journey day ticket for under 19s), which contributed to an increase in total passengers in 2018/19.

The current use, provision and satisfaction of bus services is described further in this Section as well as current estimates of operator profitability and how this is expected to evolve in the future under the current policy scenario.

This Section explains the important contribution which bus services must continue to make, towards achieving LCRCA's ambitions for growth, including in the successful delivery of its Transport Plan, LIS and Climate Action Plan.

Chart 1.1: Bus passenger journeys per head, LCR



Source: Table BUS01f²³, Department for Transport, January 2023

3.2. Use of bus

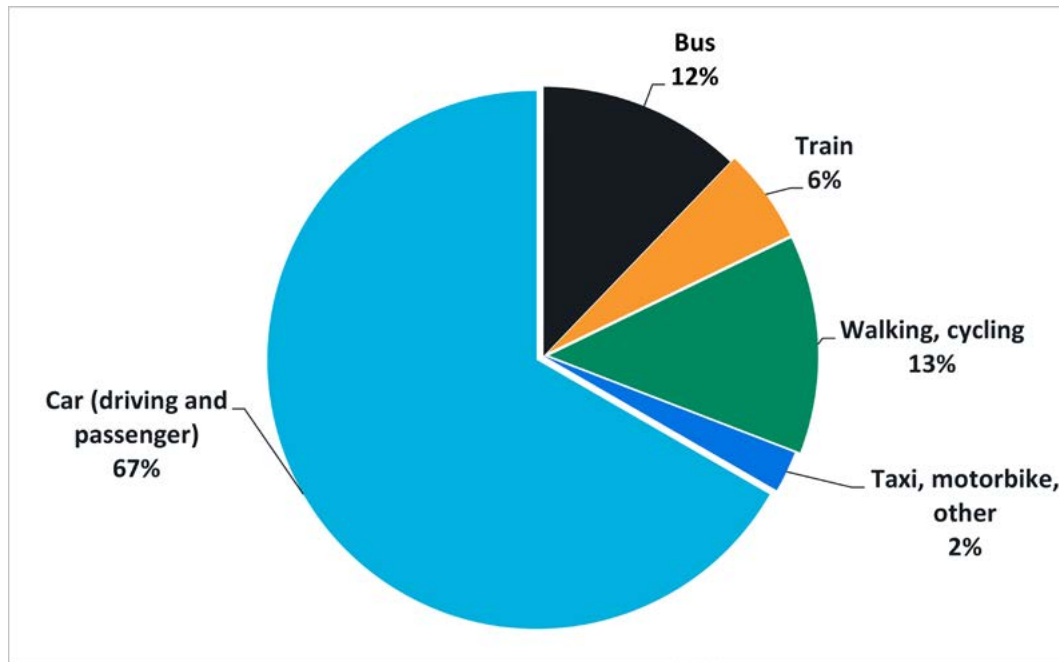
The majority of travel to work trips in the LCR were made by car (67%) in 2011. As shown in Chart 1.2, public transport attracts 18% of travel to work trips, with buses carrying the majority of these trips. Active modes were used for 13% of travel to work trips in the LCR.

In 2021, 53% of travel to work trips were made by car, with 9% by public transport and 10% through active travel methods²⁴.

23 Liverpool City Region calculated as combination of Merseyside ITA and Halton (weighted by population).

24 From 2021 Census data, however considered unrepresentative of pre-post-pandemic travel patterns due to partial lockdown being in place on Census day 2021.

Chart 1.2: Travel to work mode shares in the LCR

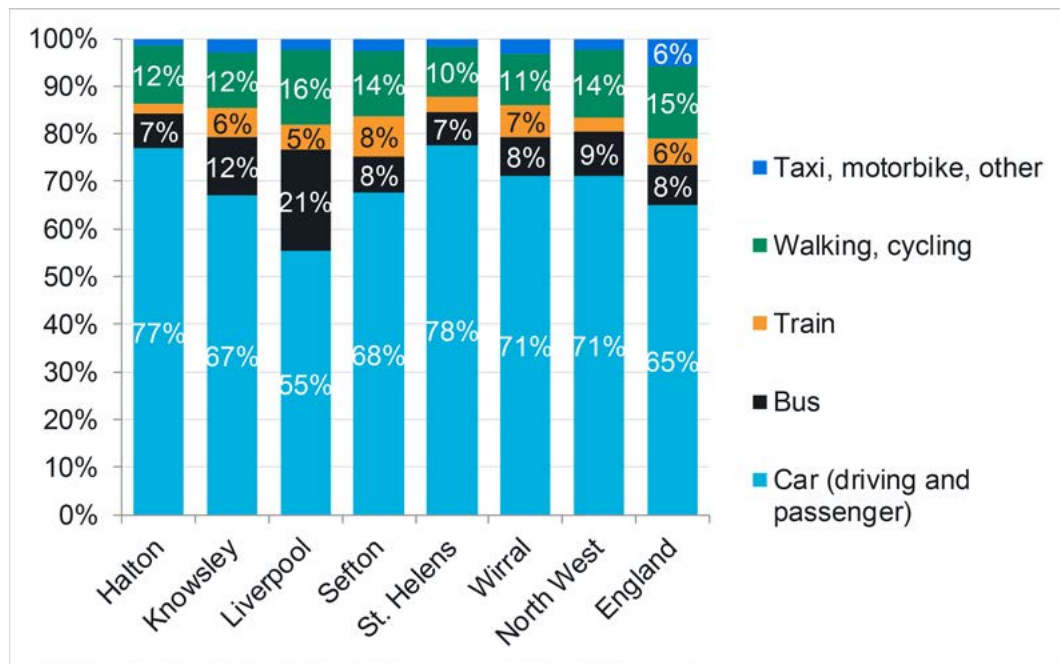


Source: WU03UK dataset, Census 2011 (see footnote 37 in relation to Census 2021 data)

There is significant variation of bus use by geographical location within the LCR. Chart 1.3 shows that the Local Authorities of Liverpool and Knowsley had higher proportions of commuters using bus than the neighbouring areas. These higher levels of bus use are linked to the relative density of the bus network, level of road traffic congestion and income levels of residents of these boroughs compared to other LCR boroughs. The remaining four Local Authorities have levels of bus commuting comparable to the North West and for England²⁵.

25 WP703EW data, Census 2011 – North West has 8% bus use for travel to work and England has 7% bus use for travel to work. Data from Census 2021 not applicable as Census day was during a COVID-19 lockdown which skewed the validity of the data collected.

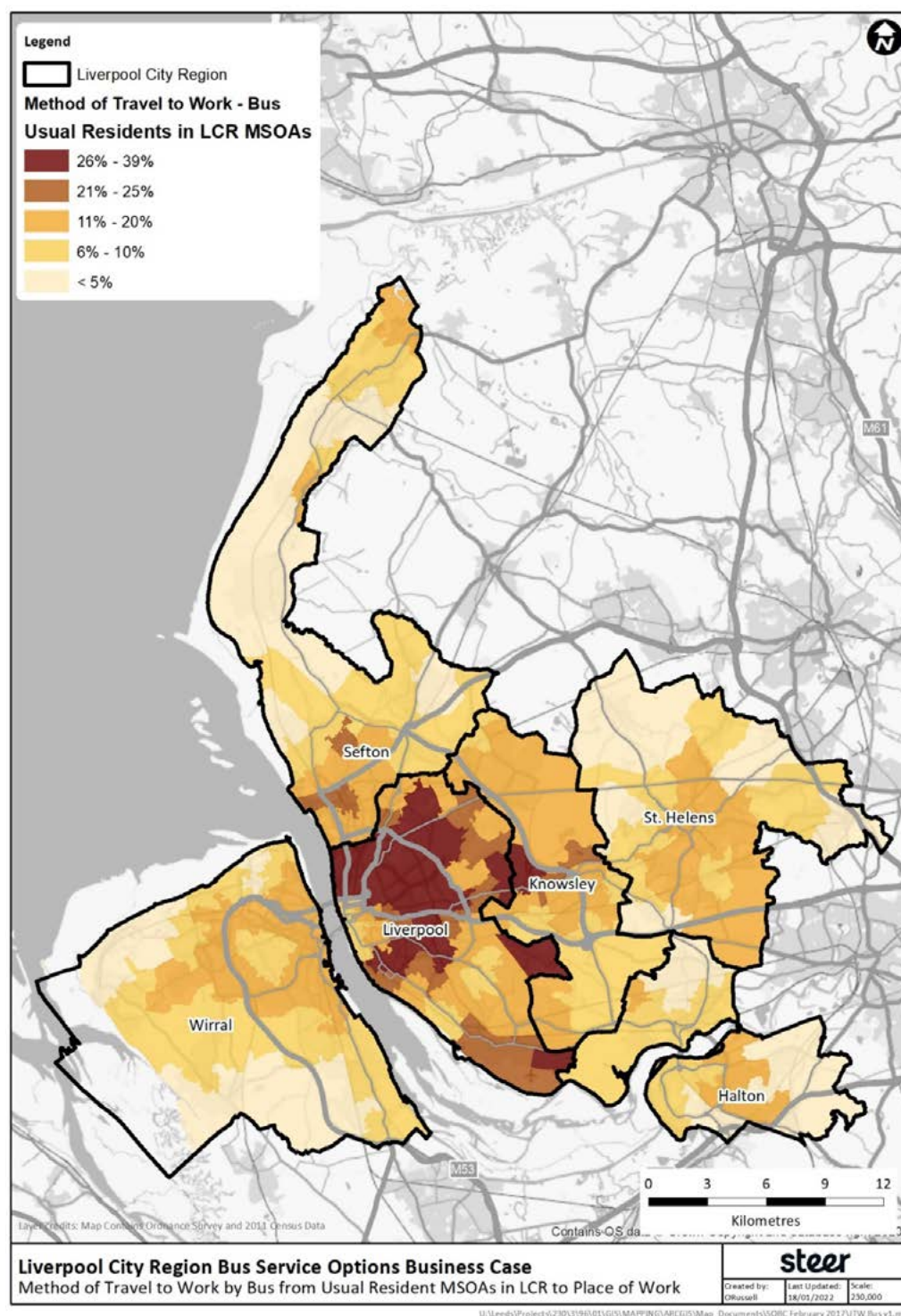
Chart 1.3: Mode share by Local Authority for travel to work



Source: WU03UK dataset, Census 2011(see footnote 37 in relation to Census 2021 data)

Figure 1.2 shows how the proportion of commuting trips made by bus varies across the LCR. Within the darkest coloured areas, bus accounts for more than a quarter of commuter trips.

Figure 1.2: Bus use for travel to work trips by MSOA²⁶



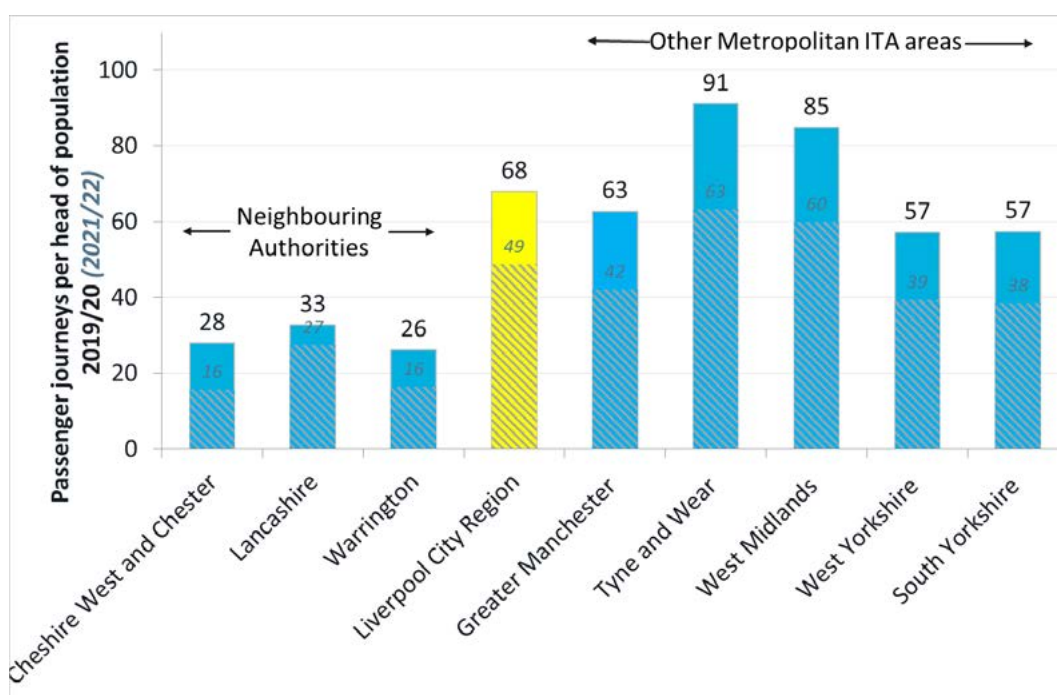
Source: WU03UK dataset, Census 2011 (see footnote 37 in relation to Census 2021 data)

DfT bus statistics (Chart 1.4) show that the level of bus journeys per head of (all) population in 2018/19 in the LCR (made up of Merseyside ITA and Halton) is higher than in comparable

26 MSOAs - Middle Layer Super Output Areas – are a geographic hierarchy for reporting of small area statistics from the Census. MSOAs have a population of between 7,000 to 10,000. Each MSOA is within a local authority.

metropolitan areas of Greater Manchester, South Yorkshire and West Yorkshire. Bus use in the LCR is notably higher than in neighbouring authorities, demonstrating the significance of bus use across the entirety of the LCR. As mentioned earlier, should the provision of bus services in the LCR decline over time, the number of bus users per head of population would subsequently reduce, with a range of associated social and economic disbenefits for the LCR.

Chart 1.4: Bus journeys per person for comparable areas



Source: Table BUS01f²⁷, Department for Transport, January 2023. Liverpool City Region is comprised of Merseyside ITA and Halton.

3.3. Pre-pandemic bus provision

3.3.1. Bus network

The pre-COVID-19 bus network in the LCR provided a wide coverage of reasonably frequent services broadly aligned with more densely populated areas and areas with higher levels of need (see Figure 1.3 below constructed from the pre-COVID-19 Routeline dataset)²⁸.

The City of Liverpool had a network of high frequency bus services (5-9 services/hour/direction). Other urban centres,

²⁷ Liverpool City Region calculated as combination of Merseyside ITA and Halton (weighted by population).

²⁸ The pre-pandemic network remains a reasonable baseline illustration of LCR bus network accessibility. The service pattern during/after COVID-19 continues to stabilise, including allowing for the influence of increased Operator subsidy.

such as St. Helens, Southport and Birkenhead, also had high frequency bus service connections with Liverpool, but services between these centres are more limited and generally of low frequency. Outside of the City of Liverpool and other major centres in the LCR, the coverage was lower and services relatively less frequent.

Figure 1.4 illustrates the areas accessible by public transport within different time bands from Liverpool Lime Street railway station (representing Liverpool city centre). The analysis shows that, pre-pandemic, the City of Liverpool had good accessibility (within 40 minutes' travel time) to the city centre. As the distance from the city centre increases, accessibility can be seen to be more influenced by the rail services than the bus network with limited integration with bus services providing interchange opportunities from areas more remote from railway stations.

Figure 1.3: Pre-pandemic LCR bus service frequency

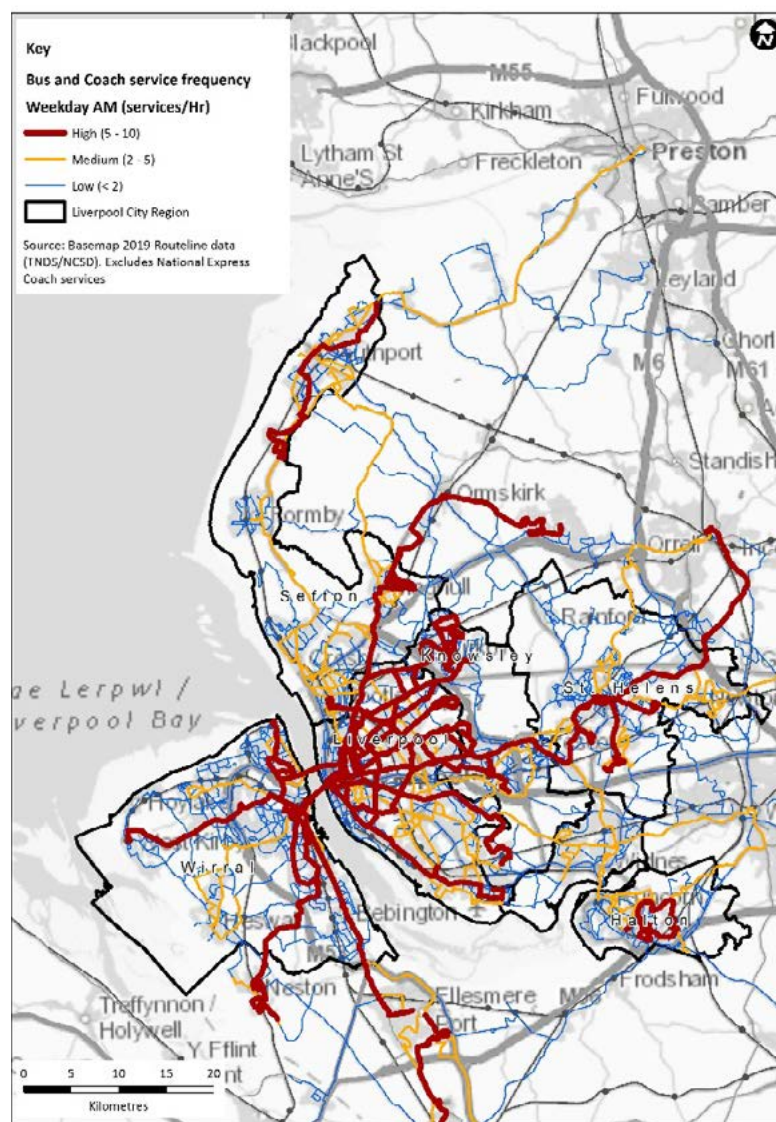
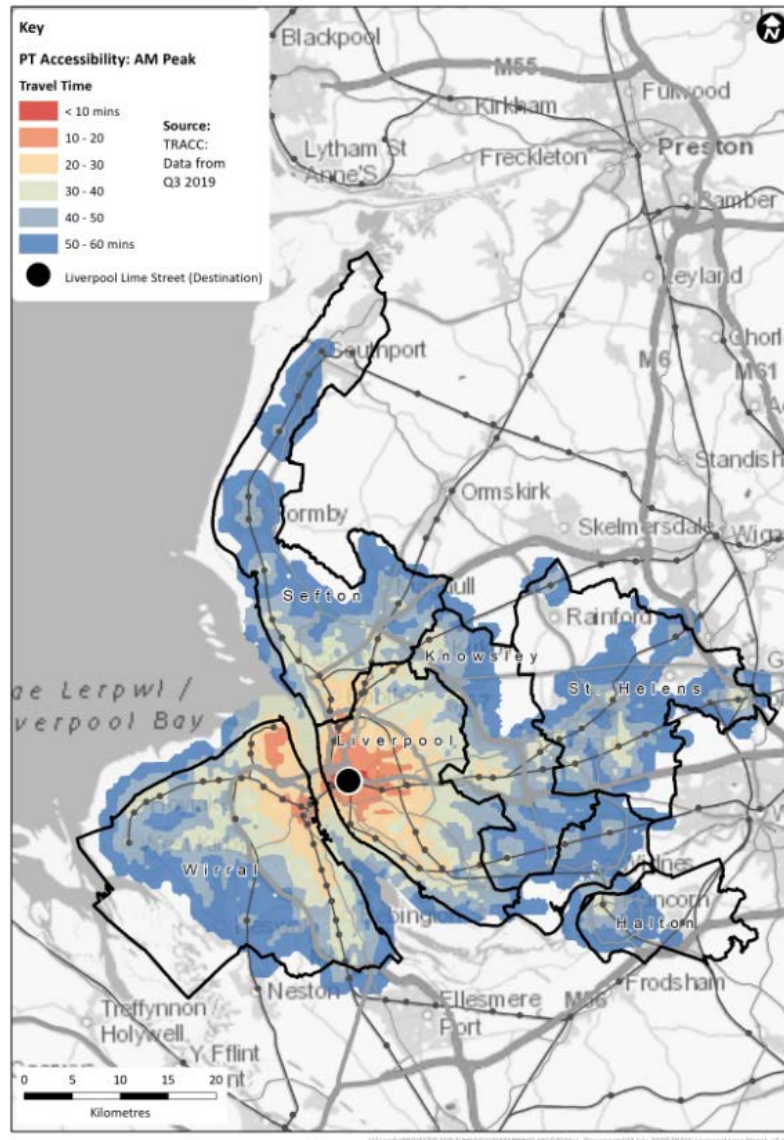


Figure 1.4: Pre-pandemic Liverpool City Centre catchment



3.3.2. Operators

Outside London and Northern Ireland, UK bus services operate in a deregulated environment. Predominantly, private sector bus operators plan and operate local bus services which are registered with the Traffic Commissioner. Operators can compete for passengers 'on street', seeking to differentiate themselves by the quality of service offered and fares available.

Arriva carries 69% of all passengers and operates a similar proportion of scheduled bus service kilometrage (68.7% scheduled kilometrage in 2015/16 including Halton Borough) and Stagecoach carries 23% of all passengers and around 20% of all kilometrage (21.4% in 2015/16 scheduled kilometrage including Halton Borough). Pre-pandemic, the level of service offered had not changed significantly since 2015/16.

The remaining 8% of bus passengers and 10% of bus service kilometrage was operated by 24 smaller operators (as of 2015/16). The breakdown of market share by bus passenger demand for all bus services (including school and charter services) is provided in Table 1.4.

Table 1.4: Bus operators by market share (Quarter 1, 2022/23)

Bus operator	Market share (bus passenger demand %)
Arriva	66%
Stagecoach	22%
Huyton Travel	5%
Cumfybus	3%
Al's Coaches	1%
Hattons Travel; Maghull Coaches; Peoples Bus; A2B; Eazibus; Other	3%

Source: Data provided by operators and LCRCA²⁹

3.3.3. Commercial and Supported Services

Overall, the bus service network coverage in the LCR had been relatively stable over the recent past (pre-pandemic), in spite of fairly frequent timetable changes as operators adapted to market conditions. In part, this stability has been secured through a combination of private and public sector actions, for example with many services which are no longer deemed commercially viable by their operators, being subsidised as part of the supported bus network.

For five of the six LCR Local Authorities (all except Halton Borough) Merseytravel, on behalf of LCRCA, procures, supports or lets additional bus services which are considered socially necessary, but are not commercially viable for operators. In Halton, this support is provided by Halton Council due to legacy funding arrangements. Such 'supported' services may include additional departures (for example early morning or Sunday services) on otherwise commercially viable routes, as well as on entire routes.

Prior to the COVID-19 pandemic, supported services made up around 15% of bus service kilometrage operated in the five

²⁹ Q2 data, the latest available at the time of developing the Assessment, was affected by industrial action and has therefore not been included due to being unrepresentative of normal conditions.

Merseyside Local Authorities. In Halton, supported services made up 44% of the operating costs of the Halton Borough Transport bus company which previously operated the majority of services in Halton, but only 13% of bus demand. Most of Halton Borough Transport's services are still running, having been picked up by other operators after that operator ceased trading in January 2020. In the former Merseyside area, the majority of supported bus service miles were run by smaller local operators; Arriva and Stagecoach, who dominate commercial services, operate less than 15% of supported service kilometrage between them. Where the operator of supported services (often providing services on weekends and evenings) is different from the operator of commercial services (providing the peak weekday and daytime service) on the same route, this can result in inconsistencies of fares available and passes accepted, vehicle standards, branding of services and resulting uncertainty for bus users. This model is recognised as “not always working for passengers” by the Bus Back Better strategy.

However, there have been reductions in the supported service network in recent years as Merseytravel's ability to fund them has been constrained. Merseytravel is not permitted by the current legislative framework to provide a supported service alongside a commercial service, for example to increase frequency, but can provide supported services to supplement a commercial route, for example by providing services in evenings and weekends when operators do not find services to be commercially viable.

The duration of the COVID-19 pandemic from March 2020 until present has brought changes in services across the LCR. During the first lockdown in Spring 2020, public sector payments to operators were maintained at previous levels, supporting a significantly reduced level of service and limited fare revenue. As well as supported services contract payments, these payments included: Bus Services Operator Grant (Section []); and ENCTS reimbursement payments (Section 3.5.1). In each case, disregarding the link between bus services operated/eligible passengers carried and entitlement to these payments to protect bus services.

Additional funding through the COVID-19 Bus Service Support Grant (“CBSSG”) was subsequently made available in support of increasing service levels as lockdown was gradually eased in the summer of 2020. A condition of CBSSG required that bus operators *“take all possible steps to respond positively and quickly to reasonable requests from LTAs to amend the services operated*

and the routes used by those services, hours of operation, vehicles used or levels of provision and to supply data on service usage and operations during the period of CBSSG receipt’.

CBSSG was a discretionary fund that ended in August 2021, replaced by a lower level of Bus Recovery Grant funding. While the Bus Back Better strategy makes a commitment to continue to support the bus sector to run the services needed to get the economy back on track, the recovery of passenger levels is uncertain and many services are reliant on support funding which is also uncertain and only available until the end of March 2023.

3.3.4. The LCR Bus Alliance

The LCR Bus Alliance (“The Alliance”) is an agreement set up in 2016 between Merseytravel, Arriva, and Stagecoach³⁰ to improve bus travel for people across the LCR.

The underlying intention of the Alliance is to increase bus patronage and customer satisfaction, emphasising the importance of bus within a connected city region, promoting improvements in the image and perception of bus and targeting infrastructure investment to improve punctuality and journey speeds.

The Alliance allows Merseytravel and LCRCA to contribute to the strategic planning of the bus service network and enhances certainty of operator commitment to certain routes and fares. To date, the Alliance has developed a “Joint Business Plan” and “Joint Investment Plan” on an annual basis. The status of the Alliance is anticipated to continue to evolve, subject to agreement between the parties.

Since its inception the Alliance has supported the achievement of a range of improvements in the LCR bus service provision, including:

- more than £40m of investment in new bus vehicles;
- improvement to ticketing arrangements including the introduction of multi-Operator day tickets and the scrapping of the former zonal fares system;
- improved customer information at bus stops;
- single smartcard platform;
- newly designed customer service training course for all drivers;

30 Other bus Operators are allowed to join the Alliance subject to agreement on the terms of the Alliance.

- improved links to Liverpool John Lennon Airport and development of 24/7 services; and
- cooperation as part of the HyBus Pilot project to implement a hydrogen bus fleet.

Over the same period there was (pre-COVID-19) a 16.5% growth in fare paying passengers³¹ including an 168% increase in journeys made by young people by 2019³² (2.68 more journeys made per person). However, it should be noted that passenger growth was not matched by an equivalent growth in revenue. Customer satisfaction in bus services as recorded by Transport Focus was at 91% in 2018, up from 89% in 2015 prior to the Alliance. However, feedback from the 'Big Bus Debate' shows that further improvements are desired (see Table 1.7 below), and that there remains some way to go in achieving these.

The nature of the Alliance also means that negotiation between parties is required for each change, which can be time-consuming and may not achieve all the outcomes that LCRCA would expect. There are also commercial and operational challenges for operators in achieving the Alliance targets; for instance, currently the average age of the bus fleet has in some cases approached or exceeded the Alliance targets, as there are not sufficient incentives for operators to renew the fleet.

3.4. Key Route Network

The LCR KRN comprises the LCR's important strategic routes, partly informed by the needs of core bus routes in linking the main areas of population and opportunity. This network is vital to support improvements to bus punctuality and reliability, which is central to increasing the competitiveness and efficiency of the bus network. LCRCA is investing to enhance the condition of the KRN to improve the condition of the roads, including upgrades and priority corridors through Transforming Cities Programme and the CRSTS programme described in Section 2 of this Strategic Case.

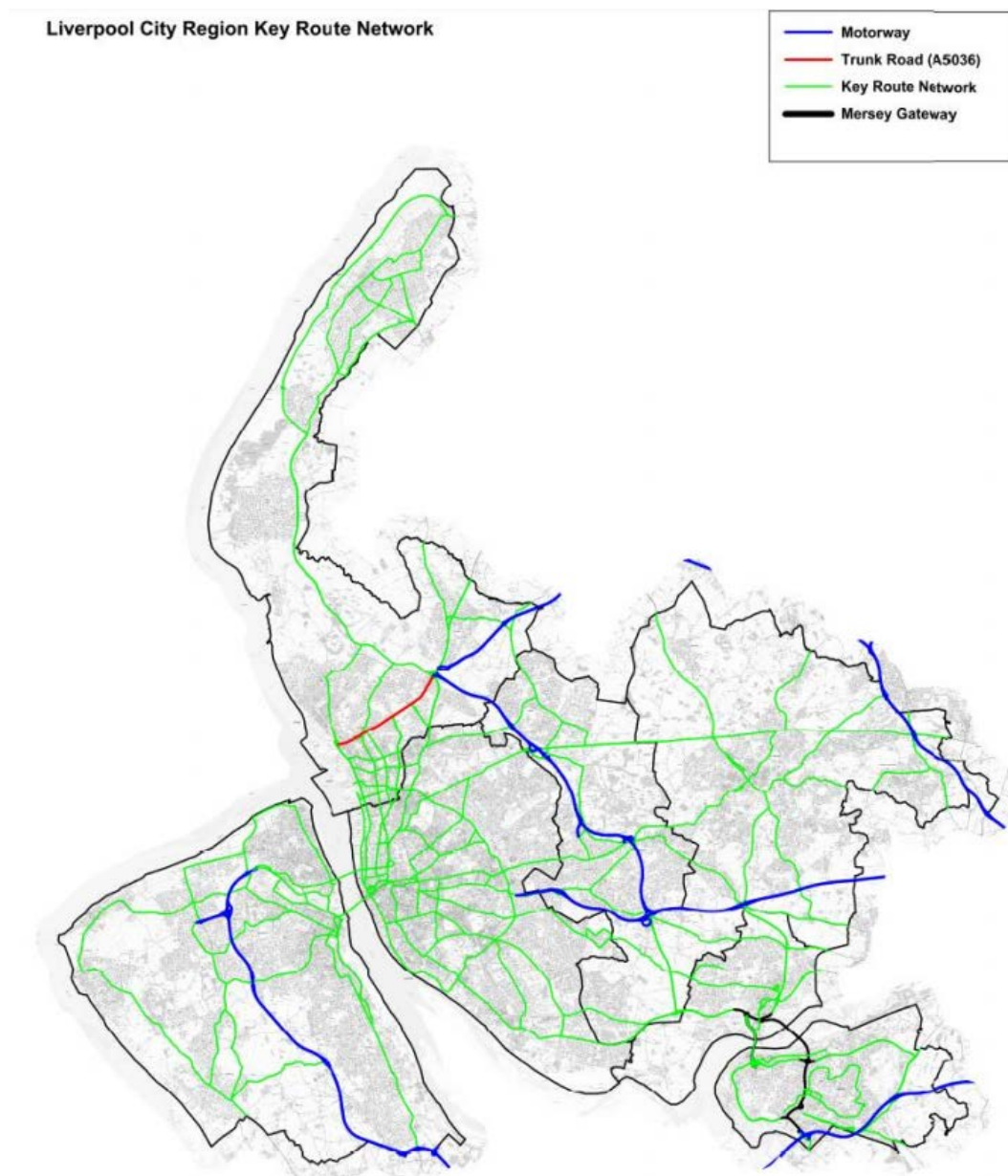
Responsibility for the network was devolved to the Metro Mayor as part of the Devolution Agreement. The Devolution Agreement gave LCRCA powers to manage and maintain the KRN through a single asset management plan and streamlined contractual and delivery arrangements. To date, the powers of directly managing and maintaining the KRN have not been enacted in the LCR, with LCRCA allocating funding to its constituent authorities to manage and maintain their parts of the network.

31 <https://www.transporttimes.co.uk/news.php/Removing-the-barriers-374/>.

32 LCR BSIP, Page 37.

LCRCA has the option to exercise greater powers over the KRN, including enhancements that would benefit bus services, and, as noted in the Section 2.2.3 detailing Bus Back Better, there is potential that the Government will devolve greater powers to make improvements to the KRN to benefit bus services in the future, for example by facilitating the joined-up planning of bus priority measures which can increase bus speeds and increase the efficiency of bus service delivery. Better coordination between planning of the KRN and bus services would allow for LCRCA to more fully realise the benefits of devolved powers in relation to the KRN and improve modal shift. The LCR KRN is shown in Figure 1.5 below:

Figure 1.5: LCR Key Route Network³³



33 LCRCA: Report of the Interim Director of Integrated Transport, Key Route Network (KRN) – Progress Update, September 2020.

3.5. Fares and tickets

For five of the six Local Authority areas in the LCR (Liverpool, Knowsley, Sefton, St Helens and Wirral) Merseytravel promotes and manages a range of multi-modal and/or multi-Operator tickets and operates six travel centres at bus stations in the LCR, which provide information and ticket sales. Most Merseytravel tickets are valid for use within the five Merseyside Local Authorities but not in Halton Borough (due to legacy of funding arrangements), which is part of the LCR but not covered by Merseytravel fare zones. Merseytravel's multi-Operator tickets supplement the ticket products sold by commercial bus operators that are normally only available on the services operated by that operator. The pricing of single operator tickets offered by individual operators is set below the equivalent multi-Operator tickets offered by Merseytravel. For supported bus services, other than those provided by Arriva or Stagecoach, Merseytravel provides ticket machines to operators and specifies the fares which are available.

In May 2014, Merseytravel introduced an improved young peoples' ticket offer, branded 'MyTicket', offering a fixed affordable price for a full day's bus travel valid across operators. In 2015, the upper age limit for the ticket was increased from 15 to 18 and the scheme was extended from Merseyside to Halton, covering the entire LCR. This scheme was shown to have resulted in growth of bus passenger volumes since 2014, albeit travel on this ticket has a lower-than-average revenue yield per trip. MyTicket is valid in Halton Borough as well as the other five LCR Local Authorities.

Halton Borough Council offers a "Halton Hopper" multi-Operator ticket for use on three operators' services for travel within Halton Borough only. Individual operator tickets are also available in Halton for travel within the borough and for cross-boundary travel into Merseyside Local Authorities.

The table overleaf shows some of the ticketing and payment options available from the two largest operators in the LCR: Arriva and Stagecoach.

Table 1.5: Principal ticketing and payment options available from Arriva and Stagecoach³⁴

Ticket/payment type	Arriva	Stagecoach
Contactless payment on-bus	✓	✓
Mobile ticket app	✓	✓
Adult day ticket*	£4.60	£4.70
Return tickets available	No	Yes
Single/return fare information published	No – information on single and return fares available but no specific prices	Yes – single fares available for individually planned journeys on website*
Single tickets available on mobile app	No	No
Multi-Operator tickets available on mobile app	No	No
Other tickets available	Weekly, monthly, annual tickets “Duo” ticket for 2 people travelling together Family day ticket Student tickets (full-time to age 19 only) Discounted travel for 16-21 year olds	Weekly, monthly, annual tickets Young person’s tickets for 15-19 Jobseeker discounts Family / group day ticket Student tickets (separate offers for College/ University students)
Child tickets	Under 5s travel free. Children aged 5 to 15 are charged at a discounted fare Child weekly/monthly tickets	Under 5s travel free Children aged 5 to 15 years can travel for between half and two-thirds the cost of most adult fares Child weekly/monthly tickets

34 Arriva Bus Ticket Information | Arriva Bus, All Tickets | Stagecoach (stagecoachbus.com), February 2023.

As an example, the single fares presented for journeys planned through the Stagecoach journey planner³⁵ give an indication of the difficulties that passengers face in understanding the costs of bus travel. Each journey must be planned individually to obtain fare data – no fare boundaries are shown and fares can be inconsistent. For example, for a three-mile journey from Liverpool to Bootle a single adult fare of £1.90 is shown by the journey planner. For a journey on the 86 bus from Liverpool Lime Street station to the University of Liverpool, a journey of less than one mile comprising four minutes on a bus, the fare shown by the journey planner is £2.30. Both fares require a purchase of a paper ticket by cash or contactless payment from the driver on the bus.

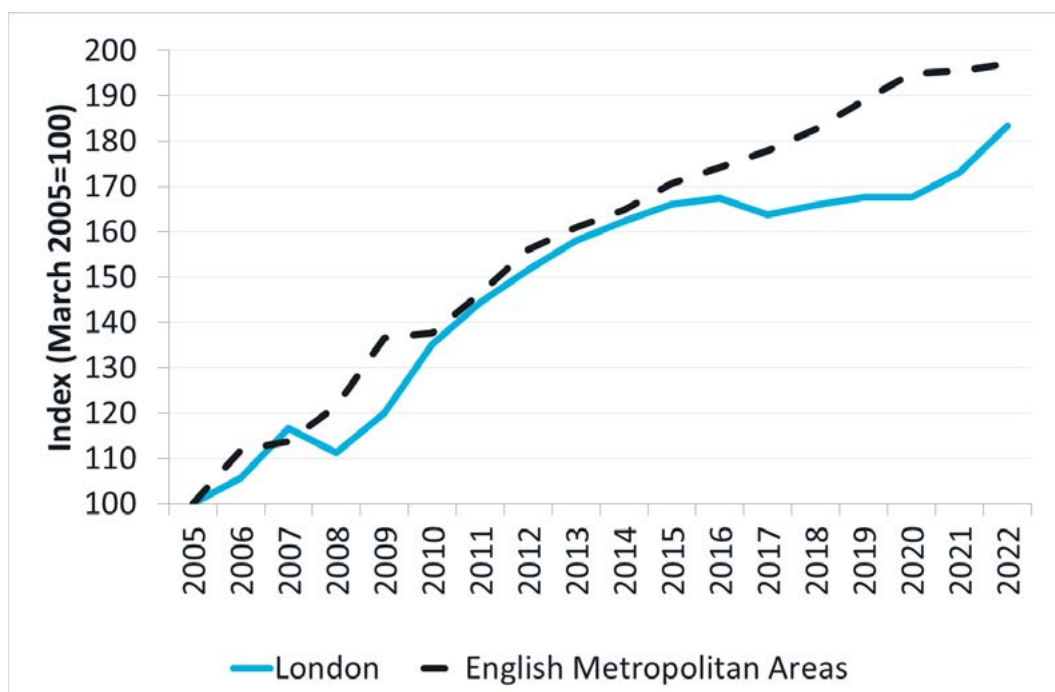
As a comparison, equivalent bus journeys in London, where fares are set by the Mayor of London, cost £1.55³⁶ (the flat fare for bus journeys of any length, including multiple journeys started within an hour of purchase), with fares paid through contactless payment or pre-paid smartcard, a process that does not involve the bus driver. Fares in London (where deregulation was never implemented) are cheaper as TfL has greater control over all elements of its bus network including the ability to set bus fares and subsidise where necessary.

Bus fares in metropolitan areas have risen more sharply than in London, as shown in Chart 1.5 which shows the relative cost of bus fares from 2005 to 2020 on an index where March 2005 fares are 100.

35 All Tickets | Stagecoach (stagecoachbus.com), February 2023.

36 Fares - Transport for London (tfl.gov.uk), February 2023.

Chart 1.5: Relative cost of bus fares 2005 to 2020³⁷



Source: Table BUS0415a, Department for Transport, January 2023

Direct comparison of bus fares in Merseyside and London over the same period further illustrates the growing affordability challenge for bus in LCR. In 2005, the Merseytravel Saveaway single zone (off-peak) ticket cost £2.40, the cost in 2022 is £4.30³⁸, a 79% increase. By comparison, the cost of a single bus fare in London in 2005 was £1.00³⁹ compared to £1.65⁴⁰ in 2022, a 65% increase. It is important to note, however, that a number of services in Merseyside are operating with the £2 fare cap until 31 March 2023.

3.5.1. English National Concessionary Travel Scheme

The ENCTS provides free local bus travel for older (men and women who have attained the state pension age) and disabled passengers, between 09:30 and 23:30 on weekdays and anytime at weekends. Bus operators are reimbursed with the objective that they should be ‘no better or worse off’ than in the absence of a scheme.

37 Department for Transport statistics, Table BUS0415a: Local bus fares index (at current prices¹) by metropolitan area status and country: Great Britain, quarterly from March 2005; and Table BUS0415b: Local bus fares index (in constant prices¹) by metropolitan area status and country: Great Britain, quarterly from March 2005.

38 Sourced from Merseytravel website and archived website pages.

39 Response by Transport for London to a Freedom of Information Request: https://www.whatdotheyknow.com/request/history_of_bus_fares.

40 Transport for London website.

The ENCTS is funded by Central Government through the LCR Local Authorities, but administered by Travel Concession Authorities (“TCA”). In the LCR, Merseytravel is the TCA. In the five Merseyside Local Authorities, ENCTS policy goes further than the statutory requirement and offers the following:

- Concessionary travel on bus, rail and Mersey ferries within Merseyside is available from age 60+ through the Merseytravel 60+ pass (statutory requirement is only for bus trips, for people of pensionable age, which is currently 66 for both men and women). From the age of 66, the English National Concessionary Travel Pass replaces the 60+pass and can also be used on services outside Merseyside; and
- Concessionary travel in Halton is provided through the Cheshire Boroughs Concessionary Travel scheme in line with statutory requirements (free off-peak bus travel for concessionary pass holders of pensionable age and for disabled people).

Funding allocations are based on population, adjusted for specific local variations such as high visitor use of buses. TCAs propose locally relevant calculations for reimbursement, and the DfT issues guidance, including formulae, to assist. All passes must be ITSO compliant smart tickets to record journey data in support of reimbursement claims.

In practice, the level of reimbursement has sometimes proved to be controversial:

- Operators often maintain they do not receive adequate reimbursement;
- Public authorities consider this is a subsidy that they pay out that is difficult to afford but gives them no control over bus services; and
- Individual authorities may extend the scope of the scheme from their own funds, for example: to add local rail; to add other groups (such as children/young people); or to extend the time of validity.

In Bus Back Better, the Government states an expectation that Local Authority funding to operators will remain above the actual level of concessionary patronage for an (unstated) period of time and that it will review how concessionary payments work during the COVID-19 recovery period.

3.6. Fleets and depots

A total of approximately 1,200 buses are in the total fleet operated in the LCR for public service and schools’ transport services.

Estimated total numbers of buses operated by the larger operators, split by fuel type, and age, are shown in Table 1.6. Note that this information does not include very small operators or spare vehicles which equate to 10% of the vehicles required to run the service. The vast majority of the fleet currently operates on diesel fuel, with the average age of vehicles being around 9 years in 2020.

Table 1.6: Bus fleet and fuel type

	FLEET	DIESEL	ELECTRIC	HYBRID	GAS	AVERAGE AGE
TOTAL	1,064	903	17	128	19	9.1

Source: Data received from A2B, Arriva, Al's, Cumfybus, Eazibus, Hattons (age data only), HTL, Maghull Coaches, MD Bus, Ogden (age data only), Peoples Bus, Selwyns, and Stagecoach (as of 2020). Excluding spare vehicles.

As the services operated are dominated by Arriva and Stagecoach, so is the ownership of the fleet. Both operators are part of the Alliance which includes an obligation on them to invest in the fleet to maintain the average age of their buses below the threshold of seven years, which can be challenging for operators as noted earlier, due to commercial reasons.

There are currently 24 depots across the LCR, which are owned by 13 different bus operators. Reflecting the scale of their operations, the majority of larger depots are owned by Arriva and Stagecoach (see Figure 1.6 for the locations of the major depots). The characteristics of these depots are summarised below:

- Arriva owns seven depots with capacities ranging between 50 and 130 buses, with a total capacity of 645 buses. These are located throughout the LCR, with the largest depots located to the south in Speke near Liverpool John Lennon airport (130 buses), to the east in St Helens (115 buses), near the city centre at Green Lane (110 buses) and at its North West Garage (100 buses);
- Stagecoach owns two depots with a total capacity of 230 buses. Its largest depot is located in the north east with a capacity of 160 buses and its other depot is located in Wirral and has a capacity of 70 buses; and
- the remaining 12 depots are owned by 11 bus operators, with the largest one being owned by Halton Transport (before it ceased trading) with a capacity of 75 buses and located in Widnes. The capacities for the remaining depots range between five and 40 buses each.

Figure 1.6: Major bus depot locations in the LCR



Source: Merseytravel's bus team

While the current model is reasonably well suited for a deregulated environment, where each operator runs services locally from their own depots, this is generally considered a barrier for entry to new operators – especially at a large scale, given that the upfront capital costs would weaken their competitive position.

3.7. Customer experience

The Big Bus Debate survey was undertaken in August/September 2019 with over 1,200 residents of the LCR. A summary of key findings is set out in Table 1.7.

Table 1.7: Big Bus Debate summary of findings

Topic	Response
Satisfaction with the bus network and buses:	• Low satisfaction is seen with the cost of travel by bus, punctuality of services arriving at the stop and timetable – buses running early, late weekends. • An emerging issue appears to show low satisfaction with the contribution buses make to improving air quality. • Whilst satisfaction is low for cost of travel, 71% of under 18s are satisfied. • There are differences between boroughs in perceptions of satisfaction with the bus network, with Halton residents showing higher levels of satisfaction. • High satisfaction seen for the ease of getting on/off the bus, personal security on the bus and length of journey time. • the information on bus, availability of Wi-Fi and availability of USB charging shows lower satisfaction.
Priorities for improvement:	• Punctuality, frequency and cost of travel are top priorities to improve the bus network, as well as the timetabling of buses. Frequency and punctuality are top priorities for regular bus users, whereas the cost of travel is a top priority for non-users. • Looking across boroughs either frequency or punctuality is the top priority, closely followed by timetabling for four of the boroughs. Cost comes through as a priority in Halton and Liverpool. • For bus improvement, driver attitude, comfort of the bus and space to sit/stand are the top three priorities. Driver attitude and space to sit/stand are top priorities for regular bus users, whereas the comfort of the bus is a top priority for non-users.

Topic	Response
Overall perceptions of buses:	- Nearly three-quarters of users view buses as safe, with a further 63% viewing buses as convenient; however less than half (45%) think that they are reliable and just a third (33%) think they are cheap to use. - Surveys conducted towards the beginning of the COVID-19 pandemic showed that 73% of respondents do not feel public transport levels would return to pre-pandemic levels, although these perceptions might have evolved with the removal of all restrictions.
What would encourage more bus use?	Four in ten say nothing would encourage further bus use, however cheaper fares, better punctuality/reliability and better availability to go more places/routes are top suggestions.

Source: The Big Bus Debate, LCRCA 2019

In general, residents of the LCR consider bus travel to be safe and convenient. They are least satisfied with the cost of bus travel, punctuality of bus services, bus information and are increasingly concerned about the contribution of buses to poor air quality. Residents are satisfied with the ease of vehicular access, security and bus journey times.

Respondents considered the priorities to improve bus service provision should include improved bus frequency, punctuality and reduced bus fares. Improved timetabling was also raised as an area for enhancement. Driver attitudes and bus comfort were also raised as areas for improvement.

Improvements that could promote greater bus use include cheaper fares, better punctuality/reliability and better connectivity.

LCRCA monitors performance the performance of the LCR's bus network including on time performance. This is done on a daily basis and also includes monthly and annual on time performance measures. It will continue to do so under all of the Delivery Options considered in this Assessment, which is also a requirement of BSIP funding which requires 6-monthly performance reporting. Prior to the pandemic, both journey speeds and reliability were under gradual decline. LCRCA has introduced separate projects to address aspects of performance which include Green Bus Routes which will invest City Region Sustainable Transport Settlement (CRSTS) funding in bus priority measures on up to 9 bus corridors. These projects are already funded through the devolved CRSTS settlement and are being undertaken regardless of the Delivery Option chosen.

As a consequence, the Case for Change is not based upon service performance specifically, including journey speeds and reliability, and as such does not include specific data on these elements. The Assessment does however consider how measures to address journey speeds and/or reliability could be introduced under the regulatory options.

3.8. Current and future bus service profitability

Factors such as passenger volumes, route competition, mode competition, hours of operation and operating costs all impact upon bus service profitability. Services which are not commercially attractive for the operator to provide are either supported by Merseytravel or cease to operate.

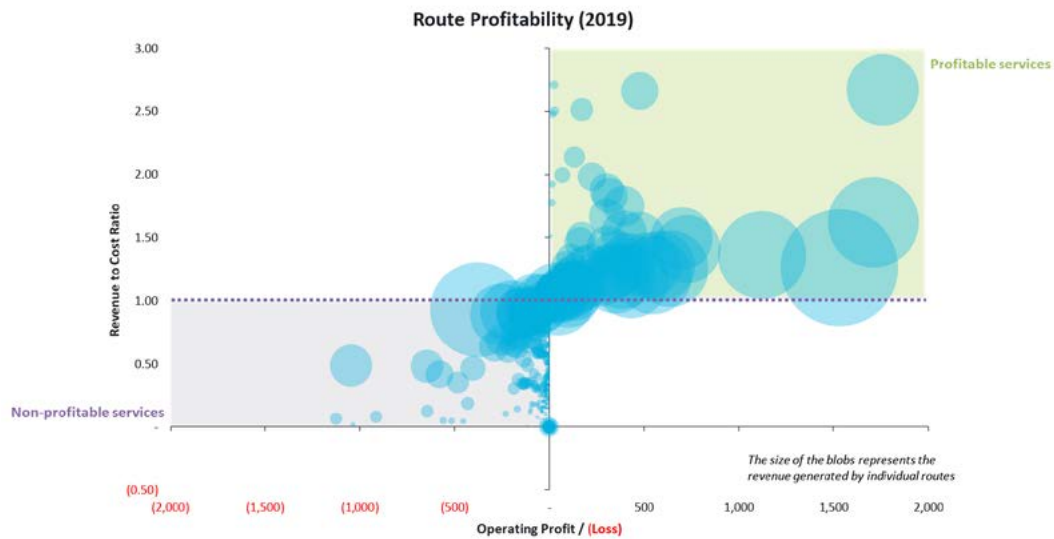
Prior to COVID-19 impacts on bus patronage and revenue, bus service profitability ranged significantly by service. Chart 1.6 presents the range of profitability by service based on consideration of passenger volumes, fare box revenue and operating costs. Profitable services, with positive operating profit, are displayed in the upper right quadrant. These services generate more revenue than they cost to operate and include several successful services such as those between Liverpool and West Kirby and Liverpool to St Helens.

Less profitable bus services are shown in the bottom left quadrant. These services collect less farebox revenue than they cost to operate for reasons such as long route lengths, the impacts of traffic congestion and lower levels of fare-paying bus passengers. These services are more likely to be supported by Merseytravel to meet a social need, despite their apparent unprofitability.

Assessment of service profitability depends on the approach taken to allocation of costs across services by time of day, particularly in terms of the capital cost of vehicles and overheads (which vary less by level of output). Operators' consideration of whether to operate services commercially go beyond the performance of individual services; for example, considerations of the performance across all services operated, individual efficiencies of particular services (for example that in practice can be operated at marginal/reduced extra cost), and the relationship between marginal and more profitable services.

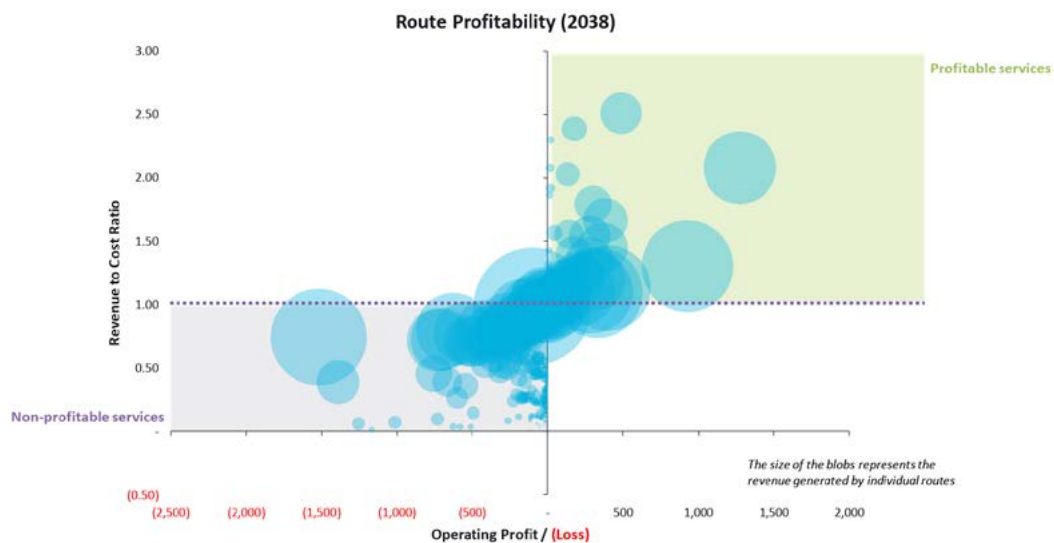
Increasing operating costs, a continued long-term decline in passenger volumes and farebox revenue will impact on the overall profitability of bus services over time. Chart 1.7 displays the forecast profitability of existing services in 2038 if trends in increasing operating costs and declining long-term passenger and farebox revenues continue.

Chart 1.6: Route profitability (pre-COVID-19)



Source: Revenue and operating costs from bus operator data⁴¹

Chart 1.7: Forecast route profitability (excluding long-term impact of COVID-19)



Source: Revenue and operating cost projections from bus operator data⁴²

It is clear from a comparison of Charts 1.6 and 1.7 that, based on passenger volumes prior to the COVID-19 pandemic, a significant number of services were forecast to move from being financially profitable to being unprofitable in the future. Assuming that the current bus network and service provision is maintained, the impact

41 The X axis provides the difference between revenue and operating cost, expressed in £000. The Y axis provides the ratio between revenue and operating cost.

42 The X axis provides the difference between revenue and operating cost, expressed in £000. The Y axis provides the ratio between revenue and operating cost.

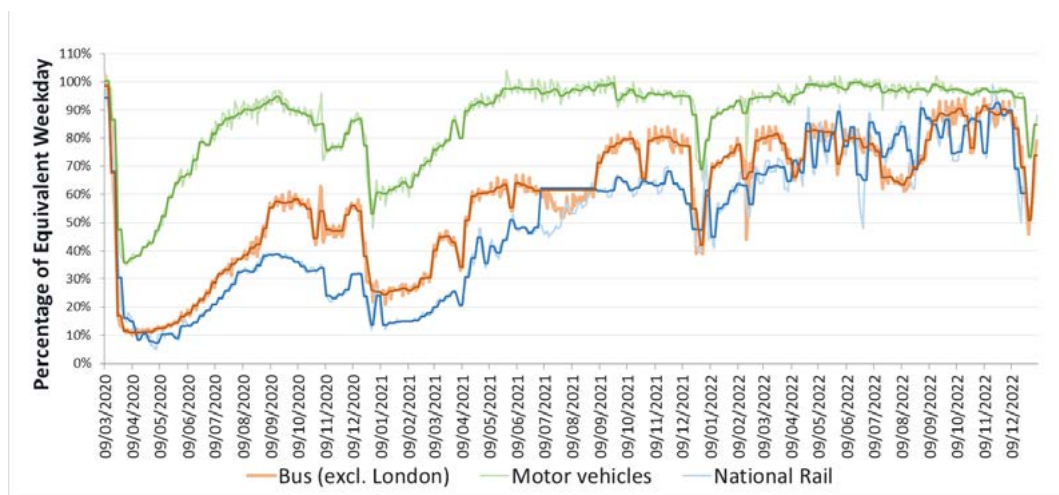
of this loss of profitability was likely to be:

- Reduction of commercial services as they become less profitable or no longer commercially viable;
- Increase in services which need to be supported by Merseytravel;
- Increase in funding required by Merseytravel to fund the increased number of supported services; or
- Reduction in bus services.

The above figures represent the profitability picture prior to the COVID-19 pandemic. Throughout the pandemic, bus services continued to operate to ensure a safe and reliable network for key workers in the region and quickly returning to pre-pandemic services, routes and frequencies but with additional public subsidy through CBSSG. There remains uncertainty about the long term impacts of the pandemic on travel behaviour but it can be expected that there will be some changes from the pre-COVID-19 situation.

Chart 1.8 below shows the average recovery in transport use across the UK since the beginning of the COVID-19 pandemic. Chart 1.9 focuses in on the recovery of bus demand outside London over 2022, annotated with key non-COVID-19 events which impacted demand over that period. In both charts, the percentages compare daily report with the equivalent weekday in the third week of January 2020 – shortly before the effects of the pandemic, and actions taken in response, were felt.

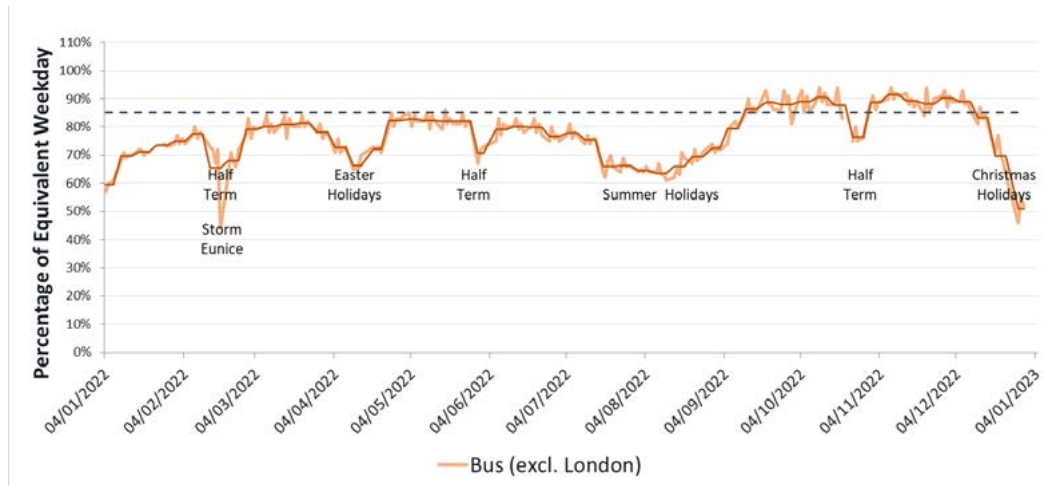
Chart 1.8: Percentage of UK bus recovery since the beginning of the COVID-19 pandemic



Source: Domestic transport use by mode: Great Britain, since 1 March 2020, DfT. For all modes the heavier line is a weekly average of weekdays, the lighter line is weekdays

Chart 1.8 illustrates the impact of successive lockdowns on all transport modes, showing that recovery in motor vehicle demand from (broadly) mid 2021. Recovery in public transport demand was more steady, taking until the latter quarter of 2022 to flatten off.

Chart 1.9: Percentage of UK bus recovery over 2022



Source: Domestic transport use by mode: Great Britain, since 1 March 2020, DfT. The heavier line is a weekly average of weekdays, the lighter line is weekdays. The dotted line shows 85%.

For the final quarter of 2022, weekday national bus demand (excluding London) averaged 85%, including reduced demand over half-term and Christmas holidays, or 88%, if those periods are excluded (bearing in mind that the January 2020 comparison week was not during a school holiday period).

Merseytravel and the LCR Transport Committee report quarterly bus patronage data, which show that local bus patronage had reached 85% of pre-pandemic levels by the second quarter of 2022/23⁴³, sustained into the third quarter (data for which has not been published at the time of preparing this Assessment). DfT annual bus statistics⁴⁴ also show that for 2021/22 recovery for LCR (at 71% of 2018/19) was comparable to the national (excluding London) value (69%). Therefore there can be confidence that DfT's daily statistics are a reasonable representation of the pattern of recovery for LCRCA.

In 2020, LCRCA undertook technical work to understand the potential short-to-medium term impacts of the COVID-19 pandemic on the LCR's transport network. This work, which is the most relevant and up-to-date assessment of potential COVID-19 impacts

43 2022/23: Q3 – 85% ; Q2 – 85%; Q1 – 80%
2021/22: Q4 – 80%; Q3 – 80%; Q2 – 65-70%; Q1 70%.

44 Table BUS01e, Department for Transport, January 2023.

on transport in the LCR, sought to utilise the Liverpool City Region Transport Model (“LCRTM”) to forecast and identify likely impacts and the potential policy and operational responses to mitigate these impacts.

The long term impacts on bus usage across the UK are still unknown, and therefore assessing the potential future scenarios are important in helping to gauge the levels of uncertainty. Travel demand scenarios were modelled, recognising the complex range of unknowns and their likely impacts and concentrating on developing scenarios reflecting a view of two extremes of what may transpire. Since the work was undertaken, the ‘Low Impact’ scenario of the study has emerged as the most likely. This scenario represented a medium-term view (an 18 month to two-year time horizon) and assumed an effective vaccine had been distributed, so social distancing was no longer required, and where only low-level residual impacts remained as a result of the pandemic. The scenario assumed that some travel trends and behaviours remained as a ‘new normal’, regardless of the extent of an economic recovery.

While the results of the assessment were not intended to be considered as de-facto forecasts, the work provided an estimate of the scale of impact of COVID-19 on the transport network. For the low impact scenario, the following results were obtained:

- Predicted overall impact on modelled demand is a fall in trips (by all modes) of between -5% (inter-peak) and -7% (peak);
- Commuting, shopping and business trips are subject to the greatest trip reductions, while freight trips increase, driven by the shift to online shopping;
- The greatest demand reduction is seen on public transport modes including an average reduction in bus trips by mode across all purposes of 19%; and
- Mode shift of public transport trips to car, particularly for travel to Liverpool city centre in the short term.

There remains uncertainty about the post-pandemic world but modelling for this project of future transport aligns with other studies⁴⁵ in its expectation of reduced demand for public transport, with rail demand reducing more than bus demand. In summary, if pre-pandemic trends of operating costs and long-term passenger volumes continue as anticipated and there is reduced travel demand in the post-pandemic world: the commercial profitability of bus services will reduce; the proportion of services that are required to be supported by Merseytravel will increase; and the funding

45 For example, *National Infrastructure Commission*, Behaviour change and infrastructure beyond COVID-19 which developed post-pandemic four scenarios all of which expected to include reduced or static levels of public transport use.

required to continue to provide these services will increase – earlier and more sharply than forecast without COVID-19. In the absence of additional supported service funding, a significant number of services may cease to operate.

The two main areas of uncertainty, set out in more detail in Section 3.7 of the Economic Case, are the following:

- Recovery of bus patronage and long-term impacts due to changes in travel patterns and behaviour originated by COVID-19; and
- Availability of funding and ability for LCRCA to increase spend to support a decreasingly commercial network.

A range of scenarios have been modelled to reflect this uncertainty, testing the bus reform policy options, as well as different potential COVID-19 impacts (with 85% demand recovery as the central scenario, informed by the data presented in the Charts above, with 100% demand recovery as a demand upside scenario and 75% demand recovery as a sensitivity test) and funding availability. Additional detail about the scenarios and the modelling suite used to test them is presented in the Economic Case.

3.8.1. Bus Service Operators' Grant

One key role of Government in day-to-day local bus service delivery is the administration of BSOG. BSOG is the only general subsidy which is given to bus operators and is paid on 'qualifying kilometrage' for diesel vehicles – which includes depot trips, planned and for breakdowns in addition to distance operated in service.

For local bus service qualifying kilometrage operated, bus operators receive back from Government a percentage of the fuel duty paid. The percentage varies with the fuel used. In certain circumstances, BSOG is progressively devolved from bus operators to local authorities as defined in the Better Bus Areas ("BBA") fund.

Additional rebates are payable through incentive schemes:

- low carbon; and
- smartcards and automatic vehicle location systems.

Operators submit audited estimates in advance and claims in arrears stating qualifying miles and fuel consumption. If the estimate is accepted, operators are paid quarterly in advance (with year-end adjustments). Otherwise BSOG is paid in arrears at year end.

During the COVID-19 pandemic, BSOG payments, along with supported services contract payments and ENCTS

reimbursement, were maintained at previous levels to protect bus services, as opposed to reducing in line with the initial significant reduction in service km and gradual reinstatement⁴⁶.

BSOG reform

In May 2019, The House of Commons Transport Committee recommended reform of BSOG and noted that⁴⁷ “there is no obvious rationale for the different arrangements under which payments can be made, or the different choices some Local Authorities can make in respect of the things for which BSOG is paid”.

The Bus Back Better strategy includes a commitment to reform BSOG, moving from a fuel based subsidy to an approach which better meets Government priorities and supports environmental objectives. A consultation will set out detailed plans with Bus Back Better outlining Government’s considerations as:

- moving the main element of BSOG from fuel consumption to a distance rate which would address the current problem where base BSOG is not paid to electric vehicles (except for a small incentive payment);
- updating the low carbon incentive to better meet environmental objectives. The existing incentive started in 2009 is based on comparisons to a Euro III bus;
- an additional amount for rural bus services;
- new incentives for demand responsive transport;
- efficiencies from administrative changes such as payments in arrears, and ending payments for ‘dead’ kilometrage between depots and the start or finish of passenger services; and
- making the reformed BSOG available only to LTAs and Operators in an EP, or where Franchising is being actively pursued.

3.9. Technological Developments

The LCRCA is leading the way on zero emission buses with the first fleet of 20 hydrogen fuelled buses due to start in operation in the region in April 2023. The LCRCA is using TCF funding to buy the vehicles which re to be leased back to Arriva and Stagecoach to operate.

46 See Section 3.3.2.

47 Bus services in England outside London inquiry, House of Commons Transport Committee, May 2019: <https://publications.parliament.uk/pa/cm201719/cmselect/cmtrans/1425/142504.htm>.

The LCRCA is developing multiple technological advancements through bus reform and franchising. The LCRCA have already taken steps to create smart, multi-modal ticketing and will continue to develop this project further through Bus Reform. Looking forward, the LCRCA will look to upgrade audio and visual specification which will enhance accessibility in the on-bus experience. New phone APPS and chatbots will also be developed to increase patronage and customer relationship management.

3.10. Conclusions

The importance of the bus in LCR is illustrated by the fact that LCRCA has the highest level of bus journeys per head of population in comparison to North-West Local Authorities. Bus services carried around 80% of public transport trips (pre-COVID)⁴⁸, performing a vital role in supporting the economy of LCR by providing access to employment, education, retail, leisure and healthcare. LCRCA has powers, yet to be enacted, to directly manage and maintain a KRN including some of the main bus corridors, offering greater potential for joined-up planning of bus priority measures to make bus services more efficient.

More densely populated areas of the LCR are, in general, reasonably well served by bus in terms of frequency and accessibility, although less so for more peripheral areas. However, the coexistence of commercial and supported services can result in a lack of consistency in the bus offer and drives a reactive, rather than proactive, approach to bus network planning. While Merseytravel goes beyond the statutory requirement for concessionary travel and offers multi-Operator, multi-modal ticketing, alongside the range of options offered by individual operators, cost of bus travel is higher than in London and has risen at a relatively faster rate, presenting an affordability challenge in a relatively deprived city region.

Arriva and Stagecoach currently dominate bus operations in the LCR, carrying 92% of all bus passengers (69% and 23% respectively), with the remaining 8% being shared across 24 smaller operators who are predominantly operating supported services on behalf of Merseytravel.

The Alliance has achieved improvements in passenger growth and customer satisfaction, demonstrating some benefit from more coordinated planning and investment. However, the downward longer-term trend in passenger volumes remains, along with significant customer dissatisfaction in regard to the cost of bus travel, punctuality of bus services and information provision. The LCR residents are also increasingly concerned about the contribution of buses to poor air quality.

48 LCRCA Transport Plan (paragraphs 2.1.5 and 4.3.3).

Prior to the COVID-19 pandemic, the profitability of existing bus services, commercial and supported, was forecast to continue its decline over time, as long-term downward trends of passenger volumes and upward trend of operating costs continued. Analysis of the potential short-to-medium term impacts of the COVID-19 pandemic on the LCR's transport network found that levels of bus use will be lower than pre-pandemic levels, further increasing the likelihood of more bus routes being unprofitable. The potential impacts of reducing profitability include, in the absence of additional funding, a reduction in the number of commercial bus services operated leading to:

- a deterioration of accessibility to employment, health, retail, leisure and education and secondary impacts on productivity, carbon emissions and inhibited access to opportunities; and
- increased challenge to achieving LCRCAs policy ambitions for clean and inclusive economic growth, and net zero carbon by 2040.

The assessment of alternative options to limit the impact of reduced commercial profitability on the residents and wider policy ambitions of the LCR, as permitted by the Bus Services Act, are therefore considered appropriate.

4. *The Case for Change*

4.1. Introduction

LCRCA has bold and ambitious plans for economic growth. Transport has a significant role to play in delivering clean growth and in tackling issues relating to economic and social underperformance, with buses being at the heart of the LCR's transport system, and in facilitating the LCR's recovery from the COVID-19 pandemic

LCRCA's Bus Strategy sets out a plan for network and service evolution to halt, then reverse, the long-term decline in bus patronage in the LCR, and to allow bus to play a full part in delivering LCRCA's economic and social ambitions. However, there are a number of key challenges to the delivery of bus services which impede the achievement of this aim – these are set out below.

The Case for Change forms the foundation of the justification to implement regulatory change within the context of bus service delivery within the LCR. Section 3 of this Strategic Case summarised the importance of the contribution which bus services make to the success of the LCR and explained that this contribution must both continue and evolve, in support of the successful achievement of LCRCA ambitions. The Case for Change is founded on the need to deliver LCRCA's VfB, which represents sufficient improvement in the bus service offer to passengers to support the achievement of those ambitions. The delivery of the LCRCA BSIP would facilitate LCRCA's delivery of its VfB, therefore where this Strategic Case considers whether the VfB would be achieved, this also applies to LCRCA's BSIP.

This Section concludes with the Need for Intervention, which considers whether the VfB would be achieved without regulatory change, and whether LCRCA is the appropriate organisation to deliver any required change.

4.2. Challenges to delivering LCRCA's VfB

Bus services in the LCR were deregulated in 1986 through the implementation of the Transport Act 1985, in common with all other local bus services in England, Scotland and Wales (except those in London). The intention of deregulation was to improve the passenger experience, by means of increased efficiency from competition through an increase in the number of bus operators competing and by reducing the possibilities of entry-deterring behaviour. Deregulation transferred much of the risk around bus operations away from the public sector, providing compensatory protection for the private sector which took on this risk by removing public sector influence over services and fares. This reduction in influence has limited the extent to which the public sector can depend on bus services supporting the delivery of its objectives.

Subsequent legislation, through to the Bus Services Act, has been introduced to amend the balance between LTAs and bus operators – the aim being to reduce the extent to which either can achieve success at the expense of the other. Each of the elements of the LCRCA's VfB has been considered below in terms of whether it could be delivered in full, or in part, under current arrangements (referred to as the Reference Case). This forms the basis of the Case for Change on which this business case is founded; that if the VfB or BSIP cannot be delivered, thereby not supporting the delivery of LCRCA's policy ambitions pursuant to the current arrangements, then consideration of whether any of the range of possible interventions could improve outcomes is justified.

Across the entirety of the bus network, that is including both commercial and supported services, passenger fares and ancillary revenue accounted for around half of private sector bus operators' income before COVID-19. The remainder was receipts from the public sector, a combination of concessionary travel reimbursement, BSOG and supported services payments. With the exception of the latter, these receipts were 'thin-spread' across all bus services – based on miles operated and ENCTS passengers carried respectively; they gave the public sector limited influence over the provision of commercial services.

At the time of this Assessment, while there has been a significant uptake of the vaccination programme and all restrictions have been lifted, there remains uncertainty about the long-term impacts of the pandemic on bus usage, although this uncertainty is lower than in 2020. There also remains the potential for waves of infection from new COVID-19 variants, for example as seen with the Autumn 2020 Delta variant and ongoing Omicron variants, leading to restrictions on socialising and travel. Neither the duration of the transition back to steady post-lockdown demand nor how that demand compares to previous levels is yet known with any level of precision⁴⁹, including allowing for the removal of the additional bus operator subsidy planned for March 2023. Thus, neither the future balance of passenger revenue and public sector support, nor the extent of influence resulting from that level of public sector support, can be assessed with certainty. However, it can be anticipated that an eventual balance between freestanding commercial and supported services must be found – although this seems likely to be a different balance to that prior to the COVID-19 pandemic.

In the absence of legislative or regulatory change it does not seem reasonable to expect that the public sector will secure any more influence over services operating commercially, that is with

49 Scenario modelling has considered a range of possible outcomes for the Economic and Financial cases.

the private sector taking revenue risk, than it did previously. This is recognised by the Bus Back Better strategy in its expectation that LTAs commit, as a minimum, to an EP to achieve Government objectives of improved bus services.

The challenges to delivery affecting each of the elements of LCRCA's VfB have been considered in turn:

- (a) **Network enhancements:** maintaining something appropriately close to the pre COVID-19 bus network⁵⁰ is expected to require additional financial subsidy from the public sector. Even with a continuation of Bus Recovery Grant funding, a greater proportion of bus services are becoming non-commercially viable⁵¹. With bus operating costs gradually increasing, passenger revenue declining⁵², and bus operators needing to maintain profit margins to survive, it is reasonable to assume that their inevitable response will be to cease commercial operation of the least commercial parts of their networks.
- Over recent years within the LCR, reductions have covered entire services, specific periods of operation (for example, later in the evening or at weekends), or abandoning Sections of a route (for example, terminating short of the previous destination or removing a diversion away from the main road). For the latter two cases, where supported services are added back to recreate the original network, there can be clear passenger disadvantages including in terms of confusion from a lack of consistent identity but also from not being able to take advantage of cheaper single operator ticket products if different journeys are taken on bus services from separate operators. There can be disadvantages to LCRCA too; because supported services cannot run in direct competition with commercial services or are required on a sporadic basis, they are not always an efficient way of infilling the network.
 - The additional bus services included within the VfB for social, as opposed to commercial, advantage would require more funding. Given the scarcity of funds, it is imperative that funding is – and can be seen to be – used efficiently. In an ideal scenario, additional services would include enhancements to commercial services, over which

50 This business case has been developed under the central assumption that additional public sector funding cannot be found to maintain the present bus network and that the network is progressively reduced. Alternatives under which additional funding can be found, have also been considered. See Section 3.8.

51 <https://www.liverpoolecho.co.uk/news/liverpool-news/full-list-bus-routes-changed-24659642>.

52 See Section 3.8.

LCRCA currently has limited influence. The ambitions for additional services are unlikely to be realised under current arrangements and therefore the bus service offer would be constrained in its ability to support the achievement of LCRCA objectives.

- Network integration has been called for in the DfT's Decarbonising Transport Plan and LCR's Mayor has highlighted the need for a 'London style transport network'. Integration with rail services will support an overall mode shift away from the car, particularly with outlying areas where an integrated service into the city would be faster and more attractive to service users.
- Based on the above, there was a strong case for change for bus reform in the LCR prior to the COVID-19 pandemic, when the bus network was relatively stable. Since the pandemic, there is greater uncertainty over levels of bus use, making the bus network less stable and more likely to require increased levels of public sector funding. Scenario planning by LCRCA and other post-COVID-19 scenario planning work point to reductions in bus use which can be expected to exacerbate the pre-COVID-19 trends of decreasing profitability of bus services.
- As required by the Bus Back Better strategy, LCRCA has produced a BSIP that sets out a programme of measures to increase bus patronage. Bus Back Better also requires most LTAs to establish an EP to benefit from BSIP funding. In parallel to this Assessment, operators Arriva and Stagecoach have jointly put forward an EP proposal to LCRCA⁵³ as an alternative to Franchising, which has provided input to this Assessment.

(b) **Fares and ticketing:** the current range of ticketing options offers considerable reductions on individual single fares for regular and/or multi-leg/multi-modal trip travellers. The cheapest fares are available for those able to pay in advance and able/willing to commit to a single operator. However, the wide range of ticket options available and limited publicly available information about the cost of single and return bus fares can make it hard for potential users to understand the cost of bus travel and how to secure best value for their travel needs.

- A fare capping initiative, being implemented by LCRCA in partnership with the bus operators, DfT and TfN, will bring about a material improvement – allowing passengers

53 See Section 6.3.

confidence that they will not be charged more than the minimum fare for the trips they have made with the cap period. However, a reasonable understanding of the system would be required for passengers to minimise the capped fare and/or to be able to predict their travel costs over a given period⁵⁴. Implementation of fare capping within the current de-regulated environment is complex and progress to date has been relatively slow. At the time of this Assessment, LCRCA is undertaking workshops to scope an account-based ticketing system.

- LCRCA influence to realise the ticketing initiatives included within the VfB (which include reducing the multiplicity of tickets available, improving consistency and allowing greater understanding of the costs of bus travel) is currently limited compared to the powers obtained through Franchising. Necessary simplification and rationalisation of ticketing will not be realised under current arrangements and therefore this aspect of the bus service offer would be constrained in its ability to support the achievement of LCRCA objectives.

(c) **Fleet and depots:** the majority of buses deployed within the LCR are diesel powered, although some progress is being made with the introduction of (relatively small numbers of) hydrogen buses. Fleet renewal has meant diesel vehicles are progressively becoming less polluting as new vehicles meeting the latest emission standards are introduced. The Alliance, and the contract conditions for supported services, support this transition by mandating a maximum average age for vehicles in operation. Vehicles are deployed from operator's individual depots, of various scales and located across the LCR⁵⁵. Hydrogen bus lease negotiations between LCRCA and bus operators have been ongoing and LCRCA has recently reached provisional agreement with one operator for the provision of hydrogen buses. As with the Alliance, this project has highlighted the challenges in undertaking commercial negotiations with operators.

- The capital cost of low- and zero-emission buses has been a barrier to fleet replacement, but costs are anticipated to continue to reduce. operators will increase investment

54 For example, making trips across different Operators will continue to incur more cost than on a single Operator – being capped at the lesser of LCRCA multi-Operator multi-trip fare or single Operator multi-trip plus single(s) on the other Operator/mode.

55 The location of Operators' depots with reference to service routes impacts the cost of providing those services, and therefore their potential to compete – whether as a commercial service or for a supported services contract.

in these vehicles as the whole-life costs of ownership⁵⁶, in combination with improved public perception, make them more attractive options. The time at which this happens is likely to differ between operators and will be influenced by the need to comply with low emission vehicle requirements of CAZs in the LCR and neighbouring authorities. The VfB includes a steady transition to ZEV, consistent with LCRCA's declaration of a climate change emergency and clean-air objectives. LCRCA is constrained, for example by subsidy regime legislation, in any financial support it would be able to offer individual operators in achieving this goal and therefore has limited influence over the rate at which transition happens (before, for example, target dates are set in additional legislation). Therefore, LCRCA cannot be confident when the benefits of reduced emissions will be realised, nor that vehicles introduced will be zero emission, rather than cleaner/reduced emission, and consequently the timescale to achieve LCRCA objectives is uncertain.

- Emissions from buses have environmental and health impacts on the population of the LCR. The environmental impact occurs from the greenhouse gas emissions produced which contribute to global warming. The health impacts are as a result of the particulate matter and nitrogen oxides (NOx) tailpipe emissions from buses which affect the local air quality of the LCR. Ambient air pollution increases rates of respiratory disease, heart disease, and strokes as well as being associated with physical and neurological impacts on the development of children. Therefore, reducing the emissions that affect air quality will have positive health impacts on residents adjacent to bus routes. Air quality is an issue across the UK but is particularly pertinent in urban centres. Within the LCR the entirety of the Liverpool District has been declared an AQMA which mandates LCRCA to address the issue of poor air quality in the area. Other districts also have defined AQMA, but at a local scale.

- (d) **Punctuality and reliability:** perceived poor punctuality and reliability were raised in the Big Bus Debate as significant passenger concerns; service reliability also has significant operator consequences, requiring additional resources for extended journey times and to maintain service frequency as well as leading to reduced revenues.⁵⁷

56 That is, taking into account changes in operating/energy efficiency and renewal costs (for example mid-life battery or fuel-cell replacement).

57 Liverpool Bus Lane Suspension Monitoring Results Report, Liverpool City Council, September 2014, Mott MacDonald.

- LCRCA and operators are already working together to improve reliability, for example by identifying specific locations or corridors to target investment in bus priority measures. LCRCA, working together with its constituent Local Authorities as highway authorities, has influence over the delivery of interventions to improve reliability; therefore, this aspect of the bus offer could support the achievement of LCRCA objectives under current arrangements. However, mechanisms to secure delivery of measures and/or performance are limited under current arrangements. The powers available to LCRCA to manage and maintain the KRN directly allow LCRCA to have greater control – if exercised – over road improvements that improve bus reliability and punctuality. Combining greater control over the KRN with greater control over the bus services that operate on it allows more coordinated strategic planning of the bus network to deliver LCRCA objectives compared to the existing situation.
 - Under current arrangements, LCRCA and/or its constituent Local Authorities deliver highway interventions to improve bus reliability, thus taking the financial risk, with the benefits of interventions (that is reduced journey times, increased reliability) being shared between LCRCA and operators. There is risk inherent in current arrangements whereby LCRCA is reliant on operators continuing to provide bus services to use any bus priority interventions implemented but is unable to guarantee level of service or influence the nature of these services and in turn to achieve its objectives.
- (e) **Customer experience:** a range of attributes which affect the passenger experience were raised as priorities for improvement within the Big Bus Debate, including driver attitude; bus cleanliness (inside and out); and availability of information on/off board. The survey results show variation in current satisfaction levels for these attributes by Local Authority, suggesting possible differences in quality between operators and/or services.
- LCRCA, working with the operators signed up to the Alliance, and supported services/other operators, has put into place a range of provisions to improve the customer experience, including customer service training for drivers, enhanced cleaning and improved information availability. LCRCA, working with the bus operators, has reasonable influence to realise further

improvements in the customer experience; therefore, this aspect of the bus offer can support the achievement of LCRCA objectives under current arrangements, although with limited mechanisms to enforce delivery. In addition, the TravelSafe Partnership aims to ensure that the public transport network is attractive and safe to use at any time.

- (f) Funding: The COVID-19 pandemic has led to public sector finances being more constrained now than they were pre-pandemic. The certainty of future public sector finances is also unclear. This puts additional pressure on the efficiency of the bus network and makes it more challenging for the public sector to control and maintain a bus network in the current model. A move to an alternative model would mean that LCRCA could take more control over the level of service provision and the funding required for it. Furthermore, in order to access BSIP funding, LCRCA must change the current delivery of the bus network. This is needed in order to recover more effectively from the impacts of the COVID-19 pandemic and be able to deliver the VfB.

A Case for Change therefore exists. Without regulatory changes to the delivery of bus services LCRCA's VfB could not be delivered in full and, for those limited aspects which could be delivered, has limited certainty around delivery. In addition to regulatory changes, LCR's BSIP, as described in Section 2 of the Strategic Case, would be necessary to ensure that LCRCA's VfB is delivered and has sufficient funding.

If the substantive improvements in the bus service offer to passengers described in the VfB are not secured, this would significantly constrain the extent to which LCRCA ambitions can be achieved. The need for change which cannot be realised, or cannot be depended on, forms the basis of the Need for Intervention. Changes in the regulatory context of bus services delivery are needed to achieve the Case for Change.

4.3. The Need for Intervention

This Section has set out and considered the challenges which act to constrain the delivery of the improvements identified with LCRCA's VfB under current arrangements. In particular, a compelling justification of regulatory change exists for the areas of: Network enhancements; Fares and ticketing; and Fleet and depots. Based on evidence set out in this Strategic Case and under current arrangements, the level of improvement which could be achieved does not provide the level of bus reform and change needed to support LCRCA achieving its objectives and ambitions.

This Section goes on to consider the mechanisms under which regulatory change could be secured.

4.3.1. Market imperfections

In support of the Bus Services Bill (now the Bus Services Act) during its passage through Parliament, the DfT commissioned a Local Bus Market Study⁵⁸ which considered:

- market trends;
- stakeholder objectives; and
- Government intervention in the market.

With regards to the last of these, the report describes four potential sources of ‘market imperfection’; reasons why the market may not routinely deliver bus services that provide the greatest level of passenger benefits (commercial bus operators have limited incentives to invest and improve the network other than commercial purposes). The market imperfections and their descriptions as provided in the Local Bus Market Study are summarised in Table 1.8.

It is not the intention to suggest that all of these market imperfections can currently be seen in LCR. However, there is the potential for them to become relevant and, if they do, that the realisation of those imperfections would constrain the future achievement of LCRCA’s VfB.

The diminished benefit to passengers arising from the market imperfections of the deregulated bus market is regarded by some as a significant human rights concern⁵⁹. A lack of affordable public transport affects quality of life given its crucial role in providing access to work, education and healthcare, particularly for the more deprived communities that make up a high proportion of the LCR population. The market imperfections therefore may not only constrain the ability to deliver the VfB but, in turn, have potential to significantly impact on wellbeing of the population.

4.3.2. The Bus Services Act

In recognition of the ‘market imperfections’ described in Table 1.8, the Bus Services Act provides LTAs with additional legislative tools in order to respond to situations where the current deregulated model is not the optimal regulatory structure (that is where the current deregulated model is exhibiting one, more or all of the ‘market imperfections’),

58 Local Bus Market Study, Report to the DfT, KPMG, 2016.

59 Alston, Khawaja & Riddell (2021) Public Transport, Private Profit: The Human Cost of Privatizing Buses in the United Kingdom.

with the ultimate aim of enhancing the passenger experience and reversing the long-term decline in bus patronage outside of London.

Table 1.8: Market imperfections, Local Bus Market Study 2016⁶⁰

Market imperfection	Description	Applicability to the LCR
Network economies	On road competition between operators may lead to fragmented service patterns and complex ticketing arrangements.	In the LCR, there is a wide range of ticketing options over which Merseytravel/ LCRCA has limited influence and which can be confusing for passengers (and potential passengers). Bus timetables are specified by the operators who may not seek to coordinate with other services or modes.
Misaligned incentives	Competition will likely drive the benefits of investing in infrastructure to passengers. Infrastructure management may however be more difficult in markets with more than one operator.	In the LCR, partnership working has been achieved through the Alliance and positive outcomes have been achieved. There is however a limit to the level of cooperation between private sector operators that can be achieved within the current deregulated bus model, which has competition between operators as its basis.

60 KPMG, Local Bus Market Study, Report to the Department for Transport, January 2016.

Market imperfection	Description	Applicability to the LCR
Lack of competition	A lack of effective, sustainable competition between operators for passengers could lead to higher fares, lower output, reduced service quality, reduced innovation and higher operator profits relative to those delivered by a more competitive market. A lack of effective competition could also lead to inefficiencies in the market for supported services.	Despite there being more than one operator in the LCR (and therefore the basis for competition), there are few routes in the LCR where there is genuine on-road competition between operators; the limitations of competition have resulted in the realisation of some of the negative outcomes mooted as possibilities here.
Wider economic, social and environment benefits	Bus services can generate wider economic, social and environmental benefits which can mean that it is economically efficient to increase supply above the levels determined by the commercial market.	In the LCR, to achieve the policy aims of achieving clean, low carbon growth, continued access to opportunities and achieving the objectives of the VfB, more coordinated action to increase supply is required.

The Bus Services Act is intended to unlock the potential of buses by giving LTAs new powers to deliver EP, Advanced Quality Partnerships or Franchising. The Bus Services Act aims to benefit passengers by making bus services more attractive by giving LTAs the power to decide upon:

- types of tickets available;
- types of payment that can be accepted;
- the information available to passengers;
- where buses go and at what frequency; and
- the emissions standards and technologies available on buses.

Following the publication of Bus Back Better in March 2021, the option of entering into Advanced Quality Partnerships has effectively

been removed as a viable option for LTAs. While an Advanced Quality Partnership could be established, Bus Back Better makes it clear that Central Government funding support for bus services is limited to services operating through EP and Franchises.

Applicability to LCR

LCRCA and operators are in agreement over the need for action to increase bus passenger revenue through improving the attractiveness of services, evidenced by the creation of the Alliance.

The Alliance is an example of an LTA promoted intervention and demonstrates the parties' agreement in the need for a different approach to the delivery and management of bus services in the LCR. The Alliance also refers to the requirement to consider the potential future role of an EP, one of the policy measures introduced by the Bus Services Act, now a requirement stipulated in the Bus Back Better strategy⁶¹, signalling Government acceptance of the necessity for change. Arriva and Stagecoach have jointly put forward an EP proposal for LCRCA's⁶² consideration as an alternative to Franchising.

It is clear that current levels of public sector intervention in the delivery of bus services are only partially successful in mitigating identified deficiencies under the current deregulated model, and therefore that this is not the optimal regulatory structure for the LCR. As an LTA with new powers to help it mitigate and overcome market imperfections, it is entirely appropriate for LCRCA to consider the potential contribution of each of the regulatory options available to it.

4.4. Conclusions

Buses are vital to the functioning of the LCR's economy. To realise the potential for growth in that economy, the bus service offer needs to be improved. This Section has set out and considered the challenges which act to constrain the delivery of the improvements identified with LCRCA's VfB under current arrangements. A compelling Case for Change has been identified; without regulatory changes to the delivery of bus services, LCRCA's VfB – which is closely aligned to national Government expectations for bus services as set out in Bus Back Better – could not be delivered in full. For those limited aspects which could be delivered, LCRCA has limited certainty around delivery. If the substantive improvements in the bus service offer to passengers described in the VfB are not secured, this would significantly constrain the extent to which LCRCA ambitions can be achieved.

61 Except Mayoral Combined Authorities (such as LCRCA) which have started the statutory process of franchising.

62 See Section 6.3.

Evidence indicates some effects from each of the market imperfections identified in the Local Bus Market Study⁶³ which was commissioned during development of the Bus Services Act including: network economies; misaligned incentives; lack of competition; and wider economic, social and environment benefits.

LCRCA and operators are in broad agreement over the need for action to increase bus passenger revenue through improving the perceived attractiveness of services, as evidenced by the creation of the Alliance. It is clear that current levels of public sector intervention in the delivery of bus services are only partially successful in mitigating identified deficiencies under the current deregulated model, as recognised by the Bus Back Better strategy, and therefore that this is not the optimal regulatory structure for the LCR.

The Bus Services Act gives LCRCA access to additional legislative tools which have the potential to address those market failures and the challenges which are constraining delivery of its VfB, in support of achieving its wider ambitions and objectives. It is entirely appropriate for LCRCA to consider the potential contribution of each of the regulatory options available to it, and to choose to pursue the implementation of whichever of those options have potential to achieve the changes required.

63 Ibid.

5. Scheme Objectives

5.1. Introduction

The previous Section outlined the ways in which bus operations in the LCR need to change to deliver on LCRCA's VfB and wider Policy Objectives identified in Section 2 of this Strategic Case.

The Bus Services Act contains provisions to expand the range of regulatory options available to LTAs and operators to work together, providing a range of policy tools to foster collaboration and meet common interests, from LTA/operator voluntary agreements to bus Franchising powers.

The Franchising Guidance requires the setting of clear objectives relating to what the authority is seeking to achieve, against which different options can be assessed. This Section explains the derivation and use of the objectives which underpin the Assessment undertaken in this business case.

The starting point for this Assessment, are the set of five Policy Objectives described in the following Section. These form the basis of the option shortlisting process which is presented later in this Strategic Case. In the remaining four cases of this Franchising assessment, additional objectives are applied in distinguishing between the impacts of options in a greater level of detail. Taken together these make up the Scheme Objectives which govern the overall choice of a preferred option.

5.2. Policy Objectives

The Policy Objectives build on the Case for Change and the Need for Intervention, forming the basis of the framework which allows a comparison between the different regulatory options. Central to these objectives is the delivery of the VfB⁶⁴, but they have been developed to also capture the ongoing gradual shift of services from commercial operation to supported services, and the developing policy context. The objectives, all considered over the medium to long term⁶⁵, are to:

1. **Maximise the contribution of bus services to achieving the economic success and social capacity of the LCR.**

This objective is measured in terms of the scale of monetised passenger/ (transport-efficiency) and economy benefits each option can realise from delivery of the VfB, but also non-monetised benefits from bus service improvements and commentary on the potential for bus services to support wider LCRCA ambitions and initiatives.

64 An objective related to housing has not been included as part of the Assessment given that it is not an aim of the Vision for Bus nor LCRCA's BSIP.

65 For the purposes of this Assessment: short term is considered as representing the time up to implementation of any regulatory option; medium term as 3-5 years post-implementation; and long as 5-10 years (plus) post-implementation.

2. Maximise the contribution of bus services to reducing the impact of travel on the natural environment.

This objective is measured in terms of the monetised reductions in greenhouse gases and vehicle emissions from a greener bus fleet and from fewer private car km (as more bus trips are made), as well as the extent that local ambitions and EU regulations on climate change are met. It also considers non-monetised benefits from bus service improvements and commentary on the potential for bus services to support wider LCRCA ambitions and initiatives.

3. Harness competition's role in improving the offer to passengers and delivering best value for LCRCA for the services it procures.

This objective is qualitative, with assessment being based on commentary on the options' anticipated impacts on the level and capacity of competition for bus service delivery and potential benefit which this brings.

4. Maximise the passenger benefits of service coordination, ticket integration and information provision across the LCR public transport network.

This objective is measured in terms of the scale of monetised passenger (other) benefits and revenue which result from delivery of the VfB, but also non-monetised benefits from coordination and information improvements, including better integration with other modes.

5. Support implementation of measures that improve bus service delivery by addressing factors which may constrain the extent to which bus operators can commit to meet quality or service level standards.

This objective is qualitative, with assessment being based on commentary, with particular relevance to feedback from the Big Bus Debate, on the options' anticipated impacts on the extent to which they mitigate constraints which limit what operators would be prepared to sign up to.

5.3. Scheme Objectives

The Franchising Guidance specifies that objectives should be included that specifically relate to VfM and affordability. The decision of which of the shortlisted options is adopted as the preferred approach, requires consideration across each of the five cases which form this Franchising assessment. The Scheme Objectives take the Policy Objectives, which largely relate to the Strategic Case, and combine these with objectives relevant to those other cases.

- (a) Strategic Case, based on the five Policy Objectives as detailed above, all considered over the medium to long term;

- (b) Economic Case, considered over the medium to long term, in terms of:
 - combining monetised and non-monetised aspects and consideration of the distribution of those benefits;
 - An assessment of certainty in outcomes, partially informed by sensitivity testing but also referencing the nature and time-profile of uncertainty around options; and
 - VfM, appraised in line with DfT's Transport Appraisal Guidance;
- (c) Financial Case; considered over the short term, and the medium to long term, in terms of:
 - assessment of the net cost of each option to the public sector, taking into account all financial costs and benefits arising;
 - affordability analysis, including a year-by-year assessment of costs, income and budget, considering implementation costs and any capital investment;
 - details of funding sources, including any LCRCA borrowing requirements and arrangements; and
 - overview of financial risks and sensitivity analysis to understand the quantified impact of identified risks occurring;
- (d) Commercial Case; considered in terms of:
 - Effect on the level of public sector influence, over the medium to long term;
 - Achieving best value (in terms of implementation), over the short term;
 - Competition between bus operators, over the medium to long term;
 - Appropriate risk transfer, over the medium to long term;
 - Ease of implementation, over the short term; and
 - Recovery robustness, over the medium term;
- (e) Management Case; considered in terms of:
 - the extent to which the resources required for its successful delivery match those available to the promoting authority, over short; and medium to long terms;
 - acceptability to key stakeholders, over the short term; and
 - the complexity, including the potential for robust challenge, of the delivery process, over the short term.

Further information on the appraisal of options against the measures of success for the relevant Scheme Objectives are provided within the subsequent cases.

5.4. Conclusions

This Section has introduced the Scheme Objectives and their derivation, which allow differences between options to be distinguished for the purposes of shortlisting the most promising options and then for selecting a preferred way forward.

Each of the objectives has been defined in terms of specific measures for success, which are set out in more detail in the relevant cases. The identification of options which have the potential to contribute to the identified Policy Objectives is set out in Section 6. Section 7 describes the comparison of those options in terms of their performance against objectives and the process of which a shortlist of options was identified for more detailed assessment within later Sections of this Franchising Assessment.

6. *Delivery Options Generation and Refinement*

6.1. Introduction

Previous Sections have established the Case for Change, in terms of the need for additional regulatory powers to shape the delivery of bus services, providing the additional support that LCRCA needs to deliver its objectives and ambitions described within the VfB.

This Section considers the broad range of regulatory options which are available to LCRCA and their potential to secure the changes in the region's bus service offer to deliver against the Policy Objectives set out in the previous Section. The Bus Services Act changed the range of options available to LTAs; the longlist generated and presented within this Section combines new options from the Bus Services Act, with those which it leaves largely in their current form.

Subsequent to setting out the options available, this Section describes the potential of the different options against the Policy Objectives from Section 5 and, based on their performance, identifies the shortlist of options which are considered in further detail in the remaining four cases of this franchising assessment.

6.2. Regulatory Options Available

The Bus Services Act contains provisions to enhance the range of policy tools available to LTAs to improve bus services in their areas, encouraging LTAs and bus operators to work together to meet common objectives. As amended by the Bus Services Act, five service delivery intervention options are available to LCRCA as a Mayoral Combined Authority. These vary significantly in the complexity of their application, the level of risk which the LTA is prepared to consider and the level of influence that the LTA would be able to exert in shaping bus services. It is noted that Bus Back Better makes it clear that Central Government funding support for bus services is limited to services operating through one of EP or Franchising, but the full suite of options is included for completeness:

- (a) A **Voluntary Partnership Agreement (VPA)** allows two or more operators and one or more LTA to agree a wide range of undertakings and behaviours such as integrated tickets and improved passenger information. VPAs apply only to operators that have entered the agreement; other operators cannot be forced to comply. The Alliance is an example of a VPA. This option would not allow LCR access to BSIP funding and has therefore not been considered further.
- (b) A **Statutory Quality Partnership (SQP)** allows LTAs to specify proportionate service standards for the use of physical facilities which it provides. Merseytravel's Quality Bus Network is an example of this model. The AQPS model

(below) provides a more functional replacement to SQP; this option has therefore not been considered further on a standalone basis.

- (c) Under an **Advanced Quality Partnership Scheme (AQPS)** LTAs can specify a wider range of service standards than possible under the previous SQP; it also removes the SQP requirement that local authorities provide ‘facilities’ which are proportionate to the standards in favour of the broader ‘measures’ which improve the use of and/or quality of bus services. An AQPS appears most suitable for application at a local level, for example a corridor or town centre, for example by restricting the registration of new services and/or prohibiting operators from using specified facilities such as bus stations. It has more limited application at a Local Authority or city region geography in terms of the scope of standards that could be imposed on operators. Its potential to support delivery of VfB is therefore constrained and it has not been considered further on a standalone basis.⁶⁶
- (d) An **Enhanced Partnership (EP)** encourages collaboration between LTAs and all bus operators through the setting of joint objectives and actions by all parties. An agreed set of EP arrangements, for example specifying vehicle age, passenger information and fare-setting of multi-Operator tickets, are imposed on all operators within the agreed area (if those operating a defined proportion of service kilometrage⁶⁷ do not object). However, an EP scheme has limitations in terms of the ability of the authority to take enforcement action in cases of poor performance, other than the option of imposing full termination. Also, an EP needs to be negotiated and agreed with operators, who are unlikely to accept uncommercial initiatives and which might limit the extent to which VfB initiatives can be implemented. This option would allow LCR access to BSIP funding.
- (e) Combined Authorities with directly elected Mayors, such as LCRCA, are permitted by the Bus Services Act to introduce **Franchising** of bus services whereby operators would bid for the right to operate services under local service contracts. The Bus Services Act allows reasonable freedom to LCRCA in determining the nature of the Franchising scheme, including on the approach to sharing

⁶⁶ It is noted that an AQPS has potential to form a useful additional role, complementary to a VPA or EP scheme.

⁶⁷ Either of: objectors cumulatively operate at least 25% of the total registered service distance; or objectors make up more than 50% of the Operators of qualifying local services and they operate at least 4% of the total registered service distance.

revenue risk⁶⁸. Franchising also allows more flexibility in terms of incentivising high performance standards and taking appropriate enforcement action in the event of failure to meet those standards. This option would allow LCRCA to access BSIP funding.

6.3. Delivery Option Shortlisting

As previously introduced, LCRCA's VfB sets out its ambitions to improve bus services and standards in support of achieving its wider policy and strategy objectives. The regulatory options considered involve trade-offs between the degree of influence which LCRCA has over delivery of the VfB and the costs and risks associated with their implementation.

The Bus Services Act requires that, where an LTA decides to consider Franchising of bus services in its area, an assessment needs to be developed to demonstrate that Franchising is the most suitable option to deliver its Policy Objectives and aims. The assessment should set out the options which have been considered in coming to the Franchising scheme put forward for consideration.

Other suitable 'non-franchising' options also need to be assessed and compared to Franchising within the Assessment. The necessary trade-offs are identified and addressed as part of this Assessment and are considered central to LCRCA's decision about which option to pursue.

An EP does not formally require an assessment to be developed for its adoption or implementation. Instead, through a process of negotiation, the parties would decide whether the balance between advantage and commitment favoured them supporting (as opposed to objecting to) an EP. The analysis has, necessarily, been developed without reaching a final negotiated commitment from bus operators that the partnership option appraised would attract their support. The EP proposal jointly put forward to LCRCA by Arriva and Stagecoach as an alternative to Franchising, is a welcome step towards the ambitious EP considered within this Assessment. However, it needs to be recognised that further steps would be required in partnership development as the requirements of the delivery obligations, funding availability to support those obligations and the policy context crystallise over time.

This Assessment sets out the information necessary for LCRCA to make a decision as to how Franchising compares with the available EP alternative for delivering its strategy and objectives, and against a

68 In this Assessment, gross cost contracting has been selected as the proposed Franchising model, as it represents the purest form of franchising. Other franchising options sit on the continuum between Franchising and EP; these are not considered to provide sufficient differentiation for the purposes of this Assessment.

Reference Case representing existing arrangements. Further details of the operators' proposed EP, as well as LCRCA's ambitious EP and Franchising options assumed in this Assessment, are set out in Section 2.3 of the Economic Case.

The remainder of this Section describes the extent to which each of the shortlisted options and the Reference Case can deliver the VfB initiatives, identified as a set of improvements which would perform well against the Policy Objectives. With regards to the Reference Case, the Franchising assessment guidance requires to set out a reasonable Reference Case against which the different delivery models/policy options can be assessed. This Reference Case should consist of a reasonable future representation of the bus delivery model in the absence of any policy intervention. For the purposes of this business case, a continuation of the existing VPA is assumed to be a reasonable Reference Case, given that it is the current model and there is certainty about what it could achieve if it was extended. Although it could be assumed that an EP is a suitable Reference Case (as the Bus Back Better strategy states an expectation that all LTAs commit to introducing an EP⁶⁹), the content of such an EP has not been agreed and therefore cannot function as a suitable Reference Case for the LCR – for comparison with EP and Franchising options⁷⁰.

New funding made available for buses (for example BSIP) would only be available under an EP or a Franchising model, as set out in the Bus Back Better strategy. The funding conditions for each of these would allow LCRCA to present a like-for-like comparison between the Reference Case and the policy options. That is, it would allow LCRCA to demonstrate whether the policy options are able to deliver better on the VfB outcomes under similar funding conditions, therefore supporting the decision-making process.

Further considerations in relation to the benefits, costs and risks of each Delivery Option (including the Reference Case) are presented elsewhere within this document.

69 Except Mayoral Combined Authorities (such as LCRCA) which have started the statutory process of franchising.

70 The Reference Case can alternatively be considered as an EP with the same provisions as the Alliance, in contrast to the EP option presented as a material change in partnership working.

6.4. Objective 1

Maximise the contribution of bus services to achieving the economic success and social capacity of LCR

6.4.1. Bus Network Enhancements

As described in Section 3, buses in LCR are currently operated as a combination of commercial services, where operators take revenue risk, and supported services (to cover socially necessary but non-commercially viable journeys) operated under contract with Merseytravel, where Merseytravel takes revenue risk.

The VfB proposes a bus network, which in response to presently unmet mobility needs: (a) provides some additional services; or (b) makes adjustments to existing routes; and (c) which is more standardised in terms of hours and days of operation. It also proposes: (d) increased integration between public transport modes, with bus services complementing rather than competing with rail (and ferry services). These enhancements could be secured by the Delivery Options as follows:

- (a) **Provision of additional supported services:** on the assumption that these services are not commercially attractive (since they are not presently being operated) they could be delivered under all Delivery Options, including the current policy scenario, materially constrained only by affordability to LCRCA. Under the partnership options, no part of the additional bus service could compete with any commercial service; this could constrain the specification, potential efficiency, and effectiveness of the additional services.
- (b) **Route changes to commercial services:** under current arrangements (with or without the existing Alliance) LCRCA does not have the right to insist on changes to commercial services. De minimis rules/exceptions allow a limited mechanism to provide financial support⁷¹ for route diversions and additional service departures (with a duty to have regard to the interests of the public and of operators). EP has limited (and potentially inefficient) potential to alter existing routes, given its geographical-area based applicability and negotiated status. Under Franchising the material constraint to changing services is affordability to LCRCA.

71 Up to 25% of the value of supported services, given that the total LCR annual spend exceeds the £600,00 pa threshold as amended in 2004. In practice de minimis support is more suited to providing services which have limited commercial attractiveness than to enhancing (for example by increasing frequency) an otherwise commercial service.

- (c) **Standardisation of service frequency:** under current arrangements LCRCA does not have the right to specify minimum service frequencies. Under an EP there is potential to specify a standard pattern of maximum service frequencies by time period, which would apply to all operators wishing to run services. Under Franchising the only material constraint to standardising service frequencies is affordability to LCRCA.
- (d) **Increased integration between public transport modes:** current arrangements incentivise commercial operators to maximise revenue on their bus services, rather than overall public transport revenue. There are therefore limits to the extent to which operators are willing to route or time their services to provide opportunities for interchange with rail services (for example). For some movements rail and bus compete directly for passengers. As (b) above, neither the Reference Case nor an EP provide any particular flexibility to enforce changes to commercial routes and therefore both are limited in their potential to improve integration with other public transport modes. Under Franchising the only material constraint to improving public transport integration is affordability (across those modes) to LCRCA.

The potential of each of the Delivery Options available to LCRCA with respect to network enhancements, is summarised in Table 1.9 below.

