

HATCH

REPHANT & CASTLE  
REPHANT & CASTLE

73 mins

# Moving London Forward

Bakerloo Line Upgrade and Extension

February 2024



The Bakerloo Line Upgrade and Extension will deliver for people and businesses across our city and country, creating a more connected, productive and sustainable capital and supporting the national economic growth our country needs.



# Foreword

Hatch collaborated with Central London Forward, the London boroughs of Lewisham and Southwark, and Transport for London to update its impact assessment and case-making work in support of the Bakerloo Line Upgrade and Extension.

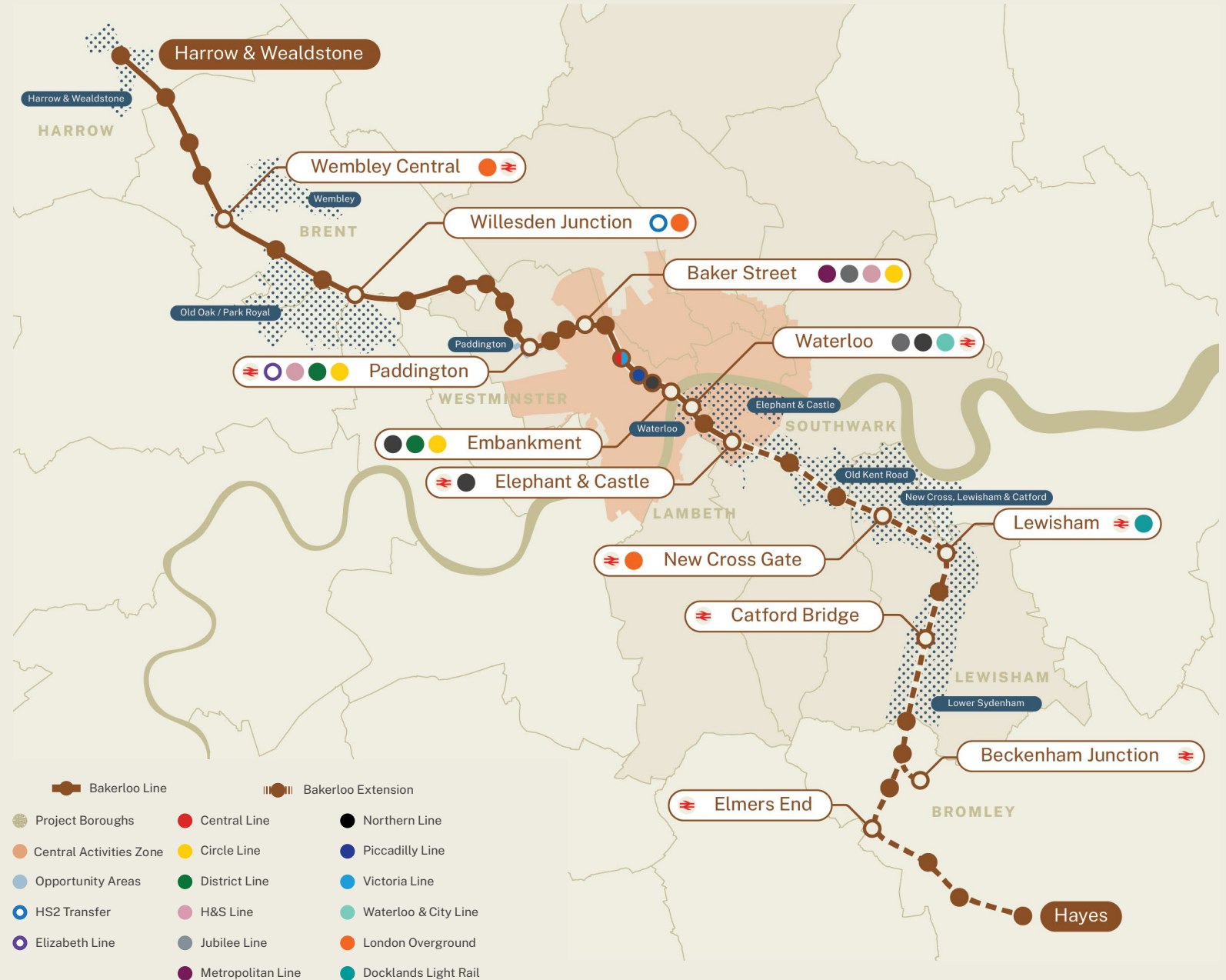
The Bakerloo Line is an iconic part of London’s underground, its history and culture. It connects our great landmarks, from Wembley, to the West End, and the South Bank. It is a vital part of economic infrastructure, with one in six jobs in London within a 12-minute walk of a station.

However, the Bakerloo Line faces significant and indeed existential challenges. Introduced in 1972, when Slade dominated the charts and Ted Heath was Prime Minister, the trains are the oldest in use anywhere in the UK and long past life-expectancy. Delays and maintenance costs are rising fast, and without action the line is at risk of failure.

The Bakerloo Line Upgrade and Extension is a fantastic opportunity for the capital and our country. Highlighted as an exemplar project in the recent London Infrastructure Framework, the extension is backed both by London’s boroughs and businesses. That is no surprise when you consider it will unlock 20,400 homes and 9,700 jobs and deliver a £1.5bn boost to our national economy.

At its heart, this is a plan to make much better use of the Bakerloo tunnels that already traverse under our great city. Transforming connectivity and travel times all the way from Harrow in the north west to Lewisham and Hayes in the south east. Creating capacity for an additional 150,000 journeys daily and connecting some of London’s least served areas to the TfL network.

It is a project that will deliver for people and businesses across our city and country, creating a more connected, productive and sustainable capital and supporting the national economic growth our country needs.



**Jennifer Daothong**  
Chief Executive  
Lewisham Council



**Kieron Williams**  
Leader of  
Southwark Council



**John Dickie**  
Chief Executive  
Business LDN

1 Elephant & Castle	4 min
2 Elephant & Castle	Delayed
3 12:59 London Euston	8 min
12:51:32	

Introduced in 1972, Bakerloo trains are the oldest in use anywhere in the UK and long past life-expectancy. Delays and maintenance costs are rising fast, and without action the line is at risk of failure.



