



Multimodal  
Interchange and  
Civic Hub

04

# Multimodal Hub Key Principles

The station currently acts as a barrier to connectivity across the Waterloo area and has little civic presence. Using underutilised existing spaces, new routes can be opened up across the station footprint to act as a catalyst to wider connectivity across the masterplan and between transport modes to create a true multi-modal active travel and sustainable transport hub.

- Improved access from entire station perimeter along key desire lines stitches the station back into the city fabric - unlocking new routes, connections, and concourses as permeable extensions of the street and public realm.
- Intuitive movement in and out of the station through new efficient, legible routes creates a true multi-modal transport hub that promotes active and sustainable travel whilst being responsive and adaptable to future growth.
- Step-free access along all routes align with key onward movement e.g. to St. Thomas' Hospital. Safe and secure spaces encourage 24hr natural surveillance in a generous station that improves the passenger experience for all.
- Resolving the current east-west severance, through unlocking the potential of the dormant undercroft spaces as a new southern concourse and site-wide connection integrates the station into its southern context whilst providing operational resilience.
- Improving the cycle parking capacity through increased quantum and distribution, and connecting the station into the existing and proposed cycle routes around Waterloo in a safe and clear manner.
- Waterloo Station will become far more mixed use, transitioning to become a destination in its own right, with renewed centres for local communities which they will be better connected to. The station will provide more jobs, services, assets and amenities – becoming even more important for the local community and across the city.



## Efficient, Legible Movement and Interchange

- Making movement in and out of the station more intuitive, efficient and legible whilst addressing congestion and passenger flows
- Creating clear sightlines, and wayfinding to interchange modes and connections
- Promoting active travel with improved pedestrian and cycle environments, safe and designated infrastructure aligning with onward journeys, and increase in cycle and micro-mobility parking and hire hubs



## Welcoming and Generous Public Open Space

- Integration of station into its context and strengthening onward connections and walkability
- Enhancing station setting and enriching arrival experience
- Generous, welcoming, and memorable amenity spaces
- Accessible and activated amenity that encourages users to dwell



## A Station with Civic Presence in Waterloo

- Improving civic presence as a gateway to city and defining civic thresholds for orientation, creating a sense of place and arrival
- Mediating between the scale of station footprint with the adjacent context to provide a legible, permeable urban network
- Celebrating Waterloo's history and unique identity



## A Resilient, Net Zero Hub Flexible for the Future

- Sustainable transport and civic hub
- A station that is responsive and adaptable to future growth, behavioural patterns and change
- Operationally efficient and resilient
- Serving as a catalyst for sustainable and inclusive growth



## A Permeable, Connected and Integrated Piece of City

- Improved access to station from entire station perimeter to facilitate greater contextual integration
- Unlocking new routes and connections both E-W and southward
- Creating a station and concourse(s) as permeable extensions of the street and public realm
- Enhancing and connecting active travel, cycle and micro-mobility networks, with new parking and hire hubs



## An Inclusive, Accessible Station Environment for All

- Station-wide level access and equitable step-free routes including routes that align with onward movement e.g. to St Thomas' and Royal Street
- Safe and secure station and environs that encourage natural surveillance day-night to support 24h city
- Generous and inclusive station and spaces that accommodate future passenger numbers, improve passenger experience, and legibility



## An Integrated and Activated Gateway to Waterloo

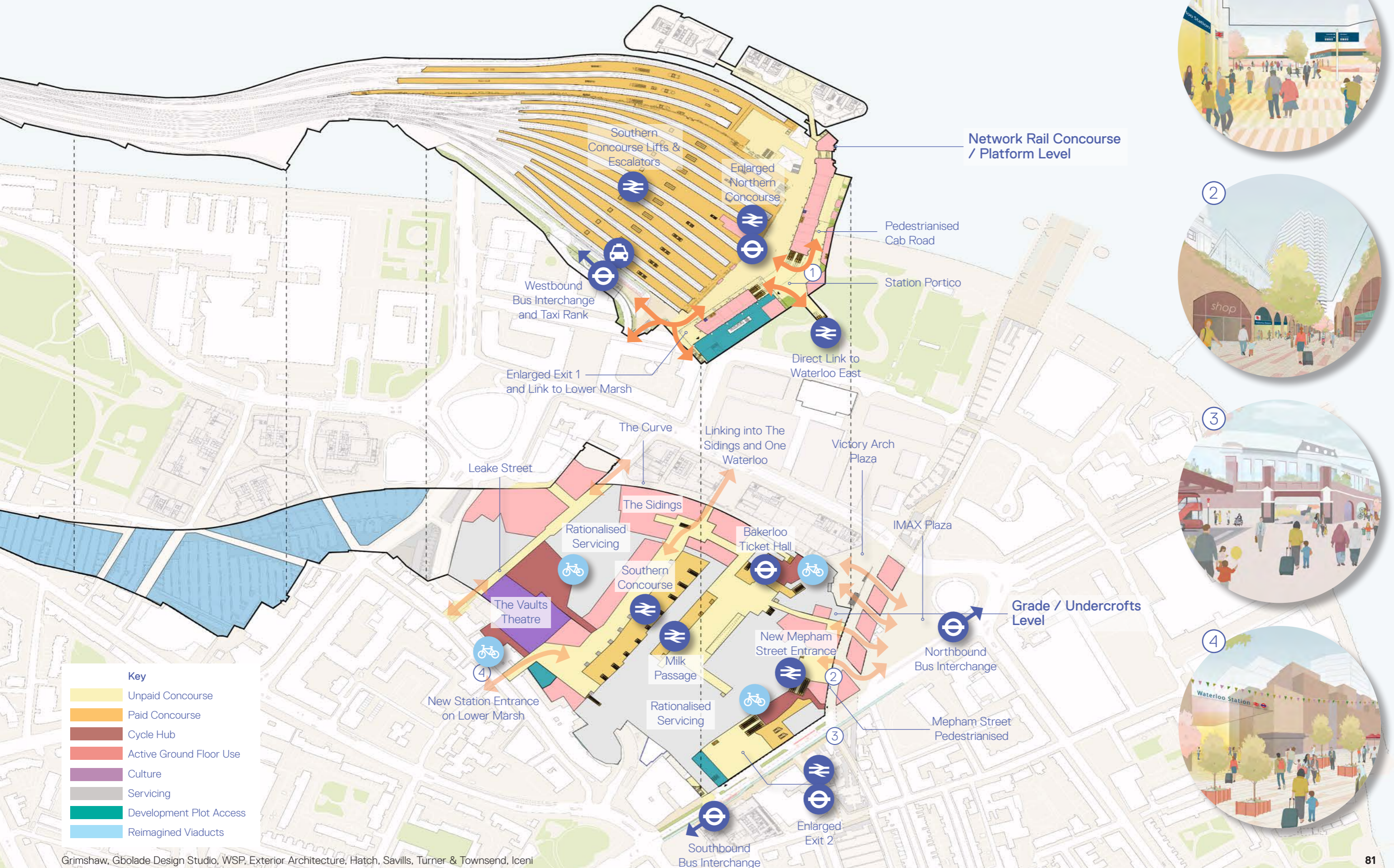
- An integrated piece of city and dynamic destination
- Activation of station frontage
- Maximising potential of underutilised assets such as the undercrofts and viaduct arches
- Creating a node for community amenity and incubator spaces



## Delivering Value for All Through Development

- Identifying development opportunities to deliver value to fund the station redevelopment and wider public realm improvements
- Supporting benefits of new jobs and skills, affordable workspace and safeguarded community amenity space
- Providing address and activation of key routes and spaces

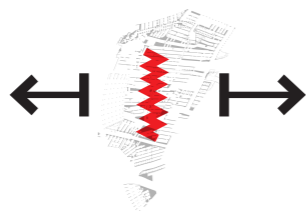
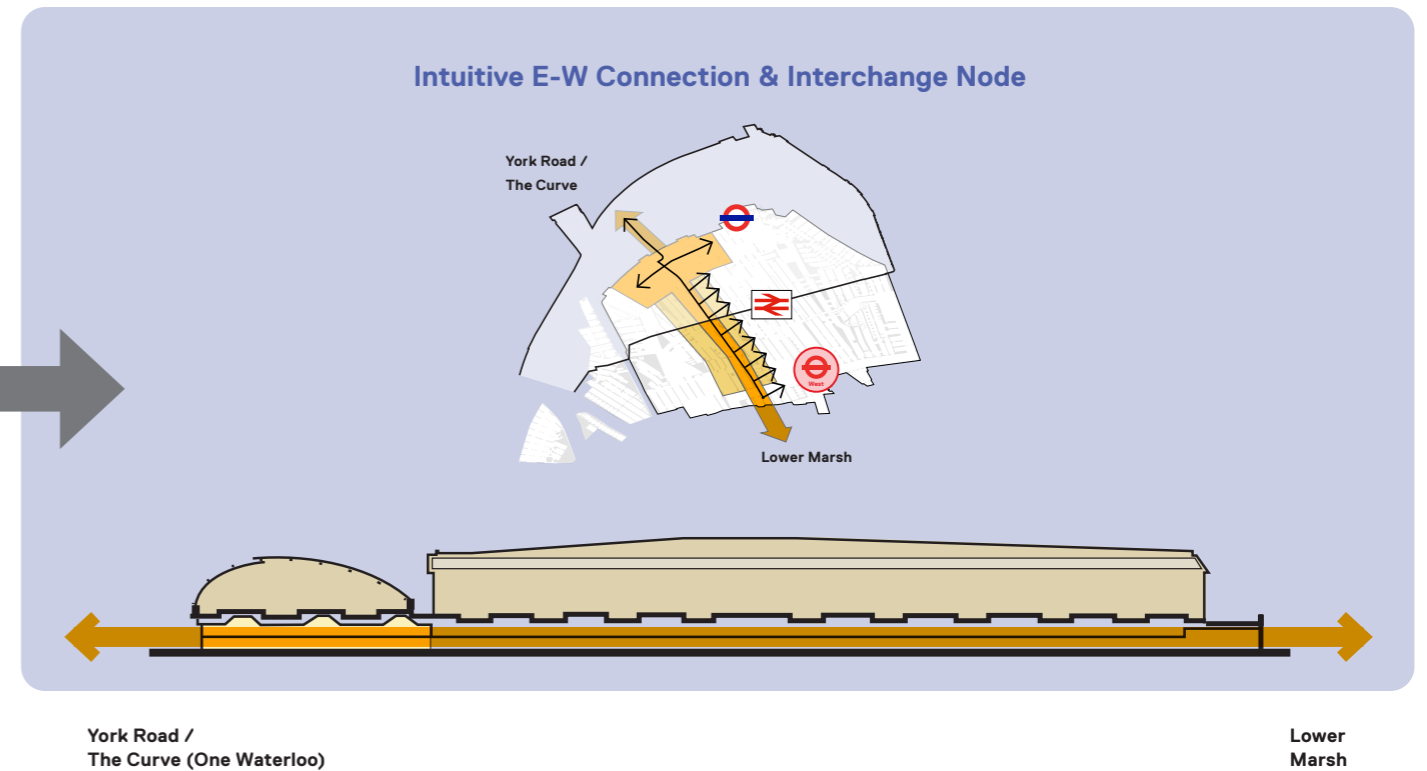
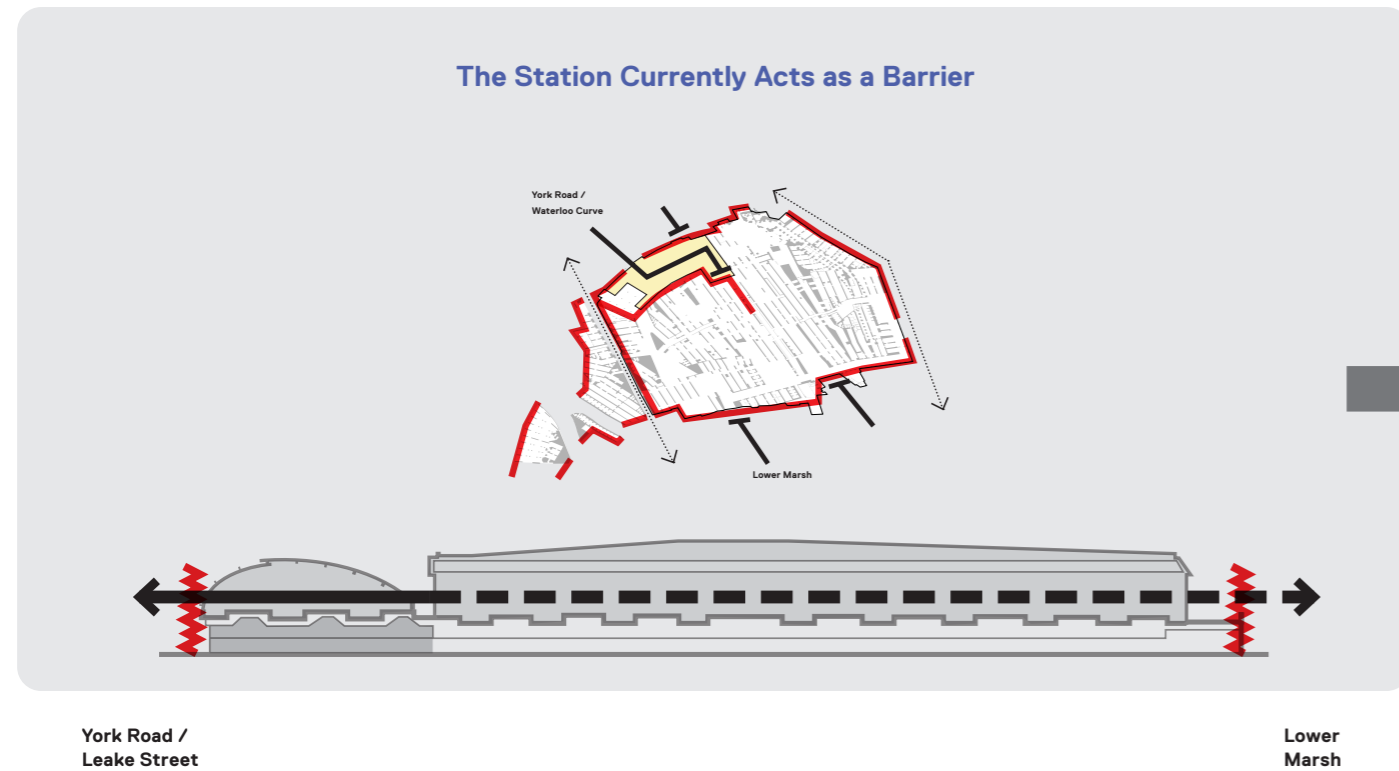
# Overview of Station Transformation