Table 1.9: Network Enhancements: Summary of Delivery Options

	RC	EP	FS
Provision of additional supported services	Yes	Yes	Yes
Route changes to commercial services	No	No	Yes
Standardisation of service frequency	No	Yes*	Yes
Increased integration between PT modes	No	No	Yes

Yes* = Subject to Negotiation with bus Operators

6.4.2. Punctuality and Reliability

As described in Section 3, bus service punctuality and reliability are key passenger and operator concerns within

the LCR. Implementing bus priority or other measures which are aimed at reducing variability in journey times is neither contingent nor particularly influenced by Delivery Option, albeit highlighted as an area of focus in BSIP guidance. For example, CRSTS funding for bus priority measures is available regardless of Delivery Option. Implementing or updating a partnership agreement (whether EP or the Reference Case) would create an opportunity for the public-sector to offer and record its commitment to such interventions, to incentivise and reward the negotiated bus operator commitments. Similar opportunities exist for Franchising, and the benefits of faster and more consistent journey times from implementing bus priorities would also accrue to LCRCA in terms of a reduced operating cost to deliver a specified level of service and performance. There would be advantages in terms of aligning incentives for improving punctuality and reliability; in that the public sector would receive any additional revenue.

6.4.3.Support to Delivering Wider LCRCA Strategy and Policy

Each of the Delivery Options has the potential to support the delivery of wider LCRCA strategy and policy. Periodic renegotiation of the partnership options (Reference Case or EP) would allow opportunities for changes to ensure alignment with ever-evolving strategy and policy, allowing bus operators to improve their outcomes over time but subject to their individual financial situations and resources. Under Franchising, the bus system becomes an integral part of LCRCA's toolkit, which it can deploy in support of delivering its wider objectives, subject to affordability. It would also bring the advantage of aligning beneficiaries, for example LCRCA would receive additional bus revenue from initiatives aimed at moderating private car use, or additional rail revenue from better integration between bus services and rail stations.

Both EP and Franchising options, relative to the Reference Case, also offer potential advantages to neighbouring authorities: Lancashire County Council; Greater Manchester Combined Authority; Warrington Borough Council; and Cheshire West and Chester Council – with cross boundary bus routes operating between LCR and each of these. These authorities share similar ambitions to LCRCA in their local transport policies and other policies; achieving these ambitions similarly requires stability and improvement in local bus services, which these options can deliver.

6.4.4.Objective 1: Summary

The shortlisting assessment against Objective 1 provides an assessment of the strategic fit of options against three

components of the VfB based on their ability to deliver each of the below initiatives:

- Bus Network Enhancements; where the Franchising Option showed the strongest performance, followed by EP and then the Reference Case;
- Punctuality and Reliability; where improvements could be made under all three options, but with Franchising having the advantage of aligning incentives – with the public sector receiving additional revenue; and
- Support to Delivering Wider LCRCA Strategy and Policy; where the Franchising Option offers additional benefits from LCRCA control, whereas any changes to EP and Reference Case options in support of wider ambitions would require renegotiation of the partnership agreement.

With respect to Objective 1, the Franchising Option offers the strongest potential performance, followed by EP and then the Reference Case, as summarised in Table 1.10 below.

Table 1.10: Bus Network and Services: Summary of Delivery Options

	RC	EP	FS
Bus Network Enhancements	No	Yes*	Yes
Punctuality and Reliability	No	Yes*	Yes
Support to Delivering Wider LCRCA Strategy and Policy	Yes*	Yes*	Yes

Yes* = Subject to Negotiation with bus Operators

6.5. Objective 2

Maximise the contribution of bus services to reducing the impact of travel on the natural environment

6.5.1. Fleet and depots

As described in Section 3, the vast majority of bus vehicles deployed within the LCR are owned by operators, for both commercial and supported services (the exception being vehicles within the HyBus Pilot fleet). Most buses are conventional diesel vehicles, although Arriva's fleet includes a reasonable number of biogas, electric and hybrid vehicles and around half of Cumfybus' fleet are hybrid vehicles and

one is electric⁷². The Alliance⁷³ and Merseytravel's contract conditions for supported services, include a range of vehicle requirements. One example is in terms of specifying the maximum average age of the fleet at seven years, half of the expected life of 15 years. As highlighted earlier in this document, there are commercial challenges with some of these requirements which have led to operators not meeting them in certain cases.

The VfB proposes a transition to ZEV, presently anticipated to be some battery electric vehicles ("EV"), but with wider adoption of fuel cell electric vehicles ("FCEV") also being considered given local availability of hydrogen as an industrial by-product. Transition over a period of fifteen years, the expected lifetime of a diesel bus, is envisaged – the aim being that vehicles exit the fleet at broadly the same age that they have done in the recent past.

Section 4.3.11 of the Commercial Case compares public sector and private sector ownership alternatives for the ZEV, under the different Delivery Options. Options for depot provision, closely linked with the ZEV strategy, are considered within Section 4.3.12 of the Commercial Case.

The Delivery Options differ in terms of the certainty that they offer LCRCA with regards to (a) the pace of transition, and (b) the deployment of the ZEV. There are also differences in terms of the legal constraints, for example subsidy regime, which apply and result in changes in the efficiency of transitioning to ZEV under the different options (c).

- (a) **Influence over pace of transition to zero-emission vehicles:** where services are operated under contract (supported services under all non-franchise options/ all services under Franchising) LCRCA has full control of the number and timing of ZEV deployed, subject to affordability to LCRCA. Regardless of Delivery Option, EU Directive 2019/1161 (presuming continued application) specifies an increasing percentage⁷⁴ of clean (half of which should be zero-emission) vehicles purchased

72 Forming a little over 20% of the total Arriva LCR fleet, and with Cumfybus' hybrid vehicles/ electric vehicle, around 15% of the all-operator LCR fleet in 2020.

73 Arriva and Stagecoach, current signatories to the Alliance, run the vast majority of LCR supported services.

74 EU Directive 2019/1161 specifies that by 31/12/2025 45% of vehicles aggregated over purchases/on contracts of over €1m or for more than 300,000 km pa (awarded after 02/08/2021) must be clean, increasing to 65% by 31/12/2030 (awarded after 01/01/2026). For SMEs with less than 23 vehicles, the thresholds are increased to €2m and 600,000 km pa. Half of the clean vehicles must be zero-emission (except where double-decker vehicles make up over 80% of the fleet, which is not the case within the LCR).

or operating applicable contracts. Whether operating commercially or not, bus operators are contemplating investing in clean vehicles, as the number of options offered by bus manufacturers increase and the whole-life cost comparison with conventional vehicles (including availability of grant funding) changes. An additional incentive for investment in clean vehicles is the requirement to comply with emissions standards for operating within CAZs in the LCR and neighbouring authorities. Under the Reference Case, because of the potential for affecting competition between signatory and non-signatory operators, provisions to influence the pace of transition would be limited (although legislation, in support of the introduction of CAZ, would imply scope for some local influence – independent of Delivery Option). Under an EP there is potential to specify the pace of transition to ZEV, subject to affordability to LCRCA⁷⁵ and operators.

- (b) **Influence over zero-emission vehicle deployment:** within the LCR, there are specific locations where higher vehicle emissions coincide with sensitive receptors. These locations are designated AQMA. These locations are the priority for deploying zero-emission buses. LCRCA would have limited potential to specify where deployment of ZEV is prioritised under Reference Case or EP, given the need to negotiate this with operators. Under Franchising LCRCA can specify in tenders where ZEV are used, rather than having to be agreed with operators via negotiation.
- (c) **Efficiency from present legal constraints:** transition to ZEV will affect the balance between initial investment and on-going costs, with lower operating costs off-setting higher purchase costs. There is potential for this balance to differ between larger operators (typically replacing a proportion of their national fleet every year) and smaller operators, where vehicle replacement would be more sporadic. Subsidy regime legislation limits the extent to which LCRCA can offer financial support where this may most be needed, for example the smaller operators which in many cases solely or mostly operate supported services. However, if no intervention is possible/⁷⁵ taken, this could change the balance of competition

75 Noting that the impact on affordability to LCRCA would include an increase in the number/ proportion of supported services; if the overall cost of operating commercial services with non-ZEV increases, the point at which more marginal services can be accommodated within a commercial portfolio will change (over and above the impact of the increased cost of those services).

in favour of operators of sufficient scale to make the required investment. Under the Franchising Option, LCRCA takes full control of competition for contracts, including developing a specification which could allow additional support (as required) for smaller operators to fund additional vehicles, providing lease term usage guarantees, providing/leasing public sector owned vehicles and/or depot facilities.

The potential of each of the Delivery Options available to LCRCA with respect to fleet and depots, is summarised in Table 1.11 below.

Table 1.11: Fleet and Depots: Summary of Delivery Option

	RC	EP	FS
Influence over pace of transition to ZEV	No	Yes*	Yes
Influence over ZEV deployment	No	Yes*	Yes
Efficient from present legal constraints	No	No	Yes

Yes* = Subject to Negotiation with bus Operators

6.5.2. Objective 2: Summary

The shortlisting assessment against Objective 2 considers the performance of options against the Fleet and Depot component of the VfB, against which the Franchising Option showed the strongest performance, followed by EP and then the Reference Case.

6.6. Objective 3

Harness competition's role in improving the offer to passengers and delivering best value for LCRCA for the services it procures

Competition plays a vital role with relation to each of the options considered. A central tenet of the current deregulated bus context is that competition between operators will incentivise them to improve the passenger offer – a combination of service level, quality and fare. Both of the EP and Reference Case options have the potential to supplement this natural competition with negotiated standards, the ambition being to achieve the same high level of quality 'network wide' that can be seen on corridors where there is direct competition. An EP scheme offers advantages over the Reference Case in its application to all service operators in the area, as opposed to applying to those who sign up. By removing a threat of

'low quality' competition, an EP is anticipated to allow bus operators to sign up to higher and stricter standards.

For Franchising, for all services, and EP/Reference Case, for supported services, competition for bus services let by Merseytravel improves the value of the tenders received. Franchising, where this is fundamental, allows considerable flexibility in developing an appropriate scheme which attracts and retains an appropriate level of competition.

6.6.1. Objective 3: Summary

The shortlisting assessment against Objective 3 considers the potential for the different options in harnessing the beneficial role of competition. In a deregulated context, EP is expected to offer advantages over the Reference Case. A Franchising Scheme has potential to be structured to attract competition.

With respect to Objective 3, within their separate contexts, both of the EP and Franchising options offer strong potential performance, being followed by the Reference Case.

6.7. Objective 4

Maximise the benefits of service coordination, ticket integration and information provision across the LCR public transport network

6.7.1. Fares and Ticketing

As described in Section 3, there are currently two groups of bus ticket products available within the LCR for fare-payers: those offered by Arriva or Stagecoach and largely⁷⁶ only valid on their services; and those offered by Merseytravel, comprising multi-Operator and multi-modal tickets⁷⁷. Both the individual operators and Merseytravel offer a range of ticket products with different validities, including for example: single; daily; weekly; monthly; annual. The diversity of overlapping product offers and the wide range of tickets and fare options has resulted in passengers being unsure whether they are getting the best deal and being overwhelmed by options. This lack of integration can result in a single trip requiring the purchase of several tickets.

The VfB proposes a simpler fares and ticketing system to ensure better VfM for passengers, reducing and standardising the number of products available, and including fare capping.

76 The exception being for trips on core Sections of the Quality Bus Network (routes 10/10A/10B, 14/14A/14B/ 14X, 53, 86/86A, 82, 471/472) where Arriva and Stagecoach accept each other's daily and weekly tickets.

77 Merseytravel allows Stagecoach and Arriva to sell/accept their own tickets on the supported services which they operate. Where other Operators provide supported services, only Merseytravel's products are available.

These enhancements could be secured by the Delivery Options as follows:

- (a) **Fare validity at all times on an individual service:** this is a consequence of the service frequency standardisation process described above. Ensuring that a single Operator runs a service throughout the day and the week ensures that all passengers are able to achieve best VfM from their tickets⁷⁸. As above, this would be achievable with Franchising, is assumed to be negotiated within an EP, but would not be possible to achieve under the Reference Case.
- (b) **Simplified product availability (singles):** competition through cash fares charged on commercial services is a central and protected feature of the deregulated bus environment, and LTAs cannot intervene to influence individual bus operators' fares under the Reference Case, or an EP. Under Franchising LCRCA would control fares, and therefore could specify a common single ticket fare scale across all services.
- (c) **Simplified product availability (multi-trip):** under the Reference Case LCRCA has limited influence on the availability of individual commercial operator's season/ multi-trip products⁷⁹. Under the EP there would be considerably more potential, such as to specify that only Merseytravel's (multi-Operator) season tickets would be sold/accepted, considerably reducing the range of product options. It would also be possible to specify a common price relationship between products, reducing complexity. Under Franchising LCRCA would fully control ticket availability, and therefore could specify a common season ticket availability across all services.
- (d) **Better value fares:** although, as above, LCRCA cannot intervene in individual commercial bus operators' fares, it does have indirect influence on fares – including by the value it sets on its multi-modal ticket products. Under Franchising the only material constraint to delivering better value fares is affordability to LCRCA.

78 For example avoiding the situation where a commercial Operator daily or other ticket is not valid.

79 An operator can be assumed to not be prepared to sign up to a VPA which bound it in to only offering (for example) Merseytravel's multi-operator products while there was nothing to prevent a non-signatory operator competing by means of a cheaper single operator product.

- (e) **Fare capping (daily):** LCRCA is participating in a joint initiative, involving Arriva and Stagecoach⁸⁰, committed to delivering daily fare capping during 2022. This initiative would ensure traveller confidence that they would not be charged more than the single/multi-Operator daily ticket, as relevant to their trip. Franchising would mean that the level of the cap was more clearly defined for users.
- (f) **Fare capping (weekly):** the joint fare capping initiative introduced above has potential to also implement weekly fare capping. However, under a partnership model there are significant complexities in applying weekly capping because of the considerable increase in products and therefore permutations available. This assessment has not attempted to value the potential slight advantage of simpler implementation of weekly capping under Franchising.

The potential of each of the Delivery Options available to LCRCA with respect to fares and ticketing, is summarised in Table 1.12 below.

Table 1.12: Fares and Ticketing: Summary of Delivery Options

	RC	EP	FS
Fare validity at all times	No	Yes*	Yes
Simplified product availability (singles)	No	No	Yes
Simplified product availability (multi-trip)	No	Yes	Yes
Better value fares	Partial	Partial	Yes
Fare capping (daily)	Yes	Yes	Yes
Fare capping (weekly)	Yes	Yes	Yes

Yes* = Subject to Negotiation with bus Operators

6.7.2. Customer experience

Currently there are differences between different operators in terms of the customer experience offered and the information available. Each of the Delivery Options has the potential to standardise the offer, for example in terms of driver training and vehicle quality requirements or setting standards for the style, content and sources of information. Under Franchising LCRCA could also choose to specify common branding and identity for all bus services, as it does for other public

80 LCRCA already has influence over fares and available tickets on the majority of other operator's services, which are running supported services.

transport services, having full control over the potential to ensure a more consistent and pleasant user experience.

6.7.3. Objective 4: Summary

The shortlisting assessment against Objective 4 considers the performance of options against two components of the VfB:

- Fares and Ticketing; where the Franchising Option showed the strongest performance, followed closely by EP and then by the Reference Case
- Customer experience; where improvements could be made under all three options, but where the Franchising Option offers additional benefits from LCRCA having greater control over the user experience

With respect to Objective 4, the Franchising Option offers the strongest potential performance, followed by EP and then the Reference Case.

6.8. Objective 5

Support implementation of measures that improve bus service delivery by addressing factors which may constrain the extent to which bus operators can commit to meeting quality or service level standards

The existing Alliance, a VPA, demonstrates the extent to which bus service operators would commit to quality and service level standards for commercial services at the time of its negotiation. The Alliance has had positive impacts; however, there are constraints to what the operators would agree to include, and there are further constraints on the extent to which Merseytravel can enforce its requirements in practice. An EP scheme offers advantages over VPA in its application to all service operators in the area, as opposed to applying to those who sign up. By removing a threat of 'low quality' competition, an EP is anticipated to allow bus operators to sign up to higher and stricter standards.

The Franchising Option would transfer responsibility for setting all quality and service level standards directly to LCRCA, which would set both the standards and means of enforcing standards through the bus service operating contracts, as it currently does for the supported services it lets.

6.8.1. Objective 5: Summary

The shortlisting assessment against Objective 5 considers the potential for the different options in removing constraints to agreeing quality and service level standards. In a deregulated context, EP is expected to offer advantages over VPA. A Franchising Scheme effectively removes

this constraint, by transferring responsibility for setting standards to LCRCA for all services.

With respect to Objective 5, within their separate contexts, both of the EP and Franchising Options offer strong potential performance, the EP being followed the Reference Case.

6.9. Shortlisting Conclusion

Five service delivery intervention options are available to LCR as a Mayoral Combined Authority which vary in their complexity, the level of risk to LTA and the level of influence that the LTA would be able to exert in shaping bus services.

Two of these were excluded before the shortlisting stage:

- **SQP** – on the grounds that an AQPS introduced in the Bus Services Act, effectively offers a more functional replacement
- **AQPS** – on the grounds of it being most suitable for application at a local level, with considerably more limited potential for benefit at the required LCR-wide scale

The Delivery Options considered present trade-offs between the influence which LCRCA has over the delivery of its VfB and the costs and risks associated with their implementation. The components of VfB have been assessed against the Policy Objectives set out in Section 5, for each Delivery Option, with conclusions against each objective being summarised in Table 1.13.

Table 1.13: Summary Strategic Fit of Delivery Options against Policy Objectives

Rank Order of Performance:	1st	2nd	3rd
Objective 1: Maximise the contribution of bus services to achieving the economic success and social capacity of the LCR	FS	EP	RC
Objective 2: Maximise the contribution of bus services to reducing the impact of travel on the natural environment	FS	EP	RC
Objective 3: Harness competition's role in improving the offer to passengers and delivering best value for LCRCA for the services it procures	FS EP		RC
Objective 4: Maximise the passenger benefits of service coordination, ticket integration and information provision across the LCR public transport network	FS	EP	RC

Rank Order of Performance:	1st	2nd	3rd
Objective 5: Support implementation of measures that improve bus service delivery by addressing factors which may constrain the extent to which bus operators can commit to meet quality or service level standards	FS EP		RC
Overall Performance	FS	EP	RC

With respect to the three Delivery Options which are applicable to the LCR-wide context, the Franchising Scheme ranks first or joint first across all of the Policy Objectives and therefore is included on the shortlist of options to be considered in further detail in the Assessment. A Franchising Option has the potential for a significant beneficial effect in terms of meeting the Policy Objectives, offering a route to confident delivery of LCRCA's VfB and making a substantial contribution toward achieving its wider ambitions and strategy. Franchising would enable LCRCA to bid for BSIP funding, which is a competitive process and may not result in the award of funding.

The EP scheme performs relatively well against the Policy Objectives, ranking joint first on two and second on the remainder. It is therefore also included on the shortlist of options considered in the Assessment. An EP Option has potential for a materially beneficial effect in terms of meeting the Policy Objectives, offering a route to delivery of several components of LCRCA's VfB and making a worthwhile contribution toward achieving its wider ambitions and strategy. BSIP funding would also be available under EP.

The Reference Case, with similarities to the EP in terms of its regulatory context and impact, ranks behind the EP Option against all Policy Objectives and BSIP funding is not available under VPA. This option therefore has been included within the shortlisted options considered in further detail in the Assessment solely as a comparator. For BSIP funding to be available under the Reference Case, conversion of the Alliance to an EP would be the minimum theoretical requirement, noting that the scale of funding available is expected to be proportionate to the scale and ambition of the EP.

7. *Strategic Case Summary*

Bus as a key enabler of the LCR's Vision for Growth

LCR has bold and ambitious plans for economic growth, including the delivery of 100,000 new jobs and for the LCR to be a £50 billion economy (a near doubling from today's level) by 2040. This growth must be clean and inclusive, achieving net zero carbon emissions by 2040.

Targeted action on the main social and economic issues where the LCR underperforms relative to other city regions – namely gaps in wealth, business activity, jobs, productivity and skills, persistent worklessness and spatially concentrated deprivation – will be required to achieve those ambitious targets. The LCR's Vision for Growth sets out the plan for tackling these issues around the three 'growth pillars' of productivity, people and place.

Transport, and particularly bus, has a significant role to play and in delivering clean growth and in tackling these issues, which is recognised in LCRCA's Transport Plan and LCRCA's Bus Strategy. The importance of LTPs in reducing carbon in transport at a local level is referenced in the DfT's Transport Decarbonisation Plan. Bus journeys represent almost eight out of every ten public transport journeys in the LCR, which means that bus must be at the forefront of the transport response.

The current and future role of bus

Bus in Merseyside presents the highest level of journeys per population in comparison to other North-West ITAs, providing access to employment, education, retail, leisure and healthcare. The LCR, pre-pandemic, was in general reasonably well served by bus, in terms of frequency and accessibility, for the more densely populated areas, although less so for the more peripheral areas.

The Alliance has contributed to some improvements in passenger growth and customer satisfaction, demonstrating the benefits of coordinated planning and investment. However, there remain areas of significant customer dissatisfaction with regards to the cost of bus travel, punctuality of bus services, bus information and contribution of buses to poor air quality.

Prior to the COVID-19 pandemic, the trend of declining use and profitability of existing bus services was expected to continue, with impacts expected to include a reduction in the number of commercial bus services and pressure for the supported network to expand to avoid bus services being lost altogether. The uncertainty on future recovery of bus patronage post COVID-19 could accelerate and accentuate the forecast long-term decline in use of the existing bus services. The Bus Back Better strategy and guidance for Local Authorities on developing BSIPs highlights that improved bus networks should be a key priority for supporting bus recovery for Local Authorities post-pandemic.

The case for change and need for intervention for LCRCA

Buses are vital to the functioning of the LCR's economy and maximising the potential for economic growth will require the bus service offer to be improved. However, some challenges could constrain the delivery of the improvements identified on LCRCA's VfB under current arrangements.

There are certain areas which require a step change to deliver the VfB, as current arrangements cannot deliver the scale of change required to support LCRCA's ambitions. Further initiatives are needed, including network enhancements; fares and ticketing initiatives, and fleet renewal – which are unlikely in an operating environment overwhelmingly driven by commercial objectives and priorities.

In addition, a number of market imperfections in the delivery of bus services, including network economies, misaligned incentives, limitations of competition, profit-led decisions, and inadequate attention to wider economic social and environmental benefits, mean that public intervention by LCRCA is needed in order to exercise greater influence on the outcomes to deliver the essential step change in bus services.

A Case for Change therefore exists. Without regulatory changes to the delivery of bus services LCRCA's VfB could not be delivered in full and, for those limited aspects which could be delivered, has limited certainty around delivery. Transport has a significant role to play in tackling issues relating to economic and social underperformance, and in facilitating the LCR's recovery from the COVID-19 pandemic. With buses being at the heart of the LCR's transport system, delivery of LCRCA's VfB is fundamental to delivering its clean growth ambitions.

Legislative tools are available to overcome current market imperfections

The Bus Services Act provides LTAs with legislative tools to respond to situations where the current deregulated model does not appear to be the optimal regulatory structure to enhance the customer experience and reverse the long-term decline in bus patronage. The Government's Bus Back Better strategy, in mandating that LTAs must introduce an EP or Franchising (where applicable) to access BSIP funding, signals its acceptance of the necessity for change.

As an LTA with powers to mitigate and overcome market imperfections relating to bus, it is appropriate for LCRCA to consider the potential contribution of each of the Delivery Options available to it.

Five service delivery intervention options are available to LCR as a Mayoral Combined Authority which vary, in their complexity, level of risk to LTA and the level of influence that the LTA would be able to exert in shaping bus services.

Application of each of the Delivery Options considered involves inherent trade-offs which LCRCA needs to assess against their potential to secure the delivery of its VfB.

A Franchising Option has the potential for a significant beneficial effect in terms of meeting the Policy Objectives, offering a route to confident delivery of LCRCA's VfB, making a substantial contribution toward achieving its wider ambitions and strategy and performs most strongly against the Policy Objectives. It therefore is included on the shortlist of options to be considered in further detail in the Assessment, with the EP scheme which outperforms the Reference Case.

EP and Franchising Schemes have potential to make positive contributions to the implementation of neighbouring authorities local transport and other policies, in particular through enhancing service stability and specification.

The choice of which of these two options should form LCRCA's preferred option for implementation must also take into account their relative performance in the more detailed assessment, for example in terms of the Scheme Objectives set out in this Strategic Case, and the relative weight which accountable decision-makers place on the different aspects, together with a risk/reward balanced decision.

The Economic Case

1. Introduction

The purpose of this Economic Case is to demonstrate the VfM of alternative bus service Delivery Options for the LCR, with reference to HM Treasury's Green Book Guidance requirements and the Franchising Guidance.

Green Book Guidance requires that the value of the options considered to different user and other affected groups are assessed. Options appraisal leads to the identification of a preferred option that represents an acceptable balance between costs, benefits and risks to society and the public sector, allowing for any unquantifiable factors which could affect a decision.

To address these requirements in the context of bus services in the LCR, this Economic Case:

- (a) Establishes the impacts on wider society in terms of the economic, social and environmental costs and benefits of the Delivery Options being considered.
- (b) Compares the shortlisted options of EP and Franchising against a realistic 'business as usual' scenario, referred to as the Reference Case, which reflects the baseline changes to bus services that can be expected to occur without reform.
- (c) Presents an assessment of the impacts of the options on different groups in society including passengers, LCRCA, wider society and bus Operators (existing and new entrants).
- (d) Describes the likely impacts of the transition period of each option, particularly on passengers.
- (e) Illustrates the distribution of benefits, costs and risks between different user groups.
 - (i) For EP these include: impact on bus and non-bus users; other impacts including on the environment; revenue; BSOG payments; operating and capital costs; costs of administering bus registrations and periodic renegotiations; and ongoing management costs for LCRCA and for local bus Operators.
 - (ii) For Franchising these include: impact on bus and non-bus users; other impacts including on the environment; revenue; BSOG payments; operating and capital costs; management, bidding and administration costs; and implementation costs.
- (f) Explains the appraisal period adopted for assessing the impacts of the options and demonstrates the ongoing sustainability of the different Delivery Options.

- (g) Presents the NPV of each option, derived from the present value of the costs and benefits of each option, and presents sensitivity tests to account for uncertainty and optimism.

The relative performance of each option has been primarily appraised through a VfM assessment, which captures the monetised impacts, the unmonetised impacts that have been qualitatively assessed and consideration of uncertainty. The Assessment measures how well each option delivers against the objectives for reform identified in the Strategic Case.

The VfM assessment forms a key element of the fourth activity from the Franchising Guidance (“detailed assessment of options”), which continues across the later cases of this Assessment. The fifth and final activity (“selection of preferred option”) is set out within the closing summary Section.

To address the requirements of both the Green Book Guidance and Franchising Guidance, this Economic Case is presented over the following twelve Sections:

- Section 2 – **Impacts of Bus Reform** sets out what is expected to happen to bus services in the Reference Case as well as the interventions which are deliverable under each Delivery Option. It provides the rationale for how changes to services will benefit bus users and the LCR more widely; and in doing so deliver against the objectives for reform (points (a) and (f) and part of (d) in the list of requirements addressed by the Economic Case above).
- Section 3 – **Approach to Demand, Revenue and Cost Forecasting** presents the approach to forecasting demand, revenue and operating cost under each of the Delivery Options and describes the scenarios which have been considered and assessed.
- Section 4 – **Unconstrained Demand and Revenue Forecasting** presents the methodology and results of the forecast changes in demand and revenue under each of the Reference Case, EP and Franchising options (point (b) in the list of requirements addressed by the Economic Case above).
- Section 5 – **Unconstrained Forecasts of Cost of Bus Delivery** presents the methodology and results of the forecast cost impacts of transition and of operating bus services under each Delivery Option (part of point (c) in the list of requirements addressed by the Economic Case above).
- Section 6 – **Demand, Revenue and Cost Forecasts Results** provides an overview of the key results from forecasting revenue and operating costs under each of the Delivery Options.
- Section 7 – **Approach to Appraisal of Impacts** discusses the methodology used for quantifying the impacts of bus reform (part of point (c) in the list of requirements addressed by the Economic Case above).

- Section 8 – **Impacts on the Economy** presents the impacts of EP and Franchising interventions that directly affect the economies of the LCR and the UK more widely as well as the implications of reform for Operators (part of point (e) in the list of requirements addressed by the Economic Case above).
- Section 9 – **Impacts on the Environment** presents the environmental impacts of EP and Franchising (part of point (e) in the list of requirements addressed by the Economic Case above).
- Section 10 – **Impacts on Society** presents the welfare and social impacts of EP and Franchising interventions relative to the Reference Case (point (d) and part of point (e) in the list of requirements addressed by the Economic Case above).
- Section 11 – **Impact on Public Accounts** presents the relative costs of bus reform on LCRCA budget and on wider public finances (part of point (e) in the list of requirements addressed by the Economic Case above).
- Section 12 – **Economic Appraisal Outputs** discusses and quantifies potential uncertainty in the outputs from the appraisal and how this impacts the case for EP and Franchising Options (part of point (g) above in the list of requirements addressed by the Economic Case). The Section also brings together the VfM appraisals of reform and intervention under the EP and Franchising options.
- Section 13 – **Economic Case Summary** considers the VfM assessment alongside how each Delivery Option delivers against the objectives stated in the Strategic Case. It concludes whether there is a case for EP and/or Franchising in an Economic Case context.

2. *Impacts of Bus Reform*

2.1. Introduction

This Section discusses the extent to which regulatory reform will improve the delivery of bus services in the LCR. The different regulatory regimes for each of the Delivery Options are described in the Strategic Case and below in the Economic Case. It describes how these interventions will benefit bus users and the LCR more widely, as well as describing the relative scale of their impact. It provides the rationale as to how appraisal of each Delivery Option has been conducted for this Economic Case. Following on from the options assessment process detailed in the Strategic Case, EP and Franchising options have been appraised; the further options of Voluntary Partnership, Statutory Quality Partnership and Advanced Quality Partnership being assessed as being inappropriate mechanisms for reform of the scale considered for the LCR context.

The purpose of bus reform is to support and enable LCRCA's VfB to be delivered and ensure that the public sector secures best value from its financial support to Operators. The VfB proposes interventions in five aspects of bus operations affecting: the bus network; reliability of services; fares and ticketing; customer experience; and emissions of the bus fleet. The interventions will seek to:

- (a) Benefit bus users through: reducing wait times, improving reliability, improving the customer experience of using and interacting with bus services and making bus use more affordable for many. The user benefits would be distributed across the LCR population, particularly ensuring vulnerable social groups are positively impacted by the interventions.
- (b) Increase bus patronage by enabling new journeys and making buses a more attractive proposition in comparison to private car use.
- (c) Reduce negative environmental and social impacts associated with travel in the region. This includes reducing the direct emissions associated with the provision of bus services, as well as the reductions in emissions, congestion and other social externalities which result from people choosing to travel by bus instead of car.
- (d) Support growth in the region's economy through enlarging the workforce catchment population for employers, supporting increases in participation and productivity alongside enabling better access to employment and education.

2.2. Summary of Scheme Objectives

The objectives outlined in the Strategic Case (Section 5.2) provide the framework against which regulatory bus reform Delivery Options are assessed and compared. These objectives inform the approach to the Economic Appraisal of the options. To provide context, the objectives of the Strategic Case are:

1. Maximise the contribution of bus services to achieving the economic success and social capacity of the LCR.

This objective is measured in terms of the scale of monetised passenger/ (transport-efficiency) and economy benefits each option can realise from delivery of the VfB, but also non-monetised benefits from bus service improvements and commentary on the potential for bus services to support wider LCRCA ambitions and initiatives.

2. Maximise the contribution of bus services to reducing the impact of travel on the natural environment.

This objective is measured in terms of the monetised reductions in greenhouse gases and vehicle emissions from a greener bus fleet and from fewer private car km (as more bus trips are made), as well as the extent that local ambitions and EU regulations on climate change are met. It also considers non-monetised benefits from bus service improvements and commentary on the potential for bus services to support wider LCRCA ambitions and initiatives.

3. Harness competition's role in improving the offer to passengers and delivering best value for LCRCA for the services it procures.

This objective is qualitative, with assessment being based on commentary on the options' anticipated impacts on the level and capacity of competition for bus service delivery and potential benefit which this brings.

4. Maximise the passenger benefits of service coordination, ticket integration and information provision across the LCR public transport network.

This objective is measured in terms of the scale of monetised passenger (other) benefits and revenue which result from delivery of the VfB, but also non-monetised benefits from coordination and information improvements, including better integration with other modes.

5. Support implementation of measures that improve bus service delivery by addressing factors which may constrain the extent to which bus Operators can commit to meet quality or service level standards.

This objective is qualitative, with assessment being based on commentary, with particular relevance to feedback from the Big Bus Debate, on the options' anticipated impacts on the extent to which they mitigate constraints which limit what Operators would be prepared to sign up to.

2.3. Summary of options appraised

The regulatory regimes available to LCRCA have been described in the Strategic Case. Two future Delivery Options have been selected for further analysis in the Economic Case – an EP and Franchising – to be compared against the Reference Case. The three options considered are therefore:

- Reference Case;
- EP; and
- Franchising.

An EP encourages collaboration between LTAs and bus Operators, through the setting of joint objectives and agreed action plans, for instance, in relation to bus services, fares or ticketing systems. All actions would need to be agreed by bus Operators, so there is the need to negotiate between LCRCA and bus Operators to establish an initial EP and any subsequent modifications to it.

A Franchising Scheme provides full control of the bus network to LCRCA, with bus Operators being required to bid for the right to operate bus services on the basis of a competitive tender process. Franchising provides LCRCA with the greatest degree of flexibility to define bus services in the LCR but also brings higher levels of risk, some of which is currently borne by the private sector.

These two Delivery Options are appraised against a Reference Case. The Franchising Guidance requires the setting out of a reasonable Reference Case against which the appraised options can be assessed. As described in the Strategic Case, a continuation of the existing VPA has been assumed to be a reasonable Reference Case for the purposes of the Assessment. However, it is noted that the Bus Back Better set out that new funding for buses would only be available under an EP or a franchising model. Although, therefore, the introduction of an EP would be required if LCRCA elects not to introduce Franchising, the content of an appropriate LCR EP has not been agreed and therefore cannot function as a suitable Reference Case⁸¹ for the Assessment.

81 Further explanation around the choice of an appropriate Reference Case can be found in Section 6.3 of the Strategic Case.

EP and Franchising are assumed to deliver interventions in the bus network to achieve the strategic objectives of the VfB set out by LCRCA. These interventions are described below:

2.3.1. Interventions delivered under EP

For the purpose of this Assessment, EP is assumed to deliver a range of VfB initiatives, based on what is allowed by the EP regulations and also what are assumed to be reasonable outcomes of future commercial negotiations with bus Operators (who need to agree to any propositions).

As such, it is assumed that, in general, bus Operators will only deliver initiatives that do not result in a financial gain to them (for instance, a net profit or operational efficiency) if funding is made available, for example, from BSIP. Where funding can be made available, interventions could equally be delivered under Franchising, therefore they would have a similar impact on the Assessment and have not been included.

EP has been assumed to deliver:

- **Network enhancements**, including optimisation of routes, and improvements of frequency and times of operation, where commercially viable for Operators (noting that Operators are able to reduce services to the times and routes which are profitable without agreement from LCRCA). These exclude any enhancements which require replacing any existing commercial route. These enhancements are more ambitious than bus Operators' proposals to LCRCA in their draft EP priorities document (for example improved links to key locations, consistent service frequency), excluding those requiring additional external funding.
- **Ticketing enhancements**, including the removal of certain price differentials between multi- and single-Operator multi-trip tickets, and other initiatives in the bus Operators' proposal (such as improvement of the ticketing capability for example tap and go, QR readers) but excluding a wholesale integration of all bus tickets in the LCR.
- **Fares initiatives**, including a one-off reduction in all fares except multimodal fares and no growth above inflation over time for all fares. Propositions from the EP draft priorities document assume external funding is provided, therefore the Assessment assumptions are more ambitious.
- **Clean fleet introduction**, including a full clean fleet by 2040, which is more ambitious than the target in bus Operators' proposition. Under this option, fleet and depot ownership would remain under the private sector.

Other initiatives included in the draft EP priorities document require external funding and could also be delivered under Franchising (for instance, bus priority improvements, development of a night bus network, and reintroduction of early morning services) or are not anticipated to materially impact the outcomes of the Assessment as they would be delivered under Franchising with an equal or greater impact for passengers (for instance, consistent branding and livery, customer experience improvements such as a single bus app, or development of a customer charter).

2.3.2. Interventions delivered under Franchising

Franchising has the most potential to deliver the initiatives within the VfB, given that it gives LCRCA the greatest control over the bus network. As such, Franchising has been assumed to deliver the following interventions:

- **Network enhancements**, including optimisation of routes, improvements of frequency and times of operation, including any modifications to existing commercial routes within LCRCA's budget envelope, where EP regulations did not allow for such changes.
- **Ticketing enhancements**, including the removal of certain price differentials between multi- and single-Operator multi-trip tickets, other initiatives in the bus Operators' proposal (such as improvement of the ticketing capability for example tap and go, QR readers) and a wholesale integration of all bus tickets in the LCR, which would be the most significant driver of passenger benefits.
- **Fares initiatives**, including a one-off reduction in all fares except multimodal fares (on a larger scale than assumed under EP, as described later in the Economic Case) and no growth above inflation over time for all fares.
- **Clean fleet introduction**, including a full clean fleet by 2040. Under this option, fleet and depot ownership is anticipated to shift to the public sector, with LCRCA being the asset owner and manager. This would provide greater control over the decarbonisation goals under the VfB.

All other initiatives which can take place under Franchising should funding be made available, such as bus priority measures, night bus network, branding and livery, or customer experience can also be delivered under EP, therefore have not been included for the purposes of the Assessment.

2.4. Extent of intervention under each Delivery Option

As discussed in Section 5 of the Strategic Case each of the different Delivery Options available to LCRCA for bus delivery reform allow the VfB to be realised to differing degrees.

- EP – changes to services have to be agreed with Operators and would go ahead unless Operators objecting the changes meet certain minimum thresholds of numbers and operating distance, as defined in the EP Plans and Schemes (Objections) Regulations 2018. Unless these are met, agreed changes apply to all Operators in the region. Many beneficial changes could be delivered under EP, but the overall scale of intervention would be limited due to the commercial impact on Operators constraining what they would be able to agree.
- Franchising – as Franchising would vest full control of all services in the region to LCRCA, all the interventions proposed could be delivered (subject to affordability, deliverability and VfM).

As Franchising effectively removes restrictions on which interventions can be put in place, it could realise all the benefits of the VfB. The table below summarises the assessment made in Section 6 of the Strategic Case of the degree to which each of the intervention areas could be delivered under an EP or through Franchising. It should be noted that a number of these interventions are dependent on funding being available, for all Delivery Options (for example for interventions that improve reliability). This funding dependency has been taken into account in the modelling framework described later on in this Economic Case.

Table 2.1: Delivery of VfB interventions under Delivery Options

	Franchising	EP
Network Enhancements	All	Some
Delays and Reliability	All	All
Fares and Ticketing	All	Some
Customer Experience	All	Some
Bus Fleet Emissions	All	All

To this extent, in a context where sufficient funding was available to deliver all the interventions in the VfB, an EP would deliver less overall passenger benefit than Franchising, however, the choice as to which is the right option for the LCR must take into account wider considerations than this, such as the public sector funding constraints, as mentioned in Section 4 of the Strategic Case and

taken into account in the modelling framework of the Economic Case. The remainder of this Section discusses what the benefits produced by each of the interventions are.

2.5. Impact of interventions

The impacts of the interventions presented in the table above on different groups, as required by the guidance, is considered in this Section.

2.5.1. Network enhancements

The proposed network enhancements include:

- The provision of additional services⁸²;
- Route changes to existing commercial services;
- Standardisation of service frequencies;
- Extended hours of operation; and
- Increased integration between public transport modes.

This Section explores the impacts of network enhancements on different groups, in line with transport appraisal guidance.

Impacts to existing bus users

Primarily these changes will benefit bus passengers by improving travel times through offering more convenient services; reducing wait times through increased service frequencies; improving interchange opportunities between different bus services or between bus and other public transport modes through the coordination of timetables; offering fare capping and ticketing initiatives to provide customers with the best VfM for trips; and, creating more direct journeys by improving existing routes and introducing new routes.

New bus users

The largest proportion of those switching to bus are expected to come from current private vehicle use, either as a driver or passenger (the latter including taxi/private hire use). The remainder diverting from other modes would be switching from other public transport modes, which within the LCR would be rail and ferry, or making new trips which were previously not available⁸³.

82 Relative to the Reference Case, comprising services which the impacts of Bus Reform result in improved affordability of contracted services, and additional services specified by Merseytravel's bus team to address network gaps in line with its VfB.

83 Based on TAG Databook (v1.20.2 January 2023) values in Table A5.4.6: Bus diversion factors by recipient/source mode.

Impact on Bus Operators

The proposed network enhancements will also impact on the operations of bus Operators. Extended hours, new services, and route changes mean Operators incur increased costs in providing these enhancements in the form of worker salaries, administrative costs, and fuel costs, for example. The intention, however, is that with more services provided, patronage will increase and therefore additional revenue is generated through ticketing.

Environmental and social impacts

Modal shift from private vehicle to bus services will reduce the overall environmental and social impact associated with travel (externalities) that affects the wider population in the LCR and beyond. This reduction is due to the lower greenhouse gas emissions, particulate emissions (air quality impacts), levels of congestion and accident rates associated with bus use compared to using private vehicles.

There are no material net disbenefits associated with people transferring to bus use from walking and cycling or other public transport modes from a social and environmental perspective⁸⁴. In most cases, these travellers are not making the same trip by bus which they previously walked, but are travelling further. Often walking to the boarding bus stop and from the alighting bus stop may mean that a similar amount of activity is undertaken. Overall, there would be a net benefit from the increase in bus use as a result of modal shift.

The proposed network interventions have been designed to improve services to currently less well-served areas and increase their accessibility to key destinations including areas of employment, education, health services, leisure and shopping facilities. These changes, at a minimum, will not worsen services for any area within the LCR and are expected to have a higher impact on areas where people within vulnerable social groups represent a greater than average proportion of the population. The distributional impacts of the benefits to bus users are discussed further in Sections 7 and 8 of this Economic Case. However, these interventions, and their associated benefits, can also be implemented if sufficient funding from LCRCA is identified to support bus services, given that most of the proposed network interventions which are currently not operational are not commercially profitable in themselves. This has been captured as part of the modelling framework described later on in the Economic Case.

84 The aggregate distance of active modes trips in LCR will not change by any appreciable amount, including because bus use requires users to access/egress services by active modes.

Wider Economic Benefits

As a result of shorter journeys and increased accessibility of the network, the economies of the LCR and the UK more widely will directly benefit from a number of Wider Economic Benefits (“**WEBs**”). Productivity improvements in the LCR account for the majority of the resulting WEBs, as reductions in travel time for business users are associated with increased output as this time can be utilised more productively than if it is spent travelling. This benefit is captured by the conventional time-saving benefits to users.

The economy also benefits from agglomeration effects. These occur when people and jobs are effectively ‘brought closer’ together through better transport links. This increases participation in the workforce. A larger workforce means there is better matching between jobs and the people with the most appropriate skills who will be relatively more productive and therefore increase economic output.

A small proportion of WEBs come from transport enabling new business to be able to sell into or out of the LCR and a final set of WEBs come from better matching of labour supply and demand. The wider economic benefits of bus reform are discussed more in Section 6 of the Economic Case.

Summary

Overall, if funding can be identified to deliver them, the network interventions are expected to generate the largest proportion of the total benefits of the interventions within the VfB. This would primarily be due to the user benefits which will be generated by material changes to operating frequencies and hours of operation. The network interventions proposed as part of the VfB could only be fully delivered under Franchising (subject to funding). Under EP, any intervention would have to be introduced through agreement with the majority of Operators. This would limit the extent to which the network can be changed as interventions might be misaligned with the commercial needs of Operators and they might not be willing to accept them (as they are dependent on successful commercial negotiations). Under EP, it is assumed that minimum standards for operating hours and service frequency can be put in place, delivering a significant proportion of the total network enhancement benefit that would be achieved under Franchising. However, it should be noted that in a context where the bus budget available is not too dissimilar to the current bus budget, the extent to which network enhancements could be afforded is limited under every Delivery Option under consideration.

2.5.2. More reliable bus services

LCRCA intends to make bus services more reliable and punctual through implementing more bus priority measures on the key routes in the region, which will include further roll-out of vehicle and highway infrastructure technologies to enable this. Reforming ticketing is also expected to facilitate reliability. By simplifying the range of products available and implementing smart ticketing across all services this will support quicker boarding of passengers and reduce potential delays at bus stops.

As with the network interventions, more reliable bus services will generate growth in bus patronage, reduce the externality impacts associated with travel and benefit the LCR and wider UK economies. The scale of these benefits will be proportionate to the journey time improvements perceived by passengers.

The improvements to the reliability of bus services will primarily be focused on core corridors in the city. These corridors are less likely to serve areas where the population of vulnerable people is higher. Therefore, although no one will disbenefit from the proposed changes, the benefits are likely to be skewed away from these groups.

The reliability benefits arising from the VfB proposals have not been explicitly quantified. Under any Delivery Option, including the Reference Case, priority measures can be introduced. However, as discussed in the Strategic Case, under Franchising the needs of bus users and network managers are better aligned which should result in a modest net benefit. The impacts of the ticketing interventions can only be fully delivered under Franchising, but the scale of benefit will be relatively small.

2.5.3. Improved ticketing offer and more affordable fares

The proposed interventions in fares and ticketing, based on the VfB interventions presented in Section 2.5.3 of the Strategic Case, are:

- Fare validity all day on a route;
- Simplified ticketing and better value fares;
- Unified ticketing framework; and
- Maintaining the extension of the ENCTS pass to over 60s.

Currently there are a range of different tickets that can be purchased for bus travel in the LCR. These fall into three categories:

1. **Singles** – these are tickets purchased on bus services for an individual journey. Available on all services the prices of single tickets are set by Operators. BSIP funding currently allocated to LCRCA is being used to cap these at £2.00.
2. **Single-Operator tickets** – these are multi-trip tickets sold by the main Operators, valid for travel exclusively on their services⁸⁵, with validity periods ranging from a day to annual passes. Some single-Operator tickets are valid for areas outside the LCR boundary. The demand and revenue from these tickets are not included in the analysis.
3. **Multi-Operator tickets** – Merseytravel promotes a range of tickets that are valid for use across all Operators in the region as well as some tickets which are also valid for use on Merseyrail and ferry services. These are multi-trip products with validity periods ranging from a day to an annual pass. Day tickets from the Merseytravel range are mainly purchased on-bus whilst passes for longer periods are bought directly from Merseytravel. Off-bus ticket sales are conducted either online via Merseytravel's website, at Merseytravel kiosks or from authorised vendors.

The fares and ticketing initiatives primarily benefit those passengers who travel on multi-trip tickets. Pre-COVID, 53% of bus travel was done on multi-trip products. Of this, 35% was on single-Operator tickets and the remaining 18% on Merseytravel tickets⁸⁶, which are valid for all Operators.

Single-Operator tickets have restricted validity which limits routes and times that passengers using these tickets can travel. If passengers want to undertake travel outside the validity of their ticket, they are faced with the choice of either not undertaking the journey, purchasing a new ticket, or using an alternative mode (usually also at an additional cost). The proposed changes either remove or reduce the restriction on these tickets and reduce the price of the Merseytravel

85 The exception for the validity of single operator tickets is on routes coming under the SQPS scheme which affects certain routes operated by Arriva, Stagecoach and Halton. No revenue adjustment is made between operators under the SQPS as demand and revenue is assumed to net out across services.

86 Proportions based on data provided by bus operators for the purposes of this Assessment.

multi-Operator tickets. Passengers benefit through a direct reduction in the cost of existing journeys or an indirect reduction in the cost of travel, by being able to travel more without paying a higher fare.

As discussed for network interventions, the reduced cost of travel, as well as benefiting existing users, will also stimulate new demand for bus services from modal shift and inducing new journeys. Like other interventions, the increase in bus patronage will create a net reduction in the social and environmental externality impacts of travel on the wider population in the LCR.

The complexity of the ticketing system constrains bus demand, as it can be a barrier to people choosing to use the bus in the first place. The uncertainty about what the cost of travel will be using the bus and the inflexibility of some travel on single-Operator tickets across the network, means some people will opt to use other modes. Simplifying ticketing would remove these barriers to bus travel and therefore should further stimulate demand.

Passengers who currently choose to use single tickets will benefit from the fare capping and Short-Hop tickets proposed as part of simplified ticketing. However, the VfM offered by multi-trip products is only available to those willing or able to pay in advance. The introduction of fares capping gives more users access to these savings as everyone will automatically benefit from multi-trip ticket prices if they take multiple journeys over the course of a day or week. The Short-Hop ticket will allow passengers travelling on a single to change buses during a specific time period without having to purchase a new ticket. Both proposals will reduce the cost of travel to all passengers and consequently induce more bus trips to be made.

Fares and ticketing benefits are expected to have a proportionally greater impact on people with lower incomes. Those on lower incomes under the current fares system can often only afford to buy single or single-Operator tickets, limiting their access to the bus network. The proposed interventions remove these restrictions increasing the affordability and accessibility of using bus services in the LCR. More affordable fares will also have long term economic benefits by enabling access to employment and educational opportunities for people where the cost of travel is currently a barrier.

The benefits of the proposed fares and ticketing initiatives are significant, but smaller in scale than the network interventions.

This is due to the change in the cost of travel per passenger being smaller compared to the scale of reductions in journey time delivered by the network interventions.

Under EP, the implementation of minimum service standards will effectively bring in all day validity on any route delivering a proportion of the fares and ticketing benefits discussed above. Under Franchising, all the changes required to deliver the vision for fares and ticketing can be introduced and therefore there will be some additional benefit.

2.5.4. Better customer experience

The VfB sets out the following standards for the customer experience of using the bus network in the LCR:

- High quality vehicles across the entire fleet with a low average age;
- All buses meet the highest accessibility standards;
- Improved information provision both on and off bus;
- Better staff-customer interactions;
- Better facilities; and
- Common branding for bus and public transport provision in the LCR.

Evidence from the Big Bus Debate shows that passengers value a high-quality customer experience when using the bus network and will therefore benefit from any changes made to align the entire network with the VfB. Delivering the vision outlined above is most achievable through Franchising and partially achievable through EP.

The impacts of customer experience improvements have not been quantified within this Economic Case; there is limited relevant evidence on how any improvement in customer experience will be perceived by passengers and hence result in a change in demand. Relative to the network enhancements or fares and ticketing changes, the scale of benefit will be smaller. As a result, it is not expected to make a material change to the case for EP or Franchising.

2.5.5. Reduced bus fleet emissions

Under all Delivery Options, including the Reference Case, bus emissions are expected to reduce as old vehicles are replaced by newer lower-emission vehicles. However, under the EP and Franchising the introduction of new vehicles can be more closely managed by LCRCA, which will allow better realisation of the benefit of reduced bus emissions and improve the efficiency of the transition.

Without intervention the cost premium of lower emission buses, in particular zero tailpipe emission buses, may slow the rate at which bus emissions will be reduced, bus Operators may delay the point at which they purchase new vehicles and may purchase lower cost 'low-emission' buses rather than zero-emission buses. Under EP, it is assumed that Operators would buy and own vehicles, similar to under the Reference Case. The proposal under Franchising is for LCRCA to purchase ZEV, which are leased to Operators or provided as part of service contracts. This ensures that a consistent fleet of ZEV is introduced, rather than low-emission buses, and allows diesel vehicles to be replaced faster. However, for the purposes of the Assessment, it is prudently assumed that, under both EP and Franchising options, the benefits of a reduction in emissions are similar, with the same pace of transition to ZEV in both options.

By purchasing ZEV LCRCA gains control over where they are used. This increases the benefits incurred from improved air quality through lower NO_x and particulate tailpipe emissions. Air quality effects are localised and vary on a street-by-street basis; there is more benefit of introducing ZEV in areas with poorer air quality. However, where it is best to introduce ZEV from an air quality perspective may not align to where it is commercially most advantageous to introduce new (zero-emission) vehicles. Under the Operator-led introduction in the Reference Case, commercial priorities will likely influence where buses are introduced (except in the case of supported services, where the service specification can influence the transition to ZEV). Under EP and Franchising options, the introduction can be focused on where the greatest benefit will be, maximising their impact. LCRCA having control over where ZEV are deployed will also ensure societal groups, such as children, which are particularly vulnerable to the effects of poor air quality can be targeted.

As the cost of LCRCA purchasing ZEV is significant, they need to be assessed in the appraisal. Some of the benefits of ZEV can be readily assessed and are captured within the appraisal. This captures the net benefit of introducing ZEV more quickly under EP and Franchising. The net benefits of EP and Franchising options over the Reference Case are relatively small and the cost will also be similar, making the overall net affect broadly neutral. The net benefit of the localised impacts of ZEV is difficult to assess, particularly as the Reference Case will be difficult to establish. These benefits are therefore not captured quantitatively in the appraisal.

2.6. Potential impacts of transition to Franchising and EP

2.6.1. Transition to Franchising

Moving from the current deregulated system in the LCR to a regulated bus network under Franchising risks Operators ceasing to run commercial services prior to or during transition stages. Contrary to the various benefits of expanding bus services described above, the loss of these services would have significant disbenefit to bus users as well as negative social and economic impacts to the LCR. Temporary replacement of these services, for example through contracting or otherwise making arrangements with other Operators, is likely to incur increased operating cost through loss of efficiency.

The risk of cessation of commercial services mainly lies with the actions of Arriva and Stagecoach, which together operated around 90% of commercial services pre COVID-19 (in 2018/19⁸⁷). Whilst a risk, the likelihood of either Operator undertaking such an action wholesale is considered to be relatively low given the significant commercial implications of such a move. Risks for cessation of commercial services by Arriva and Stagecoach during the transition phase have been considered in the development of the transition plan for Franchising, so that such risks are mitigated insofar as possible⁸⁸. However, they may choose to end operation of routes on a targeted basis where the commercial viability of a route is more marginal. With smaller Operators, the nature of the risk lies with their having more agility in their operations to end services at relatively short notice.

On a route by route basis, the situation under the transition period is not dissimilar to 'business as usual' where Operators can choose to end operation of routes for commercial reasons. In either situation LCRCA can choose to intervene to continue the operation of the route as a supported service, which comes at a cost to LCRCA's budget.

However, during the transition LCRCA would not be passive in its approach and would act to mitigate the risks of withdrawal of services and ensure continuity of the network. The approach to the transition period is discussed and considered in the Management Case. Assuming the transition is managed effectively, most commercial services should continue to operate with no disbenefit incurred. A small number of commercial services ceasing to operate can be

87 Based on bus service costs data provided to LCRCA for this Assessment by operators.

88 See Section 8.4.2 of this Economic Case.

effectively managed by tendering new supported services. Existing supported services can also continue to operate during the transition period so long as LCRCA funding continues to be available.

The impacts during the transition phase have not been appraised as part of the transition phase as the risks can be mitigated with only a small overall cost impact relative to the wider benefits of reform.

2.6.2. Transition to EP

Under EP, minimum operating hours and frequencies cannot be imposed on Operators; any specified changes are likely to be non-commercially profitable and therefore require additional funding from LCRCA. This will lead to increased net costs. This will increase the cost of bus delivery to LCRCA both on a gross and net cost basis.

More widely, under EP, reform has to come with the agreement of the majority of Operators. This therefore inherently mitigates some of the transition risk compared to Franchising as those Operators who agreed to an EP would not take adversarial action in terminating services. The residual risk would then remain with the minority of Operators who did not specifically agree to the EP meaning, overall, the number of services at risk during a transition phase of an EP would be lower than Franchising.

2.7. Conclusions on the impacts of the interventions

As Franchising enables greater levels of intervention in bus services it has the potential to deliver the greatest benefit. However, for both Delivery Options these benefits need to be weighed against the costs of intervention, risks, and wider affordability and deliverability issues. The remaining Sections establish that the benefits unlocked by bus reform are greater than the costs, for EP and Franchising options, and discuss the relative VfM of each.

3. Approach to Demand, Revenue and Cost Forecasting

3.1. Introduction

The impacts of the interventions described above are a function of the demand, revenue and cost associated with bus services within the LCR. Generating detailed and robust forecasts for these three aspects of bus operation is therefore vital for robustly appraising bus reform. These forecasts also underpin the financial and commercial analysis conducted for other Sections of the business case.

3.2. Overview of the LCR Bus Network System

It is self-evident that the cost of operating buses has to be balanced by incoming funds, either in the form of farebox revenue or public sector subsidy. This affordability equilibrium of bus services is not isolated to individual routes, or even Operators, but encompasses the whole of the LCR bus network as a system.

Six conditions impact the equilibrium of the LCR bus network system:

- Social and economic factors as well as effects from the wider transport network which influence demand (exogenous demand drivers).
- Economic, supply chain as well as local operating environment (for example network congestion) affecting the cost base (exogenous cost drivers).
- The regulatory system under which buses are operated.
- Strategic choices about bus services directed by LCRCA on fares, ticketing, routeing and timetables (endogenous drivers).
- The public funding available for subsidising bus services.
- Operator profit margin to make running service in the region commercially viable.

The exogenous drivers of demand set the potential for bus use in the region. However, the actual demand supported depends on the services operated. These depend on the overall affordability of the network which in turn depends on the revenue generated by the demand on these services as well as: the cost base for operating buses (affected by exogenous cost drivers); the level of public sector subsidy available; and the margin required by Operators to make their businesses commercially viable.

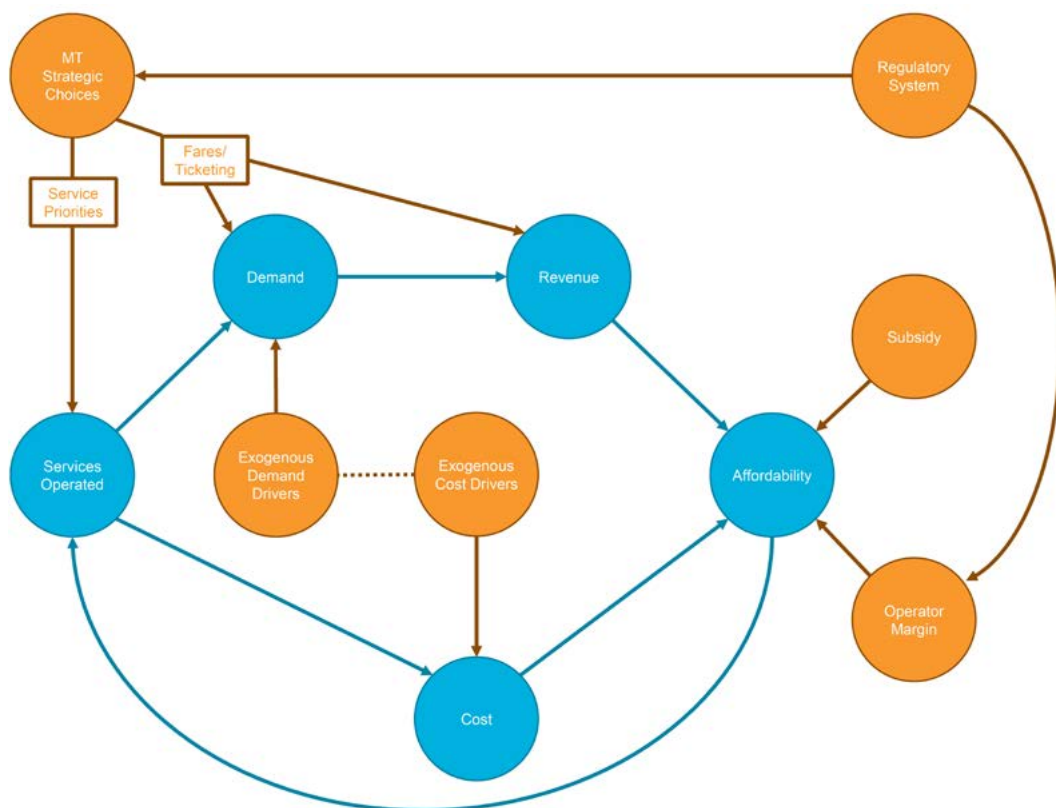
The point of equilibrium can be changed by strategic decisions made by LCRCA. Both directly by prioritising which services to operate and through fares and ticketing which have an endogenous effect on demand and revenue.

The degree to which LCRCA can make these decisions is dependent on the regulatory system under which the services operates. Currently its control is limited but under Franchising it would have full control over all facets of the bus service.

The regulatory system also affects the level of margin Operators require to make their businesses commercially viable. Margins under Franchising are expected to be lower as revenue risk is moved wholesale from Operators to LCRCA.

The figure below summarises these interactions.

Figure 2.1: System Diagram of the LCR Bus Network



For a sustained period, the LCR network has been characterised by declining patronage. The resultant fall in revenue without an increase in public sector subsidy has made the network unaffordable leading to service cuts. It is reasonable to expect this trend to continue. The approach to forecasting, described in the remainder of this Section, has been developed in this context.

3.3. The Reference Case System and Forecasting Approach

In the context of the current broadly deregulated system, services are either commercial, or are operated on a supported basis⁸⁹. That is, those which require direct subsidy and are run by Operators

⁸⁹ There are some services which are partially supported where only particular days or periods are operated on a supported basis.

under contract to LCRCA. As demand, revenue and costs change, there will be a different equilibrium between services operated commercially, those operated on a supported basis and services becoming viable/unviable given the funding envelope. The modelling approach seeks to establish what the equilibrium point is in any given year as the six conditions vary under different scenarios.

Under the current deregulated system, where supported services are constrained in the extent to which they can directly compete with commercial services, the determination of which services are run is essentially a two-stage process. First the Operators decide what services they will run on a commercial basis. Then LCRCA decides what services it will support based on the gaps in the commercial network and its available budget.

Each Operator will decide which services to operate commercially based on the profit margin⁹⁰ across their entire portfolio, or in the case of larger Operators the portfolio at a depot level. They will have a target margin that they need to achieve. Individual services make margins above or below this target, and in some instances may be seemingly loss-making, however on aggregate, Operators achieve the desired margin.

Managing services as a portfolio is commercially advantageous to Operators. This allows them to maximise the services they run, supporting higher levels of demand across the network. They can also maximise the use of their assets and operate some services on a marginal cost basis.

Where the desired margin is not being achieved due to a fall in revenue or increase in costs, an Operator will seek to cut underperforming parts of its portfolio generating the least profit or biggest loss. An Operator may decide to stop operating an entire service or reduce the level of service on an existing route. Changes to services will typically entail not operating during certain days or time periods but could also entail changes to routes or reductions in frequency. Conversely, where margin exceeds target, an Operator may decide to introduce new routes or enhance the level of services on existing routes.

Where an Operator chooses to cut or reduce commercial services one of three things may happen:

1. Another Operator may step in if it has a lower cost base or could generate more revenue.
2. LCRCA may step in, providing direct subsidy, and contract the running of the service or period to the Operators on a supported basis.
3. The service (or part of it) is lost from the network.

90 The revenue on which margin is based includes public sector funding for ENCTS.

In principle, LCRCA will seek to maintain as much of the network as possible through running supported services. However, its ability to do this depends on the budget available and the cost of operating supported services. Where costs exceed budget, services or periods will be cut from the network.

The primary factor determining the cutting of a service is the relative subsidy per passenger. Consideration is also given to the wider social outcomes provided by each service. For example, a route may be chosen to be operated as a supported service over others with a lower cost per passenger if it serves an area without other readily available public transport options and a high proportion of bus dependent, low-income households.

The available budget for contracting supported services will be taken from LCRCA's broad bus budget. This also covers LCRCA's administrative costs related to bus and the reimbursement to Operators for ENCTS on commercial services.

How the budget is balanced is complex. In part because the amount paid to each Operator for ENCTS is not fixed in absolute or pro-rata terms but determined by periodic negotiations with LCRCA. Administrative costs will also flex in response to the wider budgetary pressures. However, it is reasonable to infer the budget for supported services is generally subordinate to the other two demands.

3.3.1. Modelling Approach

The modelling approach represents the process by which the LCR bus network is determined in three key stages:

1. Forecasting of 'unconstrained' demand, revenue and cost.
2. Portfolio assessment of all services to determine which services/periods can be commercially operated.
3. The assessment of which services/periods not commercially operated can be supported based on the available budget.

The modelling uses service-level, operating, demand, revenue and cost data provided by bus Operators and LCRCA for the financial year 2018/19⁹¹. The 'unconstrained' projections use this as a base year and therefore the modelling pivots off the network operated at this point in time. Whilst this may not capture some of the subsequent

91 Data for the financial year 2019/20 was used to validate the 2018/19 base year data. There has not been another year since that is considered to be a suitable base year given the severe impacts of COVID-19 on bus patronage in those years.

changes to routes and services, it provides a reasonable approximation of the shape of the network⁹².

An elasticity model is used to forecast unconstrained (by supply) demand. This reflects the demand potential of the 2018/19 network in response to projected future changes to the key economic and social factors which will affect bus use. The effects of the COVID-19 pandemic on patronage are reflected in the demand forecasts. As these drivers are independent of decisions made about bus, the same exogenous forecasts underpin all Delivery Options.

Under the Reference Case the operation of bus is assumed to continue with the status quo; without strategic changes to services, the continuation of the current ticketing structure and fares remaining constant in RPI real terms⁹³. Therefore, no explicit endogenous changes are applied in the modelling. Revenue is treated as a function of demand, calculated by applying derived yield values per journey to the demand forecasts. As fares are assumed to remain constant in real terms, yield is also assumed to be constant within the model.

Once the demand potential based on operating the 2018/19 network has been established along with corresponding revenue and cost forecasts, the affordability equilibrium assessment of the network is conducted in the following two stages.

First, for each forecast year, the full portfolio of services is assessed to establish what services will be commercially operated based on: the income generated by these services; the cost; and operators' required margin. The model assesses both whole services and, where appropriate, individual periods but does not consider the other ways in which Operators may reduce or trim services, which are assumed to be less significant.

A single assessment is conducted for all services collectively, rather than separate assessments for each Operator's portfolio. This is reflective of how a service's commercial viability is based not only on the current Operators required margin but that of other Operators who may not adopt the same margin as a measure of commercial viability.

92 The list of the routes considered as part of the modelling underpinning the Economic Case and Financial Case is consistent with the manner in which Operators list routes in their management accounts, given that this is the source of the inputs to the modelling. In the Management Case routes are presented from the perspective of passengers, which is different to what is recorded in Operators' management accounts.

93 All modelling has been conducted in RPI real terms. Therefore, an inflationary (RPI) increase in fares will elicit no change in demand.

The required margin for commercial services is taken as the average across all Operators. The target margin used in the model has been derived from the 2018/19 base year data. It is assumed that the average margin percentage underpins the commercial viability of Operators' businesses and therefore would remain broadly constant going forward.

The income stream for commercial services comprises farebox revenue, and the payments from LCRCA that Operators receive for carrying passengers who receive free concessionary travel under the ENCTS scheme⁹⁴. A reduction in the number of commercial services operated will reduce the income Operators are due from ENCTS payments. To approximate the ENCTS income Operators would receive the modelling allocates this funding to commercial services on the basis of:

- The forecast ENCTS demand carried on the services and periods determined to be commercial.
- The effective 2018/19 yield, by Operator, per ENCTS trip, assumed to remain constant in real terms⁹⁵.

Once the commercial services/periods have been determined, the model assesses which of the remaining services/periods can be supported and those to be cut. What can be supported is based on the net cost of the services/periods in scope and the budget remaining available for contracting supported services.

The net cost of each service/period to LCRCA will include the margin applied to the gross operating cost by the contracted Operator less any farebox revenue generated. As with the commercial margin, the modelling uses a single average margin value across all services as it isn't reasonably possible to capture how this might vary on a service-by-service basis. As discussed elsewhere, the average margin assumed for supported services is generally lower than commercial services, as Operators are not taking on revenue risk.

The annual budget for contracting supported services is modelled as the bus subsidy budget, derived from the broad bus budget, less any ENCTS payments to Operators.

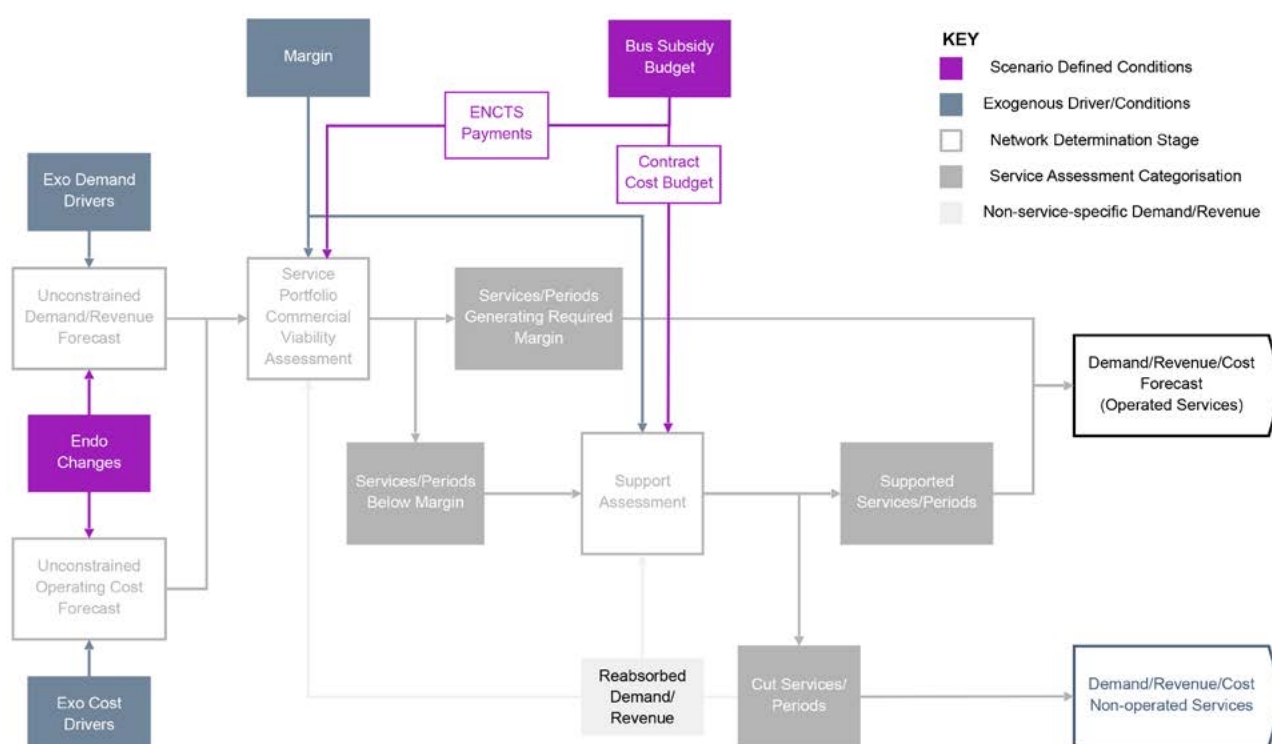
The decision of which services to support is modelled as being based on the relative net cost per passenger alone. As other metrics to this decision are secondary to cost, this provides a reasonable approximation of the outcome at a network level.

94 Within LCR the ENCTS scheme is extended to all over 60s. This does not attract additional HM Treasury funding.

95 As ENCTS payments are negotiated separately by each Operator the effective yield generated will vary. The base year yield remains associated with each route.

There is an interdependency between the commercial and supported service assessment. This is a result of the feedback effect occurring due to a proportion of the demand from cut services being reabsorbed by the network⁹⁶. This will effectively increase revenue on remaining services which can enable more services to be commercially operated and more service to be supported. The figure below summarises the overall approach.

Figure 2.2: Forecasting Approach Diagram for Reference Case and EP



3.4. The EP System and Forecasting Approach

The approach described for the Reference Case also broadly applies to the EP. However, an EP enables LCRCA to exert greater influence over the delivery of bus services, allowing some determination over what bus services are operated, fares and ticketing. These endogenous changes are modelled on top of the exogenous drivers in the unconstrained demand, revenue and cost forecasts.

A Delivery Option has been modelled which reflects the most extensive changes that Operators would reasonably agree to under EP. The modelling forecasts the demand response to the endogenous changes.

⁹⁶ The assumed proportion of reabsorbed demand by the network does not disproportionately impact any of the Delivery Options, and therefore does not change the conclusions of the Assessment.

3.5. The Franchising System and Forecasting Approach

Under Franchising, LCRCA takes control of all bus services in the LCR, giving it full decision-making power over fares, ticketing and the services operated. As with the modelling of EP these endogenous changes are captured within the unconstrained forecasts. The Franchising Option modelled includes the initiatives, which elicit a significant demand, revenue or cost response, that LCRCA have identified to as part of its VfB.

Franchising changes the process which determines what services are operated. As all services become contracted to Operators there is no decision point for determining commercial services/ periods. In this instance the determination process becomes a single assessment process, where all services are considered collectively with the choice of which are operated based on:

- the gross cost of services;
- the mark-up applied by Operators to achieve the required margin; and
- the total income for operating services, comprised of the farebox revenue generated on operated services, ENCTS funding received by LCRCA and any other funding available once administrative costs have been considered.

As with supported services under the Reference Case and EP, the decision of which services to operate is modelled on the relative net cost per passenger.

The forecasting approach solves in each year the bus service network which would be affordable to LCRCA under Franchising. However, it is noted that, under Franchising, the proposal is that LCRCA would enter into fixed seven-year contracts for bus services⁹⁷. LCRCA will monitor demand for bus services and contract costs on a continual basis, and will base the services it lets under franchise contracts on contemporary forward forecasts of affordability; the proposed contract will a flexible change mechanism⁹⁸ which will allow the adaptation of the network in response to changes in demand. There may be costs associated with implementing changes, due to certain costs, such as the depot and operator employed staff, not reducing in line with a reduction in the number of services. There may also be termination costs associated with terminating franchise contracts early. Similarly, there is a risk to LCRCA that it has certain fixed costs that cannot be reduced at the same time as services, for example committed vehicle costs and LCRCA staff costs. From a financial risk perspective

97 See Section 4.2.3 of the Commercial Case.

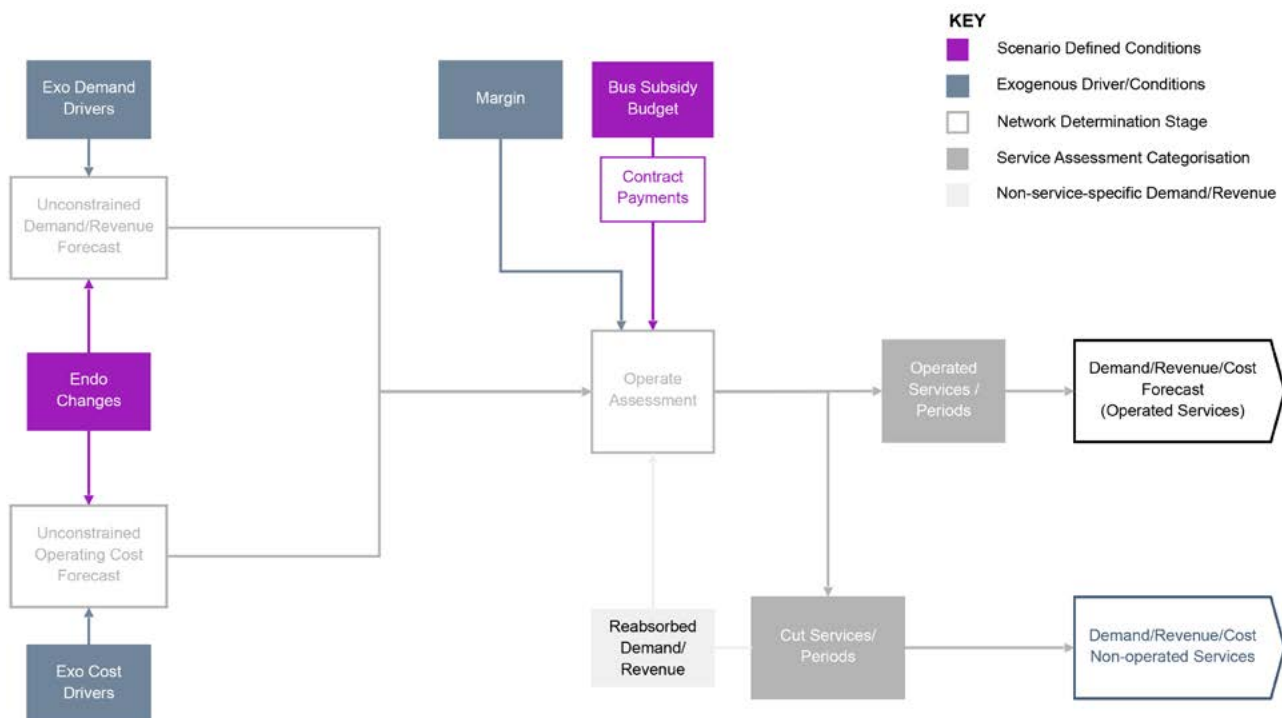
98 See Section 4.3.4 of the Commercial Case.

and in order to deliver a minimum bus network, LCRCA has assumed that it will continue to receive the Transport Levy from constituent authorities for the appraisal period. However, Section 5.5 of the Financial Case sets out alternative means of funding, if required.

The change mechanism will include a requirement for the Operator to confirm the cost of implementing any change, which can then be used by LCRCA to determine the extent to which a change should be implemented. Should there be any necessity for a more significant change in service than is allowed for (or cost-effective) under a particular franchise contract, a more substantive change can be allowed for in the contract renewed that year, supported by some reallocation of services within contracted resources. Together this allows sufficient flexibility for LCRCA to manage the affordability of its bus network at the time this is required. It should be noted that any significant change to the network size could be met with political resistance due to socio-economic considerations and therefore in practice may not be as timely to implement as permitted under any franchise contract.

Figure 2.3 outlines the overall forecasting process for Franchising.

Figure 2.3: Forecasting Approach Diagram for Franchising



3.6. Summary of key modelling assumptions

The forecasting approach described uses a range of assumptions which inform the demand, revenue and cost forecasting, as well as the affordability of the network.

Subsequent Sections of this Assessment outline the data and assumptions used to forecast demand, revenue and operating cost for each Delivery Option under consideration. However, the key overarching assumptions in developing this Assessment, are set out below:

- The collective average profit margin across the portfolio of all commercial services in the LCR is assumed to remain constant over the forecast period (as a percentage). This has been based on 2018/19 revenue and cost data provided by Operators and LCRCA. This means that, where Operators see their average profits decrease because costs increase and revenues decrease, they will seek to cut services to return to their target average margin.
- Where bus Operators elect to cut services to maintain their desired average margins, they are assumed to do so on the basis of the ratio between revenue and operating cost for each individual service, hence maximising the profit margin for the portfolio.
- In contrast, where LCRCA decides to provide additional funding for supported services, it is assumed that those services with the lowest cost per passenger ratio will be supported first, given that this maximises bus service kilometrage and therefore the social benefit associated with the introduction of bus services.
- Supported services under tendered contracts are assumed to achieve a 7.2% margin on revenue⁹⁹. While there is no data from bus Operators which informs this assumption, it is considered reasonable and in line with benchmarked mark-ups in similar contracts (the rationale underpinning this assumption is provided in the Financial Case).
- Franchised services are assumed to have a 7.5%¹⁰⁰ margin on revenue¹⁰¹ (see Section 3.2.3 in Financial Case). The margin that bus Operators will target for these services will be based on a number of factors, such as level of competition, risk and reward balance or other wider portfolio considerations. It is believed that these potential issues have been appropriately addressed in the Commercial Case and therefore that the actual margin could in practice be lower, however a prudent assumption has been made for the purpose of the Assessment.

99 Equivalent to 7.75% mark-up on operating costs. This reflects a 6.5% assumed margin (or around 7.0% mark-up) on supported services, coupled with an additional 0.75% mark-up associated with increased management costs.

100 Based on data from Bus Industry Performance 2020 report and the GMCA Bus Franchising in Greater Manchester Assessment.

101 Equivalent to 8.11% mark-up on operating costs.

- For all Delivery Options, LCRCA cannot spend more money than funding is available for supported or franchised services. Where the total net cost of supported or franchised services exceeds the total funding available to LCRCA, the overall number of services under operation in the bus network need to be reduced. This principle applies under the Reference Case, EP and Franchising.

Because of the different administrative costs associated with the Reference Case, EP and Franchising the effective bus subsidy budget is lower for EP than under the Reference Case and lower again for Franchising, with its increased planning and management cost to LCRCA. The budgets are summarised below.

Table 2.2: Budget available for buses in the LCR

Delivery Option	Budget for 2026/27 (expressed in 2018/19 Prices)
Reference	£46.7m
EP	£46.0m
Franchising	£42.5m

Source: Financial Case analysis. Budget presented for 2026/27, when it is assumed that Franchising (if adopted) would be implemented.

3.7. Assessing uncertainty

Uncertainty is inherent to forecasting and must therefore be a key consideration in determining the social, economic and environmental impacts of each of the Delivery Options assessed in the Economic Case. In addition, the COVID-19 pandemic brought additional uncertainty to the future of bus (and all) transport. The two main areas of uncertainty are the following:

- Degree of recovery of bus patronage and long-term impacts due to changes in travel patterns and behaviour originated by COVID-19.
- Availability of funding and ability for LCRCA to increase spend to support an increasingly less commercial network.

The Green Book and the Department for Transport's Uncertainty Toolkit¹⁰² propose, as one of the tools alongside sensitivity testing for example, a scenario development and assessment process to appraise the performance of different Delivery Options under different forecasts of the future, through the use of different assumptions for the key identified areas of uncertainty. The aim of this process is to test a wide range of different futures to understand the which option is the most appropriate way forward and bring about the best changes.

102 Uncertainty Toolkit – TAG Supplementary Guidance, Department for Transport, 2021.

3.7.1. Scenario Development

The objective of the scenario development process is to appraise how the relative performance of these options varies depending on uncertainty factors. This allows consideration of conditions under which it would be appropriate, from an Economic Case perspective, to choose one Delivery Option over another, informing LCRCA overall decision-making process.

The modelling scenarios developed for the economic appraisal have been built by combining potential scenarios in each of the two main areas of uncertainty – COVID-19 impact and LCRCA bus funding availability. These scenarios will support decision makers in understanding the relative performance of Delivery Options. The appraisal compares each of the six potential combinations of COVID-19 impact (two scenarios) and funding (three scenarios) for the EP and Franchising Delivery Options against the corresponding combination for the Reference Case, the counterfactual. The characteristics of the scenarios under consideration are presented below.

3.7.2. Recovery of bus patronage and COVID-19 long term impacts

COVID-19 severely impacted bus travel during 2020 and 2021 following the cycles of lockdown, restrictions and reopening of the economy. While it remains possible that there could still be further short-term fluctuations in bus demand following the appearance of new variants with potential subsequent restrictions, for the purpose of the Assessment, only the long-term lasting impacts of COVID-19 on travel behaviour have been considered, as these will have an impact on the different Delivery Options throughout the appraisal period.

By September 2022, bus demand at a national level, according to DfT data (see Section 3.8 of the Strategic Case), had exceeded 85% of 2019 bus demand following the reopening of the economy and wide roll-out of the vaccination programme¹⁰³. It is therefore assumed that 85% of demand recovery is a reasonable and prudent estimate for demand recovery in the longer-term and has therefore been adopted as part of the scenarios to be assessed.

A scenario where demand fully recovers to the pre-pandemic trajectory has also been assessed; while it is anticipated that some lasting impact of COVID-19 will remain and therefore that demand will not fully recover to the pre-pandemic forecast, this scenario constitutes a likely upper bound for demand and a useful comparator to other scenarios.

¹⁰³ See Chart 1.9 and accompanying narrative in the Strategic Case.

As such, two possible ‘extents’ of the spectrum of uncertainty have been considered:

- A scenario where bus demand recovers to 85% of the demand trajectory that would have been forecast in the absence of COVID-19¹⁰⁴.
- A scenario where bus demand eventually fully recovers to the demand trajectory forecast in the absence of COVID-19.

3.7.3. Availability of funding to support the bus network

Alongside the impact that COVID-19 has had on bus travel, the pandemic has also put further pressure on public sector budgets, given the need for Government support of the economy and population during the cycles of lockdown and restrictions. This means that there is now increased competition for any funding available in LCRCA.

In parallel to that, as bus costs are forecast to grow faster than bus revenues, there will be an increased need to support bus services financially to maintain as much as possible of the pre-COVID network, because as services run by commercial Operators become non-commercially viable the Operators are likely to drop the less commercially viable services to maintain their target profitability. Therefore, maintaining the bus network will require additional funding from LCRCA. For this, three scenarios have been proposed:

- “Reduced” – a scenario where LCRCA is only able to maintain the level of funding allocated in 2021/22 to buses in nominal terms (that is it does not grow in line with inflation).
- “Current” – a scenario where LCRCA is able to maintain the level of funding allocated in 2021/22 to buses in real terms (that is it grows in line with inflation).
- “Increased” – a scenario where LCRCA is able to steadily increase its level of funding to bus, such that by 2037/38 it is double 2021/22 levels, in real terms.

These scenarios are considered to represent a reasonable range for funding availability. It is anticipated that LCRCA will at least be able to maintain current levels of spending; in addition, given the strategic role that buses have in LCRCA policies, a scenario where LCRCA doubles its budget allocated to bus also appears a reasonable illustrative assumption for the scenario assessment process. The scenarios considered are

104 This will constitute the central scenario for the Assessment. A sensitivity test with a lower recovery assumption has also been included in the Assessment.

therefore the following:

- Current funding and 85% recovery to pre-COVID demand¹⁰⁵ projections. This is the baseline scenario for the Economic Case.
- Current funding and full recovery to pre-COVID demand projections.
- Increased funding and 85% recovery to pre-COVID demand projections.
- Increased funding and full recovery to pre-COVID demand projections.
- Reduced funding and 85% recovery to pre-COVID demand projections.
- Reduced funding and full recovery to pre-COVID demand projections.

3.7.4. Establishing the Reference Case and Delivery Options

The appraisal of EP and Franchising considers the net benefits and costs of these two options against the Reference Case. A reasonable Reference Case needs to establish what changes would occur to the bus market under 'business as usual' conditions including any enhancements committed to, or highly likely, on the part of LCRCA or Operators. The Reference Case should not include interventions which require regulatory change or uncommitted material investment to enhance the network beyond its current state.

Under the current regulatory context, the majority of services within the network are run by commercial Operators who have control over when and what services they run. Bus services will be affected by the underlying exogenous impacts on bus travel as a result of macro social and economic changes in the region; and, in the Reference Case, by any endogenous effects as a result of changes to bus services or fares made by the Operators, for commercial services, or LCRCA, for supported services.

A scenario of declining bus revenue would result in commercial bus services being cut or reduced as they become financially unviable for Operators. Unless LCRCA introduces additional supported services (at increased cost) to cover the reduction in commercial services, the bus network will contract, resulting in significant disbenefits to passengers.

¹⁰⁵ See Chart 1.9 in the Strategic Case which shows that this level of demand was marginally exceeded in the final quarter of 2022.

This scenario conflicts with the VfB and therefore is not a scenario that would be attractive to LCRCA, regardless of whether EP and Franchising are introduced or even contemplated.

The appraisal will use the Reference Case scenario as the common counterfactual for the assessment of benefits and costs of EP and Franchising options. It is therefore a tool for comparison purposes only and not a scenario which would necessarily be desirable or appropriate for the LCR, as noted above.

3.8. Establishing the Appraisal Period

In appraising EP and Franchising options it is necessary to consider the period over which costs and benefits of intervention will be incurred. This does not mean that the appraisal period should capture every cost and benefit of reform, as these will continue far into the future. Rather it should capture the lifecycle of any proposed investment. The typical period used for appraisal of transport schemes is 60 years, used to reflect the period over which infrastructure investment still has residual value without needing complete renewal.

For bus reform there is no such one-off infrastructure investment driving the appraisal period. Instead, the main driver of investment costs from LCRCA and the wider public purse is the bus fleet. A monetised appraisal period of 40 years has been used, from financial year 2022/23 to 2061/62¹⁰⁶. This period aligns with the lifecycle of zero emission buses that will be introduced into the fleet under all options. The lifecycle of a zero emission bus is between 15 and 20 years¹⁰⁷ with a renewal period for batteries, drive and, for hydrogen vehicles only, fuel cell replenishment, of half the assumed lifecycle duration. For all Delivery Options, the last diesel buses are forecast to be replaced around 2040 and their replacements will come to the end of their natural service life around 2060. Therefore, a 40-year appraisal period is considered reasonable as it would enable to fully realise the benefits of the intervention, including environmental associated to the deployment of ZEV.

3.9. Economic Appraisal Treatment of Revenue and Costs

As described above, revenue and costs have been forecast for a 20-year period from financial year 2018/19 to 2037/38. For the Economic Appraisal, a 40-year period from financial year 2022/23

¹⁰⁶ It should be noted that the demand, revenue and operating cost forecasts have been undertaken for a 20-year period.

¹⁰⁷ For the purposes of the Economic Case appraisal, a 17-year lifecycle of zero emission buses has been assumed, on the basis of the current status of bus technology. However, a 40-year appraisal period is still considered appropriate.

to 2061/62 is assumed. For appraisal years after 2037/38 no further growth is assumed, with values remaining constant in 2018/19 real terms after this year. This assumption is made as reliable forecasting data and assumptions are not available for a longer period.

For the purposes of the Economic Appraisal, revenues and costs have been also adjusted in line with HM Treasury's Green Book and TAG.

The adjustments made are:

Conversion of costs to 2010 GDP real. This has been done using RPI and GDP deflator indices from the January 2023 release (v1.20.2) of the TAG databook.

Conversion to market prices. This adjustment is made to bring the costs in line with the transport user 'perceived cost' created by the effects of taxation. An uplift of 19% is applied to the costs, as per DfT's TAG requirements.

Optimism Bias (OB). An OB of 44% has been applied to the vehicle costs, as per DfT's TAG requirements¹⁰⁸. Optimism bias is an economic construct, which is applied to costs to account for the observed tendency for underestimation of project costs. Depot costs are apportioned within ZEV costs within the appraisal, so OB has also therefore been applied to them.

Discounting to 2010 present values. In line with Green Book and TAG, costs have been discounted at 3.5% per annum for the first 30 years of the appraisal (2022 to 2051) and 3.0% for the remaining 10 years to 2061.

108 Paragraph 3.5.2 of DfT's TAG Unit A1-2 states "The Green Book [HMT,2003] suggests that appraisers should make explicit, empirically based adjustments to the estimates of a project's costs, benefits, and duration. The guidance in this section focuses upon making adjustments to costs and draws on evidence from the studies summarised in Table 5. Demand and benefit optimism bias should be examined using sensitivity tests" as DfT's interpretation of how Green Book principles are applied within transport monetised appraisal. DfT's approach has been followed in the monetised appraisal set out in this Assessment, with Optimism Bias applied to capital costs and with the sensitivity of the appraisal to demand, benefit and operating costs considered through sensitivity testing (see Section 12.4 of this Economic Case).

4. Unconstrained Demand and Revenue Forecasts

The unconstrained demand and revenue forecasts are projections of the potential demand and revenue that would be supported if it was possible that the 2018/19 LCR bus network was retained. The forecasts comprise two parts; the change as a result of social and economic exogenous drivers, which is common to all Delivery Options, and the change as a result of the different VfB initiatives brought forward under EP and Franchising.

4.1. Overview of Demand Forecasting Approach

The approach to forecasting has been developed using industry good practice, parameters from *The demand for public transport: a practical guide* (TRL, 2004¹⁰⁹) (the “**Black Book**”) and in alignment with TAG.

Demand has been forecast using an elasticity model which estimates the changes in bus demand caused by the behavioural change of bus users as a result of exogenous and endogenous drivers. An elasticity model is both a proportionate and appropriate approach to forecasting the impact of incremental changes on an existing user population, namely bus passengers.

The effects differ for bus users across the LCR, being dependent, among others, on the type of ticket used.

To capture these variations, demand is segmented by route and into different user groups by ticket type. The demand and revenue forecasts are produced in three stages:

1. Construction of base year.
2. Exogenous forecast – baseline change to bus demand.
3. Endogenous forecasts – impact of the initiatives under different Delivery Options.

4.1.1. Base Year

Demand and Revenue Input Data

The forecasts have been based on passenger data from 2018/19 provided by Operators and LCRCA. Equivalent data was provided for 2019/20, which was used to validate the base year data for 2018/19. Subsequent years, 2020/21 and 2021/22, were not considered appropriate to use as a base year for the forecasts given the impact of COVID-19 on bus patronage which varied throughout those years as restrictions were imposed and lifted, and afterward with gradual

¹⁰⁹ Although published some time ago, TRL’s report has not been superseded by any alternative source at the time of developing this Assessment, for example remaining a key source referenced in DfT’s modelling guidance within TAG.

recovery¹¹⁰. It is noted that the long-term impact of COVID-19 on bus patronage was incorporated into the forecasts, as described in the previous Section.

For commercial services, the demand data has been provided by Operators from electronic ticket machine (“**ETM**”) records. The demand data from all operators has been disaggregated by route and ticket or concession type.

The revenue data for commercial services comes from data of on-bus ticket sales collected from ETMs alongside demand data, LCRCA annual payments to Operators for passengers using Merseytravel tickets and ENCTS reimbursements to Operators (all in (2018/19 prices). Where agreeable, Operators also provided data for their off-bus ticket sales. Where off-bus ticket sales were not provided, an average yield based on the wider pool of fares and ticketing data was used.

Demand and on-bus revenue data for supported services was provided by LCRCA (with the exception of Arriva and Stagecoach services), based on the data from ETMs it provides to the Operator fulfilling the contracts. Data was also provided by LCRCA for revenue payments made relating to the use of Merseytravel tickets on supported services.

Segmentation

For demand the route segmentation is taken directly from the data. The user segmentation is done based on groupings of different ticket types. The grouping is based on:

- The demographics of the ticket holder – Adult (18+)/ young person/ENCTS user.
- The type of product purchased:
 - Single-Operator ticket/Merseytravel bus ticket/ Merseytravel multimodal ticket.
 - Length of validity – single/day/other multi-trip ticket.

4.1.2. Exogenous Forecast

Demand for bus travel is impacted by social and economic factors that are independent of how buses are operated. Therefore, these exogenous effects will influence the underlying demand for bus travel regardless of any approach taken to bus reform. The following exogenous drivers that

110 Demand and revenue data for these years would require different adjustment factors to be applied at different times during the year to obtain the uniform, neutral, year of data which would be an appropriate base for forecasting. The validated year of pre-pandemic data is a more robust base for forecasting, including with the adjustments for persisting COVID impact.

can impact bus demand and have been captured as part of this appraisal are:

- Gross Domestic Product (GDP);
- Population;
- Employment;
- Car ownership;
- Cost of car ownership (Car Operating Cost).

GDP increases are associated with increases in travel demand. This increase results from the population in general becoming more affluent and therefore having more disposable income to spend on discretionary travel. Some of this increase can also be associated with greater commuting and business travel, given GDP increases are typically associated with increases in employment. The exogenous forecast assumes a GDP increase based on that contained in the TAG databook¹¹¹, at a national level that, in isolation, would create an increase in bus demand. However, GDP increases are also associated with increased rates of **car ownership** which has a counter effect on bus demand. The overall effect of GDP on bus travel, when factoring for car ownership, is therefore net negative. The demand response to GDP changes is assumed to be only fully realised over a number of years as consumer behaviour does not and cannot adjust immediately.

Overall demand for travel in the LCR will be impacted by the **change in population** with the relationship between the two assumed to be directly proportional and immediate. Different groups of people make a different number of trips per head, based on their sociodemographic characteristics, including those travelling on concessionary tickets. The change in population over time varies depending on geography and age group. The geographic effects on population are driven by other economic factors such as where employment centres are located and increasing urbanisation. The population size of different age groups is impacted by the aging population and birth rates. Based on DfT's National Trip-end Model (NTEM)¹¹², the overall populations in each local authority within and surrounding the LCR are expected to increase. The size of the population under 16 is forecast to increase a small amount; the population between the ages of 16 and 74 is forecast to stay broadly the same; and, a significant increase is forecast in the size of the population who are 75 and over.

111 TAG databook January 2023 Sheet 'Annual Parameters'.

112 National Trip End Model (NTEM) Version 7.2, February/March 2017.

Increases in employment are associated with increased travel through more people commuting and travelling for business as well as having greater disposable income to spend on discretionary travel. The Black Book does not provide any specific parameters for how bus travel changes with employment. However, evidence from PDFH¹¹³ 6.0 (B2) suggests that for rail the demand increases at a proportionally greater rate than the increase in employment. A similar relationship has been assumed for bus travel, but without specific evidence a smaller demand response (demand change directly proportional to change in employment rates) has prudently been used. These effects are assumed to occur immediately. For the LCR, NTEM¹¹⁴ shows an increase in employment for all local authorities. However, the rate of growth will vary based on local economic factors.

Decreases in **the cost of car ownership**¹¹⁵ make the relative cost of car use compared to bus lower, resulting in a reduction of bus demand (and vice versa). The trend for the reduction in car ownership costs is expected to continue, further suppressing demand for bus services.

The exogenous effect of congestion reduces travel demand as it increases travel time for the affected modes resulting in users choosing not to undertake some journeys or diverting to other, less affected, modes. Whilst congestion in the UK in general and the LCR specifically is expected to increase, the impact on bus demand has not been assessed as part of this appraisal as LCRCA and its constituent LTAs would be expected to implement measures to address the impact of congestion on buses. As these interventions can be introduced without the need for bus reform, their effect can be included under any Delivery Option and the Reference Case. As a result, the net effect between the Reference Case and any Delivery Option will be neutral.

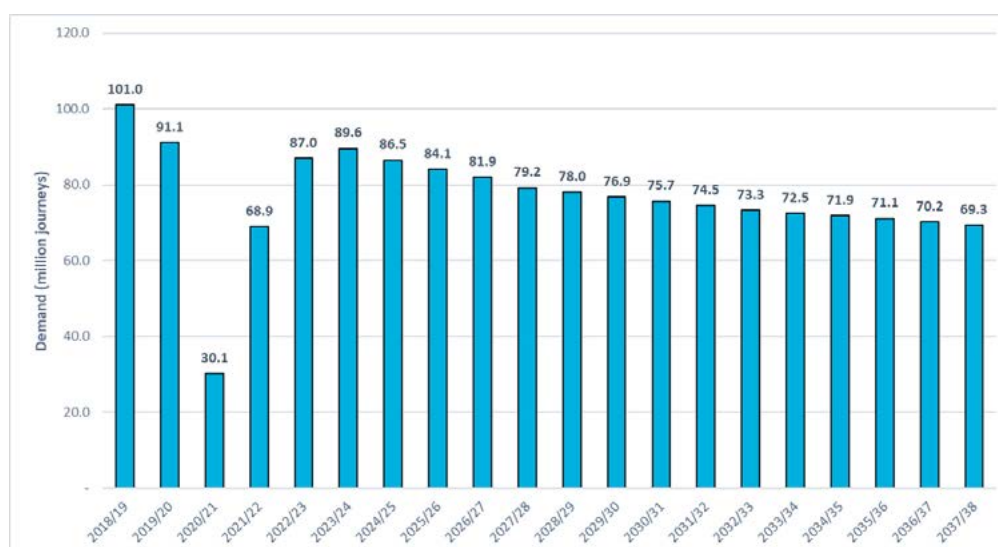
The figures below show the unconstrained demand trajectory under the Reference Case (illustratively without a permanent impact of COVID-19 on patronage).

113 Passenger Demand Forecasting Handbook, UK Rail Industry Guidance.

114 National Trip End Model (NTEM) Version 7.2, February/March 2017.

115 TAG databook (v1.20.2 January 2023) values in Table M4.2.2: Car cost series for rail demand forecasting.

Figure 2.4: Unconstrained Demand Forecast (Reference Case)



Source: Economic Case forecasting models.

As described in the Strategic Case, bus patronage has been in decline over the past decade. The aggregate impact of the various exogenous effects is forecast to generate a continued decline in bus patronage within the LCR. This can be seen in the figure above.

Bus demand is forecast to be annually around 30 million passengers lower by 2037/38 under the unconstrained Reference Case, ignoring any permanent COVID-19 impact on bus patronage.

However, in addition to the exogenous natural decline of patronage, two additional impacts are anticipated:

- Behavioural changes occasioned by COVID-19 are anticipated to have lasting impacts in bus patronage, with permanent reductions in demand over those already shown in the graph above.
- Funding constraints might result in further reductions in bus services due to an increase in the need to provide funding for supported services (so, in the absence of funding, more services would be cut as they could not be supported).

The scenarios described in the previous Section are therefore applied to the above unconstrained forecast to reflect the uncertainty over both the long-term impact of COVID-19 on patronage and the funding available to LCRCA.

4.1.3. Endogenous Forecasts

The endogenous forecasts capture the passenger impacts of changes made to bus services in the LCR either by LCRCA or operators. Separate endogenous forecasts have been produced for each different Delivery Option, including the Reference Case against which they are compared. These changes will be as a result of the initiatives introduced under the EP and Franchising options, and not in the Reference Case, or, for example, as a result of reductions in services under the Reference Case, which do not take place under the other Delivery Options. The three delivery options considered are therefore:

- Reference Case;
- EP;
- Franchising.

In each case the impact of changes to the network, as well as fares and ticketing, have been quantified.

Network Interventions

The proposed network interventions see changes to existing services to enhance service frequencies or extend the hours of operation on underserved routes and some services being added or replaced to increase network coverage. A demand uplift is calculated based on an elasticity response to the change in service vehicle kilometres operated, resulting from the increased frequency or hours of operation. Some of the demand response to service changes will be immediate, whilst the remainder will occur over a number of years as longer-term behavioural changes come into effect. The full demand response is assumed to be realised over a period of ten years from the intervention being introduced.

Where new services are introduced, demand is estimated from the calculated operating costs and the level of revenue generated by the service as anticipated by LCRCA's bus network team¹¹⁶. The estimation of revenue is based on a comparison of the new service to existing supported services in the region. The network interventions quantified under each Delivery Option are:

¹¹⁶ The number of new services introduced is small relative to the number of services in the region, with a cost of around £20m in 2022/23 in comparison to total service costs for the same year of approximately £150m. The method of calculation of the demand and revenue for new services does therefore not have a material impact on the overall demand and revenue forecasts.

Reference Case – Under the Reference Case there are no anticipated changes from the VfB from a network perspective. However, the level of service across the network will reduce as a whole as a result of it only being possible to accommodate a limited number of supported services within LCRCA’s budget when commercial services cease to operate as they become unprofitable.

EP – Many of the service changes proposed result from introducing new services which deliver the outcomes of the VfB where these do not interfere with existing commercial services. Other changes, such as changes to frequency or operating hours, are only achievable under EP assuming agreement with the Operators. However, commercial Operators are unlikely to accept changes to frequency and operating hours which adversely impact their profitability and so changes to frequency or operating hours are not assumed to take place under EP. Therefore, only services replaced or introduced that do not affect commercial services can be delivered. However, similar to the Reference Case, a long-term funding commitment would be required to support services which cease to be commercial and to introduce improvements to the network which are not commercially viable to Operators.

Franchising – All proposed services changes are assumed to be delivered under Franchising. This includes services proposed to be replaced or introduced that would affect commercial services. Given that the average assumed margin under Franchising is lower than under the Reference Case and EP, more funding is available to support an additional number of bus services.

Both EP and Franchising options generate a demand increase relative to the base, reducing the overall attenuation of demand that results from the exogenous effects to bus demand. The network enhancement impacts of Franchising are marginally greater than for EP given more routes are affected. The revenue impact of the network interventions is proportionate to demand in both cases.

Ticketing Interventions

The VfB proposes simplification of the range of ticketing products available and extending the validity of tickets to cover the whole day on a given service. These changes will result in an increase in demand. When evaluating comparable proposals, research for Nexus¹¹⁷ found that passengers perceived a

117 Simplified Ticketing Research (Nexus, 2013). It has not been possible to find a more recent, equally-relevant source, and there is no justifiable cause to doubt its relevance – particularly given that its influence on demand forecasts is modest.

willingness-to-pay benefit that would equate to an uplift in demand of 2.5% for extensive ticket simplification¹¹⁸. The VfB proposals are assumed to generate the same uplift in demand for journeys that are undertaken by fare paying passengers (that is excluding ENCTS).

The ticketing interventions quantified under each Delivery Option are:

Reference Case – Under the Reference Case the range and validity of tickets would remain the same therefore no demand uplift is applied.

EP – Under EP, the removal of the price differential between multi- and single-Operator multi-trip tickets is assumed to take place. These changes do not represent the full equivalent of changes considered as part of the Nexus proposition, but some proportion of the benefit would be delivered. There is uncertainty about how much of the extent of ticketing interventions could be achieved under EP, as the implementation of these proposals will depend on the agreement negotiated with Operators. The impact on demand is expected to be between that of the Reference Case and the 2.5% uplift expected for Franchising. For the purposes of the appraisal, and to represent the possible impact under EP, a demand uplift of 1.25% has been assumed. However, it is possible that a smaller impact could be achieved, as this depends on successful negotiations. It should be noted that long-term funding commitment would be required to deliver these initiatives, as BSIP and the Operators' proposed EP indicate their willingness to deliver some of these initiatives only if a dependable route to funding is available.

Franchising – The full VfB ticketing proposals can be delivered under Franchising therefore the full 2.5% uplift is applied.

Fares Interventions

Under the VfB, LCRCA propose reducing the cost of bus travel (in real terms) through better value fares¹¹⁹. As part of this, fares capping is proposed to provide passengers with the

118 The assumed benefit of the ticketing intervention is related to ticketing simplification, not to the delivery of any technological solution to enable it, and so the marginal benefit to passengers is linked to this simplification. The capital expenditure of the technology enabling the smart ticketing programme has already been incurred and there is no difference between Options. The operating cost (associated with the LCRCA team dedicated to manage ticketing and any marketing expenditure) is reflected in the costs of EP and Franchising.

119 Within this appraisal fares are assumed to increase in line with inflation (RPI, as this is the inflation assumption which underlies the estimation of demand elasticities to fares in the Black Book) unless otherwise stated.

confidence that they will never pay more than the cost of a daily or weekly ticket for travel within the relevant period. Fare capping has not been assessed, as daily capping is currently in the pipeline to be introduced on Arriva and Stagecoach services.

In appraising the benefit of better value fares, specific changes in the price of individual ticket products have not been assessed. Instead, a reduction in the price per journey is assumed for all fare paying passengers (excluding ENCTS journeys where travel is free to pass holders)¹²⁰. The assumed reduction has been set in line with the revenue increase generated by the uplift in demand from ticketing interventions. The compounded effect should be close to revenue and net cost neutral. The reduction in fares will benefit existing passengers and generate a further increase in demand. Impacts on demand associated with changes in fares have been estimated by using elasticities to fares from the Black Book¹²¹.