# Defining The Upgrade and Extension

The Bakerloo Line Upgrade and Extension includes two distinct components: the ‘Upgrade,’ and the ‘Extension’. Whilst the Upgrade is not dependent on the Extension, the Extension can only be considered in conjunction with, or following, the Upgrade, to resiliently respond to future levels of demand. To achieve full benefit, the Upgrade and Extension should be delivered together.

		
<b>27</b>	<b>14</b>	<b>65,000</b>
Trains Per Hour	New London Underground Stations	New capacity for trips in each direction

### Bakerloo Line Upgrade (BLU)

The Upgrade proposes replacing the full fleet of existing rolling stock (Stage 1), which exceeded its nominal design lifespan in 2008, with new rolling stock, as well as improvements and modernisation of signalling equipment (Stage 2). The introduction of walk-through carriages will increase physical capacity by approximately 10%, enabling passengers to occupy the full length of carriages. New carriages and signalling (Stage 2) will enable faster line-speeds, increase train frequencies, and improve safety and reliability.

### Bakerloo Line Extension (BLE)

The Bakerloo Line Extension is the proposed extension of the Bakerloo Line from the current southern terminus at Elephant & Castle to Lewisham (Phase 1) and Hayes (Phase 2). It will deliver 2 new stations along the Old Kent Road before extending to Lewisham via New Cross Gate. The proposed Extension will be delivered via tunnel between Elephant & Castle and Lewisham before utilising existing Network Rail tracks from Lewisham to Hayes.

Source: TfL, Bakerloo Line Upgrade and Extension, Non-technical Modelling Report, 2022



# Today's Challenges

## MANAGED DECLINE

Continually reduced service due to a **lack of available rolling stock**. Many replacement parts and supplies have now been discontinued<sup>1</sup>.



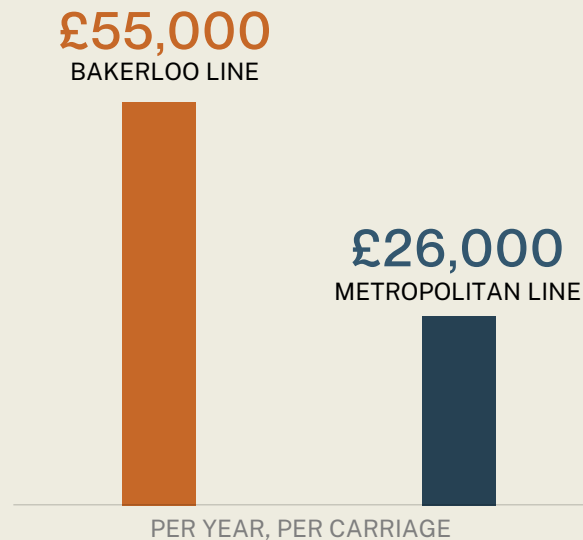
## RISK OF SUDDEN CRITICAL FAILURE

Current rolling stock is more than 50 years old, well beyond the planned 36-year lifespan. There is a risk of a sudden critical failure, which would lead to the **withdrawal of the fleet and the line ceasing to operate**.



## HIGH MAINTENANCE COSTS

Annual maintenance costs per carriage are **£55,000**, significantly higher than other London Underground lines<sup>2</sup>.



## INCREASING COSTS

Approximately half of the Bakerloo Line fleet is overhauled every year in order to keep the line operational. By mid-2030s, it will have cost over £500 million to **maintain and renew** the fleet. The Upgrade will significantly reduce this level of spending<sup>3</sup>.



## UNDERPERFORMS POTENTIAL CAPACITY

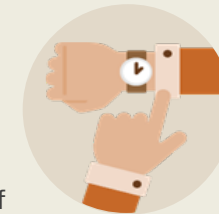


The Bakerloo Line under-performs its potential capacity compared to other major London Underground lines (Central, Northern, Jubilee and Victoria), carrying approximately **half the number of passenger journeys**<sup>6</sup>.

## INCREASING SERVICE DISRUPTIONS

**630,500**

**630,500 Lost Customer Hours in 2022-2023**, due to cancellations and withdrawals, an increase of 370% compared to 2012<sup>4</sup>.



## HIGH DEPRIVATION



48% of people within reach of the existing Bakerloo Line live within the **top 30% most deprived communities in England**<sup>7</sup>.

<sup>1,2,3,4,5</sup> TfL, 2023

<sup>6</sup> TfL, Bakerloo Line Extension, Background to 2017 Consultation, 2017

<sup>7</sup> DLUHC, IMD 2019

## HIGH FAILURE RATE

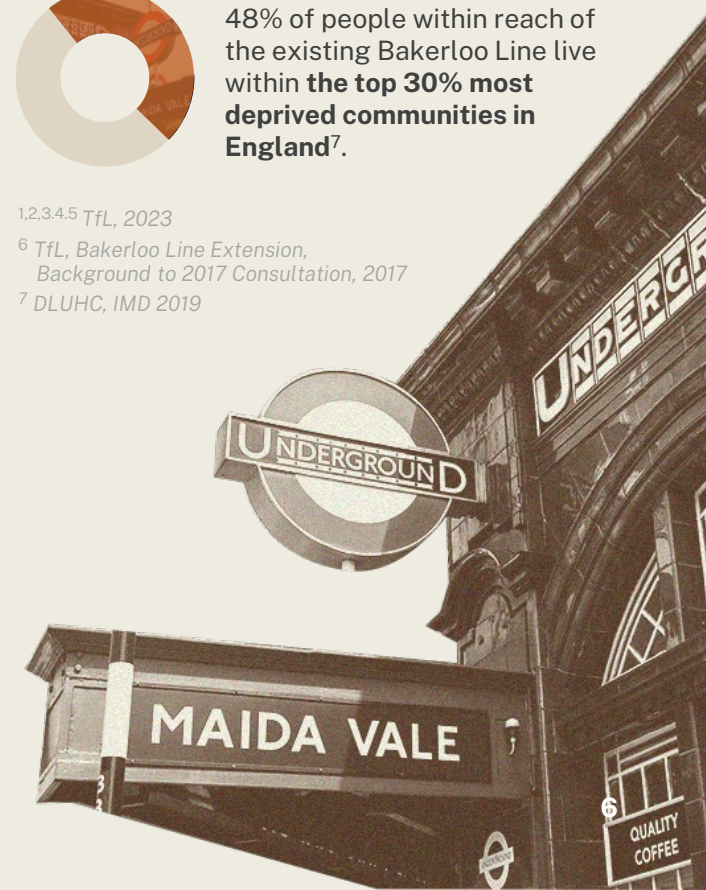
The Bakerloo Line experiences service failure 4x more often than the Victoria Line<sup>5</sup>.