- Key**
- Unpaid Concourse
  - Paid Concourse
  - Cycle Hub
  - Active Ground Floor Use
  - Culture
  - Servicing
  - Development Plot Access
  - Reimagined Viaducts

# Unlocking Strategic Connections Key Principles

The station impedes grade level connections across the Waterloo area, particularly between Lower Marsh in the east and York Road in the west, due to its height, level changes, and impermeable facades. The existing undercrofts are underutilised and sit at approximately the same level as the surrounding streets. Through creating a new unpaid route across the southern portion of the station, complemented by a new southern station concourse with direct routes to platforms, wider connectivity can be unlocked.

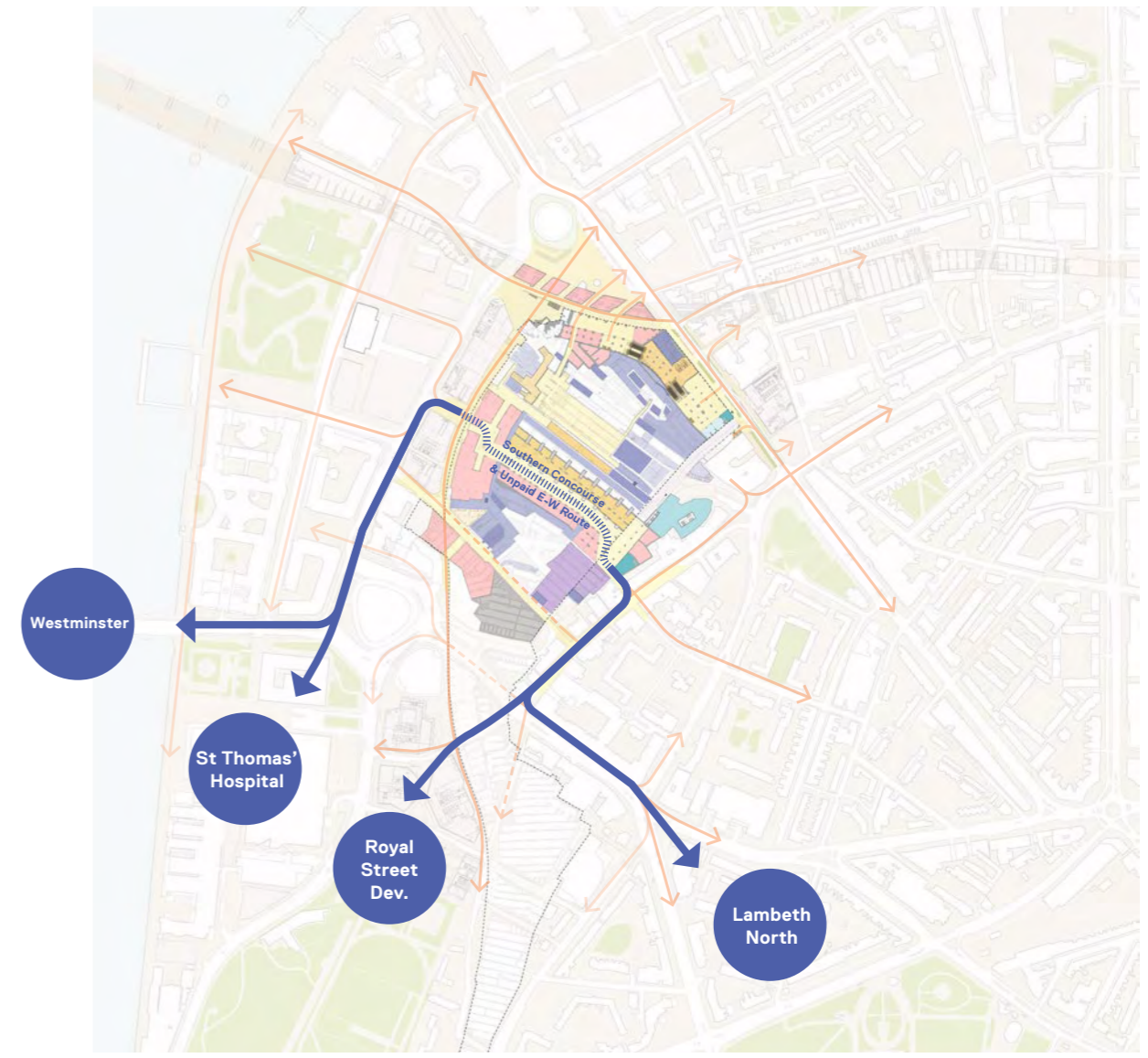
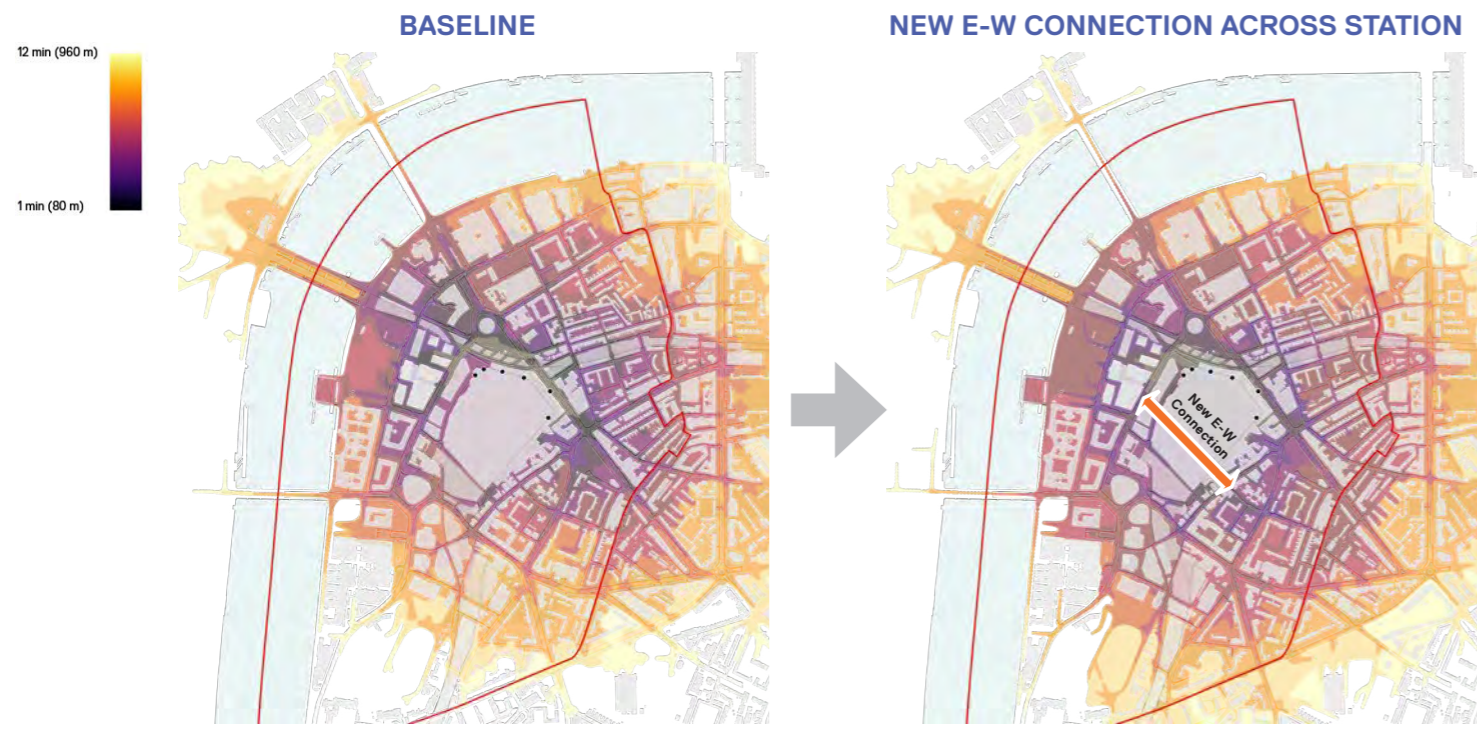


# Unlocking Strategic Connections Key Principles

The proposed southern concourse is integral to widening the benefits of the station transformation for local communities and key anchors, increasing walkability and access, and catalysing future development to the south of the station. As illustrated in the heatmap diagrams below, the new connection significantly increases the station accessibility catchment for communities in both the south-east and south of the Waterloo area.