The fares interventions quantified under each Delivery Option are:

Reference Case – Daily fare capping introduced (not quantified), as for all options, but no other reduction in fares.

EP Under EP the scope for changing fares remains somewhat limited (given that single and cash fares remain protected under EP) and related to this the benefit of fares changes smaller. In line with this a 1.25% fares reduction has been assessed.

Franchising – Under Franchising, LCRCA has full control over fares pricing and is ‘only’ limited by the affordability of the fare changes. In line with ticketing benefits a fares reduction of 2.5% is assessed.

120 Impacts on demand associated with changes in fares have been estimated by using elasticities to fares from the Black Book. Elasticities related to off-peak travel are consistent with guidance from the DfT. In the case of peak travel elasticities, a lower elasticity has been assumed (-0.4 in the morning peak and -0.5 for the evening peak). This is because the Black Book indicates that trips made in the peak tend to be for work and education purposes, and so tend to be relatively fixed in time and space, hence peak elasticities should be lower than off-peak elasticities.

121 Elasticities relating to off-peak travel are consistent with guidance from the DfT. In the case of peak travel elasticities, a lower elasticity has been assumed. This is because the Black Book indicates that trips made in the peak are dominated by travel to work and to education, and so tend to be relatively fixed in time and space, hence peak elasticities should be lower than off-peak elasticities. This is consistent with TAG Unit M2-1, 6.4.22, which indicates that peak period elasticities are lower than inter-peak elasticities, which are in turn lower than off-peak elasticities.

4.2. Revenue Forecasts

Fares paid by passengers are the primary form of revenue generated from the commercial operation of local bus services. However, a proportion of journeys are also paid for under ENCTS – a reimbursement to bus Operators for the provision of concessionary travel, which is funded from the public sector purse. Whilst not strictly a revenue stream in the same way that farebox revenue is, it is appropriate to treat it as such for the purposes of appraisal and the wider business case. Therefore, forecasts are produced for farebox revenue and ENCTS revenue.

4.2.1. Farebox Revenue

As outlined in Section 2.5.3 of the Strategic Case, there are three categories of ticket types that can be purchased for bus travel in the LCR. They are singles, single-Operator tickets and multi-Operator tickets.

For some single-Operator and Merseytravel tickets, there are geographical restrictions limiting travel to certain parts of the LCR.

Commercial Services Operator Remuneration

Where a service is operated commercially, the Operator retains revenue. The revenue received by an Operator across all its commercial services is a combination of the fares received for singles, the revenue from its own single-Operator tickets and a portion of the revenue generated from the sale of Merseytravel tickets. This proportion is based on estimations of the passenger journeys taken on an operator's services using Merseytravel products.

Supported Services

Services operated wholly under contract from LCRCA (fully supported services) are tendered in the LCR as gross cost contracts, with revenue being collected by LCRCA¹²². For some commercial services Operators receive de minimis payments from LCRCA¹²³. These payments are made for example where the hours of operation or the route of commercial services are extended at the request of LCRCA. In these instances, the payment is received in addition to any fares revenue generated by these services.

ENCTS

There is a statutory requirement for local bus operators to accept ENCTS passes, as discussed in Section 3.5 of the Strategic Case

¹²² This includes a self-payment for the use of Merseytravel Tickets.

¹²³ De minimis payments can be provided by Local Authorities to pay for enhancements to existing commercial bus services, such as extensions or diversions. These payments are capped as they were limited by EU state aid rules.

Whilst the underlying mechanism uses audited Operator estimates of the number of journeys made on their services using ENCTS passes, the reimbursement is also impacted by Operator specific variations in operating cost and the available budget for ENCTS. ENCTS funding is not explicitly allocated to any Operator but the negotiated amounts for commercial services are paid to Operators and any remainder retained by LCRCA to fund concessionary travel on supported services. The cost implications of ENCTS are discussed in more detail in Section 3.

4.2.2. Revenue Forecasting Approach

Farebox revenue forecasts are calculated using the forecast demand, which is segmented by different ticket types and the derived yield per journey for each product. Where appropriate the yield is changed in line with fares changes. ENCTS revenue forecasts are calculated similarly but using the derived per journey subsidy amount paid to each bus service provider¹²⁴ instead of yield. The yield value of ENCTS is assumed to remain constant in real terms. This has been assumed to allow a consistent representation of the commerciality of services overall.

Calculating Yield

Yield is calculated separately for journeys made on singles, single-Operator tickets, multi-Operator tickets and ENCTS passes. The yield for singles is inferred directly from the demand and revenue data. For single Operator tickets the yield is calculated based on revenue generated for each product divided across the total number of journeys taken using that product. A similar calculation is done for multi-Operator tickets but based on the payment made by LCRCA to each Operator for each of the different ticket types. ENCTS yield is based on the payment each Operator receives (including the effective payment LCRCA makes to itself for supported services) divided by the total ENCTS demand.

4.3. Conclusions

Based on the approach described in this Section, unconstrained demand and revenue for each of the Delivery Options have been forecast. As described in Section 3 of this Economic Case, these have been combined with the operating cost forecasts, as well as with the COVID-19 long-term impacts and funding constraints to produce a constrained forecast under the different Delivery Options considered. These constrained forecasts are presented in Section 6.

124 This includes payments made for ENCTS pass use on supported services.

5. *Unconstrained Forecasts of Cost of Bus Delivery*

The unconstrained operating cost forecasts are projections of the potential cost of bus delivery required to deliver the 2018/19 bus network if this was retained. The forecasts comprise two parts; the growth in the underlying cost drivers, which is common to all Delivery Options, and the change as a result of the different VfB initiatives brought forward under EP and Franchising. It should be noted that costs are presented net of Operator margin, allowing more comparison among options, where margin can be different.

5.1. Introduction

This Section describes the costs of operating buses within LCRCA. It presents and compares the costs of EP and Franchising against those incurred under the Reference Case. As part of this comparison, it considers: the cost to the private sector; costs to LCRCA; and, costs to HM Treasury under each Delivery Option.

As discussed in Section 2, this Economic Case does not appraise all of the interventions proposed under the VfB as some interventions do not require the introduction of EP or Franchising. Therefore, in comparing EP or Franchising to the Reference Case the net impact of these interventions would be neutral and would not influence the case. The interventions appraised are therefore:

- Network enhancements;
- Fares and ticketing changes;
- The introduction of a zero-emission fleet.

The remainder of this Section provides an overview of the approach taken to appraising costs and presents the cost forecasts produced.

5.2. Reference Case Operating Costs

Operating costs have been estimated for each route using data provided by the Operators and LCRCA. The forecasts are based on a single base year (financial year 2018/19, validated with 2019/20 data¹²⁵.) with growth factors applied to estimate the increase in costs over the appraisal period. To allow for appropriate growth rates to be applied and relevant cost

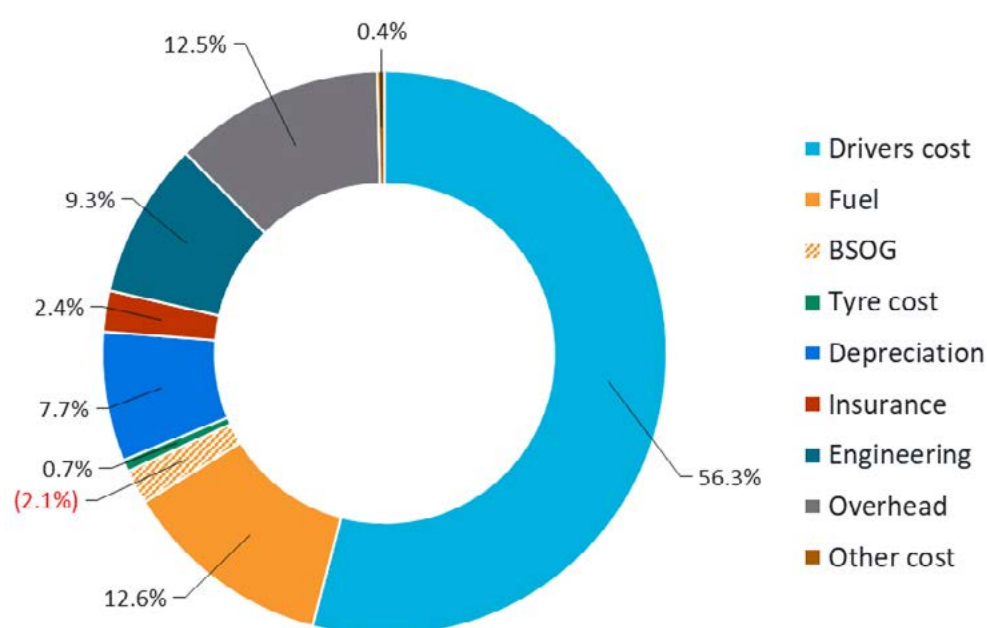
¹²⁵ Subsequent years, 2020/21 and 2021/22 were not considered appropriate to use as a base year given the impacts of COVID-19 on the bus industry, including the provision of additional national and local government subsidy to bus operators to sustain the bus service network. Operating costs for these years. would require different adjustment factors to be applied at different times during the year to obtain the uniform, neutral, year of data which would be an appropriate base for forecasting. The validated year of pre-pandemic data is a more robust base for forecasting.

changes to be made for each of the Delivery Options costs have been itemised into the following groups:

- driver costs;
- depreciation;
- fuel;
- BSOG;¹²⁶
- tyres;
- insurance;
- engineering;
- overheads;
- other.

The breakdown of costs is presented in the figure below:

Figure 2.5: Bus Operating Cost Breakdown



Not all Operators were able to provide fully disaggregated cost data for their services. Due to the scale of operations of the smaller

¹²⁶ BSOG is paid to Operators of local bus services to cover some operating costs, relating to diesel fuel consumption. The intention of the grant is to reduce fares for passengers and enable the operation of services that would otherwise not be financially viable. BSOG was originally hypothecated as a fuel duty rebate, however it is now calculated on a service kilometre basis, with the payment per kilometre varying by the type of fuel used. Additional payments are also made for using low emissions vehicles, accepting smartcard tickets and having automatic vehicle location. BSOG is funded by the Treasury (HMT) and is paid to both commercial Operators and public sector bodies who either run or contract services. BSOG is generally treated as a negative operating cost.

Operators (those other than Arriva and Stagecoach), they do not collect detailed cost data. However, this is not material for the forecasts, given that Arriva and Stagecoach alone, which have provided detailed cost data, represent around 90% of the overall LCR operating cost. For supported services, the tender costs paid by LCRCA were used to establish the total operating cost by route. This tender cost was assumed to include a profit uplift. The average uplift (that is mark-up on operating cost) assumed is 7.75% based on estimations using the data provided by Operators including financial accounts. Once operating profit was excluded from the tender costs it was itemised, based on the breakdown of costs where data had been provided.

For the modest number of commercial services operated by SMOs the absence of cost data means a cost for each route has had to be synthesised using the revenue data for these routes and an average margin calculated from the cost and revenue data of other routes. Based on the available data, an average margin of 15% has been assumed.

5.2.1. Cost growth

The growth of costs will be different for each cost group due to the influence of different market factors.

Fuel is tied to the Diesel Fuel Index from the TAG databook¹²⁷, expressed in real RPI terms. As BSOG is linked to the cost of fuel, its change is also tied to the Diesel Fuel Index.

For all cost groups other than fuel and BSOG, the growth rate is treated relative to RPI growth. As such, RPI growth is adjusted for each of the cost groups based on Confederation of Passenger Transport data (which shows how each of the cost items grew historically relative to RPI). The underlying increase or decrease in growth rates beyond RPI is affected by factors such as average national and local wages, changes in materials costs and changes in insurance premiums.

The total cost growth by segment for all services is presented in the table below.

127 TAG databook (v1.20.2 January 2023) values in Table A1.3.7: Fuel & electricity price forecasts.

Table 2.3: Cost Growth Rates (real growth)

Cost item	Real annual growth rate
Drivers cost	1.0%
Fuel	Diesel fuel index
BSOG	Diesel fuel index
Tyre cost	2.5%
Depreciation	0.5%
Insurance	-2.0%
Engineering	-1.0%
Overhead	-
Other cost	2.5%

Source: Confederation of Passenger Transport

Overall, the combined impact of the growth in cost for operating buses is equivalent to an annual growth rate of 0.65% (CAGR) above RPI over the period 2018 to 2037. Cost growth is applied for a period of 20 years. Uncertainty about change in cost increases the further out the forecast is extended. A longer period would result in too great an uncertainty for the cost forecast to be considered robust. After the 20-year period costs (as well as revenues) are assumed to remain constant in real terms, given the aforementioned uncertainty in forecasting beyond the model forecasting period.

5.3. Operating Cost Impact of Network Interventions

The cost of running a bus service is affected by the total vehicle kilometres operated by the vehicles providing the service (service kilometres). It is also affected by the peak vehicle requirement (PVR). This the maximum number of vehicles required at any period over the course of a day to deliver the timetabled frequency of the service. For each operating cost item, the total annual cost will be predominately influenced by either the service's kilometrage, or by its PVR. The total cost of each item is therefore calculated using one of these. For each service change, uplifts to total vehicle kilometres and PVR have been derived¹²⁸ and are applied to the relevant cost items to generate the forecast operating cost.

¹²⁸ Changes in PVR/service kilometres operated including changes to existing routes and proposed additional/replacement services were provided by Merseytravel's bus team as part of its ongoing function reviewing and planning the LCR bus network. These assumptions are considered appropriate given the bus team's local expertise and knowledge. Likewise, the assumed level/band of subsidy required for new services is made by the bus team based on its historic understanding of the network and the relative commercial performance of its services. It is noted that the impact of these assumptions is not material to the conclusions of the Assessment, given that demand/revenue and costs from these services are small relative to other services and therefore do not affect the conclusions of the Assessment.

As part of the service changes, new services are being introduced in both EP and Franchising options. The operating cost of new services has been calculated by applying a per bus cost to the PVR requirement for the new routes. The per bus cost has been calculated using cost and PVR data provided by Arriva and Stagecoach for the Assessment, resulting in a figure of £139k (2018/19 real prices) per bus.

It should be noted that, while the cost of the network interventions has been derived as described above, in a context where there is limited funding to support services and where the proposed network enhancements are usually not commercially viable (as otherwise commercial Operators would be running them currently), some of the proposed changes to services will not be able to operate given the funding constraints.

5.4. Zero Emission Fleet Costs

Under all of the Delivery Options considered within the appraisal the bus fleet is expected to transition to ZEV¹²⁹. The transition to ZEV will affect:

- vehicle costs;
- depot/infrastructure costs;
- fuel costs;
- driver costs.

5.4.1. Vehicle Costs

The appraisal has looked at the transition to battery electric and hydrogen electric buses. Fleet costs on a whole life basis have been found to be broadly equivalent at present for both technologies, based on data from LCRCA's Hydrogen Bus Project. While battery electric buses typically require a higher PVR to deliver the same level of service and require mid-life battery replacements, energy costs and acquisition costs are lower, so overall on a whole life basis costs are equivalent to hydrogen fuel cell buses (which to an extent also require new batteries, and fuel cell replenishment).

Whilst the costs of purchasing hydrogen and electric buses will decrease relative to diesel bus over time, there is uncertainty about the rate of change and the eventual cost floor. For appraisal purposes, subsidised vehicle costs are assumed to

129 Whilst for the purposes of the appraisal the fleet in the Reference Case is assumed to transition to ZEV, Operators could choose to alternatively use low emission vehicles as a lower cost alternative. This would reduce the environmental benefit incurred under the Reference Case, increasing the net benefit under Franchising and EP as LCRCA is assumed to intervene to finance the introduction of zero emission buses. This is discussed further in Section 9.

remain constant at today's prices over the forecast period. The current cost of ZEV is assumed to represent a net cost to LCRCA of £250k per bus (in 2020/21 prices¹³⁰, or around £225k in 2018/19 prices). This figure includes the acquisition of the bus and is net of the DfT grant on acquisition of electric buses, which covers 75% of the difference in cost between a ZEV and a new diesel bus. The mid-life renewal costs are assumed to be £140k, including replacement of battery.

Both bus fleet technologies could be used in the LCR, depending on market trends, the specific needs of bus lots and service routes, as well as commercial evolution of different technologies. As mentioned, whole life costs for battery electric and hydrogen fleets have been estimated to be currently broadly similar (although this might change over time) and therefore the choice of technology would not impact the outputs of the economic appraisal.

As referenced in discussed Section 3.9 of this Economic Case, OB is applied to vehicle costs in the monetised appraisal.

5.4.2. Depot infrastructure costs

Using battery electric and hydrogen buses requires new charging infrastructure at depots. No on-route charging infrastructure has been assumed for the operation of battery buses as on-route charging is currently not a solution that most Operators consider to be attractive at this time (and even allowing short charging windows within operations would still require extra vehicles and/or disadvantage passengers).

Depot fit-out costs (for existing depots belonging to the incumbent operators) of £32m (2020/21 prices¹³¹, or around £29m in 2018/19 prices) have been assumed for the installation of charging infrastructure, which assumes 75% grant funding for ZEV related infrastructure. This equates to a net depot fit-out cost of £30,000 per PVR in 2020/21 prices. This is made up of £20,000 per PVR of contingency for general upgrades and £10,000 per PVR net cost of charging infrastructure (which assumes 75% or £30,000 grant per PVR). As referenced in Section 3.9 of this Economic Case, OB is applied to depot costs in the monetised appraisal.

130 See Section 5.3.2.2 of Financial Case. Note that prices based in different years to revenues/operating costs (as is common) have been rebased within the economic appraisal. Care should be taken in comparing values in different price bases quoted within this Assessment.

131 See Section 5.3.2.3 of Financial Case. Note that prices based in different years to revenues/operating costs (as is common) have been rebased within the economic appraisal. Care should be taken in comparing values in different price bases quoted within this Assessment.

5.4.3. Treatment of fuel costs

The energy costs for charging battery electric buses are lower than the equivalent fuel cost for diesel buses. This will result in a net 'fuel' saving in the operating cost of buses. The energy cost for a battery electric bus is assumed to be half of the equivalent fuel costs. No material fuel saving is presently expected from the transition to hydrogen electric buses.

Under the current system, battery electric buses would receive a lower rate of BSOG, as they do not attract the 'fuel rebate' component of the grant. However, as committed in the Bus Back Better, at the point either EP or Franchising comes into effect, ZEV will receive a reimbursement at a rate that is equivalent to diesel. As electric buses do not generate fuel duty the resulting net cost of BSOG to HM Treasury is increased. This is captured within the appraisal.

5.4.4. Additional driver and vehicle costs

Battery electric buses have a more limited range than their diesel and hydrogen counterparts. In some instances, this will mean a vehicle cannot complete a days' service under a single charge. In specific circumstances this problem can be solved by using on-route rapid charging technologies. However, if the entire fleet was transitioning to electric buses, on-route charging would be unlikely to be a cost-effective solution and, as discussed earlier in this Section, is currently not a solution that most Operators consider to be attractive, although that might change in the future. An alternative to addressing the range issue is to increase the number of vehicles used to fulfil the timetabled service, relative to the number of diesel vehicles used. This reduces the operating kilometrage of each vehicle and therefore the required range. It also allows vehicles opportunities to return to the depot during the course of 1 day to recharge.

An average uplift in the PVR of 10% above the number of diesel vehicles is assumed to be required for operating the service using battery electric vehicles. This also has a corresponding impact on the number of drivers required. The same uplift is assumed for the driver costs. No uplift in PVR is assumed in the case of hydrogen buses.

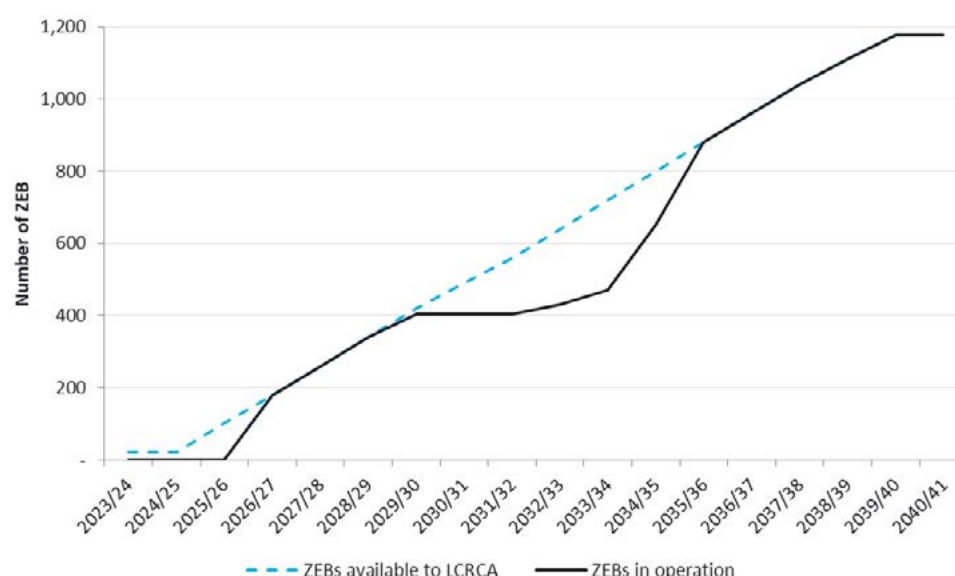
5.4.5. Zero Emission Bus Uptake Rates

Under the Reference Case and EP the transition to ZEV is assumed to be market led, with Operators replacing diesel buses based on relative cost and the impact of regulation,

namely the EU Clean Vehicle Directive¹³². Under Franchising the purchase of new battery electric and hydrogen buses is taken on by LCRCA which then provides vehicles to Operators. LCRCA can borrow greater amounts, at lower finance costs than the private sector. The difference in financing costs for the fleet is included within the economic appraisal.

The figure below shows the profile of ZEV purchase (dotted light blue line) and its introduction into operation (solid black line) for Franchising. Vehicle numbers in operation are tied to Franchise contract changes, whilst the purchase of ZEV is done steadily by purchasing between 70 and 80 ZEV per year, which is also beneficial for the supply chain. The graph shows that ahead of the largest area (that is Liverpool) contracts coming up for renewal between 2034 and 2036, as described in the Commercial Case, ZEV are purchased so that they can start operation when these areas are franchised. However, in practice, these vehicles could be used on other services in the meanwhile to allow to realise their environmental benefits. In the case of the Reference Case and EP, the same steady profile of purchasing ZEV is assumed, however in this case the transition is market-led as opposed to managed by LCRCA.

Figure 2.6: Zero Emission Bus Uptake Rates



Source: ZEV deployment assumptions made for the purposes of this Assessment.

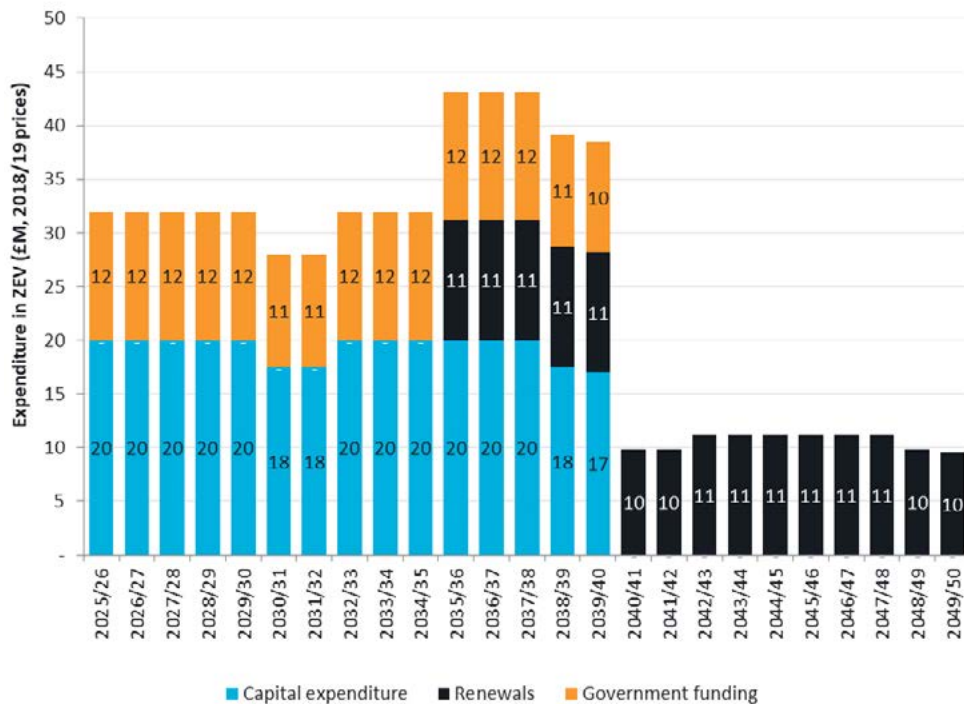
132 At the time of writing this is the only legislation stipulating the use of ZEV that impacts on UK bus operations.

5.4.6. Total Cost of Zero Emission Buses

Whole life costs for battery electric and hydrogen buses have been found to be broadly similar and therefore equivalent for appraisal purposes. Battery electric vehicles would be expected to have higher renewal cost, higher costs as a result of increased PVR needs, while having lower acquisition and fuel costs than hydrogen buses.

The figure below shows the costs over time of the acquisition of the ZEV fleet. It should be noted that this only represents the replacement of the current fleet, which takes place over a 15-year period and not the subsequent replacement of those ZEV once these can no longer be operated. The blue bar represents the cost of the original purchase (paid by Operators under the Reference Case and EP and LCRCa under Franchising), with the orange bar representing any funding available paid by Government. The black bar represents the mid-life refurbishment costs of the new ZEV.

Figure 2.7: Zero Emission Bus Costs



Source: Based on costs per PVR from paragraph 5.4.1 and ZEV uptake rate from Figure 2.6. Note that the small step down in 2030/31 and 2031/32 results from a notional allocation of vehicles to lots and should be considered illustrative and in any case is effectively inconsequential.

5.5. Preparation, Administration and Management Costs

Under EP and Franchising, LCRCA will have increased costs associated with the preparation and implementation of either set of reforms as well as the ongoing cost of managing both. Primarily these costs will be increased LCRCA staff costs and administration and office costs.

EP is estimated to require £1.5m per annum (2020/21 prices) for the preparation and implementation period, over three years. Ongoing management costs for LCRCA to manage EP would amount to around £4m per annum (2018/19 prices), as well as £0.5m (2018/19 prices) every three years corresponding to the periodic renegotiation of EP. Further detail is presented in Section 6.3.2 of the Financial Case.

Franchising is estimated to incur £1.5m per annum (2020/21 prices) in transition costs over a three-year period. and £2.6m per annum for early mobilisation of procurement and management resource. Ongoing management costs for LCRCA to manage Franchising would amount to £4.4m per annum (2018/19 prices). Further detail is presented in Section 5.3.2.4 of the Financial Case.

5.6. Non-Bus Indirect Costs

The proposed interventions to bus services will increase bus demand. As described earlier, a portion of this will be people switching to buses from other modes. This will impact public finances in several ways:

Fuel duty income from private vehicles is reduced as a result of people switching from using cars to bus. This reduces the amount of fuel used for car travel with a proportionate decrease in fuel duty.

Indirect tax is similarly reduced as spending is switched to untaxed public transport fares and away from the general taxed economy.

Infrastructure costs are similarly reduced by the switch from car. For the equivalent number of passengers, the wear created on highway infrastructure by car use is significantly greater than for bus (for an equivalent number of travellers). People switching from car to bus will therefore marginally reduce highway maintenance cost to Local Authorities.

Reduction in revenue on other public transport modes will also occur as a result of modest numbers of passengers switching to bus travel from rail and ferry. This will result in reduced revenue for these services. As both are operated by LCRCA this will have a net neutral impact on it.

5.7. Conclusions

Based on the approach described in this Section, unconstrained cost forecasts for each of the Delivery Options have been derived. As described in Section 3, these have then been combined with the demand and revenue forecasts described in Section 4, as well as with the COVID-19 long-term impacts and funding alternatives to produce a constrained forecast under the different Delivery Options considered. The results of these constrained forecasts are presented in Section 6.

6. Demand, Revenue and Cost Forecasts

This Section presents demand, revenue and cost forecasts for the Delivery Options under consideration. These forecasts take into account long-term COVID-19 impacts on bus patronage as well as the (constrained) funding available to LCRCA to support buses. The scenario where bus patronage recovers to 85% of the unconstrained trajectory and the funding available to LCRCA stays constant in real terms, has been used throughout this Section to summarise the forecasting process. A comparison with the other scenarios tested is presented at the end of the Section.

6.1. Demand Forecasts

The demand forecasts prepared for this Assessment for each of the Reference Case, EP and Franchising options are presented below for the baseline scenario. The graphs show the proportion of bus demand separately for commercial and supported services.

Figure 2.8: Reference Case Demand Forecast

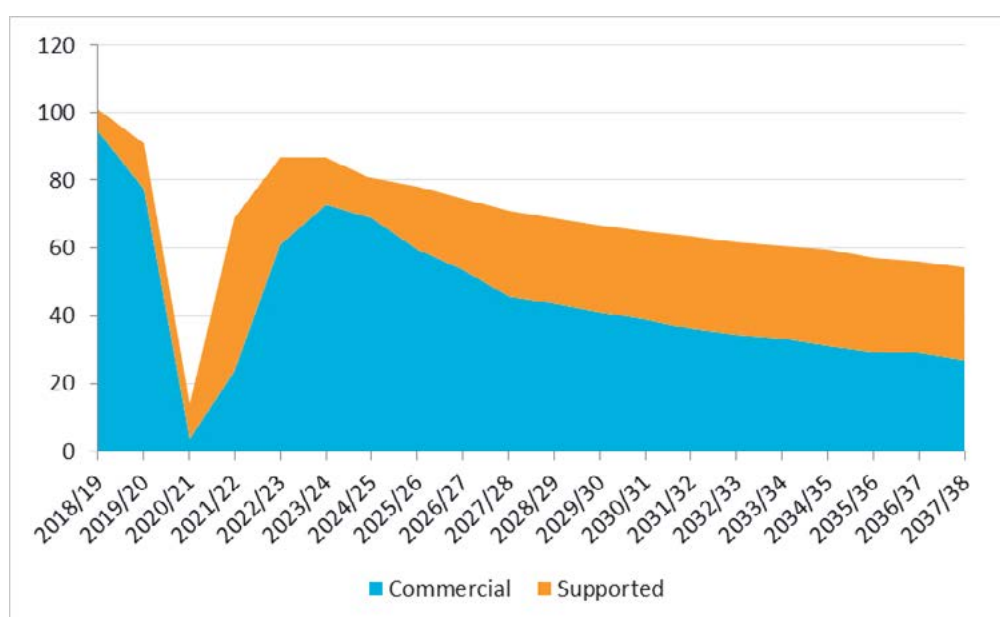


Figure 2.9: EP Demand Forecast

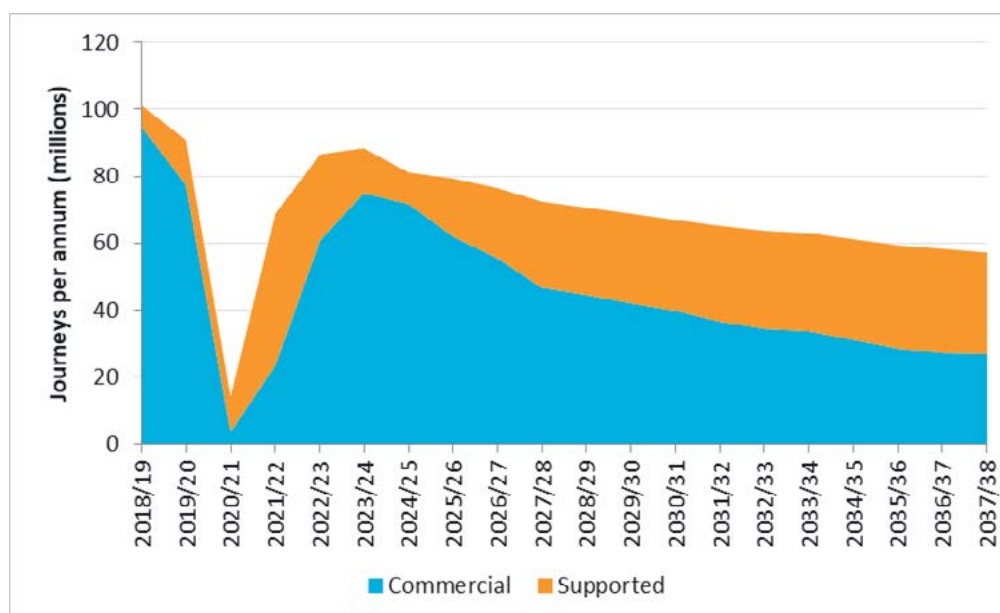
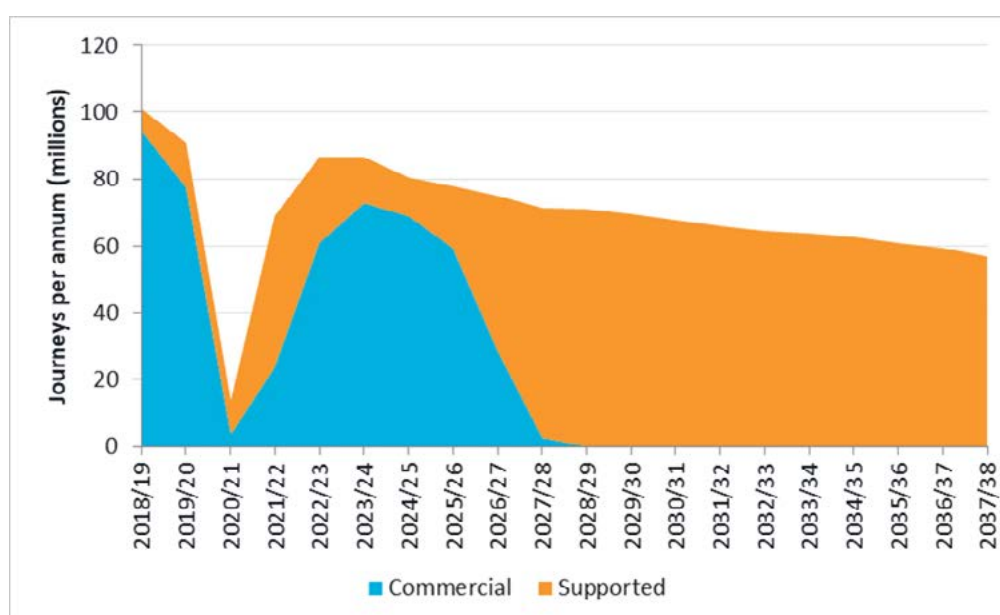


Figure 2.10: Franchising Demand Forecast



These graphs show that bus patronage is forecast to continue to decline over time, in line with the historical trend. As services become less profitable and with (in this scenario) a proportion of pre-COVID demand not returning, operators will cut them from their commercial networks. Where public sector funding is available, a proportion of these become supported services under Reference Case and EP options, thus the proportion of demand on supported services increases overall over time. The Franchising graph shows that all services become 'supported' as LCRCA takes control of services when these are franchised.

Overall, Franchising allows a greater proportion of bus demand to be maintained in the network than EP and the Reference Case, for the same quantum of funding. A summary of bus demand in the LCR network in 2036/37 is presented in the table below.

Table 2.4: Summary of Bus Demand in 2036/37 (million journeys)

Option	Total demand	Commercial demand	Supported demand
Reference Case*	54m	27m	28m
EP	58m	27m	31m
Franchising	59m	-	59m

*Commercial and supported figures may not sum to the total due to rounding.

6.2. Revenue Forecasts

The revenue forecasts prepared for this Assessment for each of the Reference Case, EP and Franchising options are presented below for the baseline scenario. The graphs show the proportion of revenue on commercial and supported services.

Figure 2.11: Reference Case Revenue Forecast (£m, 2018/19 prices)

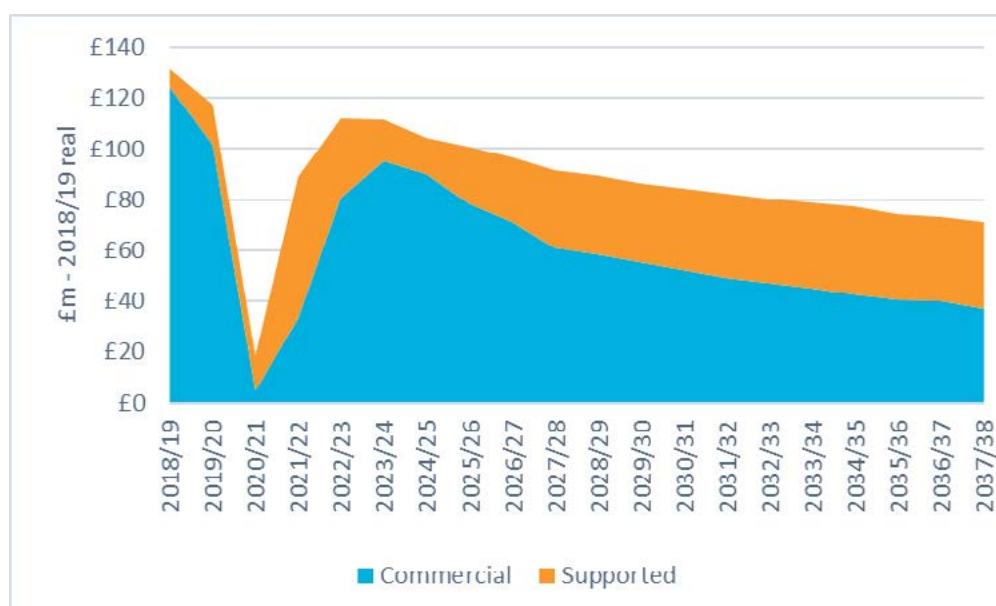


Figure 2.12: EP Revenue Forecast (£m, 2018/19 prices)

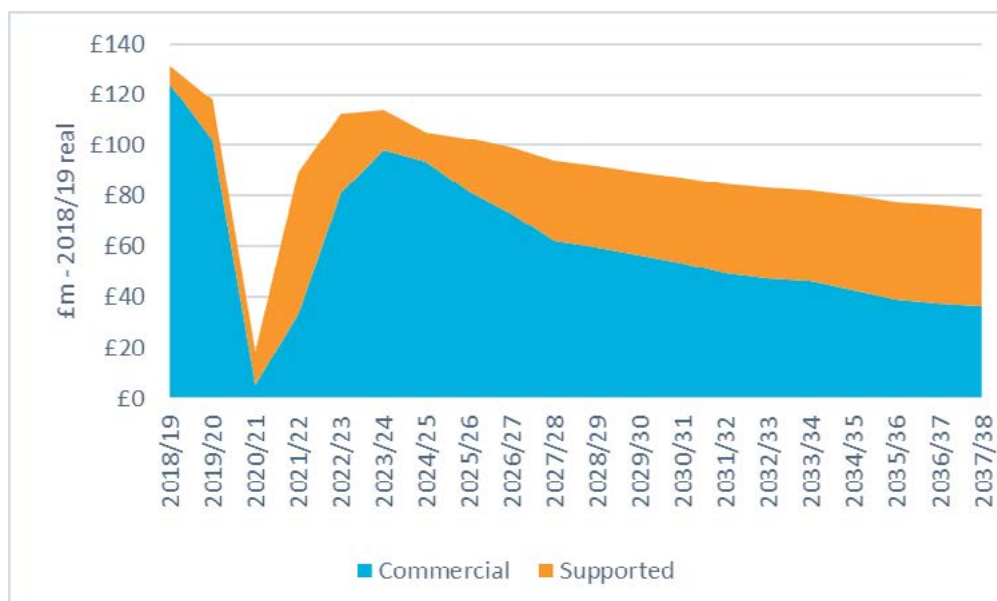
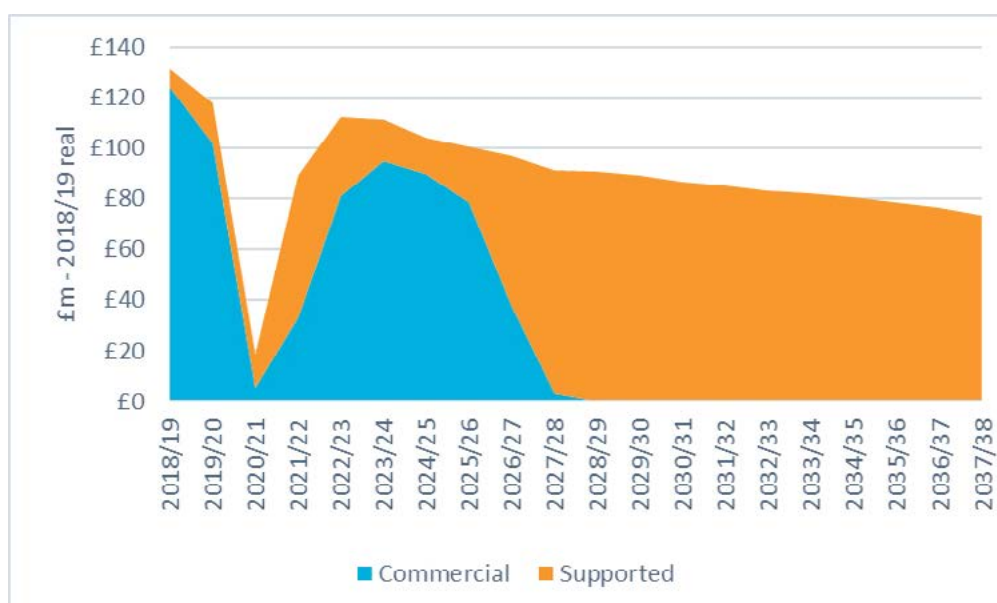


Figure 2.13: Franchising Revenue Forecast (£m, 2018/19 prices)



The pattern seen for demand above is also observed in the revenue forecasts, with revenue declining over time as the network reduces in line with the funding availability.

Overall, Franchising allows a greater proportion of bus revenue to be maintained in the network than EP and the Reference Case. A summary of bus revenue in the LCR network in 2036/37 is presented in the table below

Table 2.5: Summary of Bus Revenue in 2036/37
(£m, 2018/19 prices)

Option	Total demand	Commercial demand	Supported demand
Reference Case*	£74m	£40m	£33m
EP	£76m	£37m	£39m
Franchising	£77m	-	£77m

*Commercial and supported figures may not sum to the total due to rounding.

6.3. Operating Cost Forecasts

The operating cost forecasts prepared for this Assessment for each of the Reference Case, EP and Franchising options are presented below for the baseline scenario. The graphs show the proportion of operating cost on commercial and supported services.

Figure 2.14: Reference Case Operating Cost Forecast
(£m, 2018/19 prices)

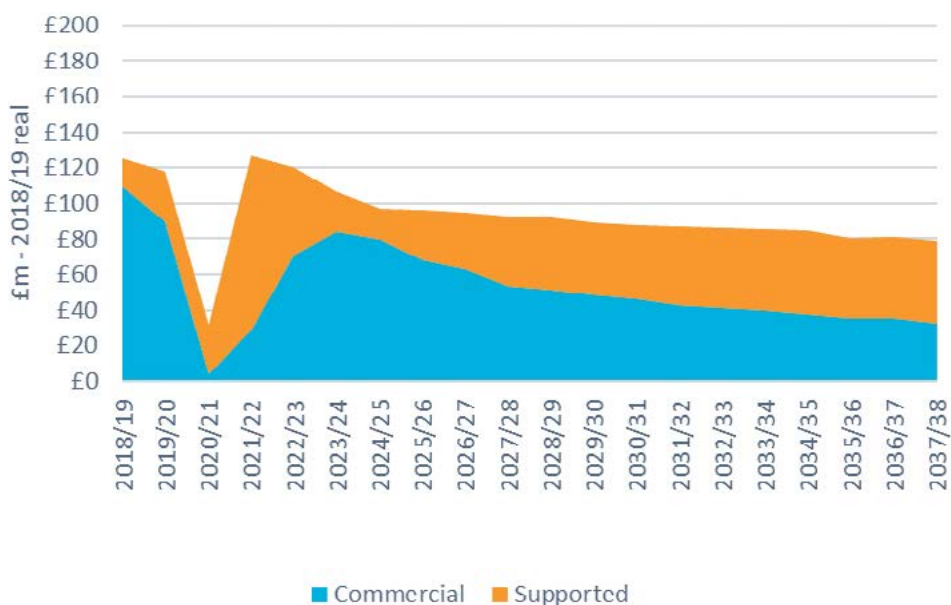


Figure 2.15: EP Operating Cost Forecast (£m, 2018/19 prices)

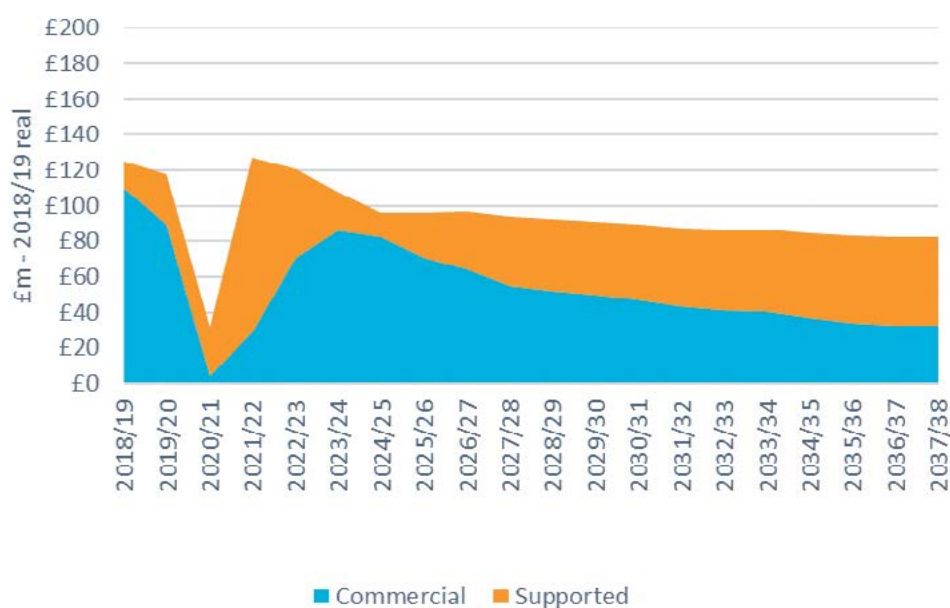
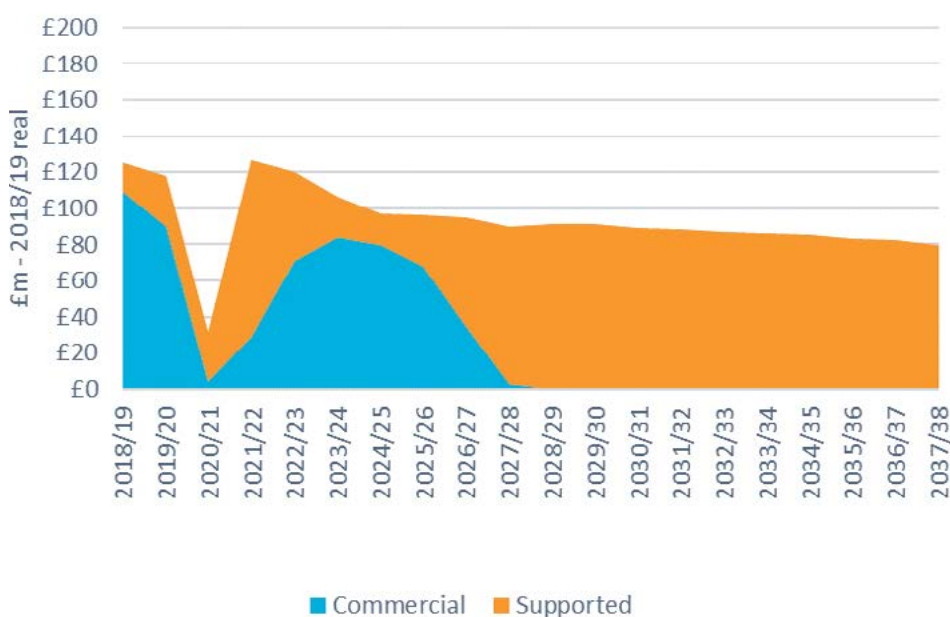


Figure 2.16: Franchising Operating Cost Forecast (£m, 2018/19 prices)



The pattern seen for demand and revenue can also be seen in the operating cost forecasts, which decline over time as the network reduces in line with the revenue income.

Overall, Franchising allows a greater proportion of bus services (and therefore operating cost) to be maintained in the network than EP and the Reference Case. A summary of bus operating cost in the LCR network in 2036/37 is presented in the table below.

Table 2.6: Summary of Bus Operating Cost in 2036/37 (£m, 2018/19 prices)

Option	Total demand	Commercial demand	Supported demand
Reference Case*	£81m	£35m	£46m
EP	£82m	£32m	£50
Franchising	£83m	-	£83m

6.4. Gross and Net Cost

6.4.1. Gross and Net Cost of Bus Delivery

The graphs below present the gross and net cost of bus delivery across the LCR. These take into account the revenue and operating cost of supported services only but exclude any Operator margin or ENCTS payment that LCRCA would pay to Operators.

Given that under Franchising all services are controlled by the LCR, the gross cost to them of Franchising is substantially greater than under the Reference Case and EP. However, the net cost of bus operations under Franchising is lower than under the Reference Case and EP, as the most commercially profitable services would be under the control of the LCR. This is partially offset, as described in the Financial Case, by a larger ongoing management cost required to manage bus services and run bus procurements under Franchising.

Figure 2.17: Gross Cost to LCRCA of Bus Operations (£m, 2018/19 prices)

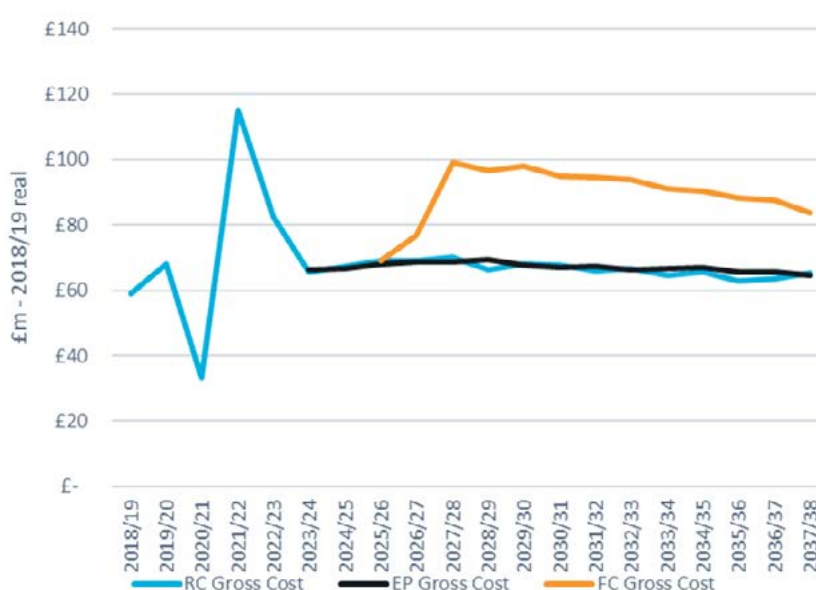
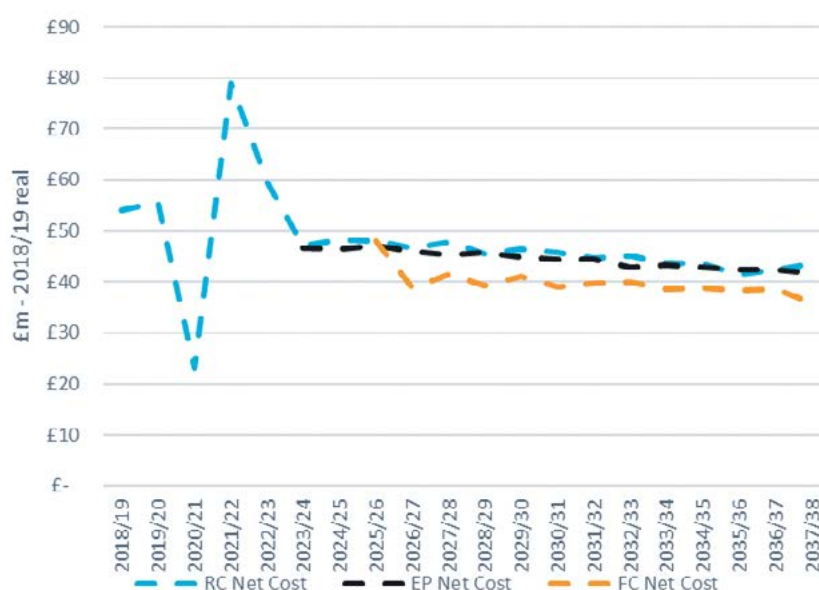


**Figure 2.18: Net Cost of Bus Operations
(£m, 2018/19 prices)**



6.4.2. Gross and Net Cost to LCRCA

LCRCA tenders wholly supported services as gross cost contracts for which it retains revenue. Under Franchising all services will be tendered as gross cost contracts. The total cost to LCRCA in either Delivery Option is the tender cost (including Operator margin) net of the revenue received from these services.

The increase in supported services under each Delivery Option has a significant impact on the gross cost of bus services to LCRCA. Under the Reference Case and EP none of the supported services can be expected to be profitable, or at least not profitable enough to be part of the commercial bus portfolio, as they would otherwise be operated as commercial services. However, a proportion of the cost will be recouped through the farebox revenue from these services. Under Franchising, the proportion of the cost covered by the retained revenue will be higher as this will now include profitable services which would be operated commercially under the Reference Case and EP. The forecast net and gross costs to LCRCA are presented below.

Figure 2.19: Gross Cost to LCRCA, Reference Case (£m, 2018/19 prices)

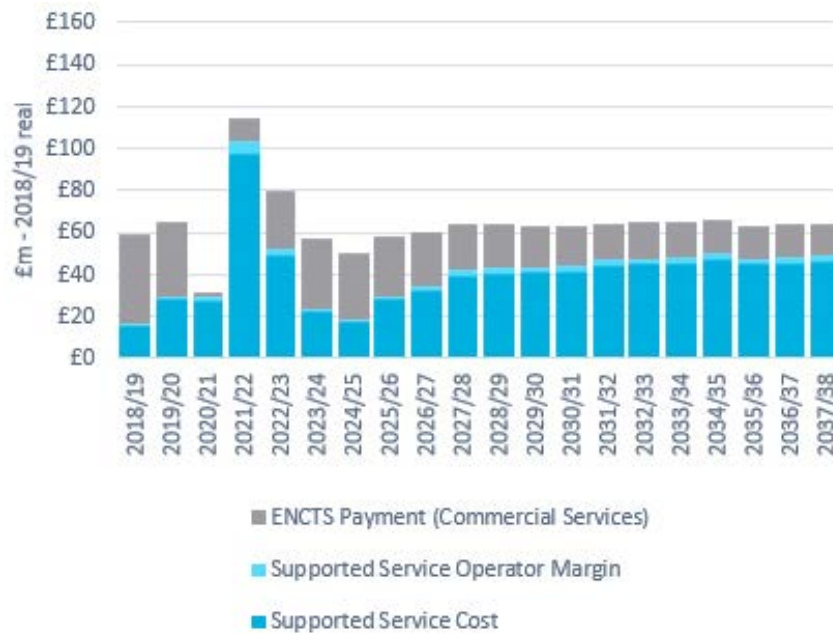


Figure 2.20: Gross Cost to LCRCA, EP (£m, 2018/19 prices)

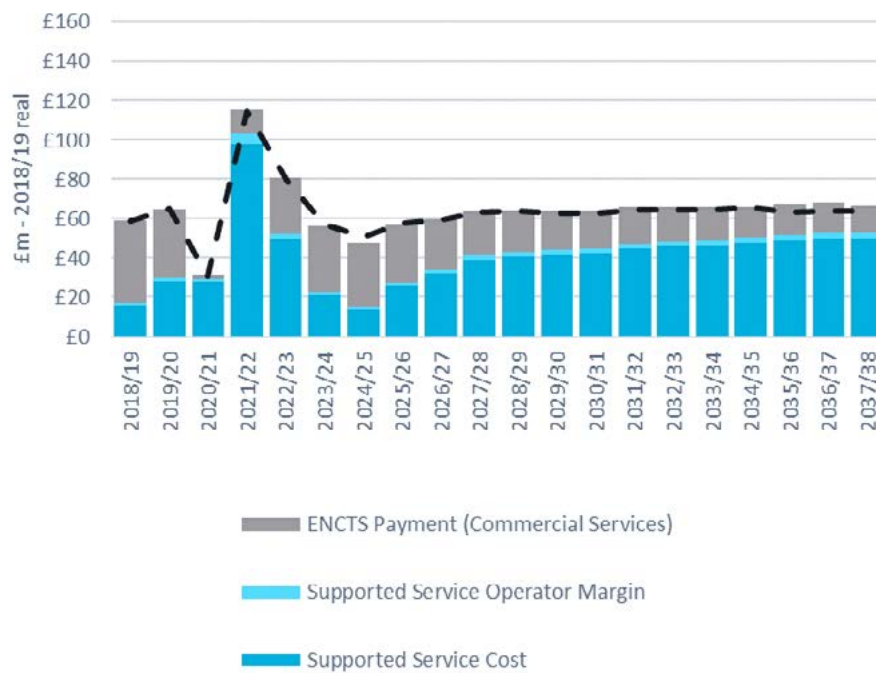
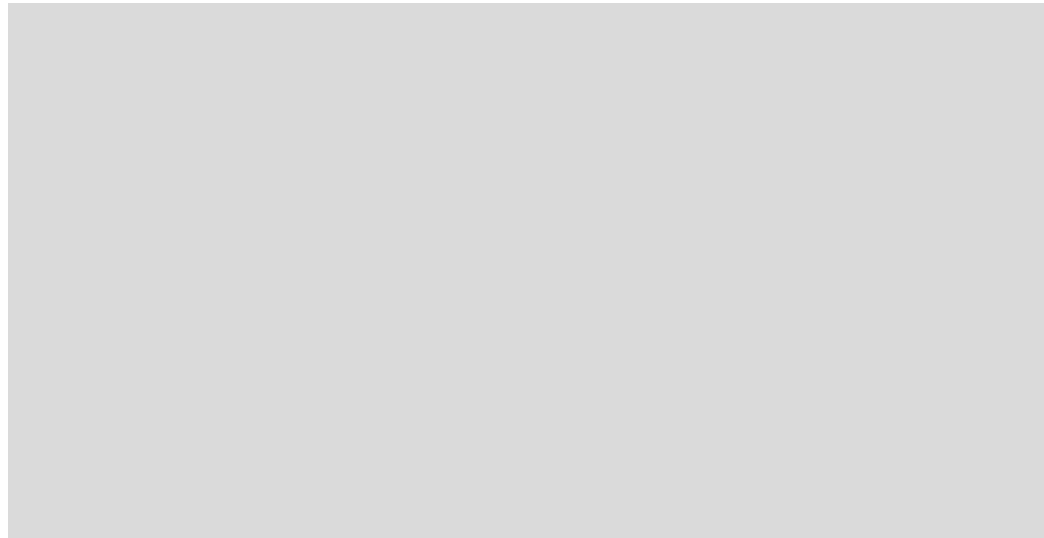
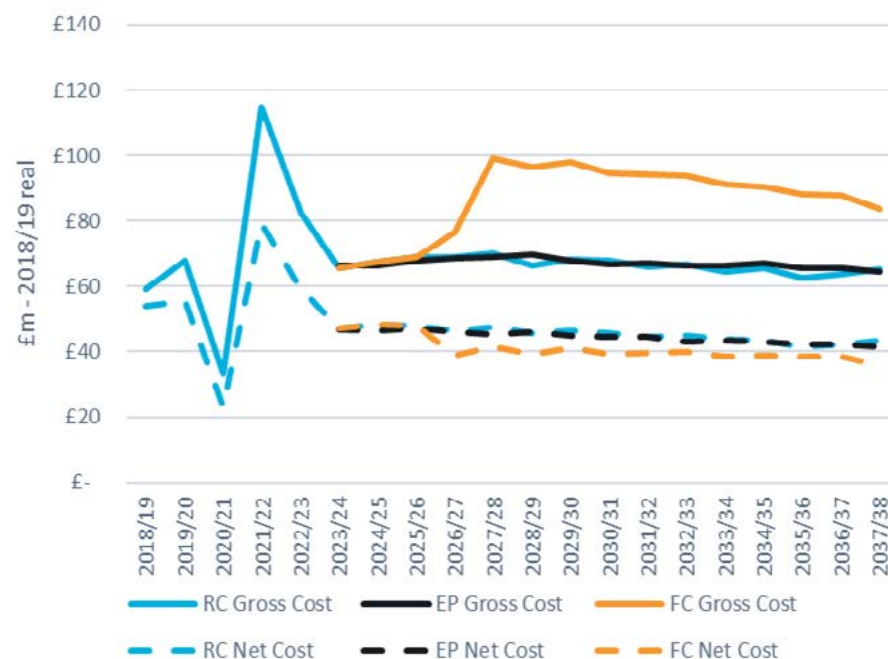


Figure 2.21: Gross Cost to LCRCA, Franchising (£m, 2018/19 prices)



When the costs, net of revenue, are considered, Franchising incurs the lowest cost to LCRCA, followed by EP and then the Reference Case, with Franchising delivering the larger bus service kilometrage in the LCR. The increase in retained revenue under Franchising means LCRCA has to manage a greater revenue risk and have budget contingency to cover the increased cost as a result of any reduction in revenue. The financial implications of revenue risk are discussed further in the Financial Case.

Figure 2.22 LCRCA Gross and Net Costs



6.5. Comparison of Forecasts across Scenarios

The tables below summarise the forecasts of demand, revenue and operating costs for each Delivery Option under each of the scenarios under consideration (combining two COVID-19 recovery options and three funding options).

The results show that in almost all cases Franchising outperforms EP and the Reference Case, with bus services carrying more demand and generating more revenue for all combinations of bus patronage impact and LCRCA funding.

Table 2.7: Summary of Bus Demand in 2036/37 across Scenarios (millions)

Option	85% of pre-COVID demand trajectory			100% of pre-COVID demand trajectory		
	Current funding	Increased funding	Reduced funding	Current funding	Increased funding	Reduced funding
Reference Case	56m	63m	54m	70m	78m	68m
EP	58m	66m	55m	73m	82m	70m
Franchising	59m	68m	56m	75m	84m	71m

Table 2.8: Summary of Bus Revenue in 2036/37 across Scenarios (£m)

Option	85% of pre-COVID demand trajectory			100% of pre-COVID demand trajectory		
	Current funding	Increased funding	Reduced funding	Current funding	Increased funding	Reduced funding
Reference Case	£73m	£82m	£70m	£91m	£100m	£88m
EP	£76m	£86m	£72m	£96m	£106m	£92m
Franchising	£77m	£87m	£73m	£97m	£108m	£92m

Table 2.9: Summary of Bus Operating Cost in 2036/37 across Scenarios (£m)

**85% of pre-COVID
demand trajectory**

**100% of pre-COVID
demand trajectory**

Option	Current funding	Increased funding	Reduced funding	Current funding	Increased funding	Reduced funding
Reference Case	£81m	£100m	£75m	£90m	£111m	£84m
EP	£82m	£103m	£75m	£92m	£113m	£86m
Franchising	£83m	£103m	£76m	£94m	£115m	£85m

Whilst there exists uncertainty around the long-term impacts on demand and funding, these results show that across scenarios Franchising performs better than the alternative options, from this point of view. For Franchising, demand ranges in 2036/37 between 56m and 84m passengers (compared to a range of 55m to 82m for EP), revenue ranges in 2036/37 between £73m and £108m passengers (compared to a range of £72m to £106m for EP) and operating cost in 2036/37 ranges between £76m and £115m (compared to a range of £75m to £113m for EP).

7. Approach to Appraisal of Impacts

7.1. Introduction

This Section sets out the approach taken to appraising the impacts of bus reform. It starts by outlining the methods and key assumptions that have been used for calculating and monetising:

- (a) User Benefits;
- (b) MEC Impacts;
- (c) Wider Economic Impacts.

The net benefit of EP and Franchising options relative to the Reference Case is presented throughout the following Sections. This includes monetised benefits and a discussion of relevant non-monetised benefits in each instance. Guidance from DfT¹³³ and the Green Book indicates that the appraisal constituting the VfM assessment is comprised of monetised benefits, non-monetised benefits and consideration of uncertainty in the Assessment; therefore all these aspects are reflected when appraising the net impacts of EP and Franchising over the Reference Case. This Section also assesses the performance of each of the options against the objectives set out in the Strategic Case.

The following Sections are structured to describe the impacts on the economy, on the environment, on the society and on public accounts, reflecting the structure of a standard DfT Appraisal Summary Table.

As part of the appraisal process it also considers Distributional Impacts, that is how the benefits of bus reform will be distributed across different demographic and social groups within the LCR.

7.2. Monetised Appraisal

The appraisal has been conducted in line with TAG as adopted at the time of preparation of this Assessment (February 2023). All values are shown as 2010 present values¹³⁴ and 2010 GDP Deflator Real market prices.

In the Strategic Case, Objective 1 of bus reform is to “maximise the contribution of bus services to achieving the economic success and social capacity of LCR” which will primarily be delivered through benefits to bus users. These passenger impacts make up the largest individual portion of the total benefit of bus reform.

7.2.1. Estimating Benefits per Trip

The industry standard approach to forecasting bus user benefits is to assess the change in the ‘generalised cost’ of travel between the Reference Case and “do something” options (that is with

¹³³ In particular DfT’s Value for Money Framework (July 2017).

¹³⁴ In line with TAG, a discount rate of 3.5% has been applied for the first 30 years (from now/2022) of the appraisal with a rate in the remaining years of 3.0%.

intervention). This includes a time component and the monetary cost of travel to the passenger. The time component is a composite measure of people's journeys that takes into account each leg of a trip – walking to a stop, wait time, in-vehicle journey time, walk from a stop, and interchange (if applicable) weighted relative to in-vehicle time to account for differences in passenger perceptions. The monetary cost, in this case the bus fare, of travel can be converted into time units by the application of a value of time.

Transport demand is responsive to changes in travel costs. This change is typically forecast using observed elasticities to represent the demand impact based on users' responsiveness to changes in fares or to the components of journey times. The same elasticities can be used to estimate the generalised cost change based on predicted change in demand.

For the Reference Case, EP and Franchising options, demand has been forecast based on the elastic response of bus users to changes in service levels and fares. The consolidated demand change between Reference Case and the two Delivery Options has been used to estimate the average passenger benefit, that is the benefit which would result in the overall forecast change in demand.

The assumptions for this calculation are set out below:

- A Reference Case generalised journey time (GT) for each bus trip has been based on an average in-vehicle time of 20 minutes and an average walk and wait time of 5 minutes to and from the bus stop at either end of the journey (these assumptions¹³⁵ are based on the size of the LCR network and the length of a typical journey, as well as the service frequency), but it should be noted that they will vary across services and areas within the LCR). The average in-vehicle time is consistent with data from DfT Bus Statistics: the average bus journey in Metropolitan areas is 6km (from BUS01 and BUS03, for 2019/20) and an average speed of around 20 km/h allows to derive in-vehicle time. The 'walk' and 'wait' elements have been weighted by a factor of 2, which reflect peoples' perceived preference for time spend on-board compared to walking to or waiting at stops.
- For fare paying passengers an additional 11 minutes is added to the Reference Case GT based on the average fare yield per journey (on average, that is £1.30,

135 While there is no definitive nor precise source for these assumptions, it has been established that the appraisal results are not unduly sensitive to their values – in particular because the same values are used for Reference Case and reform options.

based on the demand and revenue data provided by bus operators as described in earlier Sections, converted into units of time). For concessionary demand there is no cost component as travel is free for these passengers.

- The percentage changes in bus demand between the Reference Case and EP or Franchising are based on the demand forecasts set out in earlier Sections.
- When considered in the context of the whole network the aggregate of the individual service changes represent a marginal change to bus services in the LCR.
- A generalised GT elasticity to passenger demand of -1.1, based on the values from a 2018 Rand Europe study on behalf of the UK Department for Transport¹³⁶

The passenger benefits per journey for EP and Franchising options are presented in the table below.

Table 2.10: Passenger Benefit per Journey (minutes)

EP	2025	2026	2027	2028	2029	2030	2031	2032	2033
Concession	3.7	3.8	4.0	4.1	4.2	4.3	4.5	4.6	4.7
Non-concession	4.7	4.8	5.0	5.1	5.3	5.5	5.6	5.8	5.9

Franchising	2025	2026	2027	2028	2029	2030	2031	2032	2033
Concession	4.0	4.2	4.3	4.5	4.6	4.8	4.9	5.0	5.2
Non-concession	7.1	7.3	7.5	7.7	7.8	8.0	8.2	8.4	8.5

The benefit per journey presented in the above table has been estimated on the basis of the unconstrained demand forecasts. However, the total user benefits reported in the tables in this and the following Sections reflect the constrained demand forecasts described in earlier Sections.

Benefits per journey are estimated based on the change in generalised travel journey time that would lead to the unconstrained demand forecasts, using the elasticities described above. For existing journeys, passengers receive the full time benefit. The interventions will also generate additional bus journeys that would not have occurred in the Reference Case. Based on the TAG 'rule of a half'¹³⁷, for new journeys passengers receive half the equivalent time benefit.

136 Bus fare and journey time elasticities and diversion factors for all modes, A rapid evidence assessment by Fay Dunkerley, Mark Wardman, Charlene Rohr, Nils Fearnley. RAND Europe and Systra, 2018. Table A.4. page xvii.

137 TAG unit A1.3 (May 2022) Section 2 and throughout.

The benefit per passenger is higher for Franchising than EP because more services are provided and there are additional interventions across the Network and Fares and Ticketing under Franchising which generate additional passengers and therefore benefits.

Total time benefits have been monetised within the appraisal using passenger values of time. The values of time vary based on whether a journey is for employers' business, commuting or other purposes. To calculate the total user benefits, the forecast demand is segmented into these groups. The values of time and journey purpose splits for bus users are taken from the TAG databook. The journey purpose split for concessionary and non-concessionary travel is presented in the table below. This split is assumed to remain constant for the duration of the appraisal period.

Table 2.11: Journey Purpose Demand Split

	Concession	Non-concession
Business	1%	2%
Commuting	5%	25%
Other	94%	73%

Source: January 2023 TAG databook (v1.20.2), constructed from Table A1.3.16, based on metropolitan built-up areas values across trip purposes

7.2.2. MEC Impacts

Transport use is associated with social, environmental and fiscal impacts. These impacts affect wider society including users of other modes and other “non-transport” users. These externality impacts are broadly created by vehicle movements and include:

- (a) **Congestion** – any vehicles using public highways will generate congestion affecting journey times of other road users.
- (b) **Greenhouse Gas Emissions** – many forms of transport are associated with greenhouse gas emissions such as CO₂ which contribute to climate change.
- (c) **Local Air Quality Impacts** – most forms of transport generate emissions such as particulates and nitrous oxide (NO_x). These create adverse health conditions in people exposed to them particularly when created in high concentration.

- (d) **Accidents** – in any form of transport there is an inherent risk of accidents occurring. The costs of any accidents include those associated with injury, death, pain and suffering or property damage. Increasing the number of vehicle km on the road will increase the rates of accidents, incurring a social cost.
- (e) **Noise** – transport generates noise which can impact on the health and wellbeing of those exposed to it.
- (f) **Infrastructure Costs** – vehicles generate wear and tear on the infrastructure they use meaning it has to be maintained, repaired and replaced at a cost to the infrastructure provider. Increased vehicle movements will increase the rate of wear and tear and increase these costs.
- (g) **Indirect Tax** – the use of some vehicles generates tax income for HM Treasury through fuel duty, and VAT (for consumers only). Any change in the amount these vehicles are used will affect the quantum of tax generated.

Unit A5.4 from TAG (November 2021, its latest version) sets out the MEC impacts of these externalities and how the change in these costs can be estimated as a result of transport intervention. In line with this guidance the change in the MEC of travel in the LCR, as a result of bus reform, has been measured. The proposed interventions in bus services impact the MEC of travel as a result of reductions in private car usage, introduction of ZEV and increases in bus services.

Benefits of Reduced Car Use

The proposed interventions under EP and Franchising will increase bus usage in the LCR. A proportion of this increase will be as a result of modal shift away from private cars, reducing the MEC of travel in the LCR. For all MEC, excepting indirect tax, this will generate a benefit. There is a disbenefit from a reduction in indirect tax that occurs from the loss of fuel duty and consumer VAT on fuel paid for car use.

Using an approach consistent with TAG a per trip MEC is calculated based on a prudent average length of a car journey in the LCR of 5.0 km¹³⁸. This unit cost is applied to all new bus journeys which would otherwise have been taken by car, assumed to be 30% of the increase in bus demand based on the TAG bus diversion factors¹³⁹ for Metropolitan areas.

138 Liverpool City Region Household Travel Survey, 2018. Figure 41 shows the proportion of trips across distance bands, with the average car trip being around 5 km, although trip distances are distributed across a number of distance bands.

139 TAG databook January 2023 Sheet A5.4.6.

Benefits of Zero Emission Bus Services

The greenhouse gas and air quality externalities vary depending on how a vehicle is powered. Replacement of existing diesel engine bus vehicles with ZEV will reduce the greenhouse gas and air quality MEC of bus.

Under Franchising, EP and the Reference Case, the whole LCR bus fleet is assumed to eventually transition to ZEV. The benefit of this is calculated using the TAG unit per bus km MEC values for greenhouse gases and air quality, the total annual service km of buses in the region and the proportion of buses in the fleet which are zero emission in any given year. It is assumed that battery electric and hydrogen buses reduce greenhouse gases and improve air quality, however given that it is not assumed that either EP or Franchising accelerate the introduction of ZEV, there is not a material environmental net benefit for either option.

Impacts of Additional Bus Services

As with cars, buses also generate MEC, although typically smaller values per passenger journey. EP and Franchising allow the operation of more bus services than the Reference Case through reducing the number of services which would be cut. This will generate a disbenefit in terms of externalities. MEC have been calculated using the unit rates per bus km from TAG to the and applying an increased uplift on the number of service km operated as a result of the interventions.

7.2.3. Revenue Impacts

Impacts on Bus Services

Franchising and EP, to a lesser degree, allow the operation of a greater number of bus services than the Reference Case across the different scenarios considered. This, in turn, leads to greater numbers of fare-paying passengers which increases the revenue generated by bus services.

The interventions under Franchising and EP lead to a more commercial network (that is, fewer services need to be supported by the public sector), which improves the commerciality of bus services across the LCR overall.

Impacts on other Public Transport Modes

In the LCR there are instances where buses compete with other public transport modes, namely Merseyrail services and cross-river ferries. Some of the passenger increases as a result of enhanced bus services will be as a result of mode shift away from rail and ferry, noting that the VfB seeks greater integration between rail and bus which could also lead to

more multimodal trips using rail and bus, although this has not been represented in this Assessment. The drop in demand for these services will have a modest revenue impact from reduced ticket sales, affecting LCRCA budget as it provide these services in the region.

The impact on Merseyrail revenue has been calculated based on:

- A yield per rail journey of £1.33 (2018 prices) taken from Office of Road and Rail (ORR) financial statistics. This value is assumed to remain constant in GDP Deflator real terms (noting that any real increases in rail fares may lead to additional demand transferring to bus services, if bus fares do not increase in real terms).
- Using TAG bus diversion factors an assumed 11% of the induced bus demand from interventions coming from journeys that would have otherwise been taken by rail.

The diversion from ferry to bus is assumed to be smaller than other modes. Therefore, the revenue impact is assumed to be non-material. There might also be some impacts on the Mersey Tunnels toll revenue as some passengers switch from car to bus, but the impact for LCRCA is also assumed to be non-material.

Impacts on the Exchequer

The main impact on the Exchequer is on the collection of tax due to shifts between transport modes. Both of fewer car journeys and fewer rail journeys affect tax income. The former from reduced fuel consumption and the tax income from the duty paid on it and the latter from the indirect taxation impact on fares.

7.2.4. Social Benefits of Bus Services

Bus services have a social function through providing increased access to education and employment opportunities as well as access to activities that reduce social exclusion. In enhancing bus service provisions, more people are enabled to take journeys that give them access to these activities and opportunities, generating social benefits.

For EP and Franchising the value of the social impact of enhanced bus services have been calculated by:

- Estimating the number of return (non-business) trips that only occur because of the enhanced services based on the demand uplift in each Delivery Option and applying the TAG bus diversion factor of 12% (Table A5.4.6 from the TAG databook (v1.20.2 January 2023) indicate the proportion of new bus trips that corresponds to passengers that previous did not travel).

- Applying the social benefit value from TAG for return trips, which is £3.84 for concession pass holders and £8.17 for non-concession pass holders, in 2010 prices (TAG databook, Table A1.3.18).
- Applying Value of Time growth to the social benefit values to estimate the benefits over the appraisal period.

These benefits are not in addition to the user benefits, as indicated in TAG Unit A1.2 and in the TAG databook (Table A1.3.18) on the value of the social impact per return bus trip but provide context as to how transport intervention delivers social benefit by monetising the proportion of benefits relating to trips that would have otherwise not taken place.

7.3. Non-monetised Impacts

Guidance from the Green Book and TAG indicates that VfM categorisation needs to take into account the monetised impacts, the non-monetised impacts where these are material and any uncertainty in the Assessment, which can be measured via sensitivity tests or otherwise.

In the case of this Assessment, whilst a proportion of the impacts of the intervention have been monetised as described in this and previous Sections, some of the aspects which are part of the assessment of options against the Scheme Objectives have not been monetised.

These non-monetised aspects have been reflected in the Section on Performance against Strategic Objectives presented below in this Section and have been assessed using DfT's Transport Appraisal Guidance seven-point scale: Large Beneficial; Beneficial; Slight Beneficial; Neutral; Slight Adverse; Adverse; Large Adverse. These, together with the monetised impacts as well as the uncertainty in producing these, have been used to determine the VfM categorisation of each of the options under consideration.

7.4. Distributional Impacts

Distributional Impact (DI) assessments consider and uncover any scale bias across the different societal groups impacted by a proposed scheme. Part of this Assessment is comparing the proportion of the population impacted by the proposal who fall into these social grouping categories with the proportions for the local authority area and the UK population more broadly.

The first step to assess this, as recommended by TAG¹⁴⁰, is to undertake a screening process to identify the likely broad areas of the impact of the transport intervention, assessing whether the intervention might have negative or positive impacts on specific

140 TAG Unit A4-2 Distributional Impact Appraisal (May 2020).

social groups. Across the metrics presented in TAG, the following were considered that required further analysis, as part of the second step recommended by TAG, the assessment of its impacts on different societal groups:

- User benefits;
- Accessibility;
- Air Quality;
- Personal Affordability.

Other metrics, such as noise, accidents, security or severance, are considered to not be materially impacted by any of the options under consideration or their impacts not disproportionately affecting any particular social group, hence they have not been further assessed as part of the DI analysis.

7.4.1. User benefits

User benefits are distributed across the different geographical areas encompassing the LCR. The table below presents the proportion of the user benefits which correspond to a number of broad geographical areas, as well as the proportion of pre-COVID bus demand in services that operated in each of them.

Table 2.12: Distribution of user benefits across the LCR

Geographical Area	% of User Benefits (PV over appraisal period)	% of pre-COVID bus demand (2018/19)
Wirral	20%	18%
Sefton and North-west Liverpool	26%	12%
North-east and Central Liverpool & Knowsley	15%	38%
South Liverpool & Knowsley	24%	18%
St Helens	15%	14%

Source: Economic Case forecasting models, which map individual bus routes to broad geographical areas across the LCR to identify the distribution of user benefits across the region. Figures presented in the table above correspond to Franchising under the baseline scenario.

The user benefits are relatively well distributed across geographical areas, ranging between 15% and 26% of total benefits in each LCR district, and they are of the same broad order of magnitude as bus demand in each of them. It should

be noted that some bus services operate across several of these geographical areas, which explains some of the variance between the proportion of benefits and demand (for example, in services from/to Central Liverpool which commence in other areas). From a DI perspective, the scheme does not appear to disproportionately impact positively or negatively any geographical areas.

7.4.2. Accessibility

In the context of the scenarios appraised where the bus network contracts over time, the main measure of accessibility is the number of services which operate under each of the options considered.

As described earlier in the Economic Case, Franchising enables the operation of a greater number of bus services than EP, which in turn allows the operation of more services than the Reference Case for all patronage and funding scenarios. These services carry more bus demand in Franchising than in EP and the Reference Case.

This means that a greater level of accessibility is provided by both Franchising and EP than the Reference Case, providing opportunity to more disadvantaged social groups, such as younger or older people or populations with disabilities or from minority groups, to access employment, recreation and leisure opportunities across the LCR.

7.4.3. Air Quality

As described in the Strategic Case, LCRCA's Local Transport Plan describes addressing poor air quality as a strategic objective for the LCR. Areas of poor air quality are managed by declaring them Air Quality Management Areas (AQMA) and developing action plans for achieving their compliance with national air quality standards.

The 11 AQMA within LCR are as follows:

- The City of Liverpool in its entirety.
- The M6, High Street, Borough Road and Link Way in St Helens.
- South Road, Princess Way, Hawthorne Road and Millers Bridge in Sefton.
- Deacon Road and Milton Road in Halton.

Both LCRCA's Initial Air Quality Action Plans and the action plans for the individual AQMA aim to address poor air quality by deploying ZEV, supporting mode shift from private car and making bus journeys a more efficient and attractive option (among other measures).

Poor air quality negatively impacts the health of the population and, in turn, its life expectancy. Demographic information, split by local authority district, for populations particularly vulnerable to the effects of poor air quality (people with health conditions, low-income households and children) is shown below.

Table 2.13: Life expectancy in LCR¹⁴¹

Metric	Halton	Knowsley	Liverpool	Sefton	St Helens	Wirral	North West Ave.	England Ave.
Physically inactive adults	33.2%	26.9%	26.8%	27.4%	23.9%	22.0%	25.2%	22.9%
Male life expectancy (years)	77.4	76.8	76.6	78.9	77.8	78.5	78.4	79.8
Female life expectancy (years)	81.7	80.5	80.4	82.9	81.2	82.3	82.1	83.4

Table 2.14: Long-term health problem or disability statistics in LCR by district¹⁴²

Long-term health problem or disability	LCR	Halton	Knowsley	Liverpool	Sefton	St. Helens	Wirral
Not limited at all	77.8%	77.9%	77.4%	78.2%	78.1%	77.7%	77.2%
Limited a little	11.1%	11.4%	10.3%	10.6%	11.2%	11.4%	11.8%
Limited a lot	11.1%	10.7%	12.4%	11.2%	10.7%	10.9%	11.0%

Table 2.15: General health in LCR by district¹⁴³

General health	LCR	Halton	Knowsley	Liverpool	Sefton	St. Helens	Wirral
Very good or good health	78.4%	78.2%	77.4%	78.6%	78.6%	77.9%	78.6%
Fair health	14.0%	14.1%	14.0%	13.4%	14.3%	14.6%	14.2%
Bad or very bad health	7.6%	7.7%	8.6%	8.0%	7.0%	7.5%	7.3%

141 Public Health England - Physical activity profiles, LA Health profiles, 2017-20.

142 2021 Census data, TS038-Itla.

143 2021 Census data, TS037-Itla.

Liverpool, St Helens, Halton and Sefton (the districts with AQMA) each have life expectancies under the England average, and all except Sefton have life expectancies under the North West average. Liverpool, which is entirely under an AQMA, has male and female life expectancies around three years lower than the national average. In addition, 14.9% of Liverpool residents report they are 'limited a lot' by a health condition and 8.8% are in 'Bad or very bad' health. St Helens is also above the LCR average in these metrics.

All four of the LCR districts containing AQMA have populations vulnerable to the effects of poor air quality, often at levels well above the national and regional averages. Franchising enables the operation of a larger bus network, as described previously, and therefore providing a more attractive clean transport option that can lead to modal shift, compared to EP and the Reference Case. This can contribute to improving air quality across all districts and therefore contribute to addressing any health issues in those areas.

7.4.4. Personal Affordability

Affordable bus services are key to ensuring that certain social groups can access opportunities that they would not have otherwise, for instance, as they do not have an alternative transport mode to use. These are particularly important for younger and older people that may rely on use bus as their main transport alternative.

Based on the data provided by bus Operators and LCRCA, the proportion of demand using concessionary tickets in 2018/19 ranges between 30% (in Liverpool) and 43% (in Sefton). The areas with the highest proportions of concessionary fare revenue (Sefton, Wirral and St Helens) are also the areas with the highest populations 60 and over (that is qualifying for ENCTS).

The age profile of districts in LCR is shown below in the table below.

Table 2.16: Residential Population in LCR by district¹⁴⁴

Working population - Age	LCR	Halton	Knowsley	Liverpool	Sefton	St. Helens	Wirral
15 and under	12.8%	13.8%	14.3%	12.3%	12.0%	12.9%	13.0%
16 to 24	12.0%	10.1%	10.4%	17.1%	9.3%	9.7%	9.4%

144 Analysis derived from Census 2011 data. Extracted from Nomisweb: KS102EW – Age structure.

Working population - Age	LCR	Halton	Knowsley	Liverpool	Sefton	St. Helens	Wirral
25 to 44	27.1%	27.4%	28.4%	29.7%	24.5%	26.7%	25.0%
45 to 59	21.0%	22.0%	21.5%	18.8%	22.1%	22.3%	22.1%
60 to 74	18.0%	18.7%	17.7%	15.2%	20.1%	18.5%	19.8%
75 and over	9.1%	8.0%	7.7%	6.9%	11.9%	9.9%	10.7%

Source: Analysis derived from Census 2021 data. Extracted from Nomisweb: TS007A – Age by five-year age band

Likewise, an affordable bus system is important to ensure access to opportunity to more deprived social groups. The table below shows that around a third of LSOAs in the LCR are within the 10% more deprived (from an income and multiple deprivation index perspective) nationally. This is particularly substantial in Liverpool and Knowsley, with almost half of LSOA in the districts within the 10% most deprived nationally.

Table 2.17: Indices of multiple deprivation in LCR by district (2019)¹⁴⁵

2019 Indices of Multiple Deprivation	LCR	Halton	Knowsley	Liverpool	Sefton	St. Helens	Wirral
Proportion of LSOAs in most multiple deprived 10% nationally	33.9%	31.7%	46.9%	48.7%	20.1%	24.4%	25.2%
Proportion of LSOAs in most income deprived 10% nationally	32.3%	29.1%	46.9%	44.6%	21.2%	22.7%	24.3%

Source: English Indices of Deprivation 2019 (IoD2019): Index of Multiple Deprivation IMD. The latest update on Indices of multiple deprivation is from 2019, as these are updated every four years.

Franchising, and to a lesser degree EP, can contribute to the affordability of the bus network for the most vulnerable social groups, from an age and deprivation perspective. As described in the VfB in the Strategic Case and earlier in this Economic Case, Franchising would allow, if the funding was available, the implementation of a number of fare changes that could make buses more affordable across the LCR; this is also the case under EP, notwithstanding the limitations in making changes to some fares (for example single fares) and noting that any changes would require a commercial negotiation with Operators.

145 English Indices of Deprivation 2019.

7.4.5. Conclusions about Distributional Impacts

Both Franchising and EP would provide benefits across the districts that make up the LCR with no particular geographical area, demographic or social group disproportionately impacted, positively or negatively. However, given that Franchising would enable the operation of more services than EP (and the Reference Case) under a given funding envelope, the potential for Franchising to address some of the social challenges in relation to equity, affordability, air quality and accessibility is greater than in the case of EP.

Franchising also presents advantages over EP in terms of LCRCA being able to influence distributional outcomes in its specification of the bus network in aligning benefits with the areas of the city region which are most in need of them.

7.5. Performance against Strategic Objectives

Section 5 of the Strategic Case sets out five Policy Objectives, built from the Case for Change and Need for Intervention, to form the basis of comparison between Delivery Option contributions to the delivery and achievement of passenger needs and LCRCA policy. These benefits are considered over the medium to long term (three years plus post contribution) or, in the case of monetised benefits¹⁴⁶, over the adopted forty-year appraisal period.

This Section describes how each of the two Delivery Options appraised in this Economic Case perform against the scheme strategic objectives, summarising their monetised and non-monetised¹⁴⁷ impacts:

(a) Maximise the contribution of bus services to achieving the economic success and social capacity of the LCR

	EP	Franchising
Passenger efficiency benefits:	£247m	£252m
(Wider) Economy benefits:	£97m	£108m
Non-monetised benefits:	Slight beneficial	Beneficial
Potential support for wider LCRCA ambitions and initiatives:	Slight beneficial	Large beneficial

¹⁴⁶ All monetised impacts in this summary are presented in DfT appraisal units, that is 2010 present values, expressed in 2010 GDP Deflator real market prices, for the scenario where bus demand recovers to 85% of the pre-COVID trajectory and funding remains constant over time in real terms.

¹⁴⁷ Considered on DfT's TAG seven-point scale: Large Beneficial; Beneficial; Slight Beneficial; Neutral; Slight Adverse; Adverse; Large Adverse.

Against the first Policy Objective, the Franchising Option offers LCRCA advantages in comparison to the EP Option, including in terms of generating higher values of monetised benefits (corresponding to bus user benefits, also known as passenger efficiency benefits, and to benefits to the economy measured as Wider Economic Impacts), a wider range and scale of non-monetised benefits, and material gains in terms of the benefit of LCRCA being able to align its specification of the bus network in support of achieving its wider economic and social policy ambitions. Franchising performs better than EP not only on the scenario presented in the above table but also across the different scenarios considered within this Economic Case.

(b) Maximise the contribution of bus services to reducing the impact of travel on the natural environment

	EP	Franchising
Greenhouse gas reduction:	£0.8m	£1.0m
Air quality emission reduction:	£0.2m	£0.3m
Non-monetised benefits:	Neutral	Neutral
Potential support for wider LCRCA ambitions and initiatives:	Beneficial	Large beneficial

Against the second Policy Objective, the Franchising Option offers LCRCA advantages in comparison to the EP Option, in terms of the benefit of LCRCA being able to align its specification of the bus network in support of achieving its wider environmental ambitions; this means that while monetised benefits through the MEC approach from TAG results in a similar scale of quantified benefits, Franchising offers LCRCA greater control to align the bus network and service specification with its environmental goals.

(c) Harness competition's role in improving the offer to passengers and delivering best value for LCRCA for the services it procures

	EP	Franchising
Anticipated impacts on the level and capacity of competition for bus service delivery:	Beneficial	Beneficial

Against the third Policy Objective, both EP and Franchising Options offer LCRCA advantages, but in different ways. An EP scheme allows the negotiation away of some of the downsides of predatory competition in the deregulated market, by allowing some protection to existing and new operators, while maintaining passenger benefits of on-street competition. Franchising requires competition between Operators for different service contracts, to ensure that best value is achieved and maximise the number of services which can be run for the budget available. The structure of LCRCA's proposed Franchising Scheme, and provisional transition arrangements, have been developed in consideration of achieving this requirement. In addition to this, for the scenarios considered where there is decline in bus patronage, Franchising offers LCRCA greater control than EP over the bus services it provides, which LCRCA can use as a tool to deliver value to society.

(d) Maximise the passenger benefits of service coordination, ticket integration and information provision across the LCR public transport network

	EP	Franchising
Revenue impact:	£10m	£19m
Non-monetised quality and integration benefits:	Beneficial	Large beneficial

Against the fourth Policy Objective, there is a balance between the Franchising and EP Options; EP offers LCRCA advantages in terms of generating higher values of monetised passenger quality benefits and revenues, but Franchising offers LCRCA advantages in terms of offering a wider range and scale of non-monetised integration benefits. Franchising uniquely allows LCRCA to take a more integrated approach to the planning and delivery of its full public transport network, currently comprising bus, rail and ferry services, and wider travel options.

(e) Support implementation of measures that improve bus service delivery by addressing factors which may constrain the extent to which bus operators can commit to meet quality or service level standards

	EP	Franchising
The extent to which options mitigate constraints which limit what operators will agree to:	Slight beneficial	Large beneficial

Against the fifth Policy Objective the EP Option offers LCRCA some advantage in comparison to the Reference Case, allowing some protection to predatory competition and contractualising public sector contributions and investments, the aim being to increase the level of bus Operator commitment. Franchising removes these constraints, again offering LCRCA advantages in comparison with the EP Option by allowing LCRCA to fully define the service specification that better meets its strategic objectives and to better integrate ticketing and fares across operators and across modes, which has a positive impact on passengers in the LCR.

Against the five Policy Objectives, Franchising offers clear advantages over the EP Option – scoring more highly against four of the objectives and being equal with EP on one.

7.6. Presentation of the Appraisal Impacts

The following Sections present the appraisal of the benefits of bus reform, in the order prescribed by TAG. The appraisal first considers impacts on the economy, with the contribution buses make to growing and enhancing the economy of the LCR being one of the key objectives of reform. Secondly, environmental impacts are considered; although a key objective, the environmental impacts of bus reform is the area of least differential between the Reference Case, EP and Franchising. Next the impacts on society are considered, noting that the benefits accrued by those who use bus for non-business purposes represent the largest share of the overall monetised benefits of reform. Finally, the impacts on public accounts are considered, comprising effects on local and Central Government transport funding and on the exchequer.

8. Impacts on the Economy

8.1. Introduction

The impacts on the economy include those benefits which affect economic output. This includes first order productivity impacts from time savings and other transport user benefits, impacts on private sector transport Operators, and wider economic impacts associated with transport improvements.

Monetised benefits in this Section correspond to the scenario¹⁴⁸ where patronage recovers to 85% of the pre-COVID-19 trajectory and where ENCTS/supported services funding is maintained in real terms. Results for the other scenarios are considered in summary at the end of the Economic Case.

8.2. Bus User Benefits

Compared to the benefits to bus users who travel for commuting and other journey purposes, business users receive a small proportion of the benefit due to only representing to 2% of bus demand¹⁴⁹. The higher value of time of these users means they generate a slightly greater proportion, over 2% of the total bus user benefit. The benefits equate to £5.9m and £5.1m for EP and Franchising respectively.

As discussed in Section 7 there are slight beneficial impacts from the proposed interventions to improve customer experience and better integration of bus with other public transport modes. Only Franchising will deliver any integration benefit and EP will only deliver part of the customer experience benefit compared to Franchising.

8.3. Transport User Benefits (Other Modes)

As with the impacts on society, there are benefits to other road transport users through decongestion which results from modal shift to bus and therefore fewer car km being travelled. Compared to bus use for business journeys the non-bus users receive a significantly higher proportion of the benefits due to a higher journey purpose share¹⁵⁰ of remaining highway travellers, which receive the benefit. The total travel benefit accrued for non-bus business journeys is £2.2m and £3.0m for EP and Franchising respectively.

148 Further information on the demand and public sector funding scenarios considered in this Assessment can be found in Section 3.7.1 of this Economic Case.

149 TAG Databook (v1.20.2 January 2023) values in Table A1.3.16: Proportion of bus trips by car ownership, trip purpose and concessionary travel pass status. For Metropolitan built-up areas, concessionary and non-concessionary pass holders, 1.5% of all bus trips are on Employers' Business.

150 TAG Databook (v1.20.2 January 2023) values in Table A1.3.4: Proportions of Travel and Trips. All week average percentage of distance travelled by occupants in Work time is 8.6% for car, 1.5% for bus.

8.4. Private Sector Transport Provider Impacts

8.4.1. Aggregate Impact on Operators

The proposed interventions under EP and Franchising options will have an aggregate impact on Operators in three main ways:

- (a) The enhancements to bus services will increase the operating cost of services.
- (b) The enhancements to bus services will increase revenue generated, but this increase is forecast to be less than the uplift in cost.
- (c) The number of services operated on a 'supported service' basis, under contract from LCRCA, increases over time for all options (Reference Case, EP and Franchising), due to the reduction in commerciality of the network over time. This reduces the margin received by Operators for these services (but noting that a commercial Operator would cut these in the absence of any subsidy). Within the budget scenarios tested in the Assessment, the number of services operated decreases over time for all Options, but this decrease is smaller for EP and Franchising than for the Reference Case.

The effects of EP and Franchising options on Operators are summarised in the table below.

The net effect over the 40-year appraisal period on Operators under an EP and Franchising compared to the Reference Case is shown below. The commercial costs and revenues under Franchising are for those services that continue under commercial operation during the transition period.

Despite a reduction in commercial services, the net Operator profit on commercial services is similar between each Option. Profit increases under EP because of the VfB initiatives assumed to take place during EP, such as some aspects of integrated ticketing. Levels of profit stay at a similar level because the network as a whole becomes 'unprofitable' under the Reference Case. This means that under 'business as usual', Operators cannot make the same absolute profit per year even if the majority of services are transferred to supported operation. The return the Operators receive from the margin made on supported service contracts is therefore comparable to running a reduced number of profitable services. Commercial profit under Franchising only represents the transition period and is therefore not comparable to the Reference Case and EP.

Table 2.18: Summary of Aggregate Operator Impacts

	EP	Franchising
Passenger Revenue (a)	-£11m	-£541m
Supported Service Contract Payments (b)	£44m	£527m
Operating Costs (c)	-£24m	£23m
Net Impact (a+b-c)	£9m	£3m

Source: Economic case forecasting models

Under the EP Option, additional bus services are run in comparison to the Reference Case; this results in increases in passenger revenue and also in supported service payments (from LCRCA).

The impact of Franchising represents the change in Operators' role under this option, with the totality of bus passenger revenue received transferring across to LCRCA and being replaced with contract payments. The negative net impact shown represents the reduction in the margin earned, corresponding with the significant decrease in risk exposure.

The current aggregate Operator margin, broadly maintained under the Reference Case, is around 13% calculated over the appraisal period. Under the EP this margin varies, as a result of the change in balance between commercial and, lower margin, supported services operated under this option relative to the Reference Case. Under Franchising the Operators' margin decreases to the 7.5% assumed for the purposes of this Assessment.

8.4.2. Individual Impacts on Operators

The aggregate impact on Operators, above, will not be representative of the impact on individual Operators – in particular for the Franchising Option. Data from the Strategic Case shows that Arriva, pre-COVID-19 carried 69% of passenger trips and Stagecoach 23%¹⁵¹, with the remaining 8% being carried by 24 SMO. SMO operate the majority of supported services, with Arriva and Stagecoach combined operating less than 15% of supported bus service kilometres in Merseyside¹⁵². Conversely, Arriva and Stagecoach operate the majority of commercial services.

Under the Reference Case, Arriva and Stagecoach earn respectable margins from commercial services, which are not

151 See Table 1.4.

152 See Strategic Case Section 3.3.3.

unduly diluted by the lower-margin supported services that each runs. Both Operators have reasonable flexibility to manage their margins, largely through making: changes to fares; adjustments to their networks; or by cutting their least profitable services. Both have the resources and financial standing of leading international transport groups. Neither is likely to entirely exit the market; while partial or full acquisitions or takeovers of these Operators are possible, services would continue under the new owner. Other routes to material market entry for commercial services are constrained by the incumbent Operators.

SMO earn lower margins on the supported services they operate. Market exit is a possibility, for example Halton Transport (which, at 4% of passengers, held the third highest market share in 2015/16) stopped operations in January 2020. In such situations LCRCA has a track record in facilitating replacement services with limited or no impact on bus passengers.

Into the future, against a backdrop of declining bus passenger revenue and increasing costs, the commercial network will contract. Funding for supported services is constrained and therefore the overall bus network will reduce. One outcome is that Stagecoach and Arriva may seek to secure contracts for more supported services to offset their reductions in commercial services; this could lead to further SMO exiting the market. The level of investment required in the intended transition to ZEV may disproportionately affect SMO.

Under the EP Option, the change from the Reference Case is relatively limited. While the EP will apply to all Operators¹⁵³, in effect the fact that most services currently outside the Alliance are operated under contract to LCRCA, means that they are subject to basically the same provisions in any case.

Under the proposed model for Franchising, bus services will be divided into eight large depot-based lots, and low frequency services and school contracts (specially aimed at SMO)¹⁵⁴. The lots will be sequenced by area/round as follows:

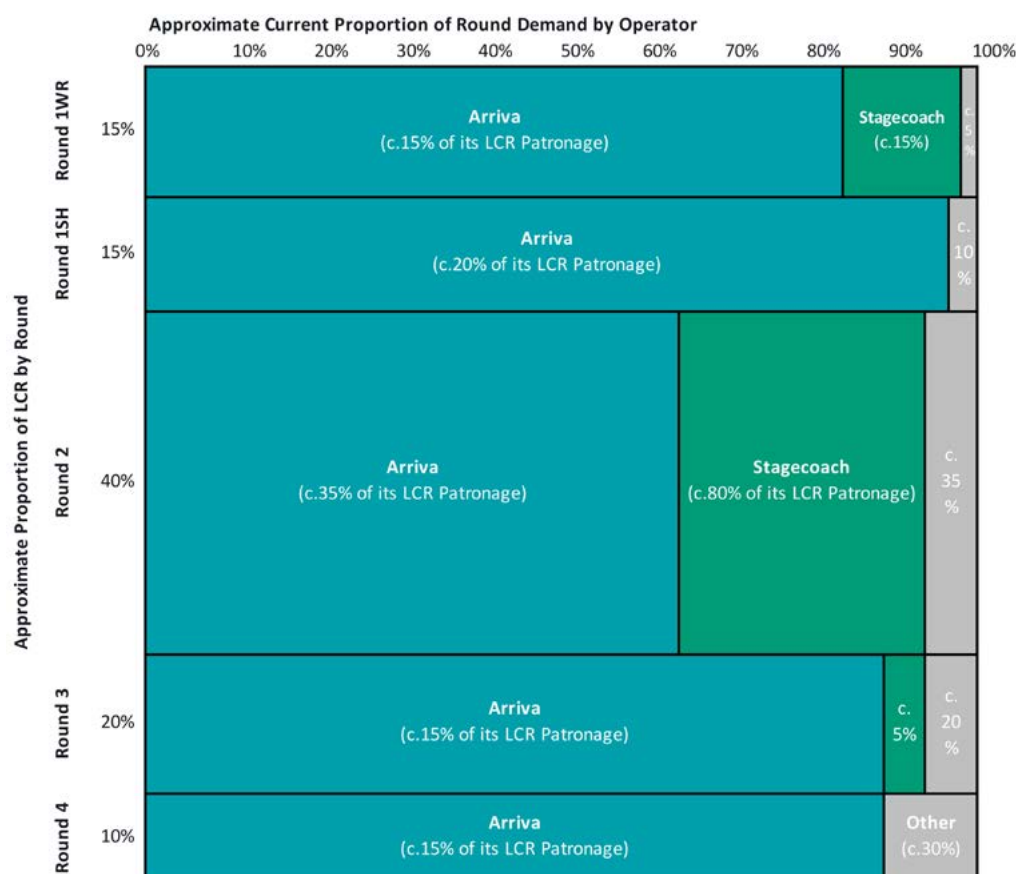
- Wirral (one depot) 'Round 1WR';
- St Helens (one depot) 'Round 1SH';
- North, East and Central Liverpool and Knowsley (two depots) 'Round 2';
- South Liverpool, Knowsley and Halton (two depots) Round 3';
- Sefton & North West Liverpool (two depots) 'Round 4'.

153 In contrast to the Bus Alliance partnership between Merseytravel, Stagecoach and Arriva.

154 See Commercial Case Table 3.7.

The current representation of passengers by Operators for each round is illustrated as Figure 2.23¹⁵⁵. The horizontal axis shows the proportion of passengers by Arriva, Stagecoach and SMO (total), for example Arriva carries around 85% of passengers in Round 1WR, Stagecoach a little under 15%, and SMO less than 5%. The depth of the rows shows the proportion that each round makes up of the total LCR bus demand, for example Round 2 contains around 40% of LCR bus passengers. Taken together, the area of the blocks therefore represents the proportion of LCR bus passengers carried by each Operator by round, and are labelled to show the proportion of each Operator's passengers by Round.

Figure 2.23: Operator Passengers by Franchising Round (pre-COVID)



The possible outcomes of Franchising have been considered in light of the information in the figure above as part of validating the proposed model, particularly for the transition phase. For example, the depot-based Lot which comprises the majority of Round 1WR services could be won by Arriva, Stagecoach, an SMO (singly or jointly) or a new entrant. At least one of

¹⁵⁵ Values are rounded to the nearest 5%.

Arriva or Stagecoach would therefore move out of that area, however with approximately 85% of their demand remaining and opportunities in other Rounds they are considered unlikely to exit at that stage. Services outside the depot-based Lot provide similar opportunities to now for SMO, or possibly options for the winner of the depot-based Lot for that Round.

Round 1SH also comprises a single depot-based Lot, which is planned to be implemented concurrently with Round 1WR – although tendered after it. If Arriva does not secure either of these Lots, after not being successful in Round 1, its remaining demand would be down to 65% – but there would still be opportunities remaining.

Round 2 is the most significant in terms of passenger numbers. If Arriva does not secure any Round 1WR, 1SH or 2 Lots it is accepted that it may consider exiting the market – and this could be before Rounds 3 or 4 are implemented. However, the current largest Operator not being successful in at least some Lots by this stage is considered unlikely – as well as not being a desired outcome. In such a situation LCRCA would necessarily make temporary arrangements with the Operators who had been successful in earlier Rounds, or Arriva (if amenable), to ensure continuity of service until formal implementation can be concluded.

The Franchising proposal was refined following market engagement with Operators, existing and potential new entrants, with the aim of attracting competition across the Rounds. The approach, set out in the Commercial Case, intends to minimise the costs and resource requirements of transition. However, there would be some activity required during transition in preparation for Round implementation and possibly more for new entrants than incumbents; however these costs are assumed to have been priced into the bids.

For incumbent Operators exiting from one or more Round-areas or entirely from the LCR under Franchising¹⁵⁶ any residual impacts are considered to be modest in scale. Drivers and other employees associated with bus operations are anticipated to transfer with the service to the successful bidder for that Round. As part of its Depot Strategy¹⁵⁷ LCRCA will engage with existing Operators in relation to acquisition of appropriate sites; others, which may be surplus to requirements, will have market value in any case.

156 This latter outcome is considered unlikely and, as previously stated, is not a specifically desired outcome.

157 See Commercial Case Section 4.3.12.

Operators have considerable flexibility with the deployment of vehicles, for example with opportunities for (as yet not fully depreciated) vehicle use on other Rounds or in other parts of their operation¹⁵⁸. Franchising represents a fundamental change from the current deregulated model, under which bus Operators choose where to provide services which attract passengers and secure a margin; however, it is noted that around half of the income received for these services relates to payments made from or through the public sector¹⁵⁹ with only around a half being from passenger fares income.