BAKERLOO LINE



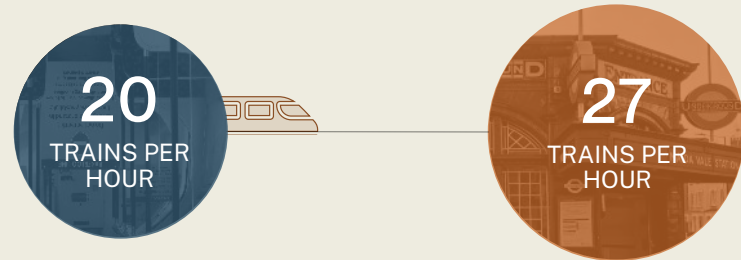
VICTORIA LINE



# Tomorrow's Opportunities

## INCREASE FREQUENCY AND RESILIENCE

New rolling stock and signalling will increase frequency and unlock capacity for **90,000** passengers in the central part of the line during the morning peak<sup>1</sup>.



## ENHANCE PASSENGER EXPERIENCE

New, modern walk-through carriages with air cooling, enhanced digital displays, step-free access and on-train CCTV will enhance passenger experience and safety.



## SAFEGUARD LONDON'S ECONOMIC PRODUCTIVITY



Long-term safeguarding of the Bakerloo Line through the Upgrade will improve operational reliability and frequency of services for the **existing 920,000 jobs** already within a 12-minute walking distance of Bakerloo Line stations (1 in 6 jobs in London)<sup>2</sup>.

## UNLOCK EMPLOYMENT OPPORTUNITIES

Unlock up to **9,700** additional jobs in London plus further benefits to the construction sector and supply chain<sup>3</sup>.

**+9,700**

## REDUCE CAR DEPENDANCE

The Bakerloo Line Extension could encourage **150,000 additional public transport trips** and **20,800 fewer car trips** during a daily period<sup>4</sup>.

**+150,000**

ADDITIONAL DAILY PUBLIC TRANSPORT TRIPS

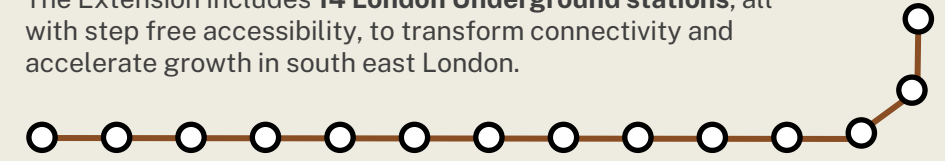
**-20,800**

REDUCTION IN THE NUMBER OF DAILY CAR TRIPS



## ENHANCE CONNECTIVITY AND INCLUSION

The Extension includes **14 London Underground stations**, all with step free accessibility, to transform connectivity and accelerate growth in south east London.



## UNLOCK NEW COMMUNITIES

The Extension will support delivery of **20,400 additional homes** and **almost 189,500 sqm of additional commercial floorspace**, catalysing new, sustainable communities in south east London<sup>5</sup>, whilst supporting 86,000 homes across London's Opportunity Areas.



**+20,400**  
HOMES



**+189,500sqm**  
COMMERCIAL FLOORSPACE

## DRIVE ECONOMIC GROWTH

**£1.5b**  
GVA PER ANNUM

The Extension will generate up to £1.5 billion in GVA per annum as a result of new jobs at unlocked sites and across the supply-chain, supporting the London and UK economies<sup>6</sup>.

<sup>1</sup> TfL, Bakerloo Line Upgrade and Extension, Non-technical Modelling Report, 2022

<sup>2</sup> ONS, BRES 2022 / Hatch Calculations

<sup>3, 5, 6</sup> Hatch Calculations

<sup>4</sup> TfL, Bakerloo Line Upgrade and Extension, Non-technical Modelling Report, 2022

## Six Imperatives for Unlocking Opportunity

# The Case for Bakerloo



## UNDERPINNING THE LONDON & UK ECONOMY

- Fueling 'Good Growth' through transport investment
- Multiplying benefits across the wider UK
- Support future population growth and economic access
- Accelerating London's Net Zero transition

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## FUTURE PROOFING TRANSPORT

- Addressing vulnerable infrastructure
- Reinventing customer experience
- Improving connectivity & connection across the network

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## ENABLING LONDON'S CULTURE, TOURISM AND KNOWLEDGE CORRIDOR

- A premier mobility corridor through the heart of the city
- Connects key London assets across sectors
- Enables cultural life and the creative economy

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## ACCELERATING PLACE LED GROWTH

- Tackling deprivation through better mobility
- Improving station accessibility
- Connectivity & connection across the network
- Unlocking homes, regeneration and investment

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## ACHIEVING NET ZERO

- Tackling air pollution challenges
- Encouraging modal shift and healthier lifestyles
- Extending rider catchment
- More efficient construction and operation

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## CREATING ECONOMIC RESILIENCE

- Achieving south east London's full potential
- Connecting talent with opportunity
- Boosting London's construction sector

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Investing to Support Growth

# Underpinning London and the UK's Economy

London's global economic influence shapes its central role in addressing many of the challenges facing the UK.

### Transport investment is cost-effective and economically proportionate for 'Good Growth' in London

The right investment in infrastructure and housing helps secure London's competitive global position and liveability. London's size and density places increased pressure on public transport as a fundamental enabler of economic prosperity.

'Good Growth' is predicated on improving the capacity, connectivity and service of transport infrastructure assets, particularly those like the Bakerloo Line Extension which accommodate south east London's future growth areas.

### Investment in London facilitates national growth, enabling rather than undermining the success of other locations

The economic vibrancy of London benefits the rest of the UK through taxes, spending, and supply chain impacts. Recent Hatch analysis<sup>2</sup> identified that TfL supported over 100,000 jobs, and £5.9bn in GVA.

The Bakerloo Line Extension will benefit businesses and employees beyond the Greater London boundary.