The new unpaid E-W route across the station connects communities and unlocks accessibility on physical, social and economic levels. Locking into The Sidings to the west and Lower Marsh to the east, the southern concourse will also increase footfall to these key retail and F&B destinations. The route will be lined by active ground floor and community uses, complementing rather than competing with the adjacent assets, whilst providing much needed safeguarded spaces for the community and retail that responds to local community need.

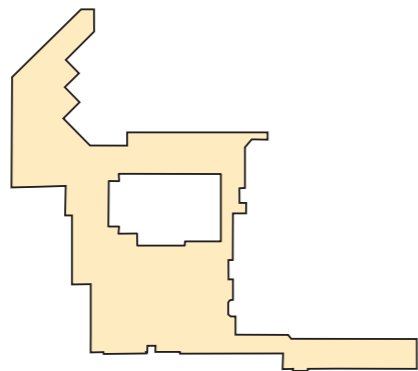
Access to St Thomas' Hospital is made more efficient, legible and accessible via a new level access station entrance on Lower Marsh and improved connectivity, wayfinding and gateway node at the intersection of Upper and Lower Marsh. The emerging SC1 health and life sciences district and proposed Royal Street development will also substantially increase demand to the south, and the southern concourse responds to this. Improved access to areas such as Lambeth North and Westminster will provide numerous improved routes, critical to catalysing wider improvements and sustainable and inclusive growth to these communities.



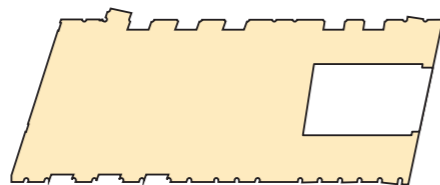
# Unlocking Strategic Connections Southern Concourse

The new southern concourse will help to alleviate current congestion and capacity issues at Waterloo, and provide future station resilience. The current northern concourse is approximately the same size as Victoria, despite handling almost 15m more passengers a year. London Bridge station now has almost 2,000m<sup>2</sup> more concourse space. The southern concourse will provide a large, flexible new area for passengers to enter/exit, distributing flows, alleviating congestion, and improving passenger experience.

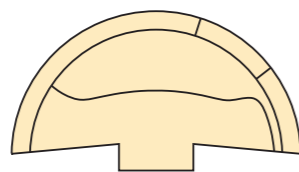
**Victoria - 7050m<sup>2</sup>**  
 Entry/Exit 77m  
 Interchange 5.8m



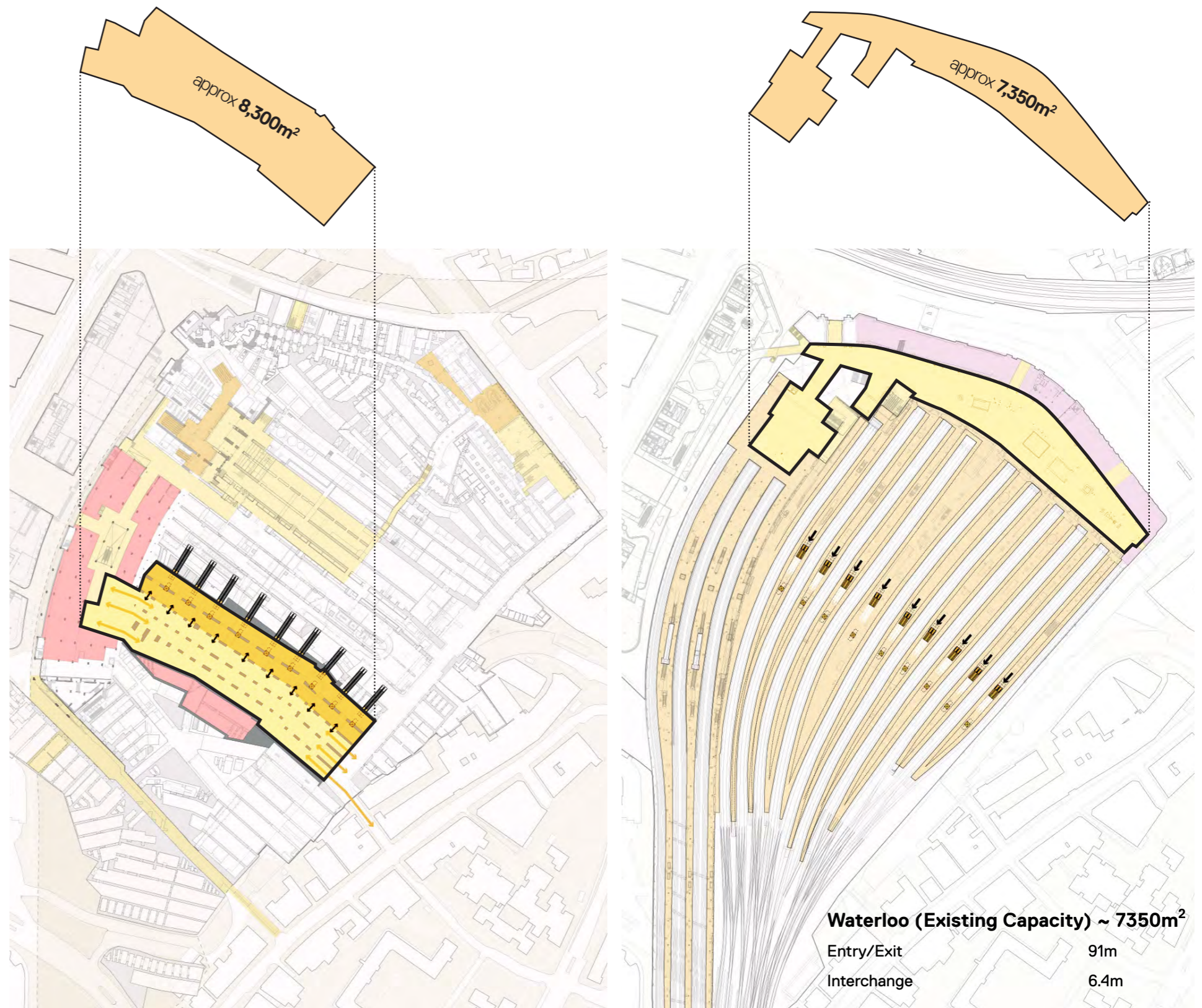
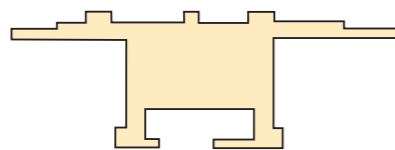
**London Bridge - 9150m<sup>2</sup>**  
 Entry/Exit 66m  
 Interchange 10.1m



**Kings Cross - 5550m<sup>2</sup>**  
 Entry/Exit 34m  
 Interchange 2.4m



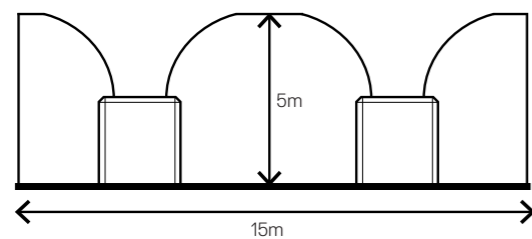
**Euston - 3250m<sup>2</sup>**  
 Entry/Exit 47m  
 Interchange 4.4m



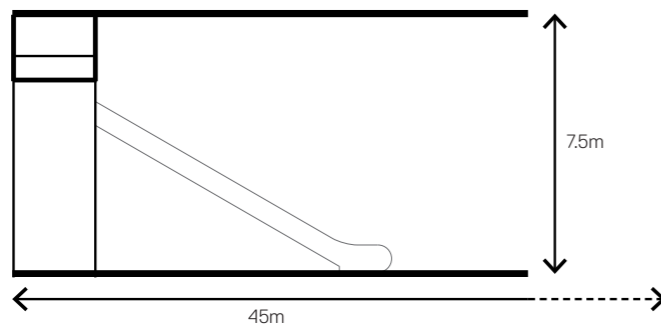
**Waterloo (Existing Capacity) ~ 7350m<sup>2</sup>**  
 Entry/Exit 91m  
 Interchange 6.4m

# Unlocking Strategic Connections Southern Concourse

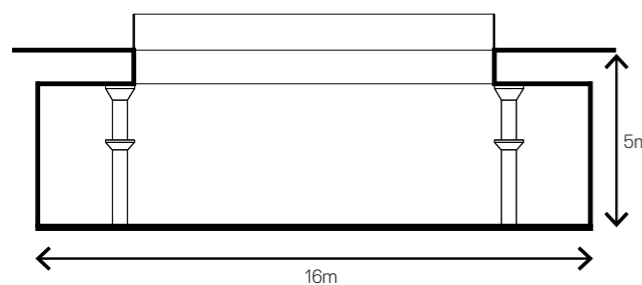
The existing dormant undercrofts will be re-imagined as a new station concourse and route. With a height of approximately 5-6m to the peak of the arches, the space is comparable to the Western Arcade at London Bridge Station. New lifts and escalators from the platforms help to reduce passenger journey times to and from the south, and reduce the platform congestion issues currently present at Waterloo.