For all Operators tendering for contracts, there will be costs associated with bidding – incurred whether or not those bids are successful. The Franchising proposal has been structured with the aim of not requiring unnecessarily high bid costs. For successful bidders, recovery of these costs (as required) is assumed to have been priced into the bids. For unsuccessful bidders, the decision of whether to bid and how much to spend will have been taken in the knowledge that success was not guaranteed. It is noted that there are already bidding costs associated with supported services, and for SMO bidding for services outside the depot-based lots there will not be a significant change in this.

8.5. Wider Economic Impacts

Wider economic impacts arise as the effects of a transport intervention are transmitted into the wider economy. These effects are greatest where market distortions mean the economy is not functioning efficiently, and which the transport intervention can help to overcome. For example, better connecting areas of high unemployment with industrial areas may lead to both to an increase in the number of people employed, and improvements to the attractiveness of the industrial site due to its improved access to a pool of labour.

These wider economic impacts can be significant and are highly context-specific. The type and magnitude of impacts will depend on the scheme itself alongside local socio-demographic and economic attributes.

The scope of analysis envisaged at each of the levels set out in TAG reflects this distinction, whereby ‘Level 1’ benefits cover direct economic impacts in the transport market assuming the scheme brings about insignificant land-use change, excluding all wider economic impacts. ‘Level 2’ benefits build on this to capture wider

¹⁵⁸ It is noted that LCRCA’s approach to fleet comprises public sector acquisition/ownership of ZEV, replacing existing operator-owned and largely diesel fleet in any case.

¹⁵⁹ See Strategic Case Section 4.2.

‘connectivity’ related economic impacts that can be estimated without explicit land-use modelling. These are:

- (a) Agglomeration (static clustering): positive productivity effects which increase with the scale and concentration of economic activity within a conurbation.
- (b) Output change in imperfectly competitive markets: improvements to competition that arise from increasing the number of accessible suppliers of goods and services.
- (c) Labour supply impacts: reductions to commuting costs remove barriers to work and increase the range of opportunities available to jobseekers.
- (d) These impacts have been assessed as part of this appraisal and the scale of the impact is presented below.

8.5.1. Agglomeration

Agglomeration or ‘clustering’ benefits arise from firms and workers being located ‘closer’ to one another as a result of improvements in transport connectivity. These benefits are based on well-established economic observations where places with greater effective density, either as a result of people and jobs being located physically close or being effectively brought closer through better transport links, are more productive. But, there is a greater degree of uncertainty in their estimation compared to Level 1 benefits.

All transport schemes which deliver benefits in the form of ‘conventional’ time savings will also deliver agglomeration benefits. The scale of these will be greater in areas of already high employment density and where the level of connectivity improvement is greatest.

Although the benefit per journey of improved bus services is small, these changes are pan regional and impact a large proportion of bus journeys. As a result, the combined densification effect on the region will be significant generating agglomeration benefits of a similar order of magnitude to the Level 1 benefits.

8.5.2. Output change in imperfectly competitive markets

Improved transport connectivity can also stimulate additional competition within the economy, encouraging new suppliers to enter the market and increasing economic output. TAG values these benefits at 10% of the value of the business user travel time benefits of the scheme.

The proportion of business trips using buses is relatively low¹⁶⁰; the inclusion of imperfect competition benefits therefore represents a small upside (relative to the level of conventional benefits) within the economic case of each of the enhancement options.

8.5.3. Labour Supply Impacts

Improvements in transport accessibility can encourage new workers into the labour market, who would not otherwise be in work, by better connecting areas of higher unemployment to employment centres elsewhere.

Improving access to job opportunities by enhancing public transport accessibility is a core objective of LCRCA in developing its Bus Service Delivery proposals. The provision of services to new areas and extending hours of operation will improve the effective labour market catchment of businesses and will improve the number of accessible jobs to many potential workers. This improved 'matching' of supply and demand would be expected to encourage more workers to enter the labour market.

This has the potential to deliver significant local benefits to workers and businesses, and second order impacts such as local income and expenditure effects. However, within TAG economic appraisal only national level benefits are considered, which reflect the increased tax take that accrues from workers entering the labour market. The monetised benefits (national level) associated with labour market impacts are typically small and would have only a marginal impact on the overall case.

8.5.4. Wider Economic Impacts Conclusions

Wider Economic Impacts are estimated to represent around 40% of conventional benefits for EP and 45% for Franchising, with agglomeration benefits representing around 96% of all Wider Economic Impacts¹⁶¹. For the scenario where demand recovers to 85% of the pre-COVID-19 trajectory and supported services funding remains constant in real terms, these would represent £97m for EP and £108m for Franchising.

8.6. Reliability Impact on Business Users

Anticipated reliability impacts on business users as a result of bus reform is dependent on the delivery, and associated funding, for bus

160 TAG Databook (v1.20.2 January 2023) values in Table A1.3.16: Proportion of bus trips by car ownership, trip purpose and concessionary travel pass status. For Metropolitan built-up areas, of all bus trips 0.2% for concessionary pass holders and 1.3% for non-concessionary pass holders are on Employers' Business.

161 Based on outputs from the Wider Economic Impacts model.

priority measures. While reliability issues and improvements are an important consideration for bus services across LCR, they are more aligned with bus priority enhancements – something that regulatory change does not in itself deliver, although it can help facilitate it or realise the benefits of any bus priority measure that improves reliability. Thus, the economic appraisal has not included reliability and the potential monetised benefits reliability improvements may bring about, given its dependency on additional funding.

8.7. Regeneration

Any regeneration impacts as a result of the changes to bus service delivery are not anticipated to be material. Although the proposed options will deliver connectivity enhancements (through improvements to service frequency, additional services and service route changes) these are not expected to directly support or enhance public transport accessibility to major developments. The impact has therefore been assessed as neutral for all options.

The table below summarises the performance of EP and Franchising options, relative to the Reference Case, against the Economic impact categories set out in TAG.

Table 2.X: Summary of Impacts on the Economy – Conclusion

	EP	Franchising
User Benefits	£8.1m	£8.1m
Private Sector Provider Impacts	£9.1m	£274m
Wider Economic Impacts	£97m	£108m

Source: Based on outputs from the Economic Appraisal model. Methodology for calculation outlined in Paragraph 7.2.1

9. *Impacts on the Environment*

9.1. Introduction

The impacts on the environment include the benefits and any potential disbenefits of transport interventions on the natural and physical environment. Compared to transport interventions which involve physical infrastructure, the scope for environmental impacts is limited to those caused by vehicle use (that is impacts of emissions). There is an overlap between the impact on the environment and the impacts on society.

The results presented within this Section are calculated as net figures against the Reference Case to allow for comparison between EP and Franchising.

9.2. Noise

The reduction in car journeys will reduce the noise pollution generated by car use. This has a resulting health benefit to the population of the LCR. There is additionally an effectively insignificant adverse impact associated with increased bus services which will be further reduced by the use of battery electric and hydrogen buses which produce significantly less engine noise than diesel buses. The benefits of noise reduction are £0.1m for both EP and Franchising relative to the Reference Case; this is linked to more car journeys being replaced by bus journeys under EP and Franchising than in the Reference Case.

Noise impacts are calculated using MEC rates from the January 2023 TAG databook (v1.20.2); these impacts could be more pronounced than the MEC average near significant receptors and in central locations where bus represents a significant proportion of the traffic flow.

9.3. Air Quality

The interventions under EP and Franchising will improve air quality in the LCR in two ways. First, through modal shift away from car use. Buses generate significantly lower emissions per person trip than cars. Therefore, the reduction in car use will generate health benefits from the net reduction in particulate and NOx emission from travel. These can be estimated using the MEC approach described in TAG, without the necessity of establishing baseline pollutant emission levels. The air quality benefits of modal shift are £0.2 and £0.3m for EP and Franchising, respectively.

Second, through the introduction of ZEV, which have significantly lower tailpipe emissions than their diesel equivalents, into the LCR fleet. Under EP and Franchising, the introduction of ZEV is more controlled and the pace of introduction more certain than under the Reference Case, maximising their potential benefit (that is,

whilst the profile of introduction of ZEV is assumed to be the same across all options, the level of certainty over its delivery is greater under Franchising and EP, to a lesser degree, than under the Reference Case).

In the context of a declining bus network, the number of car journeys would increase as these would replace bus journeys on services which are cut. However, Franchising and EP forecast a lower decline in bus trips, which in turn leads to an incremental air quality benefit of the options over the Reference Case.

The air quality benefits of ZEV under EP and Franchising appear relatively small. There are several factors that may change the scale of these benefits as described below.

The way these benefits have been calculated uses TAG MEC. The method applied to this calculation assumes that the introduction of ZEV negates any emissions that affect air quality. In reality, engine emissions do not account for all the particulate emissions produced by a vehicle. Particulate emissions are also produced by tyres, brakes and degradation of the road surface and therefore will still be produced by ZEV. In this context the calculation of air quality benefits could be an overestimate. Although most of the benefit would still be gained as engines account for the majority of emissions.

The impacts of vehicle emissions on air quality are also localised and the benefit of reduced emissions highly contextual to the air quality in the area. MEC associated with air quality are based on the average air quality conditions across the UK. In general, urban areas have significantly lower air quality than the UK average. Within the LCR specifically, the whole of Liverpool as well as several other parts of the region are air quality management zones due to the poor air quality. This means the benefits of reducing emissions will be greater than the benefits indicated by TAG MEC.

The locality of air quality benefits is also important when considering where lower emission buses are deployed across the region. Given that air quality can vary on a street by street basis and under all options there is graduated introduction of lower emission buses, the benefits will be maximised if diesel buses are replaced first in the areas with population exposed to the lowest air quality. Under the Reference Case, and to a lesser extent EP, the introduction of lower emission buses will be market led, leading Operators to deploy them where it is most commercially advantageous rather than where it delivers the greater social benefit. Under Franchising, LCRCA have full control over where the new ZEV can be deployed, therefore maximising their benefit.

There is a large gross benefit of ZEV under EP and Franchising, however, net of the Reference Case this is much smaller. The

Reference Case assessed in this appraisal takes an optimistic view of the pace of Operator-led introduction of low emission vehicles. Under EP and Franchising, the financing of ZEV by LCRCA ensures certainty of the pace of transition and that the vehicles with the lowest emissions are introduced. A slower pace of change in the Reference Case leads to a higher net benefit under EP and Franchising options.

Overall, the net air quality benefits of bus reform can be argued to be moderately beneficial, particularly for Franchising.

The Distributional Impacts of air quality benefits would not result in negative impacts on air quality. Over the appraisal period, the eventual transition to an entirely zero emission bus fleet will ensure the air quality benefits are pan-regional. However, as noted earlier, before the entire fleet is converted, Franchising gives greater control to LCRCA over where the deployment of zero emission buses is prioritised. This means their use can be targeted at areas where vulnerable demographics, for example children, will be impacted most, such as routes adjacent to schools. This will have a positive distributional impact of the air quality benefits towards these groups.

9.4. Greenhouse Gases

As with the air quality impacts there are two ways in which the proposed interventions of bus reform will reduce greenhouse gas emissions. First through modal shift and second through directly reducing the emissions of buses.

The reduction in greenhouse gas emissions as a result of modal shift generates £0.8m and £1.0m for EP and Franchising respectively.

EP and Franchising generate a reduction in greenhouse gas emissions through the introduction of ZEV into the fleet, although this is not assumed to be incremental to the Reference Case. This assumes the energy source for these vehicles produces zero greenhouse gas emissions¹⁶². Whilst, in actuality, there may be some emissions from the energy source these will still be significantly lower than would be produced by a diesel vehicle. Therefore, the level of benefit will remain similar.

EP and Franchising provide greater certainty that ZEV are introduced and that the pace of change is maximised compared to solely Operator-led introduction. This could increase the impact from **slight** to **moderate beneficial**.

Similar to in the case of air quality, in the context of a declining bus network, the number of car journeys would increase, but Franchising and EP forecast a lower decline in bus trips, which in turn leads to an

¹⁶² This would require that hydrogen powered buses use green hydrogen as opposed to blue hydrogen or trading of electricity in the context of battery electric buses as a mitigation. In any case, this does not impact the outcomes of the Assessment as there is no incremental benefit of the options over the Reference Case.

incremental greenhouse gas emission benefit of the options over the Reference Case.

9.5. Other Environmental Indicators

TAG indicates that the appraisal should also consider the environmental impacts on landscape and townscape, historic environment, biodiversity, and the water environment of the area affected by the scheme. Whilst these can be important indicators for infrastructure projects, reform of bus services will not have the same physical impacts and therefore these impacts do not need to be considered in any detail, since the programme impact of both options will be negligible, and therefore scored neutral.

Where more local infrastructure investment is undertaken in support of delivering LCRCA's VfB, for example bus priority measures or depot investment/refurbishment, any environmental impacts arising will be considered as part of the investment decision process.

9.6. Comparison of Impacts across Scenarios

The below table presents the impacts on the environment of EP and Franchising across the scenarios being appraised. It shows that both options deliver environmental benefits over the Reference Case, of around £1.3m for both EP and Franchising.

Table 2.19: Summary of Impacts on the Environment

85% of pre-COVID demand trajectory				100% of pre-COVID demand trajectory		
Option - EP	Current funding	Increased funding	Reduced funding	Current funding	Increased funding	Reduced funding
Noise	£0.1m	£0.2m	£0.1m	£0.2m	£0.2m	£0.2m
Air Quality	£0.2m	£0.4m	£0.2m	£0.4m	£0.6m	£0.4m
Greenhouse Gases	£0.8m	£1.5m	£0.6m	£1.5m	£2.2m	£1.5m

Option - Franchising	Current funding	Increased funding	Reduced funding	Current funding	Increased funding	Reduced funding
Noise	£0.1m	£0.2m	£0.1m	£0.2m	£0.3m	£0.2m
Air Quality	£0.3m	£0.5m	£0.2m	£0.6m	£0.7m	£0.6m
Greenhouse Gases	£1.0m	£1.6m	£0.9m	£2.0m	£2.5m	£2.0m

9.7. Impacts on the Environment Conclusions

The direct impacts of bus reform on the built and natural environment are limited, relating mainly to modal shift from car to bus journeys and to the replacement of existing diesel buses with ZEV (where there is no assumed incremental benefit over the Reference Case, but there is greater certainty about the pace of replacement of the bus fleet). This replacement, in line with national and local policy and commitments to achieving net zero, is anticipated to happen under all options; the advantages of the Delivery Options appraised are therefore marginal benefits from providing greater confidence in the rate of change and of focusing ZEV deployment in areas where improvements in local air quality and/or traffic noise are most needed.

The table below summarises the performance of EP and Franchising options, relative to the Reference Case, against the Environment impact categories set out in TAG.

Table 2.20: Summary of Impacts on the Environment – Conclusion

	EP	Franchising
Noise	£0.1m	£0.1m
Air Quality	£0.2m	£0.3m
Greenhouse Gases	£0.8m	£1.0m
Landscape	Neutral	Neutral
Townscape	Neutral	Neutral
Historic Environment	Neutral	Neutral
Biodiversity	Neutral	Neutral
Water Environment	Neutral	Neutral

Source: Economic Case appraisal model. Methodology for calculation outlined in Paragraph 7.2.2.

With regard to impacts on the Environment there is little to choose between EP and Franchising. Both offer some marginal advantage over the Reference Case, providing opportunities for LCRCAs to influence deployment of ZEV.

10. Impacts on Society

10.1. Introduction

The impacts on society relate to the first order impacts on transport users who travel for non-business purposes, including commuters. The benefits to these users do not directly contribute to the economy but instead have a social welfare impact. Impacts include those on bus users, other highway users, and also on active modes travellers.

Monetised benefits in this Section correspond to the scenario¹⁶³ where patronage recovers to 85% of the pre-COVID-19 trajectory and where the ENCTS/supported services funding is maintained real terms. Results for the other scenarios are considered in summary at the end of the Economic Case.

10.2. Commuting and Other User Benefits

10.2.1. Monetised Bus User Benefits

The welfare impacts of enhanced bus services on non-business users make up the largest proportion of the benefits of bus reform. This occurs because journeys for commuting and other (leisure, health, personal business etc.) purposes make up over 98% of demand¹⁶⁴, although these users have a lower value of time than business users.

The monetised welfare impacts of EP and Franchising are £231m and £233m respectively. The majority are generated by generalised travel journey time savings as a result of the increased frequencies and extended operating hours of existing services and the presence of additional services relative to the Reference Case.

A small proportion of the user benefits are from fares and ticketing reform. This includes the willingness-to-pay benefit from simplified and integrated ticketing as well as the personal affordability impacts of fares reductions.

10.2.2. Monetised Other Transport User Benefits

Of the new bus demand induced by EP and Franchising, 30% of those journeys would have otherwise been made by car and a further 12% by taxi or private hire vehicle¹⁶⁵.

163 Further information on the demand and public sector funding scenarios considered in this Assessment can be found in Section 3.7.1 of this Economic Case.

164 TAG Databook (v1.20.2 January 2023) values in Table A1.3.16: Proportion of bus trips by car ownership, trip purpose and concessionary travel pass status. For Metropolitan built-up areas, concessionary and non-concessionary pass holders, 98.5% of all bus trips are on Consumer trip purposes.

165 TAG Databook (v1.20.2 January 2023) Table A 5.4.6: Bus diversion factors by recipient/source mode. Values for Metropolitan (no light rail).

This modal shift will reduce congestion on the highway network benefiting other road users through reduced journey times. This benefit is modest, with the travel time savings equating to a value of £8m and £10m for EP and Franchising respectively. The sum of these monetised other transport user benefits and monetised bus user benefits presented in section 10.2.1 corresponds to the total monetised user benefits presented in Table 2.21 below.

This modal shift is brought about primarily by increases in bus services, relative to the Reference Case, which will have a small effect on highway congestion. However, the new services being introduced across the LCR result in a number of additional vehicle movements that will be insignificant compared to existing traffic volumes. Therefore, the impact of new services will be small compared to the decongesting effects of modal shift from private cars.

The distribution of the wider transport user benefits will be similar to the bus user benefits as the change in congestion will occur in the same areas as the new bus journeys take place.

The table below presents the disaggregated monetised bus user benefits under for Commuter and Other users under both the EP and Franchising scenarios.

Table 2.21: Commuter and Other Monetised Bus User Benefits

User Benefits	EP Commuting	EP Other	Franchising Commuting	Franchising Other
Travel time	£166m	£72m	£123m	£121m
Vehicle operating costs	£0m	£0m	£0m	£0m
User changes	£0m	£0m	£0m	£0.0m
During construction and maintenance	£0m	£0m	£0m	£0.0m
Total	£166m	£72m	£123m	£121m
Total Monetised User Benefits	£239m		£243m	

Commuting and Other figures may not sum up to the total due to rounding.

10.3.Social Value of Bus

There is a benefit to society in relation to not withdrawing existing bus services from the LCR network, relative to the Reference Case. The removal of bus services impacts on different user groups in different ways. Buses provide access to employment, leisure and recreation opportunities and thus, the provision of bus services (or the non-removal of them in this context) has a social value that can be monetised in accordance with TAG Unit A4.1. There, the appraisal of benefits of the scheme monetises the benefit of keeping the existing bus provision in place following bus reform.

The Appraisal Model applies the value of the social impact per return bus trip¹⁶⁶ to the changes in demand as a result bus reform. These values are split by concessionary and non-concessionary pass holders. The impact of these trips, however, are not directly reported (as recommended by TAG) as the values are not incremental to the over user benefits.

10.4.Reliability

As outlined in Section 6.4.2 of the Strategic Case, the Delivery Options considered generally do not implement bus priority or other measures that are aimed at reducing variability in journey times and thus are not greatly interconnected. EP and Franchising do, however, create opportunities for reliability improvements to be made. EP would create an opportunity for the public-sector to offer and record its commitment to such interventions, to incentivise and reward the negotiated bus Operator commitments. Under Franchising, there would be advantages in terms of aligning incentives for improving punctuality and reliability; in that the public sector would receive any additional revenue. The extent of these opportunities is limited and therefore an assessment of a **Slight Beneficial** impact applies to both EP and Franchising.

10.5.Physical Activity

As per reliability, bus Delivery Options are unlikely to bring about any significant changes to bus routeing and bus infrastructure throughout the LCR. As such, any changes that are made will be unlikely to influence the levels of physical activity associated with using bus services in the LCR. The impact of delivering bus reform is therefore assessed at this time as having a **Neutral** impact on physical activity for both of EP and Franchising.

10.6.Journey Quality

As discussed in Section 2, there will be a benefit from the changes proposed in the VfB to enhance customer experience. This will

166 TAG Databook (v1.20.2 January 2023) Table A 1.3.18: Value of the social impact per return bus trip.

benefit bus users through improved journey quality. However, the value placed on these changes is lower than travel time changes. Therefore, the overall additional impact is appraised as **Slight Beneficial** for Franchising. For EP this impact will be smaller as it is somewhat harder to introduce the interventions proposed under the VfB and therefore the impact is appraised as **Neutral**.

For Franchising, where LCRCA gain control over all bus services, there is the opportunity for better integration with other public transport modes. This has potential to provide a travel time benefit to bus users. However, the scale of this impact will be small compared to the wider services changes as the opportunities for better integration are much more limited. Overall, better integration with other public transport modes for Franchising is appraised as **Slight Beneficial**.

10.7. Accidents

In addition to the externality benefit of decongestion, a reduction in car use will also result in a reduction in the rate of highway accidents and reduce the associated societal costs. As with decongestion, bus services will have an adverse but relatively insignificant impact on the rate of highway incidents. The benefits of a reduction in highway accidents as a result of bus reform are £0.9m for EP and £1.2m for Franchising.

10.8. Security

The introduction of bus reform brings an opportunity to provide improved security provision at stops/on vehicles, in comparison to existing bus provision -- for example ensuring good lighting and visibility, high quality CCTV provision/recording and access to emergency help and information. A change in bus regulation will not, however, greatly impact upon many of the factors outlined above. The impact of delivering bus reform is therefore assessed at this time as having a **Neutral** impact on security for both of EP and Franchising.

10.9. Access to Services

A core ambition for bus reform is that improved bus service provision will enhance the quality of life for LCR residents by improving their connectivity to education, healthcare, retail and leisure destinations (within and outside the city region) through harnessing bus Operator competition. Enhanced competition may lead to network-wide improvements for passengers including service coordination, ticket integration, and information provision, each allowing for improved bus services for LCR residents. The impact of delivering bus reform is therefore assessed as having a **Slight Beneficial** impact on access to services at this stage for both of EP and Franchising.

10.10. Affordability

A change in bus regulation has the potential to affect the cost of travel on bus services across the LCR. The changes to fares and ticketing under Franchising (and, to a lesser extent, EP) will have a positive distributional impact on bus users by making services more affordable. The effects of this will be especially pronounced in deprived and low income areas. Thus, delivery of bus reform is assessed as having a **Slight Beneficial** and **Beneficial** impact for EP and Franchising respectively

10.11. Severance

Implementing any of the bus reform Delivery Options is unlikely to elicit any significant changes to the current public transport infrastructure across the LCR as routes will be largely unaffected. The absence of such changes means current severance barriers to accessing public transport will remain. Thus, the impact of delivering bus reform is therefore assessed, on balance, as having a **Neutral** impact on severance for both of EP and Franchising.

10.12. Option and Non-use Values

Few areas of the city region have material residential populations with very limited access to public transport of some kind. A change in bus regulation is therefore extremely unlikely to 'substantially change the availability of transport services' (TAG Unit A4.1, §7.1.1) and therefore option benefits are not anticipated to be significant.

At this time, the impact of delivering bus reform is therefore assessed, on balance, as having a **Neutral** impact on option and non-use values for both of EP and Franchising.

10.13. Impacts on Society Conclusions

Bus reform will have a significant positive impact on society, directly proportionate to the extent to which the gradual decline in service levels under the Reference Case can be mitigated and to which components of the VfB can be implemented.

The table below summarises the performance of EP and Franchising options, relative to the Reference Case, against the Society impact categories set out in TAG.

Table 2.22: Summary of Impacts on Society

	EP	Franchising
Commuting and Other Users	£239m	£243m
Reliability (Commuting and Other Users)	Slight Beneficial	Slight Beneficial
Physical Activity	Neutral	Neutral

	EP	Franchising
Journey Quality	Neutral	Slight Beneficial
Accidents	Slight Beneficial	Slight Beneficial
Security	Neutral	Neutral
Access to Services	Slight Beneficial	Slight Beneficial
Affordability	Slight Beneficial	Beneficial
Severance	Neutral	Neutral
Option and Non-Use Values	Neutral	Neutral

With regards to impacts on Society, Franchising offers advantages over Reference Case and EP, including in terms of monetised benefits and qualitative assessments. The appraisal reflects the greater level of service which can be provided under that option for the budget available. EP also offers advantages relative to the Reference Case.

11. *Impact on Public Accounts*

11.1. Introduction

The direct costs of bus reform are discussed in detail in Section 4. These costs are summarised in the table below and refer to the demand scenario¹⁶⁷ that assumes an 85% recovery of the pre-COVID-19 demand trajectory and the funding scenario that assumes LCRCA ENCTS/supported services funding is maintained in real terms.

11.2. Costs to Broad Transport Budget

The below table presents the impact on the public accounts of EP and Franchising, relative to the Reference Case. It shows that under Franchising, all services are specified and funded, and all revenue from them collected, by LCRCA. Revenue collected amounts to £575m and LCRCA operator contract payments to £527m, with a net profit of £47m (over the appraisal period). This includes all previously commercial and supported services.

In the case of EP, only those services which are supported require funding from LCRCA and are reflected in impacts of the public accounts. In the case of EP, given the initiatives from the VfB that can be introduced as part of this option, there is a greater cost effectiveness than under the Reference Case, which leads to a £22m incremental benefit.

LCRCA will incur additional ongoing operating costs for both options incremental to the Reference Case, linked to, among others, the additional costs of staff, transition, or renegotiation and tendering. In the case of EP these add up to £18m over the appraisal period, and in the case of Franchising to £48m.

The public accounts summary also presents the impact of investment in the ZEV fleet. In the case of Franchising, given that LCRCA is assumed to own and procure the ZEV fleet, there is an additional cost for the public sector of £265m which is presented in the summary below (noting that this figure represents the cost of ZEV in appraisal units – 2010 prices and present values – and is based on the information presented on Sections 5.4.1, 5.4.5 and 5.4.6 of the Economic Case). In the case of EP, the private sector is assumed to procure, finance and own the fleet; therefore, investment in the ZEV fleet is shown as part of the private sector provider impacts (by convention shown in the TEE table). It should be noted that this investment is net of DfT funding on the ZEV fleet. Given that it is assumed that Central Government would fund the same amount under all options, there is a net neutral incremental impact for EP and Franchising and no additional cost is reported in the table.

¹⁶⁷ Further information on the demand and public sector funding scenarios considered in this Assessment can be found in Section 3.7.1 of this Economic Case.

**Table 2.23: Summary of Impact on Public Accounts
(2010 prices, PV)**

LCRCA	EP	Franchising
Revenue (Supported Services)	-£66m	-£575m
Operating Costs (Administration of EP and Franchising)	£18m	£48m
Investment Costs (ZEV)	£0m	£265m
Operator Subsidy/Supported Service Contract Costs	£44m	£527m
<i>Sub Total (net impact)</i>	<i>-£4m</i>	<i>£266m</i>

Central Government: Transport	EP	Franchising
Revenue	£5.1m	£6.4m
Operating Costs	£0m	£0m
Investment Costs	£0m	£0m
<i>Developer and Other Contributions</i>	<i>£0m</i>	<i>£0m</i>
<i>ZEV Subsidy</i>	<i>£0m</i>	<i>£0m</i>
<i>Subsidy (BSOG)</i>	<i>£0m</i>	<i>£0m</i>
Total	£1.0m	£272m

Central Government: Non-Transport	EP	Franchising
Indirect Tax Revenues	£2.6m	£0.2m

Totals	EP	Franchising
Broad Transport Budget	£1.0m	£272m
Wider Public Finances	£2.6m	£0.2m

In addition to these costs, there are indirect public sector costs associated with impacts on other public transport modes as well as reduced costs from modal shift away from car use.

The other public transport modes modestly impacted will be the Merseyrail system and cross river ferries, both contracted by LCRCA. Some of the increased demand for bus travel will be abstracted from these modes which has a negative revenue impact on LCRCA. The impact on Merseyrail and ultimately LCRCA is estimated to be £5.1m and £6.4m for EP and Franchising respectively. The revenue impact on ferries will be much smaller and not material in comparison.

Modal shift away from car use reduces maintenance costs of highway infrastructure due to fewer car journeys generating wear and tear. The impact of this on public accounts is a cost benefit of less than £0.1m for both EP and Franchising.

11.3. Indirect Tax Revenues

Modal shift from other modes to bus, in particular car and rail, will impact the indirect tax collected by government. Both of fewer car journeys and fewer rail journeys affect tax income: the former from reduced fuel consumption and the tax income from the duty paid on it and the latter from the indirect taxation impact on rail fares as described in TAG. In turn, additional bus journeys will have the reverse indirect taxation impact but in relation to bus fares, which partially nets off the loss in tax from other modes. The impact of this on Central Government accounts is about £2.6m for EP and £0.2m for Franchising.

Table 2.24: Summary of Indirect Tax Impacts

Central Government Funding: Non-Transport	EP	Franchising
Road Infrastructure	-£0.8m	-£0.8m
Bus and Coach	£4.3m	£1.7m
Rail	-£0.9m	-£0.6m
Indirect Tax Revenue Total	£2.6m	£0.2m

Figures above may not sum up to the total due to rounding.

11.4. Performance Against Other Scenarios

The table below summarises the impacts on public accounts across the different scenarios tested as part of the appraisal. It shows that the cost to the broad transport budget ranges, for EP, between a net zero change, and a £61m loss, whereas under Franchising it ranges from £135m cost saving to £293m, however noting that this includes a £265m investment in fleet (thus Franchising also leading to a net cost saving for the public sector excluding the fleet investment).

Table 2.25: Summary of Impacts on Public Accounts

**85% of pre-COVID
demand trajectory**

**100% of pre-COVID
demand trajectory**

Option - EP	Current funding	Increased funding	Reduced funding	Current funding	Increased funding	Reduced funding
Cost to Broad Transport Budget	£1.0m	£5.0m	£3.9m	£61m	£0m	£61m
Indirect Tax Revenues	£2.6m	£1.5m	£1.7m	£1.5m	£8.1m	£1.5m

Option - Franchising	Current funding	Increased funding	Reduced funding	Current funding	Increased funding	Reduced funding
Cost to Broad Transport Budget	£272m	£276m	£283m	£293m	-£135m	£293m
Indirect Tax Revenues	£0.2m	-£0.7m	-£0.3m	£6.5m	£4.5m	£6.5m

12. Economic Appraisal Outputs

12.1. Introduction

This Section summarises the outputs of the economic appraisal of the different options under consideration. These outputs are presented in the standard reporting tables from TAG, including the Analysis of Monetised Costs and Benefits (AMCB) table, with the standard accompanying metrics: the Net Present Value (NPV) and Benefit Cost Ratio (BCR).

It should be noted that, in the context of this Assessment, the guidance places greater emphasis on the NPV than on the BCR, including because transferring costs and revenues between the private and the public sectors can make the BCR a less useful comparative metric of the economic performance of each of the options (with private sector costs and revenues reported as part of the PVB and public sector costs and revenues on the PVC in the standard TAG definition of the BCR).

12.2. Economic Appraisal of Scenarios

The Economic Appraisal considers each option against the net benefits and costs relative to the Reference Case. The performance of each option is summarised in the table below. Keeping consistency with previous Sections, these results are provided for the demand scenario¹⁶⁸ that assumes an 85% recovery of the pre-COVID-19 demand trajectory and the funding scenario that assumes constant LCRCA budget, in real terms.

Table 2.26: Transport Economic Efficiency (TEE) for EP and Franchising

Non-business	EP	Franchising
Commuting	£166m	£123m
Other	£72m	£121m

Business	EP	Franchising
User Benefits	£8.1m	£8.1m
Private Sector Provider Impacts	£9.1m	£274m
Other Business impacts	£0	£0
Net Business Impact	£17m	£282m
Total Benefits (TEE)	£256m	£525m

¹⁶⁸ Further information on the demand and public sector funding scenarios considered in this Assessment can be found in Section 3.7.1 of this Economic Case.

Table 2.27: Analysis of Monetised Costs and Benefits for EP and Franchising

	EP	Franchising
Noise	£0.1m	£0.1m
Local Air Quality	£0.2m	£0.3m
Greenhouse Gases	£0.8m	£1.0m
Accidents	£0.9m	£1.2m
Economic Efficiency: Consumer Users (Commuting)	£166m	£123m
Economic Efficiency: Consumer Users (Other)	£72m	£121m
Economic Efficiency: Business Users and Providers	£17m	£282m
Wider Public Finances (Indirect Taxation Revenues)	-£2.6m	-£0.2m
Present Value of Benefits (PVB)	£255m	£528m
Broad Transport Budget – Present Value of Costs (PVC)	£1.0m	£272m
Net Present Value (NPV)	£254m	£256m
Benefit Cost Ratio (BCR)	>50	1.9

As introduced above, for a scheme where there is a substantial transfer of revenue and costs between the private and public sectors, the TAG compliant BCR is not a useful metric to compare options (with the NPV being more appropriate).

However, an alternative BCR (a ‘social BCR’) which does not distinguish between public and private sector costs has been derived and provides a like-for-like comparison between options. This BCR was used in the context of other bus policy schemes (for example, for Nexus’ Quality Contract Scheme) and is recognised in the DfT publication¹⁶⁹ which adopts the current approach for the BCR (‘NATA’ BCR) as a sensitivity test which is appropriate to perform.

This measure represents the benefit ‘return’ from spending the costs of the scheme and allows a comparison between different uses of the same resources. Although similar to a DfT ‘NATA’ BCR in concept the calculation comprises the total present value benefits and

¹⁶⁹ NATA Refresh: Appraisal for a Sustainable Transport System (Department for Transport, 2009).

revenues divided by costs (rather than the ratio of net private sector to net public sector impact).

Table 2.28: Adjusted Analysis of Monetised Costs and Benefits for EP and Franchising with alternative BCR and with alternative BCR approach

TAG Approach	EP	Franchising
Present Value of Conventional Benefits	£255m	£528m
Present Value of Wider Economic Impacts	£97m	£108m
Adjusted Present Value of Benefits (PVB)	£352m	£635m
Broad Transport Budget – Present Value of Costs (PVC)	£1.0m	£272m
Adjusted Net Present Value (NPV)	£351m	£363m
Adjusted Benefit Cost Ratio (BCR)	> 50	2.3

Social BCR Approach, excluding WEIs	EP	Franchising
Present Value of Conventional Benefits	£564m	£546m
<i>Broad Transport Budget – Present Value of Costs (PVC)</i>	£309m	£290m

	EP	Franchising
Net Present Value (NPV)	£254m	£256m
Social Benefit Cost Ratio (BCR)	1.8	1.9

Excluding Wider Economic Impacts, EP and Franchising would deliver Medium and High initial VfM, respectively – although accepting that the difference is not material, considering only the monetised impacts, and both would be justified from a public intervention perspective. In addition, both options include unmonetised benefits however these are not expected to be of a magnitude as to increase the overall VfM assessment of either beyond High initial VfM.

12.3. Economic Appraisal Outputs for Scenarios under consideration

The tables below present a summary of the VfM assessment for the monetised benefits for EP and Franchising under the different scenarios assessed for the Economic Case.

The range of scenarios allow consideration of whether EP and Franchising deliver VfM across a range of outcomes and whether or not the relative performance varies between delivery options.

Table 2.29: VfM – Franchising scenarios

Franchising	Recovery of 85% of pre-COVID-19 demand			Full recovery of pre-COVID-19 demand		
	Current funding	Increased funding	Reduced funding	Current funding	Increased funding	Reduced funding
Supported Services Budget						
Present Value of Benefits (PVB)	£528m	£674m	£486m	£719m	£502m	£718m
Broad Transport Budget – Present Value of Costs (PVC)	£272m	£276m	£283m	£293m	-£135m	£293m
Net Present Value (NPV)	£256m	£398m	£203m	£426m	£637m	£425m
Benefit Cost Ratio (BCR)	1.9	2.4	1.7	2.5	FP	2.4
Social Benefit Cost Ratio (BCR)	1.9	2.4	1.7	2.2	3.2	2.2

Table 2.30: VfM Assessment – EP scenarios

EP	Recovery of 85% of pre-COVID-19 demand			Full recovery of pre-COVID-19 demand		
	Current funding	Increased funding	Reduced funding	Current funding	Increased funding	Reduced funding
Supported Services Budget						
Present Value of Benefits (PVB)	£255m	£413m	£195m	£369m	£535m	£369m
Broad Transport Budget – Present Value of Costs (PVC)	£1.0m	£5.0m	£3.9m	£61m	£0m	£61m
Net Present Value (NPV)	£254m	£408m	£191m	£309m	£535m	£309m

Supported Services Budget	Current funding	Increased funding	Reduced funding	Current funding	Increased funding	Reduced funding
Benefit Cost Ratio (BCR)	>50	> 50	49.4	6.1	FP	6.1
Social Benefit Cost Ratio (BCR)	1.8	2.3	1.6	1.8	2.7	1.8

FP = Financially positive

Across all but one scenarios, Franchising delivers a higher NPV and in all scenarios a higher social BCR than EP. Franchising delivers High initial VfM (only considering the monetised impacts and excluding any Wider Economic Impacts, on the basis of the social BCR) for all scenarios except for where there is reduced demand and budget, where it delivers Medium VfM. EP delivers High VfM for three scenarios and Medium VfM for the other three.

Consideration of Wider Economic Impacts (increasing user benefits by 43% and 40% for Franchising and EP respectively) and non-monetised impacts may lead to Very High VfM for some scenarios (e.g. full recovery of demand with increased budget under Franchising), but it is not anticipated that there would be substantial differences between EP and Franchising.

Therefore, from an economic perspective, both interventions would be justified and could be seen as delivering VfM for the public sector.

12.4. Sensitivity Testing

This Section outlines the approach, description and results of the sensitivity tests that were performed in addition to the core analysis to test the robustness of the modelling and the BCR's sensitivity to changes in some of the key assumptions. A range of sensitivity tests were considered and a number of these were retained as the Value for Money position was likely to be most sensitive to the parameters involved in these.

Three sensitivity tests (ST) were conducted as follows:

1. Additional Reduction in Post-COVID Passenger Demand Level
2. Increase in Operator Margins under Franchising
3. Decrease in Operator Margins under Franchising

All sensitivities listed above are carried out based on the central scenario – namely the scenario which assumes the current Budget is maintained in real terms and demand recovers to 85% of the pre-COVID trajectory. These tests were selected as the VfM

position was likely to be most sensitive to these parameters: demand, cost and margins¹⁷⁰. A description of these tests is set out below.

1. Additional Reductions in Passenger Demand

Assesses the impact of revenue reductions of 10 additional percentage points, reducing post-COVID passenger demand recovery from 85% to 75%. There is continued uncertainty surrounding the future of travel, including bus travel moving forward from the COVID-19 pandemic. A test has been run to further reduce demand to understand the impact of Bus Franchising or an EP with a more conservative outlook on future bus travel uptake and travel behaviour.

2. Increase in Service Operating Costs

Assesses the impact of increasing service operating costs through the application of an additional 1.5 percentage points to the operator margin assumed under Franchising¹⁷¹. The eventual Operator bid margins will be influenced by the nature of the contracts issued, and the level of competition for the contracts. This test also accounts for the inherent uncertainty in service costs, for example being representative of material increases in Operator overheads¹⁷² or in bus fuel/energy costs¹⁷³.

3. Decrease in Operator Margins

Similar to the second sensitivity test, this tests the impact of decreasing service operating costs through applying a 1.5 percentage points reduction to the Operator margin assumed under Franchising.

The below table summarises the impacts of the sensitivity tests on the key economic appraisal metrics:

170 It is noted that these are all individual and not combined sensitivities, which TAG does not require. The approach taken is consistent with TAG Units M2.1 and M4. See also Financial Case Section 5.7.

171 Within the monetised appraisal, there is no difference in impact between an increase in overall service operating costs and an increase in the assumed Operator margin.

172 Operator overheads represent 12.5% of base year operating costs as illustrated in Figure 2.5 of this Economic Case, a 12.0% overhead increase would have the effect of increasing overall operating costs by 1.5%, equivalent to this sensitivity test.

173 Fuel costs represent 12.6% of base year operating costs (ibid), an 11.9% energy cost increase being equivalent to this test.

Table 2.31: VfM Assessment – Franchising scenarios (ST)

Franchising

Supported Services Budget	Central scenario	ST: 1	ST: 2	ST: 3
Present Value of Benefits (PVB)	£528m	£393m	£418m	£594m
Broad Transport Budget – Present Value of Costs (PVC)	£272m	£265m	£252m	£283m
Net Present Value (NPV)	£256m	£83m	£166m	£310m
Social Benefit Cost Ratio (BCR)	1.9	1.3	1.6	2.0

Franchising delivers a higher NPV under sensitivity test 3, as a result of assumed lower Operator margins, against the core scenario for all other scenarios, the reverse is true. Sensitivity test 1 assumes reduced demand and as a result the lowest NPV and smallest BCR.

Franchising delivers High VfM (only considering the monetised impacts and excluding any Wider Economic Impacts, on the basis of the social BCR) in ST3, Medium VfM in ST2 and Low VfM in ST1. It is noted that the ongoing management costs of Franchising have prudently not been reduced within this test, accounting for the fact that there would be fewer services to procure and to manage. This does not reflect what would happen in actuality if passenger demand was significantly lower such as in sensitivity test 1. Corresponding reductions in LCRCA costs over time would ensure that, even under what is considered a low-probability outcome, VfM could be achieved.

12.5. fM Assessment and Conclusions

The VfM assessment for the options considered is summarised below, which includes the monetised and non-monetised aspects, the distribution of impacts, and consideration of the level of certainty around forecast outcomes.

1. Combining monetised and non-monetised aspects and consideration of the distribution of those benefits

	EP	Franchising
Net Present Value (NPV):	£254m	£256m
Overall non-monetised impacts:	Beneficial	Large beneficial
Distributional benefit	Slight beneficial	Beneficial

The Franchising Option offers LCRCA advantages in comparison to the EP Option, including in terms of delivering a wider range and scale of overall non-monetised impacts, and advantages in terms of LCRCA being able to influence distributional outcomes in its specification of the bus network in aligning benefits with the areas of the city region which most need them.

2. An assessment of certainty in outcomes, partially informed by sensitivity testing but also referencing the nature and time-profile of uncertainty around options

	EP	Franchising
Uncertainty during transition:	Medium	High
Uncertainty during operation:	Low	Low
Uncertainty around evolution:	High	Low

Both of the EP and Franchising Options have associated uncertainty, although on different time-profiles. For EP, there is some uncertainty over its initial introduction and what bus Operators will agree for inclusion in the scheme; however that the two main Operators have put forward an initial proposal is a clear advantage. During the term of that partnership (or any future scheme) the level of uncertainty would be low, but when it comes to introduction of future schemes or renegotiation of the first scheme – for example in line with a wider policy change – the level of uncertainty would be materially higher. This is because (re)negotiation provides opportunities for Operators to seek to undo or relax the requirements of previous schemes.

For Franchising, uncertainty is highest over the ‘transition’ period of its introduction, when there is the potential for legal challenge and because the length of transition period needed means that the first contracts must be signed before LCRCA has achieved cost certainty for all services. Once in place and settled, the level of uncertainty is much reduced, including allowing LCRCA maximum flexibility to respond to changes in the market for bus travel and wider policy context.

3. VfM, appraised in line with DfT’s TAG

	EP	Franchising
Initial VfM Category:	Medium-High	High
VfM including Wider Impacts:	High	High
Adjusted VfM considering: • Non-monetised impacts • Distributional benefit • Uncertainty	High	High

Both EP and Franchising can be seen to represent VfM to the public sector within the Medium-High and High categories. The interpretation of this is that either choice would be a justified intervention for LCRCA to take, the decision of which is to be preferred being free to be informed by other considerations represented in the wider objectives.

Both EP and Franchising show advantages against the Reference Case – that is LCRCA investment in either option would be outweighed by the resulting benefits. In terms of the quantum of net benefit remaining, Franchising performs somewhat better and has advantages in terms of the influence it gives LCRCA over the distribution of benefits across the LCR. Both options have associated uncertainty, more in the short term for Franchising (during transition) and longer term for EP (when it comes to (re)negotiating the scheme(s) as the context changes.

13. Conclusion

13.1. Introduction

This Section provides a summary of the economic performance of EP and Franchising under the baseline scenario, with the main impacts summarised in an Options Appraisal Summary table which includes monetised and non-monetised impacts. These impacts are then summarised in the VfM statement for the options considered.

13.2. Option Appraisal Summary

Table 2.32: Option Appraisal Summary

ECONOMY	EP	Franchising
Business Users	£8.1m	£8.1m
Transport Providers	-£9.1m	£274m
Reliability (Business Users)	Neutral	Neutral
Regeneration	Neutral	Neutral
Wider Impacts	£97m	£108m
ENVIRONMENT	EP	Franchising
Noise	£0.1m	£0.1m
Air Quality	£0.2m	£0.3m
Greenhouse Gases	£0.8m	£1.0m
Landscape	Neutral	Neutral
Townscape	Neutral	Neutral
Historic Environment	Neutral	Neutral
Biodiversity	Neutral	Neutral
Water Environment	Neutral	Neutral
SOCIETY	EP	Franchising
Commuting & Other Users	£239m	£243m
Reliability (Commuting & Other Users)	Slight Beneficial	Slight Beneficial
Physical Activity	Neutral	Neutral
Journey Quality	Neutral	Slight Beneficial
Accidents	Slight Beneficial	Slight Beneficial
Security	Neutral	Neutral
Access to Services	Slight Beneficial	Slight Beneficial
Affordability	Slight Beneficial	Beneficial
Severance	Neutral	Neutral
Option and Non-Use Values	Neutral	Neutral
PA	EP	Franchising
Cost to Broad Transport Budget	£1.0m	£272m
Indirect Tax Revenues	£2.6m	£0.2m

13.3. VfM Statement

Franchising offers LCRCA advantages in comparison to EP, including in terms of generating a wider range and scale of overall non-monetised impacts, and advantages in terms of LCRCA being able to influence distributional outcomes in its specification of the bus network in aligning benefits with the areas of the LCR which most need them.

Both EP and Franchising show advantages against the Reference Case – that is LCRCA investment in either option would be outweighed by the resulting benefits. In terms of the quantum of net benefit remaining, Franchising performs somewhat better and has advantages in terms of the influence it gives LCRCA over the distribution of benefits across the LCR. Both options have associated uncertainty, more in the short term for Franchising (during transition) and longer term for EP (when it comes to (re)negotiating the scheme(s) as the context changes).

The remaining cases of this Assessment provide the further considerations that LCRCA must take into account in making a decision of which is the most appropriate option to take forward, including affordability, deliverability and the level of risk which come with the options.

The Commercial Case

1. Introduction

The purpose of this Commercial Case is to assess the proposed commercial models of the two shortlisted¹⁷⁴ alternative bus Delivery Options, Franchising and EP, with reference to the Green Book Guidance requirements and Franchising Guidance.

Requirements of Green Book Guidance

The Green Book Guidance requires an assessment of the proposed commercial arrangements for each option to determine whether a commercially viable deal can be achieved. This includes:

- an evaluation of the required procurement arrangements to implement the proposed service changes;
- an assessment of how these arrangements can be procured competitively; and
- an assessment of the relevant risks and how these will be managed.

Under the Franchising Guidance, the Assessment should consider how the options could be procured competitively and what the contractual arrangements would look like, with the view to ensuring, for Franchising proposals in particular, that the proposed franchised services could be secured under local service contracts or through service permits.

Requirements of Franchising Guidance

The Franchising Guidance presents a number of elements that the Assessment should consider, particularly for Franchising, including:

- the commercial model they intend to employ;
- the size and geographical scope of the areas for Franchising;
- the duration of contracts;
- how cross boundary services will be facilitated (including how the service permit system will be used to enable those services to operate);
- whether Franchising will be phased-in gradually;
- other key contractual arrangements, including those relating to the transfer of staff;
- how they intend to facilitate strong competition for contracts and encourage involvement of SMO; and
- the key commercial risks, their potential impacts and how they would be mitigated and managed.

¹⁷⁴ As set out in Section 6 of the Strategic Case, the VPA scheme (or “Status Quo”) ranks behind the EP option against all Policy Objectives and BSIP funding is not available under VPA. The Status Quo option has been assessed but is not considered as an option for future bus provision.

Structure of this Commercial Case

To address these requirements in the context of bus services in the LCR, this Commercial Case will:

- (a) assess the existing commercial arrangements for bus services within LCRCA;
- (b) outline the proposed commercial arrangements under each of the bus Delivery Options, including key contractual principles and potential mechanisms;
- (c) consider potential risk allocation and implications under each option;
- (d) outline key procurement arrangements and develop the wider procurement strategy; and.
- (e) reflect the requirements of the Franchising Guidance, which sets out several additional areas that must be considered as part of a commercial case for a Franchising Scheme, each of which is addressed below. These include:
 - (i) size, geographical scope and length of franchise contracts;
 - (ii) key contractual arrangements and mechanisms;
 - (iii) phasing of franchise contracts and implementation;
 - (iv) how the involvement of SMO will be facilitated;
 - (v) measures for promoting strong competition;
 - (vi) what transition period arrangements will be required and how services will be protected and what commercial arrangements will be put in place to manage transition;
 - (vii) how cross-boundary services will be facilitated;
 - (viii) commercial risks, their potential impacts, how they are allocated and potential mitigations; and
 - (ix) other key contractual issues, including those relating to transfer of staff (e.g., personnel implications, pensions and TUPE).

To address the above requirements, this Commercial Case is structured as follows:

(a) **Section 2** - Commercial Objectives of LCRCA

The key commercial objectives of LCRCA which have been developed for the assessment of the two shortlisted future Delivery Options¹⁷⁵.

(b) **Section 3** - Overview of LCRCA Bus Market

An overview of the current bus market and the interventions made by LCRCA. This considers the strengths and weaknesses of the current arrangements, with specific commentary on the impact of COVID-19 over the last two years.

¹⁷⁵ See Section 6.9 of Strategic Case, Options Shortlisting Conclusion.

(c) **Section 4** - Commercial Assessment of Franchising Model

An assessment against each of the key areas required under the Franchising Guidance, and assessment of the benefits and challenges of this option against the Commercial Objectives of LCRCA (documented in Section 2).

(d) **Section 5** - Commercial Assessment of an EP Scheme

An assessment of the benefits and challenges of an EP Scheme against the Commercial Objectives of LCRCA.

(e) **Section 6** – Conclusion.

2. Commercial Objectives

LCRCA developed a series of Commercial Objectives for the Assessment as required by the Franchising Guidance. The Commercial Objectives build on the policy and scheme objectives described in Section 5.3 of the Strategic Case, and relate to the commercial elements of the Assessment concerning control, value, competition and risk. This Section describes the Commercial Objectives agreed by LCRCA.

2.1. Public Sector Influence

LCRCA requires certainty that its investment will support its intended outcomes. The Delivery Option's commercial model should allow LCRCA to have sufficient influence over bus network outcomes.

2.2. Best Value

The Delivery Option must robustly and transparently show that it is able to achieve the best combination of price and quality which will contribute to passenger affordability.

2.3. Driver of Competition between bus operators

The Delivery Option should be commercially viable for Operators and facilitate strong competition on a 'level playing field' basis, whilst being compliant with relevant competition rules.

The model must facilitate the participation of SMO and new entrants to the market by removing barriers to entry.

Competition is key to driving the quality of bus services and putting downward pressure on both franchise contract payments and fares.

2.4. Appropriate Risk allocation

The Delivery Option should allocate risks to the public and private sectors that they are most capable of managing. Risk allocation should be considered in a number of areas including fare revenue risk, operating cost risk, service standards and asset provision.

2.5. Ease of Implementation of Option

The Delivery Option must be practical to implement and put in place a model that is sustainable over time.

2.6. Recovery Robustness

The Delivery Option must allow LCRCA to manage the network effectively during times of disruption.

3. Overview of LCRCA bus market

3.1. Introduction

In this Section we set out the details of the current bus market in LCRCA, the commercial arrangements that are currently in place in the form of a VPA (known as “the Alliance”) and list the range of interventions that LCRCA currently makes to support bus travel in the LCR. The following Sections set out:

- (a) Current Regulation - describes the current regulatory environment;
- (b) Current Market Structure - describes the structure of the market in the LCR, including operators, as well as current fleet and depot provision;
- (c) VPA / Alliance - describes the purpose, effectiveness and challenges of the VPA, including impact of COVID-19;
- (d) Current LCRCA interventions - describes the current bus market interventions undertaken by LCRCA;
- (e) Risk allocation of Status Quo - describes the risk allocation under the Status Quo; and
- (f) Summary against commercial objectives - provides a summary of the current market for bus relative to the commercial objectives.

3.2. Current Regulation in LCR bus market

As set out in Section 3.3.2 of the Strategic Case, bus services in the LCR are deregulated, consistent with other bus services outside of London. In this model, private sector bus Operators plan and operate bus services which are registered with the Traffic Commissioner. Operators provide bus services commercially and compete for passengers based on the quality of service provided and the fares charged for journeys. While there is an Alliance in place in the LCR, there is no obligation for Operators to join or comply with the principles or objectives of the Alliance.

3.3. Current Market Structure in the LCR

The following Section sets out the current market structure in the LCR, including the market share of Operators, current fleet and depot provision.

The bus market in the LCR has 2 large Operators, Arriva and Stagecoach that make up c. 57% and c. 26% of bus mileage.

The remaining mileage is provided by a number of smaller Operators. A breakdown of market share by mileage for all bus services (including school and charter services) is provided in the table below:

Table 3.1: Q1 2022-23 Market Share for Bus Operators in the LCR

Bus operator	Market share (bus passenger demand %)
Arriva	66%
Stagecoach	22%
Huyton Travel	5%
Cumfybus	3%
Al's Coaches	1%
Hattons Travel; Maghull Coaches; Peoples Bus; A2B; Eazibus; Other	3%

Source: Data provided by operators and LCRCA¹⁷⁶

3.3.1. Current Fleet in use in LCRCA region

There are currently c.1,110 buses operating within LCRCA (including school services), the majority of which are owned or leased by individual Operators running bus services across the region.

A breakdown of the number of commercial buses and their average age as of 2021 is provided in the table below. As can be seen from the table below, the average age of fleet in the LCR is c.9 years.

Table 3.2: Average Fleet Age, 2021

Bus Operator	Number of buses in the network	Average fleet age (in years)
Arriva	611	9.3
Stagecoach	243	6.5
HTL	42	10.0
Cumfybus	50	10.2
Al's	34	12.3
Selwyns	31	10.3
Hattons	28	10.27
People's Bus	18	12.5
Maghull	17	15.2

¹⁷⁶ Q2 data, the latest available at the time of developing the Assessment, was affected by industrial action and has therefore not been included due to being unrepresentative of normal conditions.

Bus Operator	Number of buses in the network	Average fleet age (in years)
MD Bus	8	15.6
A2B	7	11.6
Eazibus	6	12.3
Total	1,110	9.09

The majority of fleet, or 80%, operating in the LCR are diesel, with 12% being hybrid between diesel and some form of low emission technology. 4% of the fleet is made up of hydrogen and electricity, with the remaining 4% unspecified. The breakdown below provides an overview of vehicle fuel type for the fleet.

Table 3.3: Fleet Numbers, 2021

Fuel Type	Fleet Numbers	Percentage of total fleet
Diesel	903	80%
Bio Fuel	19	2%
Electric	17	2%
Hybrid	128	12%
Hydrogen	-	-
Other (not specified)	43	4%
Total	1,110	100%

Operators are required to maintain vehicles to specified standards in order to retain an operator licence from the Traffic Commissioner.

Depending on exact specifications, buses operating within the LCR typically have an average useful life of 15 years. The Alliance requires signed up Operators to maintain an average fleet age of seven years. The following table presents the proportion of total fleet falling in each age category:

Table 3.4: Proportion of Total Fleet by Age, 2021

Age of bus	Number of buses in the network	Percentage of buses in the network
1 year or less	2	0.2%
1-5 years	242	22.3%
5-10 years	410	37.8%

Age of bus	Number of buses in the network	Percentage of buses in the network
10-15 years	360	33.2%
>15 years	72	6.5%

As shown in the table above, over 75% of all vehicles are over 5 years old, whilst the average age of the fleet across operators is 9 years old.

3.3.2. Depots in use in the LCR

Across the LCR there are currently 7 depots with capacity in excess of 50 PVR which are owned and operated by existing bus operators. Arriva owns five depots and Stagecoach owns two.

The location of these depots is spread across the LCR as shown in Figure 3.1 below.

Figure 3.1 Existing depots in the LCR



Depots are key to supporting the delivery of bus service operations across the LCR and play an important role in managing and maintaining the fleet and supporting the granting of and adherence to operator licences issued by the Traffic Commissioner's Office.

Lack of depot access is potentially a significant barrier to entry for new entrants/smaller operators under the existing arrangements, given the financial investment and lead times required to implement new depot infrastructure.

3.4. The VPA

3.4.1. Introduction to VPA

As described in 3.3.4 the Strategic Case, Arriva, Stagecoach and LCRCA have together formed the Alliance which sets out key arrangements and behaviours for delivery of bus services in the LCR. While one SMO, Cumfybus sought to be included in the Alliance, it has since left and as a result, no SMO are currently part of the Alliance.

The Alliance allows LCRCA to contribute to the strategic planning of the bus service network and enhance the certainty of Operator commitment to certain routes and fares. To date, the Alliance has developed a "Joint Business Plan" and "Joint Investment Plan".

3.4.2. Purpose of the Alliance

The underlying purpose of the Alliance is to increase bus patronage, emphasising the importance of bus as a means of transport within a connected LCR, promoting improvements in the image and perception of bus and targeting infrastructure investment to improve punctuality and journey speeds.

3.4.3. Process to establish the Alliance

The Alliance took approximately 12 months to negotiate and reach signature from when the initial heads of terms were shared.

A key element of the Alliance was to ensure that the bus Operators were committed to capital spend on improved buses.

3.4.4. Content of the Alliance Agreement

The Alliance is governed by an agreement which sets out:

- (a) "Key Workstreams", such as developing a bus network "that places bus at the heart of a connected city region", "making bus a mode of choice by changing the image and perception of bus", and "working with the Highways Authorities to target investment where it will make a difference to improve punctuality and journey speeds";

- (b) “Milestones”, such as “initiate a network review of the bus routes in the Sefton area by December 2016”, “change all existing Solo tickets to the 1-zone model by March 2017”, and “fit 90% of Operator’s local bus fleets with Wi-Fi by 31 December 2017”;
- (c) The Alliance’s governance structure and processes; and
- (d) Termination provisions, which include:
 - if LCRCA makes a “Bus Franchise Decision”, any party may serve a notice to terminate the Alliance (or its own involvement in the Alliance), which will take effect on expiry of the relevant notice period; and
 - any party can terminate its own participation for any reason on expiry of the relevant notice period.

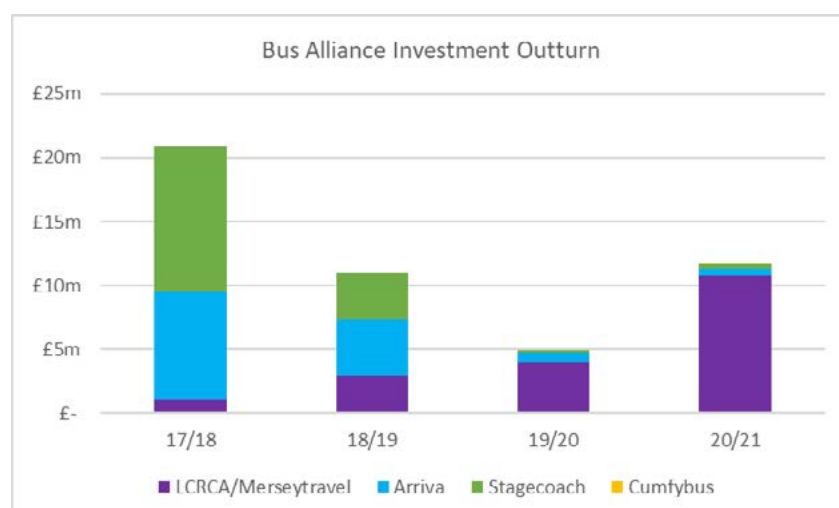
In addition, the Alliance is required to develop an annual investment plan which sets out the improvement interventions agreed between the parties as part of the Performance Management Framework for the successful running of the Alliance. The investment plan covers different aspects of the partnership investment obligations which include:

- (a) Reliability and punctuality of the network;
- (b) Customer experience on bus;
- (c) Network development; and
- (d) Customer development and growth.

3.4.5. Investment Under the Alliance

The table below sets out each party’s planned expenditure by year from 2017/18 to 2020/21. The planned expenditure in 2020/21 comes mainly from Merseytravel with Arriva and Stagecoach contributing only a marginal amount.

Chart 3.1 Alliance Investment Outturn



3.4.6. Bus network reviews

As part of its Bus Strategy and in collaboration with its Alliance partners, LCRCA carries out regular bus network reviews across all areas of the LCR.

The network reviews aim to deliver improved and simpler networks, VfM fare structures that are easy for passengers to understand, and greater investment in the bus fleet.

The purpose of the bus network reviews is to make interventions that encourage more people to travel by bus, thereby enhancing the commercial viability of services and over time resulting in less reliance on the public purse. This demonstrates LCRCA's use of existing mechanisms to work with the current Operators to enhance customer benefits and deliver on its wider objectives.

3.4.7. Alliance during COVID-19

The COVID-19 pandemic has presented a period of significant disruption for the economy and public service provision more generally, with significant impact upon the bus network including in the LCR (described in Section 3.3.3 of the Strategic Case).

The immediate impact of the pandemic was much reduced fare revenue for operators in the early stages of the pandemic, and significant reductions in the level of services (with remaining services supported by maintaining public sector payments to Operators at previous levels).

Additional funding was subsequently provided through the COVID-19 Bus Services Support Grant ("CBSSG") to increase service levels as lockdown was gradually eased during the summer of 2020. A condition of CBSSG was for bus Operators to take all possible steps to respond positively and quickly to reasonable requests from LTAs to amend services and routes (including operational hours, vehicles and sharing of data) for the period of the CBSSG receipt.

The Alliance has provided a forum throughout the COVID-19 pandemic to liaise with Operators and put in place measures to ensure a safe and reliable bus network.

3.4.8. Benefits and challenges of the Alliance

The Alliance is an innovative approach to managing bus service provision within the deregulated market. As described above, it commits Alliance members to service standards, without requiring significant financial risk for LCRCA.

3.4.9.Key benefits of the commercial model under the current bus arrangements

- (a) The Alliance partners have invested substantial effort in developing their operations, and the Alliance, Merseytravel and LCRCA have cooperated to align their strategic priorities;
- (b) The Alliance creates a forum for LCRCA and participating bus Operators to discuss and address key issues that affect bus services. It ensures that the two main Operators are aware of and are proactively engaged in supporting LCRCA to deliver its strategic objectives and the VfB; and
- (c) The Alliance has provided a forum during the COVID-19 pandemic for close monitoring of the network in the context of changing regulations, as well as collaboration in providing and maintaining a safe and secure network.

3.4.10.Key challenges of the commercial model under the current bus arrangements

There are several challenges with the current commercial model for bus services, which support the Case for Change for moving away from the existing delivery model, including the following:

- (a) The Alliance does not include all Operators. This can mean that Operators who are not party to the Alliance perceive initiatives undertaken by the Alliance to be against their interests. This includes a recent example in Cumfybus which joined the Alliance but have since left;
- (b) Progress on strategic policy issues requires agreement with all Alliance members: by its nature (as a voluntary agreement), the Alliance can only deliver outcomes based on consensus views agreed between the parties. This works well in relation to Policy Objectives - such as increasing the number of fare paying passengers - where the commercial Operators' and LCRCA's interests are aligned; but less well in relation to the achievement of wider Policy Objectives such as social inclusion, economic empowerment, enhancing connectivity to strategically important sites for economic growth, creating access to jobs, and meeting environmental priorities;
- (c) A primary objective of the Alliance is to commit Alliance partners to investment in the network. However, actual investment delivered through the Alliance is made up in the majority by LCRCA, with c. 80% of total investment coming from the public sector, and just 20% from Operators.

- (d) LCRCA has limited ability under the Alliance to hold Operators to account if objectives are not achieved. Although the Alliance is based on a contract, there is no performance regime associated with it, nor can LCRCA impose sanctions on Operators for missing targets or failing to deliver a level of service that is consistent with the VfB (including impact on fleet standards, fares & ticketing or transition to zero emission buses). A recent example of this relates to average age of fleet, which exceeds the Alliance commitment of 7 years;
- (e) The current arrangements expose LCRCA to revenue risk indirectly. If a commercial service ceases to be viable for an Operator, the Operator is free to amend that service or stop running it altogether. LCRCA must then decide whether to re-provide that service as a supported service in order to provide the same level of connectivity to affected communities. This means that LCRCA spends a significant proportion of its annual budget for bus services in a reactive manner and that it is exposed to the risk of declining passenger revenues in the LCR bus market. This is true across all deregulated bus services, but the Alliance provides no additional certainty to LCRCA; and
- (f) The existing market arrangements can be particularly problematic for SMO, with rising costs and uncertain revenues (linked to a long-term decline in fare-paying passengers) causing occasional instances of financial distress and a structural obstacle to growth and expansion. Given that the Alliance does not include any SMO, it cannot seek to address challenges for these Operators through this forum.

3.5. Current LCRCA interventions

3.5.1. Introduction

In this Section we describe the interventions that LCRCA makes in the bus market which are additional to the role of the Alliance (and which reflect what happens more generally in the deregulated bus market).

3.5.2. Tendered/supported services

LCRCA provides financial support for additional bus services which are socially necessary but are not commercially viable or attractive for Operators to run. These additional 'supported' services include additional departures (for example early morning or Sunday services) on otherwise viable routes, or in certain cases entire routes which would otherwise not be run

by Operators. Further description of these services is included in Section 3.3.3 of the Strategic Case.

Supported services make up around 15% of bus service mileage and are mostly run by smaller Operators; between them Arriva and Stagecoach, who run most commercial services, account for less than 15% of supported service mileage.

The average length of tendered contracts for supported services is 3 years, however this differs across contracts.

LCRCA spends £17.9 million per year on supported services (as at 2020/21). This expenditure is split into two main categories:

- (a) LCRCA lets contracts for the provision of bus services where services are not being provided by the market (these are gross cost contracts; and
- (b) LCRCA passes subsidies directly to commercial Operators to encourage them to continue to provide a service that is only marginally viable, e.g., to extend hours/days of operation (these contributions are known as “de minimis”).

De minimis payments make up approximately 20% of LCRCA’s expenditure on supported services (£3.6 million in 2020/21), while expenditure on supported services makes up the remaining 80% (£14.3 million in 2020/21).

In addition to planned supported services, LCRCA has occasionally intervened to provide services after Operator failure. This was highlighted when Halton Transport stopped operations in January 2020. LCRCA helped to arrange replacement commercial services, and also helped to facilitate reinstatement of commercial services with replacement Operators.

3.5.3. Ticketing and concessions

LCRCA promotes and manages a range of multi-modal and/or multi-Operator tickets which supplement the single Operator ticket products sold by individual bus Operators. LCRCA also supports an extension of the English National Concessionary Travel Scheme (“ENCTS”) allowing free travel from the age of 60 and for pass holders to travel free by bus. LCRCA currently makes ENCTS payments to Operators to compensate for the cost of these travellers.

In May 2014, LCRCA introduced an improved young people’s ticket offer, ‘MyTicket’, offering a fixed affordable price for a full day’s bus travel valid across all Operators. In 2015 LCRCA

increased the upper age limit for the ticket from 15 to 18 and extended the scheme from Merseyside to Halton, covering the entire LCR.

3.5.4. Depots and fleet interventions

LCRCA has introduced the Hydrogen Bus Pilot Project (“the HyBus Pilot”), which will see the creation of a new hydrogen refuelling station at the Arriva St Helens Depot together with 20 hydrogen powered buses which will be operated on the route 10 corridor between St Helens and Liverpool via Knowsley.

The HyBus Pilot will commence in 2023 and through it LCRCA aims to develop and sustain commercially viable hydrogen powered buses for the region, not only tackling poor air quality but significantly contributing to the zero-carbon mandate for Merseyside, as set out by the Metro Mayor.

The HyBus Pilot offers a considerable opportunity to further develop the LCR’s aspirations for a Hydrogen fuelled bus depot. The HyBus Pilot will be operated by Stagecoach and Arriva and will give LCRCA the opportunity to learn from the technology and its practical application for bus services fuelling.

This intervention by LCRCA is typical of where the public sector needs to provide support in the early stages of new technologies which, while not currently commercially viable, need to be tested in order to be more widely adopted.

3.6. Risk Allocation & Responsibility for Bus Services

As described above, bus services within LCRCA are run commercially by Operators except for supported services. The allocation of risk and responsibilities between LCRCA and Operators is described below.

3.6.1. Revenue Risk

Individual Operators take revenue and operating cost risk on all commercial services. For supported services, LCRCA either receives fare revenue (for supported services, where it pays the Operator for running the services) or makes de minimis payments to Operators for running the services.

While under the current Alliance arrangements, LCRCA has no regulatory or statutory duty to act as the Operator of last resort, in practice it will consider making interventions if there is a sudden withdrawal of commercial services.

Therefore, while there is little direct exposure to revenue risk, LCRCA is affected by reductions in revenue, as it can lead to

the cancellation of marginally commercial services, and this changes the priorities for LCRCA in assessing where to target funds for supported services.

3.6.2. Fares & Ticketing

Fares and ticketing are currently set by individual Operators, and LCRCA has little influence over either. Merseytravel promotes and manages a range of multi-modal and/or multi-Operator tickets and operates six travel centres at bus stations in the LCR, which provide information and ticket sales. Merseytravel's multi-Operator tickets supplement the ticket products sold by commercial bus Operators that are normally only available on the services operated by that Operator. The pricing of single operator tickets offered by individual Operators is set below the equivalent multi-Operator tickets offered by Merseytravel.

As set out in the Strategic Case, there are a number of deviations between the ticketing and payment options provided by Arriva and Stagecoach in the region, such as pricing, availability of returns and availability of other tickets.

These disparate products are not in line with the VfB or Commercial Objectives of LCRCA and highlight LCRCA's limited ability to influence fares & ticketing through the Alliance.

3.6.3. Employment of bus staff & station provision

All staff involved in the delivery of bus services are employed by individual operators. This includes drivers, revenue protection staff, maintenance staff, management and planning.

LCRCA currently employs a small number of staff to manage its limited interventions in the bus market.

Bus stations are also owned and managed by LCRCA and provided to Operators, with usage based charges.

3.6.4. Service specifications and branding

Through the Alliance there is currently a limited number of service requirements that Operators must comply with, such as driver training requirements and terms of the marketing and communications strategy. These requirements apply only to Operators that have entered the Alliance; other Operators cannot be forced to comply. The Alliance has limited scope to enforce changes to service specification within the network, with any significant changes being at the discretion of individual Operators.

3.6.5. Timetable and routes

These are the responsibility of individual Operators. If the frequency or timing of bus services is inadequate to meet

LCRCA's requirements, the only available mechanism currently available to LCRCA is to pay for additional services through tendered/de minimis supported services payments.

3.6.6. Commercial Risks

The table below sets out an assessment of the commercial risks associated with the current network arrangements, and the steps that LCRCA can take to mitigate these.

Table 3.5: Assessment of Commercial Risks

Risk – Description	Mitigation
LCRCA may be unable to achieve its VfB as its success is heavily dependent on the actions of Operators signed up to the Alliance.	LCRCA to monitor the Alliance's progress in meeting the VfB; and utilise powers through the Bus Services Act if the Alliance does not meet objectives.
Failure to deliver network initiative due to continued fall in patronage and increasing costs - this could put current service levels at risk if supported services requirements grow.	LCRCA to monitor Operators' services on a regular basis and maintain open dialogue with Operators to identify actions to support patronage and mitigate costs.
Failure to deliver fleet initiative as Operators may be unwilling to invest in ZEV.	LCRCA to consider incentivising Operators to upgrade to a zero-emissions fleet. DfT subsidies available on zero-emissions could support operators to invest in zero-emissions vehicles.
Failure to deliver fares and ticketing initiative due to challenges in negotiating pricing of multi-Operator tickets with operators.	LCRCA to work with Operators to establish a more cohesive ticketing system which works for all parties. Utilise powers through the Bus Services Act to achieve multi-Operator tickets.
Reputational risk for LCRCA if customers' expectations of the bus services are not met through the current bus arrangements.	LCRCA to engage with customers to understand their needs and feedback in respect of current services and how it could be improved. LCRCA to work with the Alliance to identify and respond to key themes from customers.

Risk – Description	Mitigation
Risk that there is limited/no market appetite for supported services, leading to limited competitive tension on price and quality.	LCRCA to undertake ‘market-testing’ of supported services with bidder market. LCRCA to bring understanding gained from market testing into design of contracts.
Risk of disruption to services if Operators become insolvent as services turn unprofitable.	LCRCA to regularly review operators’ financial performance. LCRCA to have contingency plans in place in case Operators become financially challenged and potentially insolvent.

3.7. Summary Assessment against Commercial Objectives

The table below sets out a summary assessment of the current bus arrangements against LCRCA’s commercial objectives as described in Section 2. The following assessment includes a rating of each option against the commercial objectives, whereby:

- **Green Rating** means high potential that the option allows for the delivery of the objective;
- **Amber rating** means that while the objective could be met under the option, there are a number of challenges; and
- **Red rating** means that it is unlikely that the objective will be met under the option.

Table 3.6: Summary of the Current Bus Arrangements

Commercial Objective	Description	Rating
Best Value	• Operators are free to stop running services where they are no longer commercially viable, which leads to increased demand for supported services. • As a result, supported services are then let on a reactive basis, with little opportunity for LCRCA to plan ahead in a strategic or coordinated manner. This reduces its ability to shape a pipeline of opportunities and prepare the market to get best VfM. • This causes LCRCA to focus on how they can provide for supported services instead of using its limited funds to optimise the network and deliver its objectives.	

Commercial Objective	Description	Rating
Driver of Competition	• Operators compete commercially for passengers on an “on street” basis, based on the quality of service and fares charged. • However, market competition is currently very limited, with two large incumbent Operators holding >90% market share. • Barriers to entry for commercial services are high due to lack of scale, access to depots and the strong position of the two major Operators.	
Appropriate Risk Allocation	• Operators are free to stop running services when they are no longer commercially viable. When this occurs, LCRCA will consider reinstating these as supported services, and this inevitably means that other supported services cannot be funded. • This results in LCRCA effectively holding a degree of revenue risk. The degree to which the public sector and LCRCA in particular have a “de facto obligation” to provide services has been highlighted by the interim arrangements in place since March 2020 to deal with the collapse in ridership due to the COVID-19 pandemic. • Further details of risks and responsibilities under the current bus arrangements are outlined within Section 3.4.9.1.	
Ease of Implementation	• Not applicable - the Bus Back Better strategy sets the requirement for LTAs to either pursue Franchising or put in place an EP Scheme.	
Recovery Robustness	• During the COVID-19 pandemic, a mechanism was required to provide support to Operators that was complex and difficult to administer. • The mechanism for COVID-19 required the involvement of LCRCA in specifying bus services but there was no contractual mechanism put in place between LCRCA and Operators. As a result, there was little or no direct control from LCRCA over services during this period.	

3.8. Conclusion

- (a) The Alliance creates a forum for LCRCA and participating bus Operators to discuss and address issues that are of strategic significance to each party. It ensures that the two main Operators are aware of LCRCA's strategic objectives and are engaged in delivering them, including managing periods of disruption and adverse impacts such as the COVID-19 pandemic. However, as discussed above, the mechanisms within the Alliance give few powers to LCRCA and this has made it difficult for LCRCA to implement its VfB (including elements such as fleet standards, fares & ticketing and transition to zero emission infrastructure).
- (b) The current LCR bus market is a market with duopoly-like characteristics, with two Operators (Arriva and Stagecoach) accounting for over 90% of bus passenger journeys. Only one SMO has joined the Alliance, and has since left, demonstrating the challenge of aligning LCRCA's strategic objectives with the commercial priorities of SMOs under the current bus arrangements, and potentially creating the perception that SMOs have little ability to influence the strategic direction of bus services in the LCR.
- (c) While the deregulated market appears to transfer risk to the private sector, Operators are free to stop running services when they are no longer commercially viable (e.g., operational risk transferred, but not market risk). The degree to which the public sector and LCRCA in particular have a de facto obligation to provide services has been highlighted by the interim arrangements in place since March 2020 to deal with the collapse in ridership due to the COVID-19 pandemic, which have provided LCRCA with little influence in relation to the network.
- (d) The existing market arrangements are particularly problematic for SMOs, with rising costs and uncertain revenues (linked to a long-term decline in fare-paying passengers) causing occasional instances of financial distress (e.g., Halton Transport) and structural obstacles to growth and expansion.
- (e) The Alliance gives LCRCA limited ability to hold Operators to account if performance metrics are not achieved. The voluntary nature of the Alliance means that LCRCA cannot contractualise delivery of strategic objectives which are not overtly linked to enhanced commercial performance, such as social inclusion, economic empowerment, creating access to jobs and building community cohesion.

As a result of the above assessment, and the policy direction, as set out in the Bus Back Better strategy, to implement either an EP or franchising, continuing with the Alliance is not currently an option.

4. Commercial Assessment and Proposed Model for Franchising

4.1. Introduction

This Section outlines LCRCA's proposed commercial arrangements for a franchise model for bus services in the LCR, which has been developed to address the requirements of the Franchising Guidance and aligns with the principles of the Green Book Guidance.

The model has been informed by existing bus franchise model examples such as the model used by TfL and various international examples, as well as the proposals put forward by the Greater Manchester Combined Authority. This Section includes:

- A description of the key components of the proposed Franchise Scheme as required of the Franchising Guidance, including:
 - (a) a summary of the scope, size and length of franchise contracts, including details of the proposed route packaging strategy;
 - (b) the proposed contractual arrangements and mechanisms for the franchise model, including risk allocation and responsibilities, the performance incentive regime and the contractual arrangements for fleet and depots;
 - (c) an outline of the proposed phasing and implementation of a Franchise Scheme, including the intended speed of roll out for franchise contracts and steps required to implement Franchising in the LCR;
 - (d) a summary of how the involvement of SMOs will be facilitated;
 - (e) an overview of competition considerations, including the measures which will be taken to ensure strong competition under a Franchising Scheme;
 - (f) a summary of transitional arrangements during the introduction of Franchising, including how services will be protected;
 - (g) an overview of how cross boundary services will be facilitated under Franchising;
 - (h) a summary of the proposed procurement strategy and arrangements for Franchising; and
 - (i) consideration of pensions and TUPE arrangements under a Franchising model;
- An assessment of the commercial risks of the proposed Franchising Scheme; and
- An assessment of the proposed Franchising Scheme relative to LCRCA's commercial objectives.

LCRCA has undertaken a detailed market engagement exercise, the findings of which have been used to inform the proposed Franchising model, with a number of amendments made to reflect views of the market. A summary of market engagement findings is included in the “LCRCA Bus Franchising Assessment: Market Engagement Supporting Paper”.

LCRCA recognises that some further elements of the commercial model for Franchising will benefit from further refinement. If the Franchising Option is to be pursued, LCRCA will undertake consultation as part of its obligations under the Bus Services Act.

4.2. Scope, size and length of franchise contracts

The Sections below outline the proposed scope of franchise contracts, including the approach to packaging services for Franchising into “Rounds” and “Lots”, and the size and the proposed length of each franchise contract.

4.2.1. Geographical Scope for Franchise contracts

Due to the size of the LCR and the number of suburbs and key corridors feeding into the city, LCRCA will split the bus network into geographical areas.

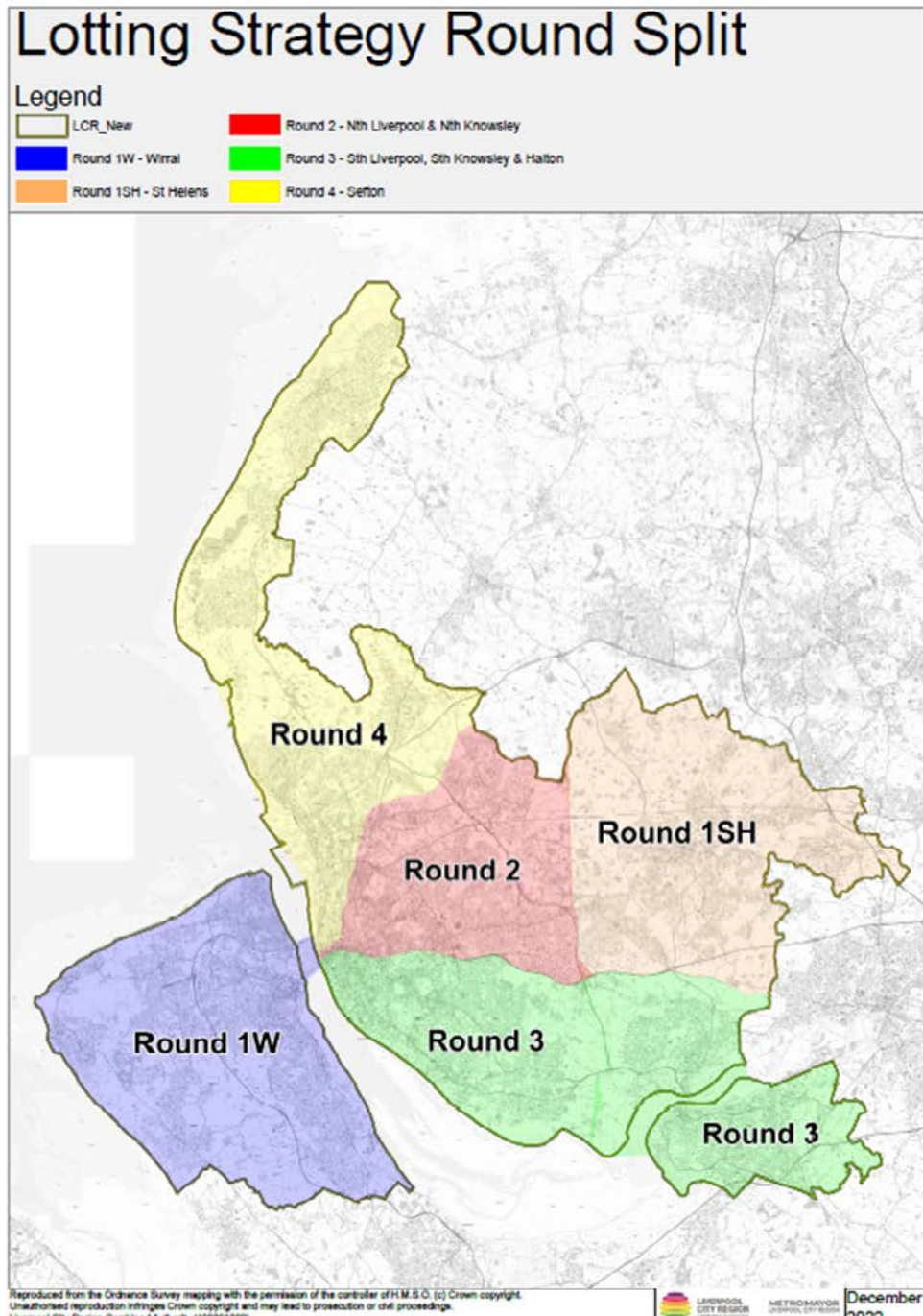
LCRCA has identified 5 such areas, referred to as ‘Rounds’.

The Rounds are as follows:

- (a) Round 1W: Wirral**
- (b) Round 1SH: St Helens**
- (c) Round 2: North Liverpool & North Knowsley**
- (d) Round 3: South Liverpool, South Knowsley & Halton**
- (e) Round 4: Sefton**

The following diagram illustrates the geographical composition of the proposed rounds. Further detailed Round maps are included with the Lotting Strategy (see “Lotting Strategy Supporting Paper”).

Figure 3.2 Lotting Strategy Round Split



4.2.2. Lotting Strategy

The lotting strategy has been updated following market engagement to reflect market views in relation to:

- providing lots of sufficient scale to attract bids from larger Operators, sized on the basis of a single depot; and
- providing lots that give smaller Operators the opportunity to participate and grow and encourage new SMO entrants.

Within each Round there are several Lots (group of services). The number of Lots will vary between each Round, influenced by the geographical area covered and the number of vehicles and services.

Each Round will be made up of Lots split into four categories: A, B, C & D– the following table provides a description of each category.

Table 3.7: Lot Categories

Category	Description	Indicative Peak Vehicle Requirement Range
A	Large number of services grouped together; specific depot included with Lot	50 - 100
B	Low frequency services; aimed at SMO	1 - 5
C	Single (am & pm paired) school contracts; aimed at SMO	1
D	Various PVR let on an individual route basis. Cross-boundary services.	

Category B, C and D Lots have been sized to attract SMOs. However, bidders for Category A lots may also wish to bid for some B, C and D lots, reflecting the economies of scale that can be achieved with a single depot. LCRCA appreciates that the scale of the SMO market may not be sufficient to fulfil all Category B, C and D. It is currently intended that Category B, C and D contracts will be let following the conclusion of the Category A Lots for a particular Round, enabling larger Operators to determine whether they are in a position to deliver the services and therefore bid with a view to ensuring competitive pricing and delivering public sector VfM. However, the specific programme for the letting of Lots within a Round is subject to further development and refinement.

A breakdown of the proposed scale of each Lot within each of the Rounds (together with the timing of procurement) is set out in the below table:

Table 3.8: Breakdown of the proposed scale of each Lot

A Depot B Local/SMEs C Schools D Cross-Boundary				
Round	Lots	PVR	Total PVR	Proposed Implementation
1W	1xA	107	186	September 2026
	11xB	22		
	47xC	47		
	2xD	10		
1SH	1xA	128	191	September 2026
	11xB	24		
	28xC	28		
	3xD	11		
2	2xA	144+102	263	June 2027
	7xB	12		
	0xC	0		
	1xD	5		
3	2xA	142+44	253	March 2028
	12xB	36		
	11xC	11		
	20xD	20		
4	2xA	50+59	173	December 2028
	9xB	34		
	23xC	23		
	1xD	7		
Table is indicative only				

4.2.3. Contract length

LCRCA can exercise a degree of flexibility regarding the length of franchise contracts. The applicable domestic EU legislation (Article 4(3) of Regulation (EC) No 1370/2007 as transposed into UK law) restricts contracts for bus services to a maximum length of 10 years.

LCRCA's proposed approach is to have fixed 7 year contracts for Category A Lots following initial Lots which may take the form of slightly shorter or slightly longer contracts to regulate the flow of contracts coming to the market.

Contract lengths for B, C and D categories will be agreed on a contract by contract basis and may be shorter in length to facilitate opportunities for new and existing SMOs.

These contract periods have been selected after considering the views of Operators captured during market engagement.

LCRCA has considered the option of having performance-based extension to fixed term franchises (which is included in TfL's bus contracts and GMCA's proposals) but intends to offer only a fixed term contract to help simplify the procurement and pipeline of Franchising opportunities.

4.2.4. Service Permits

The effect of LCRCA introducing the Franchising Scheme across all of the LCR from the commencement of the first Franchising services is that all other bus services operating in the LCR would be required to operate under service permits. This is a function of the legislation establishing the franchise area. Those services which would initially be required to operate under service permits would include cross-boundary services, those services excluded from Franchising and all of the services identified as being subject to Franchising in later Rounds, but which have not yet commenced operation as franchised services. This final group of services will reduce to zero over time as the services in the later rounds are let as new franchises.

The Service Permit Regime allows LCRCA, following relevant consultation, to set different conditions for different types of bus service. This would allow specific time limited service permits to be issued to support those services which have been identified as being franchised in later Rounds. It is expected that the service permits for those services identified as being franchised in later Rounds would have a limited number of conditions in order to reduce the risk of existing Operators choosing not to apply for a permit and allowing the service to lapse. Where an Operator does not apply for a service permit for a service or services, LCRCA will be required to decide whether to let a contract for that service or services or to allow that service to lapse.

Where LCRCA decides to let a contract for a service or services earlier than programmed there will be additional costs to LCRCA in relation to that service. Due to the light touch nature of the service permits to be utilised during the transition to Franchising, it is not anticipated that many service will be withdrawn by Operators. However, withdrawal of services is a risk that LCRCA retains under the current regime and is used to managing via the letting of supported service contracts. Further analysis in relation to private sector transport provider impact is set out in Section 8.4 of the Economic Case. Under Franchising LCRCA would also retain the right to refuse service permits for services that could undermine Franchised services. This right could be exercised to limit the extent to which fare

revenue is abstracted by Operators running services in the under service permits that compete with Franchise services.

The service permit conditions would also be designed to work in tandem with any relevant BSIP requirements in force at the time. The expiry of the term of those service permits supporting services to be Franchised would correspond to the commencement of the relevant Franchised service in order that there was no disruption to the services provided to customers.

The term of a service permit is set as part of the Service Permit Regime and there is no mechanism within that regime to allow for the shortening of the term. While there is a power for LCRCA to suspend or revoke a service permit, it can only be used in limited circumstances. In the event that there was a change in the order in which the Rounds were let, the Service Permit Regime would be able to manage a set of Franchise services commencing at a later date but would find an earlier commencement date more problematic.

The consultation on the Service Permit Regime would be completed before the introduction of the Franchising area. Information on the process for conducting the consultation is set out in the Franchising Guidance and the Service Permits Regime regulations. This will mean that LCRCA has a consistent regime which would apply to the relevant type of service managed by that permit type (e.g. cross boundary services and services that will become franchised). As non-franchised operations in the franchised area would be required to comply with the terms of the relevant Service Permit Regime, LCRCA would have a relatively strong control over service consistency between Operators within the LCR and between the different areas which are moving to full Franchising at different times.

It is considered that the use of the Service Permits Regime alongside the provision of a single Franchise area will provide a greater level of consistency of services during the transition period than there being multiple Franchise areas which are individually Franchised over time and having existing services operate within non-franchised areas under an EP arrangement which may be different for each area. Further details on the use of Service Permits is set out in Section 3 of the Management Case.

4.3. Key franchise contractual arrangements and mechanisms

LCRCA has considered the proposed contractual arrangements for Franchising. The key elements of the proposed approach are set out below including the proposed risk allocation and responsibilities, the

scope of the performance incentive regime, and arrangements for fleet and depots.

4.3.1. Risk Allocation and Responsibilities

Under Franchising the allocation of risks and responsibilities between the public and private sectors will change significantly from current arrangements.

The following table presents a high level summary of the risks and responsibilities between the public and private sectors, with the paragraphs that follow setting out further detail for each under Franchising.

Table 3.9: Summary of risks and responsibilities

Risk	Status Quo	Franchising
Revenue Risk	Private Sector	Public Sector
Revenue Protection Management	Private Sector	Public Sector
Operating Cost Risk	Private Sector	Private Sector
Employment of bus staff	Private Sector	Private Sector
Employment of network management staff	Private Sector	Public Sector
Service specifications and branding	Private Sector	Public Sector
Service performance	Private Sector	Private Sector
Timetabling	Private Sector	Public Sector
Customer Service	Private Sector	Public Sector
Fleet Provision, Financing	Private Sector	Public Sector
Depot Provision - Control systems/Ticketing maintenance Rota/Duty etc.	Private Sector	Public Sector
IT System	Private Sector	Public Sector

4.3.2. Revenue Risk

Under Franchising, LCRCA has selected gross cost contracts as the basis for its Franchising Scheme, this is based upon the following:

- gross cost contracts have significant precedent, most notably as the mechanism is used in London, the most established and largest Franchised Scheme in England. As a result, they represent a contract archetype that commercial Operators are familiar with;

- there is potential for some revenue risk to be transferred to franchise Operators under gross cost contracts. This can provide an incentive to maximise revenue (through mechanisms such as remuneration linked to revenue, or a proportion of revenue going directly to Operators). No specific incentives have been determined, and this will be an issue for detailed contract development;
- the alternative to the gross cost basis, net cost contracts, is more complex for bidders and has the potential to create perverse incentives. An example of this complexity is, in the current declining market, as revenue reduces and there is a need to cut service levels, it is unclear which party would be able to make the decision on which routes to remove;
- the wider transport sector, most notably rail franchising has recognised the challenges associated with net cost contracts and is moving away from them;
- should the private sector be asked to take revenue risk (such as under net cost contracts), this adds cost in terms of forecasting revenue as part of the bid process, as well as pricing for the risk.
- finally, there is the potential that public sector interventions targeted at increasing bus patronage may not see the benefit flow back to the public sector under net cost contracts. An example of this could include where a Clean Air Zone (CAZ) is implemented. The public sector would undertake the cost and effort to implement, but would not immediately realise all of the benefits under a net cost contract model.

Gross cost contracts will require LCRCA to be responsible for collecting all passenger fare revenue and implementing a common fares and ticketing policy across all franchised services. LCRCA will be at risk for any decreases in revenue (for example due to falls in patronage) and will be required to fund any resulting shortfalls.

Some existing tendered contracts for supported services operating in the LCR are already run on this basis, with LCRCA collecting fare revenue for these services and making a payment to operators to run the required services.

The only exceptions to this will be:

- cross-boundary services which will be subject to a Service Permit Regime from the introduction of Franchising; and
- non-franchised services which run wholly within the LCR during the period after the first franchise is introduced and before all LCR services are Franchised.

For these services, revenue risk will be taken by the private sector, but fare levels within the LCR and other standards will still be set by LCRCA.

4.3.3. Revenue Protection Management

Under Franchising, the responsibility for revenue protection management will move from the private sector (as under the Status Quo) to LCRCA. However, a first line of defence will remain with the private sector (through compliance checking for example, as part of the franchise contract). Private sector franchisees will be incentivised to facilitate high levels of revenue protection through an incentive based remuneration structure (e.g. with KPIs developed to monitor first line of defence for revenue protection). The KPIs and associated mechanisms will be developed as part of franchise contract design and development.

4.3.4. Service Specification

LCRCA will pay Operators to run services to a given frequency, specification and quality. While the defined level of frequency, specification and quality will be set out in the contract, LCRCA intends to develop a flexible change mechanism to allow the network to flex to meet demand (or reduce with any reduction in demand). The change mechanism will be developed as part of franchise contract design and development. This will be an essential element of managing budgets as bus demand changes under Franchising.

4.3.5. Operating Cost Risk

The amounts paid to Operators to run a franchise will be set in competition. The price bid by Operators should cover the bidder's underlying costs, together with their profit requirement. For the purposes of this Assessment, LCRCA has assumed a fixed percentage profit margin to the forecast costs of franchises (which has been based on market intelligence for other gross-cost franchises).

Franchise payments will be subject to indexation. This could be with general inflation (e.g. CPI), or a more specific index including (but not limited to) energy costs (which is particularly relevant in 2022) and/or labour costs. Other than this, Operators will be at risk for increases in operating costs.

Since Operators will be contractually bound to provide services once they have entered into the franchise contract, they will not have the flexibility to drop services which are no longer commercially viable (and they will have less incentive to do so as revenue risk will be held by LCRCA).

Franchise contracts will be re-let with full competition at the end of each franchise period. Therefore, LCRCA will be exposed to potential increases in the costs of franchises if underlying costs or the market's perception of risks or requirement for profits have increased.

4.3.6. Employment of bus staff

All bus drivers, maintenance and administrative staff associated with delivering bus services under franchise contracts will be employed directly by individual Operators. Many of these staff will need to TUPE-transfer from existing Operators, and a further transfer will occur every time a franchise changes hands. Further details on this process are included in Section 4.9.3.

Unlike the current bus arrangements, LCRCA will be required to undertake new functions under Franchising, including revenue management, management of ticketing/fare policies, timetabling, providing arrival/departure data and central support functions (e.g., customer services). The requirements for staff to facilitate the provision of these activities is described in the Management Case.

4.3.7. Service specifications and branding

Under Franchising, LCRCA would control the specification and branding of buses and related infrastructure/ticketing systems. Franchising would enable LCRCA to standardise vehicle quality requirements, external branding and identity for bus services, to support a consistent user experience across all local public transport services.

4.3.8. Timetabling of routes

Whereas currently bus Operators manage the timetabling of routes, under Franchising LCRCA would be able to specify the exact frequency, timing and number of buses for each service. However, the degree to which LCRCA would specify details of the timetable may vary between Lots.

4.3.9. Customer Services

Under Franchising, LCRCA would operate all central customer service and support functions. Passengers' day-to-day interaction with the bus network would be with Operators' bus staff (e.g., drivers) who would be responsible for maintaining the quality of service and customer interaction. The Operator's performance would be incentivised and measured through the performance incentive regime described below.

4.3.10. Performance incentive regime

Within each franchise contract LCRCA would incorporate a performance-based incentive regime which would give

Operators a commercial incentive to provide consistently high standards of performance. LCRCA's proposed approach is to offer financial incentives to Operators for meeting specific KPIs/performance metrics (i.e., a reward-based rather than a deductions-based regime). However, there will be the need to consider provisions to guard against underperformance, such as a mechanism to avoid contract default as the only option to deal with poor performance.

The structuring of the performance incentive regime would be finalised as part of the procurement and contract strategy and will be determined on a contract-by-contract basis. LCRCA envisages that the regime would cover areas including:

- (a) **Core KPIs** - e.g., early/late running services;
- (b) **Specification measures** - e.g., CCTV on vehicles, destinations clearly displayed;
- (c) **Bus standards** - e.g., cleanliness, availability of services;
- (d) **Passenger satisfaction** - e.g., number and nature of complaints received;
- (e) **Driver performance** - e.g., uniform compliance, behaviour;
- (f) **Fares, revenue and monitoring** - e.g., accuracy of returns/data, ETM issues;
- (g) **Improvement notices, warnings and benchmarking;**
- (h) **Brand Standards;** and
- (i) **Accident investigations.**

LCRCA believes that a structured performance framework will provide it with a level of confidence that the VfB and commercial objectives will be achieved.

4.3.11. Approach to fleet for Franchising

LCRCA's approach to fleet needs to balance the desire for a high quality service with ensuring that fares remain affordable for passengers. The approach must also support LCRCA's wider ambitions around net zero and the move to ZEV.

In assessing the potential options available under Franchising, LCRCA has concluded that the route which can provide greatest VfM, and influence over the deployment of ZEV is if it takes a role in ZEV ownership and provides vehicles to successful franchisees.

Feedback from market consultation has suggested that LCRCA provided fleet can help level the playing field for gross cost contracts between incumbents and new entrants and encourage greater competition.

Under this approach, LCRCA would provide ZEV to Operators. During the franchise term Operators would be responsible for maintaining the vehicles to specified standards and required to hand these back to LCRCA at the end of the franchise term in good condition.

As the Operator would receive the use of the vehicles without charge or for a peppercorn rental charge, the value of the gross-cost contract should be lower compared with Operator provided fleet

In this context, LCRCA has developed a fleet strategy that assumes:

- LCRCA will acquire ZEV over time, with an initial c.300 vehicles acquired in line with its BSIP, by 2025, within which:
 - 250 vehicles are assumed to be acquired new; and
 - 50 vehicles are assumed to be acquired mid-life hybrids for conversion to ZEV
- Post 2025, LCRCA will acquire ZEV at a rate aligned with the natural rate of replacement for the LCR bus fleet (i.e., replacing fleet every 15 years, at a rate of between 70-80 vehicles per year).

This strategy is dependent on the affordability of ZEV over the whole life being comparable to diesels. This can only be achieved in the short term with government support, and the costs assume that ZEBRA funding would be available for 75% of incremental costs for ZEV over diesels. In the longer term this could be achieved through the convergence of costs of ZEV and diesels as the cost of new technology reduces. For the purposes of this case, LCRCA has continued to assume that government support will be available.

On this basis, for the first phase of franchise contracts, there will be a substantial number of vehicles made available by LCRCA, but there will still be a requirement for c. 450 vehicles to be provided from other sources.

Based upon the assumption for the speed that LCRCA will acquire further fleet, sufficient ZEV are anticipated to have been acquired in time to provide a fully LCRCA owned fleet during the second phase of contracts (i.e., between 2029 and 2034).

During the first phase, LCRCA plans to allocate its ZEV to Category A Lots, as these are the contracts where it will be most challenging to source fleet. The fleet requirements of Category B, C and D Lots are not expected to pose a barrier to entry (i.e., lots of up to 10 PVR). Given this allocation, the

requirement for operator sourced fleet for the Category A Lots during the first phase of contracts fleet is forecast to be c. 266 PVR in total, or between 0 and 84 on any given Lot. Based upon market feedback collected during the market engagement exercise, a number of larger Operators (those anticipated to be required to provide Operator sourced fleet) stated that availability of fleet is less of a barrier (than a number of other factors including human capital and ZEV infrastructure), since buses can be purchased or transferred from other UK operations or Operators.

The forecast allocation of ZEV to lots is shown in the following table:

Table 3.10: Forecast Allocation of ZEV

Round	Date of first franchise	Cumulative PVR	Lot A Requirement	ZEBs Acquired	Allocation of ZEBs	Shortfall - interim fleet requirement
Wirral	Jul-26	186	107	300	70	37
St Helens	Jul-26	377	128	335	84	44
North, East, Central Liverpool & Knowsley	Apr-27	640	246	405	162	84
South Liverpool & Knowsley & Halton	Jan-28	893	186	475	122	64
Sefton & N/west Liverpool	Jul-28	1066	109	510	72	37
Total	-	-	776	-	510	266

LCRCA has a number of options for sourcing the additional fleet for Category A Lots, namely:

Option 1: No intervention

Operators will provide their own fleet and will recover the cost of providing vehicles as part of their bid price. Operators' vehicles will need to meet specific requirements specified by LCRCA within the franchise contract.

This option will be appropriate for elements of Lots where newer vehicles are not required and LCRCA will not need to have access to the vehicles beyond the franchise term.

Option 2: Residual Value Mechanism

For some contracts, LCRCA would request that bidders provide their own fleet, with an option for LCRCA (or a new franchisee) to acquire the fleet for a fixed price at the end of the franchise. This fixed price would be guaranteed as part of a RV mechanism. Having a RV mechanism would provide support to Operators acquiring new or providing relatively new vehicles, since the useful life of these vehicles could extend beyond the length of an individual franchise term.

This option would be appropriate for elements of Lots where newer vehicles are required and LCRCA wants to maintain access to the vehicles beyond the franchise term (e.g., for competition reasons as described in Sections 4.6 and 4.7).

Option 3: LCRCA access existing fleet

LCRCA could engage with existing Operators to discuss the potential to access existing fleet for the duration of first phase contracts. This may take the form of acquisition or leasing of fleet to provide to successful Operators of A Lots.

LCRCA's preferred approach in relation to diesel fleet is option 3, the cost of which has been included in the Financial Case. However, if incumbent Operators do not want to make their fleet available, then option 2 would be applied.

LCRCA has considered a number of risks that may arise in relation to the fleet strategy, namely:

- *ZEBRA Funding may not be fully available* - in this event, there may be a requirement for LCRCA to consider additional investment in ZEV or acquisition of interim diesel fleet;
- *Incumbents choose not to make fleet available* - in the event that incumbents choose to not make fleet available to LCRCA, LCRCA will move to option 2; and
- *Insufficient capacity for B & C Lots* - in the event that, during the first phase of contracts, Operators cannot provide sufficient fleet capacity, LCRCA may consider further investment in fleet or changing fleet standards required for these Lots.

4.3.12. Approach to depots for Franchising

Depot arrangements are more complex than those for fleet. While fleet can be moved relatively easily, lack of access to depot facilities can mean that competitors are excluded from the market.

In response to market consultation, the majority of Operators agreed that depots were best provided by LCRCA or a third party and leased to Operators for the franchise term. Some Operators were clear that LCRCA should mandate the use of depots in order to prevent potential market distortion by incumbents.

Managing these issues has driven LCRCA's depot strategy for Franchising.

There will be two primary options for how depots can be provided under the franchise contracts:

Option 1: Operators provide their own depots

Operators use their own depots to provide services and incorporate the cost of providing the depot into their franchise bid price.

This option could be used for smaller Lots where it is more straightforward to access suitable depot premises within the LCR, and where diesel fleet is primarily being used for the initial phase of contract.

Option 2: LCRCA provides alternative depots

For some Lots, LCRCA would provide a publicly-owned/leased depot to be used by an Operator for the term of its franchise contract.

This option would be used for Category A Lots and those where zero emissions fleet are being used (and therefore new investment is required). Using this option will reduce barriers to entry and support competition as explored within Sections 4.5 and 4.6.

LCRCA's current preferred approach is to use both of the options for providing depots described below, retaining flexibility to determine the most suitable option on a contract-by-contract basis.

In considering how it may deliver option 2, LCRCA has undertaken a depot strategy exercise to assess potential sites that it may acquire and develop for depot use under the franchise. In developing the depot strategy, LCRCA has carried out work to:

- establish the required PVR for each Round;
- undertake a desktop and field based assessment of both existing depots and brownfield sites suitable for development;
- conclude on a list of potential depots, both existing and potential sites for development, with ranked first to third preference sites in each Round;

- commission a property agency to undertake a desktop study of all the existing depots and alternative sites identified to provide an estimated purchase cost, identify the land footprint, size, environmental considerations; and
- build a financial model based on assumptions from discussions with other franchising Authorities.
- The resulting depot strategy is underpinned by a number of key guiding principles:
- At least one site in each Round has been identified as a potential LCRCA-owned depot site;
- LCRCA may engage with existing Operators in relation to acquisition of current depot sites;
- LCRCA-owned depots would be fitted out with ZEV infrastructure in line with the ZEV strategy;
- The identified sites provide excess capacity (PVR) over the requirements of the lotting strategy;
- In Lots with more than one A Category, LCRCA may consider developing multiple depots on one site where technically feasible; and
- Should a depot be provided to franchisees in a particular round, it is assumed that this would be on the basis of a peppercorn rent and reduce the contract payment from LCRCA to Operators (to reflect cost saving to Operator of not having to provide a depot).

4.4. Phasing and Implementation

4.4.1. Phasing of franchise contracts

If LCRCA was to choose to implement Franchising there would be benefits in minimising the transition period, when franchised services and deregulated services would run concurrently in different areas of the LCR. Apart from enabling earlier achievement of the full impact of Franchising, a short transition period would also limit the period when customers are offered an inconsistent service across different parts of the LCR.