### London is the fastest growing city in the UK, but also the most unequal

London's population is projected to grow to about 10 million by 2041, at a rate faster than any other English city<sup>1</sup>. However, housing costs drive significant inequality, particularly as housing supply has failed to keep up with demand over the last 20 years. Nearly half of the people along the Bakerloo Line live in the top 30% most deprived neighbourhoods in the England.

The Bakerloo Line Extension will support London's most in need communities and accelerate development across London.

### Infrastructure investment can accelerate London's Net Zero transition

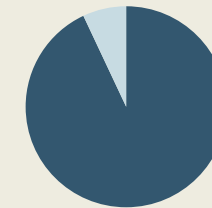
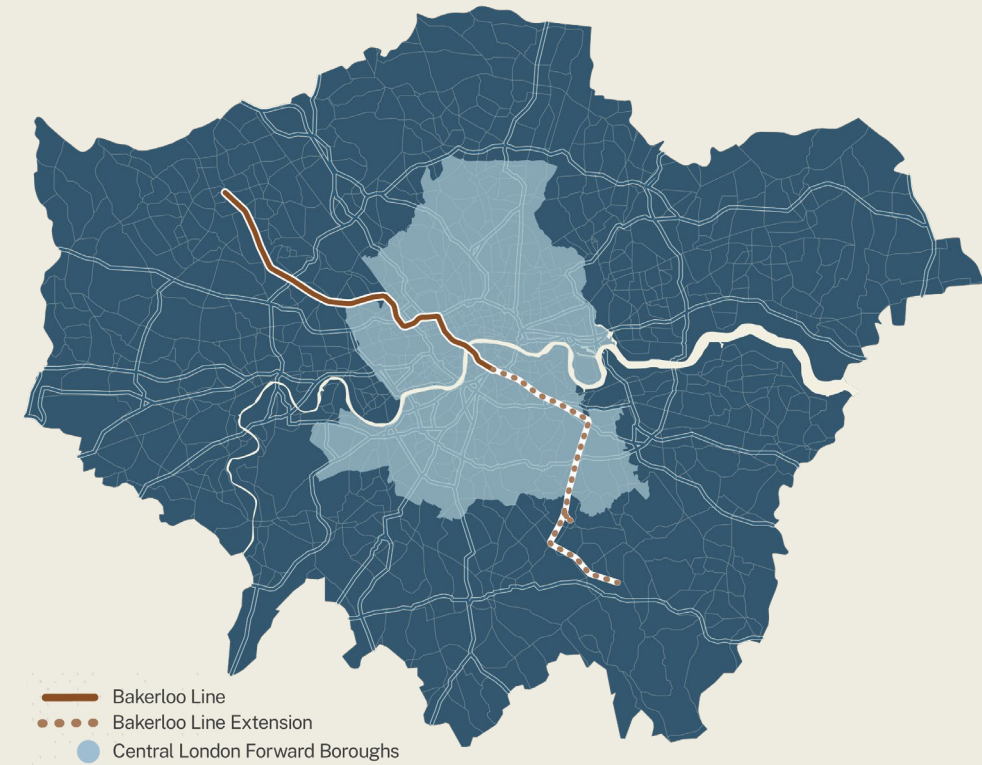
London declared a climate emergency in 2018, and in response, the Mayor bought forward London's Net Zero target from 2050 to 2030. Road transport accounts for approximately 30% of carbon emissions in London<sup>3</sup>; promoting active and more sustainable modes of travel is essential to address this emergency. Ageing infrastructure is also vulnerable to environmental risk and shocks, reaffirming the importance of investment in new infrastructure.

Investment in the Bakerloo line is essential to enhancing resilience and supporting Net Zero ambitions.

<sup>1,5</sup> GLA Population and Household Projections, GLA (2020)

<sup>2,4</sup> TfL Supply Chain Impact Assessment, Hatch (2023)

<sup>3</sup> CDRC, Access to Healthy Assets & Hazards, 2022



93%

of Transport for London's £6.5bn spending went to UK suppliers in 2022, and about half to small and medium-sized companies<sup>4</sup>



10,000,000

London is projected to grow to 10 million by 2041<sup>5</sup>

Investing to Support Growth

# Enabling London's Cultural, Tourism and Knowledge Corridor

The Bakerloo Line connects London's communities and visitors to its most prized assets.

Culture and heritage is critical to London's success as a global city. London is one of the most culturally vibrant cities in the world, providing home to over 200 museums and 800 art galleries, and 300 music venues.

The creative and cultural industries are among London's fastest growing sectors, supporting 1 in 6 jobs and generating approximately £47 billion

for the London economy each year<sup>1</sup>. Many of those are concentrated in central and north west London, including Park Royal at Willesden Junction and Soho via Oxford Circus and Charing Cross.

The Bakerloo Line has a central role in connecting communities and talent in north west London to the heart of London's business district, the Central Activities Zone (CAZ). It also connects nationally significant tourist and destination assets including Wembley Stadium, the UK's premier high street at Oxford Circus, the London Eye and Regent's Park.

<sup>1</sup> GLA, Support Culture and Creative Industries 2023



## Unlocking Opportunity

# Achieving Net Zero



### 2.4km

Average distance travelled by bus to access 'End of the Line' stations, 1km higher than London's wider bus-to-rail average<sup>6</sup>



### 20,800

Reduction in the number of daily car trips<sup>7</sup>



### 20%

Reduction in energy consumption due to new, more efficient rolling stock<sup>8</sup>



### 5x

Open rail sections result in 5x lower GHG emissions during construction, plus reduced energy consumption through less air resistance during operation when compared to tunnelled alternatives<sup>9</sup>

## The Bakerloo Line Upgrade and Extension will drive a reduction in emissions and car dependency.

### Tackle air pollution challenges

London aims to be a net-zero carbon city by 2030, and all of the Bakerloo Line boroughs have set their own net zero targets. Emissions from vehicles are the single largest source of London's air pollution, producing almost half of all nitrogen oxides (NOx) and particulate matter (PM)<sup>1</sup>. Outer London boroughs also have poorer access to public transport, increasing dependency on cars.