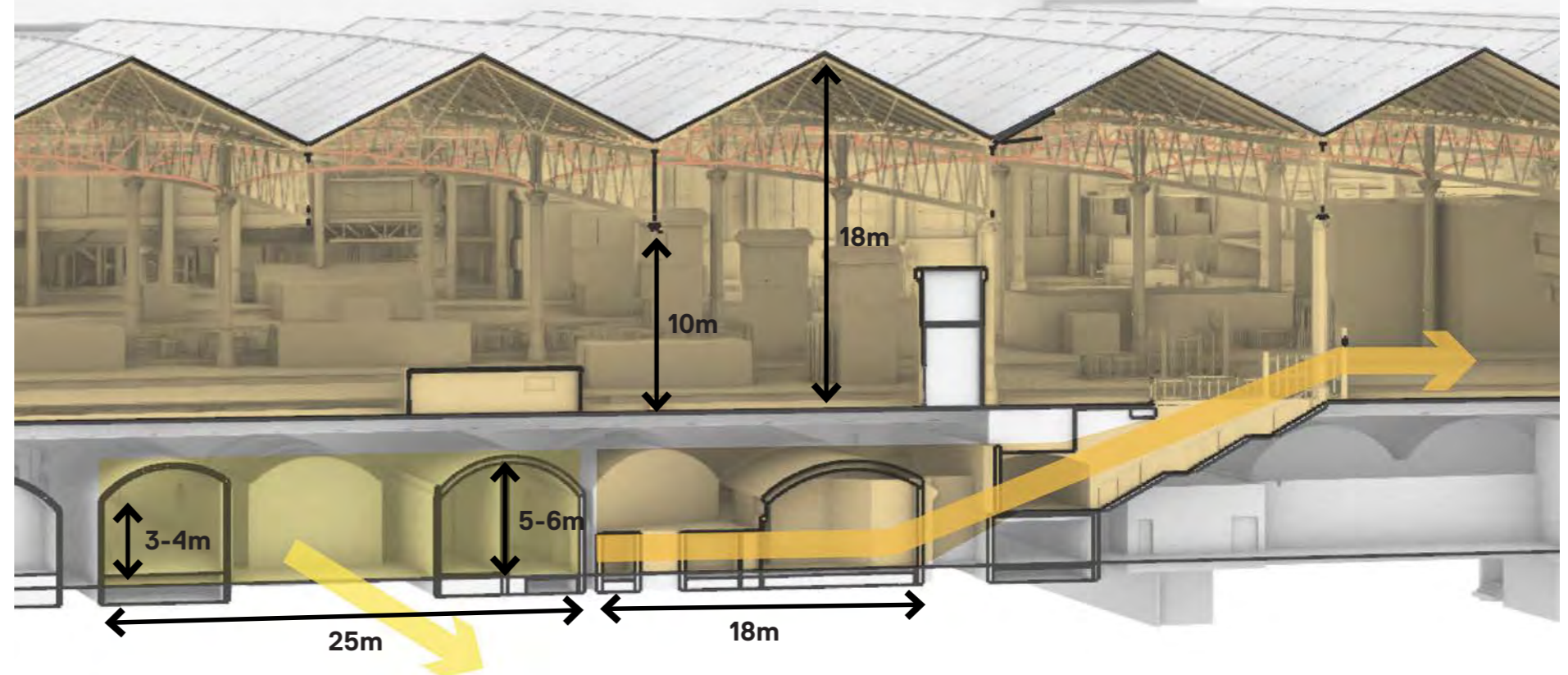
**a** London Bridge - Western Arcade Section



**b** London Bridge - Concourse Section



**c** St Pancras - Retail Arcade Section





# Unlocking the Station Thresholds Key Objectives

The station currently interfaces negatively with its immediate surroundings. The entrances sit predominantly to the north, and with the exception of Victory Arch, have little presence to aid wayfinding. Onward routes to the surrounding area, such as the South Bank or Lower Marsh, are unclear. The station thresholds suffer from a lack of pedestrian public realm impacting orientation and dwell space.

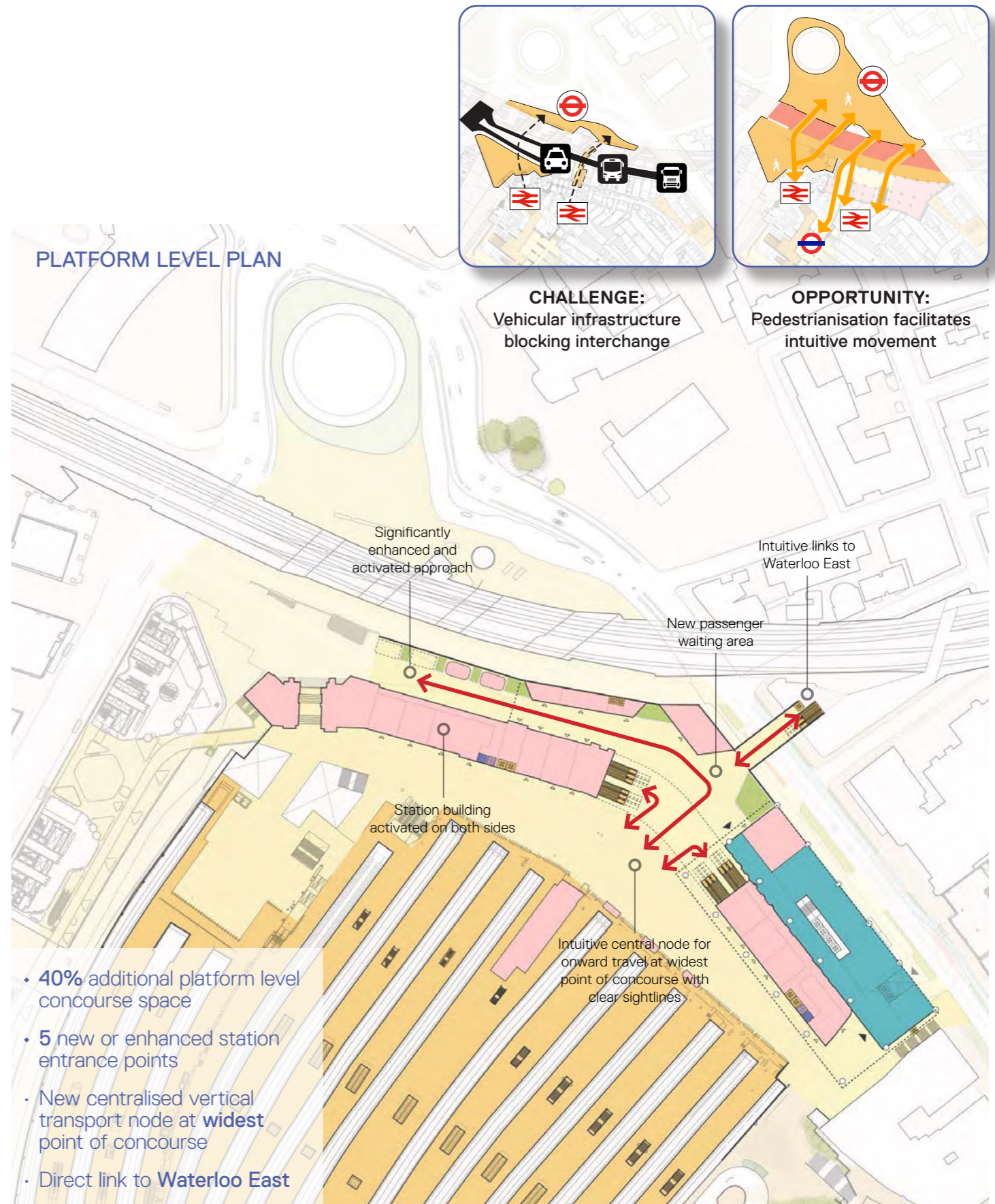
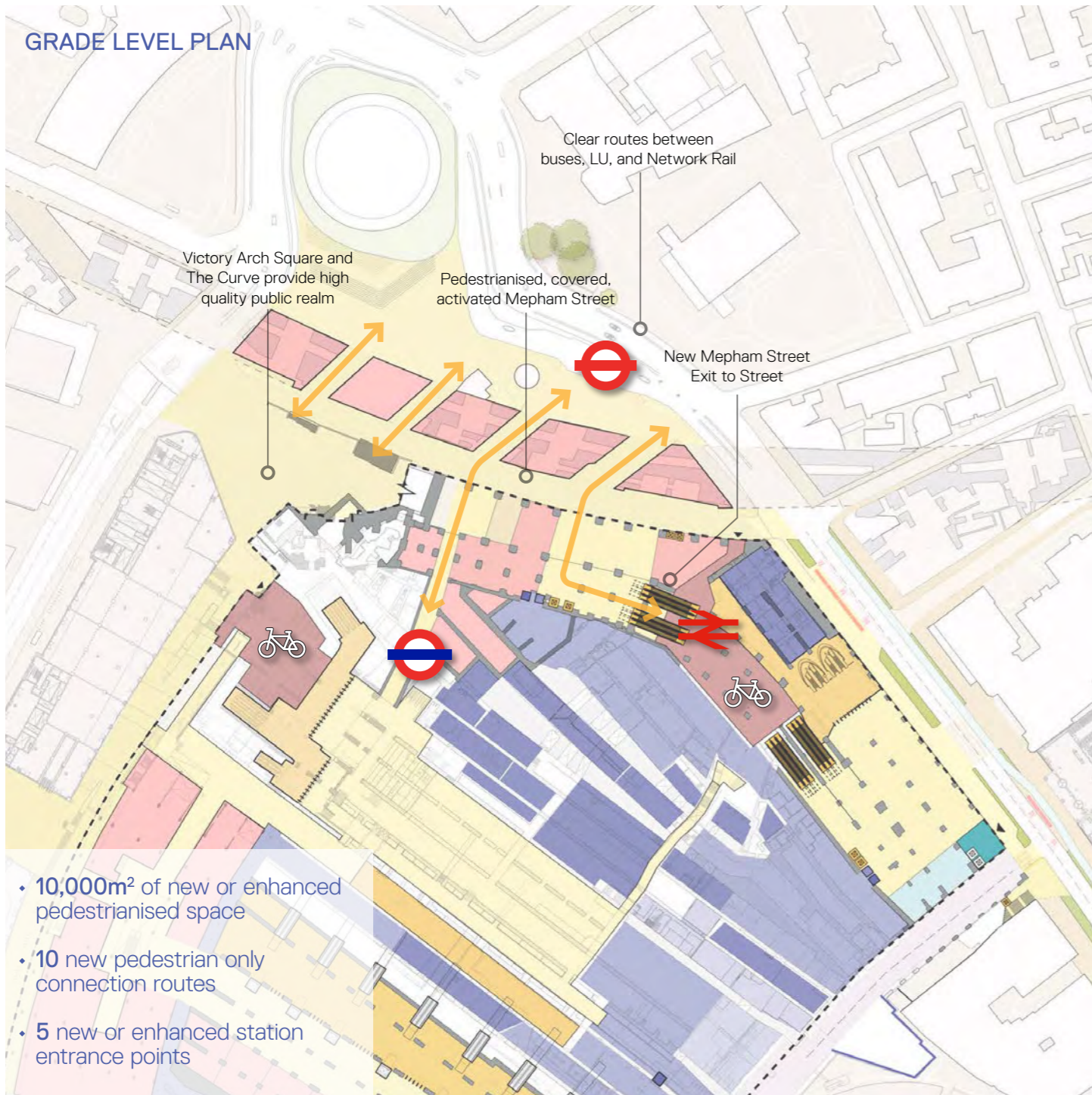
These issues are linked to the predominance of vehicular routes around the station perimeter. Station Approach, Spur Road, Cab Road, Tenison Way and Mephram Street are used by buses, taxis, private hire, and service vehicles to the detriment of the pedestrian experience.

Through consolidation of vehicular routes into key areas around the station, the station's thresholds will be unlocked whilst maintaining station function. Distributed entrances with clear civic presence aid wayfinding, and expanded thresholds with clear onward routes provide high-quality public realm and masterplan wide connections.