Balanced against this are the challenges of implementation, both in terms of ensuring that the proposed approach works effectively and managing the large number of procurements required.

To balance these issues, LCRCA's proposed approach would be to franchise all routes over a 27 month period (from service commencement of Round 1 to service commencement of Round 4).

This approach and timetable would enable LCRCA to achieve the benefits of Franchising relatively quickly, whilst ensuring that the procurement process is manageable.

It would also allow LCRCA to refine its contract and procurement processes based on experience gained in letting the earlier Rounds.

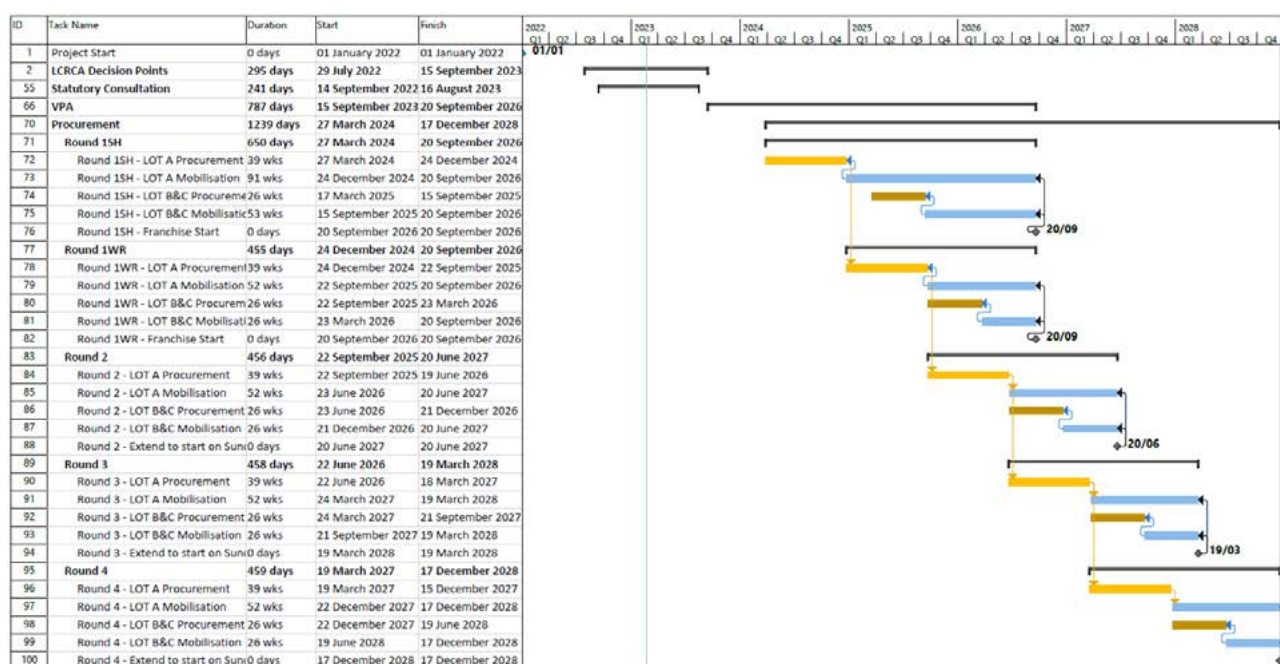
Further detail of the proposed procurement strategy has been outlined within Section 4.8.

4.4.2. Implementation

LCRCA has considered in detail the steps required to implement the plan for Franchising. This Section sets out the plan for the period from any announcement of franchising up to the letting of the first franchise.

The programme diagram below sets out LCRCA's current proposed implementation plan for Franchising. It should be noted that this programme includes the notice period for the termination of the Alliance, and much of this period is utilised in preparation for Franchising.

Figure 3.3 – LCRCA Franchising Implementation Programme



4.4.3. Initial implementation actions

If Franchising is taken forward as the preferred option, this will necessitate the unwinding of the Alliance.

LCRCA will engage with Alliance members to ensure that the transition is efficient. If necessary, LCRCA may need to prepare to implement more supported services in this period if Alliance members choose to reduce services.

LCRCA will also need to:

- Initiate depot development. This will include site identification and acquisition, obtaining planning consent and ensuring appropriate specification to support Franchising during implementation.
- Procure and appoint contractors for depot construction, and construction of depots in advance of franchise contract mobilisation.
- Ensure that fleet procurement and delivery arrangements are in place to acquire fleet that LCRCA wish to have in place for the first phases of Franchising. This will need to include lead times such that fleet is acquired in advance of the first franchise contracts being mobilised.
- Ensure that the ITS systems are procured to support the fares and ticketing proposed for the franchised system.
- Implement all internal governance, controls and change management set out in the Management Case.
- Ensure all recruitment needs are met in advance of franchise mobilisation, in line with the resource requirements as set out within the Management Case. This will include dealing with relevant pensions/ TUPE implications.
- Set in motion the processes outlined within Section 4.8 for procuring the operators for the first Round of Lots.

Once the first franchise contract is let, the Franchising process will enter the transition phase, described further in Section 4.7.

4.5. How the involvement of SMO will be facilitated

LCRCA has developed its plan for Franchising to facilitate SMO involvement. This would remove barriers to entry and provide opportunities for SMOs to grow their businesses. Many of the measures required to do this are consistent with those for promoting strong competition (described in Section 4.6). The key elements are set out below.

4.5.1. Route packaging:

LCRCA has designed the packaging of routes into categories of Lots of varying PVR sizes to suit the participation of operators of varying sizes (as outlined within Section 4.2.1), with Category B, C and D sized to a suitable scale for SMO involvement.

It is proposed that the procurement process is tailored to the specific category of bidders, for example, with category B, C and D packages requiring lower levels of financial strength from SMO, or to the extent necessary, guarantees from parent companies. This will be considered in detail and refined as part of the Procurement Strategy, in advance of any procurement launch.

4.5.2. Fleet:

One of the main barriers to entry for SMO under Franchising is the availability of suitable vehicles. The availability of mixed aged fleet in the second-hand diesel bus market within the UK is limited, with Operators generally acquiring new vehicles to use for the majority of their useful economic lives.

In providing a large proportion of the fleet for Category A Lots, it provides the potential for SMO to bid for larger Categories as it reduces the need to source a large quantity of fleet.

As a result, the proposed lotting strategy has been structured in a manner that provides the opportunity for SMO entrants to bid for small Lots where access to fleet is not required at scale during the first phase of contracts. Following the second round of contracts, it is anticipated that LCRCA is able to offer a fully LCRCA-owned fleet under all contracts and Lots, levelling the playing field and reducing the need for an interim fleet.

4.5.3. Depots:

Another barrier to entry for SMO is not having access to suitable depots. LCRCA's current proposed depot strategy includes investment in a number of strategic depot sites located in each Round.

LCRCA have designed Lots in a manner that SMO are expected to have sufficiently small Lots to source depots. LCRCA is also considering, as part of its depot strategy, the potential to provide sufficient scale to accommodate SMO for smaller Lots.

4.5.4. Marketing and ticketing systems:

As noted in Section 4.3, under Franchising LCRCA would be responsible for ticketing systems and information, as well as all central marketing and customer services functions.

In the current deregulated market SMO can have difficulty growing their businesses because larger Operators encourage customer loyalty through discounted, single Operator tickets. Therefore, it is uneconomic for customers to occasionally use a smaller Operator, and this makes it difficult to grow.

Under Franchising LCRCA would introduce a common fares and ticketing structure, thereby removing a barrier to growth for SMO.

4.6. Measures for promoting strong competition

Under Franchising the bus network would transition from a market with 'on-street' competition whereby Operators compete for passengers based on their service offer, to contract-based competition whereby Operators compete to win contracts for the right to run specified services in the LCR.

In order to provide VfM fares to passengers, LCRCA would need to ensure that there is a competitive market for franchise contracts.

To do this LCRCA intends to reduce barriers to entry for Operators of all sizes, including SMO. Such actions would cover the following areas:

4.6.1. Fleet

One of the main barriers to entry could be access to fleet. The Category A Lots require substantial fleet numbers to achieve economies of scale. The cost of a totally new fleet would increase costs to customers and increase the mobilisation period for franchises. However, the current structure of the deregulated bus market means that there is limited availability of mid-life fleet (as these tend to be cascaded through the larger Operators' different subsidiaries).

LCRCA's proposed model would address these challenges in a number of ways.

Under the proposed fleet strategy, LCRCA shall acquire ZEV over the medium to long term and provide to Operators under franchise contracts. During the initial phase of contracts, there may be a requirement for Operators to provide fleet to supplement LCRCA owned ZEV, however this will not make up the majority of fleet in a lot and as a result is not considered to be a barrier to entry.

Lots which are tendered using publicly owned vehicles and offered on level playing field terms to bidders will overcome

the challenge for new entrants of sourcing suitable compliant vehicles, as set out at Section 4.5 above.

4.6.2. Depots

As set out in Section 4.3, LCRCA's proposed depot strategy assumes the acquisition of a strategically located depot in each Round. Each depot is proposed to have sufficient capacity to exceed the PVR requirements for all categories in each Round.

These depots would be made available for use to Operators who secure a contract to run franchised services in the LCR. Access to depots would be incorporated into the terms of franchise contracts and will support multi-Operator use.

A final decision on this approach will depend on further discussions with incumbent Operators.

4.6.3. Phasing and Roll Out

The programme set out in Section 4.4, for implementing Franchising has been developed to provide a pipeline of contracting opportunities, supporting their case for investment. This will help encourage competition for every Round of contracts.

4.6.4. Indicators that LCRCA will achieve sufficient competition

The structures and preparatory work described in this document that LCRCA is proposing for Franchising are in direct response to issues raised in market discussions. LCRCA has undertaken a market engagement exercise to gather feedback on its proposed Franchising Scheme and understand the extent to which the proposals will achieve sufficient competition. The market engagement exercise has invited a range of Operators to provide feedback on the proposed Franchising Scheme, which has been used to update and inform the current position. This included participation from:

- a range of large Operators currently providing services in the LCR (e.g. Arriva, Stagecoach);
- a range of large Operators not currently providing services in the LCR (e.g. National Express, Keolis, Abellio, Metroline, Go-ahead); and
- a range of SMOs (e.g., Warrington Own Bus, Cumfybus).

A summary of the market engagement exercise is set out in the "LCRCA Bus Franchising Assessment: Market Engagement Supporting Paper".

As a result of market views being incorporated in the proposed Franchising Scheme, LCRCA has confidence that

sufficient competition can be achieved under Franchising.
In particular:

- (a) Bus Operators within the LCR have already been engaged in ongoing discussions with LCRCA regarding participation in a Franchising model;
- (b) Bus Operators outside the LCR (including Metrolink, Abellio, Go-ahead, National Express and Keolis) have expressed significant interest in bidding for franchises;
- (c) LCRCA already has a strong existing market for tendered supported services and schools' contracts; and
- (d) Other examples of franchised bus markets (such as London, the Middle East, Singapore and Australia) have been successful in attracting bidders and investment, and this is also true for other public transport contracts in the UK such as rail franchising and light rail (e.g. Manchester Metrolink and DLR operating franchises).

LCRCA will continue to engage with potential providers regarding the potential for Franchising both through formal consultation before any Franchising decision, and (if a decision to franchise is taken) through commercial engagement to refine the Franchising Option and make it attractive to bidders.

4.7. What transition period arrangements will be required and how services will be protected

4.7.1. Transition

LCRCA intends that once the first franchises are let, the remaining franchise contracts will be let at 12 monthly intervals over a 3-year period, as described above.

This means that there will be a substantial period of time between any announcement of the intention to pursue Franchising and all services having been franchised.

LCRCA has developed arrangements to support the transition from the existing deregulated market to a fully operational franchised model.

Key elements of this transition plan (which are also discussed in the Management Case) include:

- (a) the implementation process, and the provision of services during the notice period of the Alliance;
- (b) how to ensure continuity of service in the transition phase when there is a mixture of franchised and unregulated services;
- (c) how to enable/ensure that Operators can mobilise their drivers, fleet and maintenance arrangements in time

to deliver an effective service, and how to ensure that LCRCA's approach to transition does not disadvantage certain Operators (new market entrants in particular, who may take longer to mobilise); and

- (d) how to ensure that LCRCA has all the required staff and processes in place to manage the contracts, and undertake other activities required under Franchising e.g. network planning, timetabling.

The Management Case sets out how LCRCA will put the required staff and processes in place and manage potential disruption of services during the transition period in more detail.

4.7.2. Assessing the risk of network disruption

4.7.2.1. During the implementation period

If LCRCA was to choose to implement Franchising, LCRCA would initiate a termination of the existing Alliance. During the implementation period of Franchising, LCRCA would need to manage the risk that services (both commercial and tendered supported services) do not continue at their forecast level. This could arise through a number of circumstances:

- (a) Operators could make marginal service reductions, e.g. by targeting loss making commercial services;
- (b) Operators could make prolonged and systematic reductions in commercial services, which might include the reduction of both loss-making and marginally profitable services; and
- (c) Operators could cease services entirely for a given geographical area.

There are few (if any) services where it will directly benefit the incumbent Operators to withdraw services, and if it does the level of support required from LCRCA is likely to be low. Although Operators may seek to reduce costs through either marginal or prolonged service reductions, this is considered unlikely given that this could give rise to significant additional costs (e.g. redundancy costs, pensions liabilities), or create stranded assets if no alternative use or sale of fleet/depots is secured.

LCRCA is planning to negotiate with current Alliance members regarding the continuation at current service levels during the Alliance termination period.

This risk has been considered as part of the risk assessment for Franchising as set out at the end of this Section, with appropriate mitigation actions to be managed by LCRCA in the event of a decision to pursue Franchising.

4.7.2.2. During the implementation period

After the introduction of the first franchised services (subsequent to the termination of the Alliance), LCRCA intends to apply a Service Permit Regime to all services within LCRCA, to help maintain consistency of services during this period of transition. It is expected that the regimes for the service permits relating to cross-border and supported services will be different to those for services which will become Franchised in subsequent Rounds. This is to reflect the different requirements for those services and the expected short-term nature of those services which will become franchised in later Rounds. However, the process for establishing the relevant Service Permit Regime is the same and is detailed in Section 4.7.5.

During this period LCRCA would need to manage the risk that services (both commercial and tendered supported services) do not continue at their forecast level, and Operators begin to reduce or withdraw services.

In order to support its position, LCRCA will be required to enter into discussions with Operators to understand any issues concerning maintaining continuity of service, and in parallel develop contingency plans in case Operators begin to withdraw services (such as tendering a greater number of services). Through having a consistent Service Permit Regime across all parts of the LCR, LCRCA is in a stronger position (through permit rules establishing relevant standards of service) to maintain service consistency notwithstanding that some of the services will not be franchised until later Rounds.

This risk has been considered as part of the risk assessment for Franchising as set out at the end of this Section, with appropriate mitigation actions to be managed by LCRCA during the implementation period should it take the decision to pursue franchising.

4.7.3. Arrangements to protect passengers

If Operators reduce or withdraw entirely from services prior to them being subject to a franchise contract, LCRCA could manage this in a number of ways:

- (a) LCRCA could facilitate other Operators stepping in to take on services which have been reduced/withdrawn. This could be aided by LCRCA exploring whether alternative Operators are available to step-in where services are withdrawn;
- (b) LCRCA could use short-term tendered contracts, either under the existing supported services framework or a new one, to either partially or fully replace the services leading up to the point at which these services are transitioned to a franchise contract. While there would be a cost involved in this, the subsidy from the public sector is likely to be relatively low, as the services are currently run as commercial services; and
- (c) if the service is deemed to be no longer required as part of a franchised network, LCRCA could take no further action in relation to the withdrawn services.

It should be noted that this risk does not apply to existing supported service tendered contracts, since Operators are contracted to provide those services for a specified period of time.

LCRCA has set out further details of how the contracting process and continuity of services will be managed within Section 3.4 of the Management Case.

4.7.4. Fare arrangements during transition

From the commencement of the first franchised services, all of the services operating in the LCR will be operating either as franchised services or under the Service Permit Regime. The Service Permit Regime would be proposed to establish specific conditions relating to fares and ticketing to:

- (a) enable tickets to be purchased or fares to be paid in particular ways;
- (b) service Operators accepting or issuing tickets of a specified description and complying with requirements as to the price to be charged for such tickets; and
- (c) service Operators offering discounted travel for specified groups of persons.

Such conditions would allow LCRCA to create a uniform set of fares and tickets which would correspond with those which would be offered by franchised services. This will ensure that the changeover in ticket types and how they can be used will also change at the same time as part of the commencement of the first franchises, limiting the complexity and confusion over ticket types and maintaining consistency during the transition period.

For those services included within the Franchise Scheme, all revenue will be received by LCRCA. In the case of those services operated under the Service Permit Regime, the revenue will be received directly by the Operator, with the permit regime requiring fare levels to be the same as those for the franchised services. Over time, more services will become franchised services and fewer services will operate under the Service Permit Regime, although it is expected that some services, such as cross-boundary services, will remain as operating under the Service Permit Regime. While a greater proportion of fare income will be collected by LCRCA, there should be limited, if any, effect on the customers.

4.7.5. How cross-boundary services will be facilitated

Facilitating cross-boundary services under a Franchising Scheme is a key requirement of the Franchising Guidance.

Cross-boundary services which originate from outside the LCR will require a service permit in order to operate within a Franchise Scheme area. As LCRCA is not planning to have any sub areas, once the first franchise contracts commence, the requirement for a service permit will apply. Therefore, LCRCA will need to establish a Service Permit Regime for cross boundary services alongside the introduction of the Franchising Scheme.

Operators of cross-boundary services would be entitled to apply for a service permit (with published conditions) and the service can only operate under these conditions. This is to ensure that factors such as bus age and involvement in regional ticketing schemes can be controlled by LCRCA for all services operating in the LCR. It will also limit the confusion and complexity over ticket types and ensure service consistency amongst similar bus operations.

The exact scope of the Service Permit Regime would be subject to formal consultation with Operators and other relevant parties. However, legislation sets out those areas where LCRCA can propose certain types of condition which may be attached to the service permit. This significantly limits both legal and commercial risk associated with implementing a Service Permit Regime. This includes conditions such as:

- (a) enabling tickets to be purchased or fares to be paid in particular ways;
- (b) stipulating that Operators must accept or issue tickets of a specified description and to comply with requirements as to the price to be charged for such tickets;
- (c) requiring vehicles to comply with specified standards, including as to age and emissions;

- (d) setting customer service standards;
- (e) setting operational standards;
- (f) stipulating that Operators offer discounted travel for specified groups;
- (g) stipulating that Operators publish specified information about the local services provided by them and about other local services in the franchised area; and
- (h) stipulating that Operators publish specified information about their fares, the fares of other Operators of local services and ticketing arrangements applying in the franchised area.

LCRCA is permitted to propose different conditions for the different types of service that will be operated under the Service Permit Regime. Therefore, the conditions that apply to cross-boundary services do not need to match exactly those which apply to other service types such as pre-franchise services. This could allow cross-boundary services a longer period of time to meet certain service requirements or vehicle standards. However, the intention would be to align the requirements of the Service Permit Regime as much as possible with those of the Franchise Scheme to ensure a consistency of service across the LCR, reduce confusion for customers and to facilitate smooth running of cross boundary services

As part of the application by an Operator to obtain a service permit to operate non-franchised services, LCRCA is able to consider the service and its effect on the franchised services being operated in the LCR. LCRCA will have the right to reject any services which fulfil the permit requirements, but which, in LCRCA's view, are partly or wholly specified to abstract revenue from franchised services or other established permitted services.

In order to establish the Service Permit Regime, LCRCA must consult on the conditions it wishes to attach to service permits (per s123R(5) of the Act). This consultation is separate to the Franchising Scheme consultation, but would need to be completed in sufficient time before the commencement of the first franchised services to allow Service Permit Regime to be established, Operators to submit applications for permits, the applications to be considered and service permits to be issued. The conditions should not be particularly onerous as the general intention of the Service Permit Regime is to facilitate the continued running of cross-boundary services rather than setting conditions which prevent them from operating into the LCR.

4.8. Procurement Strategy

This Section explains the proposed design of the procurement of the franchise contracts.

4.8.1. Aims and benefits

The procurement process will be designed to meet the following broad requirements:

- (a) competition is maximised;
- (b) prospective Operators are treated fairly and given an equal opportunity to participate;
- (c) high quality services are delivered across the region; and
- (d) legal obligations are complied with.

By meeting those requirements, the procurement process will enable the participation of new market entrants, including SMOs, by levelling the playing field and addressing any incumbency advantage or other barriers to entry. The procurement process will also draw on best market procurement practice, to deliver a VfM solution.

4.8.2. The legal regime under the Utilities Contracts Regulations 2016

The procurement of franchise contracts will be governed by the Utilities Contracts Regulations 2016 (“UCR”). The UCR imposes a number of structural constraints on the procurement design but also offer a degree of flexibility that will enable LCRCA to adopt a design that best fits its requirements. LCRCA will also be required to comply with certain provisions in the version of EU Regulation (EC) No 1370/2007 as transposed into domestic law.

4.8.3. Establishment of a dynamic purchasing system

LCRCA has established a dynamic purchasing system (“DPS”) under the UCR to pre-qualify prospective operators. This will enable a prospective operator to submit a single pre-qualification response and, if successful, to remain pre-qualified for the remainder of the franchising programme, entitling it to bid in all of the Rounds (should it choose to do so, in view of any Round-specific bidding conditions).

To be admitted to the DPS a prospective Operator will need to satisfy LCRCA’s stated selection criteria.

All prospective Operators that satisfy the criteria will be admitted to the DPS. There can be no limit on the number of pre-qualified Operators, and applications for admission to the DPS can be made at any time, allowing for applications

from new entrants or re-application from those whose position has improved since a previous (unsuccessful) application. Each pre-qualified Operator will be required to keep its information refreshed and up to date. Any Operator admitted to the DPS will be removed if it no longer meets the selection criteria.

Use of the restricted procedure

For each Round, LCRCA will issue an invitation to tender (or “ITT”) to all of the prospective Operators that have been admitted to the DPS. The issue of the ITT will commence the bidding phase for that Round.

For the bidding phase only the restricted procedure is available to LCRCA under the UCR. Nevertheless, within the bounds of that procedure some pre-bid engagement on the specific terms of the franchise contracts for the early Rounds may be required (through inviting comments at an early stage in the bid period and potentially revising and reissuing the terms). Some development of the terms might occur through general market engagement (see below), but this is not expected to deliver full clarity on the terms that are (or are not) acceptable to the Operator market, as the market engagement exercise will be relatively wide-ranging and responses are unlikely to be commercially driven (and, therefore, are likely to be a less accurate representation of the market’s true position) compared to input during a live competition.

Operator input may be less valuable in future Rounds, as the contract terms and general bidding approaches become more settled and better understood by both LCRCA and the prospective Operators, but there might still be value in inviting that input for example, where later Rounds attract new (or different) prospective Operators, including new market entrants, with different perspectives on the contract terms. In any event there are likely to be terms that are best understood on a Round-by-Round basis.

4.8.4. Commercial engagement

LCRCA has undertaken an initial market engagement exercise, and incorporated much of the market feedback within its proposed Franchising Scheme set out within this Assessment. A detailed report of the findings of market engagement have been set out in the “LCRCA Bus Franchising Assessment: Market Engagement Supporting Paper”.

LCRCA proposes to engage in further detailed commercial engagement with prospective Operators following any decision to pursue Franchising, prior both to finalising the general approach (before the Franchising programme kicks off with the first Round) and to each subsequent Round.

It is currently anticipated that:

- (a) at a general level, the market engagement will focus on the overall structure of the Franchising programme, including the approach to Rounds; the content of Lots; financial arrangements; the approach to fleet and depots; and other fundamental concepts underpinning the terms of the franchise contracts; and
- (b) prior to each Round, the market engagement will focus on lessons learned from the previous Round and then pick up on the Round-specific requirements ahead of the next competition.

Having established a DPS, LCRCA will have a continuous (and continually refreshed and updated) list of pre-qualified prospective Operators, offering a ready-made group of market participants with whom an ongoing engagement dialogue can be maintained. This would ensure that the procurement strategy continues to represent best practice while delivering LCRCA's broad requirements (maximising competition; fairness and equal treatment; consistent high quality of services; and compliance).

4.8.5. Optional limit on Lots

LCRCA proposes to retain the option to limit the number of Lots within a Round that a single Operator can bid for or win. Any limit would apply on a Round-by-Round basis. LCRCA proposes to confirm any limit applicable to any Round(s) prior to inviting bids for the first Round, so that prospective Operators have as clear a view as possible across the whole Franchising programme.

Any limit might apply to the number of Lots within a Round that:

- (a) a prospective Operator can bid for; or
- (b) (more likely) a prospective Operator can win, meaning that rules would be required to determine the allocation of Lots where a particular Operator was the highest scoring for a number of Lots in excess of the limit.

The reason for imposing a limit would be to deliver outcomes such as enhancing the diversity and resilience of the service Operator market, facilitating strong competition for the Lots (by enhancing the opportunities for prospective Operators to win) and facilitating the involvement of SMOs. LCRCA considers that a procurement design that would permit one Operator (or a small number of Operators) to win all of the Lots would risk not delivering those outcomes.

4.9. Pensions/TUPE Considerations for Franchising

This Section sets out a number of other commercial considerations that would apply under Franchising, in particular focusing on Pensions and TUPE issues.

4.9.1. Pensions

The Bus Services Act protects the pension rights of staff who transfer under a Franchising arrangement by requiring Operators to provide such staff with pension accrual post transfer which is the same or “broadly comparable” to the pensions accrual they are entitled to pre-transfer. Operators under a Franchising Scheme do not however take on responsibility for benefits accrued pre-transfer. Liability for such benefits remains with the incumbent Operator.

The legislation provides that pension benefits are “broadly comparable” if the employee will suffer no material detriment overall in their future accrual of pension benefits as a result of their employment transferring under the Franchising Scheme. Operators are required under the Bus Services Act to obtain a statement from an Actuary confirming that the pension arrangements offered are compliant with these requirements. It is the responsibility of the Franchising LCRCA (i.e. LCRCA) to ensure that contracts require Operators to provide broadly comparable pension benefits and that such obligations can be enforced directly by the transferring staff.

4.9.2. Pensions implications for incumbent operators

The pension’s implications of Franchising for each of the current LCRCA Operators will very much depend on the nature and structure of their current pension arrangements.

When staff transfer under the Franchising Scheme they will cease to accrue pension benefits in their current pension arrangement and will become a deferred member of such pension scheme. If the Operator provides:

- (a) **defined contribution (“DC”) accrual** only this will have little impact – LCRCA understands that all but two of the current operators, Glennvale Transport Limited (trading as Stagecoach) and Arriva, provide DC pensions accrual only and therefore Franchising will have little impact on their pension arrangements; or
- (b) **defined benefit (“DB”) accrual**, whether via its own DB arrangement or as an admitted body in the Local Government Pension Scheme (“LGPS”), then there is a potential risk that franchising could Trigger an exit debt if the limited circumstances in Section 75 of the Pensions

Act 1995 or Regulation 64 of the Local Government Pension Regulations 2013 apply, or result in an Operator's pension contributions increasing as a consequence of there being less active members in the fund or through Trustees adopting a more prudent valuation of the fund.

Arriva and Glennvale are the only Operators currently providing DB accrual and they are therefore the only Operators in relation to whom these potential risks exist. The likelihood of these risks arising in practice is considered below.

Likelihood of exit debt risk materialising:

Arriva has Mersey bus employees in two of its own DB schemes and in the Mersey Pension Fund Section of the LGPS. However, given the number of active members in each of the schemes and on the assumption that the same Arriva corporate entity employs all such active members, LCRCA considers it relatively unlikely that Franchising will result in Arriva ceasing to employ at least one active member in each of the schemes. The risk of a Section 75/ exit debt being triggered by Arriva as a result of Franchising is therefore considered to be low.

Glennvale Transport Limited does not have Mersey Bus employees in its own DB pension schemes but does have circa 14 Mersey bus employees accruing benefits in the Mersey Pension Fund Section of the LGPS under a "closed" admission agreement meaning that no other Glennvale employees are eligible for membership.

Given that Glennvale only has 14 active members in the Mersey Pension Fund, LCRCA considers it a realistic prospect that Franchising could result in Glennvale ceasing to employ all of those active members thereby triggering its exit debt. However:

- (a) this risk could materialise in the near future in any event regardless of the chosen Bus Delivery Option as the 14 active members could themselves choose to retire or otherwise leave Glennvale's employment thereby triggering calculation of Glennvale's exit debt and Glennvale has no control over this; and
- (b) the 2019 valuation of the Mersey Pension Fund indicates that Glennvale's accrued benefits in the LGPS are relatively well funded and that an exit debt is therefore likely to be of less concern to Glennvale.

Therefore, it is not currently believed that the Franchising Option would have a significant negative effect on the Operator's pension scheme.

4.9.3. TUPE Considerations

TUPE may apply in respect of any change of bus Operator(s).

Where TUPE applies to employees or workers, their employment or engagement (and liabilities regarding their employment or engagement) will transfer automatically by operation of law from an outgoing Operator to an incoming Operator. Transferring personnel transfer to the incoming Operator on their existing terms and condition of employment or engagement, which are protected to a certain extent. Detrimental changes made to transferring personnel's terms and conditions as a result of the TUPE transfer will be void.

If personnel transfer under TUPE from various incumbent Operators to one incoming Operator, this means the incoming Operator will have different groups of personnel engaged on different terms and conditions. Unite has provided Merseytravel with its Minimum Standards Charter effectively an "enhanced employment contract" that should be put in place after personnel transfer to any incoming Operator(s). The Minimum Standards Charter includes the most favourable terms from the various incumbent Operators' current employment terms. If Merseytravel opts to stipulate that all franchise Operators employ/engage staff on terms, which at least match the standards set out in the Minimum Standards Charter, this is likely to increase costs. In addition, if new terms and conditions are to be put in place with transferred personnel after the transfer, it is important to note that any less favourable terms in those new contracts (when compared to a person's pre-transfer terms) are likely to be void (see above).

If TUPE may apply, there is a practical consideration of assessing the extent to which personnel working in services provided by incumbent Operators are assigned to services or routes which transfer to incoming Operators. This may involve assessing how to "match" personnel to the relevant routes under Franchising. Other considerations include the possibility that incumbent Operators could relocate or otherwise seek to retain existing personnel across their wider national/international businesses.

Depending on how franchise contracts are initially created (for example the routes and maintenance including), the automatic transfer of personnel under TUPE could result in an incumbent Operator engaging more personnel after the transfer than is required to operate the services. If that is the case, personnel may be at risk of redundancy. The parties will need to decide who will be responsible for any resulting redundancy and termination costs. If bidders are informed that they are

responsible for any redundancy and termination costs, it is likely that they will include those costs in their pricing.

Whilst LCRCA's VfB is to expand the network, a change in that strategy towards a rationalisation of underutilised routes could also create risks of redundancy.

4.10. Commercial Risks – Franchising

The table below provides an assessment of the commercial risks associated with the Franchising Option. These risks have been identified as the SOC and OBC have been developed and are updated regularly. The Management Case sets out how risks will be mitigated and managed.

Table 3.11: Assessment of the commercial risks associated with Franchising

Risk – Description	Mitigation
Risk that LCRCA is unable to secure depot sites in time to support Franchising (e.g. due to delays in identifying suitable sites), giving rise to barriers to entry.	LCRCA has developed a depot strategy outlining the numerous options available to support Franchising, described in Section 4.3.12.
Risk that LCRCA is unable to secure required vehicles to support Franchising (e.g. due to inability to raise funds), giving rise to barriers to entry.	LCRCA has developed a fleet strategy outlining the numerous options available to support Franchising, described in Section 4.3.11.
LCRCA does not have the required resources or capabilities to successfully deliver the Franchising implementation and procurement programme.	LCRCA has developed an internal resource and implementation plan (see Section 3.4 of the Management Case), which identifies key resource requirements and ensures that operational capabilities are in place for Franchising.
Operators resist the proposed terms of Franchising as part of consultation, limiting the influence/changes which LCRCA is able to deliver.	Market engagement and consultation with Operators has been undertaken to understand their views on the proposed approach. LCRCA will ensure that any decisions taken to proceed with Franchising are compliant with the requirements set out in Bus Services Act.

Risk – Description	Mitigation
Risk that LCRCA measures are insufficient to encourage the participation of SMOs.	Risks mitigated through LCRCA's interventions to encourage SMO involvement (see Section 4.6 of this Commercial Case).
Risk that LCRCA fails to achieve a competitive market for franchising, leading to higher franchise bid prices from fewer Operators (incumbents).	Ensure franchise design is attractive to a wide range of market participants. A significant market engagement exercise has been undertaken and views of the market considered in developing the proposed Franchising Scheme. This exercise has indicated the potential for a competitive market for Franchising. In the event of higher prices for franchise contracts, LCRCA will need to choose whether to provide more funding or reduce services.

4.11. Summary Assessment against Commercial Objectives

The table below sets out a summary assessment of Franchising against LCRCA's commercial objectives as described in Section 2. The following assessment includes a rating of each option against the commercial objectives, whereby:

- **Green Rating** means high potential that the option allows for the delivery of the objective;
- **Amber rating** means that while the objective could be met under the option, there are a number of challenges; and
- **Red rating** means that it is unlikely that the objective will be met under the option.

Table 3.12: Summary Assessment of Franchising

Risk	Assessment	Rating
Public Sector Influence	• LCRCA can control the design of the overall Franchise Scheme to help deliver its intended outcomes and maximise Operator performance. • LCRCA will be able to target the delivery of key strategic priorities through contractual requirements included within franchise services contracts. This will cover areas such as: - fares and ticketing, ensuring standardisation of products and pricing for passengers across all Operators; - fleet specification and standards, controlling the pace of transition to zero emissions and bus specification/branding; - use of depot sites and infrastructure, to support the fleet strategy and mitigate barriers to entry for Operators; and - route timetabling and information, to improve passenger experience and ensure quality services are delivered. • LCRCA can achieve greater influence over the outcomes of public money spent on bus services, delivering improved quality of service. • However, franchise contracts will need to be flexible to allow for changes required to services during the contract term.	

Risk	Assessment	Rating
Best Value	• Franchising will allow LCRCA to manage profitable services and services requiring support as a single portfolio. • LCRCA can control the packaging of routes in a way which delivers best value to the public sector e.g. through achieving effective cross-subsidisation to support affordability. • Franchising also allows LCRCA to proactively manage the market, in preparing the market for potential new competitions and taking views of Operators, rather than the current, reactive nature of commissioning supported services. • Finally, LCRCA can invest in assets (e.g. depot and fleet) that have the potential to deliver value for public sector over the long term, and save an ongoing commercial margin.	
Driver of Competition	• Under Franchising, Operators will shift from competing commercially for passengers on an “on street” basis, to competing for contracts to run services. • As a result, LCRCA is able to take views from, and prepare the market to maximise competition between Operators for franchise contracts. More competition between Operators can help drive up innovation in customer service and reduce franchise contract payments. • In addition, LCRCA’s fleet and depot strategy can mitigate barriers to entry and encourage competition between Operators on a ‘level playing field basis’. • This includes supporting the participation of SMOs through a lotting strategy that comprises smaller lots specifically designed for SMOs.	

Risk	Assessment	Rating
Appropriate Risk allocation	• A Franchise Scheme will allow LCRCA to better allocate risks and responsibilities to the parties which are best placed to manage them. • LCRCA will take on revenue risk and collect passenger fare revenue, whilst passing operating cost risk to Operators. • Operators will have more certainty over their cash flow over the life of each franchise. • LCRCA required to put in place the capability to manage risk during transition in relation to fleet and depot.	
Ease of implementation	• Franchising represents a significant resource and financial effort for LCRCA including to: - Establish the procurement strategy and plans, contracts, commercial terms and contract management function; - Prepare the market to ensure sufficient competition for franchise contracts; - Establish the skills and resources in house to manage and maintain the network, manage revenue, marketing and communications and provide contract management; and - Acquire, develop and prepare the assets for operational deployment, specifically assets and fleet - each of which are complex and large scale, and carry significant risk.	

Risk	Assessment	Rating
Recovery Robustness	• Franchise contracts can be established in a manner that contains clauses to allow significant reshape of services in the event of a shock to the market. However, they are required to be established in a flexible and future-proof manner to allow this, and may attract a premium in pricing to mitigate Operator risk of changing terms in future. • In recovery or in the event of a future shock, LCRCA would need to instruct Operators and seek support from Central Government (as e.g. GMCA did for Metrolink) - this may require significant resource effort to undertake.	

4.12. Conclusion

LCRCA's proposed Franchising Scheme as set out above meets the requirements of the Franchising Guidance.

In particular, LCRCA has set out a number of interventions and measures to ensure that the participation of SMO can be facilitated, and a competitive market can be achieved. This includes different options for dealing with key commercial challenges around fleet and depots.

Compared to the current bus arrangements, the proposed Franchising Option would allow LCRCA to achieve greater control over the outcomes of the bus network, better enabling the delivery of its Scheme Objectives and the VfB, in line with the Bus Back Better strategy. Moreover, as the COVID-19 pandemic has driven a step change in the potential demand for bus services and this continues beyond the short term, it provides the public sector with additional control and influence over increasing demand for non-commercial services.

It is recognised that to deliver Franchising will require a significant financial commitment from LCRCA and come with a range of financial and non-financial risks that will require careful management and delivery expertise by LCRCA. This is explored further within the Financial Case.

To be successfully delivered, Franchising will require a commitment from LCRCA to manage the commercial risks associated with Franchising and ensure that a resourcing plan and appropriate mobilisation are provided to support delivery of the scheme in a way which minimises disruption to the network. This is further discussed in the Management Case.

5. Commercial Assessment of EP Scheme

5.1. Introduction to EP

In line with the national bus strategy, it is the intention of LCRCA to enter into either an EP or establish a Franchising Scheme for the provision of bus services. LCRCA has taken early steps to agree the scope and objectives of an EP with Operators in LCR.

For the purposes of the Assessment, an ambitious EP has been assumed which LCRCA believes can be delivered with Operators.

This Section assesses the commercial parameters of the proposed ambitious EP Scheme. This Section includes:

- (a) description of the key components of the proposed EP Scheme, including:
 - an introduction to EP, including discussions with Operators to date in developing the EP;
 - a summary of the proposed EP aspirations including the commitment from Operators;
 - the proposed contractual arrangements and mechanisms for the EP model, including risk allocation and responsibilities, the performance incentive regime and the contractual arrangements for fleet and depots;
 - an outline of the proposed phasing and implementation of an EP Scheme; a summary of how the involvement of SMOs will be facilitated;
 - an overview of competition considerations, including the measures which will be taken to ensure strong competition under an EP Scheme;
 - a summary of transitional arrangements during the introduction of the EP, including how services will be protected;
 - an overview of how cross boundary services will be facilitated under an EP;
 - a summary of the proposed procurement strategy and arrangements for an EP; and
 - consideration of pensions and TUPE arrangements under an EP;
- (b) an assessment of the commercial risks of the proposed EP Scheme; and
- (c) an assessment of the proposed EP Scheme relative to LCRCA's commercial objectives.

5.2. Introduction to EP

An EP is an agreement between an LTA and local bus Operators to work together to improve local bus services. It includes a clear vision of the improvements that the EP aims to achieve (known as an EP Plan) and accompanying actions to achieve them (set out in one or more EP Schemes). It is, in practice, a joint proposal between LCRCA and the local bus Operators because both LCRCA and a defined proportion of Operators must agree to the EP for it to go ahead.

LCRCA has formal responsibility for establishing both the EP Plan and the EP Schemes. However, at set points in the process LCRCA can only proceed with its proposals if they have the support of a defined proportion of local bus Operators. Different bus corridors can have different EP Schemes provided that the schemes still meet the overall EP Plan. Each EP Scheme may be affected by the Operators who run services on the relevant corridors, meaning that the benefits for each corridor may be different and less easy to manage from an LCRCA perspective. Where there are different EP Schemes, it may also be unclear to passengers why the EP Scheme being offered on one bus corridor is different to that on another.

An EP is only achievable through market consultation and negotiation with Operators. In the formation of an EP local bus operators are able to provide their opinions and confirm whether or not they support any of the relevant proposals from LCRCA or other bus operators. Not all Operators operating in an area need to agree with an EP Scheme's content, for the EP Scheme to be made, but all Operators have a right to object and, if either of the two objection criteria set out in the table below are satisfied, the EP cannot be made. This is to ensure that a dominant Operator cannot force through requirements which could be detrimental to a number of other smaller Operators.

Objection Criteria

Criteria 1	Criteria 2
Registered distance of all the qualifying local services is at least 25% of the total registered distance in that area and: • if 4+ Operators, at least three object; and • or if less than 4, all object.	At least 50% of the total Operators of qualifying local services object and the registered distance of those services operated by the objectors is at least 4% of the total registered distance in that area.

If the objection criteria are not satisfied, then the relevant proposal can be adopted, notwithstanding that one or more Operators object to it. Once agreed, an EP Scheme binds all Operators in the area of the scheme.

It is not expected that smaller Operators in the LCR will have much, if any, influence over the EP decision because they run 1<% of commercial services in the LCR.

If requirements are met and an EP is established, as a regulatory scheme the EP applies to all bus services which have one or more stopping places within the area. This is unlike the existing VPA which only applies to Operators who are signed up to the terms of the VPA.

LCRCA has proposed an ambitious EP Scheme which intends to deliver significant benefits through the EP framework. Operators within the LCR have also proposed a form of EP to LCRCA which, while having a number of benefits which exceed the current VPA proposition, is not as comprehensive as LCRCA's proposed ambitious EP. Within the Operator-proposed EP a number of areas are still subject to agreement between the parties and an acceptable allocation of funding from LCRCA. There is also limited commitment for Operators to provide funding to support proposed Operator-led obligations. For the purposes of the Commercial Case, the Assessment therefore focuses on the ambitious EP proposed by LCRCA. The Assessment makes the presumption that sufficient numbers of Operators will not object to the various proposals contained within it to allow the EP to be adopted without modification.

It is necessary for LCRCA to consider how its ambitious EP could be used to meet the VfB and its commercial objectives, and what the implications for and requirements of Operators would be to deliver these. For example, a common suggestion from Operators is that additional funding from LCRCA may be required to be able to deliver certain components of the VfB.

5.3. EP Progress

LCRCA engaged with incumbent Operators and local authorities from July 2021 – January 2022 on the potential scope of an EP Scheme for LCRCA and how it could support LCRCA to meet its VfB.

A copy of the areas of agreement between Operators and LCRCA are attached in Appendix 3 to this Assessment. In summary, the EP would target:

- (a) Quick and reliable bus journeys through:
 - Punctuality and reliability improvements through a joint approach to data and implementation. Operators have committed to minimum reliability and punctuality standards aligned to BSIP through a trial to assess journey time optimisation.

- Green Bus Routes enabling reduced journey times and network resilience through a single central control room to deliver service development with UTC integration.
- (b) Simple ticketing and great value fares through:
- Single brand of lower fares (“Metro”) including the removal of price premiums on multi-Operator tickets and maintenance of a flat fare structure to enable Metro and “tap and go” roll out.
 - Operators have committed to supporting Smart Ticketing through implementing QR readers, and agreed to support development of a MaaS solution.
- (c) A comprehensive and integrated bus network through:
- Integration of services between modes through coordination of timetables and enabling effective interchange, with operations committing to analyse the network to support.
 - Stabilising the network through agreeing a base network between Operators and LCRCA, as well as seeking to enhance the network through minimising subsidy, considering customer offering (such as night buses) and to look at the network with an open mind to deliver efficiency and reduce operating cost and improve the customer offering.
- (d) An emission-free bus network through:
- Enhancing fleet through a commitment to invest in buses (c. 25% of fleet to ZEV by end of 2025), supporting hydrogen trial (HyBus) and complying with minimum specification on all new buses / refurbishment (note that this is subject to funding from LCRCA).
 - Take passenger views on the specification through Operator involvement in customer forums to develop fleet specification.
- (e) An excellent customer experience through:
- One standard Metro Brand across fleet, products and customer information, with operators committed to all new buses in Metro branding and a refurbishment program of existing fleet.
 - Enhanced training for all staff to be agreed between Operators and LCRCA delivered to new starters and as part of a certificate of professional competence. Operators will commit to the Fair Employment Charter.

- Improved passenger information with Operators agreeing to publish other operator timetables data on Arriva & Stagecoach App websites.

While the areas of agreement on the shape of the EP demonstrate a successful conclusion of the first stage of EP negotiations, and set out a road map to move to a more specific agreement, they do not in themselves specify what the requirements of Operators will be under the final EP Scheme.

It is necessary to have an assumed scope for the EP in order to compare it with the Franchising Option and therefore LCRCA has assumed that the final EP will be ambitious.

The key attributes of this target EP Scheme are:

- (a) **Network:** The EP would set maximum frequency on routes, and have a process for assigning these to interested Operators. LCRCA would not be able to instruct the routing of services, the inclusion of commercially unprofitable services/ portions of services (e.g. on a Sunday or early morning), or require integration with other public transport modes.
- (b) **Ticketing and fares:** Under EP, some integration can be achieved, but it does not go as far as it would under Franchising. Single ticket prices would still be set individually by Operators, but multi-trip tickets would be valid on all Operators' services.
- (c) **Fleet:** there would be the same pace of change to update the fleet to ZEV, and the same funding would be available from the Government as under Franchising. However, vehicles and depots would continue to be owned by Operators under an EP.
- (d) **Livery, branding & marketing:** there would be gradual move to a common "Metro brand" of tickets, marketing materials and livery under the EP. However, it is unclear how quickly this would be implemented, and challenges exist such as livery only occurring on replacement of vehicles meaning it could take a long period of time to implement.

5.4. Contractual Arrangements

5.4.1. Risk Allocation and Responsibilities

The specific terms of the proposed EP Scheme(s) have not yet been developed or agreed with Operators. However, the ambitious EP has been established with a set of attributes that LCRCA considers would be a suitable alternative to provide VfB in the event that Franchising is not pursued. It should be stressed that while LCRCA can propose an EP Scheme for a corridor on the network, it cannot be imposed on Operators

(other than the Operators whose commercial mileage is not sufficient to meet the objection threshold set out above). It is therefore likely that there would be a level of negotiation around what is to be included in any EP Scheme and the final solution may be less than the optimal position taken with the ambitious EP.

The following table presents a high level summary of the risks and responsibilities between the public and private sectors, with the paragraphs that follow setting out further detail for each the target EP Scheme.

Table 3.13: Risks and responsibilities between the public and private sectors

Risk	Status Quo	EP
Revenue Risk	Private Sector	Private Sector
Operating Cost Risk	Private Sector	Private Sector
Employment of bus staff	Private Sector	Private Sector
Employment of network management staff	Private Sector	Private Sector
Service specifications and branding	Private Sector	Public/Private Sector
Timetabling	Private Sector	Private Sector
Customer Service	Private Sector	Private Sector
Fleet Provision, Financing	Private Sector	Private Sector
Depot Provision - Control systems/ Ticketing maintenance Rota / Duty etc.	Private Sector	Private Sector
IT System	Private Sector	Private Sector

To provide a reasoned alternative to Franchising, the remainder of this Section sets out the basic parameters that LCRCA envisages for the target EP Scheme. This has been set as an ambitious target. The following Sections highlight the key benefits, constraints and risks of a potential ambitious EP.

An ambitious EP in the LCR is assumed to have the following commercial attributes:

5.4.2. Revenue risk

Operators would retain revenue risk for commercially-run services. LCRCA would continue to provide supported services and would retain revenue risk on all supported services. If an EP significantly increases the costs of running commercial services, this could lead to an increase in the number of supported services which would require additional funding from LCRCA.

5.4.3. Control over route registration

LCRCA would have control over route registration. Whilst Operators would have the right to shape and object to the route specifications through the process of negotiating the EP Scheme, LCRCA would have the power to grant or revoke an Operator's licence to run a route.

5.4.4. Control over service specifications

The EP Scheme would impose greater control over service specifications than under the VPA. The EP Scheme may require Operators to run a certain minimum number of services, along a specific route(s), as well as imposing a given standard of buses (e.g. Euro VI) or even the use of a specific energy source (e.g. hydrogen or electric), and setting out expected levels of passenger service and customer satisfaction. However, this is subject to being agreed with the majority of Operators during EP negotiations.

5.4.5. Performance incentive mechanisms

The EP is expected to contain some limited performance standards and KPIs, such as frequency of services, reliability, standard of buses and passenger satisfaction. However, the performance regime will not be formally linked to a payment mechanism in the same way as under a Franchising Scheme. Consequently, there is a danger that LCRCA would lack the leverage to enforce the performance regime and maintain the desired standards of bus service provision. It is probable that LCRCA's power to grant or revoke an Operator's route registration could be used to incentivise performance, but it is an "all-or-nothing" option which would see Operators stripped of routes in case of underperformance. This would result in LCRCA having to tender them as supported services, if other Operators did not come forward to run the services on a commercial basis.

5.4.6. Fares & Ticketing

The EP can go some way towards delivering the ticketing and fares component of the VfB, by creating a basis for making ticketing simpler.

The ambitious EP provides a mandate that tickets are valid for a specific route (or set of routes) regardless of the Operator(s) that a passenger uses. This is to avoid the problem in the current network that passengers may be faced with, whereby different Operator tickets are required for the outbound and return journeys. This is particularly an issue where some services are provided commercially during peak hours and as supported services in off-peak hours.

It is also assumed that it would be possible to introduce some form of alignment on multi-trip products (such as weekly, monthly or annual season tickets) through an agreement with Operators.

As above, the ability to deliver LCRCA's aims in relation to ticketing and fares initiatives would be subject to negotiation with Operators.

5.4.7. Fleet

The EP does not offer any major advantages in terms of delivering the fleet initiative over and above the current LCRCA network. The options of (i) leaving fleet investment to market forces, and (ii) LCRCA investing in fleet would apply to the EP and present a similar set of challenges.

The EP Plan and relevant EP Scheme(s) could create a mandate, against which Operators could be held to account for transitioning towards a cleaner fleet. In particular, this could specify the type of vehicles to be used to provide services. However, as noted above this would need to remain commercially viable for Operators to agree to it as part of negotiations.

5.4.8. Depot

Under the ambitious EP, it is proposed that the provision of depots remain a responsibility of the private sector Operators, and the supporting infrastructure to support transition to zero emissions fleet follows the fleet obligations in the EP agreement as set out in Section 5.3 above.

As with fleet, and given that the EP remains a continuation of the deregulated market, with control and management of both network and operations retained by the private sector, the ownership of depots would be retained by the private sector.

5.4.9. Other EP parameters to be determined through negotiation

These will include issues such as length of EP agreements, provisions for termination of the EP, provisions for change to the EP, process for renewing/continuing the EP, process for admitting new entrants to the EP, provisions for Operator of last resort (e.g. in case of Operator insolvency or termination).

5.4.10. Other complementary public policy levers

Under the current arrangements LCRCA has a number of options to incentivise certain outcomes, for example by using other public policy levers, such as the introduction of environmental measures; Clean Air/Low Emissions Zones to drive Operators to make changes in fleet standards; or introducing/changing other road charges (e.g. parking levy or Mersey Tunnel tolls) to incentivise a wider shift in transportation from car to bus.

The above areas highlight that establishing an EP is likely to require a significant process of negotiation between LCRCA and Operators. In order to make changes to the services provided under an EP, and to deal with the impact of changing market conditions on the viability of EP there will have to be fairly regular changes and this will require significant resource to negotiate and manage such changes.

5.5. An outline of the proposed phasing and implementation of an EP Scheme

There are a number of stages required to propose, negotiate, agree and implement an EP Scheme, commencing with the need to invite Operators in the area to which the EP relates to participate in the preparation of the plan and scheme. It is anticipated that this would be implemented in a shorter period of time (3 years) than under Franchising (5+ years).

While there is a 3-year notice period required for the introduction of franchising in the existing VPA agreement, this may not apply to a move to an EP, and there are provisions in the VPA to ease the move to an EP.

As set out in the EP Guidance, there is a need for LCRCA to engage informally in order to determine whether an EP is viable, and these engagements have formed the basis for the EP aspirations and Operator commitments outlined in Section 5.3 above. The engagements to date have involved both Arriva and Stagecoach.

Further consultation (including with smaller Operators) will be required to comply with guidance.

As a result, given the requirement for negotiation with Operators to reach an agreement on a set of principles and Operator commitments, the timeline for agreement and implementation of an EP Scheme is unclear.

5.6. How the involvement of SMO will be facilitated

Under an EP, SMO involvement in setting the terms of the EP Scheme depends on whether they are running commercial services at the time of the negotiation of the EP Scheme. If an SMO

subsequently decides to offer commercial services, it will be bound by the requirements of the EP Scheme.

At present no SMOs have been involved in EP Scheme negotiations in the LCR. Therefore, the interests of SMOs will need to be considered by LCRCA.

5.7. Proposed procurement strategy

Given that the ownership, management and operation of bus services, and related assets are retained by private sector Operators, no procurement is envisaged as part of proposed EP Scheme.

It should be noted however, that if LCRCA wishes to provide funding for fleet they will have to consider carefully how this is structured. The recent example of the procurement of fleet for HyBus required a lengthy and complex process, to comply with relevant subsidy regulations. As a result, thorough consideration of any future requirement will be needed under EP.

5.8. Consideration of Pensions / TUPE arrangements

Given that the ownership, management and operation of bus services, and employment of staff are retained by private sector Operators, no pensions / TUPE arrangements are envisaged as part of the proposed EP Scheme.

5.9. Commercial Risks

The table below provides an assessment of the commercial risks associated with an EP.

Table 3.14: Assessment of the commercial risks associated with EP

As the EP continues to have the services under the control of Operators, the risks set out in Section 3 (for the Status Quo) all apply here, in addition to those set out below.

Risk – Description	Mitigation
Risk that LCRCA is unable to negotiate and obtain agreement with Operators on the terms of an EP Agreement, limiting ability to deliver the VfB objectives.	LCRCA has undertaken early engagement with incumbent Operators to understand appetite for different terms.

Risk – Description	Mitigation
Risk of poor transition from the Alliance to EP, impacting customer experience and affecting LCRCA's ability to achieve its VfB objectives.	LCRCA to develop an implementation plan which includes how issues will be resolved, the role of each party in the transition period, and any arrangements to be put in place in case of delays.
Risk that SMOs are negatively affected due to lack of influence on the terms of an EP.	LCRCA to undertake an assessment of the impact of any agreement on SMOs, and ensure SMOs have a voice during negotiation of the EP through further consultation.
Risk that LCRCA does not have the required resources or capabilities to successfully manage the EP.	LCRCA will develop a detailed resource and implementation plan to ensure sufficient resource and skills are available within LCRCA to manage the introduction and operation of the EP Scheme.

5.10. Summary Assessment against Commercial Objectives

The table below sets out a summary assessment of the ambitious EP against LCRCA's commercial objectives as described in

Section 2. The following assessment includes a rating of each option against the commercial objectives, whereby:

- **Green Rating** means high potential that the option allows for the delivery of the objective;
- **Amber rating** means that while the objective could be met under the option, there are a number of challenges; and
- **Red rating** means that it is unlikely that the objective will be met under the option.

Table 3.15: Summary assessment of the EP

Risk	Assessment	Rating
Public Sector Influence	• The EP will allow LCRCA to achieve greater control over the behaviour of Operators and outcomes of the bus network, as compared against the Alliance – potentially delivering better value to customers (through e.g. a more consistent service). • This could include, for example, providing LCRCA with a more streamlined and cohesive set of service provisions than the current arrangements, and facilitate a more strategic and proactive approach to the design and management of the bus network. • However, given that the EP is subject to negotiation, it is unlikely that Operators will agree to more than what they currently provide given their commercial interests, without additional funding from LCRCA. As a result, the influence over the network may be limited. • In addition, given that Operators are free to stop running services which are no longer commercially viable, this may lead to increased supported services payments from LCRCA to maintain the network. • Should the requirements of an EP introduce additional costs to Operators, this may lead to more demand for supported services payments from LCRCA, and therefore either higher costs or reduced overall services.	

Risk	Assessment	Rating
Best Value	• Operators compete commercially for passengers on the street based on the quality of service and fares charged. However, given the lack of competition and presence of just 2 large Operators, the extent to which competition drives value is unclear. • This is further emphasised by the significant barriers to entry in the deregulated market that will continue to exist under an EP. • LCRCA will need to carefully balance the requirements and influence of an EP Scheme with the need to support Operator participation and competition.	
Driver of Competition	• Under an EP the allocation of risks and responsibilities will remain the same as under the current bus arrangements. Operators are free to stop running services when they are no longer commercially viable. • As a result, it is unlikely that the EP will further enhance competition and LCRCA will continue to be at risk of increasing supported services payments. • The ambitious EP will however extend further than the Alliance to all Operators, allowing LCRCA to establish principles which apply to the whole network. • However, SMOs have voiced concern about the impact of an EP on their competitiveness and market share, with the potential of being priced out of the market due to expensive EP commitments. Larger Operators are concerned about their competitors being unfairly supported and fast-tracked to the detriment of their own market share.	

Risk	Assessment	Rating
Appropriate Risk allocation	• Under an EP the risk allocation will remain as the Status Quo and current deregulated market arrangements. • Risk and in particular revenue risk would remain with the private sector. However, in light of reduced demand following the COVID-19 pandemic, it is likely that de facto revenue risk sits with LCRCA, in that any cut to commercial network would need to be filled with supported services - or face a reduction in network. • An EP would provide less flexibility for LCRCA to adjust its network to provide relevant support or revised services.	
Ease of Implementation of the EP Option	• An EP will act in a similar way to current arrangements. While there may be a period of negotiation with Operators, the option would not be difficult to implement relative to Franchising. However, the ability of Operators to object to LCR proposals means that the final EP that its agreed may be less than the ambitious EP proposed in this Commercial Case. • The requirements for consultation in developing an EP are significantly wider than those required for the Alliance. This increases the responsibilities and workload of LCRCA and is discussed further in the Management Case. • This Assessment does not assess the extent to which LCRCA would have influence to limit any Operator objections or on its the ability to achieve its VfB Objectives under any EP amended through negotiation with Operators.	

Risk	Assessment	Rating
Recovery Robustness	• The EP will allow LCRCA to achieve greater control over the behaviour of Operators and outcomes of the bus network, as compared against the Alliance – potentially delivering better value to customers (through e.g. a more consistent service). • Operators are free to stop running services which are no longer commercially viable, which may lead to increased supported services payments from LCRCA to maintain the network. • If the requirements of an EP introduce additional costs to Operators, this may lead to higher supported services payments from LCRCA.	

5.11. Conclusion

The EP framework allows LCRCA to put forward proposals for an ambitious EP that can fulfil the VfB. However, to create such an EP would be dependent on successful negotiations with Operators to define and agree an EP Plan and relevant EP Scheme(s). There are specific requirements for obtaining operator support before an EP Scheme can be implemented, and there is a risk for LCRCA that an effective agreement cannot be concluded.

Key areas where agreement would be required include:

- (a) Mechanisms for Operators to use additional public sector funding to achieve components of the VfB;
- (b) Cross-Operator issues such as ticketing where a separate set of agreements (e.g. Multi-Operator and Multi-Modal Ticketing Agreements) would be required;
- (c) Concerns from Operators regarding the impact of EP on their market share;
- (d) Any performance regime that LCRCA would seek to enforce on EP Operators; and
- (e) Concerns about the ongoing overhead of negotiating changes to the EP.

Therefore, from a commercial perspective, negotiations could result in an EP that helps to implement some aspects of LCRCA's VfB which would be greater than those achievable under the Alliance. However, this is dependent on the willingness of the incumbent

Operators to include these in the EP. To date a number of operators have proposed an EP Scheme which does not provide all of the attributes of the ambitious EP and includes a number of caveats, particularly with respect to Operator obligations. In LCRCA's view this Operator-proposed EP would provide a fewer number of attributes as the ambitious EP and provide less VfM.

In overall terms, even the ambitious EP does not provide the level of control for LCRCA that Franchising does (as, under EP, commercial risks still sit with Operators). To implement changes to the network, LCRCA will in many circumstances face similar challenges to the Status Quo.

6. *Conclusion of Commercial Case*

This Section brings together the key findings of the Commercial Case, specifically the commercial assessment of the existing commercial arrangements, and the key commercial differences projected to arise from the proposed alternative options, Franchising and EP, as mechanisms for LCRCA to deliver its policy and VfB objectives.

As stated in the Bus Back Better strategy, all LTAs in England are expected to commit to establishing EP across their entire areas under the Bus Services Act, or pursue Franchising.

This results in the need to shift from the Status Quo, which currently sees an Alliance in place between the two main Operators (Arriva and Stagecoach) and LCRCA. Of the two alternative Delivery Options, the existing Alliance aligns most closely with an EP.

The Alliance has demonstrated a number of positives for LCRCA since its inception, most notably creating a forum for LCRCA and participating bus Operators to discuss and address key issues that affect bus services - including managing the network during the COVID-19 pandemic.

However, a key shortcoming of the Alliance is that it does not contain all Operators, and can only deliver outcomes based on consensus views agreed between the parties. This works well in relation to Policy Objectives where the commercial Operators' and LCRCA's interests are aligned; but less well in relation to the achievement of wider Policy Objectives.

In addition, there is limited ability to hold Operators to account under the Alliance, with no contract or performance regime in place, and while a main objective is to commit Alliance partners to investing in the network, more than 80% of investment through the Alliance has come from the public sector. Operators have also failed to meet minimum criteria set out in the Alliance, such as average age of fleet. As a result of these challenges and others identified in this commercial case, coupled with the direction of the Bus Back Better strategy, continuing with the Alliance is not an option.

In contrast to the Status Quo, a Franchising scheme provides LCRCA with much greater control over the outcomes of the bus network, better enabling the delivery of its own Policy Objectives and VfB in line with the Bus Back Better strategy.

The Franchising proposals include a range of interventions and measures to ensure that a competitive Franchising market is established, and that SMOs can actively participate in the market. These interventions have been centred upon LCRCA providing access to fleet and depot.

Franchising also has the potential to provide additional control and influence in recovery from the pandemic, where bus patronage remains below its pre-pandemic levels. It provides this control by giving LCRCA

the remit to put in place targeted measures to encourage patronage and contribute to many of its wider environmental, social and economic objectives.

However, while the Commercial Case has identified that Franchising delivers significant control and influence to LCRCA in achieving its objectives, it comes with both cost and risk. Delivering Franchising will require a significant financial commitment and expertise from LCRCA for its implementation. In terms of risk, delivering Franchising presents LCRCA with a range of financial and non-financial risks that will require careful management by LCRCA, all of which should be considered in detail prior to entering into Franchising.

While the Franchising proposition provides for a competitive market in which LCRCA has much greater control and influence than the Status Quo, it comes with a range of significant risks and delivery requirements. In contrast, the EP model does not provide the same extent of risks and delivery challenges, but neither does it provide the same level of control and influence as Franchising.

Under the EP Option, the delivery of Policy Objectives and VfB is heavily dependent on successful negotiations with Operators, to agree an EP Plan and Scheme(s), and as a result may retain many of the challenges experienced with the current Alliance. These areas for agreement may include cross Operator issues such as ticketing, concerns around the EP impacting Operators' market shares and concerns over the overhead (in terms of costs and resource) of negotiating changes to the EP.

In overall terms, the EP does not provide the level of control for LCRCA that Franchising does (as, under EP, commercial risks still sit with Operators). To implement changes to the network, LCRCA will in many circumstances face similar challenges to the Status Quo.

Therefore, in conclusion, LCRCA must consider the extent to which it wishes to bear the financial and delivery requirements and risks of Franchising, in order to maximise its control and influence over policy and VfB outcomes - relative to the lower risk, and lower level of control of an EP.

The Financial Case

1. Introduction

The purpose of this Financial Case is to assess the financial implications for LCRCA of the two shortlisted alternative bus Delivery Options, Franchising and EP, with reference to the Green Book Guidance requirements and the Franchising Guidance.

Requirements of Green Book Guidance

The Green Book Guidance requires an assessment of the financial impact of each option to determine the affordability and fundability of each option, including:

- an assessment of the net cost of each option to the public sector, taking into account all financial costs and benefits arising;
- affordability analysis, including a year-by-year assessment of costs, income and budget;
- details of the capital and revenue requirements for the different options over their lifespan;
- an assessment of the impact of options on the income and expenditure and balance sheet of LCRCA;
- an assessment of any implementation costs associated with the different options;
- details of funding sources, including any LCRCA borrowing requirements and arrangements; and
- an overview of financial risks and sensitivity of key assumptions/ forecasts.

To align with the Economic Case, the Financial Case includes an assessment of the Reference Case (or “status quo”) for the purposes of public sector comparator, in line with Green Book Guidance.

Requirements of Franchising Guidance

The Franchising Guidance presents the issues that the Assessment should consider, particularly for Franchising. These cover the financial implications of both the initial introduction of the arrangements, and the ongoing management and operation.

Authorities should set out the capital and revenue requirements for the different options over the appraisal period, together with an assessment of how the options would impact upon the balance sheet, income, and expenditure account of the Franchising authority. Any requirements for external or additional funding must be set out clearly together with an explanation of how the funding will be secured.

In developing the financial case for the Assessment, an authority or authorities should ensure they have considered:

- whether the options would require capital spending, such as for the purchase of depots, buses or other infrastructure;
- whether the options would require revenue spending, such as for additional staff, in particular considering the costs associated with the TUPE transfer of staff and their pension protection where relevant;
- how devolved BSOG funding will be used; and
- impact on the financial aspects of bus operations (including but not limited to farebox revenue, BSOG, operating costs, capital expenditure, implementation costs and Operator margin).

The Franchising Guidance requires consideration of the long-term financial sustainability of the options, particularly for Franchising. Specifically, the financial case element of the Assessment should set out:

- a year by year cost analysis, broken down by capital and resource expenditure, for the authority or authorities;
- the budget available to the authority in each of the relevant years;
- a year by year income forecast for the authority if relevant (for example if a gross cost franchise is proposed);
- whether the option requires additional borrowing by the authority and if so what interest assumptions and repayment arrangements have been used;
- a summary of the key financial risks, particularly to any forecast income to the authority and including any quantified impacts and high level mitigation plans; and
- a sensitivity analysis, reflecting the range of financial risks.

Structure of this Financial Case

Section 2 (LCRCA Financial Position) sets out:

- an overview of LCRCA's current financial position for transport overall;
- an overview of LCRCA's current financial position for bus services in the LCR, including current revenue expenditure; and
- a breakdown of the uses of the Transport Levy and other income sources;

Section 3 (Modelling Principles and Approach) sets out:

- an overview of the modelling approach employed for the Financial Case;
- a description of the operating costs and revenues for bus services and how these are treated in the financial model (including operator margin); and
- a description of other modelling assumptions employed, such as the approach to inflation and comparison of options.

Sections 4 – 6 (Results) sets out the results for Reference Case, Franchising and EP in turn, and in line with the requirements of the Franchising Guidance, includes:

- net cost of each option to the public sector including an affordability analysis (including a year-by-year assessment of costs, income, and budget) as set out in Sections 4.4.1, 5.4.1 and 6.4.1;
- requirements for capital investment for depots and infrastructure, or revenue such as for additional staff (or associated TUPE / Pensions) as set out in Sections 5.3.2 and 6.3.3;
- implementation costs for the option, as set out in Sections 5.3.2.4 and 6.3.2;
- further financial considerations including VAT, working capital, accounting considerations, minimum revenue provision and long term liabilities, as set out in Section 5.8;
- proposed funding sources (such as borrowing arrangements and any associated terms), including how devolved BSOG funding will be used, as set out in Sections 5.3.2.5 and 5.5; and
- assessment of risk (including mitigation plans) and resulting sensitivity analysis to quantify the risks, as set out in Sections 5.6, 5.7, 6.5 and 6.6.

Section 7 provides a comparison of options under a range of scenarios.

Section 8 provides the conclusion of the analysis.

2. LCRCA Financial Position

2.1. Introduction

In this Section we set out the details of the current financial position of LCRCA, including an overview of LCRCA's current financial position for transport overall and for bus services in the LCR, including current revenue expenditure and a breakdown of the Transport Levy and other income sources.

Given the material impact that the COVID-19 pandemic has had on bus and other transport patronage and resulting expenditure on services, 2018/19 has been used as a reference for a steady state period representative of "normal" bus operations and patronage in the LCR.

The following Sections set out:

- (f) LCRCA Expenditure: describes LCRCA's total expenditure in relation to its transport budget;
- (g) LCRCA Income from Transport Levy: describes the composition of income relating to the Transport Levy with Districts; and
- (h) LCRCA Bus Income and Expenditure: describes LCRCA's income and expenditure relating to bus services in the LCR, under the current bus service delivery arrangements.

2.2. LCRCA Expenditure

This Section sets out LCRCA's overall spend on transport, based on its 2018/19 financial accounts¹⁷⁷. This year is chosen as being consistent with the base year for the economic analysis. For information, updated figures for 2021/22 are also included. This includes bus, rail, ferries and tunnels.

In 2018/19, LCRCA's net revenue expenditure budget for transport was £119.5 million, of which the majority related to concessionary travel, Mersey Tunnels and bus services. LCRCA funded this mainly through the Transport Levy, with contribution from Mersey Tunnels Grant and usable reserves. The breakdown is detailed in the table below:

¹⁷⁷ Merseytravel Statement of Accounts FINAL 2018-19.

Table 4.1: Merseytravel Revenue Expenditure 2018/2019

Component:	Merseytravel Revenue Expenditure (£m)	2021/22 equivalent (£m)
Concessionary Travel	53.3	47.8
Mersey Tunnels	22.4	14.0
Bus Services	15.5	17.8
Customer Service	6	3.3
Rolling Stock	5.8	0.2
Rail Services	4.3	6.9
Corporate Costs	3.8	0.6
People and Customer Development	3.1	1.5
Corporate Management	2	0.5
Policy	1.9	0.3
Mersey Ferries Group	1.4	1.6
Net Revenue Expenditure	119.5	94.5
Funded by:		
Transport Levy	92.0	91.9
Mersey Tunnels Grant	22.4	20.0
Application of Carried Forward Reserves	5.8	0
Sales, Fees and Charges Grant	Not Included	1.1
Total Income	120.2	113.0
Net Transfer (to)/ from Reserves	(0.7)	(18.5)

Source: Merseytravel Statement of Accounts 2018-19, page 4

Of the total levy received by Merseytravel in 2018/19, £56.68m of this is assumed to relate specifically to the provision of bus services, with c. £43.1m of this relating to ENCTS payable to bus Operators

for concessionary travel schemes (see Section 2.4.2 for further description of ENCTS).

2.3. LCRCA Revenue from Transport Levy

Merseytravel received £92 million of Transport Levy in 2018/19. The Transport Levy is a charge imposed by LCRCA on its member authorities and is used to fund the delivery of transport related activities across the LCR. The contributions from member authorities within the LCR for 2018/19 is detailed in the following table:

Table 4.2: Transport Levy Breakdown

Local Authority:	Transport Levy 2018/19 (£m)	2021/22 equivalent
Knowsley	10.04	10.28
Liverpool	32.66	33.93
St Helens	12.12	12.31
Sefton	18.68	18.83
Wirral	21.90	23.87
Total TL before Halton's contribution	95.40	99.2
Halton	3.50	3.2
Total TL including Halton's contribution	98.90	102.4
Grant to Halton	3.50	3.2
Amount retained by LCRCA	3.40	
Total received by Merseytravel	92.00	7.3

Source: Statements of Accounts from each Council.
Merseytravel Statement of Accounts 2021-22, page 5

2.4. LCRCA Bus Services – Income and Expenditure

This Section sets out LCRCA's income and expenditure relating to bus services in LCR under the current bus service delivery arrangements. This includes both:

- LCRCA's representative net expenditure on bus services; and
- LCRCA's long term forecast of how this will change over time, which forms LCRCA's long term 'Bus Budget'.

2.4.1. Summary of LCRCA's Net Expenditure on Bus Services

Section 2.2 above sets out LCRCA's Revenue Expenditure on all travel services for the region of c. £120m in 2018/19, of which c. £66m relates to the provision of bus services. The

following table presents the composition of expenditure on bus services for LCRCA.

Table 4.3: Merseytravel Budget 2018/19 Net Expenditure (£m)

Expenditure (£m)	2018/19 Net Expenditure	2021/22 Equivalent
ENCTS – Concessionary Travel Costs	43.1	40.3
Supported Services (De Minimis and Tendered Services)	18.5	14
LCRCA Operating Costs	2.6	3.3
Capital Expenditure and Maintenance Costs	1.9	1.3
Payments to Operators through the Alliance	0.3	0
Total 2018/19 Expenditure	66.4	58.9

Source: LCRCA Finance

The following paragraphs provide a short description of each of the above expenditure items.

2.4.2.ENCTS - Concessionary Travel costs

The Transport Act 2000 requires Travel Concession Authorities (“TCAs”) to implement mandatory travel concessions which guarantee free off-peak local bus travel to eligible older and disabled persons in England as part of the English National Concessionary Travel Scheme (‘ENCTS’).

LCRCA is required, by law, to reimburse bus operators for carrying concessionary passengers on their services. This reimbursement, paid by LCRCA to Operators, is for all concessionary journeys within LCRCA’s boundaries, regardless of whether the concessionary traveller is a resident of the TCA area.

LCRCA also supports an extension of the ENCTS, allowing free travel from the age of 60 and pass holders to travel free by bus. LCRCA makes additional ENCTS payments to Operators to compensate for the cost of these patrons. In 2018/19, ENCTS payments to operators of c. £43.1m were budgeted.

2.4.3.Supported Services

LCRCA provides financial support for additional bus services which are socially desirable but are not commercially viable or attractive for Operators to run.

These additional supported services include additional departures (for example, early morning or Sunday services) on otherwise non-viable routes, or, in certain cases, entire routes which would otherwise not be run by Operators.

LCRCA spent £18.5 million per year on supported services is observed for 2018/19). This expenditure is made up of two categories:

- (a) LCRCA lets contracts for the provision of bus services where services are not being provided by the market (these are known as “supported services”); and
- (b) LCRCA pays a subsidy directly to commercial Operators to encourage them to continue to provide a service that is only marginally viable, for example, to extend hours/ days of operation (these contributions are known as “de minimis”).

De minimis payments made up approximately 20% of LCRCA’s expenditure on supported services (£3.5 million in 2018/19), whilst expenditure on tendered services makes up c. 80% (£15.0 million in 2018/19).

2.4.4.LCRCA current bus administration costs

LCRCA incurs internal costs to administer the bus network and associated support activities undertaken in house by Merseytravel. These costs include:

- staff costs (including contract management, network and data, and compliance staff);
- general administrative costs (including, but not limited to, route management and route registrations);
- bus station costs, resulting from LCRCA’s ownership and provision of bus stations for use by Operators. Note that these costs are net of income to LCRCA resulting from Operator use of the bus stations;
- publicity and marketing costs; and
- TravelSafe payments - these are payments to the TravelSafe Partnership which help to maintain a safe and secure transport environment for customers and staff. The partnership includes Merseyside Police, British Transport Police, and Operators.

Total LCRCA current bus administration costs in 2018/19 was £2.6m.

2.4.5. Capital Expenditure and Maintenance

Under the existing arrangements, and as detailed above, LCRCA owns and manages bus stations across the LCR, which operators use for the provision of bus services.

In addition to this, LCRCA also supports technology requirements relating to bus services, including Real Time Information (“RTI”) infrastructure.

As a result, LCRCA incurs capital expenditure and maintenance costs, including:

- bus station maintenance costs, including all costs associated with the capital maintenance and development of bus stations and related infrastructure to support bus services across the LCR; and
- capital expenditure on technology and associated infrastructure to deliver RTI services to passengers. This includes RTI at bus stations and bus stops, as well as some on board technology.

Capital expenditure and maintenance costs of £1.9m were budgeted for 2018/19 under the Bus Budget.

2.4.6. Alliance Marketing

LCRCA contributes to the cost of marketing of bus in the LCR as part of the Alliance with Operators. Operators also contribute to these costs under the current arrangements.

3. Approach to Financial Modelling

In this Section we set out the approach LCRCA has taken to modelling the financial impact of the alternative bus service Delivery Options and associated initiatives. This builds on the approach to modelling of options undertaken within the Economic Case. The following Sections set out:

- (a) an overview of the modelling approach employed in the financial case;
- (b) a description of the operating costs and revenues for bus services and how treated in the financial model; and
- (c) a description of other modelling assumptions employed, such as approach to inflation or comparison of options.

3.1. Overview of Modelling Approach

3.1.1. Optimisation of Cashflows for Options

The approach taken in the Economic Case is to optimise the bus services available given the level of demand and budget available in each of the scenarios. Given that the Financial Case builds upon the analysis carried out in the Economic Case, it employs the same approach.

The Financial Case adjusts the results of the Economic Case (for example, the level of LCRCA management or staff costs associated with each option). Further details of how this is done are set out below. However, the resultant cost of each Delivery Option will be similar. The primary comparator between the Delivery Options is the level of services that can be run.

This approach has been undertaken to reflect LCRCA's position of seeking to optimise its bus offer for a given level of funding available, rather than make savings through different Delivery Options.

Therefore, the financial impact should not vary significantly between the options. However, due to bus service costs being stepped up as services are added or withdrawn and different structures in costs between options, there are differences in costs of each option, and these are discussed in the Sections relating to each Delivery Option.

3.1.2. Use of scenarios

Due to the impact of COVID-19, the future demand for bus services and the funding available is uncertain.

In the LCR, there has been a steady recovery in passenger demand, but it has still not reached pre COVID-19 levels. As of November 2022, there was also uncertainty regarding how much, if any, funding would be made available from Central Government for bus services.

To deal with this uncertainty, the Financial Case considers the impact of a range of demand and funding scenarios for the three Delivery Options (Reference Case, EP and Franchising) on the financial position of LCRCA. These also help to understand if the benefits of one option over another are maintained across the range of scenarios.

The scenarios used are the same as those in the Economic Case, and reflect the level of uncertainty regarding future bus services and funding, primarily driven by:

- (a) the degree to which passengers will return to bus after the disruption of COVID-19; and
- (b) the level of funding going forward that LCRCA will have access to for bus services.

As a result of the uncertainty, the following scenarios have been employed in the Financial Case

Bus Demand Scenarios

Two scenarios have been modelled:

- 85: Bus demand forecast is 85% of pre-COVID-19 levels
- 100: Bus demand forecast is 100% of pre-COVID-19 levels
- Note that:
- These are percentages of the forecast demand for the appraisal period before COVID-19. This forecast for demand was expected to continue the decline seen for non-London bus services over recent years. Therefore, the percentage quoted is the percentage of the declining forecast.
- The demand forecasts represent the general level of demand. If the bus service is reduced to reflect a fall in demand, the reduction in journey opportunities may lead to a larger reduction in revenue and passenger journeys than the fall in general demand.

Funding Scenarios

All funding scenarios are based on a projection of a continuation of current spend on bus, with a form of indexation.

It should be noted that the constituent authorities of LCRCA is not compelled to provide any levy to LCRCA, and that the amount of levy is set each year as part of the local authority budgeting process. Therefore there is no guarantee that any level of levy can be delivered.

However, it is important to stress that:

- The amount of levy assumed in this case is an assumption – and that different scenarios for levy available have been modelled

- The amount of levy assumed is the same for all three options. If the levy was subject to significant reductions this would affect the level of bus services for all of the options.
- The assumptions used are not a statement or prediction of what LCRCA and its constituent authorities will provide

The specific assumptions used in the 'Current Funding Scenario' are:

- The 66.3m budget for 2022/23
- An annual increase in levy of a fixed 2% per annum in every future year of the appraisal period. This is lower than the forecast level of CPI and RPI in TAG Data Book v1.20.2¹⁷⁸, and reflects that there are likely to be pressures on constituent authority budgets, and they may not be able to increase Council Tax by the full rate of inflation. This assumption therefore represents a real terms cut to the bus budget going forward,

Two further funding scenarios are used, both based on the Current Scenario:

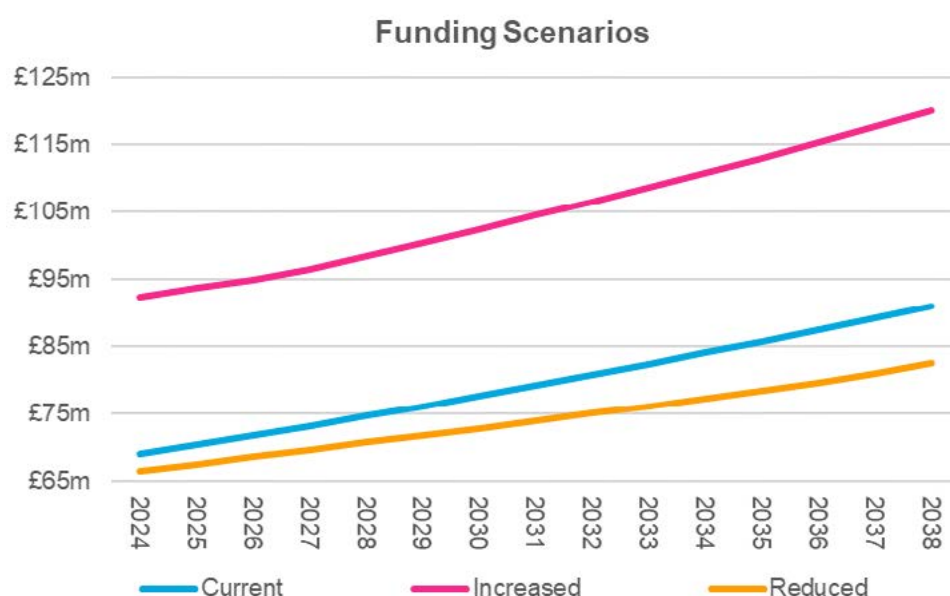
- Increased Funding Scenario: An additional £20.4m per year (in 2022/23 prices) of funding is available from 2024. This has been selected as the equivalent of doubling the current budget paid to operators for supported services (but maintaining ENCTS at the current level). There is no specific source for this scenario, but it could be funded by additional Central Government support, additional mayoral precept, or any combination of the additional funding routes available (see section 5.5).
- Reduced Funding Scenario: Annual funding reduces by 2.8% in 2024/25 and by an additional 0.4% per year thereafter. This broadly represents freezing the element of levy that pays for supported services at current nominal levels, while continuing to index the element that pays for ENCTS.

It should be stressed that the assumed level of funding does not presume a source for funding. A review of potential funding sources is included in Section 5.5 below.

The graph on the following page shows the forecast level of subsidy for each of the three funding scenarios over the appraisal period in nominal terms.

178 Released in January 2023. Sourced from: <https://www.gov.uk/government/publications/tag-data-book>.

Figure 4.1 Forecast Levels of Subsidy Across the 3 Funding Scenarios



3.2. Operating costs and revenues for bus services

3.2.1. Farebox Revenue, Operating Costs and ENCTS Payments

The forecasts for each option and scenario are derived from the forecasts developed in the Economic Case. There are 18 separate combinations of Delivery Options and scenarios (“forecasts”).

The ‘Core Scenario’ which is used as a benchmark for other scenarios is:

- demand for bus services is at 85% of its forecast pre COVID-19 levels; and
- the Current Funding Scenario.

Each forecast consists of annual cashflows in real terms (excluding inflation) for commercial services, supported services and franchised services, and the forecasts are broken down into operating costs, farebox revenues and ENCTS payments.

The Economic Case forecasts are based on data provided by Operators, and the economic model uses assumptions for changes in cost and demand levels for bus services, and the impact of the changes to the customer offer for EP and Franchising.

The Economic Case works entirely in real terms (excluding inflation). Therefore, the cash flows provided for each scenario in the Financial Case are indexed to provide for inflation (in accordance with the assumptions set out in Section 3.3 below

for indexation). It should be noted that the forecasts from the Economic Case already include real increases in cost and reductions in demand, hence only general inflation needs to be added to create a nominal forecast.

3.2.2. Adjustments to Economic Case Cash Flows

Under Franchising, depots and some fleet will be provided by the public sector, whereas under the Reference Case and EP options these will be provided by the private sector.

The Economic Model calculates gross cost franchise costs including all costs of depot and fleet. Therefore, the financial model deducts an estimate of the cost to Operators of fleet and depots from the franchise payments to Operators, where it is assumed that these assets will be provided to the Operators by LCRCA.

LCRCA separately incurs costs of providing fleet and depot, and these are shown separately in the forecast cashflows.

In addition, some of the management costs incurred by LCRCA under Franchising (described in Section 3.2.4 below) will be replacing activities previously undertaken by Operators - therefore these are deducted from the cost of franchise payments to Operators.

3.2.3. Margin on Supported and Franchised Services

A key element included in the financial analysis is the margin realised by Operators. The approach to margin in the analysis is:

- for the Reference Case and EP, commercial services earn a margin through the difference between farebox revenue (including ENCTS payments) and operating costs; and
- for supported services under the Reference Case and EP, and for Franchised services, Operators earn a margin on services provided to LCRCA. The financial forecasts calculate the margin as:
 - 6.5% margin (6.95% markup on costs) for supported services under the Reference Case and EP; and
 - 7.5% margin (8.11% markup on costs) for Franchised services.

Note that:

while LCRCA's current estimate of margin for supported services is 6%, the 6.5% margin used here reflects the forecast increase in the proportion of all services which would be provided as supported services. It is expected that the margin for supported services would increase as there could be fewer competitors for the larger number of services, leading to a rise in margins.

The margin on franchised services is subject to a sensitivity test in Section 5.7.4.

3.2.4. Management Costs

Under all Delivery Options, LCRCA has a range of activities to undertake and needs to provide for these, namely:

- Bus station costs (net);
- RTI – Real Time Information;
- Staff Costs;
- Admin & Office Costs;
- Publicity / Advertising / Marketing costs;
- Travelsafe;
- Alliance Marketing contribution; and
- (Sundry income).

Save for those items where a chosen Delivery Option drives a clear change in any of the above categories, it is assumed that the existing cost will continue and be subject to indexation (see Section 3.3 below for further details).

Items which vary between Delivery Options are:

- Staff Costs which would increase under EP and increase substantially under Franchising as additional staff are required to manage the network, analyse revenue, and provide customer services. Under the Reference Case and EP much of these responsibilities would continue to sit with Operators;
- Admin and Office Costs, which will increase on a similar basis to Staff Costs; and
- Alliance Marketing Contribution which is expected to be fully funded by the LCRCA in the Franchising Case (with Operators providing part of the funding under the Reference Case and EP, as is the case now).

For each option and each scenario these costs need to be funded through the Transport Levy, in addition to support for bus services.

3.2.5. Transition costs

The implementation of alternative options, namely Franchising or Enhanced Partnership, will each come with a level of transition costs. These are set out in the relevant Sections below.

Due to the timing and one-off nature of transition costs these have not been assumed to be funded directly from the Transport

Levy. For the purposes of this Assessment, it is assumed that transition costs are drawn from reserves, and repaid over a period of 15 years (without interest).

3.3. Indexation Assumptions

The Financial Case shows cashflow forecasts in nominal terms. This requires the application of indexation assumptions.

The primary indexation forecasts used have been taken from DfT's TAG Data Book v1.20.2¹⁷⁹. This includes forecasts for both CPI and RPI. We have also assumed historic CPI and RPI rates included in TAG for indexation of costs with an earlier price base.

The following paragraphs set out how indexation is applied. Note that different base years apply to separate streams of costs and revenues, as is common where there are multiple sources of data.

Levy Available for Bus

The budget available for bus is included in 2022/23 prices, and is subject to fixed indexation (not linked to CPI) at 2% per annum. This assumption has been made by LCRCA to reflect that the levy is not expected to grow with general inflation over the next few years.

Costs and revenues from the Economic Model

Costs and revenues relating to bus services under each of the options are provided from the Economic Forecasting Model in 2018/19 prices, and are subject to indexation with RPI. Under TAG forecasts, this index grows consistently more than CPI.

Staff Costs

Staff costs are included at 2022/23 prices, and are subject to fixed indexation (not linked to CPI), with a 4% growth rate assumed in 2023/24 and 2% per annum thereafter. This assumption has been made by LCRCA to reflect that the levy is not expected to grow with general inflation over the next few years.

Other Costs

All other costs considered in the Financial Case are assumed to grow at forecast CPI each year. These include some costs with a range of different base price dates.

The outturn inflation adjustments employed are based on TAG CPI and RPI data and set out in the following table:

179 Released in January 2023. Sourced from: <https://www.gov.uk/government/publications/tag-data-book>.

Table 4.4: Historical inflation assumptions

Year	TAG CPI Inflation Assumption	TAG RPI Inflation Assumption
2018/19	2.26%	3.06%
2019/20	1.73%	2.59%
2020/21	0.63%	1.21%

Table 4.5: Forecast inflation assumptions, TAG CPI and TAG RPI

Year	TAG CPI Inflation Assumption
2021/22	3.97%
2022/23	10.13%
2023/24	5.46%
2024/25	-0.01%
2025/26	-1.01%
2026/27	0.80%
2027/28	1.84%
2028/29 and each year thereafter	2.00%

Year	TAG RPI Inflation Assumption
2021/22	5.78%
2022/23	12.99%
2023/24	8.30%
2024/25	0.53%
2025/26	-0.46%
2026/27	1.63%
2027/28	2.69%
2028/29	3.05%
2029/30	3.04%
2030/31 and each year thereafter	2.00%

3.4. Appraisal Period

The appraisal period for the Financial Case is assumed to be 15 years, beginning from 2024/25 and ending in 2038/39. Each period represents the financial year for LCRCA, which begins in April and ends in March of each year.

4. Reference Case

4.1. Introduction

The Reference Case is based on a continuation of LCRCA's current bus services arrangements. As set out in the Strategic Case, the National Bus Strategy requires LCRCA to enter into an EP or pursue Franchising, and as a result the option is being assessed for comparison purposes only. The following Sections set out:

- (a) a description of LCRCA income from bus services under Reference Case;
- (b) a description of LCRCA costs relating to bus services under Reference Case;
- (c) the projected financial impact on LCRCA (net position) over a 15 year period; and
- (d) consideration of financial risks relating to the Reference Case.

4.2. LCRCA Income - Reference Case

In the Reference Case, LCRCA receives limited revenue from bus services as a result of services being predominantly run commercially by Operators that collect farebox revenue. However, there are a number of income items to LCRCA, namely;

- revenue from supported services (tendered contract services);
- Bus Services Operators Grant (the element relevant to supported services);
- additional (sundry) income, resulting from ex-boundary services, services to Liverpool Airport, as well as contributions for school routes; and
- payments from Operators to use LCRCA owned bus stations.
- The above are in addition to the Transport Levy LCRCA receives from Districts.

4.3. LCRCA Expenditure - Reference Case

In the Reference Case, LCRCA's gross expenditure is made up of the following items:

- ENCTS payments to operators of commercial services;
- Supported services payments to operators (includes both de minimis and tendered services payments);
- Capital Maintenance Costs - Bus Stations and RTI equipment;
- LCRCA staff costs (including contract, network and data and compliance staff);
- General admin and office costs;

- Merseytravel publicity and marketing costs;
- TravelSafe payments; and
- Payments to Operators under the Alliance.

Note that given the forecast increase in the proportion of services that are supported, there is an additional amount of variable management costs added to reflect the increased administration overhead of additional tendered services.

4.4. Results - Reference Case

4.4.1. Financial results for Core Scenario

The income and expenditure components outlined above have been modelled annually to forecast the net expenditure position for LCRCa, under a Core Scenario of assumed budget and demand.

As discussed in Section 3.2.1, the Core Scenario assumes that:

- Demand remains at 85% of pre COVID-19 levels; and
- Transport Levy increases at 2% per annum from the 2022/23 budget.

The table on the following page presents the forecast cash flow for the Core Scenario.

Table 4.6: Reference Case Cash Flow (nominal terms)

Reference Case - Cash Flows	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39
Income (£m)															
Supported / Franchise Services Revenue	12.7	19.8	22.0	27.2	27.6	28.9	30.3	32.5	33.1	34.2	36.5	36.1	36.2	38.1	38.9
Additional Income	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total income	13.1	20.2	22.4	27.7	28.1	29.3	30.7	32.9	33.5	34.6	37.0	36.6	36.7	38.6	39.4
Expenditure (£m)															
Payments to Operators															
Supported services	(26.0)	(41.9)	(48.2)	(59.9)	(63.0)	(65.2)	(68.6)	(73.9)	(76.7)	(79.4)	(83.4)	(81.5)	(84.3)	(87.8)	(89.6)
Franchise payments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENCTS payments	(44.2)	(38.8)	(34.8)	(30.1)	(29.6)	(29.0)	(28.6)	(27.5)	(27.1)	(26.9)	(26.7)	(26.3)	(26.6)	(25.4)	(25.9)
Total payments to operators	(70.2)	(80.7)	(83.0)	(90.0)	(92.6)	(94.2)	(97.1)	(101.4)	(103.8)	(106.3)	(110.1)	(107.8)	(111.0)	(113.2)	(115.5)
Financing costs															
Depot	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fleet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transitional costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total financing costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Overheads															
Bus station costs	(3.4)	(3.4)	(3.3)	(3.3)	(3.4)	(3.5)	(3.5)	(3.6)	(3.7)	(3.8)	(3.8)	(3.9)	(4.0)	(4.1)	(4.2)
RTI – Real Time Information	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)
Staff Costs	(2.6)	(2.7)	(2.8)	(2.9)	(3.0)	(3.1)	(3.1)	(3.2)	(3.3)	(3.4)	(3.5)	(3.5)	(3.6)	(3.7)	(3.7)
Admin & Office Costs	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Publicity / Advertising / Marketing costs	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)
Travelsafe	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Bus Alliance	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Total overheads	(7.6)	(7.7)	(7.8)	(7.9)	(8.1)	(8.3)	(8.4)	(8.6)	(8.8)	(9.0)	(9.2)	(9.3)	(9.5)	(9.7)	(9.9)
Transitional costs															
Consultancy and management of transition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Periodic renegotiation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Early mobilisation of procurement resource	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Early mobilisation of additional management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Provision for risk of supported services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IT provisional costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total transitional costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GROSS EXPENDITURE	(77.8)	(88.4)	(90.8)	(98.0)	(100.7)	(102.5)	(105.6)	(110.0)	(112.6)	(115.3)	(119.3)	(117.2)	(120.5)	(122.9)	(125.4)
NET EXPENDITURE (Levy required)	(64.7)	(68.2)	(68.4)	(70.3)	(72.7)	(73.2)	(74.9)	(77.1)	(79.1)	(80.6)	(82.3)	(80.6)	(83.7)	(84.3)	(86.0)

Figure 4.2 below shows the profile of the Transport Levy required for this option, in nominal terms. This is compared with the assumed expected funding available for bus services of £66.3m in 22/23 prices, with indexation added.

This graph shows that the network modelled is within the funding envelope overall and in each year. The gap represents between 2% and 6% less Transport Levy required than available in each year, and overall averages 4% over the period from 2024/25, to 2038/39.

Figure 4.2 Ongoing Transport Levy requirements for Reference Case

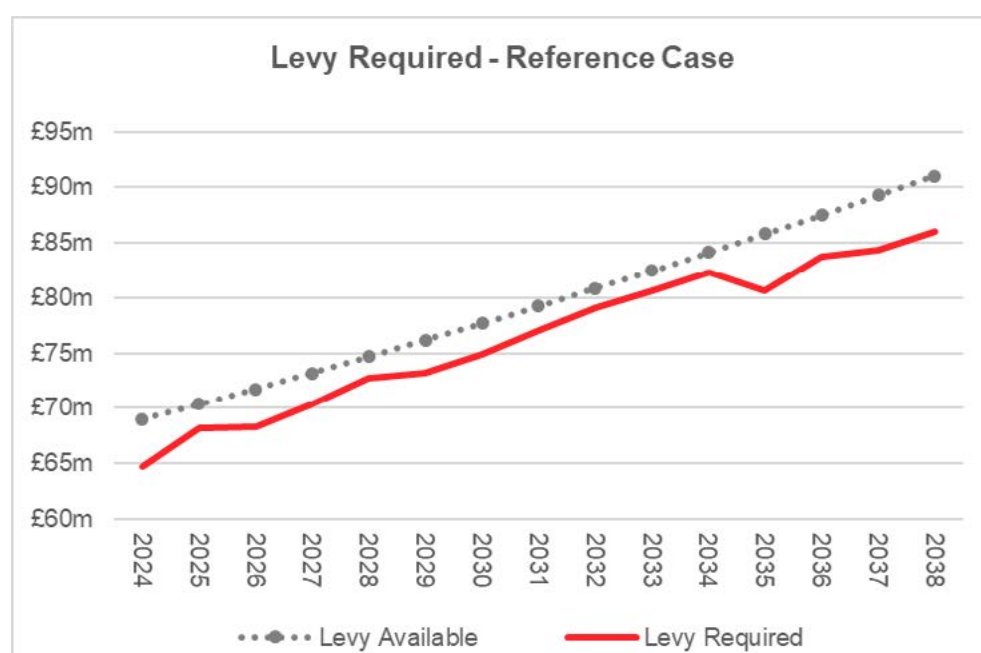


Figure 4.3 below shows the number of passenger journeys for this scenario.

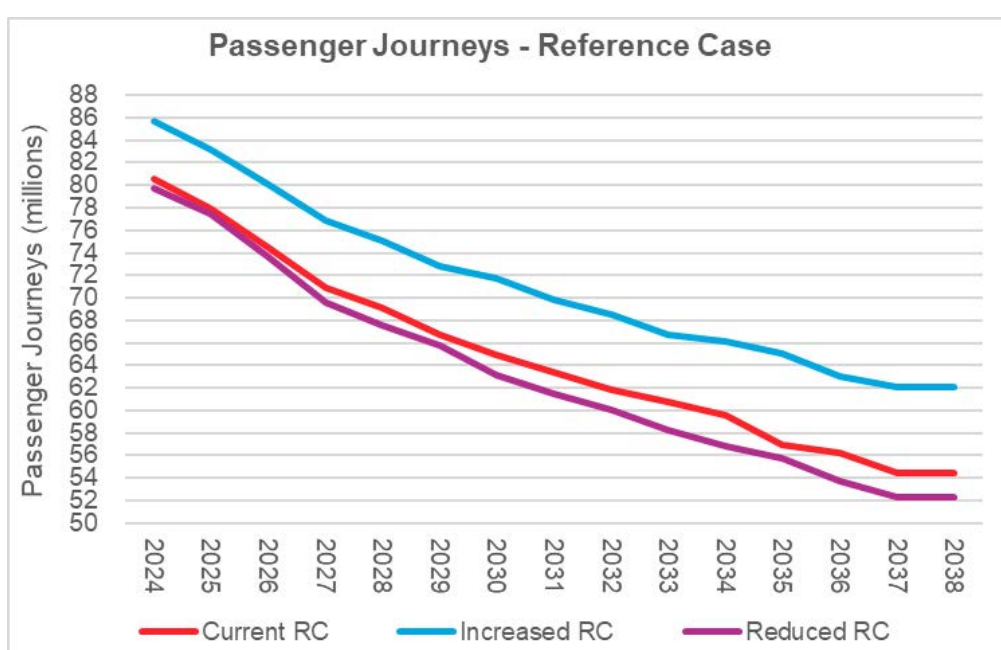
This shows a continual reduction in bus usage, which is consistent with the assumptions outlined in the Strategic Case. The factors that contribute to this decline are:

- a continuing gradual reduction in demand for bus services;
- increasing real costs of providing bus services;
- no real increase in funding - as the levy is assumed to increase by a fixed 2% and the costs of bus provision grow with the higher RPI; and
- no specific interventions to reverse the decline.

These underlying assumptions are applied in the same way for all of the evaluated cases. The consequences of this are:

- while the demand forecast assumes a starting point of 85% of pre COVID-19 demand, this forecast assumes an ongoing reduction in underlying demand over time;
- together with increases in underlying costs of providing bus services, this reduces the viability of commercial services over time and leads to service withdrawal; and
- as the level of supported services that can be sponsored by LCRCA is constrained by the funding available through the Transport Levy, this will lead to a reduction in the scale of the network, as has been experienced in most urban bus markets in recent years.

Figure 4.3: Passenger Journeys for Reference Case



As illustrated in Figure 4.3 above, under the Reference Case c. 80m passenger journeys per annum is forecast to reduce to c. 56m by 2036, as a result of the consequences set out above.

4.4.2. Alternative revenue scenarios

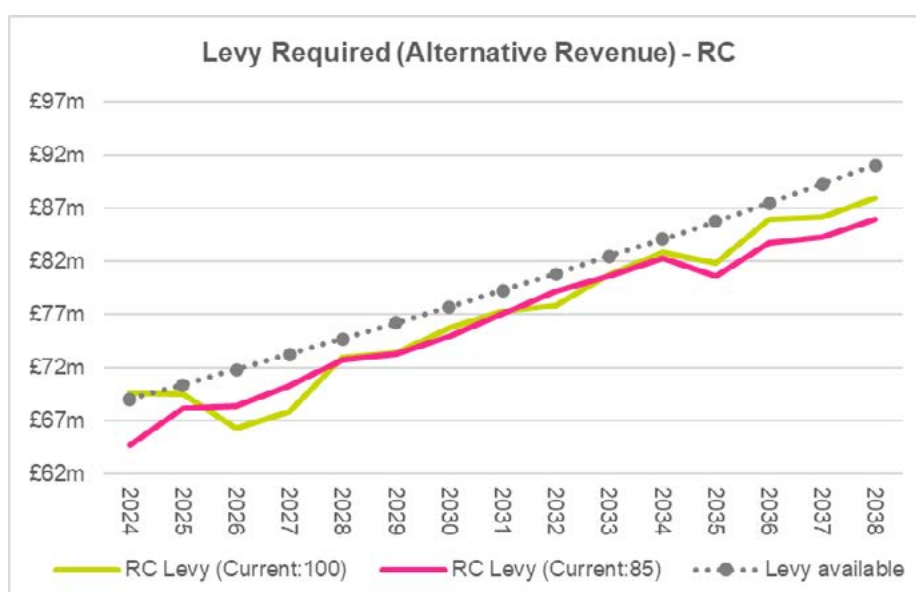
Recovery in demand for bus services post COVID-19 is uncertain, and therefore forecasts have been derived for two demand scenarios:

- 85% of pre COVID-19 demand forecast (described above); and
- 100% of pre COVID-19 demand forecast.

Comparative results for these options are shown below.

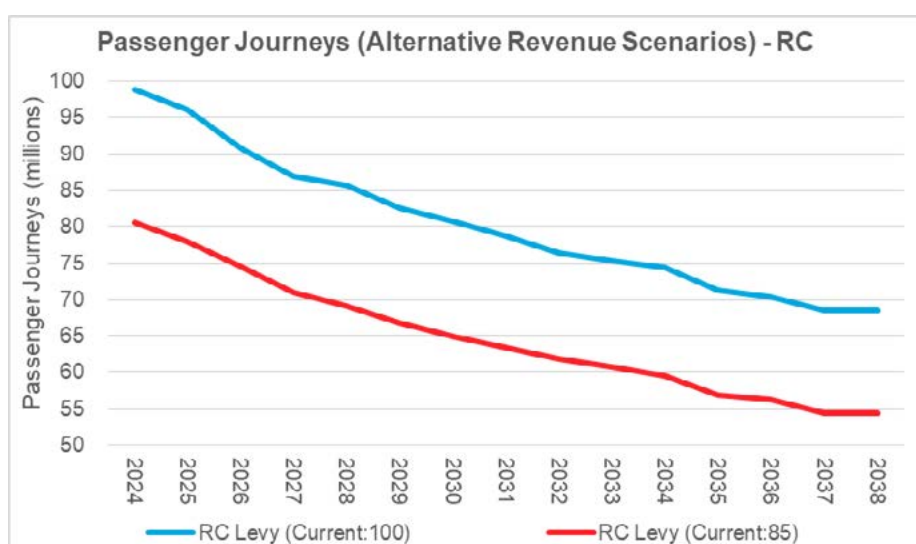
The Transport Levy required is reasonably consistent between the two options, in line with the optimisation approach.

Figure 4.4: Levy required under alternative revenue scenarios



In drawing a comparison of the two alternative revenue scenarios, Figure 4.5 below shows that the higher demand forecast results in greater levels of passenger journeys. This is primarily through more services being commercially viable.

Figure 4.5: Passenger Journeys under alternative revenue scenarios



In 2024/25, the higher demand scenario results in 23% more journeys, and this gap is fairly consistent with approximately 26% more journeys in 2038/39. Both revenue scenarios show the declines in bus use, for the same reasons as set out in Section 4.4.1 above.

4.4.3. Alternative funding scenarios

In addition to the alternative revenue scenarios, the analysis considers varying levels of funding available. The following Section presents the service levels projected for different amounts of Transport Levy (as set out in the scenarios described in Section 3).

Figure 4.6 below shows the Transport Levy used under each of the three funding scenarios. All of the results shown in the graph below assume 85% of the demand forecast level pre COVID-19.