The BLE Corridor, in particular, currently falls within the two worst performing deciles (top 20% worst performing LSOAs) nationally in terms of air quality<sup>2</sup>. Lack of access to the tube and rail network mean that buses further compound congestion issues. Its role as a strategic corridor between central and south east London means that the Old Kent Road is one of the worst areas in London for exposure to air pollution. It is estimated that 30% of carbon emissions along the BLE corridor are contributed by cars,<sup>2</sup> which compounds already poor health outcomes for residents in this area.

By providing a high quality, accessible, electric train alternative, the Bakerloo Line Upgrade and Extension will help to improve air quality through an anticipated reduction of 20,800 daily car trips<sup>3</sup>.

### Encourage modal shift and embed healthy lifestyles

The Bakerloo Line Upgrade and Extension will encourage a shift away from car usage and reduce the number car trips made during peak hours, reducing congestion on some of the main arterial routes into London and allowing freight and buses to move more freely. Less congested roads can bring about cleaner, quieter and safer streets, in turn encouraging more walking and cycling. This virtuous cycle can make a valuable contribution to improving air quality and reducing emissions throughout the BLE Corridor.

New development enabled through the Bakerloo Line Extension will be sustainable communities with greater use of public and active transport. Residential development at the Old Kent Road, Lewisham and New Cross will be zero car parking and new commercial development will be required to commit to electric vehicles<sup>3</sup>. All new development will be delivered in line with modern energy efficiency standards and requirements, performing more efficiently than existing housing stock.

### Spread transport benefits beyond the tube stations

Catchment areas of station termini extend beyond the station, with passengers choosing to travel from further afield to access stations and the services they provide<sup>4</sup>. This effect can be supported through other public transport options and active travel links. It can therefore be reasonably expected, similar to what is seen in places like Brixton, that the Bakerloo Line Extension will further extend public transport catchment at key stations and interchanges such as Lewisham and Hayes, encouraging extended modal shift away from private car trips.

### New rolling stock will be more energy efficient

The existing Bakerloo Line rolling stock is the oldest operational electric multiple units (EMUs) in the UK and are less energy efficient and heavier than modern rolling stock. The Bakerloo Line Upgrade will deliver new rolling stock, resulting in a 20% reduction in energy consumption.

The design of the new rolling stock is also expected to be similar to that of the Piccadilly Line, which weigh substantially less, are more energy efficient, and less damaging to the tracks. Other improvements include regenerative braking, modern traction systems, LED lighting and improved energy management systems.

### Reduce environmental impact through use of existing open rail network

The extension of the Bakerloo Line south of Lewisham will utilise existing south eastern rail tracks, meaning the majority of the route does not require tunnelling which is both disruptive and carbon intensive. In addition, use of existing open rail network could save approximately 260 cubic metres of water per day otherwise required for tunnel boring during construction<sup>10</sup>.

<sup>1</sup> TfL, London's Air Quality

<sup>2</sup> CDRC, Access to Healthy Assets & Hazards, 2022

<sup>3</sup> LB Southwark, Old Kent Road Area Action Plan, 2020

<sup>4</sup>, <sup>6</sup> TfL, Bakerloo Line Upgrade and Extension, Non-technical Modelling Report, 2022

<sup>5</sup>, <sup>7</sup> TfL, Strategic Case for Metroisation in south and south east London

<sup>8</sup> TfL, Piccadilly Line Upgrade

<sup>9</sup> Pritchard & Preston, 2018, Understanding the contribution of tunnels to the overall energy consumption of and carbon emissions from a railway

<sup>10</sup> GLA, Water requirement of the Silvertown Road Tunnel Boring Machine, 2022

Unlocking Opportunity

# Future Proofed Transport

Without investment, there is risk of continued decline in experience and sudden failure.

**Address obsolete rolling stock and an extremely vulnerable maintenance supply chain**

The Bakerloo Line operates using life-expired and obsolete assets. The trains date from the 1970's and the signalling system has elements which date back to the 1950's. In its existing form, the fleet can never be compliant with modern standards of crashworthiness. Operating beyond their 36-year designed lifespan, the trains are now increasingly unreliable, costly to maintain and offer a poor-quality customer experience.

The existing life-expired fleet, together with legacy signalling, infrastructure, and track layout, all critically constrain the volume, quality, frequency, and reliability of services that can be operated. Increased risk of equipment and structural failure requires costly monitoring and management. Many suppliers of necessary parts and materials have ceased trading, further endangering the viability of the life-expired fleet.

<sup>1,2</sup> TfL, Fleet related delays and service cancellations 2023  
<sup>3</sup> TfL, 2023

**Reinvent customer experience to drive a shift toward sustainable transport**

Experience on the Bakerloo Line is poor and fails to meet customer requirements. This contributes to below-capacity ridership as well as longer delays and increased cancellations. In 2022-23 there were 589 cancellations leading to 630,500 lost customer hours, an increase of 370% compared to 2012-2013<sup>2</sup>.

The Upgrade aims to enhance customer experience and incentivise usage. New trains will feature walk-through carriages, air cooling, wider doorways, enhanced digital displays and on-train CCTV. Improvements and modernisation of signalling equipment will further improve resilience and train frequencies.

**Re-establish a higher frequency service to prevent managed decline and boost capacity**

Historically, the Bakerloo Line operated at 24 trains per hour, however, services have continually reduced due to a lack of available rolling stock. It now operates at around 20 trains per hour,<sup>3</sup> due to reduced availability of functional rolling stock and the discontinuation of replacement parts and supplies. The Upgrade will both restore and increase frequency to 27 trains per hour, boosting capacity and reducing impacts of future crowding.



The trains date from the 1970's and the signalling system has elements which date back to the 1950's.

**HIGH MAINTENANCE COSTS**

Annual maintenance costs per carriage are **£55,000**, significantly higher than other London Underground lines.

Source: TfL, 2023

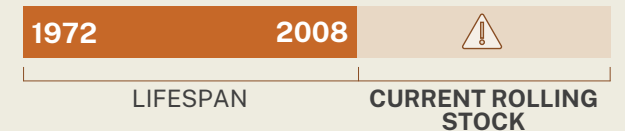
**£55,000**  
BAKERLOO LINE

**£26,000**  
METROPOLITAN LINE

PER YEAR, PER CARRIAGE

**RISK OF SUDDEN CRITICAL FAILURE**

Current rolling stock is more than 50 years old, well beyond the planned 36-year lifespan. There is a risk of a sudden critical failure, which would lead to the **withdrawal of the fleet and the line ceasing to operate.**



**HIGH FAILURE RATE**

The Bakerloo Line experiences failure 4x more often than the Victoria Line.