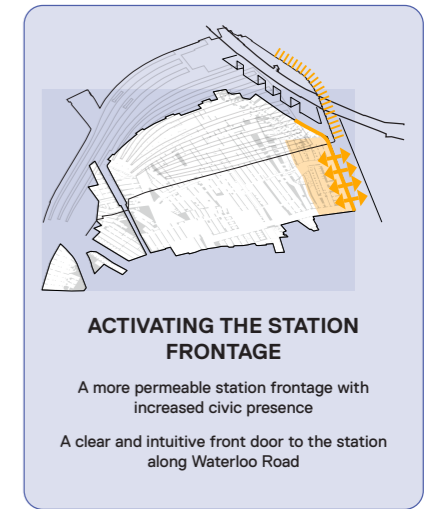
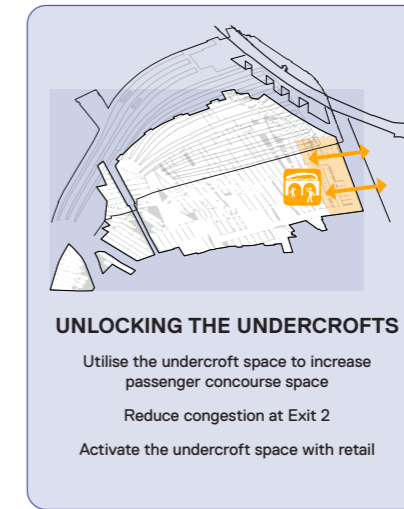
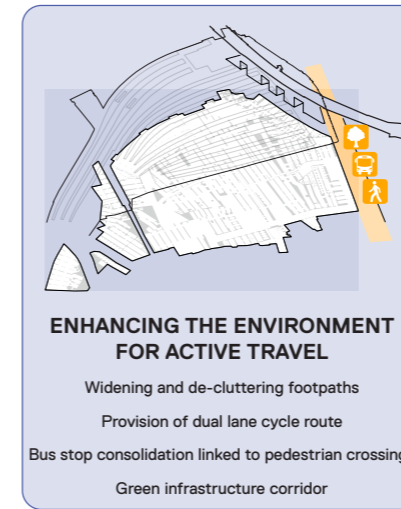
# Unlocking the Station Thresholds Station Plaza

Pedestrianising Mepham Street, Cab Road, and the creation of the IMAX peninsula transforms the station's northern edge. Pedestrian only links between modes of transport aid interchange and provide activity and amenity space. The station's northern concourse expands into Cab Road for increased capacity, intuitively linking to Waterloo East. A central escalator nodal arrangement clarifies wayfinding at the concourse's widest point.



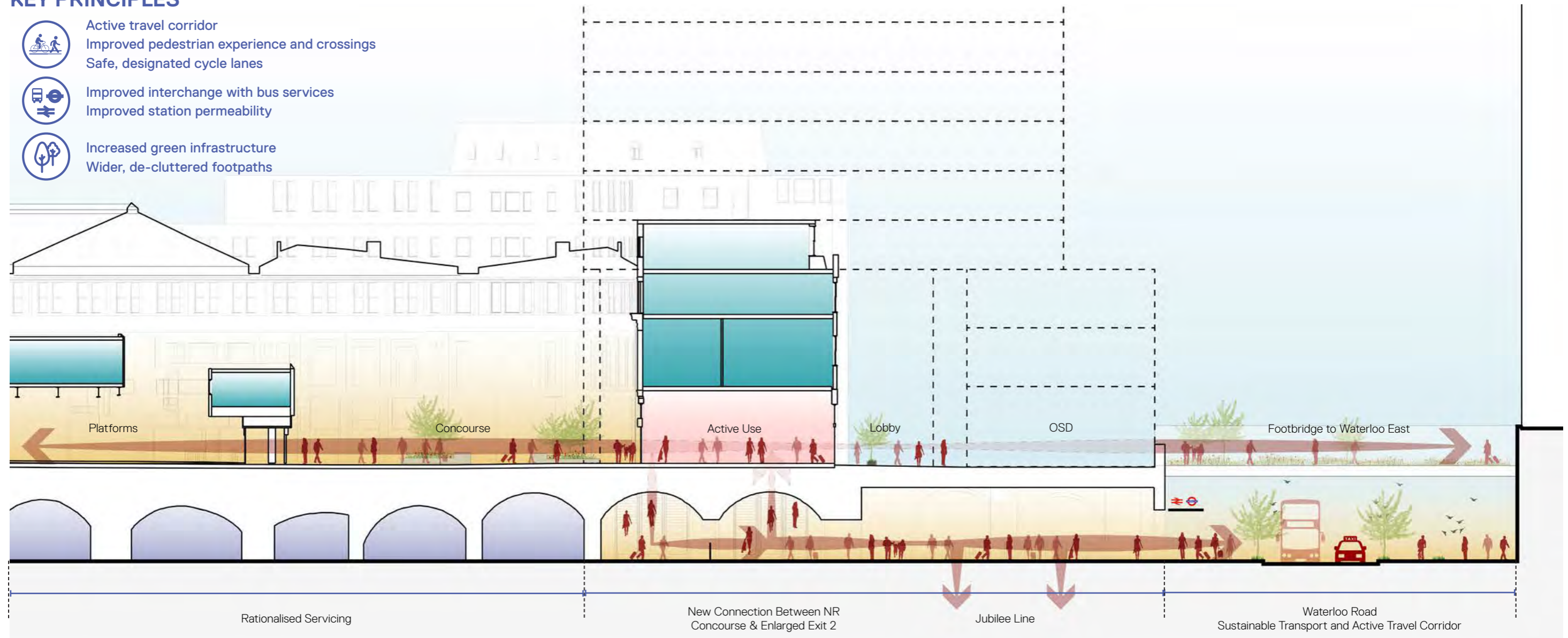
# Unlocking the Station Thresholds Waterloo Road

Waterloo Road is re-imagined as an active travel and sustainable transport corridor, with improved pedestrian and segregated cycle routes to align with Lambeth’s long-term goals. Taking advantage of improvements to the public realm from new development, bus infrastructure is also improved to act as a southbound interchange. Wider footpaths, a more permeable station entrance, and green infrastructure creates an enhanced public realm environment. Further development of the alignment and designation of space along Waterloo Road should be coordinated by LBL, TfL and key local stakeholders such as NR, IMAX, St John’s and King’s College London at the next design stage to ensure priorities are balanced and to create a safe, green and healthy Waterloo Road for all.



## KEY PRINCIPLES

- Active travel corridor  
Improved pedestrian experience and crossings  
Safe, designated cycle lanes
- Improved interchange with bus services  
Improved station permeability
- Increased green infrastructure  
Wider, de-cluttered footpaths



# Unlocking the Station Thresholds Exits 1 and 2

Exit 2 provides the entrance to the station from Waterloo Road and main entrance into the Jubilee Line. Currently, it is undersized to deal with the crowding issues around the LU gateline, causing issues all the way up the escalators to the NR concourse. Through increasing and reorientating escalators and lifts and increasing the footprint of Exit 2 by 150% into the undercrofts, increased capacity and control of passenger flows future-proofs the station.

Exit 1 links the NR concourse out to eastern connections such as Lower Marsh. Currently, it is undersized and vehicular routes make wayfinding unclear. Through increasing the size of the entrance and pedestrianising the road, new concourse space is unlocked and clear pedestrian routes are created to The Cut and Lower Marsh. Landscaping creates a successful public realm, adjacent to the new bus and taxi interchange.

### EXIT 2 CHALLENGES

- Queuing in NR concourse caused by lack of escalator capacity, closure of escalators from disruption on the Jubilee Line or escalator failure
- Multiple cross flows on Exit 2 lower level and lack of holding capacity during Jubilee Line disruption