Figure 4.6: Transport Levy required under alternative funding scenarios

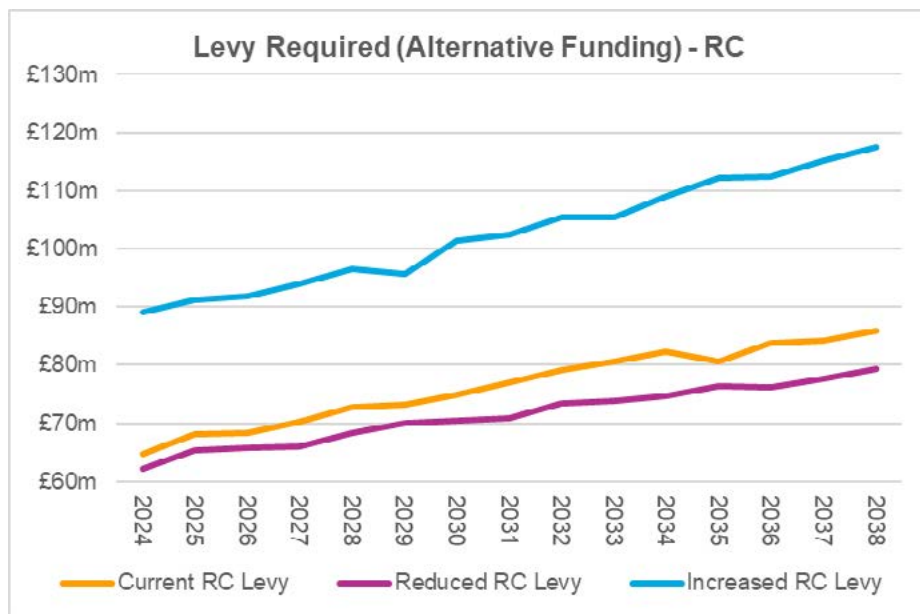
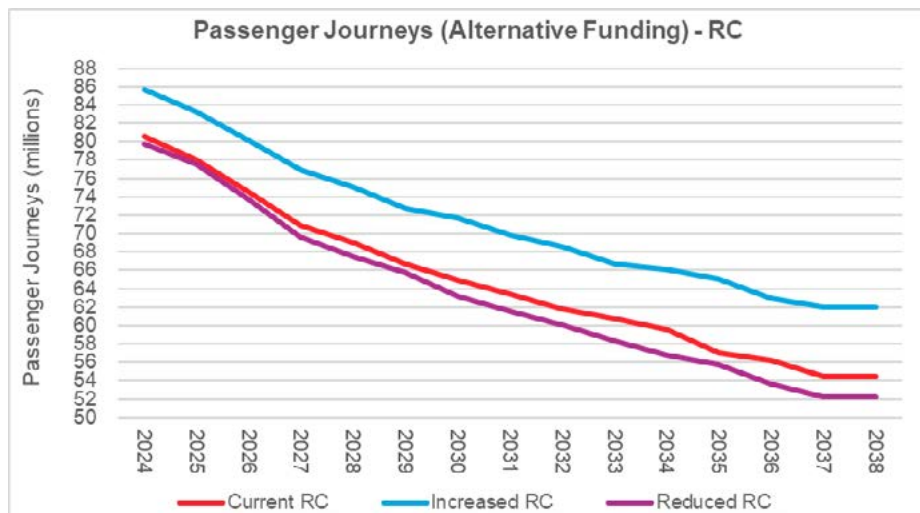


Figure 4.7: Passenger journeys under alternative funding scenarios



As indicated above, increasing the Transport Levy under the Increased scenario provides a greater level of passenger journeys - on average by about 10%. Similarly, reducing the Transport Levy under the Reduced scenario marginally decreases the service level in terms of passenger journeys - by about 3%.

4.4.4. Financial Risks

Because the Reference Case is unlikely to be taken forward, as the National Bus Strategy requires LTAs to enter into an EP or pursue Franchising, sensitivities have not been run for the Reference Case.

However, there are clearly a number of risks that LCRCA is exposed to under the current arrangements. These include:

- commercial services being discontinued and LCRCA having to decide whether to fund a supported service and potentially terminate other supported services;
- costs of supported services increasing;
- a major external event causing commercial services to be unviable such as COVID-19 in the spring of 2020;
- failure of a commercial operator (as occurred with Halton and Avon); and
- exposure to cost escalation of investments which are sponsored by LCRCA. This includes investments in ticketing and in a zero emissions fleet.

All of these risks will also apply to the EP Option and are discussed in Section 6.5 below.

5. *Franchising*

5.1. Introduction

The Franchising Case option shows the most significant financial impact on LCRCA of the alternative bus delivery options. The following Section presents LCRCA's income and expenditure in a manner that reflects the commercial arrangements that would exist under a Franchising model. The following Sections set out:

- (a) a description of LCRCA income from bus services under the Franchising Case;
- (b) a description of LCRCA costs relating to bus services under the Franchising Case;
- (c) the projected financial impact on LCRCA (net position) over a 15 year period;
- (d) sources of funding;
- (e) a risk analysis relating to the financial implications of the Franchising Case;
- (f) sensitivity analysis to test the impact of potential risks occurring; and
- (g) further financial considerations specific to franchising (VAT and working capital and accounting implications).

The environmental impacts of franchising are discussed in Section 9 of the Economic Case.

5.2. LCRCA Income - Franchising

Under the Franchising Case, LCRCA is assumed to collect passenger fare revenue from franchised services and pay Operators to run services in accordance with franchise service contracts. ENCTS payments would no longer be made to Operators, and the funds received could be used to support all bus services. There would be no supported services as all services would be franchised.

LCRCA's income sources under Franchising include:

- farebox revenue from franchised services;
- farebox revenue from supported services (transition only); and
- additional (sundry) income (e.g. from school routes).

It is assumed that under Franchising, LCRCA would continue to receive the Transport Levy from Districts (as is the case for all Delivery Options).

It should be noted that the approach to modelling the franchising option is to maintain the fare levels and standards of service provided under franchising, and only vary the number of services provided. Therefore, the economic impact on bus users is restricted

to the impact of additional services. This is described further in Section 2.5 of the Economic Case.

5.3. LCRCA Expenditure - Franchising

The following Sections present the expenditure items under the Franchising Case. Under Franchising, the expenditure profile for LCRCA is different to that under the Reference Case or EP, most notably including the cost of service contracts, additional management cost in running the network, capital investment in fleet and depot (in accordance with LCRCA's commercial objectives), and the cost of transition.

5.3.1. Operating Costs

LCRCA's operating costs in the Franchising Option are derived in the same manner as under the Reference Case, with the following adjustments for Franchising:

- **Franchise payments to Operators:** forecast payments from LCRCA to Operators are based on data provided by Operators costs for the anticipated scope of services (with profit margin added);
- **existing Capital Maintenance Costs:** Bus Stations and RTI equipment;
- **LCRCA Operating Costs;**
- **Management Costs** (implementation, procurement and ongoing management); and
- **Capital expenditure:** servicing of any debt relating to fleet and depot investment

Franchise payments to Operators are calculated on the basis of the costs that Operators incur, and include:

- Driver costs;
- Fuel costs;
- Depreciation (including Fleet where provided by Operators);
- Insurance;
- Maintenance;
- Overheads; and
- Operator margin

There are a number of changes to operators' operating costs that are included in the financial forecast for franchising.

- There are adjustments for the cost of ownership of depots and fleet (see Section 5.3.2.6 below)

- There are reductions in operating costs to reflect some activities which, under franchising, would be undertaken by LCRCA.

Apart from these, the costs of operating services are calculated on the same basis as under the Reference Case. Further details on the impact of franchising on operating costs are included in Section 5.3 of the Economic Case.

5.3.2. Franchising Specific Costs

Transitioning to a Franchising scheme is assumed to have a series of direct cost implications for LCRCA, such as the additional management cost and staff required, procurement and transition costs, as well as ongoing investment in fleet and depots.

Relative to the Reference Case, management costs increase from c. £2.2m p.a. prior to implementation in 2026 to £4.5m¹⁸⁰ p.a. under Franchising, reflecting an increase from 90 to 210 FTE to deliver Franchising.

In addition to the above incremental costs, the implementation of Franchising also assumes that LCRCA invests in fleet and depot acquisition, and a range of transition costs. The costs and financing of these are set out in the Sections below.

5.3.2.1. Capital Investment - Fleet and Depot

The Franchising Case assumes that LCRCA makes capital investments in fleet and depot to support its wider commercial objectives under Franchising (see Commercial Case). These investments include:

- Fleet investment: investment in LCRCA owned zero-emissions fleet; and
- Depot investment: investment in the acquisition of new or existing depots, and supporting zero-emissions infrastructure.

The Franchising Option assumes that ZEV, depots, and associated infrastructure will be financed by LCRCA using prudential borrowing. In line with the assumptions set out in Section 3, this additional cost to LCRCA is offset by an assumed reduction in franchise payments to operators reflecting the use of LCRCA assets.

The following Sections set out the financial assumptions made in relation to LCRCA's investment in fleet and depot, including financing arrangements.

¹⁸⁰ Hubs team salary costs have not been included in the Assessment (and are the same for each Delivery Option).

5.3.2.2. Fleet Investment

LCRCA has identified acquisition and ownership of fleet as an intervention as part of Franchising to support its wider commercial objectives, such as encouraging a competitive market and levelling the playing field for new entrants and SMO. This has been tested through market engagement and is set out in further detail in the Commercial Case.

As a result, the Franchising Case assumes investment in new fleet. From 2026 onwards, LCRCA would acquire ZEV at a rate of 70-80 vehicles per annum. This reflects the natural rate of replacement for buses in the LCR and this continues as when there is a full ZEV fleet in place, the earliest buses will need to be replaced.

Fleet investment within the financial model is based on the following cost assumptions:

- ZEV are assumed to have a net cost to acquire of £250,000 (in 20/21 prices) per vehicle (net of any government funding available to support the incremental cost relative to diesels); and
- the overall required investment in the fleet is assumed to be £252.5m in 20/21 prices (until 2039).

Table 4.7 overleaf shows the costs of purchase, value of assets and payments of debt service assumed for the fleet acquisition over the appraisal period.

The forecast costs of franchise contracts include a saving, reflecting that Operators would not need to provide their own fleet.

The forecasts of cost per vehicle would require government subsidy at current prices (although in future it is possible that the costs of diesel and zero emissions buses will converge). If this subsidy was not available, then the CA would need to make a choice of whether to provide more funding, use cheaper diesel fleet, or set aside more of its budget to pay for the cost of vehicles, and therefore run fewer services. These same issues apply to all of the Delivery Options.

Table 4.7: Capital investment and financing in fleet (£m, nominal terms)

Fleet Capital Investment & Financing	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39
Fleet acquisition profile															
Fleet acquired	-	-	80	80	80	80	70	70	80	80	80	80	80	80	70
Cumulative fleet	-	-	80	160	240	320	390	460	540	620	700	780	860	940	1,010
Fleet Costs (£m)															
Cumulative investment in fleet	-	-	(24)	(48)	(73)	(98)	(121)	(144)	(170)	(198)	(225)	(254)	(283)	(312)	(339)
ZEB capital investment to be drawn down	-	-	(24)	(24)	(25)	(25)	(22)	(23)	(27)	(27)	(28)	(28)	(29)	(30)	(26)
Financing costs (£m)															
Opening balance	-	-	-	24.1	48.3	69.7	90.2	106.8	122.5	140.4	157.1	172.5	186.6	199.1	210.0
Drawdown	-	-	24.1	24.2	24.7	25.2	22.5	22.9	26.7	27.3	27.8	28.4	28.9	29.5	26.3
Interest	-	-	1.3	2.5	3.8	5.0	5.9	6.8	7.8	8.8	9.7	10.6	11.3	12.0	12.4
Principal	-	-	-	-	3.3	4.6	5.9	7.3	8.9	10.6	12.4	14.3	16.4	18.6	20.8
Closing balance	-	-	24.1	48.3	69.7	90.2	106.8	122.5	140.4	157.1	172.5	186.6	199.1	210.0	215.6

5.3.2.3. Depot Investment

In a similar manner to fleet Investment, LCRCA has identified acquisition and ownership of depots as an intervention as part of Franchising to support its wider commercial objectives, such as encouraging a competitive market and levelling the playing field for new entrants and SMO. This has been tested through market engagement and is described in further detail in the Commercial Case.

As a result, the Franchising Case assumes investment in depots based on the following assumptions:

- 8 depots are acquired, with at least 1 depot in each of the 5 Franchise Rounds;
- depot sites will be owned and managed by LCRCA;
- each site will be acquired c. 24 months prior to when it is required operationally;
- there will be an 18-month development and fit out period;
- first and second choice depot locations have been identified, including a mix of existing and new depots;
- acquisition costs based on detailed due diligence undertaken by LCRCA; and
- the overall required investment in the depots is assumed to be c. £62m in 20/21 prices, fully operational by 2026. The investment consists of c. £14.8m¹⁸¹ acquisition costs and £47.3m of development and fit out costs¹⁸²

181 Eddison's report.

182 Development and fit out costs assumed at £80k per PVR for new sites. This consists of £40k for fit out and £40k for charging infrastructure. Together with £30k of subsidy per PVR, this results in a net cost per PVR of £50k. For existing sites, £40k per PVR is assumed for charging infrastructure, with an additional £20k per PVR for contingency. Together with £30k of grant funding per PVR, this results in a net cost per PVR of £30k. All of these amounts are in 20/21 prices.

Table 4.8 below shows the costs of purchase, value of assets and payments of debt service assumed for depot acquisition over the appraisal period.

The forecast costs of franchise contracts include a saving, reflecting that Operators would not need to provide their own depots.

Table 4.8: Depot capital investment and financing (£m, nominal terms)

Depot Capital Investment & Financing	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39
Depot Capital Investment (£m)															
Total capital investment requirement	14.7	30.1	17.6	8.1	0.3	-	-	-	-	-	-	-	-	-	-
Accumulative capital investment requirement	19.0	49.1	66.7	74.8	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1	75.1
Financing costs (£m)															
Opening balance	4.3	19.0	48.7	65.8	73.3	73.0	72.3	71.6	70.8	70.0	69.2	68.3	67.4	66.4	65.4
Drawdown	14.7	30.1	17.6	8.1	0.3	-	-	-	-	-	-	-	-	-	-
Interest	(1.0)	(2.7)	(3.6)	(4.0)	(4.0)	(4.0)	(3.9)	(3.9)	(3.8)	(3.8)	(3.8)	(3.7)	(3.7)	(3.6)	(3.5)
Principal	-	(0.4)	(0.5)	(0.6)	(0.6)	(0.7)	(0.7)	(0.8)	(0.8)	(0.8)	(0.9)	(0.9)	(1.0)	(1.0)	(1.1)
Closing balance	19.0	48.7	65.8	73.3	73.0	72.3	71.6	70.8	70.0	69.2	68.3	67.4	66.4	65.4	64.3
Gross cost to Authority of depots	(1.0)	(3.0)	(4.1)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)
Opportunity costs (£m)															
Acquired Land value	3.6	7.5	2.4	-	-	-	-	-	-	-	-	-	-	-	-
Cumulative Acquired Land Value	7.9	15.4	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8	17.8
Opportunity cost	0.2	0.7	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Total saving from Authority provided depots	0.2	0.7	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.3
Net cost to Authority of depots	(0.8)	(2.3)	(2.9)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)	(3.3)

5.3.2.4. Transition Costs

As set out previously, a key component of the cost of Franchising are transition costs during the 3-year period prior to the launch of the first Round. These costs typically cover the development and design of the procurement and contract, as well as preparing any required information and ticketing systems.

The tables below set out the assumed costs associated with the implementation and ongoing administration costs of a Franchise Scheme, to be incurred over the 3-year implementation period commencing in 2023.

These are assumed to be funded from reserves, and repaid over a 15 year period.

Table 4.9: LCRCA costs specific to Franchising (20/21 prices)

Implementation costs	LCRCA Cost per annum (£m)	Total Cost (£m)
Consultancy and management of transition	£1.5m	£4.5m
Early mobilisation of procurement resource	£1.3m	£2.6m

Implementation costs	LCRCA Cost per annum (£m)	Total Cost (£m)
Early mobilisation of additional management (two years only)	£1.3m	£1.3m
Provision for risk	c.£4.0m (with £6.0m in 2023/24)	£14.0m
IT provisional costs	c. £1.7m	£5.0m
Total implementation cost	-	£27.4m

5.3.2.5. Financing of fleet and depot costs

LCRCA expects that capital expenditure associated with Franchising will need to be supported through financing, such as PWLB borrowing, the impact of which has been included within the net expenditure analysis in the following Section.

PWLB is a well-established financing mechanism already used by LCRCA. Using PWLB borrowing to finance fleet and depot costs is expected to reduce costs of the fleet initiative compared with operator financing, since the rate of interest is likely to be lower than what could be achieved by Operators.

The following table sets out the proposed borrowing arrangements in relation to fleet and depot .

***Table 4.10: Financing summary
(Franchising) (all terms nominal)***

Investment	Borrowing Requirement / Drawn over years	Term (years)	All in rate	Total Interest
Fleet	£338.5m / 13 years	15	5.26%	£98.1m
Depot	£75.1m / 6 years	40	5.42%	£53.2m
Total	£413.6m			£151.3m

The financing calculations set out in the above table also assume a grace period for principal repayment for the first 2 years of each loan.

Interest rates have been sourced from the DMO website for 6th October 2022 (they have reduced since then). Additional sensitivities on interest rates are shown in Section 5.7.3.

Loans will be repaid using funds available to LCRCA. Under Franchising, these consist of the Transport

Levy and revenue from franchised services (including sundry income relating to, for example, advertising).

As fleet and depot assets are being provided to Operators, this reduces their need to fund assets and the payments for Franchise contracts have been adjusted to reflect these savings.

It should be noted that when estimating budget available for services, the net savings from financing of fleet and depot are not taken into account, and therefore the costs incurred in running services for Franchising are lower than the affordability limit. This means that the forecast number of services run and passengers carried are at a level where potential savings from asset ownership have not been taken into account. The extra savings could be used to create a fund to manage the risks of asset ownership, or eventually used to provide more services.

In order to accommodate the level of borrowing anticipated, LCRCA may need to agree an increase in its existing borrowing cap. Furthermore, LCRCA will need to consider any Minimum Revenue Provision (“MRP”) implications of additional borrowing used to finance capital expenditure (see Section 5.8.2.2).

5.3.2.6. Impact on Operator Capital Costs

As LCRCA would be purchasing depots and fleet, operators would make a saving on no longer need to provide these themselves. We have assumed that these savings would be passed on to LCRCA through the competitive tendering process.

Not all fleet will be provided by LCRCA from the start of franchising, so operators would still need to use their capital for these. However, under the proposed approach, there would be no need for any further investment in new fleet by operators.

Further detail on the impact on operators’ capital costs are included in Section 5.4 of the Economic Case.

5.4. Results - Franchising Case

5.4.1. Financial results for Core Scenario

The income and expenditure components outlined above have been modelled annually to forecast the net expenditure position for LCRCA under Franchising, under a Core Scenario of assumed budget and demand.

As discussed in Section 3.2.1 the Core Scenario assumes that:

- Demand remains at 85% of pre COVID-19 levels; and
- Transport Levy increases at 2% per annum from the 2022/23 budget.

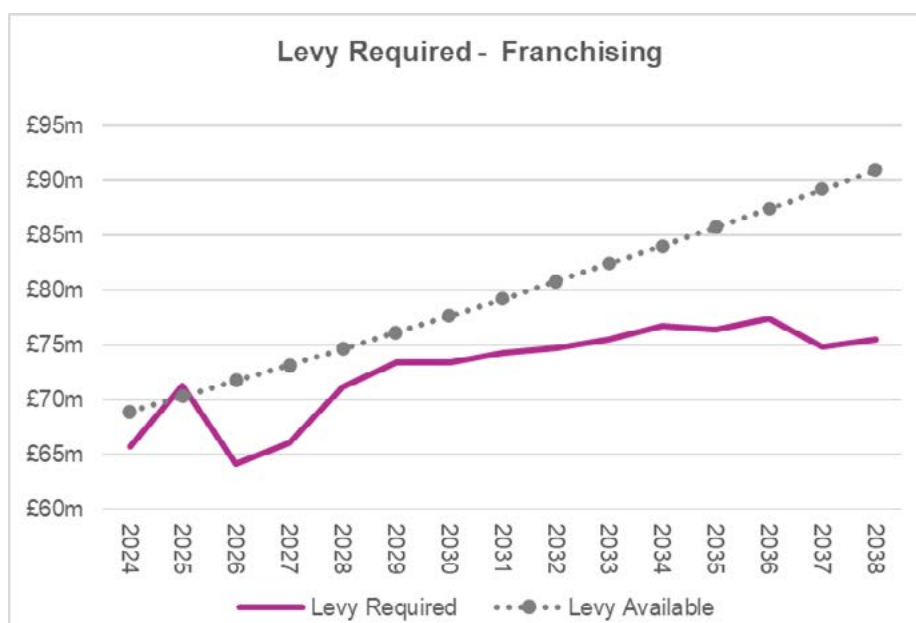
The table below presents the forecast cash flow for the Core Scenario.

Table 4.11: Franchising Cash Flows
(£m, nominal terms)

Franchising - Cash Flows	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39
Income (£m)															
Supported / Franchise Services Revenue	12.7	19.8	49.0	78.9	85.0	85.9	86.3	85.8	85.3	85.5	85.5	84.3	84.0	82.5	84.2
Additional Income	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total income	13.1	20.2	49.4	79.3	85.5	86.4	86.7	86.2	85.8	86.0	86.0	84.8	84.5	83.0	84.7
Expenditure (£m)															
Payments to Operators															
Supported services	(26.0)	(41.9)	-	-	-	-	-	-	-	-	-	-	-	-	-
Franchise payments	-	-	(76.0)	(121.4)	(131.1)	(131.6)	(129.5)	(127.4)	(124.6)	(122.6)	(120.9)	(116.3)	(113.9)	(106.7)	(106.1)
ENCTS payments	(44.2)	(38.8)	(18.9)	(3.4)	-	-	-	-	-	-	-	-	-	-	-
Total payments to operators	(70.2)	(80.7)	(94.9)	(124.8)	(131.1)	(131.6)	(129.5)	(127.4)	(124.6)	(122.6)	(120.9)	(116.3)	(113.9)	(106.7)	(106.1)
Financing costs															
Depot	(1.0)	(3.0)	(4.1)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)	(4.6)
Fleet	-	-	(1.3)	(2.5)	(7.2)	(9.6)	(11.8)	(14.1)	(16.7)	(19.4)	(22.1)	(24.9)	(27.7)	(30.6)	(33.2)
Transitional costs	-	-	(2.2)	(2.2)	(2.2)	(2.2)	(2.2)	(2.2)	(2.2)	(2.2)	(2.2)	(2.2)	(2.2)	(2.2)	(2.2)
Total financing costs	(1.0)	(3.0)	(7.6)	(9.3)	(14.0)	(16.4)	(18.6)	(20.9)	(23.5)	(26.2)	(28.9)	(31.7)	(34.5)	(37.4)	(40.0)
Overheads															
Bus station costs	(3.4)	(3.4)	(3.3)	(3.3)	(3.4)	(3.5)	(3.5)	(3.6)	(3.7)	(3.8)	(3.8)	(3.9)	(4.0)	(4.1)	(4.2)
RTI - Real Time Information	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)
Staff Costs	(2.6)	(2.7)	(6.0)	(6.1)	(6.2)	(6.3)	(6.5)	(6.6)	(6.7)	(6.8)	(7.0)	(7.1)	(7.3)	(7.4)	(7.6)
Admin & Office Costs	(0.1)	(0.1)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.3)	(0.4)	(0.4)	(0.4)
Publicity / Advertising / Marketing costs	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)
Travelsafe	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Bus Alliance	(0.1)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Total overheads	(7.6)	(7.8)	(11.2)	(11.3)	(11.5)	(11.8)	(12.0)	(12.2)	(12.5)	(12.7)	(13.0)	(13.2)	(13.5)	(13.8)	(14.1)
Transitional costs															
Consultancy and management of transition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Periodic renegotiation	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Early mobilisation of procurement resource	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Early mobilisation of additional management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Provision for risk of supported services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IT provisional costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total transitional costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
GROSS EXPENDITURE	(78.9)	(91.5)	(113.6)	(145.5)	(156.6)	(159.9)	(160.2)	(160.5)	(160.6)	(161.5)	(162.8)	(161.2)	(161.9)	(157.9)	(160.2)
NET EXPENDITURE (Levy required)	(65.8)	(71.3)	(64.2)	(66.1)	(71.2)	(73.5)	(73.5)	(74.3)	(74.8)	(75.5)	(76.8)	(76.4)	(77.4)	(74.9)	(75.5)

Figure 4.8 overleaf shows the profile of the Transport Levy used for the Franchising Option and this results in a profile of bus services over the period shown in Figure 4.9. These also include the equivalent result for the Reference Case for comparison purposes.

Figure 4.8: Transport Levy required for Franchising



The above graph shows a substantial saving of franchising against the levy. The majority of this is due to the savings from the lower cost of fleet financing in the public sector, which have not been used to provide additional services. Over the whole of the appraisal period from 2024 to 2039, the levy required is 8% less than the budget available for the core scenario.

Figure 4.9: Passenger journeys for Franchising

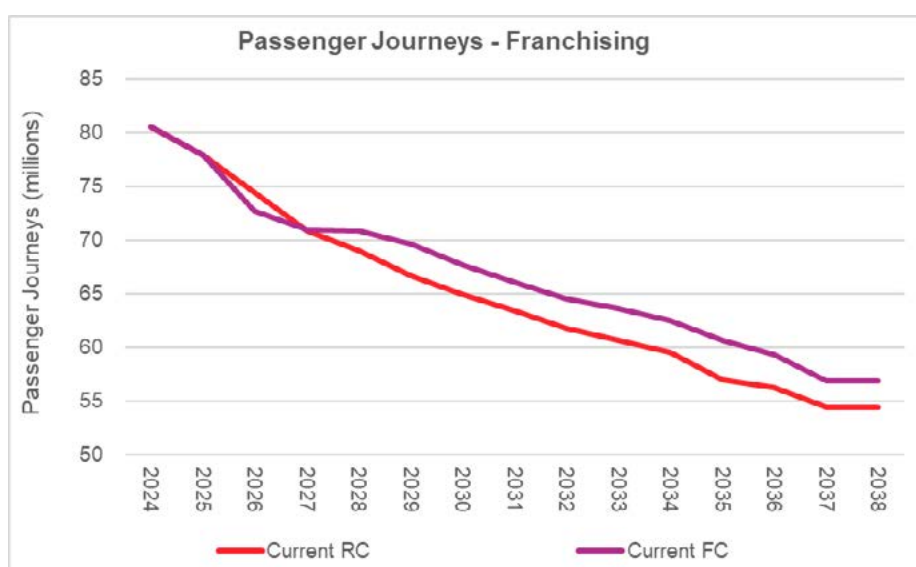
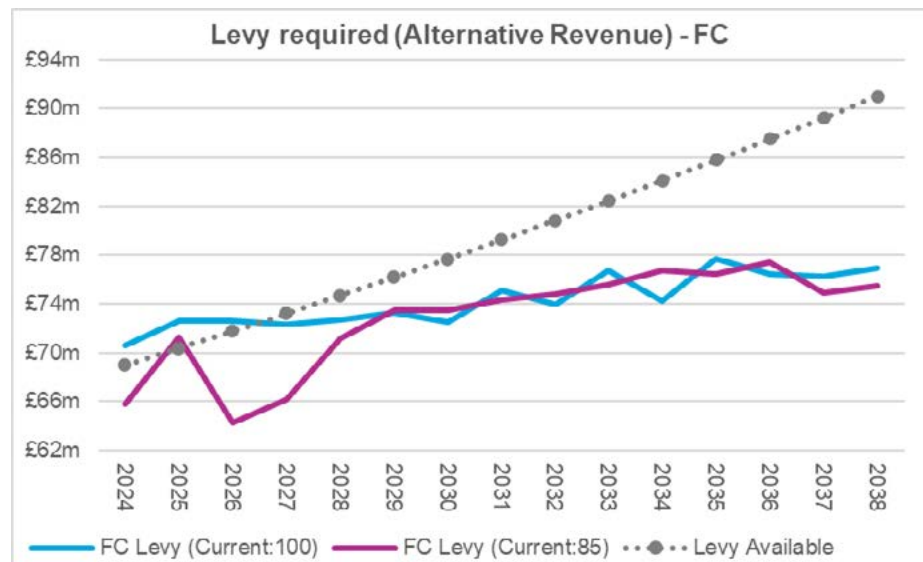


Figure 4.9 shows that while passenger numbers will still continue to fall under Franchising, the reduction will be smaller than for the Reference Case. On average, over the appraisal period from 2027-2039 (after the full implementation of franchised services), Franchising provides 4.3% more passenger journeys in the core scenario compared with the Reference Case.

5.4.2. Alternative revenue scenarios

The figures below show a comparison of Transport Levy required and service levels provided, assuming that demand returns to 85% or 100% of the forecast level before COVID-19. Note that all demand scenarios assume an ongoing reduction in demand.

Figure 4.10: Transport Levy required under alternative revenue scenarios



The profiles for the 100% demand scenario broadly follow those of the 85% scenario for each of Franchising and the Reference Case respectively. On average both scenarios use between 3.6%-4.8% less funding than under the Reference Case.

Figure 4.11: Passenger journeys under alternative revenue scenarios

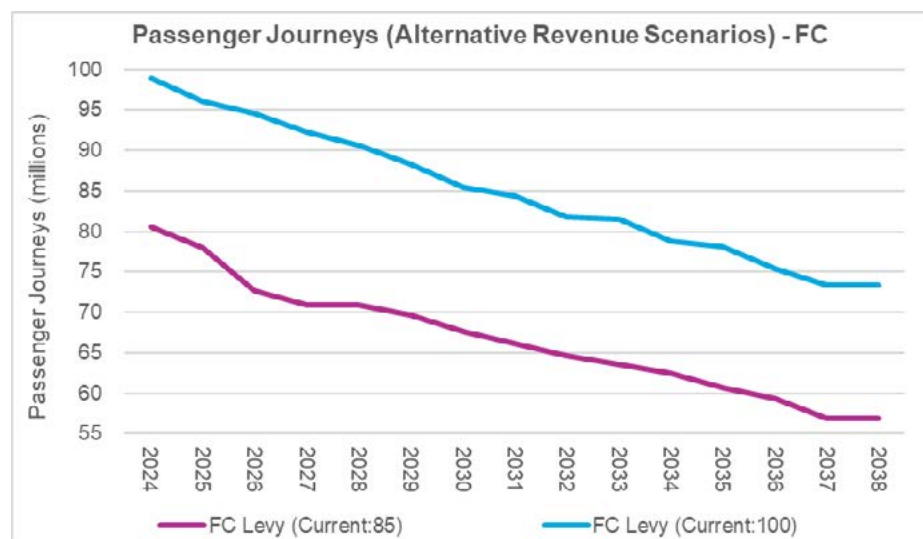


Figure 4.11 demonstrates that the benefit that Franchising brings in terms of passenger journeys for the 100% demand scenario follows the pattern of that for the 85% scenario, demonstrating that the financial and passenger benefits of Franchising are not specific to a single demand scenario.

After the full implementation of Franchising, from 2027-2039 Franchising provides on average 7% more passenger journeys, compared with the Reference Case if demand is at 100% of pre COVID-19 levels.

Alternative funding scenarios

Figures 4.12 and 4.13 below show a comparison of Transport Levy required and service levels provided assuming that demand is at 85% of the forecast level before COVID-19, for each of the three funding scenarios. These show a consistent pattern that the levy required under franchising is lower than under the Reference Case (in part due to the lower cost of financing assets in the public sector).

Figure 4.12: Transport Levy required under alternative funding scenarios

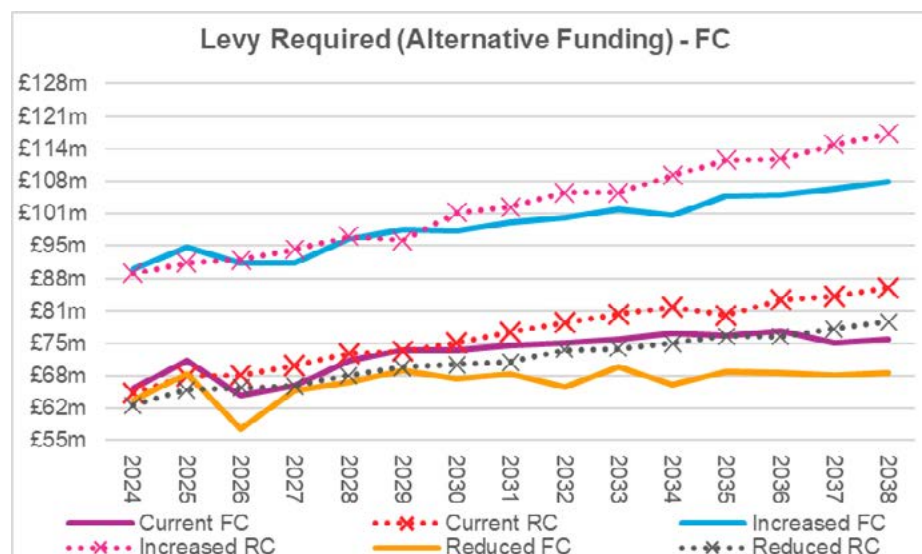
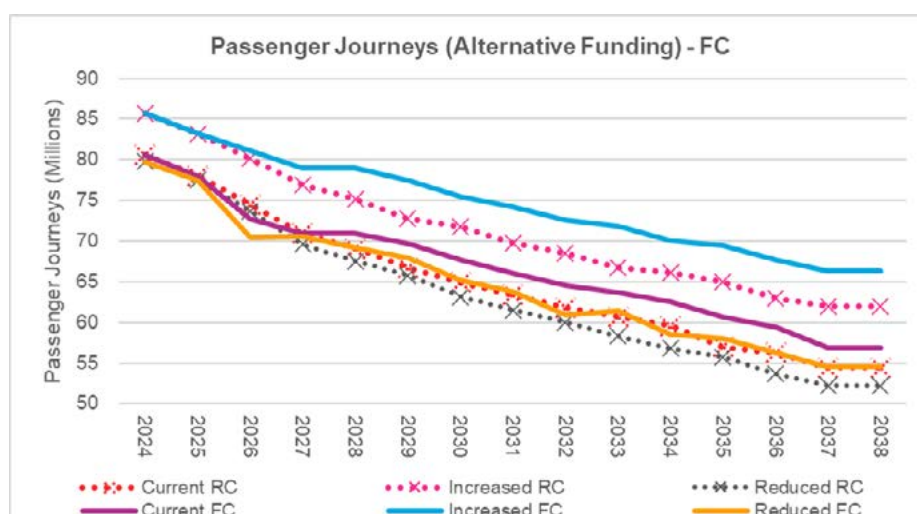


Figure 4.13: Passenger journeys under alternative funding scenarios



As illustrated above, increasing the Transport Levy under the Increased scenario provides a greater level of passenger journeys, of 6.1% compared to the Reference Case. Similarly, reducing the Transport Levy under the Reduced scenario results in additional passenger journeys of 3.4%, compared to the Reference Case.

5.5. Sources of Funding

Details of the potential sources of funding available for bus services are set out below. There are 3 categories of funding:

- Transport Levy;
- Local Authority controlled mechanisms; and
- Central Government funding.

5.5.1. Transport Levy

LCRCA uses the Transport Levy to fund various transport related activities within LCR, and it is the primary source of funding available to support the net expenditure gap generated from bus activities.

For the purposes of this Assessment, and in order to provide a comparison of options, all of the annual costs of providing bus services have been funded using the Transport Levy. As there are substantial upfront costs for some of the options, this requires borrowing to cover one off costs in transition and the purchase of depot and fleet assets (see Section 5.3.2.5).

The budgeted Transport Levy received for 2022/23 is £99.352m. Of this, the amount expected to be used for bus services in 2022/23 is £66.3m.

A key challenge facing LCRCA is that the Transport Levy amount has been static compared against prior years, as LCRCA has been unable to increase the Transport Levy charged to its constituent authorities to keep pace with costs. Notwithstanding this, on 4 March 2022, the constituent authorities approved progressing with the completion of the Assessment and to move to the next stage of bus franchising through the independent review of the Assessment having considered the report and draft of the Assessment which included an assumption that the Transport Levy would increase over the appraisal period in line with inflation. The assumed measure of forecast inflation was CPI. During refinement of the Assessment and, as a consequence of the currently high level of CPI, the assumed level of indexation for the Transport Levy was amended to the lower 2% per annum, in line with the decision made by the constituent authorities.

Because the Transport Levy is declining in real terms, this adds additional pressure to the budget in respect of maintaining bus services.

Because of the uncertainty regarding future funding, and in order to provide comparison of options, the forecasts for the Financial Case have been developed on the basis of forecasting the level of bus service that will be affordable for a given level of budget. Therefore, while there is no certainty that the Transport Levy will be available at the level assumed, the level of services can be adjusted to make the bus service affordable within the funding available, including if additional funding became available.

The Sections below set out the details of mechanisms that could be used to make more funding available for bus services in addition to the Transport Levy.

5.5.2. Local Authority Mechanisms

5.5.2.1. Council Tax Precept

A Council Tax Precept is a Local Authority mechanism which can raise funds through a separate charge on the council tax bill of council taxpayers. The income generated by a precept specific to a service, such as transport, is ring-fenced meaning it can only be used for transport related services.

The Council Tax Precept is well established and has been previously used by LCRCA for funding municipal services, including emergency services and adult social care and a Mayoral precept.

A precept would vary between property bands, and would be collected by the LCRCA's constituent local authorities and remitted to the precepting Authority, in this case being LCRCA.

5.5.2.2. Mersey Tunnel Tolls

There are two Mersey tunnels; the Kingsway Tunnel between Wallasey and Liverpool and the Queensway Tunnel between Birkenhead and Liverpool.

LCRCA could increase the toll it charges users for the use of the Mersey Tunnels to generate more funding, some of which could be used for improved bus services. However, this would have to be done in accordance with the Tunnels Act 2004, which places restrictions on toll increases.

5.5.2.3. Business Rate Supplement

Business rates are levies on business premises. While they are collected by Local Authorities, the amounts payable under conventional business rates are determined by Central Government. Business rates are charged on most national non-domestic properties ("NNDRs") (e.g. shops, offices, pubs).

Implementing a BRS system would be challenging, and it may not be suitable to use to fund a short term requirement such as the transition costs.

5.5.2.4. Other Local Authority mechanisms

In addition to the potential sources of funding above, LCRCA will also fully explore the potential for other revenue raising opportunities which might include a workplace parking levy, commercial revenue generation, road user charging and bus lane enforcement.

Additionally, investment committed to prioritise buses on the LCR's road network is forecast to have the dual effect of increasing passenger numbers and revenue whilst reducing operational costs.

5.5.3. Additional Central Government Funding

In addition to the Transport Levy and Local Authority mechanisms, LCRCA may be eligible and/or have the ability to apply for Government funding in the form of grants, subsidies or funds. Following a Franchising decision, there may be the ability for Merseytravel to apply for Government funding initiatives which will be available at that time. These could include, for instance, funds for investment in fleet or ticketing systems.

5.6. Financial Risks

This Section sets out the financial risks associated with the Franchising delivery options. Table 4.12 below sets out each risk, along with any mitigations that might apply:

Table 4.12: Franchising financial risks

Franchising Risk Analysis

Risk/Description	Mitigation
Funding: Insufficient funding to cover the costs of the Franchising and bus services. LCRCA does not currently have the ability to secure statutory and local revenue funding for multiple years (for instance, the Transport Levy is agreed annually). However, franchise contracts would be agreed on a multi-year basis. Reduced funding for bus services would lead to increasing costs for LCRCA, which would eventually lead to fare increases, reduced network, or other reallocation, all of which can be politically sensitive. <i>The impact of this risk has been tested within the results (alternative scenarios)</i>	• The alternative scenarios that have been run show that Franchising can still provide benefits even if there is a lower level of funding available. • Franchising contracts would need to be flexible enough to provide reduced services if there were to be a cut in funding. • it may also be possible to develop a reserve account to manage unanticipated funding calls. However, there are potential challenges around scaling the reserve and implementing and agreeing it with Districts.
Operating cost risk: Increases in operating costs will be at the risk of Operators within franchises but LCRCA is exposed to increases in costs during franchise handovers as bidders would reflect increased operating costs in their bid prices. In addition, operators may charge higher margins for franchise services than LCRCA's assumption. <i>The impact of this risk has been tested in Sensitivity 4 below.</i>	• Long-term financial planning and funding required from local authorities should consider both the cost and revenue side. • Incentivise bidders to look for cost saving measures and calibrate procurement criteria accordingly (i.e. appropriate price / quality weightings). • Encourage more competition, to get better pricing via tighter margins

Risk/Description	Mitigation
Revenue Risk: Decreases in commercial patronage would directly impact LCRCA's bottom line as, regardless of the revenue levels, LCRCA would need to pay Operators what has been agreed as part of the contract (i.e. an amount to cover the Operator's costs plus margin). Therefore, if LCRCA receives lower revenue, its financial position would be negatively affected. <i>The impact of this risk has been tested in Sensitivity 1 below.</i>	• Undertake sensitivity analysis of fluctuation in revenue to understand the impact on LCRCA's financial position. • Consider introducing flexible contracts, to enable LCRCA to adjust payments to Operators if revenue drops. • Consider incentivising revenue growth through an upside revenue sharing mechanism.
Management of Franchising: Under Franchising, LCRCA would have to manage an internal operation of a much larger scale (P&L gross income and expenditure would go from c. £100m up to £200m+). LCRCA needs to ensure that it feels comfortable with being able to manage this new operation and understands that small variations in some of the drivers (i.e. revenue) could have significant impact on its P&L. <i>The impact of this risk has been tested in Sensitivity 5 below.</i>	• Establish appropriate financial management and reporting systems, including building arrangements for reporting on and responding to changes in cost and revenue.

Risk/Description	Mitigation
Pension Costs: Risk of increased costs required to set up new pension schemes which may need to be in place in order to comply with the Bus Services Act. The challenges around setting up these schemes may also be a barrier for new market entrants.	• LCRCA has included an uplift to salary costs for additional staff required for franchising. • LCRCA has received limited data from Operators regarding their pension liabilities. • While this is not sufficient to produce an accurate estimate of the potential costs of pension liabilities for a new Operator, it appears that relatively few of the existing employees are members of DB schemes, which may be more challenging to set up a scheme that is 'broadly comparable'. Therefore, the cost to a new Operator may not be significant, but this will need to be analysed further if further detail can be provided by Operators. • From the data provided, around 18% of staff were in DB schemes, and of these 3% were in the LGPS. We have estimated that the total cost to operators of providing privately run DB schemes is around 1% of the total operating costs for bus (reflecting the small proportion of staff in such DB schemes). Therefore any sensitivities on the cost of providing DB schemes would be within the envelope of the sensitivity done on operator margin (which is the equivalent of a 1.5% increase in operators costs). • A further potential risk is that there could be an exit debt could be triggered if all staff stop contributing to a pension scheme. Analysis of the Operators' position suggests this the risk of a material exit debt is low. If such a debt was to arise there would be no requirement for LCRCA to contribute to the exit debt

Risk/Description	Mitigation
Capital Expenditure: Risk of the cost of capital expenditure on fleet, depot and transition increasing relative to the assumptions applied to the analysis. <i>The impact of this risk has been tested in Sensitivity 2 below.</i>	• LCRCA has developed projected cost estimates for fleet, depot and transition based upon experience to date and input from professional advisers and is based upon precedent
Cost of financing: Risk of an increase to the base rate resulting in an increase to the assumed cost of finance to LCRCA. <i>The impact of this risk has been tested in Sensitivity 3 below.</i>	• LCRCA will continue to monitor interest rate movement and impact on PWLB pricing

5.7. Sensitivity Analysis

This Section sets out an analysis of sensitivity tests which have been used to test the robustness of the affordability analysis outlined above, and to quantify the potential financial implications to LCRCA arising from identified risks occurring.

These tests have been assessed based on their impact to LCRCA's net expenditure and funding requirements.

The sensitivity tests considered within this Section are as detailed in Table 4.13 below.

It should be noted that:

- these are all individual and not combined sensitivities¹⁸³ – as to do so would require the probability of each element of a combined downside to be estimated; and
- The sensitivities maintain all of the fixed costs of Merseytravel resource, depot and fleet being incurred by LCRCA. In reality, if, for example, outturn or re-forecast demand reduced below the expected level, then LCRCA could adapt its resourcing and fleet investment plans.

¹⁸³ The approach taken is consistent with TAG Units M2.1 and M4.

Table 4.13: Sensitivity Scenarios

Sensitivity	Title	Description	Link to risk
Sensitivity 1	Additional reductions in Passenger Demand	Assesses the impact of reductions in revenue of 10%.	Revenue risk
Sensitivity 2	Capital Expenditure	Assesses an increase/decrease in capital expenditure costs of 10% in real terms (2021/22 base price).	Capital Expenditure
Sensitivity 3	PWLB interest rate	Assesses an increase/decrease by 100bps (1%) on assumed PWLB rates (as of 6th October 2022).	Cost of financing
Sensitivity 4	Franchising Operating costs	Assumed Operator margin of 7.5% increases/decreases by 1.5 percentage points for Franchising Case.	Operating Cost Risk
Sensitivity 5	Management of franchising	10% increase in management costs for Franchising.	Management of Franchising
Sensitivity 6	CPI/RPI rate	Assesses an increase by 100bps (1%) of CPI/RPI from 2023/24.	Cost of financing
Sensitivity 7	Long term reduction in bus fares	Assesses an increase to bus fares at RPI-1%.	Revenue risk

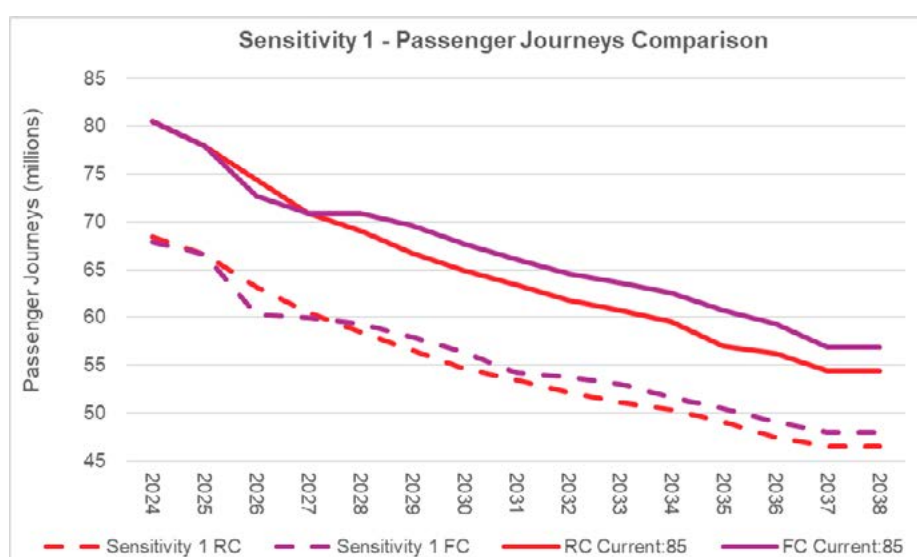
5.7.1. Sensitivity 1 – Results

The graph below shows the impact on the number of passengers carried on the network for the Reference Case and Franchising of a drop in demand to 75% of pre-COVID levels.

As the forecasting model is set up to adjust the level of services to ensure that it is affordable, this leads to significant reductions for both options.

The results demonstrate that at this reduced level of demand, there is still a degree more services forecast to be provided under franchising compared with the Reference Case. Under Franchising, fewer services will be self supporting, meaning that the budget will not go as far. Under the Reference Case, the number of commercial services would drop, and supported services would be reconfigured, resulting in an overall drop in services.

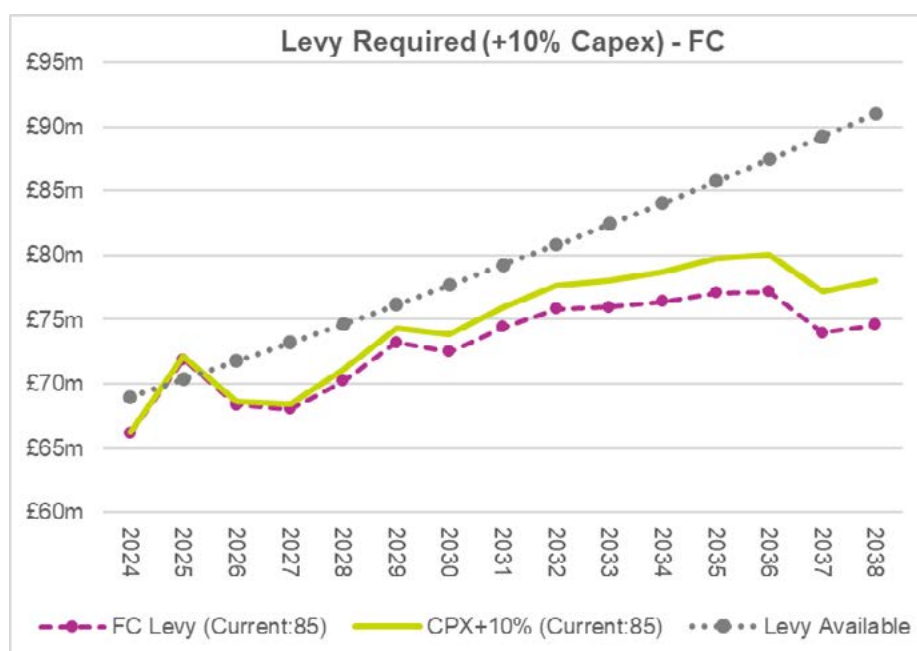
Figure 4.14: Passenger Journeys under Franchising with 75% of Pre-COVID Demand



5.7.2. Sensitivity 2 - Results

Sensitivity 2 assesses the impact of a 10% increase in capital investment in fleet, depot, and transition. The impact of the increase is illustrated on the following graph.

Figure 4.15: Transport Levy required under Franchising (+10% capex)



The above graph shows the cashflow impact of a 10% increase in capital cost for fleet and depot costs on the Current:85 scenario. This shows an increase to the amount of Transport Levy required by £22.1m over the appraisal period, or 2.0% of total Transport Levy required.

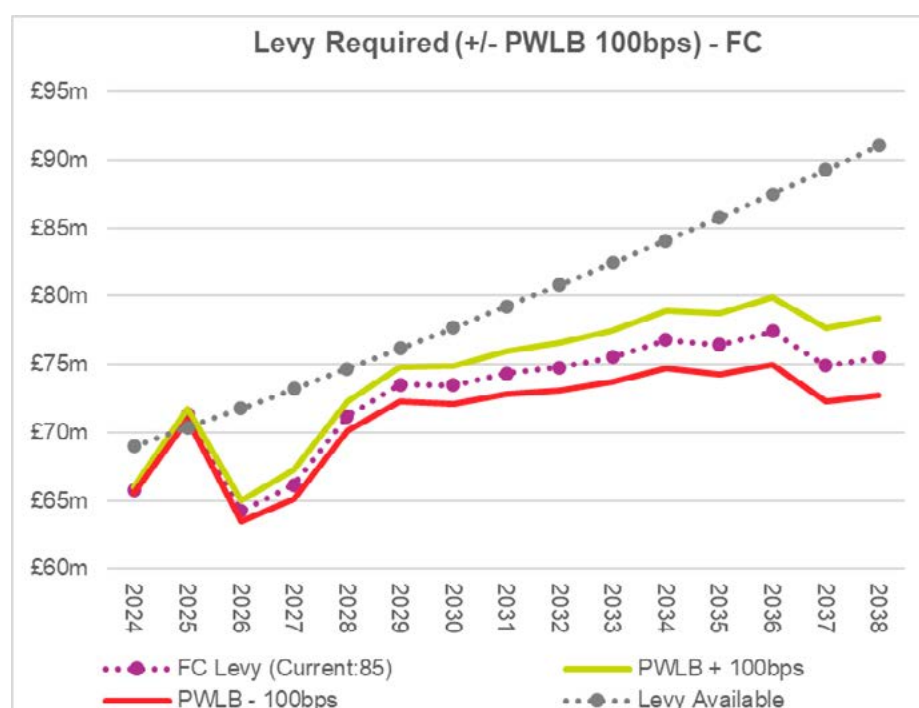
This is a substantial increase, but can be managed within the assumed budget - reflecting that the savings from lower financing costs in the public sector have been set aside, and can be used to manage this risk.

It is also important to stress that there are multiple reasons why capital costs could increase, and many of these will also apply to capital investments by the private sector. If the private sector's capital costs increased, then LCRCA would probably have to absorb some of these costs under an EP structure as fewer services would be commercially viable.

5.7.3. Sensitivity 3 - Results

Sensitivity 3 assesses the impact of a 1% increase/decrease in the assumed PWLB interest rate. The impact of the increase is illustrated on the following graph.

Figure 4.16: Transport Levy required under Franchising (PWLB +/- 100bps)



The above graph shows the impact of a 1% increase in the rate of borrowing under the Current:85 scenario. This results in a marginal increase to the amount of Transport Levy required by £24.2m over the appraisal period, or 2.2% of total Transport Levy required. Conversely, a 1% decrease in the rate of borrowing results in a marginal decrease to the amount of Transport Levy required by £23.3m over the appraisal period, or 2.1% of total levy required.

It should also be noted that if increases in PWLB arise from general changes in interest rates, then the cost to the private sector of financing assets will also rise, and the some of the cost impacts of this could flow through to LCRCA by a reduction in commercial services, and greater demand for supported services.

5.7.4. Sensitivity 4 - Results

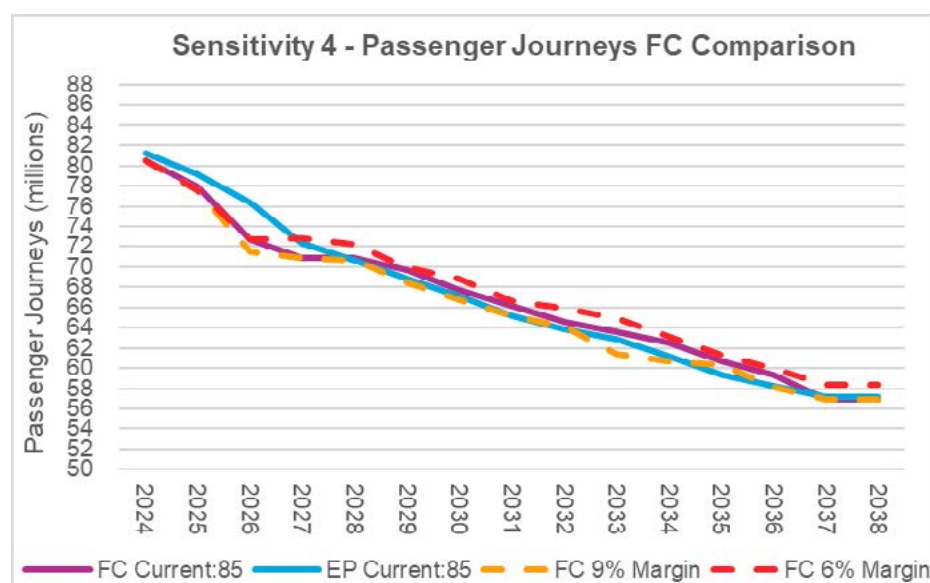
The graph below shows the impact on journeys if the costs of franchising rise or fall due to an increase/decrease in the profit margin of 1.5%.

The results show an overall pattern of services dropping when the profit margin is higher, as LCRCA would need to cut services to stay within budget. The converse happens if the margin is lower.

The graph also shows the forecast level of journeys under the EP. In particular, it shows that for certain years the EP provides more journeys if the margin charged for Franchised services is higher.

When considering this, it is important to stress that under the EP there is forecast to be a significant proportion of services provided as supported services under gross cost contracts. In the forecast, these are assumed to have a profit margin of 6.5%, and if operators were able to demand a 9% margin under Franchising, with LCRCA taking specific steps to reduce barriers to entry and encourage new entrants, it may not be possible to maintain the lower profit margin for supported services under an EP model.

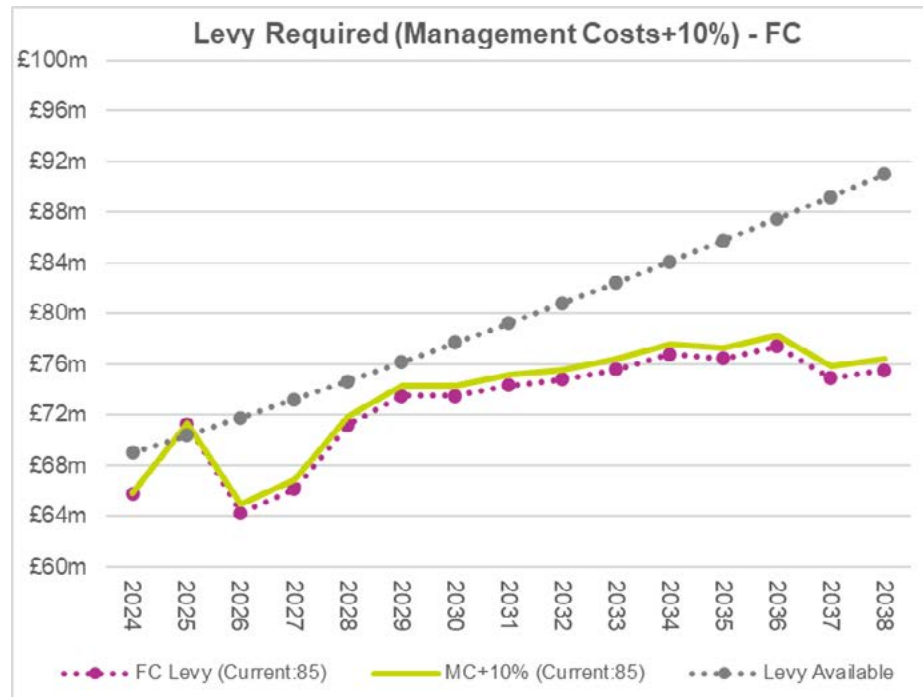
Figure 4.17: Comparison of Services Provided with Higher and Lower Franchising Contract Margin



5.7.5. Sensitivity 5 - Results

Sensitivity 5 assesses the impact of a 10% increase in the cost of management under Franchising. The impact of the increase is illustrated on the following graph.

Figure 4.18: Transport Levy required under Franchising (Management costs + 10%)



As can be seen on the above graph, the impact of a 10% increase in management costs under the Current:85 scenario, results in an increase to the amount of Transport Levy required by £10.5m, or 1.0% over the appraisal period.

5.7.6. Sensitivity 6 - Results

Sensitivity 6 assesses the impact of the CPI/RPI rate being higher by 1% in each year from 2023/24 onwards. It also assumes no changes to indexation of the levy.

This sensitivity has been run on the basis of LCRCA absorbing the extra costs as opposed to reducing service. The impact of this is illustrated on the following graph.

Figure 4.18b: Transport Levy required with 1% high RPI/CPI for Reference Case

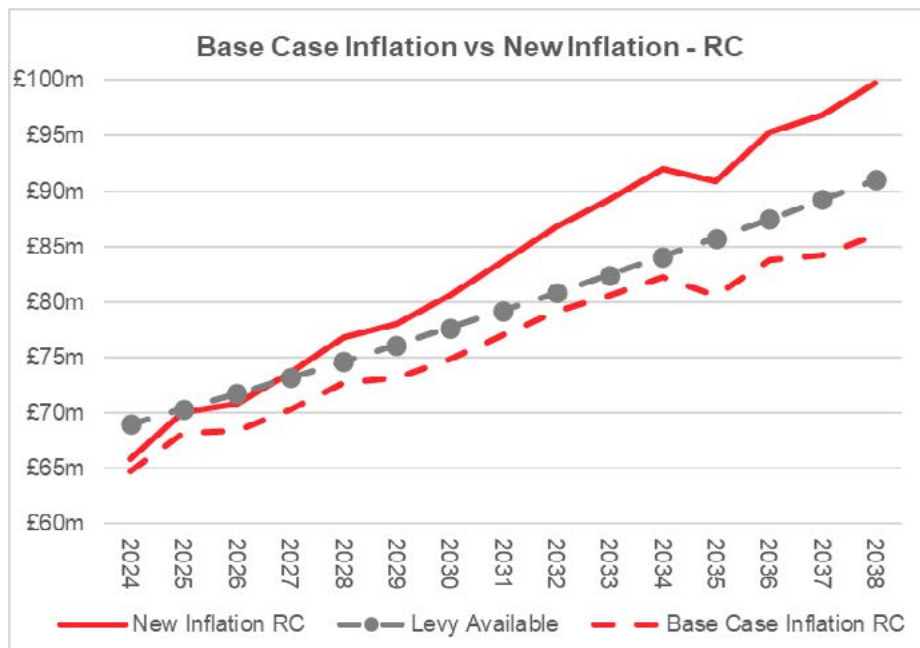
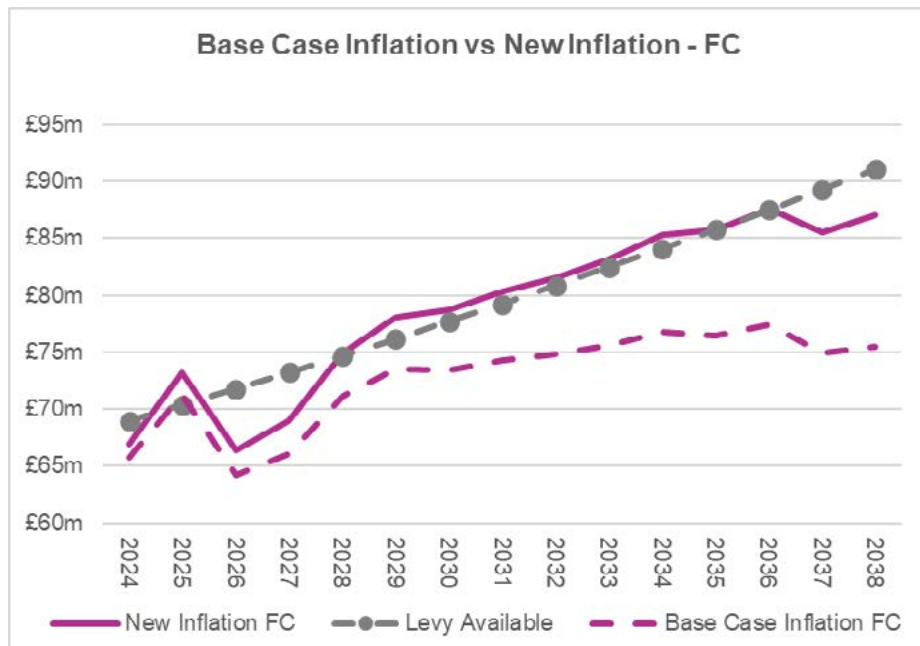


Figure 4.18c: Transport Levy required with 1% high RPI/CPI for Franchising



The graph shows a similar relative impact on Franchising as with the Reference Case. In both options, the costs to the Authority over the assessment period rise by 8-9%. This reflects that the net amount being contributed by LCRCA is similar under both cases (i.e. the levy), and therefore the impact of increased inflation of costs funded by this will be similar.

5.7.7. Sensitivity 7 - Results

Recent data published by DfT shows periods when bus fares did not rise at the same rate as RPI, and potentially therefore somewhat more slowly than is assumed in the Assessment core tests. Therefore, a sensitivity test has been undertaken to consider the impact of fares rising at less than RPI.

This sensitivity assumes that bus fares increase at RPI-1% from 2018/19 and has been run for both the Reference Case and Franchising Option.

A relative reduction in fares has multiple effects. First, it reduces revenue per passenger. Second, it increases demand as fares are lower. This leads to an overall reduction in revenue for the same bus network, and therefore an increased funding requirement.

Because the forecasting model works on the basis of matching service levels to funding requirement, the reduction in fares also leads to a reduction in services (in order to make the overall service affordable to LCRCA).

Therefore in order to make a balanced assessment of the impact of lower fares, the forecasting model has been rerun with the lower fares for the Reference Case and the Franchising Option.

The graphs below show the amount of Transport Levy required under the Core Scenario and this sensitivity for both the Reference Case (RC) and Franchising Option (FC). As explained in this sensitivity, the model cannot optimise to exactly the budget available so there is some variation of spend from year to year but overall it is similar.

Figure 4.18d: Transport Levy required with 1% per annum reduction in fare increase (Reference Case)

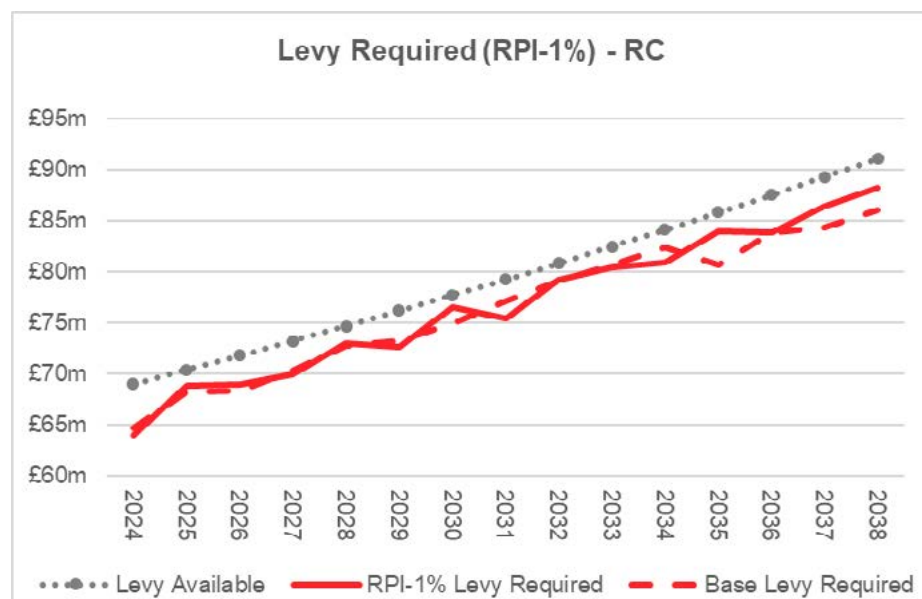
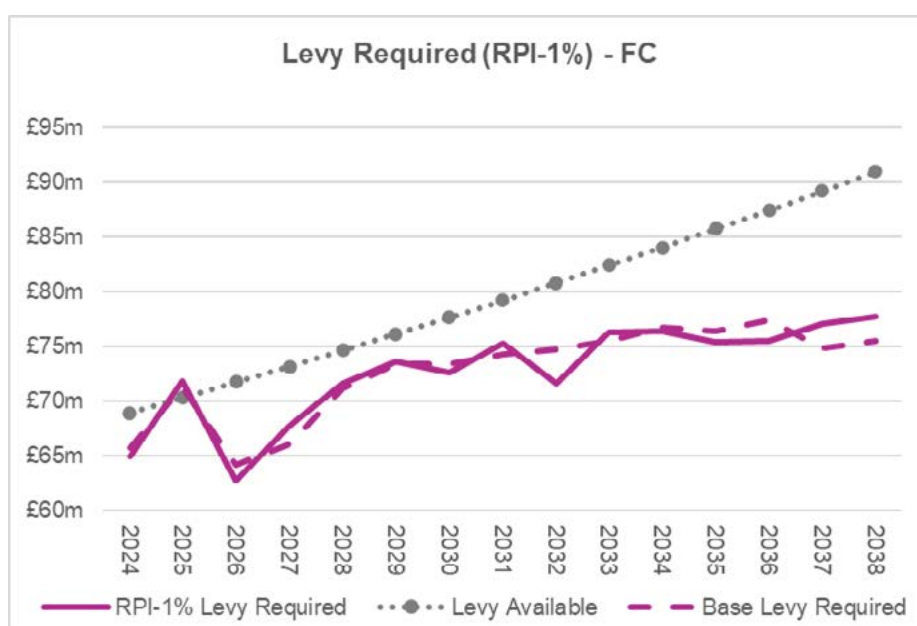


Figure 4.18e: Transport Levy required with 1% per annum reduction in fare increase (Franchising)

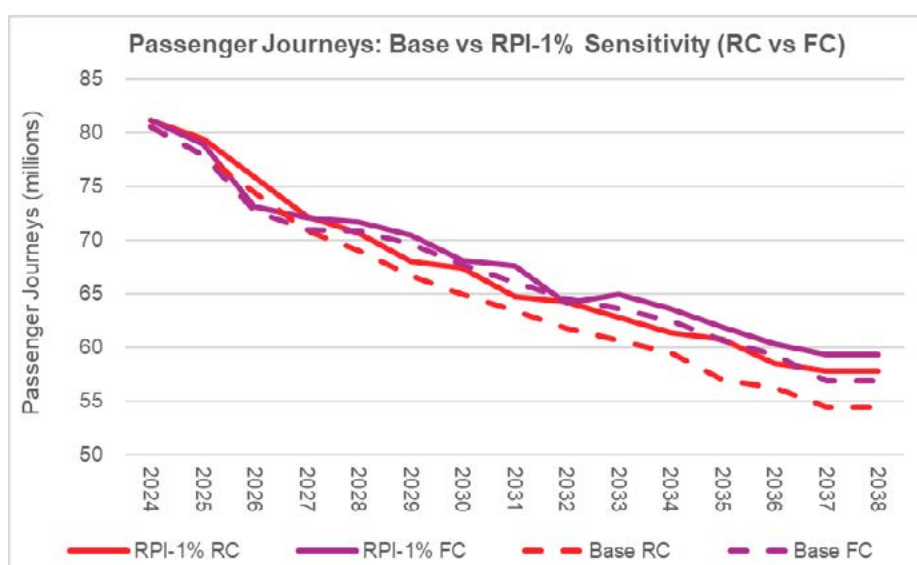


The above graphs show the amount of Transport Levy required – however, this is not the only source of funding available to LCRCA. Fare revenue would drop with the lower fares. For the Franchising Case, this would drop by 10.1% in total from 2026 to 2039.

The net impact of such a change would be to increase passenger numbers. These are shown in the figure below.

This sensitivity continues to show that such an increase in passenger numbers would still maintain the ranking of Franchising carrying more passengers than the Reference Case.

Figure 4.18f: Comparison of Passenger Journeys with fares rising at less than RPI



The results above show an increase in passengers. However, there are good reasons why neither the deregulated market or a franchising authority would reduce fares in this way.

First, it reduces the size of the bus market in terms of total revenue. This clearly isn't in the interest of a commercial operator.

Second, the larger number of passengers would be crowding onto a smaller number of buses. The forecasting model doesn't deal with this issue directly, and it is likely that overcrowding would suppress passenger demand.

In summary therefore, this sensitivity shows that if these reductions in fares were to be applied, Franchising would still carry more passengers than the Reference Case.

5.8. Further financial considerations specific to franchising (VAT and Working Capital, Accounting Implications) for Reference Case

The following Sections set out further financial consideration specific to Franchising, including VAT and Working Capital, Accounting Implications.

5.8.1. VAT and Working Capital

5.8.1.1. VAT

Under Franchising, LCRCA would be responsible for payment of contractual service fees to franchised service operators. Merseytravel is VAT registered and if VAT is levied by franchised operators on services fees, Merseytravel is eligible to recover VAT charged on eligible services from HMRC. VAT charged on service fees is expected to be fully recoverable, as passenger fares revenue is currently expected to remain a zero rated activity. No material changes are anticipated in relation to VAT exempt business activities.

5.8.1.2. Working Capital

Working capital requirements reflect any short-term timing differences between income and expenditure cash flows (including the timing of payment and recovery of VAT) which are not captured at the annual forecasting level in the financial model. The precise quantum of working capital requirements will principally depend on any timing differences between payment of service fees and receipt of farebox revenues.

LCRCA expects any working capital requirements to be manageable, based on the following factors and financial management approach if Franchising were implemented:

- in the event of a mayoral decision to proceed with Franchising, there will be a development, procurement and mobilisation period of 3 years which will provide LCRCA a sufficient financial planning period to reserve working capital requirements for earlier contract phases;
- the proposed Franchise Scheme is based on a phased roll out of contracts across LCR, with a consequent phased build-up of farebox revenue and franchise contract payments relating to franchised services. This will support LCRCA to ensure sufficient working capital requirements are in place during the transition period;
- once a Franchising decision is made, it is expected that LCRCA would undertake detailed financial model forecasts to support funding and working capital requirements both during the transition period and once steady state franchised services has been established; and
- LCRCA has experience of managing working capital requirements across its whole transport network and has cash and cash equivalents held to support working capital requirements.

5.8.2.Accounting Implications

The purpose of this Section is to provide a brief overview of the anticipated accounting (including balance sheet) implications to LCRCA of switching to an alternative delivery model. This covers both Merseytravel as the assumed franchise delivery body and LCRCA. This Section also considers the whole of government Balance Sheet implications as per ESA10 National Accounting guidelines.

The affordability analysis provided within Section 4 has been undertaken on a cash basis in order to demonstrate the net revenue expenditure impact of the alternative delivery options.

There are a number of identifiable differences between the cash basis of modelling and the accounting implications of these delivery models as per IFRS and the Code of Practice on Local Authority Accounting in the United Kingdom 2020/21.

For the purposes of this Financial Case it is assumed that Merseytravel is the delivery body of a Franchise Scheme and that income and expenditure relating to the delivery of bus services will be recognised within the Merseytravel financial accounts.

Any grant funding, borrowings or utilization of usable reserves to support the delivery of alternative bus options (e.g. to fund net expenditure or capital investment) will be undertaken at LCRCA level.

5.8.2.1. Grant Funding

Government grants and contributions are recognised as due to the authority when there is reasonable assurance that the authority will comply with the conditions attached to the payments, and the grants or contributions will be received.

When conditions are satisfied, the grant or contribution is credited to the relevant service line in the Comprehensive Income and Expenditure Statement.

Any capital grants received by LCRCA are credited to the Comprehensive Income and Expenditure Statement once conditions have been satisfied and are reversed out of the General Fund Balance in the Movement in Reserves Statement.

Grants which are revenue in nature, such as the BSOG, are recognised and accounted for on a receipts basis at LCRCA level and therefore align with the cash basis which has been modelled in the affordability analysis in Section 4.

5.8.2.2. Borrowing and Minimum Revenue Provision (MRP)

It is assumed that LCRCA will finance capital costs associated with fleet and depots using PWLB borrowing, Section 5.3.2.5 sets out the terms under which the financing of fleet and depots.

LCRCA is required by statutory guidance to make prudent provision for future debt repayments through a Minimum Revenue Provision (“MRP”) charge.

LCRCA makes an annual contribution from revenue towards the reduction in its overall borrowing requirement equal to an amount calculated on a prudent basis, as determined by the authority in accordance with statutory guidance. LCRCA currently uses the annuity basis for calculating its MRP charge.

5.8.2.3. Residual Value Mechanism

The residual value mechanism described within the Commercial Case is an option being considered by LCRCA to support its fleet strategy under Franchising.

It is expected that any assets over which LCRCA is to provide a future value may require recognition of a contingent liability on LCRCA's balance sheet, in accordance with IAS37 - subject to this being deemed a possible obligation depending on whether an uncertain future event occurs (LCRCA acquiring RV Assets).

5.8.2.4. Use of Reserves

Carried forward usable reserves are utilised by LCRCA to fund net revenue expenditure gaps that exist in excess of the Transport Levy funding and other grants applied in the year.

The extent to which the usable reserves are required fluctuates year-on-year depending on both the level of funding which LCRCA is able to secure against the sources outlined, and the in-year net revenue expenditure.

5.8.2.5. Capital Investment

LCRCA's balance sheet currently holds c. £258m in long-term assets. The proposed capital expenditure on fleet, depots, and related infrastructure modelled under Franchising will increase this by £122m by the implementation of all Franchising rounds, and by £281m by the end of the appraisal period

5.8.2.6. Long-term liabilities

It is assumed that fleet and depot capital costs will be financed through PWLB borrowing undertaken by LCRCA, which would increase the long-term liabilities recognised within Merseytravel's Balance Sheet by £122m by the implementation of Franchising.

6. EP

6.1. Introduction

The EP Case is similar to the Reference Case, in terms of LCRCA's structure of income and expenditure.

If a successful EP can be negotiated, it should be possible to reconfigure the network to avoid duplication of services, allowing more beneficial services to be run as supported services, compared with the Reference Case. Therefore, the costs and revenues for LCRCA associated with supported services and ENCTS would change.

However, it is important to recognise that any changes to the network under EP could only be achieved with the agreement of Operators.

This Section sets out the following details and results for the model EP:

- (a) a description of LCRCA income from bus services under EP;
- (b) a description of LCRCA costs relating to bus services under EP;
- (c) the projected financial impact on LCRCA (net position) over a 15 year period;
- (d) sources of funding;
- (e) a risk analysis relating to the financial implications of EP; and
- (f) sensitivity analysis to test the impact of potential risks occurring.

6.2. LCRCA Income - EP

In the EP Case, income sources have the same structure as the Reference Case, with services being predominantly run commercially by Operators that collect farebox revenue. However, there are a number of income items to LCRCA, namely:

- Revenue from supported services (tendered contract services);
- BSOG (the element relevant to supported services);
- Additional (sundry) income, resulting from ex-boundary services, services to Liverpool Airport, as well as contributions for school routes;
- Payments from Operators to use LCRCA owned bus stations.

The above are in addition to the Transport Levy LCRCA receives from Districts.

6.3. LCRCA Expenditure - EP

6.3.1. EP Operating Costs

Under an EP scheme, LCRCA's gross expenditure profile includes the following costs:

- ENCTS payments to operators of commercial services;
- Supported services payments to operators (includes both de minimis and tendered services payments);

- Capital Maintenance Costs - Bus Stations and RTI equipment;
- LCRCA staff costs (including contract, network and data and compliance staff);
- General admin and office costs;
- Merseytravel publicity and marketing costs;
- TravelSafe payments; and
- EP specific costs (implementation costs and ongoing costs to administer the EP Scheme(s)).

Note that given the forecast increase in the proportion of services that are supported, there is an additional amount of variable management costs added to reflect the increased administration overhead of additional tendered services.

Unlike Franchising, no financing costs for capital investment for fleet and depot is included within the analysis, as LCRCA is not anticipated to undertake any investment in and ownership of fleet and depot under EP.

In addition to the costs for the Reference case, the EP also requires £557k of additional staff costs annually (in 20/21 prices), due to the increased involvement of LCRCA in ongoing management of the partnership with Operators

6.3.2. EP Transition Costs

Transitioning to an EP scheme is assumed to have a series of direct cost implications for LCRCA such as market consultation and negotiations with Operators, scheme design, and to manage and administer the EP Scheme following implementation.

The table below shows the assumed costs associated with the implementation and ongoing administration costs of an EP Plan and Scheme.

Transitional costs are assumed to be drawn from reserves, and repaid over a period of 15 years (without interest).

Table 4.14: LCRCA costs specific to an EP

Implementation costs	Cost to LCRCA (£m)
Cost of advisors during implementation - 3 year total	£1,500,000
Recurring costs to renegotiate EP - Assumed cost every three years following implementation period	£500,000 (pa)

6.3.3.LCRCA Capital Investment

The EP Option assumes that LCRCA does not undertake any capital investment in fleet and depots, and that these will continue to be provided by the private sector (with the exception of any fleet currently owned by LCRCA).

6.4. Financial Results

6.4.1. Financial results for Core Scenario

The income and expenditure components outlined above have been modelled annually to forecast the net expenditure position for LCRCA under EP, under a Core Scenario of assumed budget and demand.

As discussed in Section 3.2.1 the Core Scenario assumes that:

- demand remains at 85% of pre COVID-19 levels; and
- Transport Levy increases at 2% per annum from the 2022/23 budget.

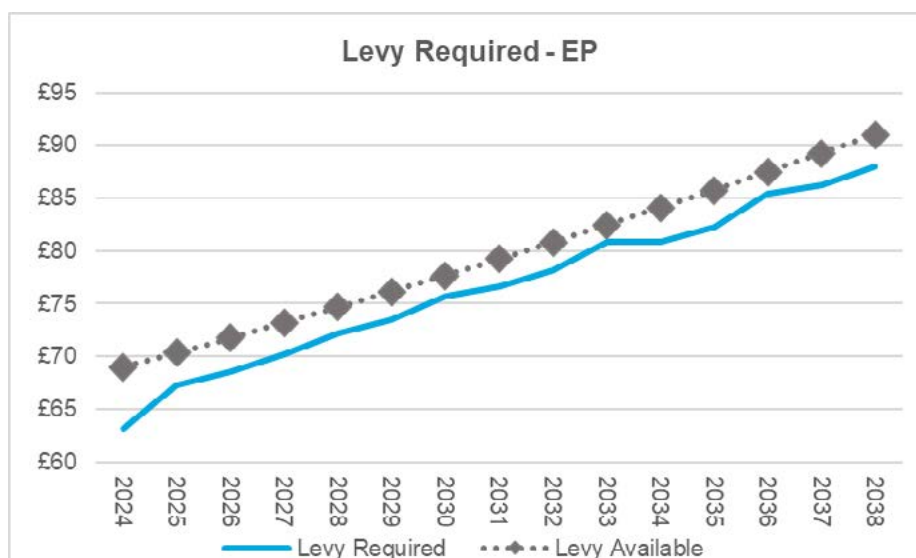
The following table presents the forecast cash flow for the Core Scenario.

Table 4.16: EP Cash Flows (£m, nominal terms)

Enhanced Partnership - Cash Flows	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31	2031/32	2032/33	2033/34	2034/35	2035/36	2036/37	2037/38	2038/39
Income (£m)															
Supported / Franchise Services Revenue	10.9	19.0	22.5	27.9	29.1	30.4	32.1	35.1	36.7	37.3	39.4	41.3	42.5	42.5	43.4
Additional Income	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Total income	11.3	19.4	22.9	28.3	29.6	30.8	32.6	35.6	37.1	37.7	39.9	41.8	43.0	43.0	43.9
Expenditure (£m)															
Payments to Operators															
Supported services	(20.8)	(38.3)	(47.7)	(58.8)	(63.2)	(66.1)	(69.5)	(74.7)	(78.2)	(80.4)	(84.6)	(88.7)	(92.6)	(94.1)	(96.0)
Franchise payments	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ENCTS payments	(45.2)	(39.6)	(35.0)	(30.1)	(29.5)	(28.9)	(28.6)	(27.8)	(27.2)	(27.4)	(25.8)	(24.7)	(24.2)	(24.1)	(24.6)
Total payments to operators	(66.0)	(77.9)	(82.7)	(88.9)	(92.6)	(95.0)	(98.1)	(102.5)	(106.4)	(107.8)	(110.4)	(113.5)	(116.8)	(118.3)	(120.6)
Financing costs															
Depot	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fleet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Transitional costs	-	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Total financing costs	-	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Overheads															
Bus station costs	(3.4)	(3.4)	(3.3)	(3.3)	(3.4)	(3.5)	(3.5)	(3.6)	(3.7)	(3.8)	(3.8)	(3.9)	(4.0)	(4.1)	(4.2)
RTI – Real Time Information	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.6)	(0.7)	(0.7)	(0.7)	(0.7)	(0.7)
Staff Costs	(3.4)	(3.5)	(3.7)	(3.8)	(3.9)	(4.0)	(4.1)	(4.2)	(4.3)	(4.3)	(4.5)	(4.6)	(4.7)	(4.7)	(4.8)
Admin & Office Costs	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
Publicity / Advertising / Marketing costs	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.8)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)	(0.9)
Travelsafe	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Bus Alliance	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)
Total overheads	(8.4)	(8.6)	(8.7)	(8.8)	(9.0)	(9.2)	(9.4)	(9.6)	(9.8)	(10.0)	(10.2)	(10.4)	(10.7)	(10.9)	(11.1)
Transitional costs															
Consultancy and management of transition	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Periodic renegotiation	-	-	-	(0.6)	-	-	(0.6)	-	-	(0.7)	-	-	(0.7)	-	-
Early mobilisation of procurement resource	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Early mobilisation of additional management	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Provision for risk of supported services	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IT provisional costs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total transitional costs	-	-	-	(0.6)	-	-	(0.6)	-	-	(0.7)	-	-	(0.7)	-	-
GROSS EXPENDITURE	(74.4)	(86.6)	(91.5)	(98.5)	(101.8)	(104.3)	(108.2)	(112.2)	(115.3)	(118.6)	(120.8)	(124.0)	(128.3)	(129.3)	(131.8)
NET EXPENDITURE (Levy required)	(63.1)	(67.2)	(68.5)	(70.2)	(72.2)	(73.5)	(75.7)	(76.6)	(78.2)	(80.9)	(80.9)	(82.2)	(85.4)	(86.2)	(88.0)

Figure 4.19 below shows the profile of the Transport Levy used for this option and this results in a profile of bus service over the period shown. These also include the equivalent result for the Reference Case for comparison purposes.

Figure 4.19: Transport Levy Required for EP



The above graph shows that the EP Option as modelled is affordable within the proposed budget for the Core Scenario. On average the cost of this option is almost identical to the Reference Case.

Figure 4.20 Passenger Journeys for EP

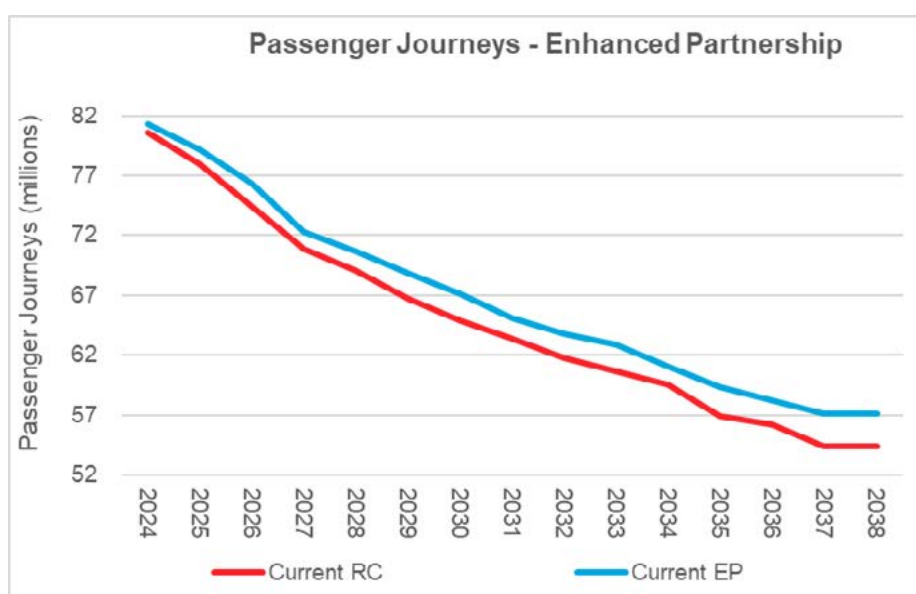


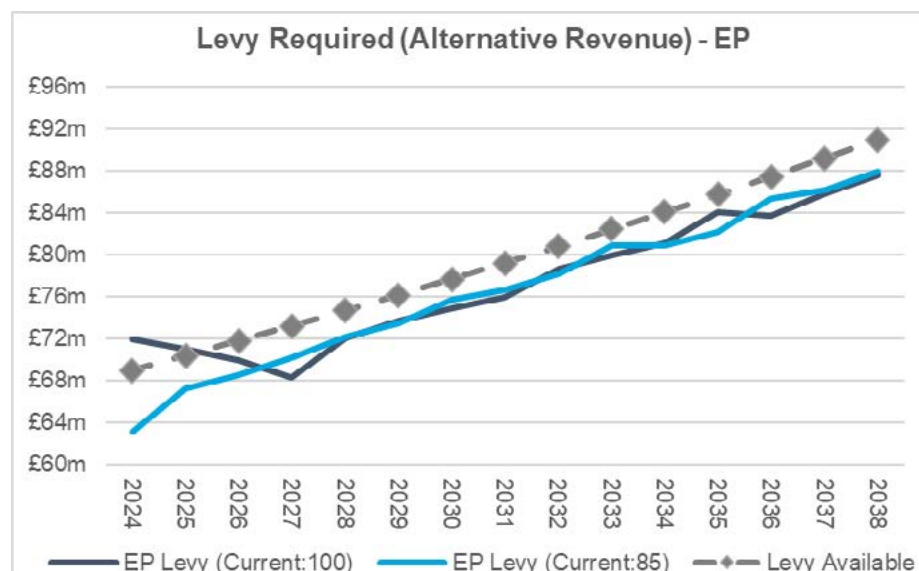
Figure 4.20 shows that while passenger numbers will still continue to fall under EP, the reduction will be smaller than for the Reference Case. On average, for the period from 2027-2039, EP provides 3.4% more passenger journeys.

6.4.2. Alternative revenue scenarios

The figures below show a comparison of Transport Levy required and service levels provided, assuming that demand

returns to 85% or 100% of the forecast level before COVID-19. Note that all demand scenarios assume an ongoing reduction in demand.

Figure 4.21: Transport Levy required under alternative revenue scenarios



The profiles for the 100% demand scenario follow those of the 85% scenario for each of EP and the Reference Case respectively - as with the 85% scenario there is an almost identical levy required for both options.

Figure 4.22: Passenger journeys under alternative revenue scenarios

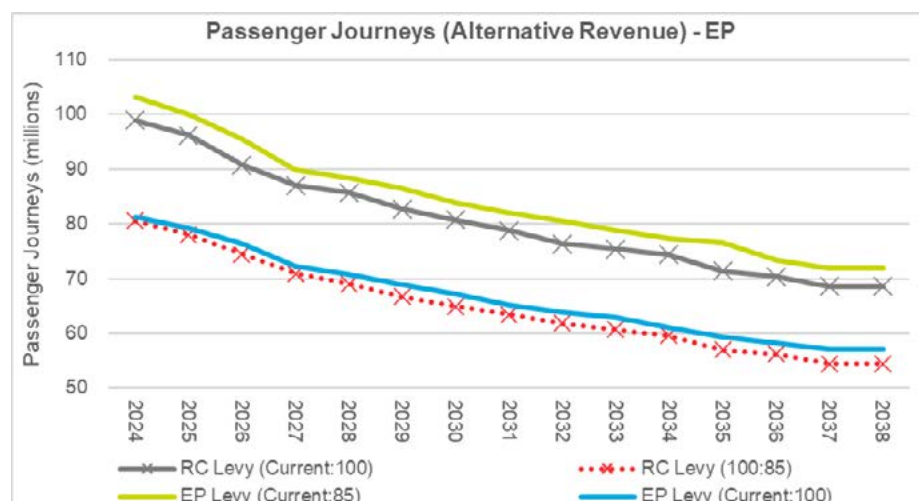


Figure 4.22 demonstrates that the benefit that EP brings in terms of passenger journeys for the 100% demand scenario follows the pattern of that for the 85% scenario, demonstrating

that the financial and passenger benefits of EP are not specific to a single demand scenario.

Over the period from 2027-2039, EP provides on average 4.6% more passenger journeys, compared with the Reference Case if demand is at 100% of pre COVID-19 levels.

6.4.3. Alternative funding scenarios

The figures below show a comparison of Transport Levy required and service levels provided assuming that demand is at 85% of the forecast level before COVID-19, for each of the funding scenarios

Figure 4.23 below shows the Transport Levy used under each of the three scenarios.

Figure 4.23: Transport Levy required under alternative funding scenarios

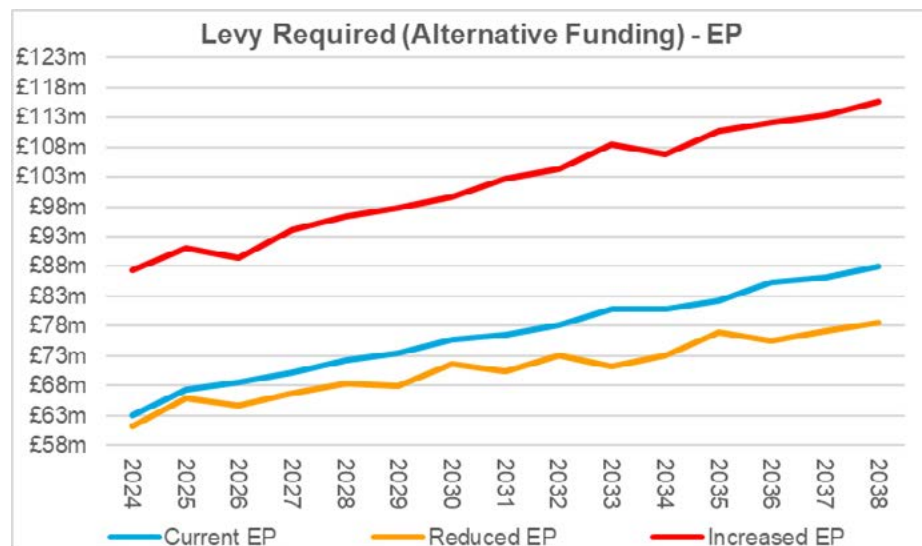
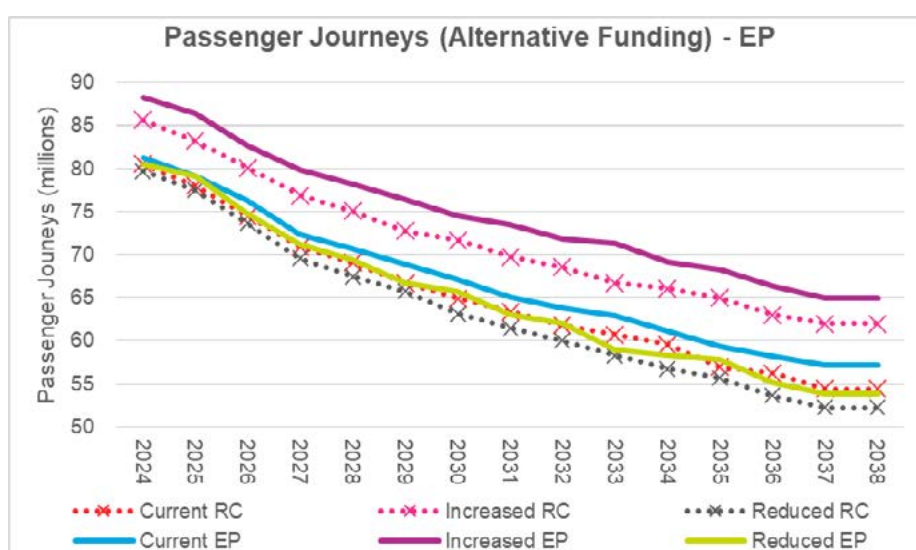


Figure 4.24: Passenger journeys under alternative funding scenarios



As illustrated above, increasing the Transport Levy under the Increased scenario provides a greater level of passenger journeys, of 4.9% compared with the Reference Case. Similarly, under the Reduced Funding scenario EP provides 2.8% more passenger journeys than the Reference Case.

6.5. Financial Risks

This Section sets out the financial risks associated with the EP Option, assessment of their scale/significance and potential mitigations.

Table 4.17: Financial risks under EP

EP Risk Analysis

Risk/Description	Mitigation
Funding: The EP structure is more similar to the Reference Case than Franchising, and services will be primarily provided by commercial Operators. However, as with Franchising, LCRCA does not have the ability to control the amount of funding it receives from Districts and Central Government and any reduction would impact LCRCA's ability to continue delivering the current level of bus services within the existing financial envelope. If demand declines, LCRCA will need to make decisions about which formerly commercial services to run, and (given restrictions on funding) this is likely to mean that other tendered services would have to be cut. <i>The impact of this risk has been tested within the results (alternative scenarios)</i>	• As with Franchised services, LCRCA will need to be able to revise the bus network in order to manage the impact of reductions in service. Under EP this will have to be done by negotiation. • Undertake sensitivity analysis of fluctuations in funding to understand the impact to LCRCA's financial position and on its ability to deliver bus services.
Operating Cost Risk: LCRCA is impacted in two ways by increasing operating costs. 1. the number of services which are commercially viable would reduce, leading to requests for intervention to support such services. 2. the cost of supported services would also increase, reducing LCRCA's ability to provide services within a limited budget. <i>The impact of this risk has been tested within Sensitivity 4 below.</i>	• LCRCA can liaise with Operators and attempt to monitor the market - however, the decision to cease commercial services will be for the Operators and therefore LCRCA will to some extent be reactive to such changes.

Risk/Description	Mitigation
Revenue Risk: While revenue is primarily a risk for Operators, it has a knock-on effect on LCRCA (as with cost risk). It can lead to commercial services being discontinued, and increase the net cost of supported services. The experience of COVID-19 has shown that transport authorities cannot assume all revenue risk can be borne by Operators. <i>The impact of this risk has been tested in Sensitivity 1 below.</i>	• LCRCA can liaise with Operators and attempt to monitor the market - however, the decision to cease commercial services will be for the Operators and therefore LCRCA will to some extent be reactive to such changes.
Increased Management Cost: Increased costs of managing the EP, which could include cost of negotiating the initial EP plan and scheme, implementation and renegotiation in future years to continue to allow for change and progress. <i>The impact of this risk has been tested in Sensitivity 5 below.</i>	• The EP scheme will need to be negotiated by LCRCA with Operators and will be subject to consultation. The extent to which an EP gives rise to additional costs will depend on the EP scheme negotiated.
Failure of Operators: Falls in revenue or increased costs reduces viability for Operators to the extent that they may withdraw from the market or become insolvent. This would not directly affect LCRCA financially, as there is no recourse back to LCRCA. Ideally, other Operators would pick up the routes or the services in question, although this is unlikely in the event that the routes could not sustain a viable business model for the incumbent. In this event, LCRCA could consider tendering or re-tendering affected services to a different operator and cover the costs of doing so or allow the services to no longer be provided.	• Regularly monitor Operators' performance to identify potential risk of insolvency. • Monitor patronage and undertake scenario planning for a decline in passenger revenue.

Risk/Description	Mitigation
Value for Money of Investments: Risk that public sector funding is spent in ways that generate limited control for LCRCA and the wider public stakeholders, and that private Operators receive disproportionate benefits of public investments.	Clearly define the terms of public sector funding and identify vehicles for joint-investment with Operators with a clear set of shared risks and returns.
Capital Expenditure: Risk of the cost of capital expenditure on transition increasing relative to the assumptions applied to the analysis.	The estimated level of transition cost under EP is relatively small compared with Franchising.
Cost of financing: Risk of an increase to the base rate resulting in an increase to the assumed cost of finance to LCRCA.	- The level of borrowing under EP is relatively small compared with Franchising. - LCRCA will continue to monitor interest rate movement and impact on PWLB pricing.

6.6. Sensitivity Analysis

This Section sets out an analysis of alternative scenarios which have been used to test the robustness of affordability analysis outlined above, and to quantify the potential financial implications to LCRCA arising from identified risks occurring.

These scenarios have been assessed based on their impact to LCRCA's net expenditure and funding requirements.

The sensitivity scenarios considered within this Section are as detailed in Table 4.18 below.

Table 4.18: Sensitivity Scenarios

Sensitivity	Title	Description	Link to risk
Sensitivity 1	Additional reductions in Passenger Demand	Assesses the impact of reduction in revenue of 10%.	Revenue Risk
Sensitivity 2	Capital Expenditure	Not applicable as no significant capex in EP Option	N/A

Sensitivity	Title	Description	Link to risk
Sensitivity 3	PWLB interest rate	Not applicable as no significant borrowing in EP Option	N/A
Sensitivity 4	Support Service Operator Margin	Not applicable	N/A
Sensitivity 5	Management of EP	10% increase in management costs for EP.	Management of EP

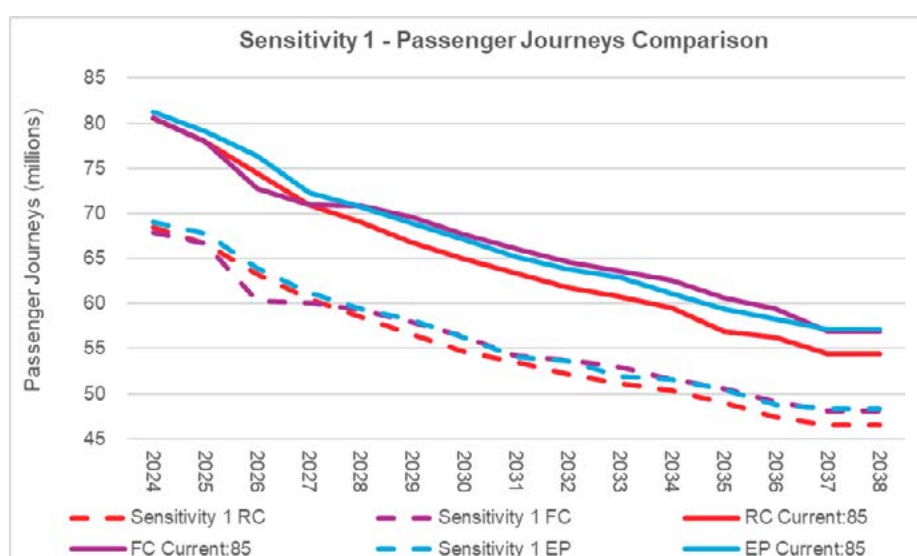
6.6.1. Sensitivity 1 - Results

The graph below shows the impact on the number of passengers carried on the network for each of the Reference Case, EP and Franchising of a drop in demand to 75% of pre-COVID levels.

As the forecasting model is set up to adjust the level of services to ensure that it is affordable, this leads to a significant reduction in services for all 3 options.

There is also a slight narrowing of the differences between the options at the lower demand level. This could be caused by the higher fixed costs management costs of Franchising. At this level of service, it is possible that there could be some reduction in these costs.

Figure 4.25: Passenger Journeys under EP with 75% of Pre-COVID Demand



6.6.2.Sensitivity 2 - Results

Not Applicable

6.6.3.Sensitivity 3 - Results

Not Applicable

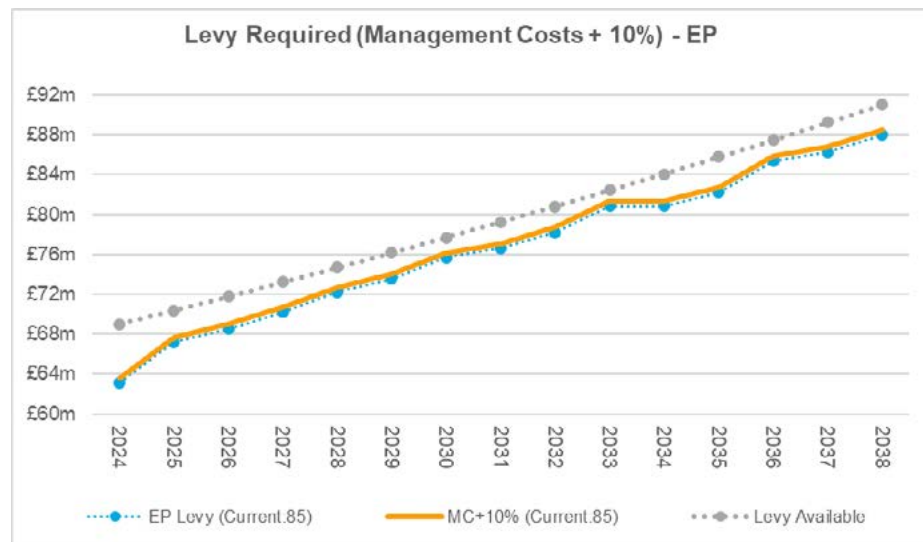
6.6.4.Sensitivity 4 - Results

Not Applicable

6.6.5.Sensitivity 5 - Results

Sensitivity 5 assesses the impact of a 10% increase in the cost of management of EP. The impact of the increase is illustrated on the following graph.

Figure 4.26: Transport Levy required under EP (Management costs +10%)



As can be seen on the above graph, the impact of a 10% increase in management costs under the Current:85 scenario, results in an increase to the amount of Transport Levy required by £7.3m, or 0.6% over the appraisal period.

7. Comparison of Options under Differing Scenarios

7.1. Introduction

In this Section we compare and analyse results across the three Delivery Options and consider the relevant financial benefits and risks of all of the options.

As set out in the introduction to this Financial Case, the bus market faces uncertainty both in terms of passenger demand and funds available to support services.

The impact of COVID-19 has contributed to these and comes on top of a long-term decline in bus usage and a reduction in services.

Therefore, the approach of this analysis has been to assume that, in any funding or demand scenario, and for any Delivery Option, LCRCA would aim to utilise the limited funding available by improving the network and carrying more passengers.

The Economic Case model forecasts the network that would be preferred under each of the Delivery Options and for each demand and funding scenario. This is a complex process, as the costs of services will change in steps as individual services are increased or reduced.

Because of this, it is not possible to produce forecasts which utilise the exact amount of funding available.

Therefore, the comparison of options needs to consider both the differences in funding required and the passenger journeys provided.

7.2. Comparison of options

7.2.1. Ongoing Transport Levy required

The table below shows the average saving over the Assessment period for each of the Delivery Options over the Reference Case. These show a consistent pattern:

- EP uses slightly less funding on average than the Reference Case across all six scenarios (slightly exceeding the average cost of the Reference Case in three scenarios) - this is consistent with the economic forecasting model targeting a similar level of spend for each of the three Delivery Options;
- Franchising consistently uses less funding than the Reference Case and the EP Option in all scenarios - which is explained by the lower financing costs of fleet in the public sector.

Note that these cost differences are for different levels of service provision, so it is important that these are considered

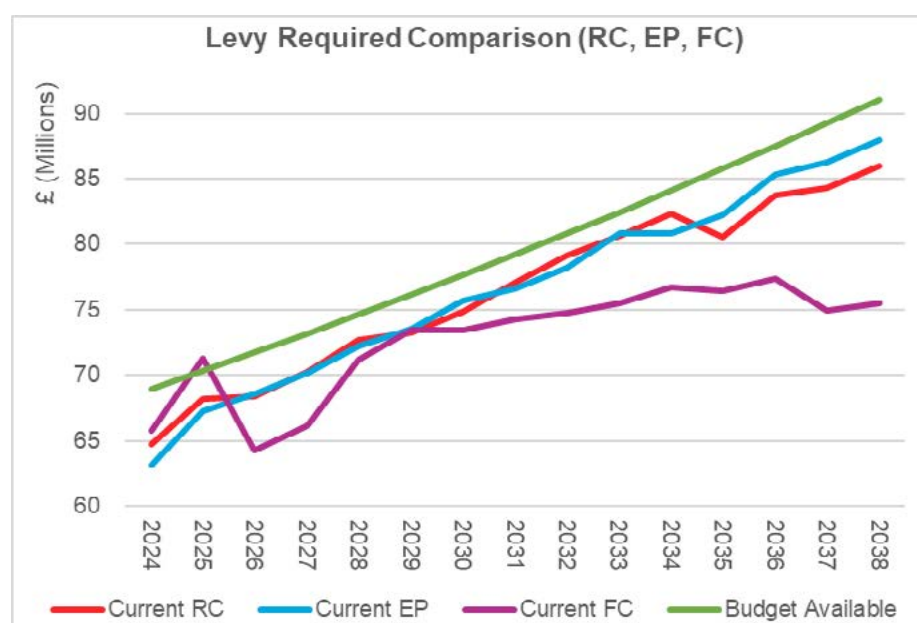
alongside the benefits of passenger journeys of the two alternative Delivery Options which are covered in Section 7.2.2.

Table 4.19: EP and Franchising savings compared to Reference Case

Funding Scenario	Demand Scenario	% Savings compared with Reference Case EP	% Savings compared with Reference Case Franchising
Current	100	0.3%	-3.6%
Current	85	0.2%	-4.8%
Increased	100	-0.1%	-4.4%
Increased	85	-0.6%	-3.5%
Reduced	100	0.3%	-2.8%
Reduced	85	-0.8%	-6.2%

The graphic below shows the comparison of costs of each option under the core scenario.

Figure 4.27: Cost Comparison across all Options



The above graph shows that all three options are affordable within the forecast budget, with the following observations:

- There is a small breach of budget during the transition period for the Franchising case - this reflects the

costs of preparation for Franchising, specifically depot and transition cost financing. This is at a level that LCRCA believes can be managed by using other funds available to it.