Source: TfL, 2023



BAKERLOO LINE



VICTORIA LINE

Unlocking Opportunity

# Future Proofed Transport

**Enabling transformational connectivity and capacity enhancements**

Unlike most London Underground lines, the Bakerloo Line terminates in Zone 1 central London. Its failure to extend further south, as well as its poor-quality customer experience, results in low levels of demand when compared to others (114 million passenger-journeys in 2017, less than half that of Central, Northern or Victoria lines)<sup>1</sup>. The Upgrade will make the entire line more attractive for users and drive new demand by adding capacity for at least 65,000 extra journeys across the morning and evening peaks<sup>2</sup>.

The extension to the south east will create a new direct link into central London, allowing the Bakerloo Line to create more equitable access to more sustainable travel modes. Journey times between central London and the south east will reduce, some by as much as 25 minutes<sup>3</sup>. This reduction in journey times will provide access to new skills and labour markets.

**Strategic connections across the network**

The Bakerloo Line Extension will connect south east London with all eleven existing tube services, the Elizabeth Line and Overground. In addition, Willesden Junction, which is currently served by the Bakerloo Line, is situated close to the Old Oak Common HS2 Station. It will become increasingly important on the network for reliable and high-quality onward connections for passengers travelling from Birmingham and the east Midlands, particularly as Old Oak Common will serve as the temporary southern terminus for HS2 for several years.

**Benefits to the rest of the network**

By providing additional capacity in the extension corridor, the Bakerloo Line Extension will release existing capacity on parallel lines (southern, south-eastern and Jubilee) and local buses, ensuring wider benefits to those passengers who use them. Increased connections and more alternative routes will also reduce the need to interchange at related stations and alleviate crowding on London Overground and Jubilee Line services.

<sup>1</sup> TfL, Background to Bakerloo Line, Public Consultation, 2017

<sup>2</sup> TfL, Bakerloo Line Upgrade and Extension, Non-technical Modelling Report, 2022

<sup>3</sup> Figures provided by TfL

<sup>4</sup> Figure based on assumptions for new Piccadilly Line rolling stock provided by TfL

**10%**

Increase in capacity through optimised design of new walk-through rolling stock<sup>3</sup>

**150,000**

Increase in the number of public transport trips during a daily period<sup>2</sup>

**27tph**

New rolling stock and signalling will allow the existing Bakerloo Line to increase frequency of trains per hour (tph)<sup>3</sup>

## The Bakerloo Line Extension will enhance journey times across London.



# Unlocking Opportunity Place Led Growth

The Bakerloo Line Upgrade and Extension is required to support population growth across London.

### Respond to accelerating demand

London’s housing market is constrained, with Outer London facing particular pressure to accommodate growth. Population growth in these areas has accelerated beyond comparator averages over the last decade (9.0% in Outer London between 2011 and 2021, compared to 5.3% in Inner London)<sup>1</sup>.

By 2041, the 7 boroughs through which the Bakerloo Line Upgrade and Extension will run are projected to see population increase by 145,000, accounting for 25% of London’s forecast growth<sup>2</sup>. Together, these boroughs are required to deliver 86,000 new homes<sup>3</sup>. Failure to invest in the Bakerloo Line Upgrade and Extension risks constraining growth through the impact of new developments on traffic congestion as well as sites becoming less attractive to developers due to poor connectivity.

### Unlock new homes and communities in south east London

Alongside supporting existing growth, the Bakerloo Line Upgrade and Extension will help to facilitate the delivery of 20,400 additional new homes in a 10km corridor of south east London which would otherwise not come forward, many of which will be genuinely affordable. These homes will be delivered around station sites, optimising land use and delivering more sustainable, car-light communities.

### Act as a catalyst of change for wider regeneration and investment across London

The Bakerloo Line Upgrade and Extension will also have an important role in stimulating inward investment and helping to support the already ambitious growth that is underway within the boroughs. New transport investment can enhance confidence in the market and accelerate development, including in town centre locations such as Lewisham and Catford.

<sup>1</sup> ONS, Population Projections, 2023

<sup>2</sup> ONS, Population Projections 2023

<sup>3</sup> London Plan, 2021

### Old Kent Road

The Old Kent Road is an Opportunity Area and one of London’s key locations for growth, covering an area roughly one square mile (282 hectares). Through innovative mixing of residential and industrious uses, it is delivering 20,000 new homes (of which 7,000 will be affordable) and 10,000 new jobs, 3 schools and other health and education facilities. Appetite for delivery is strong and planning permission has already been granted for over 9,500 new homes, many of which are currently under construction.

The Extension is integral to realising the full opportunity at the Old Kent Road. Existing Grampian conditions preclude 10,500 homes coming forward until the signing of the construction contract for the Extension.

The Extension will also bring forward benefits to the existing nearby communities through widened jobs opportunities and new facilities including new public open space (up to 15 hectares) and 3,000 new trees.

Source: LB Southwark and Old Kent Road Area Action Plan, 2020



## Lewisham Centre

Lewisham already has major regeneration and renewal plans well underway in its journey to transition into a Metropolitan Centre.

However, to fully realise its growth potential, the existing town centre infrastructure needs substantial improvement to support Lewisham Station in becoming a strategic public transport hub (1 of 4 in London).

The Bakerloo Line Extension will provide developer confidence and as a catalyst for change, providing an opportunity to enhance the transport offer at Lewisham town centre. It will support and enable growth while also enhancing the public realm and connectivity.

Enhancement of the station and redevelopment of the shopping centre and other sites (totalling 3,730 homes) is essential to ensuring Lewisham realises its full potential. It will be complemented by ambitious housing delivery plans at Catford and New Cross.



Lewisham Town Centre

## Bell Green and Lower Sydenham

Located in the south of Lewisham, Bell Green and Lower Sydenham represents a strategic area for regeneration, enabled primarily through comprehensive redevelopment of out-of-centre retail parks and low-density commercial uses.