### EXIT 2 NEEDS

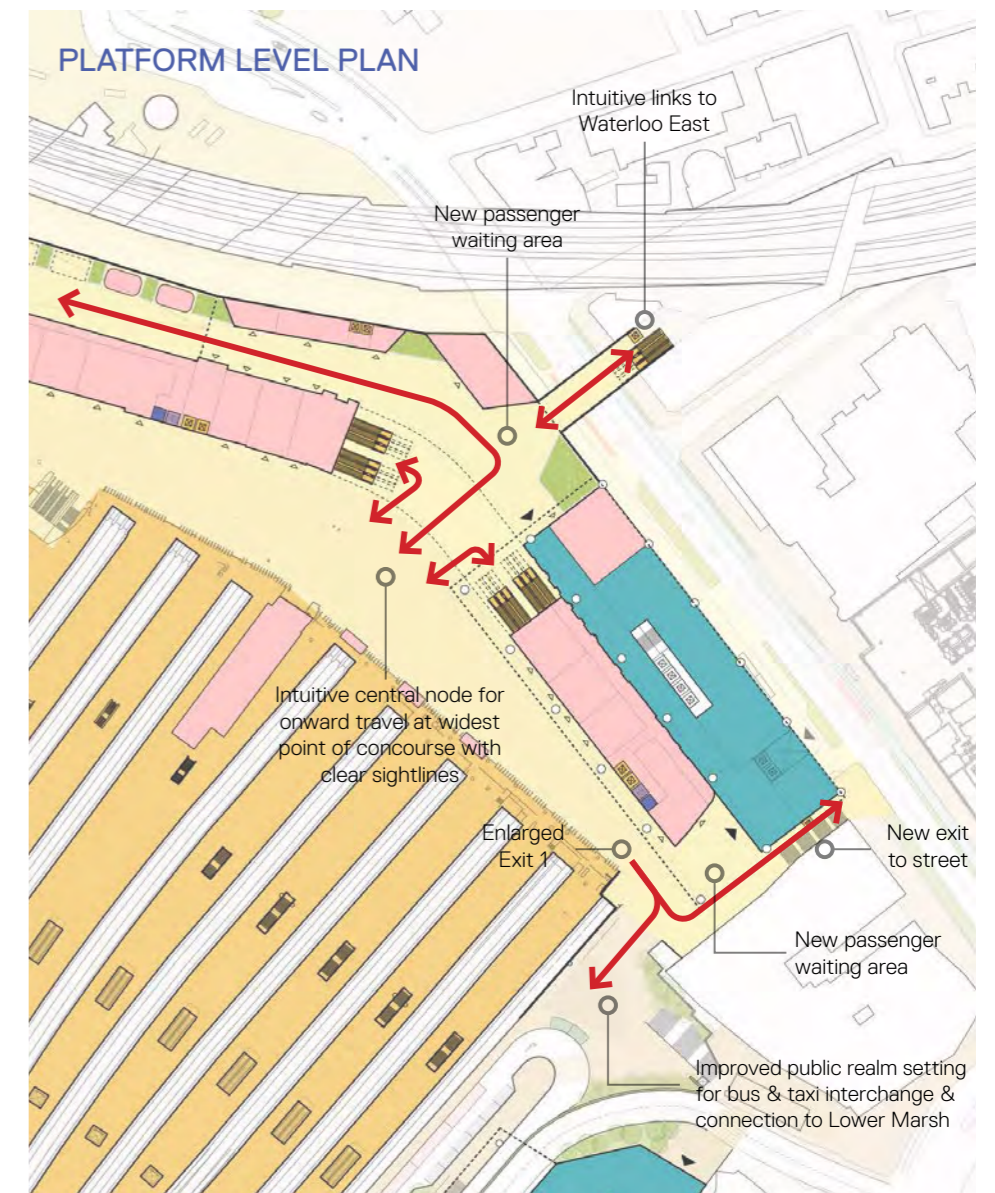
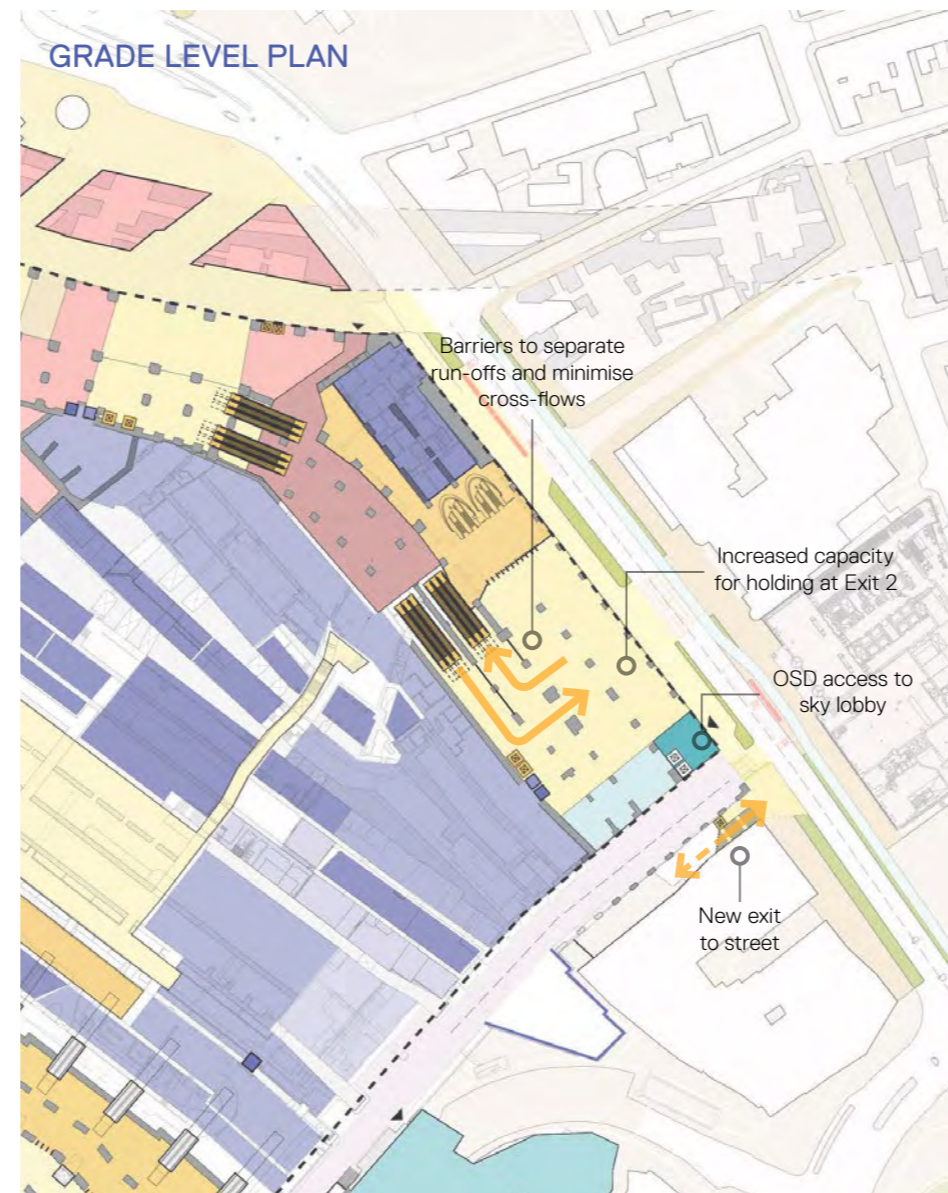
1. More vertical circulation capacity from concourse to LU and street
2. More holding space for concourse queuing in front of escalators
3. More holding space for lower-level LU queuing
4. Straightforward routing which limits cross-flows



Jubilee Line disruption



NR concourse level queuing



# Modal Strategic Principles Buses

There are a significant number of bus routes that start, terminate, and pass through Waterloo. The station serves as a key interchange on the bus network, and the bus routes are a critical part of Waterloo’s sustainable transport offering. Improvements are proposed as part of the holistic re-imagining of vehicular routes around the station. Through these proposed changes to, and rationalisation of, service vehicles, taxis, and bus routes, new pedestrian only permeable routes can be unlocked.

These public realm opportunities allow for new station entrances with civic presence and active frontage on Cab Road and Mepham Street, and safer direct interchange between transport modes via pedestrian only routes.

Only through a holistic vehicular movement enabling strategy, that protects and enhances the public transport experience and is supported by stakeholders, can the masterplan public realm aspirations, connectivity improvements and active travel and sustainable transport benefits be unlocked. The principles of re-routing will be subject to further detailed analysis at the next design stage, including a transport modelling study and transport assessment process. This will include preparation of a number of specific modal interchange strategies for rail, buses, cycles and pedestrians.

Through engagement with TfL and LBL, key stakeholder objectives for the future of buses were identified to help unlock the wider masterplan aspirations. These included:

### Waterloo Road

- Strengthening as a key bus corridor, for all north/south connections
- Supporting active travel with key pedestrian and cycle improvements

### Westbound Services

- A combined interchange for the east-west routes, which all terminate at Waterloo Station
- Freeing up York Road for future improvements

### Unlocking Cab Road and Mepham Street

- Ensuring that the existing stop/standing capacity of these roads is transferred to other roads.

## KEY PRINCIPLES



### Bus Operations

A new ‘western interchange’ moves the dedicated bus stops and stands from Cab Road to the station’s eastern edge, with new adjacent staff welfare facilities. Proposals for the Cornwall Road bus depot move bus standing from Mepham Street, with new adjacent staff welfare and the potential for further standing capacity to aid wider consolidation of bus services in the area such as the Old Vic stands.



### Bus Future Resilience

The masterplan provides a framework for the implementation of coherent long-term strategies. Detailed future work between TfL, LBL, NR, and developers based on masterplan principles will create enhanced public realm around Waterloo (e.g. Imax peninsula, Waterloo Road, etc) enabling provision of improved bus stops and stands, driver facilities, and operational resilience.



### Bus Customer Experience

Changes to vehicular routes around the station create new pedestrian-only routes. This unlocks safer and easier multi-modal interchange between the 20+ TfL bus routes, Network Rail, LU, cycles, or the surrounding context. Works to the Imax peninsula, Waterloo Road, and the ‘western interchange’ create improved bus stop facilities, grouped by direction to aid stationwide wayfinding and support intuitive interchange.