- The Franchising cashflow shows a lower utilisation of budget than the other options. This is because of the potential saving from using lower costs public sector financing for fleet and depot. These savings have not been modelled to provide extra services, reflecting that LCRCA can accrue any such saving to manage risks associated with asset ownership.

7.2.2. Passenger journeys

The table below shows a comparison of the additional passenger journeys provided, on average, across the appraisal period by each of the EP and Franchising Options, compared with the Reference Case.

There is some variability in the results but they show a consistent pattern:

- both options provide more passenger journeys than the Reference Case; and,
- Franchising offers more passenger journeys than EP.

These increases in journeys are achieved with lower spend than the Reference Case (see Table 4.19 in Section 7.2.1).

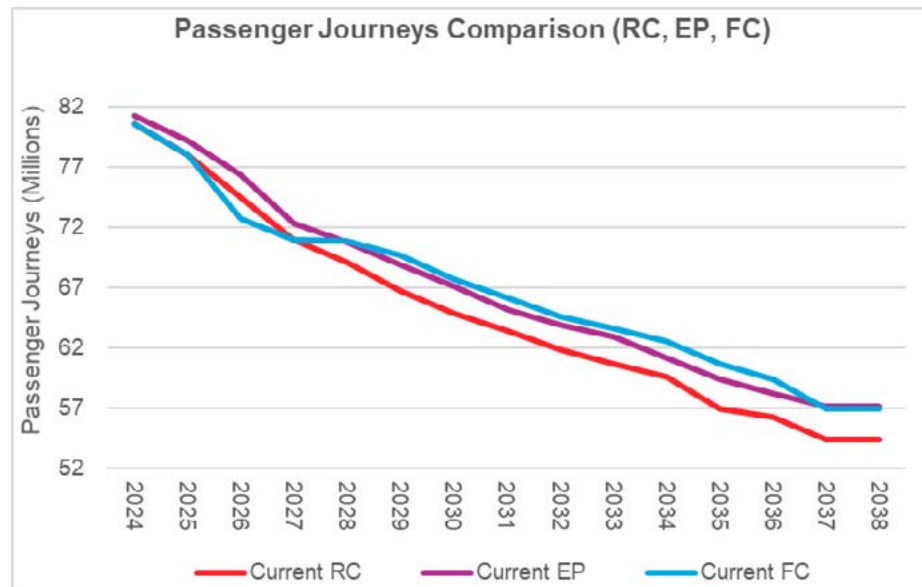
Table 4.20: EP and Franchising passenger journeys compared to Reference Case

Funding Scenario	Demand Scenario	% Additional passengers compared with Reference Case EP	% Additional passengers compared with Reference Case Franchising
Current	100	4.6%	7.0%
Current	85	3.4%	4.3%
Increased	100	5.7%	8.3%
Increased	85	4.9%	6.1%
Reduced	100	4.0%	6.8%
Reduced	85	2.8%	3.4%

Note: these show the difference in total journeys for the period from 2027-39, when both options have been fully implemented.

The graphic below shows the comparison of ridership for each option under the core scenario. This shows that there is a consistent ranking of the three Delivery Options once franchising is fully implemented. This ranking is maintained under all of the different scenarios.

Figure 4.28: Demand Scenario Comparison across all Options



8. Conclusion

8.1. Key conclusions

The primary conclusion of this Financial Case is that both EP and Franchising options provide benefits over the Reference Case, specifically providing more passenger journeys for a similar budget. The Franchising Option provides more benefit than EP.

Below we consider the key financial attributes in making a choice between these two options.

8.2. Franchising

Franchising provides more passenger journeys for a similar cost to the other options (as a consequence of reinvesting in providing more bus services). However, the differences are small and the Franchising Option introduces significant new responsibilities for LCRCA. These need to be managed carefully and there is risk that costs may escalate if not.

LCRCA should ensure it has the appropriate capacity and capability to respond to this should it consider entering into franchising. LCRCA will need to be agile in responding to market changes in order to maximise the benefits of Franchising. This is a key difference from EP where Operators will have incentives to react to market changes.

In addition, it is important to stress that Franchising offers LCRCA the most control. This is discussed in the Commercial Case. This level of control will make it easier for LCRCA to capture the financial benefits arising from any additional interventions in the bus market e.g. bus priority measures or a clean air zone. Therefore, there are additional financial benefits that could arise from Franchising if further investments can be made.

8.2.1. EP

On the basis of the above figures EP appear to provide a substantial element of the benefits of Franchising without significant risk transfer to LCRCA.

The EP model that has been used assumes a very high level of collaboration from Operators to deliver what LCRCA wants from the network.

However, it is important to recognise that LCRCA have had an Alliance for a number of years and this is more than most LTAs have managed to achieve with their bus operators. Experience with the Alliance has shown that Operators in a deregulated market will still want to be the final decision makers on what services are run and therefore may not agree to everything that LCRCA wants from the bus network. Therefore, it would be

sensible to consider the modelled EP Option as a best case scenario and there may be additional investment needed in order to encourage Operators to provide the network LCRCA desires (and no additional investment has been included in any of the forecasts of costs and services performed under the EP Option). A worst case scenario would be very little willingness by Operators to reconfigure the network, and in the most extreme scenario, the EP could offer no more benefits than the Reference Case.

The Management Case

1. Introduction

1.1. Purpose

The purpose of the Management Case is to consider the factors which influence the deliverability and robustness of arrangements within LCRCA to deliver, monitor and evaluate the Delivery Options. This Management Case considers both Franchising and EP options of bus service delivery alongside one another.

1.2. Franchising Scheme Guidance

In producing this Management Case attention has been given to the requirements of the Franchising Guidance and the relevant Sections of the Green Book. The format of the Management Case has been designed to:

- (a) show how Merseytravel would successfully deliver and manage the Delivery Options and set out the arrangements it plans to put in place to manage and mitigate risk in relation to each Delivery Option;
- (b) set out how Merseytravel intends to manage the transition process from the current system to the introduction of the chosen Delivery Option;
- (c) set out contingency plans for providing replacement services which would be provided in the event that Operators cease running their services before the introduction of the chosen Delivery Option and any other plans which will be put in place to manage those risks; and
- (d) show the programme management structure that Merseytravel will employ for the relevant Delivery Option, including whether additional specialist staff or advice will be required; the procurement and management processes that are required for the successful and ongoing management of the chosen Delivery Option and the risk management and mitigation arrangements that Merseytravel plans to put in place, particularly with respect to the management of the transition process from the status quo to the chosen Delivery Option.

1.3. Division of Management case

The Management Case is split into the following Sections:

- (a) Section 2 provides an overview of the competencies that will be required by Merseytravel to deliver and manage the Delivery Options and then sets out the resource requirements of the Delivery Options;

- (b) Section 3 sets out how Merseytravel would transition from its current operating model to each Delivery Option, including its approach to cross-boundary services and mobilisation. It details how Merseytravel would implement each Delivery Option and the requirements for any organisational change;
- (c) Section 4 sets out the changes that would be made to the bus network, in the event that either Delivery Option is pursued, how LCRCa would vary the bus network, if required, and actively manage the chosen Delivery Option to maximise the benefits achieved;
- (d) Section 5 sets out the stakeholder engagement activities which will be undertaken by Merseytravel in conjunction with its selection of its preferred Delivery Option;
- (e) Section 6 sets out the arrangements for risk and risk management for the Delivery Options;
- (f) Section 7 sets out Merseytravel's proposed programme management and governance arrangements under the Delivery Options; and
- (g) Section 8 summarises the Management Case.

The Management Case has been developed on the basis of:

- (a) the information provided in the Transport Act, the Franchising Guidance and relevant supporting documentation at the time of writing; and
- (b) the data collected from Operators using powers under the Transport Act at the time of writing.

2. Operating Model

2.1. Introduction

The extent of organisational and resourcing change in Merseytravel will differ depending on the chosen Delivery Option. This Section considers the management structure that Merseytravel would employ for each Delivery Option, including whether additional specialist staff or advice would be required to deliver the option and the VfB, in accordance with the Bus Services Act.

2.2. Existing Responsibilities under the VPA

Merseytravel already has a number of responsibilities as part of the Alliance. Both the Franchising and EP options would build upon these responsibilities. The current VPA:

- (a) contains a comprehensive governance framework under which decisions regarding the current partnership are made. The governance operates by way of regular work stream meetings which are managed by Merseytravel. Information on operational performance is fed into meetings of a programme board (the “LCR Bus Alliance Programme Board”), an alliance board, (the “LCR Bus Alliance Joint Alliance Board”) and a wider stakeholder board (the “LCR Bus Alliance Stakeholder Board”) who provide strategic input that the Alliance participants look to implement through the terms of the VPA;
- (b) compels operators, which are party to the VPA, to enter into a ticketing agreement under which they are required to offer multi-Operator products set by Merseytravel to their customers. Merseytravel, in turn, receives data from operators in connection with the scheme in accordance with specified data sharing agreements and can evaluate the success of the scheme. Where appropriate Merseytravel is able to propose changes to the ticketing arrangements; and
- (c) requires Merseytravel to undertake an LCR-wide zonal review of the bus network to establish current and future demand in the LCR linked to projected economic growth. This requires an amount of demand modelling and a good understanding of the needs of bus passengers.

Merseytravel also:

- (a) provides additional supported services on the network. In providing the services Merseytravel has to evaluate the need for the provision, understand the costs and consider whether they are necessary. It then manages the delivery of the supported services by contracted bus operators;
- (b) provides off bus real-time information to passengers; and

- (c) operates a central contact centre for managing customer queries and complaints for all of the bus services operated in the LCR (excluding Halton). This allows it to maintain an overall view on the quality of bus operations in the region.

2.3. Extending Responsibilities under a Franchise Structure

Franchising would require Merseytravel to undertake a number of new responsibilities, such as developing commercial pricing and ticketing strategies and to increase its capability in relation to its existing competencies. As a result Merseytravel's current organisation and operating framework would need to change significantly to enable the bus services delivered to adapt to changing environmental influences and to facilitate delivery of the VfB.

The main Merseytravel responsibilities that will differ under Franchising include:

- (a) **Network design:** Merseytravel would tender the whole of the network and specify the network and routes;
- (b) **Transition arrangements:** Merseytravel would manage the transition to the franchised operations, including provisions to ensure continuity of bus services;
- (c) **Network operation:** Merseytravel would provide, specify and manage the services that would be run during the life of the local service contracts and administer the performance incentive regime;
- (d) **Revenue risk:** Merseytravel would take full revenue risk (as opposed to only taking revenue risk on supported services, which it does under the current operating framework);
- (e) **Fares and ticketing:** Merseytravel would establish products and be responsible for setting fares. It would also need to enhance its capabilities for managing revenue protection;
- (f) **Marketing and brand management:** Merseytravel would own, develop, specify and implement branding and marketing initiatives, and commercialise the network (via advertising and data);
- (g) **Performance Monitoring and Updating:** Merseytravel would monitor performance against the BSIP requirements and where required implement changes to the Franchising Scheme; and
- (h) **Customer Relations:** Merseytravel would be responsible for managing the relationship with customers, including engaging with customers to improve the customer experience with the aim of delivering the VfB and managing customer queries and complaints.

2.4. Extending Responsibilities under an EP Structure

Under an EP, Merseytravel's responsibilities would be extended to cover:

- (a) **Network design:** Merseytravel would manage discussions with the Operators and control the designation of routes to fit within the EP Schemes and how they would fit around "non-EP" routes. This would also require the establishment and management of an EP Engagement Board, to give a forum for operators and interested parties such as the LEP and local authorities;
- (b) **Transition arrangements:** Merseytravel would manage the transition to the EP operations, including provisions to ensure the continuity of bus services where operator support is withdrawn pursuant to the VPA;
- (c) **Network operation:** Merseytravel would provide a level of monitoring of the services to ensure that the services were operating in the manner that the EP intends. This would include relevant headways and journey times;
- (d) **Fares and ticketing:** Merseytravel would establish procedures to monitor the management of multi-Operator ticketing schemes;
- (e) **Marketing and brand management:** Merseytravel would own, develop and manage the adoption of a common branding for the EP Schemes;
- (f) **Performance Monitoring and Updating:** Merseytravel would monitor performance against the BSIP requirements and where required implement changes to the EP; and
- (g) **Customer Relations:** Merseytravel would be responsible for managing the relationship with customers, including managing stakeholders, seeking feedback and undertaking consultations; engaging with customers, jointly with Operators, to improve the customer experience with the aim of delivering the VfB and managing customer complaints.

Revenue risk would remain with the Operators although there would be specific commitments placed on LCRCA to deliver infrastructure enhancements which could affect the Operator's revenue streams. While there would not be any specific performance monitoring there would be an element of performance management through the network operation. While an ambitious EP would expect to set a number of metrics to monitor performance against agreed service characteristics it is expected that the operator proposed EP would limit the number of performance criteria that Operators would agree to.

2.5. Merseytravel's ability to successfully manage and deliver major projects

Merseytravel has significant experience in successfully managing and delivering large-scale transport projects and schemes within the LCR, such as the Alliance and supported bus network, the Merseyrail concession with Merseyrail Electrics 2002 Limited (a 50/50 joint venture between Serco and Abellio), Mersey Tunnels and Mersey Ferries. It therefore has experience in procuring commercial contracts and their ongoing management over the medium and long term, which would be important for effective delivery of either delivery option.

Merseytravel would utilise and develop these existing competencies, together with acquiring the additional skill sets required to deliver the objectives of the chosen Delivery Option. In some cases, these would be provided through Merseytravel itself and, in other cases, through the recruitment of additional appropriately skilled staff. Merseytravel would use its experience of procuring relevant support and external skills to assist its delivery where it considers that specific short term assistance is also required. This would ensure that Merseytravel is able to manage and deliver the chosen Delivery Option in a cost-effective and efficient manner.

Table 5.1 provides an overview of recent large-scale programmes and projects that Merseytravel has delivered or is in the process of delivering.

Table 5.1: Programme Management Experience

Programme Name	Value	Date	Key outputs delivered	On time	To budget
Merseytravel Rolling Stock	£500m capital	2012 - 2022	• Replacement of Merseyrail's fleet of rolling stock, providing 50% additional capacity on the network. • Infrastructure modifications to improve safety, accessibility and reduce journey times. • Depot modernisation. • Wireless connectivity on rolling stock.	Yes	Yes

Programme Name	Value	Date	Key outputs delivered	On time	To budget
Better Bus Area (BBA)	£3.9m capital	2014 - 2018	• Junction improvements to relieve pinch points and improve bus reliability. • New real time info screens introduced at bus stops. • Upgrading bus infrastructure along key corridors.	Yes	Delivered under budget
Sustainable Transport Enhancements Package (STEP)	£41.4m capital	2015 - 2021	• Over 26 km of new or improved cycle routes delivered in years 1 and 2 • Journey time savings on Liverpool City Corridor • Improved public realm for 30 businesses	Yes	Yes

2.5.1. Merseyrail Rolling Stock Programme

The Rolling Stock Programme is the largest rail investment undertaken in the LCR since the 1970s. £500 million is being invested in a new fleet of bespoke trains which will be owned by Merseytravel. The new fleet will provide over 50% additional passenger carrying capacity, a reduction in journey times of over 10% and an improved journey experience for passengers with focus on safety, accessibility and passenger comfort. In addition to the fleet purchase, the programme includes significant infrastructure investments in the railway's power supply, works to provide level boarding across the network, modernisation of the maintenance depots and the accommodation of longer trains.

At the time of this Assessment, the Rolling Stock Programme is more than two thirds of the way through the delivery phase with train testing on the network and infrastructure upgrades being delivered on site. The leadership of the Rolling Stock Programme is resourced internally with external support procured to provide specialist expertise and to deal with peaks in workload.

The Rolling Stock Programme has been the largest ever capital project undertaken by Merseytravel and has given Merseytravel transferable experience in:

- (a) fleet ownership models;
- (b) governance arrangements;
- (c) the development of team structures and recruitment strategies;
- (d) the procurement of expert consultancy support and later of capital assets;
- (e) Business Case development; and
- (f) project controls and assurance (such as risk management).

2.5.2. Better Bus Area (BBA)

The Better Bus Area (BBA) Programme was delivered by the Highway Authorities for Halton, St Helens, Knowsley and the following Operators – Cumfybus, Halton Transport, Arriva and Stagecoach. The programme partners worked together to deliver the associated projects using a six weekly steering group/programme board which reported into the LCR Transport Advisory Group.

The programme delivery process illustrated the benefits of encouraging operator and Highway Authority discussions around key issues. Merseytravel was successful in reviewing the programme throughout delivery – making savings in scheme costs as projects progressed, which allowed additional outputs to be delivered. The programme also demonstrated Merseytravel’s ability to successfully co-ordinate and manage stakeholders through regular liaison meetings.

The successful delivery of this programme shows Merseytravel’s ability to plan, implement and deliver a range of transport interventions of varying complexity as well as its ability to work with local authorities and Operators in a partnership. This provides a valuable source of experience and a foundation to support the successful delivery of either Franchising or EP.

2.5.3. Sustainable Transport Enhancements Package (STEP)

The STEP programme was delivered by the Highway Authorities of each Local Authority in the LCR. The programme partners delivered the programme with support from Central Programme Management (within Merseytravel’s Local Transport Plan (LTP) Development Team) and PMO specialists within the LCR.

Project reporting was managed with a monthly dashboard for each scheme. Quarterly meetings were held with partners to review progress, spend, risks and issues. This collaborative approach helped identify solutions to common issues and reports were sent to the region's Transport Advisory Group on a six-monthly basis.

Merseytravel learnt a number of key lessons from the programme, one of which was in respect of the immaturity of the programme scheme and development work at the outset. This impacted on delivery timescales once funding was secured. It clearly demonstrated the need for upfront project development before activity commissioning. It also highlighted the need to introduce effective project management tools from the outset so that all partners are clear on expectations.

The project delivery process also demonstrated the need to challenge delivery milestones at the point of Business Case development to give assurance they can be met during delivery. Successes from the programme have shaped the structuring of this Assessment, including the merit in establishing a central point of coordination to maintain momentum and escalate issues as required. In addition, regular reporting would allow challenges to be addressed early by a wider group, preventing any miscommunication and permitting the sharing of successes.

2.5.4. HyBus Pilot

LCRCA has introduced the HyBus Pilot, which will see the creation of a new hydrogen refuelling station at the Arriva St Helens Depot together with 20 hydrogen powered buses which will be operated on the route 10 corridor between St Helens and Liverpool via Knowsley.

The HyBus Pilot will be operated by Stagecoach and Arriva and will give LCRCA the opportunity to learn from the technology and its practical application for bus services fuelling and provide the base evidence for expansion of the zero-emission fleet.

The HyBus Pilot utilises expertise within the rolling stock team to advise, guide and provide lessons learnt on transport procurement and asset management. Experienced leads are embedded within the governance structure on the operational project board and can provide an independent view on the progress and developments of the HyBus Pilot.

2.6. Merseytravel Competencies for managing a Franchising Scheme or EP

As an executive body for LCRCA, Merseytravel has all the powers and levers necessary to support bus services effectively. These include responsibilities for local infrastructure and other related issues within the scheme area – such as the ability to improve bus priority

measures (e.g. bus lanes or enforced clearways) in conjunction with constituent local authorities, provide new bus stops, passenger waiting facilities, or change parking provisions. Merseytravel drives key local government policy that would influence the success of bus services and, as outlined in Section 7 below, has robust governance arrangements.

Table 5.2 provides an overview of the competencies that would be required by Merseytravel to deliver and manage a Franchising Scheme. Table 5.3 provides an overview of the competencies that would be required by Merseytravel to deliver and manage an EP.

Tables 5.2 and 5.3 set out whether each required competency:

- (a) exists within Merseytravel's current operating framework and is able to meet the requirements of a Franchising Scheme or an EP (as relevant);
- (b) exists within Merseytravel's current operating framework but needs to be developed to meet the requirements of a Franchising Scheme or an EP (as relevant); or
- (c) is a new competency that does not currently exist within Merseytravel's current operating framework.

Table 5.2: Required Competencies for Franchising

Function	Competency	Extent available within Merseytravel	Extent of additional capacity or competency required
Strategic Projects and Bus Services Improvement Programme Team	• Programme management. • Continuous innovation with the aim of improving overall service and programme delivery. • Forecasting future requirements and reporting. • Setting and implementing overall bus strategy. • Managing and oversight of transition to bus Franchising. • Risk management. • Management and monitoring of strategic programmes such as Green Bus Routes	Exists with minimal need to develop. If supporting bids to secure external funding, may need additional expertise.	The Strategic Projects and Bus Services Improvement Programme Team will need to be expanded to include a Head of Bus Programme and Partnerships, a BSIP Coordinator, a Project Development Officer, a Lead Officer for bus reform and a Risk Coordinator.

Function	Competency	Extent available within Merseytravel	Extent of additional capacity or competency required
Commercial Team	• Developing and monitoring pricing and ticketing strategies and setting fares. • Setting and implementing commercial objectives. • Increasing demand and revenue receipts. • Setting out the pricing and fees payable for service permits. • Monitoring of demand and revenue for commercial insight. • Provide a direct link between franchisees and Merseytravel. • Fleet management. • Account management.	Minimal skills currently available within Merseytravel.	A new commercial team will be created to deliver the commercial elements of the Franchising option.

Function	Competency	Extent available within Merseytravel	Extent of additional capacity or competency required
Contract Management Team	• Managing contract documentation and service delivery. • Managing contract award and tender evaluation. Responsible for the oversight and management of the procurement process for bus services. • Contract governance. • Managing dispute escalation procedures. • Managing engineering compliance. • Managing the operation, monitoring compliance, suspension, or termination of service permits. • Monitoring service delivery and KPIs against the contract requirements and franchise agreement. • Monitoring contract compliance. • Monitoring use and management of the fleet and depots. • Contract payments and reconciliation. • Management of ETM data sets and RTI data. • Monitoring of revenue risk. • Contract variations.	Exists with greater capacity required and minimal need to develop. Gap in experience surround depots and property.	Additional capacity and capability required. Specific roles to be created for management of depots, payment and performance.

Function	Competency	Extent available within Merseytravel	Extent of additional capacity or competency required
Operations Team	• Real-time operational management. • Managing major events and unplanned disruptions. • Monitoring of network standards. • Enforcing revenue protection regimes and managing revenue protection teams. • Control room management. • Real-time customer messaging. • Operational social media. • Developing and implementing a network safety regime. • Managing highway performance. • Monitoring of contract compliance. • Monitoring of KPIs. • Hubs and Travel Centres. • Managing transition arrangements from the current system. • Replacement of a failing Operator to ensure continuity of services.	Exists with greater capacity required and minimal need to develop	Merseytravel has an existing RTI control room and tunnels police control room. However, additional capabilities will be required for a 24/7 bus control room, back-up contingencies and revenue protection.

Function	Competency	Extent available within Merseytravel	Extent of additional capacity or competency required
Bus Planning and Development Team	• Network planning and design – the ability to specify routes, first and last buses, bus capacities and frequencies by peak/off-peak period and day, and publish timetables. • Managing surveys and consultation exercises (e.g. customer feedback and complaints). • Performing bus service registration requirements. • Development of Service Permit Regime and issuing service permits. • Managing planned disruptions. • Network planning and design. • Service specifications for franchise services. • Support the LA and stakeholders in regard to any developments that are planned. • Managing and developing Capital Infrastructure works.	Exists with minimal need to develop	Additional capacity, rather than capabilities, required.
Customer Experience Team	• Providing a customer engagement service to improve the customer experience with the aim of delivering the VfB. • Managing stakeholders, seek feedback and undertake consultations. • Managing customer complaints and queries. • Management of transport information.	Exists with minimal need to develop but greater capacity required	Additional capacity, rather than capabilities, required. The Customer Experience Team have a commissioned a survey to improve and enhance real time information under any bus reform model.
TravelSafe Team	• TravelSafe function.	Exists with minimal need to develop.	Additional capacity would be required.

Central Support Functions

Function	Competency	Extent available within Merseytravel	Extent of additional capacity or competency required
Sales, Marketing and Communications	- Developing, implementing and monitoring branding and marketing strategies. - Monitoring and setting restrictions on Operator advertising. - Public relations. - Increasing demand and revenue receipts through sales. - Selling and marketing products through the Merseytravel website.	Exists with minimal need to develop	Additional capacity would be required. Branding of Vehicles would be standardised and operate under one Merseytravel brand.
HR	- Managing workforce and implementing HR strategies. - Recruiting, employing and managing staff to deliver procurement, contract management, sales and marketing, regulatory management and client-side operations. - Specifying minimum standards for Operator staff where these are additional to regulatory requirements. - Considering controls on use of agency staff. - Specifying training required.	Exists with minimal need to develop	Additional capacity, rather than capabilities, required
Finance	- Financial control and statutory accounting. - Revenue collection and payment processing in accordance with the requirements of the franchise agreement.	Exists with minimal need to develop	Merseytravel would need to engage specialist financial support during the procurement and transition to the Franchising option.
Legal Audit	- Managing and implementing risk and assurance procedures. - Providing independent assurance on internal control, risk management and governance	Exists with minimal need to develop but greater capacity required	Additional capacity, rather than capabilities, may be required depending on the number of risks that will need to be managed.

Function	Competency	Extent available within Merseytravel	Extent of additional capacity or competency required
Procurement	- Developing and delivering the procurement process. - Procuring fleet. - Procuring depots. - Procuring services.	Exists with minimal need to develop but greater capacity required.	Additional capacity, rather than capabilities required.
Legal	Provision of legal advice and support.	Exists with minimal need to develop but greater capacity required.	Additional capacity, rather than capabilities required.

Table 5.3: Required Competencies for an EP¹⁸⁴

Function	Competency	Extent available within Merseytravel	Extent of additional capacity or competency required
Strategic Projects and Bus Services Improvements Programme Team	- Partnership management. - Continuous innovation with the aim of improving overall service. - Forecasting future requirements and reporting. - Setting and implementing overall bus strategy. - Managing the EP Engagement Board and process for producing the EP Plan and EP Schemes. - Risk management. - Management and monitoring of strategic programmes such as Green Bus Routes	Exists with minimal need to develop	The Project Management team will need to be expanded to include a Project Development Officer, a Bus Services Improvement Plan Coordinator and a Partnership Delivery Manager.
Commercial Team	- Developing and monitoring ticketing and fares strategy. - Fleet management.	Minimal skills currently available within Merseytravel	A new commercial team will be created to deliver the commercial elements of the EP Option including a Business Intelligence Manager, a Fares and Ticketing Manager, a Fleet Manager and a Data Analysis and Administration Officer.

184 Competencies are based on the ambitious EP being established.

Function	Competency	Extent available within Merseytravel	Extent of additional capacity or competency required
Contract Management Team	• Managing compliance and KPIs with EP terms. • Contract governance and managing of fares policies. • Managing dispute escalation procedures. • Monitoring service delivery against the requirements of the Partnership Agreement. • Governance and process audits. • Payments and reconciliation. • Managing contract award and tender evaluation, responsible for the management of the procurement process for Bus Services. • ETM data and real time data. • Contract Variations.	Exists with minimal need to develop but greater capacity required	Additional technical roles to be created.
Operations Team	• Managing unplanned disruptions and recovery. • Monitoring of network standards. • Enforcing revenue protection regime. • TravelSafe function.	Exists with minimal need to develop	No additional capabilities or capacity required

Function	Competency	Extent available within Merseytravel	Extent of additional capacity or competency required
Bus Planning and Development Team	- Managing registrations. - Network planning and design – the ability to specify routes, bus requirements, frequencies by peak/off peak period and day, etc. - Planning the network and developing tenders. - Network Reviews. - Working with Operators on quality corridors. - Managing surveys and consultation exercises, customer feedback and complaints. - Managing and developing Capital Infrastructure works.	Exists with minimal need to develop	Additional Registration Officer role to be created.
Customer Experience Team	- Managing stakeholders, seek feedback and undertake consultations. - Enhancing the customer experience with the aim of delivering the VfB. - Complaint handling. - Transport information.	Exists with minimal need to develop	No additional capabilities or capacity required. The Customer Experience Team have a commissioned a survey to determine options to improve and enhance transport information under any bus reform model, which would be managed by the existing Customer Experience Team.

Central Support Functions

Function	Competency	Extent available within Merseytravel	Extent of additional capacity or competency required
Sales, Marketing and Communications	- Working collaboratively with Operators to increase sales and help promote the commercial offering. - Public relations.	Exists with minimal need to develop	No additional capabilities or capacity required.

Function	Competency	Extent available within Merseytravel	Extent of additional capacity or competency required
HR	- Managing workforce and implementing HR strategies. - Considering controls on use of agency staff. - Specifying training required.	Exists with minimal need to develop	No additional capacity or capabilities required.
Finance	Financial control and statutory accounting.	Exists with minimal need to develop	No additional capacity or capabilities required.
Legal Audit	- Managing and implementing risk and assurance procedures. - Managing transitional arrangements from the current system. - Providing independent assurance on internal control, risk management and governance	Exists with minimal need to develop	No additional capabilities, but a small increase in capacity required.
Procurement	Developing and delivering the procurement process.	Exists with minimal need to develop but greater capacity required.	No additional capabilities, but a small increase in capacity required.
Legal	Provision of legal advice and support.	Exists with minimal need to develop but greater capacity required.	No additional capabilities, but additional capacity required.

2.7. Existing Team Structure and Resources

Merseytravel competencies are provided through the personnel that make up the team managing its current bus operations and the associated central support functions. The current team has been established to manage the VPA and contains all of the relevant expertise that is necessary for this task.

Merseytravel also manages relationships with Operators in operating services within the LCR. This is to support the delivery of a good bus network within the LCR but also enables LCRCA to obtain an early warning of potential difficulties for an Operator and therefore providing sufficient time to put in place a solution to support the affected services. As well as maintaining a strong dialogue with all of the Operators providing services in the LCR, Merseytravel has established processes and procedures to manage a bus Operator ceasing to trade and to ensure the provision of alternative operators to maintain the services on the affected routes.

Examples of this function are Merseytravel's provision of supported bus services, following the closure of Avon Buses in October 2018 and the loss of Halton Borough Transport January 2020. This was completed in accordance with LCRCA Transport Committee's approved policy for the provision of bus services.

The extent of the organisational and resourcing change required in Merseytravel will be determined by which Delivery Option is chosen. This Section considers the management structure that Merseytravel would employ for each option, including whether additional specialist staff or advice would be required, in accordance with the Bus Services Act.

2.7.1. Franchising Team Structure

Merseytravel would require a significant change to its current operation to provide the competencies set out in Table 5.2 for the Franchising Option. It would need to enhance its capacity, capabilities and behaviours to support Franchising, while establishing the correct structure and governance mechanism to manage it.

Using its current team structure as a starting point, Merseytravel has developed a team structure for a future Franchising operation using its experience of managing the supported bus network, the Alliance and other modes of transport. Initially Merseytravel considered the areas where Merseytravel currently has expertise, but where under Franchising increased activity would require additional resources. Merseytravel then considered where new expertise would be required under Franchising and the level of resource that would be required with a doubling in the number contracts to be managed in comparison to the Status Quo. In developing the outline team structure, Merseytravel has consulted with TfL, TfGM and Translink through a series of workshops and discussions, and has also obtained feedback from Brighton and Hove Buses, in order to refine its model. The suggested posts and figures were checked by bus industry professions to provide assurance over the scale and shape of the team proposed. The roles outlined in the team structure chart at Figure 5.1 are vital in the successful delivery and implementation of a Franchising Scheme. The team structure is subject to further development.

The structure envisages that the following central teams and activities would be required for the delivery and management of a Franchising Scheme:

- (a) **Strategic Projects and Bus Service Improvement Programme Team:** This team would be responsible for

overall programme management, overall management of the transition arrangements, developing bus strategy, reporting against BSIP requirements, and driving continuous improvement and innovation. The Strategic Projects and Bus Service Improvement Programme team will support the securing of external funding for initiatives, this may require the team to obtain additional expertise. Merseytravel's core risk management function would also form part of this team.

- (b) **Commercial Team:** This team would be responsible for developing and implementing commercial objectives (including pricing and ticketing strategies) and demand management. It would also be responsible for developing and implementing commercial objectives and specifications for all fleet requirements. The Commercial team would provide a direct link between the franchisee and other Merseytravel functions, with account managers primarily serving this role, which would continue to operate once a delivery model had been selected to oversee innovation and continuous improvement in the bus network. It would carry out the principal sales and marketing activities for Franchising (with support from central Sales, Marketing and Communications team) to help drive revenue and exploit commercial opportunities. It would also be responsible for developing and implementing commercial objectives for all depot requirements. The Commercial team would work particularly closely with the Operations team and the Bus Planning and Development team.
- (c) **Operations Team:** During the life of the franchised operations, this team would undertake day-to-day operational decision making and oversight of compliance by both Merseytravel and the franchisees to ensure franchise commitments are delivered in accordance with contractual requirements. It would be responsible for revenue protection, real-time operational and control room management, network standard and safety regime monitoring, management of the day to day operation and efficiency of hubs and interchanges, management of layover and departures, management of planned and unplanned disruptions, and monitoring contract compliance by the Operator;
- (d) **Bus Planning and Development Team:** The Bus Planning and Development team would be responsible for network planning and design, as well as developing

service specifications for all Franchise services (including future franchise services). The team would also be responsible for the development and implementation of the Service Permit Regime, including issuing service permits, monitoring their use and operation and working collaboratively with the Contract Management team to implement any necessary changes. It is important to ensure that the franchised services and those operating under the Service Permit Regime complement each other within the overall network of services proposed for the LCR. This will be particularly important during the phased roll-out of Franchising over the whole LCRCA Area when a significant number of services will initially be operated under the Service Permit Regime.

The team would perform the required service registration function for local bus services operating in the LCR. Planned disruptions (roadworks and major events) would be co-ordinated in relation to their impact on the bus network. As part of the development of the network there would also be a heavy involvement in stakeholder engagement.

The Bus Planning and Development team will work collaboratively with the Contract Management team to draw up contingency plans to replace a failing franchisee, with the Bus Planning and Development team focusing on the gaps in provision and tender preparation.

- (e) **Contract Management Team:** This team, working with Merseytravel's internal procurement team, would be responsible for the procurement, evaluation and award of franchise contracts, managing contract documentation and service delivery, managing and executing variations, waivers or amendments to the contract documents, managing dispute escalation procedures, data analysis and service performance requirements. It would also be responsible for undertaking operator performance review meetings in accordance with the franchise contracts and, where necessary, enforcing the terms of the contract. It would also be responsible for developing and implementing specifications for all depot requirements. The Contract Management team would establish whether franchise commitments are being delivered by Operators in accordance with their contractual obligations; namely by monitoring service delivery against the contract requirements and franchise agreement;
 - (i) monitoring KPIs against the service level regime;

- (ii) contract payments and reconciliation;
- (iii) management of tracking vehicles and electronic ticket machine data; and
- (iv) monitoring of revenue risk.

The Contract Management team would monitor performance and operation of services under the Service Permit Regime and would be responsible for the enforcement of service permit conditions of use and any suspension or termination of such permits. The team would work with the Bus Planning and Development team to implement any changes required to the Service Permit Regime.

The team would work collaboratively with the Bus Planning and Development team and be responsible for drawing up relevant contingency plans to replace a franchise Operator that was unable to continue to provide franchised services. This team would focus on the procurement and replacement of franchise services. This would include using the legislative powers to make emergency direct awards of bus service contracts to a new operator in order to ensure that the relevant service(s) could continue to be operated. In the period prior to the first franchises being awarded, it would enforce the Operators' obligations in the VPA and manage the substitution of a new operator to provide those services which were otherwise being withdrawn.

The team would also work collaboratively with the Operations Team undertaking checks and monitoring services as part of any monitoring regime.

- (f) **Customer Experience Team:** This team would be responsible for customer engagement and contact, dealing with customer queries, feedback and complaints (by acting as the intermediary between the franchisees), management of stakeholders, undertaking and managing consultations and surveys. It would also support the management of planned disruptions, working closely with the Operations team and Bus Planning and Development team.
- (g) **TravelSafe Team:** This team would be responsible for promoting safer travel on the network by gathering crime and anti-social behaviour data to identify areas of the network that may be vulnerable to crime and anti-social behaviour, by undertaking targeted activities to improve customer and staff safety and supporting with designing

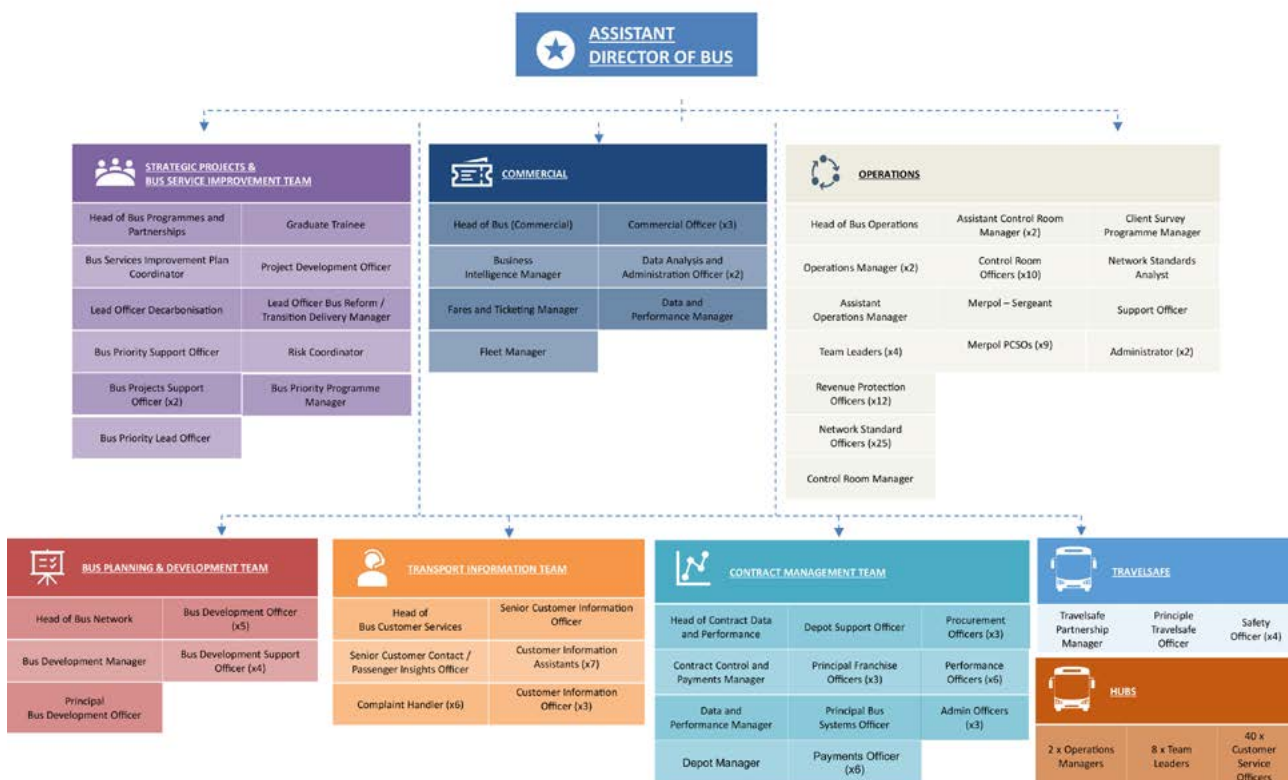
out crime on supported services and associated infrastructure.

- (h) **Hubs Team:** This team would be responsible for the management of bus stations within the LCR.

In addition to the central teams listed at Section 2.7.1 above, a number of support functions would be utilised by Merseytravel to deliver a Franchising Scheme. This would include a legal function, a procurement function, an internal function, a sales, marketing and communications function, a finance and accounting function, a HR function and an IT function. These activities would be performed by existing functions within Merseytravel, with new or enhanced capabilities.

The implementation of a Franchising Scheme would also require a broad range of specialist skills (including TUPE and pensions expertise), which would need to be sourced externally.

Figure 5.1: Bus Franchising Team Structure



2.7.2. Franchising Team Structure: Additional Resources and Cost

Table 5.4 below sets out Merseytravel's analysis of the total additional head count that would be required to manage the proposed Franchise Scheme. This equates to a total of 210 full time roles in relation to the bus team and 11.5 full time roles in relation to Merseytravel's central support team.

26 of these roles would no longer be required by the existing Operators and are expected to transfer to Merseytravel as they move from fully supported operations to franchise operations. A small number of Merseytravel's existing roles would either be no longer required or would change significantly due to Franchising and require staff with a different skill set. This equates to:

- (a) a gross increase in head count of 73 in relation to the bus team and 5.5 full time roles in relation to Merseytravel's central support team; and
- (b) a net increase in head count of 47 in relation to the bus team and 5.5 full time roles in relation to Merseytravel's central support team.

Table 5.4: Additional Headcount required for Franchising

Team / Function	Additional Headcount	Transfer of existing Operator role
Strategic Projects and Bus Services Improvement Programme	3	0
Commercial	10	2
Operations	25	12
Contract Management	21	6
Bus Planning and Development	4	0
Customer Experience	7	6
Travelsafe	3	0
Hubs	0	0
Central Support Functions	5.5	0
Total	81.5	26
Net Incremental Headcount	53.5	

Tables 5.5 and 5.6 provide a breakdown of the core and support team resourcing costs involved in delivering Franchising.

Table 5.5: Resourcing Cost of Franchising – Core Teams

Team / Function	Headcount	Salary Cost (£K per annum)
Strategic Projects and Bus Services Improvement Programme	13	438,000
Commercial	10	362,000
Operations	73	1,437,500
Contract Management	27	930,500
Bus Planning and Development	12	353,500
Customer Experience	19	459,000
Travelsafe	6	112,000
Hubs	50	-
Total	210	4,092,500

Table 5.6: Resourcing Cost of Franchising – Support Teams

Team / Function	Required Headcount	Salary Cost (£K per annum)
Finance and Accounting	1	29,000
Human Resources	1	22,500
IT Support	0.5	16,000
MPO	2	65,000
Procurement	1.5	37,500
Legal	1.5	54,750
Risk	1	40,000
Comms & Marketing	1	35,000
Engagement	2	57,000
Total	11.5	£356,750

2.7.3. EP Team Structure

The resourcing requirements of Merseytravel for an EP would need to reflect the extent and content of the EP (as is agreed with the Operators) and the number of EP Schemes being implemented.

Based on Merseytravel's engagement with Operators to date, it is envisaged that the EP would reflect a number of the responsibilities currently assumed by Merseytravel in managing the Alliance. However, given that a number of the responsibilities would be expanded and some additional responsibilities, such as operator licensing, would be taken over by Merseytravel, there would be some additional resourcing requirements.

As has been noted in the Commercial Case, the EP is not simply a set of requirements specified by LCRCA, but is a proposal which needs to be agreed between the Operators and LCRCA. If a certain number of Operators object to a proposal, it cannot be included in the EP. This provides a level of uncertainty to the EP solution. Currently LCRCA has proposed an ambitious EP and there is an operator-proposed EP which provides for fewer obligations on the parties. For the purposes of this Assessment, the ambitious EP is used. It is also anticipated in the Assessment that the ambitious EP will remain unchanged following discussions with Operators.

Merseytravel has developed a team structure to provide the competencies set out in Table 5.3 for an ambitious EP. This structure has been developed based on its experience of managing the supported bus network, the Alliance and other modes of transport, taking into account the additional levels of administration required for the implementation of the ambitious EP. These roles are vital in the successful delivery and implementation of an EP. Although the team structure has been based on the requirements of LCRCA's ambitious EP, LCRCA does not expect that there would be significant differences in this structure if the Operator-proposed EP was adopted instead. The team structure is set out at Figure 5.2. However, as set out in Section 6.3.1 of the Financial Case it is envisaged that the size of this team would need to increase over time.

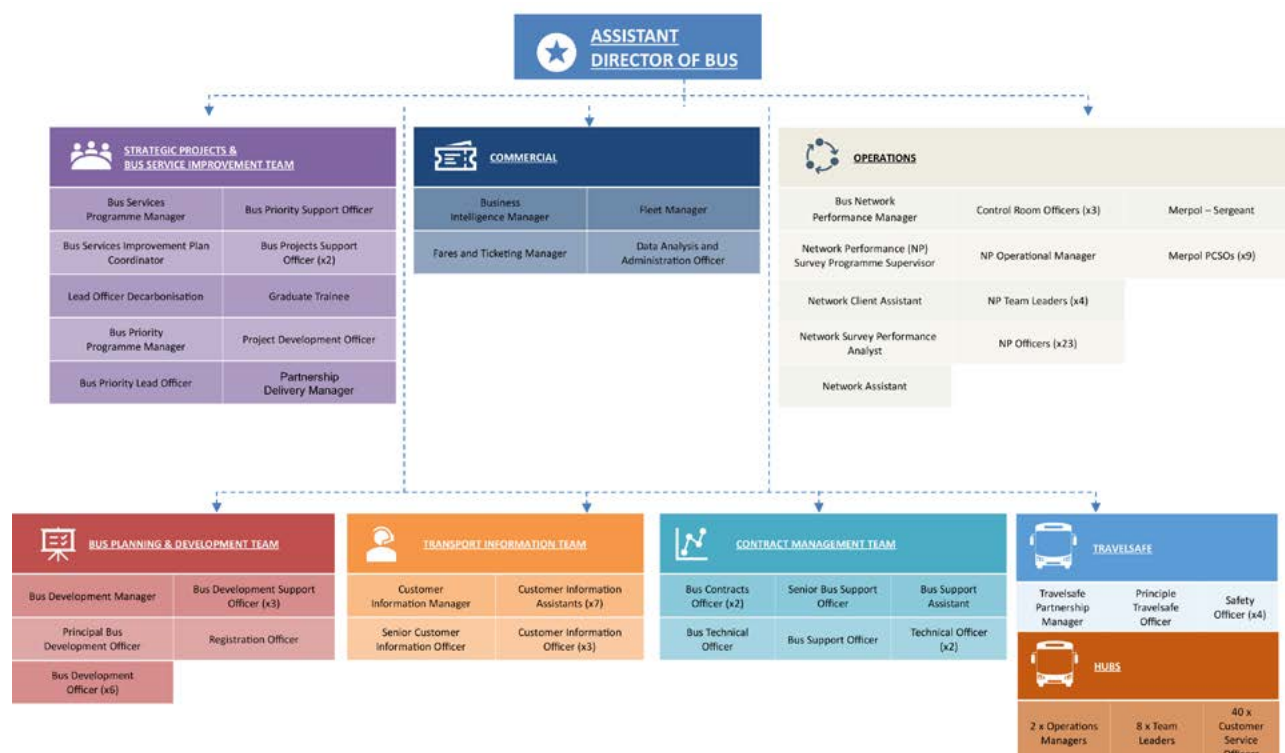
The structure envisages that the following central teams and activities would be required for the delivery and management of an ambitious EP:

- (a) **Strategic Projects and Bus Services Improvement Programme Team:** This team would be responsible for overall programme management, overall management of the transition arrangements and developing its ambitious EP negotiation strategy, reporting, and driving continuous improvement and innovation. The Strategic Projects and Bus Services Improvement Programme team would liaise closely with the other Merseytravel bus teams. Following implementation of the ambitious EP, the team would be responsible for supporting the EP in-life and managing its operation.
- (b) **Commercial Team:** This team would be responsible for developing and implementing commercial objectives (including service performance requirements, pricing and ticketing strategies), data analysis and design and branding for EP services. It would also be responsible for developing and implementing commercial objectives and specifications for all fleet requirements.
- (c) **Operations Team:** During the life of the EP operations, this team would monitor the day-to-day performance of the Operators and oversight of compliance by both Merseytravel and the Operators of their commitments under the EP schemes. It would support revenue protection, network standard and safety regime monitoring, planned and unplanned disruptions.
- (d) **Bus Planning and Development Team:** This team would work closely with the Strategic Projects and Bus Services Improvement Programme team on the implementation of EP Schemes. They would continue to develop and design the supported bus network in closer association with the commercial operators/network to ensure a 'one network' approach. They would be responsible for the bus service registration function and planned disruptions.
- (e) **Contract Management Team:** This team would be responsible for the management of the EP schemes, managing service delivery within those schemes, managing and executing variations, waivers or amendments to the contract documents and managing dispute escalation procedures. It would also be responsible for enforcing the requirements and obligations of the relevant EP Schemes. In performing these functions, the Contract Management team would work closely with the Operations team to establish whether EP obligations are being delivered by Operators in accordance with their contractual obligations.

- (f) **Customer Experience Team:** This team would be responsible for engagement with the wider stakeholder community as well as with the Operators who are parties to the relevant EP Schemes. The team will continue Merseytravel's role in customer engagement and contact, dealing with customer queries, feedback and complaints (by acting as the intermediary with Operators), undertaking and managing consultations and surveys. It would also support the management of planned disruptions, working closely with the Bus Planning and Development and Operations teams.
- (g) **TravelSafe Team:** This team would be responsible for promoting safer travel on the network by gathering crime and anti-social behaviour data to identify areas of the network that may be vulnerable to crime and anti-social behaviour, by undertaking targeted activities to improve customer and staff safety and supporting with designing out crime on supported services and associated infrastructure.
- (h) **Hubs Team:** This team would be responsible for the management of bus stations within the LCR.

In addition to the central teams listed at Section 2.7.3 above, a number of support functions would be utilised by Merseytravel to help it deliver its commitments and obligations under the EP schemes. This would include a legal function, procurement function, internal audit function, sales, marketing and communications function, a finance and accounting function, a HR function and an IT function. These activities would be performed by existing functions within Merseytravel, with new or enhanced capabilities. It is not expected that support functions required under the operator-proposed EP would differ by any significant amount.

Figure 5.2: EP Team Structure



2.7.4. EP Team Structure: Additional Resources and Cost

Table 5.7 below sets out Merseytravel's analysis of the total additional head count that would be required to manage the proposed ambitious EP. This equates to an overall net increase in head count of 13 full time roles in relation to the bus team and 2 full time role in relation to Merseytravel's central support team.

Table 5.7: Additional Headcount required for EP

Team / Function	Additional Headcount
Strategic Projects and Bus Services Improvement Programme	2
Commercial	4
Operations	(2)
Contract Management	2
Bus Planning and Development	4
Customer Experience	0
TravelSafe	6
Hubs	0
Central Support Functions	2
Total	15

Tables 5.8 and 5.9 provide a breakdown of the core and support team resourcing costs involved in delivering the ambitious EP.

Table 5.8: Resourcing Cost of EP – Core Teams

Team / Function	Headcount	Salary Cost (£K per annum)
Strategic Projects and Bus Services Improvement Programme	12	405,500
Commercial	4	165,000
Operations	46	988,000
Contract Management	8	231,000
Bus Planning and Development	12	331,500
Customer Experience	12	247,500
Travelsafe	6	112,000
Hubs	50	-
Total	150	2,480,500

Table 5.9: Resourcing Cost of EP – Support Teams

Team / Function	Required Headcount	Salary Cost (£K per annum)
Finance and Accounting	0.5	14,500
Human Resources	0.5	11,250
IT Support	0.5	16,000
MPO	2	65,000
Procurement	0.5	12,500
Legal	2.5	91,250
Legal audit	0.5	20,000
Comms & Marketing	0.5	17,500
Engagement	0.5	14,250
Total	8	262,250

3. *Transitional Change and Mobilisation*

3.1. Additional staffing resources and establishing new schemes

During the transition from the current operating model to either Franchising an EP, additional resources would be required by Merseytravel to facilitate that change. These resources would be built up over time to provide Merseytravel's proposed management structures as identified in Section 2.7. As part of the transition, it is proposed that the incremental recruitment of this long-term resource commences well in advance of the commencement of the chosen Delivery Option. This resource would form part of the Strategic Projects and Bus Services Improvement Programme Team supporting in the development and implementation of the new operating model. Merseytravel would also utilise any additional staff that have been brought in to support and manage the BSIP for the purposes of transitioning to the new operating model.

In addition to changes to staffing levels, new operating schemes will need to be established – either a Service Permit Regime for the franchise option or a licensing regime alongside the EP Plan. The existing VPA would need to be wound down in a managed way so that bus services continue to be provided and mitigation measures established so that services can be maintained in the event that an Operator decides to cease running a commercial service before the start of the relevant franchised service or EP service.

3.2. Transition – Franchising Option

3.2.1. Transition

LCRCA intends that once the first franchises are let, the remaining franchise contracts will be let at 12 monthly intervals over a 3 year period, as described at Section 4.4 of the Commercial Case

This means that there would be a substantial period of time between any announcement of the intention to pursue Franchising and all services having been franchised.

LCRCA has developed arrangements to support the transition from the existing deregulated market to a fully operational franchised model.

Key elements of this transition plan include:

- (a) the implementation process, and the provision of services during the notice period of the Alliance;
- (b) how to ensure continuity of service in the transition phase when there is a mixture of franchised and unregulated services;
- (c) how to enable/ensure that Operators can mobilise their

drivers, fleet and maintenance arrangements in time to deliver an effective service, and how to ensure that LCRCA's approach to transition does not disadvantage certain Operators (new market entrants in particular, who may take longer to mobilise); and

- (d) how to ensure that LCRCA has all the required staff and processes in place to manage the contracts, and undertake other activities required under Franchising e.g. network planning and timetabling.

3.2.2. Merseytravel Personnel

In order to manage all of the proposed franchises as well as the Service Permit Regime, Merseytravel would need to significantly increase the size of its bus team. In doing so, it would balance the needs of its proposed structure with the staff numbers and skills required for its proposed team to manage its franchises and Service Permit Regime. The timing of the recruitment would be important, particularly as some of the positions would require specialist skills, for which there may be a limited supply.

Merseytravel would implement its recruitment strategy for Franchising in accordance with Section 3.4.3.

3.2.3. Cross-boundary Services / Permit Regime

Merseytravel would implement the Franchising Scheme across the whole of the LCR upon commencement of the first franchised services. This would mean that all non-franchised bus services (including those proposed for Franchising, but not yet franchised) would need to operate under a Service Permit Regime.

Cross-boundary and certain other types of service not considered suitable for Franchising, such as tourist bus routes, would need to operate under a Service Permit Regime, capable of providing longer-term certainty. Services identified as being services which would become Franchised services in later rounds of franchise letting, would also need to operate under a Service Permit Regime for an initial period until those services were let under a franchise agreement.

LCRCA can introduce a Service Permit Regime which sets different requirements for different types of service. This allows LCRCA to identify certain types of service which should have specified sets of standards associated with their operation. These may include specifications regarding acceptance of other operator's tickets, conditions regarding bus age and service requirements. The length of a specific type of service permit being issued under a Service Permit Regime must be clear before the operator applies for the permit, but the stated length of a permit may be different for different types of service.

The Service Permit Regime would need to apply to all bus services designated as being subject to Franchising but, at the time the first franchise services commence, are not yet franchised. The term of the relevant service permit would need to have been set so that the service permit expires on the date on which the service recommences as a franchised service. This is to ensure that there is always only one operator for each route.

Before a Service Permit Regime can be established, it is subject to consultation. The Service Permit Regime would need to be implemented in advance of the Franchising Scheme so that Operators can apply for, and be issued with, relevant service permits which are effective from the start of Franchising. Merseytravel would therefore need to engage its service permit management team at the start of the Franchising process to ensure that the consultation on the Service Permit Regime occurs in a timely manner so that the Service Permit Regime can be coordinated to operate effectively and efficiently with the Franchising Scheme.

3.2.4.Pre-Franchise Services

For each of the various Rounds of franchise letting, Merseytravel would need to identify the relevant services which, while not operated as franchise services on commencement of the first franchised services, would become franchise services when that Round was let. Those which are expected to be let at the same time would be allocated the same Round marker. Within the Service Permit Regime consultation, the expiry date for the service permits for each of these Rounds would be set so that their expiry occurs at the same time as the commencement of the new franchise services which are set to replace them. Merseytravel would ensure that the transfer from service permit to franchise service results in no disruption to passengers.

3.2.5.Establishing the Permit Regime

Alongside, but separate to the consultation on the Franchising Scheme, Merseytravel would need to introduce a Service Permit Regime. Merseytravel would consult on the detail of the form of the Service Permit Regime and any conditions to be attached to permits issued under the Service Permit Regime. It is expected that there would be an appropriate regime for the service permits issued during the period when the various Rounds were commencing the new franchise services in order to help maintain the economic balance of the existing services operating over the entire LCR.

The exact scope of the Service Permit Regime would be subject to formal consultation with Operators and other relevant parties. However, legislation sets out those areas where LCRCA can propose certain types of condition which may be attached to the service permit. This significantly limits both legal and commercial risk associated with implementing a Service Permit Regime. This includes conditions such as:

1. enabling tickets to be purchased or fares to be paid in particular ways;
2. stipulating that operators must accept or issue tickets of a specified description and to comply with requirements as to the price to be charged for such tickets;
3. requiring vehicles to comply with specified standards, including as to age and emissions;
4. setting customer service standards;
5. setting operational standards;
6. stipulating that operators offer discounted travel for specified groups;
7. stipulating that operators publish specified information about the local services provided by them and about other local services in the franchised area; and
8. stipulating that operators publish specified information about their fares, the fares of other operators of local services and ticketing arrangements applying in the franchise area.

LCRCA is permitted to propose different conditions for the different types of service that will be operated under the Service Permit Regime. Therefore, the conditions that apply to cross-boundary services do not need to match exactly those which apply to other service types such as pre-franchise services. This could allow cross-boundary services a longer period of time to meet certain service requirements or vehicle standards. However, the intention would be to align the requirements of each Service Permit Regime as much as possible with those of the Franchise Scheme to ensure a consistency of service across the LCR, reduce confusion for customers and to facilitate smooth running of cross boundary services.

In order to establish the Service Permit Regime, LCRCA must consult on the conditions it wishes to attach to service permits (per s123R(5) of the Act). This consultation is separate to the franchising scheme consultation, but would need to be completed in sufficient time before the commencement of the first franchise services to allow Service Permit Regime to be

established, operators to submit applications for permits, the applications to be considered and service permits to be issued.

Merseytravel would need to coordinate the publication of its service permit policy statement, as its publication cannot be any earlier than the date of publication of the Franchising scheme. Within the policy statement, Merseytravel can differentiate between types of service permit that may be issued. Service permits supporting services operating until franchises are let within their relevant area will have some different requirements compared to service permits for longer term cross-boundary services.

As part of the application by an operator to obtain a service permit to operate non-franchised services, LCRCA is able to consider the service and its effect on the franchised services being operated in the LCR. LCRCA will have the right to reject any services which fulfil the permit requirements, but which, in LCRCA's view, are partly or wholly specified to abstract revenue from franchised services or other established permitted services.

3.2.6. Services operating with financial support

Merseytravel would continue to manage the provision of those services which can only operate with financial support from Merseytravel.

The volume of services operating with financial support would gradually reduce throughout transition as the network is franchised. However, residual subsidised service contracts would continue to be carefully managed to ensure that capacity and quality of service is maintained before service transfer to large or small franchises. Merseytravel would ensure that the expiry date of any subsidised service contracts let on behalf of LCRCA during the transition phase are coterminous with franchise commencement where appropriate and handover requirements specified where necessary.

Merseytravel would actively engage with neighbouring authorities regarding cross-boundary services operating with financial support to understand and agree renewal dates (if appropriate) and/or to ensure that the existing contract specification meets the requirements of the permitting scheme in the same way commercial services would be expected to.

3.2.7. Cross-boundary fares and ticketing services

The Bus Planning and Development team would have the responsibility of working closely with the operators of cross-boundary services in setting the principles for establishing the fares structure. This is so that those parts of the cross-

boundary services which operate in the LCR will not have fares set at a rate which are in conflict with that set for the franchise services.

Where the Service Permit Regime requires cross-boundary services to accept other operators' tickets, Merseytravel would be responsible for managing the payment of the appropriate fare to/from the operator of the cross-boundary service.

3.2.8. Contingency Planning

The Contract Management team, working with the Bus Planning and Development team would draw up and manage contingency plans for providing replacement services in the event that any Operator decided to withdraw any of its commercial services before the franchises in the relevant areas were fully mobilised and operating.

The Strategic Projects and Bus Service Improvement Programme team will also work with the Bus Planning and Development team and Contract Management team to consider whether any additional resources may be required to support the procurement or management of the franchises or where bid support is required to obtain external funding. Where it is determined that additional resources are required, the procurement and integration of these resources shall be managed by the host team or, where flexible additional resource is required, by a newly established team. LCRCA has employed this approach with its Mayoral Programme Delivery team, which was set up as a flexible and agile team to help further LCRCA's ambitions and which works on a varied portfolio of transformational projects. Any requests for project support are made through a dedicated Mayoral Programme Delivery team portal.

3.3. Transition – EP Option

3.3.1. Merseytravel Personnel

In order to manage the proposed EP Scheme(s) as well as the operator licensing regime Merseytravel will need to increase the size of the Bus Planning and Development team. In doing so, it will be required to balance the needs of its proposed management structure with the staff numbers and skills required for its proposed team to manage the proposed EP Scheme(s). It is not anticipated that there would be a significant difference in the number of Merseytravel staff required whether the ambitious EP or operator-proposed EP was adopted by LCRCA, although, over time, as the number of supported services increases, this team will need to increase in size, as set out in Section 6.3.1 of the Financial Case.

3.3.2. Fleet

In the event that Merseytravel wished to make a fleet of new zero emissions buses available for Operators participating in the EP Schemes as part of its VfB, access to a sufficient number of buses will be required.

Where Merseytravel is procuring a clean fleet, Merseytravel would use its Commercial team to acquire the fleet and to agree the terms on which it will make it available to the Operators participating in the EP Schemes. The Commercial team would also be responsible for reviewing and checking the use and maintenance of the fleet by the relevant Operators.

3.3.3. Contingency Planning

Merseytravel's Contract Management team and Bus Planning and Development team would work together to draw up and manage contingency plans for dealing with any Operator deciding to withdraw any of its commercial services which are due to become part of an EP Scheme before the relevant EP Scheme has been fully mobilised and operating. This competency would be required regardless of whether the ambitious EP or operator-proposed EP is adopted.

The Contract Management team will also work with the Bus Planning and Development team and Commercial team to consider whether any additional resources may be required to support the negotiation and consultation on the EP Plan and EP Schemes or the establishment or operation of the bus operator licensing scheme. This is expected to be influenced by the negotiating stance taken by the Operators.

It is not currently clear how much of the ambitious EP Operators may ultimately object to or whether any Operators will alter their negotiating stance on the operator-proposed EP, particularly when the final levels of LCRCA funding are confirmed. Where it is determined that additional resources are required, the procurement and integration of these resources shall be managed by the relevant host team.

3.4. Implementation Programme

The implementation programme to deliver the required outcomes will differ depending on which Delivery Option is decided upon by LCRCA. Some activities will be similar for all of the Delivery Options while others will be specific to one Delivery Option.

For example, both the Franchising Option and EP Option would require the enhancement of the Contract Management team to ensure sufficient capacity to monitor and manage the Operator's performance in meeting contractual obligations, whether

under a franchise agreement or the terms of the relevant EP scheme. However, only the Franchising Option would require the establishment of a Service Permit Regime and the EP is not anticipated to involve formal Operator procurement exercises (but rather Operator engagement to transition from the existing Alliance).

Merseytravel will be responsible for obtaining comprehensive information about the existing bus network under the Bus Services Act and its associated provision of information regulations. Merseytravel is required to engage proactively with operators of local bus services, both before and throughout the information request process, to understand the ways in which all the operators hold the relevant information as well as dealing with concerns from any operator. Such obligations will need to be properly managed and the requests fully documented. The information must be securely stored and appropriate protection measures put in place and managed throughout the implementation period and beyond as the information may be commercially sensitive and can only be used for the purposes for which it was obtained.

3.4.1. Implementing the Franchising Option

In order to implement Franchising, an effective transition plan would be required to prevent disruption to passenger services. It is not expected that there will be any significant reduction in bus services during the mobilisation phase, but Merseytravel will put in place measures to manage such risk and a risk reserve has been included within the financial case in the event that Merseytravel is required to procure additional supported services during transition.

The key elements of Merseytravel's implementation programme would be:

- (a) the mobilisation and expansion of the Strategic Projects and Bus Service Improvement Programme team to support the move to franchise contracts;
- (b) the work of the Bus Planning and Development team (supported by Merseytravel's internal risk function and the wider Merseytravel bus team) in evaluating the risk of any bus services being withdrawn by Operators prior to the start of Franchising and putting in place procedures to ensure that replacement services can be provided so that there is no loss of any parts of the bus network in the LCR (see Section 3.5.1.2);
- (c) the establishment of the Franchise operating model and the design of the franchise contracts to provide for large, medium and small franchises so that there are entry points for local as well as regional bus operators;

- (d) the creation of the procurement process (including relevant documentation to support the process) and the phased procurement of Operators for those franchise opportunities;
- (e) the establishment of the Service Permit Regime and the management of applications for service permits alongside the introduction of the new franchises; and
- (f) the mobilisation of the franchises.

In order to provide effective management and governance of the Franchising of bus services and the associated issuing of service permits for non-franchised services, Merseytravel would need to allocate appropriate staff and resources from an early point in the process. This would include managing consultations on both the Franchising itself and the Service Permit Regime, reviewing and assimilating the responses to the consultations and ensuring that the resulting Franchising Scheme and associated Service Permit Regime meet all relevant statutory requirements.

The implementation programme would be designed so that Merseytravel has all relevant management systems in place to meet its obligations under the Franchise Scheme and Service Permit Regime. It will be particularly important for Merseytravel to ensure that there are sufficient resources available to manage the letting of the first Round of franchise contracts and the issue of service permits for all other bus services operating in the LCR. This is because, under the Bus Services Act, services operating within a Franchising Scheme area must either be franchised services or operate under a Service Permit Regime.

The Service Permit Regime envisages different service permits being issued for different types of services and LCRCA would establish two distinct regimes. One would cover those services which will become franchised services over the course of the franchise letting process and the other would cover all those other services which would remain outside of the franchise letting process (such as cross-boundary services).

Merseytravel's resources would need to be at a sufficient level to manage the high number of applications for service permits arriving at around the same time as the first Franchising Round is let. The relevant application information would need to be checked and the correct type of service permit issued prior to the start of franchised services to allow the continuation of those types of bus service not included in the first Round of Franchising. Merseytravel also recognises the importance of

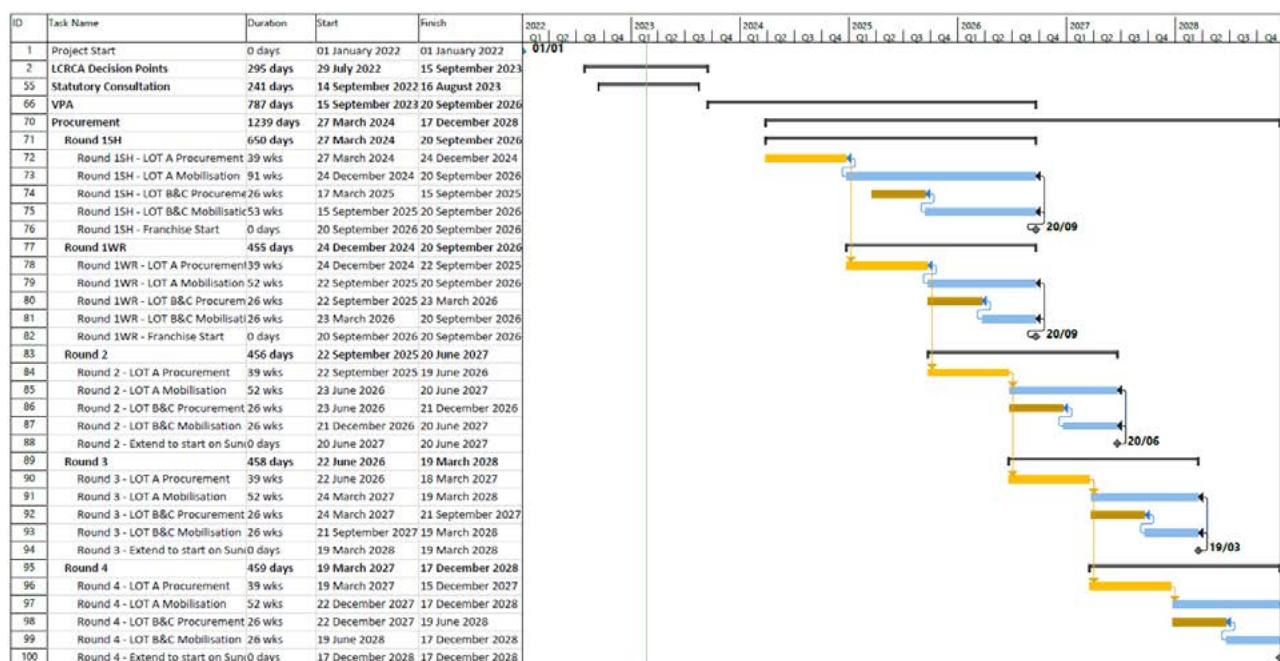
ensuring that those service permits issued for services which were due to become franchised services during the course of the franchise letting process would also need to have the relevant expiry date applied so that they were coterminous with the commencement of the relevant franchised service being let in later Rounds.

If a decision to franchise was taken, Merseytravel would need to implement a plan to enable successive franchise contracts to be let and managed. This would include putting in place a framework of service permits to support the existing bus services until the relevant franchise contracts could commence. Figure 5.3 shows a high level plan setting out how Merseytravel would manage the implementation of the Franchising Scheme.

LCRCA's proposed approach is to franchise all routes over a 3 year period from the commencement of the first franchise contracts through to the commencement of the final Round of franchise contracts. Category A Lots will be let in advance of Category B,C and D Lots.

This approach and timetable will enable LCRCA to achieve the benefits of Franchising relatively quickly, whilst ensuring that the procurement process is manageable. It will also allow LCRCA to refine its contract and procurement processes based on experience gained in letting the earlier Rounds and feedback that becomes available from other franchising authorities implementing franchising.

Figure 5.3: Implementation Plan for Franchising



The key foundations of the implementation plan set out in Figure 5.3 are described at Section 4.4 of the Commercial Case.

The Contract Management team would manage the day to day operation of each franchise together with the routes operated under service permits. They would review the overall bus network, monitoring the compliance of the Operators with their franchise agreements or terms of their service permits (as applicable) and whether any excusing events apply.

The size and roles undertaken by the Contract Management team would need to be kept under review. Monitoring the progress of the Franchising and delivery against the relevant timetable would be key to the successful delivery of the Franchising Option. Depending on the outcome of such monitoring, the level of resources required for the Franchising Option may need to increase beyond that assumed for Franchising in this Assessment.

During transition, and as the Franchises commence, there is a risk that incumbent Operators will cease running some of the current commercial services. There is no specific restriction on an Operator withdrawing a commercial service, subject to giving the statutory amount of notice to deregister its services.

It is therefore possible that an Operator may have opposed Franchising and be following a strategy to withdraw from the LCR, which would result in reduced commercial bus services during transition to Franchising. Merseytravel would consider whether to extend the deregistration notice period to 112 days, as permitted by The Public Service (Registration of Local Services) (Franchising Schemes Transitional Provisions and Amendments) (England) Regulations 2018, during the transition phase.

In such circumstances, Merseytravel may need to subsidise additional services to ensure that the overall bus network is not adversely affected and public support of bus services damaged. As the VPA termination period is 3 years from the date of a decision to franchise, it is not expected that there will be any reduction in bus services prior to the commencement of franchise services in practice. However, Merseytravel will put in place measures to manage such risk and a risk reserve has been included within the financial case in the event that Merseytravel is required to procure additional supported services during transition.

3.4.2. Organisational change to support the operation of the Franchising Option

Merseytravel would need to manage the implementation of the Franchising Scheme and the Service Permit Regime, including communicating with all relevant parties and dealing with changes

in requirements during the transition phase as the franchises are let on a Round-by-Round basis.

The existing Merseytravel Contract Management team would form the core of the team that would manage the day-to-day operation of the franchises and routes operating under service permits. During the Franchising process the Bus Planning and Development team would be expanded to take over the additional obligations that arise as part of the issuing of service permits and responding to queries on the same alongside the development of the franchises. It is expected that a significant number of service permits will be required alongside the letting of the first Round of franchise contracts. The Contract Management team would be expanded to deal with the management of the franchises and the enforcement of the Service Permit Regime. While the phased introduction of Franchising takes place, the Merseytravel Operations team would continue to deliver its existing role in supporting and monitoring operations, including supported services, in those parts of the LCR where franchises have not yet been introduced.

The team that Merseytravel would require in order to manage the Franchises and operation of the Service Permit Regime will be significantly larger than the team it currently has to manage the Alliance and provide relevant oversight of bus services within the LCR. Some additional skill sets would be required (see Section 2.6), which in some cases can be provided through existing staff undertaking relevant training.

The increase in resourcing headcount would continue during any transition to a Franchising Scheme to reflect the increased workloads of the Bus Planning and Development team, Contract Management team and the new Commercial team in order to set up, implement and operate the initial franchises and to monitor the operation of the Service Permit Regime. Other teams, such as the Operations team and Customer Experience Team, would also continue to grow during the transition phase in line with the increased support required as more franchises were let.

To the extent that roles are only required during transition, these would be undertaken by external consultants or internal secondments from Merseytravel's central function

At the conclusion of transition, these constitute an increase of headcount by 73 in relation to the bus team and 5.5 full time roles in relation to Merseytravel's central support team, resulting in an increased cost of £2,934,750

3.4.3. Merseytravel Personnel Recruitment Strategy

In order to meet its increased need for personnel to support and manage the franchised services, Merseytravel has developed a recruitment strategy. This takes account of the development of existing staff, certain staff being transferred from existing Operators and the external recruitment of additional staff. In producing this strategy, Merseytravel has taken account of the demand for specialist roles, particularly in the light of proposals for Franchising by Combined Authorities in the UK.

Merseytravel would undertake a skills audit, mapped against the requirements of the new operating model, to establish the level of training or additional resource required. Where the need for further capabilities is identified, Merseytravel would provide existing team members with additional training and development by way of internal and external training courses, coaching, mentoring and shadowing.

Where resource does not exist within the organisation, and re-training or upskilling existing team members is not practicable, Merseytravel would recruit additional staff: either directly, using specialist search, agency staff, consultancy and/or secondments (as appropriate).

Merseytravel would develop role descriptions and person specifications to facilitate the completion of job evaluation for each role prior to mobilisation and recruitment. In the event of any material change to an existing role's function or responsibilities, such roles also be subject to job evaluation.

3.4.4. Systems changes to support the operation of the Franchising Option

Merseytravel's existing IT hardware and software is not considered a barrier to bus reform. Merseytravel has commissioned an independent IT systems analysis survey which has concluded that:

- (a) overall, LCRCA has invested in systems that are of a "Good Industry Standard", operational on current versions, and are 'Fit-for-Purpose' to support all forms of bus reform, including Franchising as required;
- (b) all 15 systems identified as having either a 'High' or 'Medium' level of impact on bus reform are capable of meeting an enhanced requirement in relation to capacity and capability;
- (c) the existing systems already align with commercial bus operator best practice to support any data and knowledge migratory needs associated with bus reform; and

- (d) generally, the underlying contracts upon which the systems are based are considered to be sound and capable of supporting a greater burden associated with bus reform.

3.4.5. Implementing the EP Option

In order to mobilise the EP (whether it was the ambitions EP or operator-proposed EP), there would be a need for a transition plan. This plan would need to flex depending upon the extent of the EP Plan and number of EP Schemes required to facilitate the delivery of the VfB.

The key elements of Merseytravel's implementation programme for an EP would be:

- (a) establishment of an EP Engagement Board, in compliance with clause 3.10 of the EP Guidance, due to the size and complexity of the EP Option. This is expected to consist of Merseytravel, Operators, representatives of passenger groups, local businesses, the LEP and local authorities adjacent to LCRCA;
- (b) engagement with Operators to determine the operational requirements of the EP Plan and EP Scheme(s), including keeping all Operators advised of progress (whether they are engaged in the process or not) and dealing with any relevant objections from Operators to either the EP Plan or any specific EP Scheme(s);
- (c) engagement with other parties on the EP Engagement Board and taking account of their views when discussing proposals with the Operators;
- (d) consultation on the EP Plan and EP Scheme(s) as required by the Transport Act and EP Guidance;
- (e) negotiation of agreements with Operators in relation to the EP Scheme(s); and
- (f) the mobilisation of the EP.

In order to provide effective management and governance of the EP Engagement Board, Merseytravel would need to allocate appropriate staff and resources from an early point in the process. This would include managing consultations, requesting data, managing meetings and ensuring that the resultant EP Plan meets all of the relevant statutory requirements. Merseytravel would also need to ensure that where the relevant EP Scheme(s) specify any "facilities" to be provided by Merseytravel or "measures" to be taken by Merseytravel, it can provide the relevant management systems in order to meet its obligations as and when they are required.

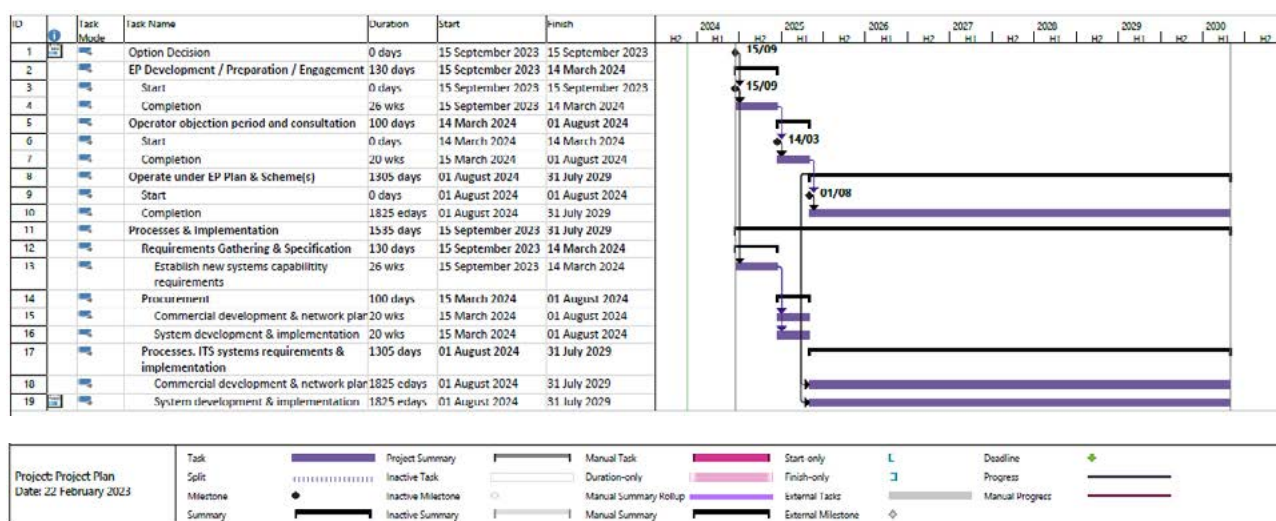
Merseytravel would need to ensure that there are sufficient resources available to undertake the assessment of Operators to determine those within the areas covered by the EP Scheme(s) that they consider to be SMO. Personnel within Merseytravel would need to be able to manage the consultation with all of the Operators on the EP Plan and all associated EP Schemes, including dealing with any notices of objection.

There is also a need to manage the development of the EP Plan and associated EP Scheme(s) to ensure that they are not conducted in a way that is unfair to particular Operators and to avoid breaches of the Competition Act 1998. This would apply in both the case of the ambitious EP and the operator-proposed EP. The operator-proposed EP received by LCRCA has been proposed by only some of the Operators in the LCR (albeit that this includes the two largest current Operators) and so particular care is required to ensure that it is not unfair to those Operators who were not involved in the development of the proposal.

Once the EP Plan and EP Scheme(s) have been reviewed by the Operators, Merseytravel will need to manage the wider consultation with the statutory consultees. This will include considering the appropriateness of a wider consultation base and managing the responses that this produces. The terms of the operator-proposed EP are provided by a group of Operators and the ongoing nature of the discussions with LCRCA does not prevent an Operator deciding to withdraw from the proposal or to object to some of the positions that other members of the group decide to take. LCRCA will draw up the EP Plan and EP Scheme(s) following work by the EP Engagement Board including consultation with the Operators and then submit it to the formal operator objection process required by the Transport Act. Involvement in the proposals for the EP Plan and EP Scheme(s) does not prevent an Operator from invoking the formal statutory objection process.

If a decision to implement the EP Option was taken, Merseytravel would need to implement a process to monitor the delivery of the EP Plan and EP Scheme(s). This would include regular engagement and observance of the incoming Operators. Figure 5.4 shows a high level plan setting out how Merseytravel would manage the implementation of the EP Plan and associated EP Scheme(s).

Figure 5.4: Implementation Plan for EP



The key foundations of the high level implementation plan set out in Figure 5.4 are:

- following a decision of LCRCA to create an EP Plan and EP Scheme(s), the start of consultation and negotiation with operators and other relevant stakeholders (which cannot be less than 28 days from the date on which LCRCA issues a notice that an EP Plan and Scheme has been prepared);
- the detailed design, implementation and phasing in of the staffing resources required to manage the EP operating model;
- the detailed design and implementation of the Merseytravel systems required to support the management of the EP operating model; and
- additional costs and resources required to transition from the current operating regime to the EP operating model.

Within the EP Option all of the activities are indicative as the actual details will need to be negotiated and agreed with the Operators and other relevant parties on the EP Engagement Board. The length of time taken to agree the EP Plan and EP Scheme(s) will depend on the effectiveness of the EP Engagement Board and the level of cooperation from the Operators.

It should be noted that a significant amount of time was spent by Merseytravel in negotiating the VPA and that Merseytravel and incumbent Operators engaged between July 2021 – January 2022 to determine the potential scope of the EP (the areas of agreement between the Operators and LCRCA are set out in Appendix 3 to this Assessment). As such, achieving the

agreement of the Operators to the requirements of the ambitious EP, as set out in Section 5.3 of the Commercial Case, is likely to be challenging and may exceed the timeframes set out in the implementation plan above.

The existing Contract Management team would manage the day to day operation of the EP Scheme(s), including managing the subsidised network, reviewing the performance of the overall bus network, monitoring the compliance of the Operators in relation to the EP Scheme(s) and monitoring whether any excusing events apply.

The size and roles undertaken by the wider Merseytravel bus team would need to be kept under review. Monitoring the compliance of and delivery against the EP Scheme(s) would be key to successful partnering arrangements and depending upon the number of EP Scheme(s) the level of resource required for the EP may need to increase beyond that assumed for an ambitious EP in this Assessment.

There is no barrier to an Operator withdrawing a service and this could result in reduced commercial bus services during transition. In such circumstances, Merseytravel may need to subsidise additional services to ensure that the overall bus network is not adversely affected and public support of bus services damaged.

3.4.6. Organisational change to support the operation of the EP Option

Merseytravel would need to manage the implementation of the EP Plan and EP Scheme(s) including communicating with all relevant parties and dealing with the transition phase as the EP Scheme(s) are implemented.

The existing Contract Management team would manage the day to day operation of each EP Scheme, subject to increasing the team size as considered below. In addition to managing the EP Plan and EP Scheme(s), including monitoring the compliance of the Operators in relation to each EP Scheme and whether any excusing events apply, the Contract Management team would be responsible for managing the subsidised bus network and monitoring and managing performance. The Bus Planning and Development team would be responsible for reviewing the service provision of the overall bus network.

Where any of the EP Schemes set operational requirements relating to:

- (a) the vehicles used to operate the bus service (including branding and livery);
- (b) the provision of information about the bus services;

- (c) the dates on which timetables may be changed;
- (d) ticketing provisions (including multi-Operator tickets and fares); or
- (e) arrangements that facilitate the operation of the scheme,

Merseytravel would require a team of sufficient size to manage the Operator's compliance with these requirements. This would be larger than the team Merseytravel currently has to manage the Alliance. Such requirements are included within the ambitious EP proposals.

While the fares collection from passengers would be the relevant Operators responsibility, Merseytravel would need to manage the settlement of the fares between the Operators that are part of the LCR wide multi-Operator ticketing scheme which would also include dealing with disputes. Although Merseytravel already undertakes part of this function through its role in the Alliance, the LCR wide multi-Operator ticketing scheme would require additional staff members and a new system for providing a fares settlement process between all of the Operators.

At the conclusion of transition, these constitute an increase of headcount by 13 full time roles in relation to the bus team and 2 full time role in relation to Merseytravel's central support team, resulting in an increased cost of £723,450.

Measures which can only be provided by third parties such as relevant highways authorities can only be included where that highway authority is a party to the relevant EP Scheme. In such case, it is likely that Merseytravel would be the party responsible for enforcing such third party's obligations.

3.4.7. Merseytravel Personnel Recruitment Strategy

In order to meet its increased need for personnel to support and manage the EP Scheme(s), Merseytravel has developed a recruitment strategy. This takes account of the development of existing staff and the external recruitment of additional staff. In producing this strategy, Merseytravel has taken account of the demand for specialist roles, particularly in the light of proposals for bus Franchising and EP schemes by a number of Combined Authorities in the UK.

Merseytravel would undertake a skills audit, mapped against the requirements of the new operating model, to establish the level of training or additional resource required. Where the need for further capabilities is identified, Merseytravel would provide existing team members with additional

training and development by way of internal and external training courses, coaching, mentoring and shadowing.

Where resource does not exist within the organisation, and re-training or upskilling existing team members is not practicable, Merseytravel would recruit additional staff: either directly, using specialist search agents, agency staff, consultancy and/or secondments (as appropriate).

Merseytravel would develop role descriptions and person specifications to facilitate the completion of job evaluation for each role prior to mobilisation and recruitment. In the event of any material change to an existing role's function or responsibilities, such roles would also be subject to job evaluation.

3.4.8. Systems changes to support the operation of the EP Option

As described at Section 3.4.4, Merseytravel has commissioned an independent IT systems analysis survey which concluded that Merseytravel's existing IT hardware and software is not considered a barrier to bus reform.

If any variations were made to the EP Plan or EP Scheme(s) as a result of Merseytravel wishing to change the bus service requirements at a point in the future to meet changing passenger requirements, Merseytravel would need to manage an additional consultation on the amended plan or scheme with all Operators and deal with any objections.

Within the negotiations for an EP Scheme, Merseytravel can agree to provide various "facilities" and/or "measures" which are funded by it. These can be similar to those already provided under the Alliance or be significantly more. These facilities and measures are described in more detail in Section 5.3 of the Commercial Case.

Once "facilities" and/ or "measures" to be provided or taken by Merseytravel form part of any EP Scheme, Merseytravel would have to continue to supply them until the EP Scheme ends. Merseytravel would, therefore, need a management system which can be adapted "in life" to ensure that these obligations could be met throughout the life of the EP Scheme(s).

3.4.9. Zero-emission Bus Fleet

In the event that Merseytravel decides to procure a zero-emission bus fleet that is then made available to Operators participating in the EP Scheme(s), there will need to be a management team put in place to:

- (a) procure the fleet and enter into supply arrangements with bus manufacturers;
- (b) manage the leasing agreements and payments of rent by Operators;
- (c) manage the provision of power (whether through electricity charging points, hydrogen supply points or other power supply systems);
- (d) monitor the maintenance being undertaken on the buses and undertake (or procure the undertaking of) checks to ensure that the appropriate maintenance is being carried out (whether during the lease term or as part of any handback arrangements); and
- (e) store and procure the maintenance of any of the buses not leased to an Operator.

Where Merseytravel is making a zero-emission bus fleet available to Operators participating in the EP Scheme(s), it shall be made available on a clear, transparent and consistent basis.

3.5. Mobilisation

3.5.1. Franchising Option

3.5.1.1. Mobilisation Plans

The transition from the current operating model to the Franchise operating model is a critical risk period for Merseytravel. In order to successfully deliver the VfB, it is vital that the transition runs smoothly and that the customer experience of bus services is not negatively affected during mobilisation.

As part of the Franchise procurement process Operators would be required to submit comprehensive mobilisation plans to detail how Merseytravel and the Operator would work together to efficiently transition to a Franchise operating model.

Merseytravel would implement a process to monitor the delivery of the Franchise operating model, which would include regular engagement and observance of the incoming Operator. The role Merseytravel would play during mobilisation is set out in the table below.

Table 5.10 Role Merseytravel would play during mobilisation

Role	Detail
Mobilisation Plan	Review and agree changes to the Mobilisation Plan with the incoming Operator
Employees	Assist with delivering TUPE and pensions related information to the incoming Operator and monitor compliance with the franchise obligations
Fares and ticketing	Determine fares and ticketing strategy and monitor delivery of the same
Network	Review and agree changes required to the bus network, prior to and during operation of the Franchise operating model
Assets	Secure franchise assets to ensure that franchise assets can be made available to the incoming Operator in the relevant franchise

3.5.1.2. Operational Continuity

During transition and as Franchising commences there is a risk that incumbent Operators would cease running some of the current commercial services, resulting in a reduced commercial bus services during transition to the Franchise operating model. This could range from a limited withdrawal of services which are either loss making or have marginal profitability to a significant deregistration and withdrawal of services by one or more Operators.

An alternative scenario is where incumbent Operators maintain their services but reduce the quality of service offered to customers (punctuality, cleanliness,

etc.) or reduce cooperation between themselves and Merseytravel.

It would be important for Merseytravel to manage an effective and efficient transfer of services from the existing commercial model to the franchised model with little or no drop in service availability or quality. In such circumstances Merseytravel may need to subsidise additional services to ensure that the overall bus network is not adversely affected and public support of bus services damaged.

The Contract Management team would work with the Bus Planning and Development team to establish an operational continuity plan in order to manage such risk. Merseytravel already has experience of managing the collapse of a local bus operator and will use this knowledge in developing its operational continuity plan. A specific team will be identified within the Contract Management team and the Bus Planning and Development team with the relevant skills to manage such support if it is needed at any point during the transition and mobilisation phases.

Merseytravel already maintain a dialogue with the bus companies that operate within the LCR in order to understand the issues relating to bus service operations and to obtain early warning of where issues may occur. Merseytravel also has experience of letting and managing short term contracts to provide alternative bus services where an Operator has had to withdraw from the market at short notice.

Merseytravel also has experience in providing “operator of last resort” services, such as the provision of supported bus services, in accordance with LCRCA Transport Committee’s approved policy for the provision of bus services, following the closure of Avon Buses in October 2018. Merseytravel has procedures in place under which affected services are quickly identified and a network assessment is undertaken before supported services are implemented and/or an emergency procurement process is completed.

3.5.1.3. Fares and Ticketing

From the commencement of the first franchised services, LCRCA would introduce fares for franchised services, which are designed to cover all bus services within the LCR and which would sit alongside existing

multi-modal tickets. As services become franchised, the operator's own tickets would be withdrawn and the Merseytravel tickets introduced.

During transition to full franchised operations, non-franchised services, and those which would become franchised services, would operate under a Service Permit Regime. As part of the consultation for the Service Permit Regime, LCRCA is able to propose conditions relating to fares and ticketing to:

- (a) enable tickets to be purchased or fares to be paid in particular ways;
- (b) service operators accepting or issuing tickets of a specified description and complying with requirements as to the price to be charged for such tickets; and
- (c) service operators offering discounted travel for specified groups of persons.

Such conditions would allow LCRCA to create a uniform set of fares and tickets which would correspond with those which would be offered by franchised services. This would ensure that the changeover in ticket types, and how they can be used, change at the same time on commencement of the first franchises. This would limit complexity and confusion to bus users over ticket types.

The requirements of the ticketing regime, which would apply to services operating under the Service Permit Regime, would be set out in the service permit conditions which are subject to consultation. This means that all operators of services requiring a service permit would have sufficient time to understand the ticketing requirements and ensure that their ticketing systems are compliant with the new ticketing requirements. In order to facilitate an effective and efficient transition to the Service Permit Regime, it is expected that an appropriate form of service permit would be proposed for those services which would later be let as franchised services in the appropriate Round.

During the mobilisation period, before commencement of the services for the first franchises, Merseytravel would need to provide customers with sufficient information to help them understand the differences between ticket types and which ticket is the correct one for the service(s) that they wish to use. The Strategic Projects and the Bus Service Improvement Plan team, in

conjunction with the relevant service operators, would manage an information campaign on the change to ticketing. It is intended that each franchisee would be required to participate in the public awareness campaign so that a common message can be provided to all customers and potential customers.

Where services are already supported by Merseytravel, Merseytravel would align the changes in ticketing type to align with the introduction of any franchised services in the area where the supported services operate.

Services which operate cross-boundary into the franchise area would be subject to the new ticketing regime as one of the conditions set out within the Service Permit Regime. This would ensure that there is a single ticket offering within the franchised area from the commencement of the first franchised services. For those parts of its service operating outside of the LCR, the cross-boundary operator may apply its own ticketing schemes.

3.5.1.4. Managing Service Permit applications

Any Operator wishing to run a cross-boundary service into or out of the LCR once Franchising was in operation, or an Operator wishing to run services within the LCR where that service is not in the first Rounds of franchise services commencing, would be required to follow a pre-established process set out by Merseytravel in order to obtain a service permit. This process would require the Operator to provide detailed information to Merseytravel as to the service(s) it intended to run, including stopping points and fare arrangements.

Merseytravel would need to process the information to fully assess the impact of any individual application and decide whether a service permit should be granted, granted with conditions or rejected. In making that decision, Merseytravel would need to properly record its reasons for doing so.

Merseytravel would establish additional capability and capacity in the Bus Planning and Development team early in the transition process in order to manage the applications process and to deal with any questions or complaints from applicants. It is envisaged that a basic set of conditions would be imposed on all cross-

boundary services which were awarded a service permit in order to manage vehicle standards and emissions, operational conditions and the provision of service information.

At the same time as managing applications for cross-boundary services, Merseytravel would also manage the applications process and issuing of service permits to those Operators continuing to operate services identified as being future franchised routes. The conditions that would be imposed for such services are likely to be different to those for cross-boundary services, in order to enable the transfer of such services to franchise services following the letting of the relevant Round.

The conditions would include the length of the service permit where the term is expected to be related to the point in time at which the service is expected to start operating as a franchised service. This would ensure a seamless transfer between the service being operated as a commercial service and being operated as a franchised service.

It would be important for Merseytravel to set conditions in the Service Permit Regime which support the smooth integration between services run under the Service Permit Regime and those provided within the larger franchised offering, whether that is in a pre-Franchising phase or to provide positive relationships with cross-boundary services. The final form of these conditions will be established following the consultation process which is required under the Transport Act and the relevant regulations pertaining to the Service Permit Regime. Consultation on all relevant Service Permit Regimes would be carried out at the same time to ensure consistency in the outcomes both between each regime and with the franchised services. This also has the benefit of mitigating the legal and commercial risk of different regimes being in place, particularly during the transition period.

3.5.2. EP Option

3.5.2.1. Mobilisation Plans

It is envisaged that the responsibilities undertaken by Merseytravel under an EP would expand on the responsibilities currently assumed by Merseytravel

for managing the Alliance. This is particularly so if the ambitious EP was adopted by LCRCA and negotiations with Operators were able to secure the maximum level of benefits set out in the Commercial Case. This would require significant changes to some parts of its existing operating framework.

As part of putting the EP Plan and EP Schemes in place Merseytravel and the relevant Operators would work together to efficiently transition to an EP operating model.

Merseytravel would implement a process to monitor the delivery of the EP Plan and EP Schemes, which would include regular engagement and observance of the EP Schemes by the relevant Operators. The role Merseytravel would play during mobilisation is set out in the Table 5.11 below.

Table 5.11: Merseytravel's Role during Mobilisation

Role	Detail
Mobilisation Plan	Review and agree changes to the Mobilisation Plan with the Operators
Fares and ticketing	Determine fares and ticketing strategy and monitor delivery of the same
Network	Review and agree changes required to the bus network, prior to and during operation of the relevant EP Scheme(s)
Management of licensing	Where LCRCA takes over the role of licensing operators it will need to consider and manage applications for licences from Operators and monitor the compliance of those operators with their licence conditions

3.5.2.2. Operational Continuity

During transition it is expected that the existing Operators will continue to operate their current commercial services. There is a limited possibility of Operators reducing their commercial services and Merseytravel consider the risk of this occurring to be low. Where an Operator does decide to withdraw a service it is expected that it would withdraw a service which was either loss making or had a marginal profitability.

The Contract Management team and Bus Planning and Development team will be required to have established an operational continuity plan in order to manage such risk. To the extent that it does occur, Merseytravel already has experience of managing the withdrawal of a necessary service from the collapse of local bus operators. A specific team will be identified within the existing bus Contract Management team and Bus Planning and Development team with the relevant skills to manage such support if it is needed at any point during the transition or mobilisation phase.

3.5.2.3. Fares and Ticketing

One aspect of an EP Scheme will be to have a common fares policy across each of the EP Scheme(s) and multi-Operator tickets being issued by Operators providing services covered by the EP Scheme fares. This would apply both under the ambitious EP and the operator-proposed EP. It is not intended that there would be a requirement to move away from each operator offering a variety of their own ticket types for journeys on their own services outside of the EP Scheme area. However, part of the VfB is to encourage Operators to work with Merseytravel on the introduction of a multi-modal, multi-Operator ticketing scheme for public transport in the LCR.

It will be necessary to manage the introduction of the new multi-Operator ticketing schemes for the services operating under the EP Schemes to help customers understand the differences between the ticket types and which ticket is the correct one for the service(s) that they wish to use. This is particularly important where the customer is intending to travel on other bus services outside of the EP Scheme area.

The Strategic Projects and Bus Service Improvement Programme team will manage a public awareness campaign on the change to ticketing as part of the

introduction of each new EP Scheme. It is intended that each Operator would be required to participate in the public awareness campaign as part of its participation in the EP Scheme so that a common message can be provided to all customers and potential customers. Opportunities for customers to be confused as to the relevant ticket product for a service should be eliminated where possible.

4. *Benefits Management, Performance Management and Network Change*

4.1. Benefits Management

4.1.1. Franchising Option

4.1.1.1. Introduction

Implementing Franchising in the LCR should assist with the delivery of the VfB through creating a number of benefits to passengers and to the wider area, as summarised below and as further detailed in the Economic Case. However, to ensure that these benefits are fully realised it will be key to continually monitor the achievements of Franchising and track these against the requirements identified in the VfB.

There are also a number of Scheme Objectives, as further detailed in Section 5.3 of the Strategic Case, which it is essential for any potential Franchising scheme to achieve in order to be considered to have been successfully delivered.

This Section looks at how Merseytravel would monitor and actively manage a potential Franchising Option in order to maximise the benefits achieved by implementing Franchising across the LCR as well as ensuring any such Franchising Option achieves each Scheme Objective.

Table 5.12: Potential Benefits of Franchising

Benefit achieved through Franchising	Entity receiving a benefit	Further Details
Direct transport benefits, including: • service enhancements; • extended hours of operation for existing routes; • increased journey quality; • additional routes; • integrated fares and ticketing; • integration with rail; • improved infrastructure; • increased access to journeys; • improved safety; and • affordability of services.	• Existing users • Additional users resulting from implementing franchising	Sections 3.16 – 3.23 and Section 10 Economic Case
Environmental benefits, including: • improved air quality; • reduction in noise; and • reduction in greenhouse gases.	• Residents • Commuters / visitors / tourists to the LCR	Section 9 Economic Case
Economic benefits, including: • increased labour supply via increased catchment areas for businesses; • regeneration; and • agglomeration.	• Workers • Businesses	Section 8 Economic Case
Wider social benefits, including: • reduced commuting times (for non-bus users); • increased physical activity; • increased journey quality (for non-bus users); • reduction in accident rates; and • improved infrastructure.	• Residents • Commuters / visitors / tourists to the LCR	Section 10 Economic Case

4.1.1.2. Objectives

The Strategic Case sets out the Scheme Objectives at Section 5.3.

4.1.1.3. Benchmarking of Objectives and Benefits

In order to effectively measure whether an implemented Franchising Scheme fulfils the Scheme Objectives, as well as ensuring benefits are fully maximised, Merseytravel would need to ensure that effective benchmarks have been established in order to assess the success of the scheme.

Whilst the benchmarks against which the fulfilment of the Scheme Objectives and level of benefit achieved would need to be established prior to the implementation of a Franchising Scheme, they would also need to be actively monitored and, where appropriate, be adjusted in order to ensure they are set at the right level, i.e. to reflect any societal changes or emerging trends (for example, the modal shift to working from home).

Criteria identified as important to bus passengers and LCRCA would be incorporated into a scoring metric and weighted; benchmarks would be reviewed by LCRCA on an annual basis.

4.1.1.4. Testing and assessment of scheme

Merseytravel has developed and currently operates a performance monitoring regime for supported services in the LCR to encourage continuous improvements in setting service quality standards and providing service quality for passengers.

The performance monitoring regime currently employed for supported services adds a structured quality dimension to contract management and is scalable under each Delivery Option.

LCRCA would require a sufficient level of data in order to test whether the Scheme Objectives have been achieved and to determine the wider level of benefit that is being achieved from any Franchising Scheme. A proportion of this data would be supplied by the Operators running the services by way of self-declarations and Operator returns. However, LCRCA would also collect data through its contract management system, survey team observations (both on-street and through its IT systems) and

through customer feedback. The data would include:

- (a) Operational / service performance:
 - (i) “total lost mileage”;
 - (ii) “late running of mileage”;
 - (iii) route breaches and/or deviations;
 - (iv) driver breaches;
 - (v) punctuality (RTI metric);
 - (vi) reliability (EBUS metric);
 - (vii) number of improvement or warning notices issued;
 - (viii) driver fraud;
- (b) Customer service:
 - (i) customer complaints;
 - (ii) average age of Operator fleet and/or vehicles;
 - (iii) vehicle non-compliance;
 - (iv) operational CCTV;
 - (v) driver training programme compliance;
 - (vi) driver standards compliance (e.g. uniform);
 - (vii) cleanliness;
 - (viii) RTI reliability;
 - (ix) provision of operator route and service information;
- (c) Contract data quality:
 - (i) monthly returns received on time;
 - (ii) Contract management system data accuracy;
 - (iii) missing trip data accuracy;
 - (iv) emergency ticket data accuracy;
 - (v) ETM data on time (revenue and commercial serviced open book policy);
 - (vi) responses to complaints / quality of response;
- (d) Policies and procedures:

- (i) compliance with drug and alcohol policies (including evidence of random testing undertaken);
- (ii) evidence of driver eyesight testing;
- (iii) evidence of driver metrics (speed / eco driving);
- (iv) own revenue protection protocols;
- (v) accident reporting policy;
- (vi) near-miss reporting policy;
- (vii) evidence of TravelSafe reporting;
- (viii) satisfactory completion of engineering inspection programme; and
- (ix) evidence of safeguarding policy / driver DBS assessment.

The Contract Management team would be responsible for ensuring the ongoing collation of the data required and assessing this against the projections and benchmarks set out. Data would be entered into LCRCA's contract management system on a 4-weekly basis and reports on Operator scores (as well updated averages) would be submitted to LCRCA by Operators on a quarterly basis based against individual franchises as well as against the overall scheme across the LCR.

Operator performance meetings would be held on a quarterly basis to monitor the moving performance average and discuss Operator plans to improve or mitigate of performance.

4.1.1.5. Responding to underperformance

Where the reporting shows that the Scheme Objectives are not being achieved or that benefits are not being fully realised, LCRCA may be required to take action in order to rectify the underperformance. Initially, where the underperformance is below a set threshold, such action will be directed by the Contract Management team who will report on the actions taken to rectify underperformance alongside its monthly reports. Where underperformance breaches this threshold the Contract Management team shall make suggestions to Merseytravel as to how to rectify underperformance and will make adjustments in line with any Merseytravel direction.

Corrective action may be undertaken in a number

of ways, from utilising performance mechanisms within franchise agreements (for lower levels of underperformance) through to variations of current franchise agreements or amended specifications for subsequent franchise rounds (for more material levels of underperformance).

4.1.1.6. Ongoing engagement

There is a requirement under S123A(9) of the Transport Act for LCRCA to set out its plans for consultation with bodies who represent users of local services in order to seek out their views on how well the scheme is working. Under the Franchising Guidance this is required to be an ongoing engagement throughout the life of the Franchising Scheme.

LCRCA will have access to information in respect of market views on the Franchising Schemes' performance from the engagement methods described above (i.e. market testing, benchmark modelling etc.) which will provide a base level of engagement with users of the services.

4.1.1.7. Timing and scope of consultations

LCRCA will also supplement the ongoing engagement described above with regular, in depth, consultations in order to provide a more holistic view of the Franchising Schemes operating both within the designated franchising areas as well as over the franchised network as a whole. These in-depth consultations will initially run in line with the expiry of each initial franchise in order to assess user views on the successes and weaknesses of the schemes. The results of the consultations will be used to shape, the lotting/ re-lotting of subsequent schemes, allowing LCRCA to make improvements during the roll out of the Franchising scheme. Eventually, once the Franchising Scheme is fully established, these consultations will take place on a regular basis covering the whole of the franchised area with the results used by LCRCA as a means of continual improvement across the Franchising Scheme.

Whilst the ongoing consultations across the entire Franchising Scheme are anticipated to be run in line with the relevant Cabinet Office Consultation Principles at the time, it is envisaged that the initial consultations

(i.e. those run at the end of each individual franchise lot) will be run as shorter, more focused, consultations aiming to streamline improvements and the process of subsequent lots prior to the entire Franchising Scheme being in place.

4.1.1.8. Consultation parties

Section 123A(9) of the Transport Act requires franchising authorities to consult with “organisations appearing to the authority or authorities to be representative of local services as they think fit”. LCRCA will, in the lead up to each consultation process, look at which groups are the most relevant within the particular franchise area to ensure that LCRCA engages with the most appropriate and relevant groups existing at the time.

4.1.1.9. Consultation Areas

Ongoing consultations will focus on the same performance indicators and benchmarks devised above as well as utilising a more granular set of criteria in order to build a view of the Franchising Scheme from an end user view point. This will include consultation on:

- (a) perception of cost-effectiveness;
- (b) service provided;
- (c) whether the services increase access across all transport modes;
- (d) whether the scheme is providing VfM; and
- (e) the general view of services within the user’s local franchise area in relation to the wider Franchising Scheme.

4.1.1.10. Results and impact of consultation

Once the results of each round of consultation have been received and analysed by the Contract Management team, these will then form the basis of a report to LCRCA providing an overview of how successfully the Franchising Scheme is operating, alongside suggestions for improvements to the Franchising Scheme in order to address any issues raised during the consultation. LCRCA will review and approve any suggestions from the Business Intelligence Manager in the

Commercial team. These improvements may be made by utilising performance mechanisms within franchise agreements (for lower levels of underperformance) through to variations of current franchise agreements or amended specifications for subsequent franchise rounds (for more material levels of underperformance).