It currently experiences some of the poorest access to public transport in London, which holds back development potential and contributes towards inequality and high levels of deprivation. To drive forward strategic regeneration, the Bakerloo Line Upgrade and Extension is required to catalyse development (circa 3,700 homes could be realised) and attract investment.



Lower Sydenham

# Unlocking Opportunity Place Led Growth

The Bakerloo Line Upgrade and Extension will better connect people with opportunity.

**Improve access for some of the most deprived communities in London**

The Bakerloo Line Upgrade and Extension passes through some of the most deprived communities in the country, where housing affordability and overcrowding are key drivers.

Over half (52%) the BLE corridor live within the most deprived communities in England, higher than both the London (33%) and national average (30%)<sup>1</sup>. Three times more people live in overcrowded conditions along the BLE Corridor when compared to England<sup>2</sup>.

The Bakerloo Line Upgrade and Extension will help to better connect these communities to new opportunities. It will also unlock and support more

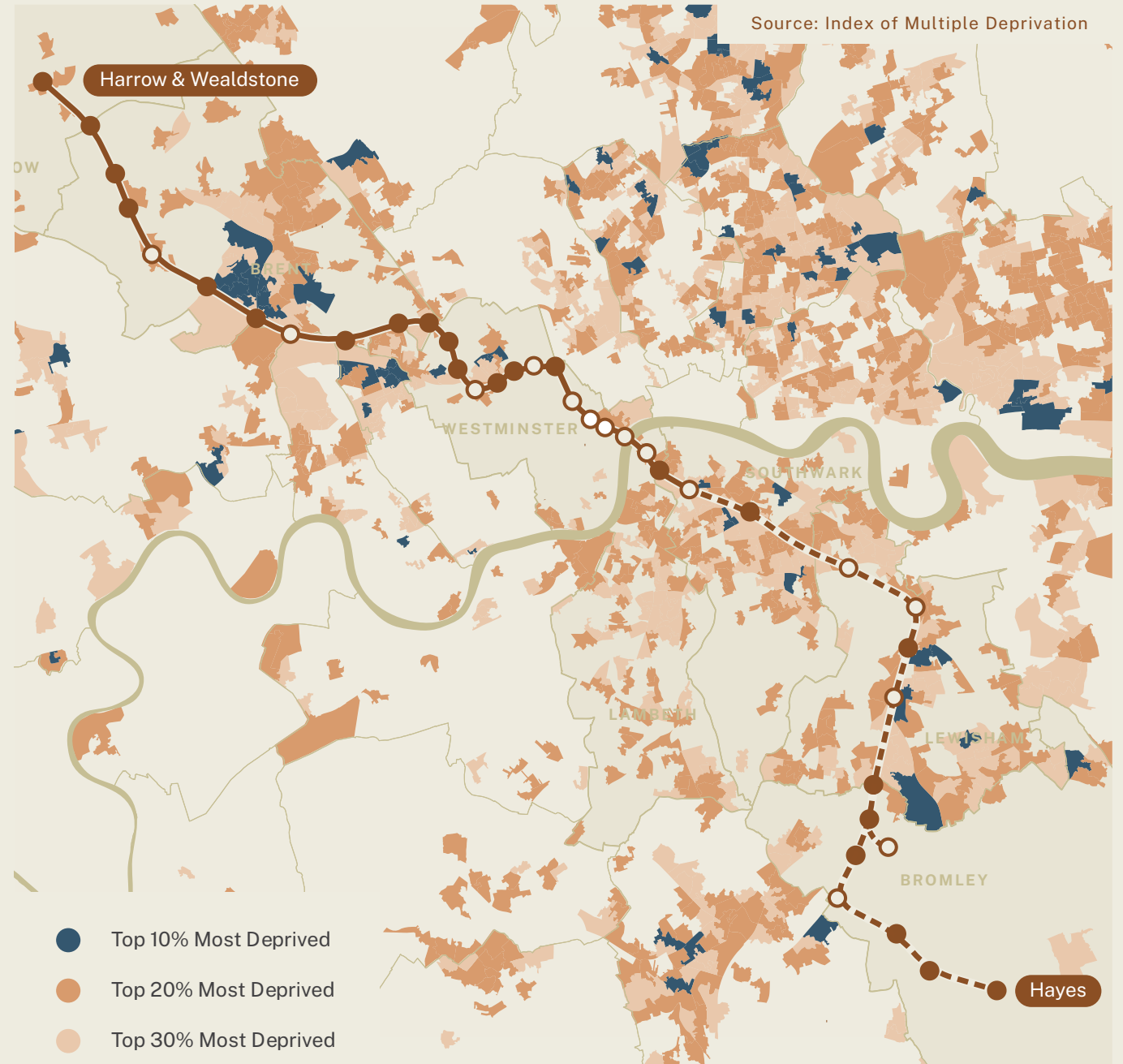
jobs and investment, helping local communities realise their full potential. Additional spending of £585 million per annum from residents new to the area will also help to support local businesses and investment.

**Deliver new and accessible stations**

All new stations along the extension will become fully step free. This will improve the number and range of accessible options for passengers who rely on step free travel, helping to ensure everyone has full access to opportunity.



**£585m**  
Estimated Annual Spend  
by New Population



<sup>1</sup> DLUHC, Index of Multiple Deprivation, 2019

<sup>2</sup> Office for health improvement and disparities, Local health, 2022



# Unlocking Opportunity

# Economic Resilience

### Enable south east London to catch up to its full potential

In recent years, GVA and employment growth in the BLE Corridor has been driven by the area surrounding Elephant & Castle, which benefits from the existing Bakerloo Line and connectivity to the London Underground network. When excluding Elephant & Castle, employment and GVA growth across the BLE Corridor has lagged behind the average growth rate for London. Whilst the type and intensity of growth will respond to local context, new infrastructure investment can unlock future economic growth beyond Elephant & Castle.

### Connect people and businesses to better opportunities

The BLE Corridor has both a higher proportion of working-age residents and degree level educated residents, compared to the London and national averages, yet also suffers from higher unemployment rates. This suggests that there is an educated workforce which could be better connected to higher value employment opportunities in the CAZ and within key developments along the corridor. The Extension will also support those who are unemployed to access more opportunities across London and within the CAZ.