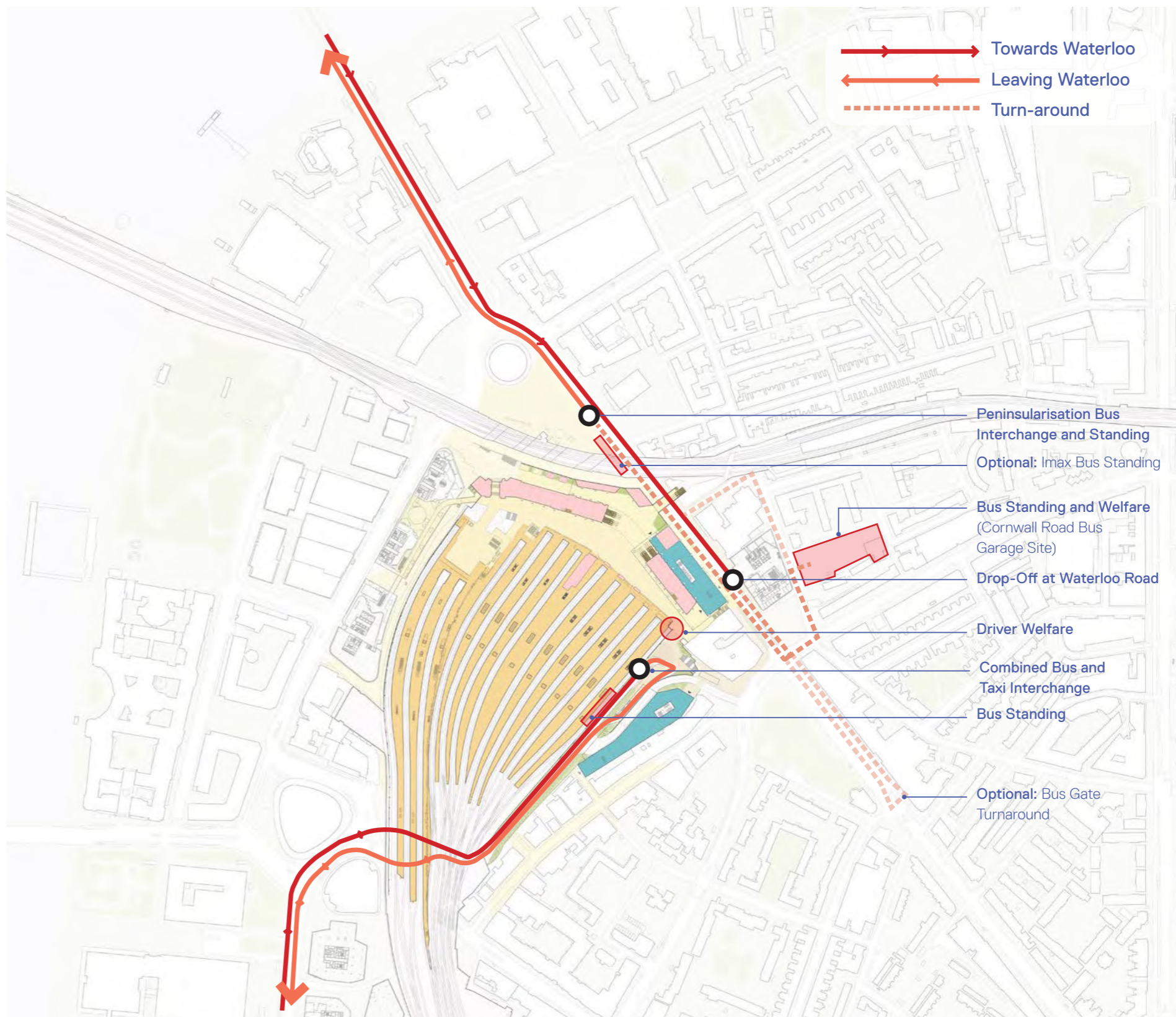


### Wider Masterplan

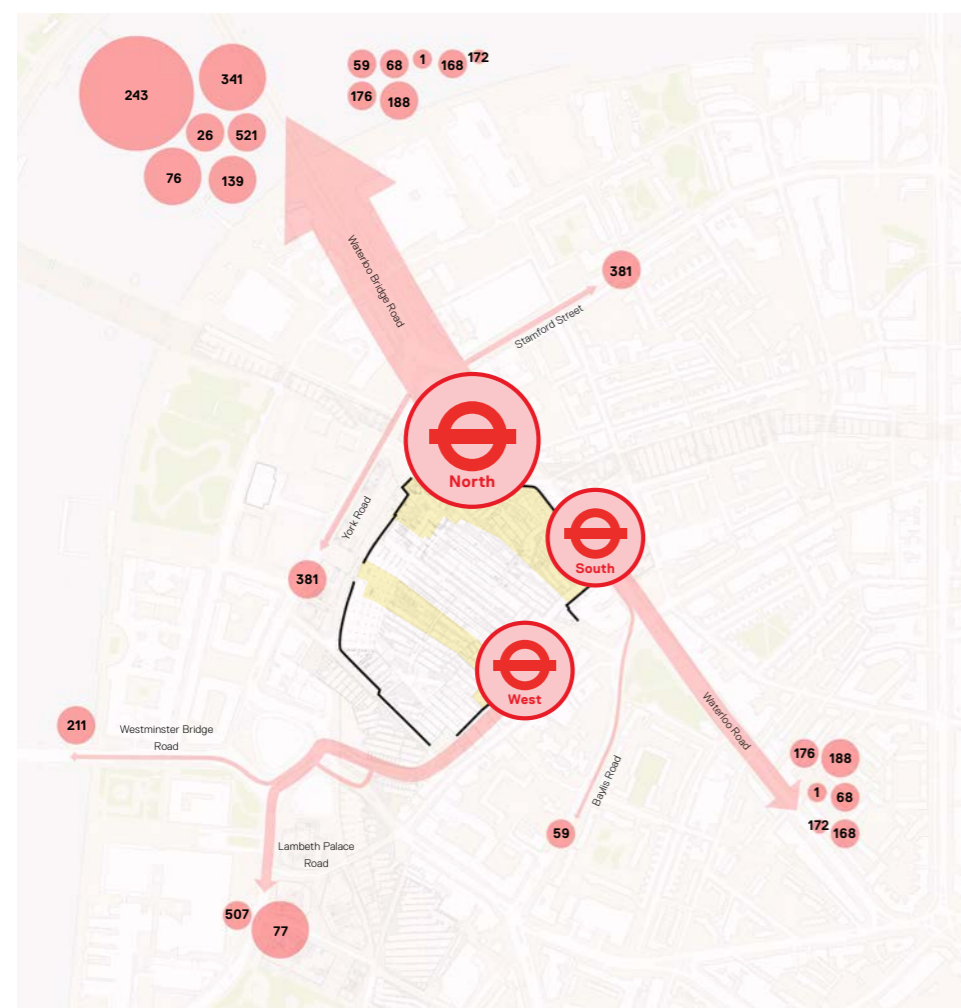
Changes to vehicular routes around the station create numerous benefits to the wider masterplan area including improved neighbourhood connectivity, improved public realm quality, safety improvements through reduced pedestrian/vehicle conflict, and improved station frontage and civic presence.

# Modal Strategic Principles Buses

The adjacent diagram illustrates the strategic principles of improving bus standing, operational resilience, driver welfare facilities, interchange, and wayfinding through re-routing services in high level modal terms.



High level principles for improvements to driver welfare facilities, bus standing and operational resilience, and interchange through adjustments to bus routes.



Principles for grouping of bus services into Northbound, Southbound, and Westbound bus interchanges linked to station entrance/exits for ease of interchange and wayfinding.

# Modal Strategic Principles Buses

## UNLOCKING CAB ROAD

- Multiple options for the re-routing of westbound services were considered in discussion with TfL and LBL
- The preferred option brings the westbound services into a combined bus and taxi interchange on Station Approach Road, unlocking the front of the station on Cab Road
- Re-routing westbound services away from the Spine Route and York Road frees up capacity for future public realm and pedestrian and cycle environment improvements to these corridors



Figure 4.6: Principles of re-routing westbound services into combined bus and taxi interchange to facilitate pedestrianisation of Cab Road

## UNLOCKING MEPHAM STREET

- Re-routing unlocks the masterplan aspiration of pedestrianising Mepham Street and creating an integrated public realm plaza as part of the peninsularisation
- An intuitive bus interchange would be delivered as part of the IMAX peninsularisation
- Future improvements to Waterloo Road will support Lambeth Council and TfL's aspirations for it to function as an active travel and bus corridor
- The bus garage site should be safeguarded at ground floor to provide bus standing, welfare facilities, and opportunities for operational resilience

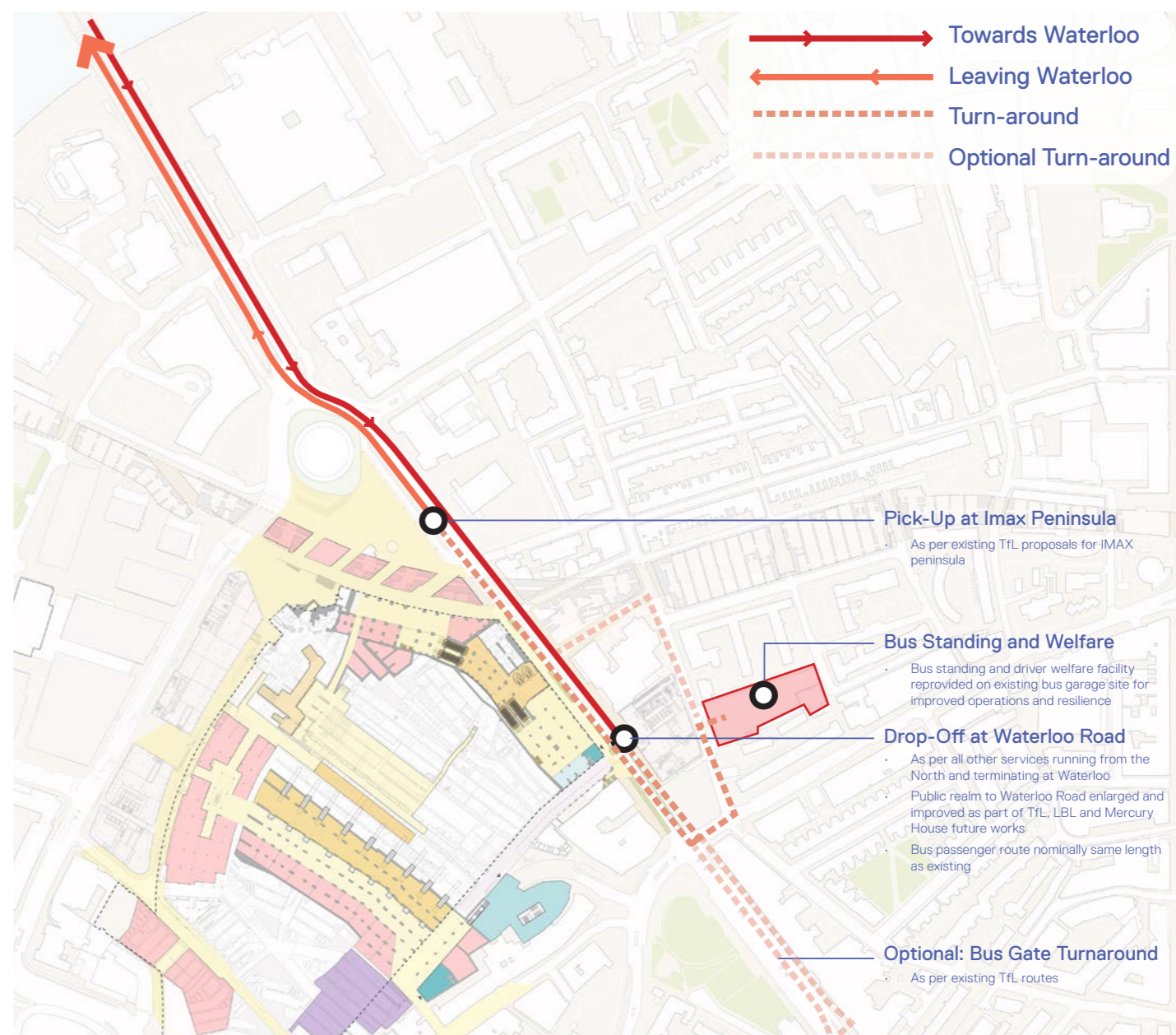


Figure 4.5: Principles of re-routing to facilitate pedestrianisation of Mepham Street

# Modal Strategic Principles Buses and Taxis

## PRINCIPLES OF COMBINED INTERCHANGE

- Combined bus and taxi interchange
- Improved station access to enlarged Exit 1 and southern concourse (at grade)
- New / enhanced connections to street and improved pedestrian experience
- Double lane taxi ranking, taxi and accessible pick up / drop off
- Relieves capacity on York Road through re-routing
- Station Approach Road Bridge constraints to be further considered at next design stage
- A dedicated PHV pick-up/drop-off location should be considered as part of TfL and LBL's aspirations for the future of York Road

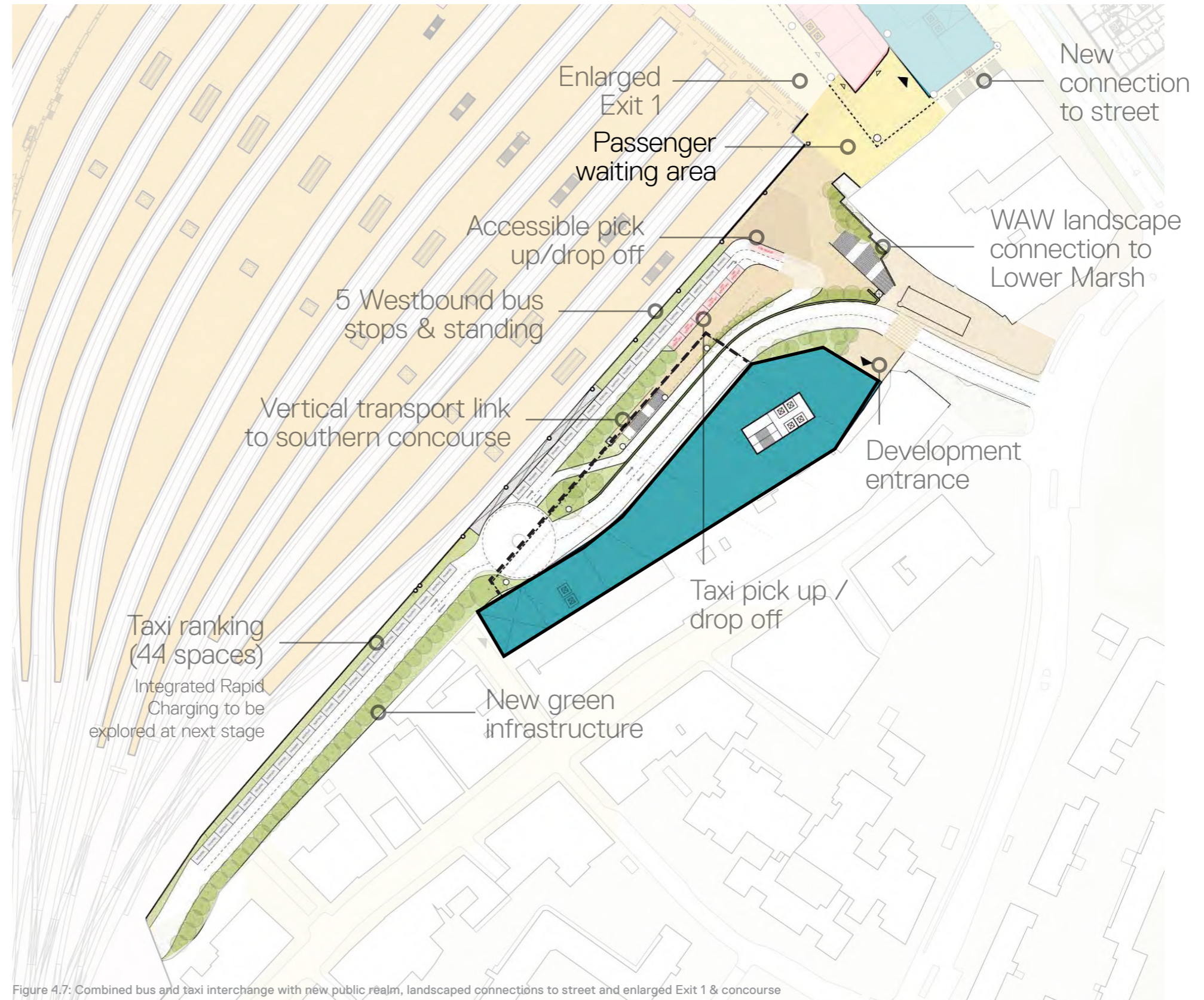


Figure 4.7: Combined bus and taxi interchange with new public realm, landscaped connections to street and enlarged Exit 1 & concourse