After decisions have been made as to how to implement any changes following the current consultation, LCRCA will publish a report on the current consultation highlighting the key findings from the consultation as well as the changes and improvements to be made.

4.1.2. EP Option

4.1.2.1. Introduction

Implementing an EP Plan and a number of EP Schemes within the LCR should assist with the delivery of the VfB through creating a number of benefits to passengers and to the wider area, as summarised below and as further detailed in the Economic Case. However, to ensure that these benefits are fully realised it will be key to continually monitor the achievements of the EP Schemes and other bus operations within the LCR and track these against the requirements identified in the VfB.

There are also a number of Scheme Objectives, as further detailed in Section 5.3 of the Strategic Case for which it is essential for any potential EP Scheme to achieve in order to be considered to have been successfully delivered.

This Section looks at how Merseytravel would monitor and actively manage potential EP Schemes in order to maximise the benefits achieved by implementing an EP Plan and EP Schemes within the LCR as well as ensuring any such EP model achieves each Scheme Objective.

Table 5.13: Potential Benefits of an EP

Benefit achieved through EP Option	Entity receiving a benefit	Further Details
Direct transport benefits, including: • extended hours of operation for routes in the EP schemes; • increased journey quality • improved fares and ticketing interoperability; • increased access to journeys; and • affordability of services.	• Existing users • Additional users resulting from implementing EP Option	Section 3 and Section 10 Economic Case
Environmental benefits, including: • improved air quality; • reduction in noise; and • reduction in greenhouse gases.	• Residents • Commuters / visitors / tourists to the LCR	Section 9 Economic Case
• Economic benefits, including: • increased labour supply via extended operating hours	• Workers • Businesses	Section 8 Economic Case
Wider social benefits, including: • reduced commuting times (for non-bus users); • increased physical activity; • increased journey quality (for non-bus users); and • reduction in accident rates.	• Residents • Commuters / visitors / tourists to the LCR	Section 10 Economic Case

4.1.2.2. Objectives

The Strategic Case sets out the Scheme Objectives at Section 5.3.

4.1.2.3. Benchmarking of Objectives and Benefits

In order to effectively measure whether an implemented EP Scheme fulfils the Scheme Objectives, as well as ensuring benefits are fully maximised, LCRCA would need to ensure that effective benchmarks have been established in order to assess the success of the scheme.

Whilst the benchmarks against which the fulfilment of the Scheme Objectives and level of benefit achieved would need to be established prior to the implementation of an EP Scheme, they would also need to be actively monitored and, where appropriate, be adjusted in order to ensure they are set at the right level, i.e. to reflect any societal changes or emerging trends (for example, the modal shift to working from home).

Criteria identified as important to bus passengers and LCRCA would be incorporated into a scoring metric and weighted; benchmarks would be reviewed by LCRCA on an annual basis.

4.1.2.4. Testing and assessment of scheme

Merseytravel has developed and currently operates a performance monitoring regime for supported services in the LCR to encourage continuous improvements in setting service quality standards and providing service quality for passengers.

The performance monitoring regime currently employed for supported services adds a structured quality dimension to contract management and is scalable under each Delivery Option.

Merseytravel would require a sufficient level of data in order to test whether the Scheme Objectives have been achieved and to determine the wider level of benefit that is being achieved from any EP Scheme. A proportion of this data would be supplied by the Operators running the services by way of self-declarations and Operator returns. However, Merseytravel would also collect data through its contract management system, survey team observations (both on-street and through its IT systems) and through customer feedback. The data would include:

- (a) Operational / service performance:
 - (i) “total lost mileage”;
 - (ii) “late running of mileage”;
 - (iii) route breaches and/or deviations;
 - (iv) driver breaches;
 - (v) punctuality (RTI metric);
 - (vi) reliability (EBUS metric);

- (vii) number of improvement or warning notices issued;
- (viii) driver fraud;
- (b) Customer service:
 - (i) ticket types and information regarding numbers of multi-Operator and single operator tickets issued;
 - (ii) the collected views of passenger and third parties on the merits and demerits of bus services locally and the performance of the LTA and local bus operators;
 - (iii) average journey times for specific routes;
 - (iv) levels of vehicle loading;
 - (v) customer complaints;
 - (vi) average age of Operator fleet and/or vehicles;
 - (vii) vehicle non-compliance;
 - (viii) operational CCTV;
 - (ix) driver training programme compliance;
 - (x) driver standards compliance (e.g. uniform);
 - (xi) cleanliness;
 - (xii) RTI reliability;
 - (xiii) provision of operator route and service information;
- (c) Contract data quality:
 - (i) monthly returns received on time;
 - (ii) contract management system data accuracy;
 - (iii) missing trip data accuracy;
 - (iv) emergency ticket data accuracy;
 - (v) ETM data on time (revenue and commercial serviced open book policy);
 - (vi) responses to complaints / quality of response;
 - (vii) Policies and procedures:
 - (viii) compliance with drug and alcohol policies (including evidence of random testing undertaken);

- (ix) evidence of driver eyesight testing;
- (x) evidence of driver metrics (speed / eco driving);
- (xi) own revenue protection protocols;
- (xii) accident reporting policy;
- (xiii) near-miss reporting policy;
- (xiv) evidence of TravelSafe reporting;
- (xv) satisfactory completion of engineering inspection programme; and
- (xvi) evidence of safeguarding policy / driver DBS assessment.

The Contract Management team would be responsible for ensuring the ongoing collation of the data required and assessing this against the projections and benchmarks set out. Data would be entered into LCRCA's contract management system on a 4-weekly basis and reports on Operator scores (as well updated averages) would be submitted to LCRCA by Operators a quarterly basis based against individual schemes as well as against the overall scheme across the LCR.

Operator performance meetings would be held on a quarterly basis to monitor the moving performance average and discuss Operator plans to improve or mitigate of performance.

4.1.2.5. Responding to underperformance

Where the reporting shows that the Scheme Objectives are not being achieved or that benefits are not being fully realised, Merseytravel may wish to take action under the ambitious EP in order to rectify the underperformance. This would be through changes to the EP Scheme, which depending upon the variation procedure agreed as part of the EP scheme is likely to require the agreement of the Operators under the terms of the scheme.

4.1.2.6. Ongoing engagement

While there is no requirement under the Transport Act for Merseytravel to set out its plans for consultation with bodies who represent users of local services in order to seek out their views on how well the scheme is working, it is Merseytravel's intention to undertake such engagement during the life of the EP scheme.

Merseytravel will have access to information in respect of market views on the EP schemes' performance from the engagement methods described above (i.e. market testing, benchmark modelling etc.) which will provide a base level of engagement with users of the services.

4.1.2.7. Timing and scope of consultations

Under the ambitious EP, Merseytravel will also supplement the ongoing engagement described above with regular, in depth, consultations in order to provide a more holistic view of the EP Schemes. These in-depth consultations will be run at regular intervals in order to assess user views on the successes and weaknesses of the schemes. It is not yet clear the extent to which such consultations will form part of the operator-proposed EP. The results of the consultations will be used to decide whether changes need to be made to the relevant EP Scheme.

4.1.2.8. Consultation parties

Merseytravel will, in the lead up to each consultation process, look at which groups are the most relevant to an EP Scheme to ensure that it engages with the most appropriate and relevant groups existing at the time.

4.1.2.9. Consultation Areas

Ongoing consultations will focus on the same performance indicators and benchmarks devised above as well as utilising a more granular set of criteria in order to build a view of the EP Scheme from an end user view point. This will include consultation on:

- (a) perception of cost effectiveness;
- (b) service provided;
- (c) whether the services increase access across all transport modes;
- (d) whether the scheme is providing VfM; and
- (e) the general view of services within the user's local area.

4.1.2.10. Results and impact of consultation

Once the results of each round of consultation have been received and analysed by the Bus Planning and Development team, these will then form the basis of a report to LCRCA providing an overview of how successfully the EP Scheme is operating, alongside suggestions for improvements to the EP Scheme

in order to address any issues raised during the consultation. LCRCA will review and approve any suggestions from the Bus Planning and Development team. These improvements would be made through negotiating changes to the EP Scheme with the Operators under the scheme but depending upon the variation procedure agreed in the EP scheme any change is likely to require the consent of those Operators.

After decisions have been made as to how to implement any changes following the current consultation, Merseytravel will publish a report on the current consultation highlighting the key findings from the consultation as well as the changes and improvements to be made.

4.2. Performance Management

4.2.1. Introduction

In the event that a decision is made to proceed with Franchising or to make an EP, Merseytravel would have different roles relating to the management of bus services. This Section sets out the tools that Merseytravel has to manage Operator performance under the different Delivery Options.

4.2.2. Performance Management in a Franchising Scheme

The franchise agreements would contain a performance regime with KPIs that the relevant Operator would be measured against. Where Operator performance exceeds the required standards, the Operator shall receive bonus payments. Where Operator performance does not meet requirements, the franchise agreement would contain a performance management regime, ranging from meetings between Merseytravel and the relevant Operator to discuss ways to improve performance, to the implementation and delivery of remedial plan through to termination of the franchise agreement.

The Contract Management Team would be responsible for monitoring service delivery and KPIs against the contract requirements and franchise agreement and spotting early warning signs where an Operator is having difficulties in performing the contract. Where a franchise agreement is terminated the Operations team would be responsible for the replacing the failing Operator. As noted earlier in this Assessment, Merseytravel has experience of letting and managing short term contracts to provide alternative bus

services where an Operator has had to withdraw from the market at short notice and therefore is equipped to manage this function. The risk of finding a suitable replacement operator at short notice could also be mitigated by including provisions requiring franchise Operators to assist with the short term delivery of services where another franchise Operator has been terminated.

4.2.3. Performance Management in an EP Scheme

It is likely that the ambitious EP will contain some limited performance standards and KPIs that will need to be monitored by the Contract Management team. However, the performance regime is unlikely to be linked to a payment mechanism as in the Franchising Option. Whilst a failure to comply with obligations committed by Operators under an EP scheme would give Merseytravel the right to withdraw the non-compliant Operator's service registration, in practice this is drastic option that is only likely to be used in the most severe circumstances. Therefore, Merseytravel's enforcement ability under EP would be lower than under the Franchising Option.

4.3. Network Change

4.3.1. Introduction

In the event that a decision is made to proceed with Franchising or an EP Merseytravel would make a number of changes to the bus network, which are set out below. Merseytravel may also need to vary the bus network, if required, once a Franchising Scheme or EP had been made, to take account of changes in bus usage needs, to support a multi-modal public transport solution in the LCR, or new housing/ industrial developments for example.

4.3.2. Network Changes to the Franchising Scheme

At any point after a Franchising Scheme has been made, Merseytravel (on behalf of LCRCA) may vary the network or routes specified in the scheme by following the formal variation process set out in the Transport Act. Minor variations, such as day-to-day service requirements, can be implemented without use of this statutory process.

For example, if Merseytravel wishes to introduce new services operating on the existing network (as specified in the Franchising Scheme), the franchise contract will provide Merseytravel with the right to include the new service within a particular contract through a clear and unambiguous change mechanism, without this constituting a formal variation to the scheme and having to follow the statutory process. This

means that Merseytravel could, for example, vary the service timetable or introduce an express service on an existing route.

Section 123M of the Transport Act sets out the process that Merseytravel (on behalf of LCRCA) will be required to follow if it wishes to vary the Franchising Scheme once it has been made. Section 123M(6) is clear that the Mayor must take the final decision as to whether to vary the scheme or not.

If it wishes to vary the services under the scheme, Merseytravel (on behalf of LCRCA) must publish a notice stating the date on which the variations are to have effect, and give notice of its decision to a Traffic Commissioner within 14 days of publishing the notice. The variation cannot take effect until six months after the date on which the variation notice was published.

Merseytravel would be required to consult on its proposals and ensure that all local stakeholders (including all Operators, the Passenger's Council and the CMA) and local communities were consulted on the nature of the network or service change. The consultation exercise will ensure that the impacts, benefits and risks associated with the proposed network changes are fully explored and assessed before being implemented. Once Merseytravel had consulted on the proposed variation, it must publish a response document, which sets out the decision on whether or not the variation will be made.

In the event that Merseytravel intends to vary the Franchising Scheme to add routes or services from a new area or areas (for example, bringing a new town within the scope of the franchised network), it would be required to follow the same statutory process when making the scheme (and as set out in Section 123H of the Transport Act).

4.3.3. Network Changes to the EP

In the event that the EP Plan and EP Scheme(s) are made, Section 138K of the Transport Act sets out the process by which Merseytravel (on behalf of LCRCA) and/or the Operators' may subsequently vary either or both. This applies to both the ambitious EP and operator-proposed EP.

Merseytravel and/or the Operators' can only make network changes to the EP Plan where it is satisfied that the EP Plan and associated scheme, as varied, will contribute to the implementation of the policies set out in the related EP Plan (or the revised EP Plan if this is being varied at the same time as the scheme), and Merseytravel's local transport policies.

Merseytravel (on behalf of LCRCA) and/or the Operators' must also be satisfied that the variations will benefit passengers

by improving quality or attractiveness of bus services in the scheme area or reduce or limit traffic congestion, noise or air pollution.

As with network changes to a Franchising Scheme, Merseytravel and/or the Operators' would be required to follow a formal statutory variation process set out in the Transport Act. Section 138K(3) requires the authority to provide notice to Operators, and any other stakeholders that were involved in the preparation of the plan or scheme, of its intention to vary it. Once these stakeholders had been consulted, and the draft variation to the plan and/or scheme had been prepared, Merseytravel (on behalf of LCRCA) and/or the Operators' would be required to undertake a formal consultation exercise, allowing the opportunity for individual Operators to object and air any concerns. The statutory objection process, as set out in the EP Plans and Schemes (Objections) Regulations 2017, would apply here unless the scheme as drafted required the parties to comply with an alternative objection mechanism.

Section 138E of the Transport Act also allows for a bespoke variation mechanism to be incorporated into EP Schemes, which can be used to allow changes or additions to be made more quickly than through the statutory variation procedure and without the need to follow the operator objection mechanism. Such bespoke variation mechanism would need to be agreed when the EP Scheme was made.

The date on which the network change and variation would occur would need to take into account the 70 day rule for changing registrations.

4.4. Network Design

4.4.1. Franchising

Merseytravel has undertaken a detailed review of the network with the objective of establishing a more attractive, efficient and integrated system for Franchising, which optimises revenues, drives demand and improves the customer experience.

Out of this review it has proposed a list of services which LCRCA would franchise in the event that this is the preferred Delivery Option. The list of these routes is set out at Appendix 2. The exact detail of the services will be subject to change throughout the process¹⁸⁵.

Merseytravel would implement a franchised network through

¹⁸⁵ These routes relate to the passenger service routes that are registered with the Traffic Commissioner. The routes appear different to the routes considered as part of the modelling underpinning the Economic Case and Financial Case which is consistent with the manner in which Operators list routes in their management accounts.

sequential rounds, allowing network changes to be made on an area or phase-wide basis. This would reduce any conflict between franchised and non-franchised routes and would minimise disruption to passengers.

To further minimise disruption to passengers, Merseytravel would franchise the whole of the LCR bus network from the point that the first franchised bus services commence, with all non-franchised routes requiring a valid service permit to operate. The non-franchised services would remain commercially operated but the service permit would require participation in, and acceptance of, the LCR's multi-Operator ticketing scheme.

Merseytravel would undertake regular area network reviews to evaluate the links and provision offered by the bus network. Network reviews would be aligned with the renewal of contracts to ensure best practice for making significant changes.

Significant service changes, such as major revisions to routes or timetables, would be consulted on as proposals, with feedback evaluated before any final decision was taken with regard to implementation.

Unless required on an emergency or short term basis, all service changes (including timetable changes to address requests or reliability issues) would be implemented on four pre-agreed dates each year to allow network stability and enable passenger confidence.

Cross-boundary services that are considered integral to the LCR bus network have been included in Merseytravel's network design proposals. Merseytravel would, when tendering, include these cross-boundary services as individual contracts operating beyond the LCR boundary to the nearest suitable interchange point. This would allow commercial Operators to submit alternative proposals (including acceptance of permitting requirements) during the tendering process.

For cross-boundary services that are currently funded by the local authorities, discussions would take place ahead of the procurement process to agree whether such services should be included within the Franchising Scheme or continue to operate with a service permit.

4.4.2.EP Option

Merseytravel has undertaken a detailed review of the network with the objective of establishing a more efficient and integrated set of services operating along key transport

corridors in the LCR. These are designed to support and increase demand, provide multi-Operator ticketing and improve the customer experience.

Out of this review it has proposed a list of services which LCRCA would include in an EP Plan and set of EP Scheme(s) in the event that this is the preferred Delivery Option and the ambitious EP proposals are adopted.

5. Stakeholder Engagement

5.1. Introduction

Each of the Delivery Options would require Merseytravel (on behalf of LCRCA) to identify relevant stakeholders and to engage in consultations or discussions with them. The Transport Act specifies for each option the statutory engagement that must be undertaken if LCRCA selects that option as its chosen Delivery Option.

However, this statutory engagement is primarily for the establishing of the Franchising Scheme or EP Plan and Scheme(s) or making significant changes to them. There is no restriction on Merseytravel carrying out additional engagement with stakeholders and it is expected that Merseytravel will do so as it continues to evaluate its progress in delivering the VfB.

Where Merseytravel decides that, after a period of time since its introduction, it wishes to make significant changes to parts of its chosen Delivery Option to reflect experience that it gains through the operation of that Delivery Option it may do so. However, prior to that change taking place, the Transport Act specifies for each option the relevant statutory engagement that LCRCA is required to undertake.

The Transport Act provides a significant level of freedom for Merseytravel to identify all of the parties that it should be engaging with. Some are relatively straightforward, such as the Operators and neighbouring local authorities, but Merseytravel is also required to make a reasoned decision as to who it should extend its engagement to.

5.2. Franchising Option

5.2.1. Statutory requirements – neighbouring transport authorities

Section 123B(3) of the Transport Act sets out the factors which an authority must consider as part of its assessment of a proposed Franchising Scheme. This includes:

- (a) whether, and the extent to which, the proposed Franchising Scheme would contribute to the implementation of the local transport plans and policies of neighbouring local transport authorities under Section 108(1)(a) of the Transport Act (being those for the promotion and encouragement of safe, integrated, efficient and economic transport to, from and within their authority area); and
- (b) the consideration of any other policies affecting local services that neighbouring local transport authorities have adopted and published.

In accordance with the Franchising Guidance, it is recommended that the authority proactively engages with neighbouring authorities to ensure that it fully understands those Policy Objectives and the impacts that the proposed options could have on bus services and transport in their areas.

The LCR borders four neighbouring transport authorities being Greater Manchester Combined Authority, Lancashire County Council, Warrington Unitary Authority, and Cheshire West and Chester Unitary Authority. Each authority has transport plans and transport policies for its constituent area and takes its own approach to setting objectives.

Merseytravel has met with all neighbouring transport authorities and has undertaken a detailed analysis of all policies of the neighbouring authorities as set out in their local transport plans or related policy documents to assess the extent to which they may be affected by each of the Delivery Options and the extent to which each of the Delivery Options would help in the delivery of those Policy Objectives.

5.2.2. Statutory requirements – other parties

In accordance with paragraphs 1.75 and 1.76 of the Franchising Guidance, Merseytravel has engaged with a range of groups in society (including the Operators and their customers) in order to understand the potential effects of franchising on the LCR. This has been managed by the bus management team and consideration given to the responses received.

Section 123E of the Transport Act sets out the requirements for consultation on its Franchising Option. Where the Franchising Option is selected, Merseytravel will establish a team of suitably qualified individuals, including external consultant experts, to produce the Franchising Scheme and to manage the consultation exercise. It will collate the results and comments which are received on the Franchising Scheme and produce the draft scheme for publication by LCRCA.

5.2.3. Service permits

Alongside the consultation on the Franchising Scheme, Merseytravel would need to undertake a consultation on the Service Permit Regime. Paragraph 1.122 of the Franchising Guidance allows Merseytravel to consult with “any other people or organisations that [it] thinks fit” in addition to the consultees that are specified.

As the Service Permit Regime includes cross-boundary services, the consultation process will need to extend to relevant parties in an area outside of the LCR, to include Operators running cross-boundary services and the local

authorities within whose area those cross-boundary service operate.

Merseytravel would establish a team to deal with service permits within its Bus Planning and Development team in order to manage the drafting of the consultation and the collating of the results and comments which are received on the proposed Service Permit Regime. The Contract Management team and Bus Planning and Development team would be responsible for proposing and implementing the Service Permit Regime as well as managing any subsequent consultation in the event of proposed changes to service permits.

5.3. EP Option

Section 3.10 of the EP Guidance recommends that for a city region there should be engagement with the wider stakeholder community as well as with the operators who are expected to become parties to the EP schemes. A key part of Merseytravel's implementation programme for its EP Option is the establishment of an EP Engagement Board, due to the size and complexity of the EP Option. Merseytravel would establish a team that would be responsible for engagement with the wider stakeholder community as part of the EP Engagement Board as well as managing the input from all Operators in the LCR (whether they are engaged in the process or not).

The ongoing engagement will be monitored by the Strategic Projects and Bus Service Improvement Programme team to ensure that progress on the EP Plan and EP Schemes is continuing. It is expected that the engagement will be a continuous process leading up to the agreement of the EP Schemes and will include undertaking and managing consultations and surveys with passengers in order to create EP Schemes which meet passenger requirements alongside the overall VfB.

6. Risk and Risk Management

6.1. Risk Management

This Section outlines the key risks associated with the franchising and EP models and the arrangements that Merseytravel will put in place to manage and mitigate such risks.

The Franchising risk register, which is based on Merseytravel's standard form risk register, is set out at Appendix 1.

The Franchising risk register identifies the relevant risks and the likely consequences of each risk materialising. It also provides an estimate of the likelihood of each risk arising, the impact of each risk and the actions that have, or will, be taken by Merseytravel to mitigate and manage each risk.

The principal implementation and transition risks for a Franchising Option are set out in Table 5.14 below.

The principal implementation and transition risks for an EP Option are set out in Table 5.15 below.

6.2. Approach to, and Implementation of, Risk Management

Risk management is a fundamental part of any scheme delivery, managing the negative impacts of the uncertainty that is inherent in any project. It is also about recognising and capitalising upon opportunities arising from uncertainty. In developing the Assessment, Merseytravel has identified the risks associated with the management and delivery of the Assessment and the Delivery Options in the form of a risk register. The Risk Register has been maintained and tracked through the risk management process to ensure all probable risks are identified and understood, as well as setting out a clear process for interventions and escalation in the management of the risk.

The Project Delivery team were empowered to allocate resources to mitigate risks as part of the organisation's governance framework.

The Project Delivery team attended the first stage Risk Workshop to identify risks and mitigation measures associated with delivery of the Delivery Options and assess their likely impact in terms of both time and cost.

The facilitation of the risk workshops and has been undertaken by the Internal Audit team. The Project Delivery Team have day-to-day responsibility for managing the risks identified in the register and escalating any issues to the operational Project Board.

The register is structured around the 'risk categories' identified in the Commercial Case.

Table 5.14: Principal Implementation and Transition Risks for Franchising

Implementation risk

	Risk Description	Consequences of risk materialising	Mitigation
1	Insufficient Merseytravel staff or capability to implement change in delivery structure. Failure to recruit an adequate number of additional people or people with the requisite skills to manage transition and/or staffing costs are higher than anticipated.	Delay to implementation, additional costs, potentially may lead to transition challenges if delays in introducing new services.	• Hired Bus Strategy Programme Manager and Bus Devolution Project Support Officer. • Implementation Programme allows for recruitment of staff to commence well in advance of resource being required. • List of potential candidates obtained from other recruitment exercises undertaken within LCRCA • Additional budget allowed for external consultants where resource is not available within Merseytravel.
2	The process is too slow in responding to new opportunities or changes in circumstances	Opportunities to reduce subsidy requirement not taken, delivery of network becomes less affordable.	• Introduction of new commercial bus team who will have the requisite experience in delivering bus services. • Procurement process for each Round separates the procurement of Lot As and the smaller Lots, allowing for the procurement process to be refined within a Round. Furthermore, the gap between the commencement of the procurement of franchise services for each Round is at least 6 months to allow the procurement process to be updated with changing circumstances.

	Risk Description	Consequences of risk materialising	Mitigation
3	Poor communication strategy, both with operators and customers, at the start of, and during, transition period. Risk of the public misperceiving that the entire Franchising Scheme will be fully operational during the transition period.	Public confusion surrounding Franchising, and what is being implemented and when, could cause reputational damage to Merseytravel, disruption to services, and resulting loss of revenue.	• Regular updates from the Merseytravel bus team to relevant LCRCA politicians and to minimise the risk of high expectations on what Franchising can achieve by when and associated timescales for implementation. • A publicity and engagement plan has been developed. This sets out the engagement required with stakeholders and local MPs as well as with the public to allow customers to see any planned changes in advance, and provide a mechanism to ask questions. LCRCA would take early control of customer contact to ensure that customer feedback and complaints are addressed through a single point of contact. • Regular updates, via various media channels on the status and progress on the roll out of Franchising would be made to customers, the general public and all other stakeholders.
4	Poor management of the transition process.	A drop in passenger numbers / an adverse impact on increasing passenger numbers and reputational damage. Negotiations with Operators may need to be reopened, leading to a delay in delivering the proposed model.	• Development of Implementation Plan, highlighting critical path items. • Development of a Plan B for actions that require the agreement of a third party, such as depot. • Scenario testing of Delivery Options to confirm that the Franchising Option is viable across a range of future patronage numbers.
5	Media campaign and/or lobbying from incumbents against change.	Loss of political momentum, potential threat to programme	• Engagement with incumbent Operators throughout assessment process so fully briefed.

	Risk Description	Consequences of risk materialising	Mitigation
6	Existing Operators do not accept risk associated with franchising and simply withdraw from the area.	Loss of bus services before franchises can be implemented. Passengers have difficulty getting to work / school / shops, etc. Additional costs to replace services in the short term, potential for reputational damage; short term service quality reductions.	• Lotting strategy developed to mitigate this risk (with smaller lots being tendered last). • Early engagement with local politicians to provide clarity on the benefits of the Franchising Option. • Early engagement with incumbent Operators during transition, so that incumbents have the ability to plan for the change in Delivery Option. • Extension of deregistration period permitted under the Transport Act 2000. • Where incumbent Operators withdraw from the area Merseytravel would: - liaise with incumbent Operators to step-in and run services commercially - prior to the commencement of the Franchising Scheme, let short-term supported service contracts - following the commencement of the Franchising Scheme, let franchise contracts - no further action as service not replaced • Contingency sum included within Economic Case and Financial Case to cover this risk.
7	The full extent and ambition of the bus reform programme (ZEV, Owing Depots etc.) is not captured in the market engagement and is therefore no real feedback is obtained from the Operators.	Any proposed Franchising Options will be 'untested' in the market. The lotting strategy could be compromised as it does not meet the expectations of the Operators. Any opportunity to engage on the benefits and operation of ZEV is reduced	• Market engagement with incumbent Operators and new entrants undertaken during assessment development and information used to shape the Assessment. • Potential for further market engagement with Operators and stakeholders to be undertaken in advance of franchise contract procurement commencing to ensure up to date market information obtained. • Staggered procurement and commencement of franchise services for different Rounds providing opportunities for feedback, learning and updating.

	Risk Description	Consequences of risk materialising	Mitigation
8	Incumbent Operator suffers financial difficulties and ceases to operate services before franchised services are due to begin. Incumbent Operator is unsuccessful in its bid for franchises and: (i) ceases to operate services which will be franchised to another operator; and/or (ii) acts in an uncooperative manner leading to disruption of franchise implementation. Operators implement changes to their service offerings during the transitional period to maximise profits (for example, fare increases through fear of not running any routes post-transition).	Loss of bus services before franchises can be implemented. Passengers have difficulty getting to work / school / shops, etc. Reputational damage resulting in a potential reduction in usage and revenue post-transition.	• Extension of deregistration period permitted under the Transport Act 2000. • Where incumbent Operators withdraw from the area Merseytravel would: - liaise with incumbent Operators to step-in and run services commercially - prior to the commencement of the Franchising scheme, let short-term supported service contracts - following the commencement of the Franchising scheme, let franchise contracts - no further action as service not replaced • Implementation Plan allows for negotiations with incumbent Operators at the start of the transition process to understand and mitigate transition risk. Merseytravel to continue to work with Operators, Stakeholders and the Traffic Commissioner and develop contingency plans to mitigate the chance of this risk materialising. • Lotting strategy has been designed to minimise the risk of incumbent cessation of services (see Section 4.4.2 of the Commercial Case). LCRCA would make temporary arrangements with the Operators who had been successful in earlier rounds to ensure continuity of service until formal implementation can be concluded. • Risk allowance included within Economic Case and Financial Case to cover this risk. • Further consultation with Operators to be undertaken prior to implementing any the Franchising Scheme, to understand their views on the proposed approach. • Depot and fleet strategy seeks to engage with, but does not wholly rely on, the availability of existing assets (depot or fleet) to support the Franchising Scheme.

	Risk Description	Consequences of risk materialising	Mitigation
9	Implementation more complex than envisaged, such as procurement process, delivery of new assets (e.g. depots, fleet), negotiations with incumbent Operators, challenge risk.	Delay to implementation, additional costs, potentially may lead to transition challenges if delays in introducing new services.	• Development of Implementation Programme, highlighting critical path items. • Development of a Plan B for actions that require the agreement of a third party, such as depot. • Resourcing estimates undertaken and introduction of new commercial bus team who will have the requisite experience in delivering bus services. • Procurement process for each Round separates the procurement of Lot As and the smaller Lots, allowing for the procurement process to be refined within a Round. Furthermore, the gap between the commencement of the procurement of franchise services for each Round is at least 6 months to allow the procurement process to be updated with changing circumstances. • Procurement framework identified to procure fleet with suitable incentives to mitigate delays around fleet procurement. • Depot location feasibility study completed. • Risk allowance included within Economic Case and Financial Case to cover this risk. • Knowledge and lessons learnt from HyBus deployed across projects.

	Risk Description	Consequences of risk materialising	Mitigation
10	Service Permit Scheme consultation out of step with franchise consultation or delayed so that service permits are not available when franchises is intended to begin, preventing non-franchised and cross-boundary services from operating at the start of franchised operations. Cross-boundary service providers do not accept terms for service permits (including permit costs) and cease to operate services as they have no permit to operate.	Inability to launch first Rounds of Franchising to meet initial timetable, delaying the start of franchise operations until relevant service permits are available. Loss of bus services which require service permits. Passengers have difficulty getting to work / school / shops, etc.	• Implementation Plan allows for engagement and consultation on service permit regime to occur early in implementation process to maximise the time available for Operators to comment on and shape the Service Permits and thereafter to obtain service permits. Franchising allows for additional roles to be responsible for the Service Permits Scheme. • Merseytravel to actively engage with incumbent Operators operating services within the LCR (including cross-boundary services) to ensure all local services within the Franchising Scheme that will not be franchised services, will be operated under permit. • Franchise contract mobilisation period of at least 6 months will provide Merseytravel with flexibility and certainty to ensure additional service permits are issued if the service permit scheme and franchise contracts become out of step. • Recruitment of additional staff into the Bus Planning and Development team to assist with development and issuing of permits

Revenue risk

	Risk Description	Consequences of risk materialising	Mitigation
1	Financial risk that approach to fares and ticketing negatively affect revenue. Operating costs are higher than anticipated.	Funding gap in Merseytravel, leading to needing to request more funding from LCRCA or cut services.	• Nominal margin introduced to allow modelling of ticket revenue. Model allows flexibility to assess varying revenue scenarios. • Market Engagement has informed fares and ticketing to ensure realistic assumptions have been used. • As set out in Section 5.6 of the Financial Case, as a Mayoral Combined Authority, LCRCA has a variety of funding sources available which could be utilised to mitigate any gap in funding. • The Franchise contracts will include a Change mechanism which will enable services to be varied and costs reduced if required.
2	Cost of new clean bus fleet exceed Merseytravel's predictions.	Funding gap in Merseytravel, leading to needing to request more funding from LCRCA or cut services. Diesel fleet may be required which would detract from the VfB and ethos perpetuated by Hydrogen Bus.	• As set out in Sections 5.5 and 5.6 of the Financial Case, as a Mayoral Combined Authority, LCRCA has a variety of funding sources available which could be utilised to mitigate any gap in funding. The level of the funding and the urgency over the deployment will to a large extent dictate which of the available funding options are suitable in the circumstances. For example, short term funding gaps could be addressed through additional borrowing. Whereas, a longer term funding gap could be dealt with via an additional council tax precept, or an increase to the Mersey Tunnel Tolls. • Risk allowance included within Economic Case and Financial Case to cover this risk. • Procurement process for franchise contracts allows flexibility in ZEV roll out.

Procurement risk

	Risk Description	Consequences of risk materialising	Mitigation
1	Insufficient bidders participate to encourage competition. Bidders prices are higher than anticipated. Inexperience of bidders or promoter in exercise of the required scale affects quality of bids or determination. Risk of legal challenge.	Procurement cancelled or delayed; may need to restart or switch approach. Bids received are more expensive than modelled, leading to a funding deficit. Adverse financial and reputational impacts resulting from defending a legal challenge.	- Merseytravel has undertaken Market Engagement during the development of this Assessment to ensure that the Franchising scheme is attractive to the market. During transition, Merseytravel will continue to engage with the market to ensure that the relevant franchise contracts are attractive to the market and therefore will receive sufficient bids. - Procurement process for each Round separates the procurement of Lot As and the smaller Lots, allowing for the procurement process to be refined within a Round to ensure that the franchise contracts to be procured remain appealing to the market. Furthermore, the gap between the commencement of the procurement of franchise services for each Round is at least 6 months to allow the procurement process and relevant Franchise contracts to be updated with changing circumstances. - Introduction of a team to undertake the procurement that has the requisite experience of running similarly complex procurements. need to ensure that staff are employed earlier in the process to embed within the team and practice tender evaluations and dummy awards on old tender rounds. - Utilisation of a DPS under the UCR to ensure that bidders are suitably experienced to deliver the services required for the relevant Lot.

	Risk Description	Consequences of risk materialising	Mitigation
2	Bidder unable to meet statutory requirement to provide a “broadly comparable” pension scheme, particularly in relation to defined benefit pensions schemes.	Reduced competition for Franchise contracts resulting increased Franchise payments. Reduced number of new entrants bidding for Franchise contracts. Disruption in resourcing and transfer of staff in the event of a new franchise award.	- Merseytravel to undertake further market engagement during transition to understand whether providing a broadly comparable defined benefit pension scheme would be a barrier to an operator bidding for a Franchise contract. - Procurement process designed to allow the flexibility to amend services within a Lot to reduce defined benefit broadly comparable pension scheme risk.

Depots

	Risk Description	Consequences of risk materialising	Mitigation
1	Incumbent advantages in depot ownership, access to skilled workforce, etc. minimises ability of new market entrants to win tenders for routes, lack of competition.	Lack of incentive for incumbent Operators to make compelling bids and drive transformative change sought by Merseytravel (potential implications for VfM and value for passengers). Potential knock on effect for other modes of transport.	- Market engagement undertaken. - Depot strategy has been produced as set out in Section 4.3.12 of the Commercial Case with two viable options for the delivery of depots. - Development of Implementation Plan, highlighting critical path items, with depot delivery programme early in the programme. - Potential to extend mobilisation period for relevant Franchise contracts where depot delivery is more challenging.

Operating risk

	Risk Description	Consequences of risk materialising	Mitigation
1	Poorly calibrated performance regime. Operators are no longer incentivised to maximise revenue.	Delivery of network requires more subsidy than previously thought. Service quality is reduced leading to reputational damage.	- LCRCA will develop the performance regime based on market engagement with Operators and best practice commercial principles. - Performance regime to be designed to reward good performance, such as punctuality, and revenue recovery, rather than penalise poor performance.
2	Franchise contracts are not managed appropriately.	Increased risk of contractual disputes and poor VfM for LCRCA	LCRCA has a detailed management strategy, which sets out the arrangements for contract management and how disputes will be resolved. Note that LCRCA already has contract management arrangements in place for existing supported service contracts and in relation to Merseyrail.
3	Fares and ticketing policy introduced have a negative effect on revenue.	Delivery of network may require more subsidy than previously thought, which has a knock-on effect on integration with other transport modes.	- Ticketing work streams have been set up. Ticketing framework in place. - Evidence based decision making for setting fares. - Future policy-making on fares should be informed by robust evidence which takes into account potential wider effects and impacts. - Governance process in place for decision making process regarding costs and revenue balance.

Table 5.15: Principal Implementation and Transition Risks for EP

Implementation risk

	Risk Description	Consequences of risk materialising	Mitigation
1	Insufficient Merseytravel staff or capability to implement change in delivery structure. Failure to recruit an adequate number of additional people to manage transition and/or staffing costs are higher than anticipated.	Delay to implementation, additional costs, potentially may lead to transition challenges if delays in introducing new services.	• Hired Bus Strategy Programme Manager and Bus Devolution Project Support Officer. • Implementation Programme allows for recruitment of staff to commence well in advance of resource being required. • Additional budget allowed for external consultants where resources is not available within Merseytravel.
2	The process is too slow in responding to new opportunities or changes in circumstances	More routes become commercially unviable and Operators require financial support (or increases to existing financial support) for them to continue to be operated. Delivery of network becomes less affordable.	• Introduction of new commercial bus team who will have the requisite experience in delivering bus services. • Engagement with incumbent Operators and use of EP Engagement Board to ensure fully briefed.
3	Poor communication strategy, both with Operators and customers, at the start of, and during, transition period. Risk that EP has already been perceived to have commenced during the transition period.	Public confusion surrounding EP, and what is being implemented and when, could cause reputational damage to Merseytravel and Operators and loss of confidence by public in the multi-Operator ticketing offered under EP.	• Regular updates from the Merseytravel bus team to relevant LCRCA politicians and to minimise the risk of high expectations on what EP can achieve by when and associated timescales for implementation. • A publicity and engagement plan has been developed. This sets out the engagement required with stakeholders and local MP as well as with the public to allow customers to see any planned changes in advance, and provide a mechanism to ask questions. • Regular updates, via various media channels on the status and progress on the implementation of EP would be made to customers, the general public and all other stakeholders.

	Risk Description	Consequences of risk materialising	Mitigation
4	Poor management of the transition process	A drop in passenger numbers and reputational damage. Negotiations with Operators may need to be reopened, leading to a delay in delivering the proposed model.	• Development of Implementation Plan, highlighting critical path items. • Development of a Plan B for actions that require the agreement of a third party, such as highways works.
5	Media campaign and/or lobbying from incumbent Operators / districts against form of EP proposed by Merseytravel, particularly in respect of financial commitments required from Operators / districts to support the EP.	Loss of political momentum, potential threat to programme	• Engagement with incumbent Operators and districts throughout assessment process and use of EP Engagement Board so fully briefed. • Obtain public statements from Operators and districts confirming commitments to specific aspects of EP proposal
6	Incumbent Operators do not accept operator obligations associated with an ambitious EP and simply use the objection rights to prevent the ambitious EP being implemented.	Inability of Merseytravel to make the EP that it requires to fully meet the VfB. A sub-optimal EP would be agreed in order for Merseytravel to receive government funding associated with the BSIP. Passengers frustrated by delay in delivery of an EP and lose confidence in Merseytravel's ability to deliver the VfB	• Early engagement with local politicians to provide clarity on the benefits of the EP Option. • Early engagement with incumbent Operators during transition, so that incumbents have the ability to plan for the increase in their obligations.

	Risk Description	Consequences of risk materialising	Mitigation
7	Incumbent Operators decide not to participate in an EP Scheme	Inability of Merseytravel to make the relevant EP Scheme fully meet the VfB. Loss of bus services before EP can be implemented. Passengers have difficulty getting to work / school / shops, etc.	• Where an incumbent operator declines to participate and cannot operate the specified services: - liaise with incumbent Operators to step-in and run service(s) commercially; - let short-term supported service contracts if no operator will run service on a commercial basis but service still required from public service perspective; - take no further action if decided that service does not need to be replaced. • Merseytravel to continue to work with Operators, Stakeholders and the Traffic Commissioner and develop contingency plans to mitigate the chance of this risk materialising.
8	The full extent and ambition of the bus reform programme (ZEV, improvements to highway infrastructure, etc.) is not captured in the market engagement and is therefore no real feedback is obtained from the Operators.	Operators openly hostile to aspects of the EP, particularly those which require operators to commit additional funding to support service reforms. Any opportunity to engage on the benefits and operation of ZEV is reduced	• Market engagement with incumbent Operators and new entrants undertaken during assessment development and information used to shape the Assessment. • Potential for further market engagement with Operators and stakeholders to be undertaken in advance of decision on EP Option to ensure up to date Operator position obtained. • Obtain public statements from Operators confirming commitment to specific aspects of EP proposal.

	Risk Description	Consequences of risk materialising	Mitigation
9	Existing operator suffers financial difficulties and ceases to operate services before EP services are due to begin.	Loss of bus services before EP can be implemented. Passengers have difficulty getting to work / school / shops, etc.	• Where incumbent Operators withdraw from the area Merseytravel would: - liaise with incumbent Operators to step-in and run services commercially; - let short-term supported service contracts if no operator will run service on a commercial basis but service still required from public service perspective; - take no further action if decided that service does not need to be replaced. • Merseytravel to continue to work with Operators, Stakeholders and the Traffic Commissioner and develop contingency plans to mitigate the chance of this risk materialising.
10	Operators implement changes to their service offerings during the transitional period to maximise profits (for example, fare increases to get greater support payments for a lower cost multi-Operator ticket provided under the EP).	Unexpected additional costs for Merseytravel which affect the overall financial viability of the EP Option. Reputational damage resulting in a potential reduction in usage and revenue post-transition.	• Introduction of new commercial bus team who will have the requisite experience in delivering bus services. • Engagement with incumbent Operators and use of EP Engagement Board to ensure fully briefed. • Obtain public statements from Operators confirming commitment to specific aspects of EP proposal.

Operating risk

	Risk Description	Consequences of risk materialising	Mitigation
1	Operators are not accepting other operators' tickets on their services and requiring new tickets to be purchased.	Passengers paying more than expected cease to have confidence in the EP Scheme. Merseytravel's reputation damaged.	- Regular meetings with Operators to help ensure operator commitments are met. - Enforcement of contractual Obligations to accept other operators' tickets.
2	Subsidy is not sufficiently controlled, for example as a result of a lack of resources	Delivery of network requires more subsidy than previously thought.	Use of commercial bus team who will have the requisite experience in delivering bus services and monitoring relevant subsidy/support payments.
3	Operators become unable to comply with the specifications within the EP (e.g. delays in manufacturing new type of bus).	Lead to breach of EP obligations. Service quality drops.	- Regular engagement with Operators to flag upcoming issues and take actions to manage consequences. - Ability to vary requirements in EP Scheme (particularly if all Operators have similar issues).
4	Insufficient grant funding from DfT under the BSIP and/or other funding schemes means Merseytravel is unable to fund its obligations under the EP.	Network upgrading, etc is unable to be provided, having a knock-on effect on the performance (and revenues) of the Operators. Operators bring a legal action against Merseytravel for specific performance of its obligations under the EP. Potential for reputational damage	- Reduced / removal of funding is expected to occur on a national basis and would be challenged by the Operators along with other local transport authorities. - There is a current legal obligation to fund BSOG mileage (although the basis of BSOG is subject to a DfT-led review).
5	Lack of consistency between EP Scheme does not incentivise Operators to incrementally improve bus offer on all routes, instead focussing only on those which give the best financial gain for the Operators.	LCR bus offering not keeping up with other areas, opportunities to reduce subsidy not taken, facilities which the operator would have introduced anyway becomes 'charged' to LCRCA in order to maintain consistency of bus services in the LCR.	- When negotiating EP Schemes try to ensure consistency between all schemes. - Monitor operation of EP Schemes to try and avoid Operators "gaming" where they focus their investments. - Regular meetings with Operators to help manage consistency in delivery between EP Schemes.

	Risk Description	Consequences of risk materialising	Mitigation
6	Operators do not provide commitment required to deliver improvements in the bus network or facilities.	Investment in bus stations, priority measures etc. is delayed or lost because Operators will not commit to using it (or contribute towards it)	• Regular meetings with Operators to help ensure operator commitments are met. • Ability to remove operator from EP Scheme if non-compliance of sufficient level – but consequences of loss of services.
7	Disruptive travel technologies change the market for bus travel.	Operators cannot agree on required changes to EP Scheme(s) and market share is lost.	• Engagement with Operators to share knowledge and propose solutions. • Merseytravel to engage with provider of disruptive travel technology to see how systems can operate in conjunction with EP operations rather than acting against them.
8	Operators do not comply with their contractual obligations under the EP (or act outside the remit of the EP).	Increased cost and time incurred in managing contractual disputes. Potential loss of service performance and reputational damage. Potential loss of services if an operator needs to be removed from an EP Scheme due to continued breaches.	• Regular meetings with Operators to help prevent the EP from becoming ineffectual. • Enforcement of contractual obligations with the ultimate sanction of ejecting the non-compliant operator from the EP Scheme. • Engagement with other Operators to take over the routes that become available if fully commercial services. • Procure supported services to operate route(s) if no operator considers such service is commercially viable.
9	Systems changes and upgrades (such as for multi-Operator ticketing) do not operate as planned during the transition period, or that the capability of current systems are not adequate to support new ways of working.	Increased costs and a potential delay to implementing parts of the EP.	• Regular meetings with the Operators to understand issues and to help implement short term solutions while a long term solution is found. • Support relevant publicity to explain reasons for delay to passengers.

	Risk Description	Consequences of risk materialising	Mitigation
10	Existing Operator suffers financial difficulties and ceases to operate services.	Loss of bus services. Passengers have difficulty getting to work / school / shops, etc. Ability to meet passenger demand and grow passenger numbers impacted. Dented public confidence in bus services.	• Where incumbent Operators withdraw from the area Merseytravel would: - liaise with incumbent Operators to step-in and run services commercially; - let short-term supported service contracts if no Operator will run service on a commercial basis but service still required from public service perspective; - take no further action if decided that service does not need to be replaced. • Merseytravel to continue to work with Operators, Stakeholders and the Traffic Commissioner and develop contingency plans to mitigate the chance of this risk materialising.

7. *Programme Management and Governance*

7.1. Programme Management

7.1.1. Introduction

It is essential that a Franchising Scheme or EP is carefully governed to ensure that stakeholder support is retained and the relevant benefits are realised. This Section sets out how Merseytravel would manage the governance of either a Franchising Scheme or an EP.

Merseytravel follows a standard approach to project management and project assurance as set out in its PMO Handbook. The PMO Handbook outlines the various roles and functions within the LCRCA PMO, including its approach to benefits and risk management and project assurance, and shows how these elements coexist and work collaboratively with the other departments in and around LCRCA and Merseytravel. The PMO Handbook follows the project management methodology of the Association for Project Management.

The PMO Handbook describes the framework within which LCRCA operates and the processes and toolkits in place to ensure consistency of approach and deliverability of high quality reporting on behalf of LCRCA. This framework would be tailored to align with the preferred Delivery Option to ensure robust controls are in place for managing key identified areas and risks which would pose significant challenges in the delivery of the programme.

7.1.2. Role and Purpose of the PMO

LCRCA's PMO is the conduit through which individual project managers can communicate with LCRCA. It provides a strategically aligned and co-ordinated approach to project delivery and facilitates an exchange of project performance information, which then feeds into the decision making processes.

As outlined in this Assessment, the transition to Franchising would require the structured co-ordination of many different business functions and interconnected activities, and it is therefore vital that the delivery programme is prudently managed to ensure it achieves all required milestones, timescales and budget constraints. This would provide independent assurance of the preferred Delivery Option's health before and during implementation.

The PMO would be responsible for performing the following functions in delivery of the preferred bus reform model:

- (a) ensuring Merseytravel delivers all expected outputs and outcomes on time and on budget;
- (b) providing a framework to ensure a standardised approach across all different work streams and phases of implementation;
- (c) providing constructive commentary on Merseytravel's delivery of the programme; and
- (d) providing monthly reporting on project activity and performance to the PDCPG, highlighting project progress (milestone tracking), financial performance, dependencies, key delivery risks, issues and other KPIs.

As LCRCA's delivery agent for transport projects, the PMO framework has been used by Merseytravel successfully on a number of schemes, including the Sustainable Transport Enhancements Package programme (see Section 2.5).

7.1.3. Project Assurance

Merseytravel's Project Assurance Framework (as set out in the PMO Handbook) is the primary means by which quality assurance would be delivered across the implementation of the preferred Delivery Option. This framework provides a structure to ensure that the key strategic priorities and funding would be managed robustly and systematically, and provides LCRCA with an unfettered perspective on areas of concern and the actions to be taken to address them.

It aims to:

- (a) provide a standard, structured set of rules which govern LCRCA's approach to project management;
- (b) articulate project processes, documents and templates; and
- (c) allow an appropriate level of assurance and control using a risk based approach, without placing unnecessary administrative burden on individual project managers or LCRCA PMO staff.

The project assurance activities undertaken by Merseytravel give clear visibility of project risks and strengths and help to:

- (d) clarify and assess the accuracy and relevance of scope;
- (e) validate and communicate project progress and risks;
- (f) evaluate and quantify project processes against benchmarks; and
- (g) ensure project accountability and stakeholder management.

The framework would be adapted to reflect the requirements of the preferred Delivery Option to ensure that robust controls are in place for managing any key risks that could jeopardise delivery of the programme.

7.2. Governance

7.2.1. Introduction

Strong and robust governance is a key requirement for driving efficiency and improvement in Merseytravel's processes, preserving stakeholder confidence and ensuring that it is well placed to respond to an ever-changing external environment. This Section describes the governance arrangements that Merseytravel has applied under the Assessment to date and the establishment of future governance arrangements that would be applied to Franchising or EP both during and after transition.

7.2.2. Governance for the Assessment

Merseytravel has a clearly defined governance framework under which decisions regarding the development of the Assessment have been made and managed effectively.

Merseytravel has a primary project team, which, together with specialist advisors, has led the development of the Assessment and the detailed transformational plans for each Delivery Option.

The project team has been supported by a Steering Group, which has overseen and contributed to the programme development and confirmed approaches of the project team. The Steering Group has led on communications with stakeholders and update briefings with senior officers and LCRCA.

LCRCA's Project Board governs and oversees delivery of the Assessment, meets on a monthly basis and is collectively responsible for:

- (a) owning and maintaining the vision for the bus reform project on behalf of LCRCA;
- (b) overall accountability for project delivery and risk management;
- (c) agreeing the project scope and ensuring this it is managed throughout the lifecycle of the bus reform project;
- (d) responsibility for ensuring that the Assessment delivers an affordable solution, with available resources;

- (e) providing leadership and direction of the project workstreams to enable delivery and realisation of benefits;
- (f) co-ordinating wider organisational processes which need to be adhered to, to support progression of project activities in line with wider organisational governance requirements and policy expectations;
- (g) providing assurance, acceptance and approval of project deliverables;
- (h) provision and allocation of skills and resources to deliver project activities and their benefits;
- (i) maintaining the strategic relevance of the project, considering business and environmental changes;
- (j) acting as an ambassador and contributing generally to the effective progression of the project aims and objectives;
- (k) ensure the reporting schedule to Merseytravel and LCRCA is maintained and determine what additional issues should be presented; and
- (l) scrutinise project expenditure, providing approval to spend within the budget envelope provided by LCRCA and the delegated approvals of individual officers of the Operational Board, supporting referral to Merseytravel for authority where necessary.

The key roles across the Project Board are:

- (a) **Project Sponsor** (also known as Owner or Senior Responsible Officer, SRO): The key decision maker and takes overall responsibility and accountability for the project;
- (b) **Project Lead:** Devolved responsibility as lead Subject Matter Expert (SME) to act on behalf of the SRO;
- (c) **Project Manager:** Has the authority to run the project on a 'day-to-day' basis on behalf of the Project Board within the pre-agreed constraints laid down by them, with the objective of achieving the benefits defined in the Assessment;
- (d) **Project Stakeholders:** Senior Project Stakeholders drawn from relevant functions across LCRCA and act as both the suppliers and customer/recipients of the project. They have the delegated authority to make decisions on behalf of their departmental area/organisation/group they represent, including allocation of resources to meet project deliverables;

- (e) **Project Assurance:** To uphold standards and ensure the project is delivered in the right way;
- (f) **Project Support:** Responsible for supporting the project and the project manager deliver the project; and
- (g) **Key stakeholders:** Person or organisation that is affected or perceived to be affected by the project and its outcomes.

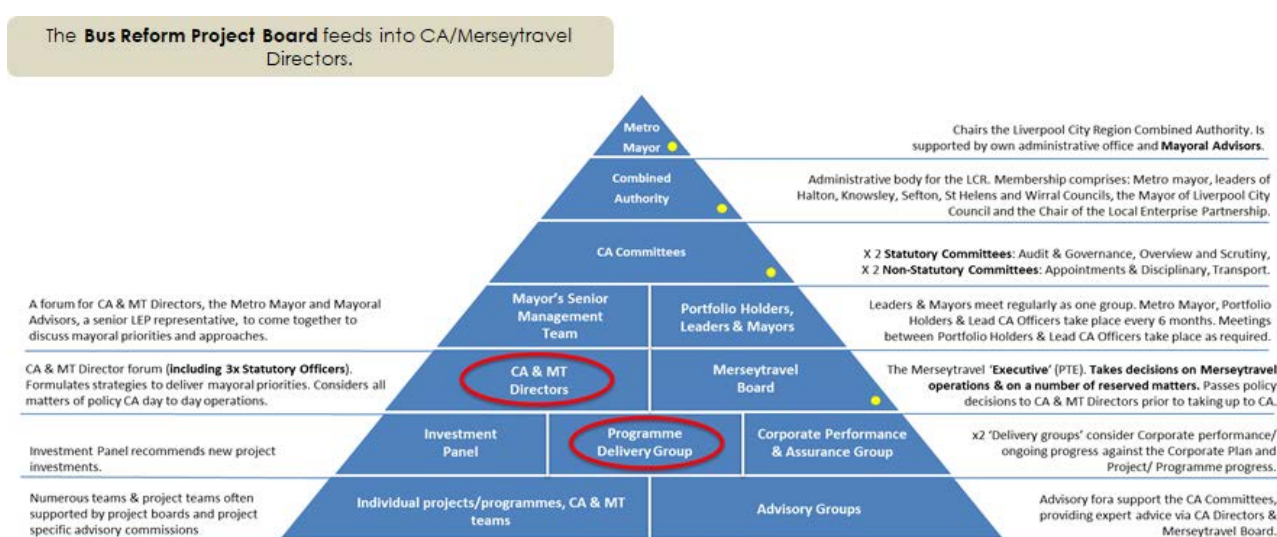
The Project Board meets monthly and by exception when required. The Project Board reports quarterly to the Transport Advisory Group and Delivery Panel. Monthly briefing sessions have been held with the Mayor's office, to inform him of the status of the Assessment, while detailed updates regarding the contents of the Assessment and the approaches taken by Merseytravel has been provided in periodic Mayoral presentations.

Figure 5.5 summarises the relationships of key governance in LCRCA and Merseytravel.

The Delivery Panel oversees project progress across the LCRCA organisational portfolio of projects and the Investment Panel governs all requests for funding from the Strategic Investment Fund ("SIF") and changes ongoing SIF funded projects.

The LCRCA and Merseytravel Directors' forum acts as strategic escalation point for project progress and decisions, however escalated decisions impacting Merseytravel operations are usually tabled at Merseytravel Board.

Figure 5.5: LCRCA Governance Structure



7.2.3. Governance for the Franchising Scheme

7.2.3.1. Initial franchises

In order to ensure that the benefits of a proposed Franchising Scheme are realised, clear an enforceable governance will be required. Both Merseytravel and LCRCA currently have clearly defined reporting and governance frameworks which will be transferable to any implemented Franchising Scheme to ensure benefits are fully realised. By following these frameworks, an overview of which is set out below, risk that any implemented scheme does not provide any of the potential benefits will be minimised.

Whilst individual authorities and districts would be able to influence the shape of franchises operating within their areas so as to:

- (a) ensure benefits are fully realised; and
- (b) ensure that the day to day running / decisions lie with the most appropriate body,

ultimate control over key franchise decisions would remain with Merseytravel so as to ensure that no decisions would be made which may adversely impact any implemented scheme and that consistency remains over the Franchising Scheme as a whole.

LCRCA Constitution

Decisions regarding the Franchising Scheme would be made in accordance with LCRCA's constitution framework ("Constitution") and Code of Corporate Governance. The Constitution sets out how LCRCA operates, how decisions are made and the procedures that are followed to ensure that it operates efficiently, effectively and is both transparent and accountable. The Code of Corporate Governance sets out how LCRCA aims to demonstrate good governance.

LCRCA appoints officers to whom delegated authority is granted to help fulfil LCRCA's functions. Merseytravel, as the statutory Passenger Transport Executive (PTE), is the executive body of the Combined Authority in relation to its transport functions, established for the purposes of Part 5 of the Local Transport Act 2008 and Part 6 of the Local Democracy, Economic Development and Construction Act 2009. As a body corporate, Merseytravel is to be treated by LCRCA in arrangements for the discharge

of functions as if it were an officer of LCRCA and the functions and responsibilities as exercised by Merseytravel are to be interpreted accordingly.

The Constitution sets out a list of decisions that are categorised as “Key Decisions”:

“A “Key Decision” means a decision of a decision maker, which in the view of the Overview and Scrutiny Committee of the Combined Authority is likely:

- (a) to result in the Combined Authority or the Mayor incurring significant expenditure, or the making of significant savings, having regard to the combined authority’s budget for the service or function to which the decision relates; or
- (b) to be significant in terms of its effects on persons living or working in an area comprising two or more wards or electoral divisions in the area of the Combined Authority.”

Where a decision maker intends to make a Key Decision, that decision would not be made until LCRCA has published a notice that a key decision is to be made in relation to the discharge of functions on its website or, otherwise, in such manner as it thinks is likely to bring the notice to the attention of persons who live in its area.

Merseytravel’s Contract Management team would be responsible for the day-to-day running and overall programme management of the Franchising Scheme.

LCRCA’s Transport Delivery Board would govern and oversee the delivery and running of the Franchising Scheme. It would meet on a monthly basis and by exception when required. It would be collectively responsible for:

- (a) overall accountability for the operation of the Franchising Scheme and risk management;
- (b) providing leadership and direction of the Franchising Scheme to enable delivery and realisation of benefits;
- (c) co-ordinating wider organisational processes which need to be adhered too to support progression of the Franchising Scheme in line with wider organisational governance requirements and policy expectations;

- (d) provision and allocation of skills and resources to deliver the franchising scheme activities and their benefits;
- (e) maintaining the strategic relevance of the Franchising Scheme, considering business and environmental changes;
- (f) acting as an ambassador and contributing generally to the effective progression of the Franchising Scheme's aims and objectives; and
- (g) ensuring the reporting schedule to Merseytravel and LCRCA is maintained and determine what additional issues should be presented.

LCRCA would ensure that key decisions taken during transition to, and the in-life management of, the Franchising Scheme are made at the appropriate forum in accordance with the Constitution.

7.2.3.2. Variations to the Franchising Scheme

At any point after the Franchising Scheme has been made, LCRCA may seek to vary it. If it wished to amend the requirements of the scheme, such as the area to which the scheme related or the description of the local services intended to be provided, it would be required to follow the formal variation process set out in Section 123M the Transport Act. Any minor variations, such as day-to-day service requirements, would be implemented without use of this statutory process through LCRCA's Transport Delivery Board.

For example, if LCRCA wished to introduce new services operating on the existing network (as specified in the Franchising Scheme), it would be entitled to do so contractually, subject to the terms of the service contract, without this constituting a formal variation to the scheme and having to follow the statutory process. This means that Merseytravel could, for example, vary the service timetable or introduce an express service on an existing route.

If it wishes to amend the requirements of, or vary the services under, the scheme, LCRCA must publish a notice stating the date on which the variations would have effect, and give notice of its decision to a traffic commissioner within 14 days of publishing the notice. LCRCA would also be required to consult on its proposals and ensure that all local stakeholders (including all Operators, the Passenger's Council and

the CMA) and local communities were consulted on the nature of the service change. Following completion of the consultation, and in accordance with the Section 123M(6), the Mayor would take the final decision as to whether to vary the scheme or not.

The consultation exercise would ensure that the impacts, benefits and risks associated with the proposed changes are fully explored and assessed before being implemented.

In the event that LCRCA intended to vary the Franchising Scheme to add routes or services from a new area or areas (for example, bringing a new town within the scope of the franchised network), it would follow the same statutory process when making the scheme (and as set out in Section 123H of the Transport Act), which would also require consultation with relevant stakeholders.

7.2.3.3. Revocation of a Franchising Scheme

At any point after the Franchising Scheme has been made, Merseytravel may consider that the scheme is not viable in its current form. In this circumstance Merseytravel would have the ability to reduce the risk taken for example by changing the form of franchise agreement, such as moving from a gross cost contract to a net cost contract or by changing the performance standards, amending the area that was covered by the Franchising Scheme, or moving to an entirely permitted regime. However, if Merseytravel considers that the Franchising Scheme should be revoked, it can only do so if Merseytravel is satisfied:

- local services in the area to which the scheme relates are likely to be better if the scheme did not apply;
- the continued operation of the scheme is likely to cause financial difficulties for the authority; or
- the burdens of continuing with the scheme are likely to outweigh the benefits of doing so.

The revocation of a Franchising Scheme is subject to the same procedure as the making of a Franchising Scheme, except that Section 123G(3) Transport Act does not apply. The Mayor must make any decision to revoke the Franchising Scheme.

7.2.4. Governance for an EP

7.2.4.1. Governance prior to making an EP

In order to ensure that the benefits of an EP are realised, clear and enforceable governance will be required. Both Merseytravel and LCRCA currently have clearly defined reporting and governance frameworks which are currently used to manage the operation of the VPA and will be transferable to any implemented EP Plan and EP Scheme(s) to ensure benefits are fully realised. By following these frameworks, an overview of which is set out below, risk that any implemented scheme does not provide any of the potential benefits will be minimised.

Whilst individual authorities and districts would be able to influence the shape of the EP Plan and the EP Scheme(s) operating within their areas through their involvement in the EP Engagement Board so as to:

- (a) ensure benefits for all EP Schemes are fully realised; and
- (b) ensure that the day to day running / decisions lie with the most appropriate body,

ultimate control over enforcement of the EP Plan and EP Scheme(s) would remain with Merseytravel. This would ensure consistency of decisions so as to ensure that no decisions would be made which may adversely impact any other implemented EP Scheme and that consistency remains over the EP solution as a whole.

It should be noted that under an EP certain obligations of Merseytravel and LCRCA can be enforced by the Operators. However, in the period prior to making an EP, Operators will only have an input into the EP Engagement Board and the ability to object to proposals for an EP Plan and EP Scheme(s).

7.2.4.2. Governance under an EP

Under an EP, Merseytravel would adopt the governance structure currently used under the VPA with minor amendments to reflect the expansion of Operators who would be party to and provide services under the EP. The governance will operate by way of monthly workstream meetings which will then feed into meetings of a programme board, EP Engagement Board and stakeholder board.

Workstream meetings

Under the EP governance structure, workstream meetings would take place on no less than a monthly basis to monitor the performance of the EP and, in the event of any underperformance, identify any potential remedial action to be undertaken. The workstream meetings would be attended by representatives from:

- (a) Merseytravel; and
- (b) Operators.
- (c) Following each workstream meeting the following items would be referred to the Programme Board:
 - (d) any proposed changes to or non-delivery of milestones;
 - (e) any material matters within the programme set out in the delivery programme;
 - (f) any updates or amendments to the marketing and communications strategy; and
 - (g) any other issues that cannot be resolved at a workstream meeting.

Programme Board

The Programme Board would comprise of representatives from Merseytravel, the Operators and the LCR Transport Advisory Group and would meet on a monthly basis with the aim of:

- (a) attempting to resolve any issues which cannot be resolved at a workstream meeting;
- (b) managing any proposed changes to the EP delivery programme;
- (c) overseeing the negotiation and production of milestones and a joint business plan for the forthcoming contract year;
- (d) considering whether the performance indicators require updating; and
- (e) monitoring performance against the joint business plan.

To ensure that control of decisions of the Programme Board is driven so as to ensure that the benefits of the EP are fully realised, the voting rights of the members of the board would be weighted to provide

Merseytravel with 50% of the votes. The LCR Transport Advisory Group would not get any voting rights. It is envisaged that a decision of the Programme Board would be made by the parties representing at least 90% of the total voting rights of all parties eligible to vote.

EP Engagement Board

The EP Engagement Board would meet quarterly and be made up of executive level representatives from Merseytravel and the Operators as well as representatives of both the Programme Board and various transport groups with an interest in seeing benefits realised under the EP. The EP Engagement Board would meet with the purpose of:

- (a) advising on strategic direction of the EP;
- (b) considering and agreeing the milestones suggested by the Programme Board;
- (c) considering and agreeing any amendments to the performance indicators suggested by the Programme Board;
- (d) advising on the development of policies (including considering issues relating to integrated transport and Mobility as a Service), objectives and remedial actions;
- (e) sharing best practice from other areas to support growth;
- (f) advising on the most effective way to continue to develop and enhance joint working;
- (g) challenging and advising on the delivery of objectives and measures;
- (h) monitoring high level performance against any milestones;
- (i) approving the composition of the Stakeholder Board; and
- (j) resolving any items that cannot be resolved at the Programme Board.

As with the Programme Board, it is envisaged that the voting of the EP Engagement Board would be weighted to provide Merseytravel with 50% of the votes and decisions of the EP Engagement Board would be made by parties representing at least 90% of the total voting rights of all parties eligible to vote. This

would ensure that any decisions are directed so as to ensure that potential benefits under the EP are realised.

Stakeholder Board

The Stakeholder Board would meet bi-annually and would comprise executive level representatives of Merseytravel and the Operators; senior politicians within the LCR; members of the wider business community; a traffic commissioner; the DfT; and the Merseyside Police.

The membership of the Stakeholder Board would be reviewed on an annual basis and would be amended by agreement of the EP Engagement Board. The purpose of the Stakeholder Board would be to support the continued success of the EP and the growth of the LCR economy, which it would carry out by:

- (a) accepting submissions from Programme Board and EP Engagement Board members on the performance the EP; and
- (b) providing advice, views, guidance and recommendations to the Programme Board and the EP Engagement Board.

7.2.4.3. Variations to the EP

Section 138K of the Transport Act sets out the process which Merseytravel would be required to follow when making variations to the EP Plan or the EP Scheme (or both).

Where Merseytravel proposed changes to an EP Plan, it would first have to satisfy itself that the EP Plan and associated scheme, as varied, would contribute to: (i) the implementation of the policies set out in the related EP Plan (or contribute to the implementation of the policies set out in the revised EP Plan); and (ii) LCRCA's local transport policies. Merseytravel must also be satisfied that the variation would benefit passengers by improving quality or attractiveness of bus services in the scheme area or reduce or limited traffic congestion, noise or air pollution.

Once it has applied this initial test, Merseytravel would be required to follow the formal statutory variation process set out in Section 138K(3) of the

Transport Act. This involves notifying all Operators, and any other stakeholders that were involved in the preparation of the EP Plan or scheme, of its intention to vary it, and holding initial discussions on the proposals. Once these stakeholders had been consulted, and the draft variation to the plan and/or scheme had been prepared, Merseytravel would be required to undertake a formal consultation exercise, allowing the opportunity for individual Operators to object and air any concerns.

Section 138E of the Transport Act also allows for a bespoke variation mechanism to be incorporated into EP Schemes. This can be used to allow changes or additions to be made more quickly than through the statutory variation procedure and without the need to follow the operator objection mechanism. Such bespoke variation mechanism would need to be agreed when the EP Scheme was made.

7.2.4.4. Governance during transition to an EP

Merseytravel's powers and responsibilities will change by only a limited amount once the transition phase is completed and the EP Plan and EP Scheme(s) have been fully implemented. As noted in Section 7.2.4.2, the governance structure currently used under the VPA would continue with some minor changes to reflect the broader coverage of the EP solution.

The establishment of the EP Engagement Board is not intended to affect the governance structure of the VPA. The VPA governance structure will continue until the EP comes into force. At the end of the transition period the Programme Board, EP Engagement Board and Stakeholder Board would also come into effect.

7.3. Contracting Organisation

As the executive body and delivery agent for LCRCA, and as the contracting party under the VPA and existing supported services agreements, it is envisaged that Merseytravel would be the contracting organisation under any franchise agreements.

8. Conclusion

8.1. Franchising

Franchising would require the implementation of a new operating framework, which means that Merseytravel's current organisation and operating model would need to change to enable bus services to be delivered under a Franchising Scheme. This would require Merseytravel to undertake a number of new responsibilities and increase its capability in relation to its existing competencies.

Merseytravel has developed a team structure for a future franchising operation using its experience of managing the supported bus network, the Alliance and other modes of transport. The Management Case has identified that incremental resources of approximately 78 (gross) and 52 (net) people would be required to plan and manage a Franchising scheme.

It would take approximately 5 years to transition to a Franchising Scheme following a mayoral decision to Franchise. LCRCA has developed an implementation plan with the associated resources to manage this transition, which is aligned to the implementation and mobilisation of each Round described in the Commercial Case.

There are various risks associated with the transition and implementation of a Franchising. LCRCA has developed a risk register to manage these risks and has set out clear processes for interventions and escalations if required.

8.2. EP

Both of the ambitious EP and the operator-proposed EP options would require the implementation of a new operating framework to support their delivery. This would mean that Merseytravel's current organisation and operating model would need to change to enable bus services to be delivered under an EP solution. Merseytravel would be required to take on additional responsibilities and increase its capability in relation to its existing competencies.

Aspects of the new structure would be able to carry forward the existing experience of Merseytravel in managing the Alliance but under an EP, Merseytravel has greater obligations, particularly with respect to the management and enforcement of the operator's obligations under the EP Plan and EP Scheme(s). Merseytravel would also need to ensure that there was a consistent approach across different EP Scheme(s).

Merseytravel has developed a team structure for a future EP operation using its existing experience of managing the supported bus network, the Alliance and other modes of transport in the LCR. The Management Case has identified that incremental resources of approximately 15 people would be required to plan and manage the

EP Option. This is expected to be similar whether the ambitious EP or the operator-proposed EP is selected. It is expected that membership of the Programme Board would come from this expanded resource, while membership of the EP Engagement Board and Stakeholder Board would come from existing executives within Merseytravel.

It would take approximately 6 to 12 months to implement an EP following an LCRCA decision to adopt an EP solution. However, at the time of making the decision, the exact content of the EP is not known. Part of the process of establishing an EP is to establish an EP Engagement Board to obtain stakeholder input into the form of EP that it to be delivered. The level of active involvement of the various parties in the EP Engagement Board and the ability to manage disagreements as to what the Operators are prepared to agree to within an EP Plan and EP Scheme(s) may have a significant impact on how quickly the EP Option can be implemented.

While LCRCA is able to set the terms of the Franchising Scheme, the terms of the EP Plan and EP Scheme(s) would need to be negotiated between the Operators and LCRCA. Although LCRCA is the party that issues the draft EP Plan and EP Scheme(s), it is subject to a statutory objection procedure for the Operators. If the relevant objection threshold is met that part of the EP Plan or EP Scheme cannot proceed. This creates the risk that not only can the ambitious EP not be delivered but that aspects of the operator-proposed EP may not be delivered either. In these circumstances, a less than optimum EP could be provided which would not fully deliver the VfB.

There are various risks associated with the transition and implementation of an EP solution. LCRCA has developed a risk register to manage these risks and has set out clear processes for interventions and escalations if required.

The information set out in this Management Case demonstrates that Merseytravel would be able to manage the transition to and the operation of an EP solution jointly with the Operators on behalf of LCRCA.

Review and Conclusion

1. Introduction

The purpose of this Assessment is to set out the case for regulatory reform of bus service delivery for the whole LCR in accordance with the Transport Act and with reference to the Green Book Guidance requirements and the Franchising Guidance.

The Franchising Guidance sets out the key activities an authority should undertake when developing its assessment and draws parallels between the requirements of the Assessment and of a Treasury Public Sector Business Case. LCRCA has set its assessment out following this five-case structure of: Strategic Case; Economic Case; Financial Case; Commercial Case; and Management Case. The five key activities set out in the Franchising Guidance can be found across these five cases as follows:

(a) **Developing the compelling case for change**

Section 4 of the Strategic Case sets out the case for change, explaining why consideration of changes in the bus network offer to passengers is appropriate at this time, and the need for intervention, further setting out why LCRCA is the appropriate organisation to bring about this change;

(b) **Setting objectives**

Section 5 of the Strategic Case sets out the objectives that LCRCA is trying to achieve through bus reform, and details how the performance of options against these SMART¹⁸⁶ objectives should be appraised;

(c) **Options generation and refinement**

Section 6 of the Strategic Case introduces the regulatory options which are available to LCRCA to bring about changes in the bus network offer to passengers and describes their characteristics and advantages, shortlisting EP and Franchising as options which could achieve change of a scale proportionate to the objectives;

(d) **Detailed assessment of options**

The assessment of EP and Franchising options against the scheme objectives is distributed across the five cases and brought together in this summary; and

(e) **Selection of preferred option**

On the basis of the performance of EP and Franchising options against the scheme objectives (as above), this summary identifies LCRCA's preferred option and the justification for its choice.

186 Specific, Measurable, Achievable, Realistic and Time-bound.

Through undertaking the key activities above, each at a level of detail proportionate to the decision being taken¹⁸⁷, LCRCA considers that thorough thought has been given to the impacts, risks and practical implications of regulatory change. EP and Franchising represent comparable different options, developed to a similarly high level of detail, to achieving LCRCA's objectives.

187 Paragraph 1.28 of the Franchising Guidance specifies that the Assessment should be to 'the level of detail that would usually be included in an Outline Business Case'.

2. Summary of Options Assessment

2.1. Strategic Case

LCRCA has bold and ambitious plans for clean and inclusive economic growth, achieving net zero carbon emissions by 2040, but requires targeted action on the main social and economic issues where the LCR underperforms relative to other city regions. LCRCA's Vision for Growth sets out the plan for tackling these issues around the three 'growth pillars' of productivity, people and place.

With buses being at the heart of the LCR's transport system, delivery of LCRCA's VfB is fundamental to delivering its clean growth ambitions. However, there are challenges under current arrangements which could constrain delivery of the improvements identified within LCRCA's VfB.

A case for change therefore exists. Without regulatory changes to the delivery of bus services LCRCA's VfB could not be delivered in full and, for those limited aspects which could be delivered, there is limited certainty around their delivery. LCRCA is the most appropriate organisation to intervene and bring about regulatory change, having appropriate powers under the Transport Act and the support of the Government's Bus Back Better strategy, which mandates the introduction of an EP or Franchising scheme for LTAs to access associated funding streams. LCRCA has sufficient resource availability to contemplate intervention and has a material financial interest in the outcome, as administrator of ENCTS funding, multi-Operator and multi-modal ticketing scheme provider and as funder of supported services.

Section 5 of the Strategic Case sets out five Policy Objectives, built from the Case for Change and Need for Intervention, to form the basis of comparison between options contributions to the delivery and achievement of passenger needs and LCRCA policy. These benefits are considered over the medium to long term (three years plus post contribution) or, in the case of monetised benefits¹⁸⁸, over the adopted forty-year appraisal period.

(a) Maximise the contribution of bus services to achieving the economic success and social capacity of the LCR

	EP	Franchising
Passenger efficiency benefits:	£247m	£252m
Economy benefits:	£97m	£108m

188 All monetised impacts in this summary are presented in DfT appraisal units, that is 2010 present market values, expressed in 2010 GDP Deflator real prices.

	EP	Franchising
Non-monetised benefits:	Slight beneficial	Beneficial
Potential support for wider LCRCA ambitions and initiatives:	Slight beneficial	Large beneficial

Against the first Policy Objective, the Franchising Option offers LCRCA advantages in comparison to the EP Option, including in terms of generating higher values of monetised benefits, a wider range and scale of non-monetised benefits, and material gains in terms of the benefit of LCRCA being able to align its specification of the bus network in support of achieving its wider economic and social policy ambitions.

(b) Maximise the contribution of bus services to reducing the impact of travel on the natural environment

	EP	Franchising
Greenhouse gas reduction:	£0.8m	£1.0m
Air quality emission reduction:	£0.2m	£0.3m
Non-monetised benefits:	Neutral	Neutral
Potential support for wider LCRCA ambitions and initiatives:	Beneficial	Large beneficial

Against the second Policy Objective, the Franchising option offers LCRCA advantages in comparison to the EP Option, in terms of gains in terms of the benefit of LCRCA being able to align its specification of the bus network in support of achieving its wider environmental ambitions.

(c) Harness competition's role in improving the offer to passengers and delivering best value for LCRCA for the services it procures

	EP	Franchising
Anticipated impacts on the level and capacity of competition for bus service delivery:	Beneficial	Beneficial

Against the third policy objective, both EP and Franchising options offer LCRCA advantages, but in different ways. An EP scheme allows the negotiation away of some of the downsides of predatory competition in the deregulated market, by allowing some protection

to existing and new Operators, while maintaining passenger benefits of on-street competition. Franchising requires competition between Operators for different service contracts, to ensure that best value is achieved and maximise the number of services which can be run for the budget available. The structure of LCRCA's proposed Franchising scheme, and provisional transition arrangements, have been developed in consideration of achieving this requirement.

(d) Maximise the passenger benefits of service coordination, ticket integration and information provision across the LCR public transport network

	EP	Franchising
Revenue impact:	£10m	£19m
Non-monetised quality and integration benefits:	Beneficial	Large beneficial

Against the fourth Policy Objective, the Franchising Option offers LCRCA advantages in comparison to the EP Option, in particular in terms of a wider range and scale of non-monetised integration benefits. Franchising uniquely allows LCRCA to take a more integrated approach to the planning and delivery of its full public transport network, currently comprising bus, rail and ferry services, and wider travel options.

(e) Support implementation of measures that improve bus service delivery by addressing factors which may constrain the extent to which Operators can commit to meet quality or service level standards

	EP	Franchising
The extent to which options mitigate constraints which limit what Operators will agree to:	Slight beneficial	Large beneficial

Against the fifth Policy Objective the EP Option offers LCRCA some advantage in comparison to the Reference Case, allowing some protection to predatory competition and contractualising public sector contributions and investments, the aim being to increase the level of bus operator commitment. Franchising removes these constraints, again offering LCRCA advantages in comparison with the EP Option.

Against the five Policy Objectives, Franchising offers clear advantages over the EP Option – scoring more highly against four of the objectives and being equal with EP on one.

2.2. Economic Case

The central consideration of the Economic Case is whether the EP and Franchising options represent VfM to the public sector (as defined by HM Treasury's Green Book). The Economic Case considers the options in terms of their impacts on wider society, appraising economic, social and environmental benefits in comparison to a common Reference Case. The appraisal has been undertaken based on a forecast of revenue (by ticket type and service) and operating costs, by service – allowing an understanding of the distribution of impacts on different groups in society. Amongst these groups are: passengers (including from areas with different socio-economic characteristics); other residents and travellers; Operators (of different scales, both existing and new entrants); LTAs (including LCRCA and its neighbouring authorities); and Central Government.

Section 5 of the Strategic Case sets out three objectives relevant to the Economic Case, which have been considered – in line with VfM assessment guidance – over a relatively long time horizon, in this case forty years.

(a) Combining monetised and non-monetised aspects and consideration of the distribution of those benefits

	EP	Franchising
Net Present Value (NPV):	£254m	£256m
Overall non-monetised impacts:	Beneficial	Large beneficial
Distributional benefit	Slight beneficial	Beneficial

Against the first Economic Case objective, the Franchising Option offers LCRCA advantages in comparison to the EP Option, including in terms of delivering a wider range and scale of overall non-monetised impacts, and advantages in terms of LCRCA being able to influence distributional outcomes in its specification of the bus network in aligning benefits with the areas of the LCR which are most in need of them.

(b) An assessment of certainty in outcomes, partially informed by sensitivity testing but also referencing the nature and time-profile of uncertainty around options

	EP	Franchising
Uncertainty during transition:	Medium	High
Uncertainty during operation:	Low	Low
Uncertainty around evolution:	High	Low

Both of the EP and Franchising options have associated uncertainty, although on different time-profiles. For EP, there is some uncertainty over its initial introduction and what Operators will agree for inclusion in the plan and schemes. That the two main Operators have put forward an initial proposal is a clear benefit, but a number of proposals within that scheme are contingent on various factors and there is no certainty that Operators will not object to some of the proposals during the statutory objection procedures. During the term of that partnership (or any future scheme) the level of uncertainty would be low, but when it comes to introduction of future schemes or renegotiation of the initial scheme(s) – for example in line with a wider policy change – the level of uncertainty would be materially higher. This is because (re) negotiation provides opportunities for Operators to seek to undo or relax the requirements of previous schemes.

For Franchising, uncertainty is highest over the ‘transition’ period of its introduction, when there is the potential for legal challenge and because the length of transition period needed means that the first contracts must be signed before LCRCA has achieved cost certainty for all services. Once in place and settled, the level of uncertainty is much reduced, including allowing LCRCA maximum flexibility to respond to changes in the market for bus travel and wider policy context.

(c) Value for Money, appraised in line with DfT’s TAG

	EP	Franchising
Initial VfM Category:	Medium-High	High
VfM including Wider Impacts:	High	High
Adjusted VfM considering: • Non-monetised impacts • Distributional benefit • Uncertainty	High	High

Against the final Economic Case objective, both EP and Franchising can be seen to represent VfM to the public sector within the same category. The interpretation of this is that either choice would be a justified intervention for LCRCA to take, the decision of which is to be preferred being free to be informed by other considerations represented in the wider objectives.

Against the three Economic Case objectives, both EP and Franchising show advantages against the Reference Case – that is LCRCA investment in either option would be outweighed by the resulting benefits. In terms of the quantum of net benefit remaining,

Franchising performs somewhat better and has advantages in terms of the influence it gives LCRCA over the distribution of benefits across the LCR. Both options have associated uncertainty, more in the short term for Franchising (during transition) and longer term for EP (when it comes to (re)negotiating the scheme(s)) as the context changes.

2.3. Financial Case

The Financial Case compares and analyses the projected cashflows occurring under Reference Case, EP and Franchising, with particular consideration of whether LCRCA could afford to take on that option, including an assessment of the level of financial risk which LCRCA would be taking on under each option. This analysis has been undertaken based on the forecasts of bus revenue and operating cost, also used in the economic case, with consideration of additional costs incurred by LCRCA in implementing or managing steady-state delivery of the options. It is noted that the forecasts of bus revenue and costs were constrained (by scenario) to the same budget availability, to achieve consistency of spend between options; this additionally influences affordability by reducing the level of service provided rather than allowing costs to increase unchecked.

Section 5 of the Strategic Case sets out two objectives relevant to the Financial Case considered over the short term, that is over the transition period, and over the medium to long term, during ongoing operation.

(a) Affordability

	EP	Franchising
Short term (up to 3 years):	Lower transition cost	Higher cost, recoverable
Medium to long term (3 years and more, post implementation):	Lower LCRCA management cost	Higher LCRCA cost outweighed by operating cost savings
For similar budget:	More services/passengers than Reference Case	More services/passengers than EP Option

Against the first Financial Case objective, both EP and Franchising offer advantage to LCRCA; both are forecast to be within the budget available and both would deliver more services and therefore additional passengers in comparison to the Reference

Case. Under Franchising LCRCA takes revenue risk, and can recover its upfront and ongoing costs from within the revenue surplus; based on the assumptions within this Assessment it would also provide an increase in the number of bus services provided.

(b) Financial risk

	EP	Franchising
Direct:	Low	High
Indirect	Medium-High	Low

Against the second Financial Case objective, it is clear under the assumed gross cost Franchising model that LCRCA takes full revenue risk for the bus network and is therefore exposed to changes or shocks in passenger revenue or operating costs which are unforeseen or otherwise beyond the range of considerations in this Assessment. Franchising introduces significant new responsibilities for LCRCA, which need to be managed carefully; there is risk that costs may escalate if not.

Under EP, the direct financial risk that LCRCA takes is limited, corresponding to the services it chooses to support which it can manage to the budget available (setting aside the undesirable but non-financial consequences of a reducing bus network). However, and as was demonstrated during the COVID-19 pandemic, the public sector does already take a significant level of financial risk indirectly (bus services only continuing through 2020/2021 because of public subsidy) and an EP scheme will not change this.

Against Financial Case objectives, Franchising shows advantage over both of the EP Option and the Reference Case in terms of being able to run more services, and therefore carrying more passengers, for the same funding – even allowing for recovery of its upfront investment in transition and increased direct management costs. EP allows more services and passengers than the Reference Case, with lower transition and ongoing costs than Franchising. Franchising would result in more bus services, and therefore passengers, than EP, but also comes with a high level of direct financial risk; it also comes with full LCRCA influence over service specification and fares, but which require careful management.

2.4. Commercial Case

The Commercial Case assesses whether the proposed commercial arrangements support successful implementation of the options considered, including consideration of whether procurement arrangements will lead to competition and achieve best value for LCRCA funding and consideration of risk and proposals for its management.

Section 5 of the Strategic Case sets out six objectives relevant to the Commercial Case; those which relate to transition (achieving best value and ease of implementation) have been considered over the short term, the objective relating to robustness of recovery has been considered over the medium term, all others have been considered over the medium to long term.

Objective Relative to Reference Case	EP	Franchising
1. Effect on the level of public sector influence	Some benefit	Significant benefit
2. Achieving best value (in terms of implementation)	Some benefit	Significant benefit
3. Competition between Operators	Neutral	Significant benefit
4. Appropriate risk allocation	Some benefit	Some benefit
5. Ease of implementation	Requires Operator consensus	A more material change than EP Option
6. Recovery robustness	Some benefit	Significant benefit

Against Commercial Case objectives, particularly in relation to public sector control, achieving best value, promotion competition and recovery robustness, Franchising offers greater advantage over Reference Case than the EP Option. However, Franchising is a more material change than EP, requiring more significant resource and financial costs to implement. It also introduces a range of additional ongoing risks for LCRCA to manage, needing significant additional capability and capacity in house to deliver.

2.5. Management Case

The Management Case considers the factors which influence the deliverability and robustness of LCRCA's arrangements to manage, deliver, monitor and evaluate the Delivery Options. That is, whether there can be confidence that the options can be successfully implemented, and managed once transition is complete.

Section 5 of the Strategic Case sets out three objectives relevant to the Management Case; all of which are considered over the short term. Additionally, the extent to which resources required match those available has also been considered over the medium to long term.

(a) The extent to which the resources required for its successful delivery match those available to the promoting authority

	EP	Franchising
Transition resource requirement	Low-Medium	High
Ongoing resource requirement	Low-Medium	High

LCRCA has developed a robust plan for the staff and resources which would be needed for transition and for ongoing management for both options, and for the recruitment of team members and appointment of additional specialist resource as required. The Franchising Option requires a materially higher increase in headcount than EP, however the additional costs to LCRCA would be covered by revenue income.

(b) Acceptability to key stakeholders

	EP	Franchising
Political acceptability:	Medium-High	Medium-High
Passenger acceptability:	Medium	High
Existing operator acceptability:	High	Low-Medium
New operator acceptability:	Low	High

LCRCA has completed considerable stakeholder engagement in developing this Assessment and will continue to do so, following approval and proceeding to implementation of either option. Both Franchising and EP options have prescribed consultation requirements. Scoring in the table above is a broad representation of this engagement; where a range score (for example Low-Medium) is given, this should be taken to represent some divergence of opinions within the group.

It should be noted that there is no single set requirement for the content of an EP and as a result an EP may take many forms. Until the terms of the EP are fully developed it will not be possible to confirm whether the EP meets all of the aspirations of both the Operators and LCRCA. The operator objection mechanism for EP also provides a level of uncertainty as to the acceptability of specific terms within an EP proposal until after the operator consultation has been undertaken.

(c) The complexity, including the potential for robust challenge, of the delivery process

	EP	Franchising
Complexity of delivery process	Medium	High
Potential for robust challenge	Low	Medium

LCRCA has developed plans for delivering Franchising and for an EP, with further detail to be added to the option as part of implementation. Franchising is a more material change from the Reference Case than EP, requiring more significant resource and financial costs and with more risks to manage. EP, while being the more straightforward process to implement, has materially less certainty than Franchising in terms of its outcomes – being based on what outcomes can be negotiated with Operators and captured within the scheme; it has considerably less opportunity for challenge than Franchising.

Against Management Case objectives, EP and Franchising options have been robustly developed to ensure successful delivery, noting that Franchising is a more material change than EP – requiring more significant resource and costs to implement, and with more potential for robust challenge. In terms of stakeholder acceptability there is limited advantage for one over the other; Franchising is anticipated to be more favourable to passengers with more services and more aspects of the VfB delivered, however it represents a considerable change in approach for existing Operators.

3. Identification of Preferred Option

3.1. Performance of Options

The preceding text has summarised the conclusions across the five cases of this Assessment of options for regulatory reform of bus service delivery in the LCR. A decision on which of Franchising or EP should be adopted as LCRCA's preferred option requires consideration across these cases, which make up the Detailed assessment of options activity set out in the Franchising Guidance. The performance against the scheme objectives, consolidated by Case, are presented below.

	EP	Franchising
Strategic Case		Clear Advantage
Economic Case	Broadly Equal	Broadly Equal
Financial Case	Balanced	Balanced
Commercial Case		Clear Advantage
Management Case	Broadly Equal	Broadly Equal

Franchising offers LCRCA clear advantages against the critical Strategic Case objectives, allowing full public sector influence over outcomes and the efficient delivery of bus service improvements to passengers, and bus network changes which support the delivery of wider policy ambitions. It also has clear advantages over EP in terms of the Commercial Case, signalling that the proposed arrangements support successful implementation and that there can be confidence in achieving those outputs.

The Economic Case shows that both options would be justifiable public sector interventions (that is, VfM) and the Management Case demonstrates that either option is deliverable.

The Financial Case is more nuanced; both Franchising and EP options are affordable to LCRCA, however Franchising would result in more bus services, and therefore passengers, for the same level of funding. Under Franchising, LCRCA would take on a higher level of direct financial risk; it also comes with full LCRCA influence over service specification and fares, but which require careful management.

The principal risk around EP is uncertainty over what Operators will eventually sign up to, in a first scheme – but also in the future schemes which will be needed as the market for bus services continues to evolve and as the underlying policy context changes. Under EP, the public sector will continue to take a significant level of financial risk directly, and still with limited influence over services and fares.

3.2. Recommendation

The publication of Bus Back Better has set out Government policy requiring LTAs in England to reform the way in which bus services are delivered in their areas. Effectively LCRCA needs to make a choice between providing those bus services using Franchising or an EP.

Having undertaken this Assessment in accordance with the relevant requirements of Transport Act and the Franchising Guidance, LCRCA considers that on balance, the strategic advantages of Franchising to LCRCA and the increased certainty which it brings in terms of outcomes outweigh the disadvantage of taking on high, but influenceable, financial risk. On the basis of this Assessment, LCRCA recommends that the Franchising Scheme is adopted as its Preferred Option for bus reform.

Appendix 1: Franchising Risk Register

Appendix 2: List of Franchise Services

1. Franchised Services

To – From
Liverpool City Centre - RLUH (via Everton/Vauxhall)
Liverpool City Centre - Sefton Park Circular
Liverpool City Centre – Prescott
Liverpool ONE - Huyton
Liverpool City Centre - Huyton Circular
St Helens - Liverpool City Centre
Liverpool City Centre - Huyton, Elizabeth Road
Liverpool City Centre - Stockbridge Village Circular
Liverpool City Centre - Croxteth
Liverpool City Centre - Tower Hill
Liverpool City Centre - Kirkby Industrial Estate
Liverpool City Centre - Huyton Bus Station
Liverpool City Centre - Aintree Hospital
Liverpool City Centre - Croxteth Park
Liverpool City Centre - Kirkby Bus Station
Liverpool City Centre - Tower Hill
Liverpool City Centre - Northwood
St Helens - Ravenhead Retail Park Circular
Sheil Road Circular (Clockwise)
Sheil Road Circular (Anti-clockwise)
St Helens- Chain Lane
St Helens - Parr
Four Acre Lane - Clinkham Wood
Clock Face - Clinkham Wood
St Helens - Sutton Manor
St Helens - Newton-le-Willows/Leigh
Bold - Gillars Green
St Helens Bus Station - Hard Lane
St Helens Bus Station - Eccleston

To – From
St Helens Bus Station - Rainford
St Helens Bus Station - Southport
St Helens - Earlestown Bus Station
Southport Hospital Circular
Crossens - Formby
Crossens - Walnut Street
Carr Lane - Russell Road
Carr Lane - High Park
Crossens - Liverpool City Centre
Crossens - Ainsdale
Liverpool City Centre - Netherton
Liverpool City Centre - Crosby
Liverpool City Centre - Old Roan
Liverpool City Centre - Netherton
Liverpool City Centre - Netherton
Bootle - Aigburth Vale
Bootle - Aigburth Vale
Bootle North Park - Allerton, Penny Lane
Bootle - Aintree Hospital
Bootle - Aigburth Vale
Halewood - Belle Vale - Broadgreen
Liverpool City Centre - Belle Vale
Liverpool City Centre - Halewood
Liverpool City Centre - Halewood
Liverpool City Centre - Rainhill Stoops
Liverpool City Centre - Halewood Circular
Liverpool City Centre - Halewood
Liverpool City Centre - Speke Morrisons
Liverpool City Centre - Liverpool John Lennon Airport
Bootle - Speke Morrisons
Bootle - Liverpool John Lennon Airport
Liverpool City Centre - South Parkway/Speke Morrisons

To – From
Liverpool City Centre - Halton Hospital via LJLA
Liverpool City Centre - RLUH - Speke
Liverpool City Centre - Garston
Liverpool City Centre - Liverpool John Lennon Airport
Liverpool City Centre - Liverpool Hope University
St Helens - Liverpool John Lennon Airport
Kirkby Circular
Runcorn Station - Runcorn East
Aintree Hospital - Broadgreen Hospital
Halton Hospital - Weston Point
Halton Hospital - Weston Point
Murdishaw - Warrington
Runcorn Busway Circular (Clockwise)
Runcorn Busway Circular (Anti-clockwise)
St Helens - Halton Hospital
Widnes - Cronton Circular
West Bank - Halton View
Kirkby - Waterloo
Bootle - Netherton Circular
St Helens- Billinge
Runcorn High Street - Beechwood
Rainford - Ashton-in-Makerfield
Walton (Cavendish Drive) - Aintree Hospital
Huyton - Halton Hospital
Halebank - Murdishaw - Warrington
South Liverpool Circular
Garston - Grassendale/Springwood Circular
Dingle - Broadgreen
Crosby - Hightown Circular
Walton Park - Walton Park
Walton Park - Aintree Hospital
Kirkby - Liverpool John Lennon Airport

To – From
Kirkby - Halewood
Maghull - Aintree Hospital
Huyton - Stockbridge Village
St Helens- Rainhill/Whiston Circular
St Helens - Kirkby
Southport Town Centre - Liverpool City Centre
Liverpool City Centre - Skelmersdale
St Helens - Ashton/Wigan
St Helens Hospital - Garswood
St Helens - Earlestown Bus Station
Newton-le-Willows - Ashton-in-Makerfield
St Helens - Warrington via IKEA
St Helens-Warrington
Liverpool City Centre - Kirkby
St Helens- Wigan
Liverpool City Centre - Ellesmere Port
New Brighton - Wallasey Circular
Wallasey - Birkenhead
New Brighton - Clatterbridge
Arrowe Park - Poulton Lancelyn - Arrowe Park
Birkenhead - APH - Wallasey - Birkenhead
Birkenhead - APH - New Brighton - Wallasey - Birkenhead
Moreton - Eastham
Birkenhead North Stn - Arrowe Park Hospital
New Brighton - Liverpool City Centre
New Brighton - Liverpool City Centre
West Kirby - Liverpool City Centre
West Kirby - Eastham
Mill Park - Woodchurch
New Ferry - Liverpool City Centre
Heswall - Liverpool City Centre
Arrowe Park Hospital - Croft Retail Park

To – From
Croft Retail Park - Heswall
Heswall - Thingwall & Irby Circular
West Kirby - Arrowe Park Circular
Ness Gardens - Liverpool City Centre - Royal Hospital
Leasowe & Town Meadow Circular
Birkenhead - Holmlands Estate
Birkenhead - Beechwood - Noctorum - Birkenhead
Birkenhead - Noctorum - Beechwood - Birkenhead
Liverpool - Liverpool John Lennon Airport (Express)
Garston - Archbishop Blanch
Eastham Village - Bebington
Eastham Library - Bebington
Eastham - Upton Village
Eastham Ferry - St John Plessington
Barnston - Upton Village
Bidston - Woodchurch High School
St James' Church - Woodchurch High School
Church Road - South Wirral High
South Wirral High - Wirral Grammar School
Heswall - St Anselm's College
Mill Park - St Anselm's College
Bebington - Eastham
Hoylake Road - Calday Grammar
Bowring Park - Woolton
Seacombe - Wallasey
Saughall Massie - Woodchurch High School
Croxteth Park - Archbishop Blanch
Huyton - Archbishop Blanch
Oxton - West Kirby Grammar
New Ferry - South Wirral High
Wallasey - Weatherhead School
Shrewsbury Road - St John Plessington

To – From
Birkenhead North Stn - Wirral Grammar Schools
Oxton - Wirral Grammar Schools
Moreton - Hilbre High School
Saughall Massie - Hilbre High School
Wallasey - Weatherhead School
Moreton - Woodchurch High School
Prenton - Wallasey
Newton - Our Lady of Pity
Moreton - Weatherhead School
Moreton - Wallasey
Oldershaw School - Upton Road
Bowring Park - Woolton
Dovecot - Broadgreen International School
Saughall Massie - Ridgeway High School
Upton Village - Pensby High School
Moreton - Pensby High School
Hoylake - Our Lady of Pity
Pensby - Barnston
Woodchurch - Birkenhead Sixth Form
Moreton - Wirral Grammar Schools
Thingwall - Wirral Grammar Schools
Newton-le-Willows - Ashton Schools
Gayton - St Mary's College
Hoylake - St Mary's College
Arrowe Park - Neston
Saughall Massie - St Mary's College
Woodchurch - St John Plessington
Garston - Woolton
Heswall Bus Station - Wirral Grammar Schools
Pensby - Wirral Grammar Schools
Gayton - West Kirby Grammar
Heswall - West Kirby Grammar

To – From
Gayton - West Kirby Grammar
Thingwall - West Kirby Grammar
Barnston - West Kirby Grammar
St Hilda's - Hunts Cross
Thornton Hough - Raby Mere
Meols - Pensby High School
Saughall Massie - Pensby High School
Knowsley Village - St Edmund Arrowsmith
Kirkdale - Savio Salesian College
Savio Salesian College - Bootle
Park Road South - Ridgeway High School
Ridgeway High School - Birkenhead Town Centre
Townfield Lane - The Birkenhead Park School
Stockbridge Village - St John Bosco
Sefton Park - Liverpool University
Prescot - Rainhill High School
Gayton - Oxton, Shrewsbury Road
Barnston - Oxton, Shrewsbury Road
Frankby - Oxton, Shrewsbury Road
Mill Park - Oxton, Shrewsbury Road
Birkdale High - High Park
Merton Bank Road - Cowley International College
Longridge Avenue - Cowley International College
Prescot - Rainhill High School
Toll Bar - Rainhill High School
Toll Bar - Rainhill High School
Crossens - Christ the King
Hard Lane - Rivington Road
Bebington - Bebington
Crossens - Christ the King
Berrys Lane - Allanson Street School
Lowfield Lane - Cowley International College

To – From
Clinkham Wood - Parish Primary
Elephant Lane - St Cuthbert's
Clock Face - St Cuthbert's
Maghull High - Black Bull
Kirkby - Maghull Schools
Black Bull - Maghull High
Blackbrook - Hope Academy
Kirkby - Maghull Schools
Newton-le-Willows - Hope Academy
Maricourt - Fazakerley
Waddicar - Maghull High
Maricourt - Kirkby
Thatto Heath - Sutton Academy
Seaforth - Maghull High
Melling Mount - Maghull High
Kirkdale - Maghull High
Newton-le-Willows - Carmel College
Platt Bridge - Carmel College
Rainford - Carmel College
Kew - Greenbank High School
Norwood Avenue - Greenbank High School
Greenbank High School - Banks
Billinge - St Augustine's
Rainhill Stoops - De La Salle
Delph Lane - De La Salle
Farnworth - De La Salle
Rainhill Stoops - De La Salle
Sutton Manor - Rainford High School
Bold - De La Salle
St Helens Town Centre - Cowley International College
Eastham - Neston
Ainsdale - Range High School

To – From
Clinkham Wood - Cowley International College
Thatto Heath - Outwood Academy
Liverpool South Parkway - Halewood Academy
Litherland - Chesterfield High
Crosby - Chesterfield High School
Billinge - Rainford High School
Liverpool Road - Rainford High School
Moss Bank - Rainford High School
Merton Bank - Rainford High School
St Helens Town Centre - Rainford High School
Hard Lane - Rainford High School
Knowsley Road - Rainford High School
Gillars Green - Rainford High School
Toll Bar - Rainford High School
Dentons Green - Rainford High School
Moreton - Broughton
Huyton Bus Station - Huyton Industrial Estate
Page Moss - Kirkby Industrial Estate
St Helens Bus Station - Haydock Industrial Estate
Huyton Circulars
Formby
Gayton/Lower Heswall
Speke Circular
West Kirkby/Caldy/Newton
Earlestown - Newton-le-Willows Interchange
St Helens - Whiston Hospital Circular
Kirkby Industrial Estate Link
Liverpool City Centre Shuttle
Maghull Circulars
Liverpool City Centre - Windmill Hill
Liverpool City Centre - Kirkby Bus Station
Liverpool ONE - Warrington

To – From
Liverpool City Centre - St Helens Bus Station
Liverpool - Stockbridge Village
Liverpool City Centre- Croxteth Park
Liverpool City Centre - Netherton
Liverpool City Centre - Widnes

Appendix 3: EP Areas of Agreement

Working Together to deliver the BSIP: Vision for Bus - Operators & LCR in Partnership



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Quick & Reliable Bus Journeys

LCR Aspiration	How	Operator commitment	Funding requirement	Timescale
Punctuality and Reliability improvements	Joint approach to data and implementation	Minimum reliability and punctuality standards aligned to BSIP with joint business plan for incremental improvement from agreed baseline	Operator funded trial to look at journey time optimisation	April 2022 (on going)
Green Bus Routes	Joint approach to data and implementation	PVR saved through bus priority enabling reduced journey time to be reinvested back into the network	Operator re investment back into route c.15 PVR	In line with Green routes timescales
Network resilience	One central control room	Arriva and Stagecoach to have one common control room to deliver service / future development with UTC integration	LCR commitment to continue to develop UTC	April 2022 (project start)

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Simple ticketing & great value fares

LCR Aspiration	How	Operator commitment	Funding requirement	Timescale
Standardised Lower Fares	One brand of fares "Metro"	Remove price premium on Multi Operator and roll out Metro products. As funding allows reduce further	BSIP funding required to reduce fares lower than own operator "Shadow fare" principle	April 2022 (delivery)
Simplify Fares	Tap and go to be rolled out as per LCR project plan	Maintain fare structure (flat fare) to allow roll out, Halton zone and Cross River zones to be removed	BSIP funding, LCR project funding requirement, Tunnel toll reduction to promote bus	April 2022 (delivery)
Integration of ticket between modes	All Ticket Machines in LCR to be Smart	All products available across platform	Stagecoach QR reader commitment	April 2022 (TBC)
MaaS	An LCR MaaS project to truly integrate transport under one branded system	Use operator experience and buy in to quickly develop the solution. Allow the removal of own operator apps	TBC	April 2022 (project start)

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A comprehensive & integrated bus network

LCR Aspiration	How	Operator commitment	Funding requirement	Timescale
Integration of services between modes	Co ordinate timetables & routes with other modes to enable effective interchange Metro / MAAS (see ticketing)	Analyse the network to ensure that the customer is offered the ability to interchange	N/A	April 2022 (project start, on going)
Stabilising the network	Operators and LCR to jointly agree a suitable network fit for the future	Agree sustainable base network with CA for April with 6 defining route categorisation	BRG 2.0 or BSIP funding	April 2022 (delivery)
Enhancing the network	Follow LCR network review cycle to optimize and enhance the network	To minimise subsidy required on the bus network. Develop the customer offering such as night buses	BSIP or Green route efficiency savings	April 2022 (project start, on going)
Network Efficiency	Deep dive analysis into SQPS bus routes	To look at the network with an open mind to deliver efficiency and reduce operating cost and improve the customer offering	N/A	April 2022 (project start 6 months)

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An emission-free bus network

LCR Aspiration	How	Operator commitment	Funding requirement	Timescale
High Specification of Fleet	Emission free buses / on board specification	Arriva – 245 Bus investment over 5 year period (TBC) Stagecoach – 80 Bus investment over 5 years (TBC) Bus investment	Support to bridge the gap to ZEV where applicable	25% of Fleet ZEV end of 2025
Hydrogen Trial	Launch first 20	To commit to bridge funding gap TBC Opex	N/A	March 2023
Passenger input into the specification	Customer groups to help shape future standard LCR specification of fleet	To lead with LCR on customer forums to develop fleet specification	N/A	April 2022
Accessibility	Audio Visual / Mobile charging	Minimum specification on all new buses / refurbishment	Needed if accelerated delivery required	April 2022

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An excellent Customer Experience

LCR Aspiration	How	Operator commitment	Funding requirement	Timescale
Network Identity Metro Bus	One standard Metro Brand across Fleet / products / Customer information	All new buses in Metro Branding / Refurbishment program of existing fleet Standard products (see ticketing) / Metro Brand first	Needed if accelerated delivery required	April 2022 (project start)
Passenger Charter	Engage with passengers & stakeholders to draw up a Passenger Charter	Major service changes twice a year 6 months notice for major route changes Develop and enhance "one point of contact"	N/A	April 2022
Improved Bus information		Other operator timetables data on Arriva & Stagecoach App website ahead of Maas		April 2022 (project start)
Highly effective and engaged employees	Enhanced training / Fair employment charter / Apprentices	Enhanced training for all staff to be agreed with LCR delivered to new starters and as part of a CPC. Operators will commit to the Fair employment Charter. Continue and develop apprentice scheme	N/A	April 2022 (on going)

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