### Encourage new commercial floorspace to accommodate high quality growth

Current evidence<sup>1</sup> highlights vacancy rates considerably lower than the London average, suggesting a constrained commercial market. At the same time, the Corridor has experienced strong employment growth in the professional, scientific and technical sector.

Future economic growth in such high value sectors can be accommodated through unlocking and delivering flexible and high-quality commercial developments along the Corridor. As such, there will be more local employment opportunities for a highly educated workforce, encouraging business growth within the Corridor's high proportion of Small and Medium Enterprises (SMEs).

### Boost London's construction sector

The delivery of the Bakerloo Line Extension is expected to provide a significant economic boost during the delivery period, creating direct and indirect jobs as well as training opportunities. It presents an opportunity to support the wider supply chain, including places like Goole, in the East Riding of Yorkshire where the new Piccadilly trains are already planned to be manufactured.

### Improved frequency and reliability will future-proof jobs and businesses

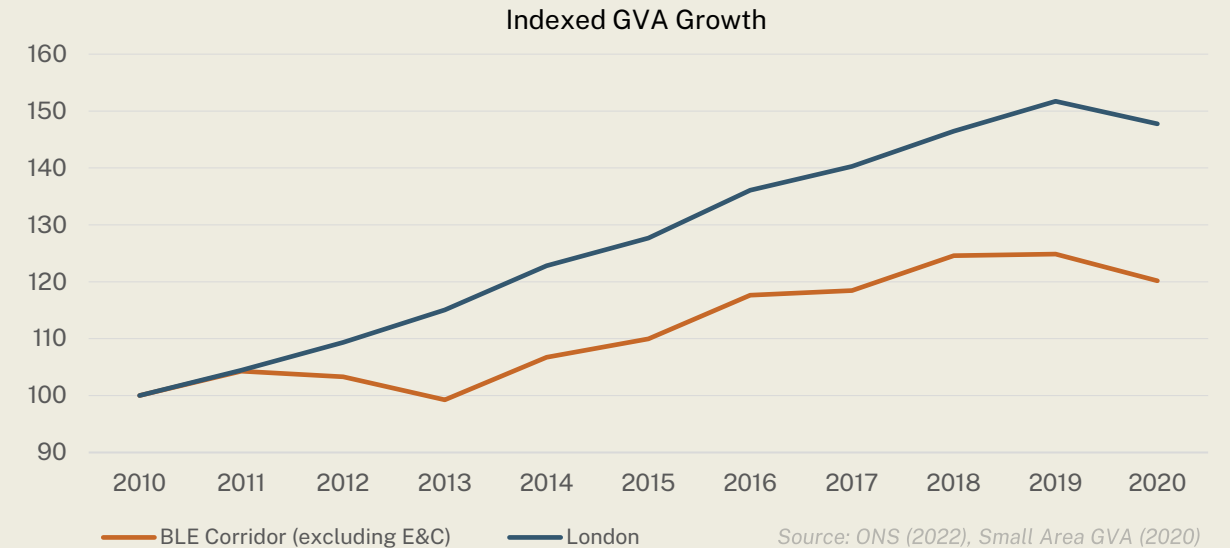
Nearly half a million people live within a 12-minute walk of its existing stations, with 1 in 6 of London's jobs also within the same area<sup>2</sup>. Improved frequency and reliability of the existing line, delivered through the Upgrade, will safeguard and enhance connectivity for the existing businesses and employees that rely on the Bakerloo Line.

<sup>1</sup> CoStar analysis (2023)

<sup>2</sup> ONS, Annual Population Survey, 2020

### Untapped Potential

GVA growth across the BLE Corridor (excl E&C) lags the London average.



**9,700**  
Additional direct jobs

**7,200**  
Southwark

**2,230**  
Lewisham

**270**  
Bromley

**189,500**  
sqm of additional commercial floorspace

**7,050**  
Gross Direct Construction Jobs on average per year to deliver Upgrade and Extension, 775 expected to be in apprenticeship roles

**£840 million**  
Direct GVA per year in construction to deliver Extension

**£1.5 billion**  
GVA per year

Source: Hatch Calculations

# Unlocking Opportunity Economic Resilience

## Unlock employment opportunities and access to a highly qualified workforce.

The economic performance of the BLE Corridor has lagged behind the average for London in recent years, which is in part linked to poor connectivity and constraints on development imposed by the current lack of the Extension into south east London.

The Bakerloo Line Upgrade and Extension will support people across London through better access to jobs and opportunities. Substantial improvements in journey times will give the 430,000 people who live along the existing route greater access to jobs within commuting distance, including some of London's most deprived communities.

Improved reliability and frequency of the existing Bakerloo Line delivered through the Upgrade, will increase public transport capacity and reduce journey times across London. The Upgrade will support 139,500 new jobs within Opportunity Areas along the existing line.



**100,000**

Additional jobs accessible within 45-mins of Hayes

**1.2 million**

Additional jobs accessible within 45-mins of Catford

Source: TfL, Bakerloo Line Upgrade and Extension, Non-technical Modelling Report, 2022 (estimates to nearest 100,000)



1 ONS, Mid-year population estimates, 2020  
2 ONS, Census 2021

## Conclusions & Reflections

# Mind the Gap

The Bakerloo Line Upgrade and Extension is a London-wide strategic imperative. As this document has outlined, the existing line plays a significant role in supporting London, and more broadly, communities nationally. The Bakerloo Line Upgrade and Extension will unlock opportunity to:

- Underpin the London and UK economy
- Enable London's Culture, Tourism and Knowledge Corridor
- Achieve Net Zero
- Future Proof Transport
- Accelerate Place Led Growth
- Create Economic Resilience

Without investment in the Upgrade, there is a serious risk of failure which will impact London and the UK's competitiveness. But this is not just about transport, the Extension brings huge opportunity to unlock and accelerate ambitious growth plans to bring benefits to residents and businesses across London, and support a net zero economy.

This report therefore arrives at a pivotal moment in time – an opportunity to invest in the Bakerloo Line Upgrade and Extension to future proof London.

The scale of this major infrastructure project means there is a long-lead in time to realise the full breadth of social, economic and environmental benefits outlined in this report.

However, this should not mean that decisions and commitments cannot occur now. UK Government, Transport for London and the boroughs must continue to work together in the short term to bring certainty and deliver commitments on the future direction of the project.



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