# Modal Strategic Principles Zero-Emissions Freight

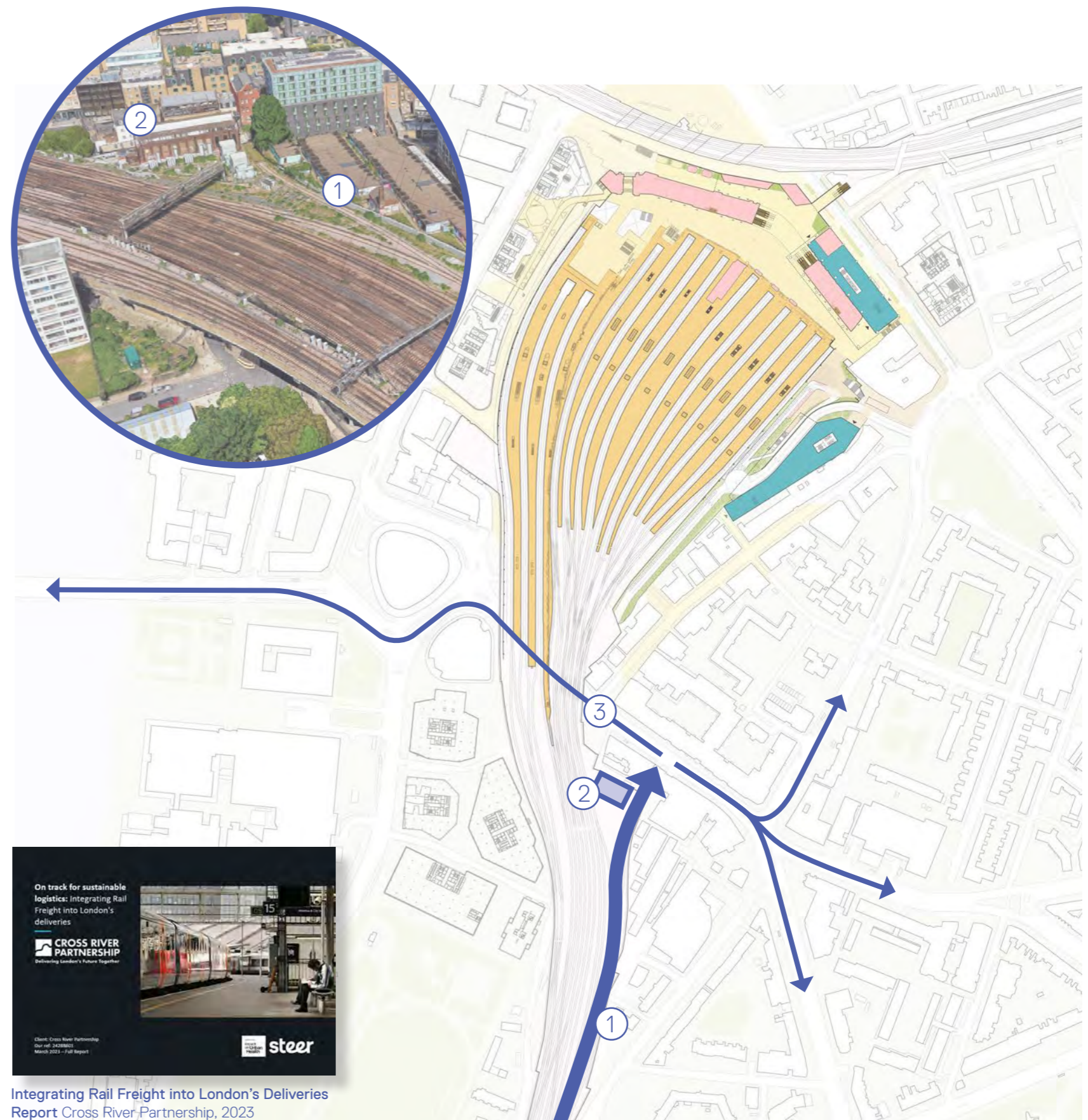
Waterloo has the potential to be a significant rail freight depot, transporting goods to central London via the existing railway lines before final mile transport using clean electric cargo bikes or vehicles. The improvements in air quality and pedestrian safety through reduced vehicles on the road network, and sustainability benefits of a de-carbonised delivery system, makes this a sizeable opportunity for the Waterloo area and Greater London.

Existing studies (such as 'Integrating Rail Freight into London's Deliveries Report' - Cross River Partnership, 2023) have highlighted freight opportunities within the station undercrofts. A further option would be to make use of disused rail spurs outside of the operational station environment. Engagement at the next stage should develop the freight strategy in detail across Waterloo.

- ① Disused railway spur provides potential for dedicated rail access route to Waterloo area on NR-owned land
- ② Adjacent industrial building and viaducts on NR-owned land provide opportunity for storage and logistics
- ③ Direct access to road and cycle networks on key city-wide routes provide option for electric cargo bikes or vehicles to transport goods to final destinations

The benefits of such an approach may include:

- Located outside operational station environment for simpler and safer freight operations that don't interface with passenger environments
- Located at key nodal point for local and wider routes to facilitate ease of onward transportation via existing networks such as cycleways
- Located away from operational station environment to reduce risk of increased congestion around station perimeter, and potentially fewer spatial restrictions on freight operations
- Potential to use wider NR-owned assets to achieve freight goals in key decarbonisation sector through reactivating disused spur, and utilising existing industrial buildings and adjacent viaducts



Integrating Rail Freight into London's Deliveries Report Cross River Partnership, 2023

# Modal Strategic Principles Cycles

Existing cycle parking at Waterloo Station is concentrated heavily to the north of the station. Although onward journeys north are predominant, further major onward cycle routes are dispersed around the station based on TfL Cycle Count Data (2022). Emerging improved cycle routes are planned across Waterloo, and a key aim should be to improve cyclist safety around the station perimeter. A number of future trends, highlighted from TfL and LBL engagement sessions, inform the masterplan strategy, with increased cycle capacity essential.



Spur Road Existing Junction



Existing Cycle Parking Hub



Existing TfL Cycle Hire Stands

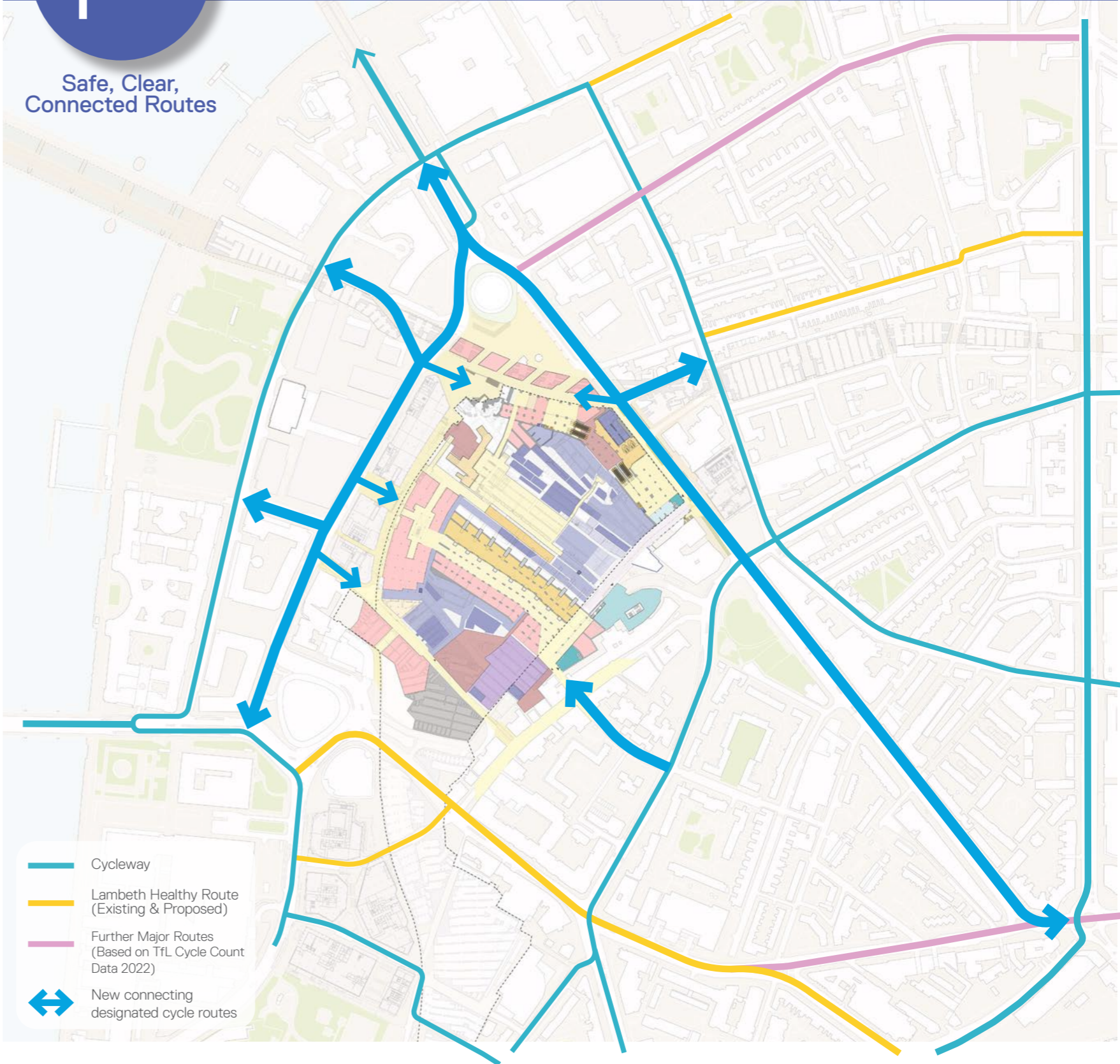
## Future Trends

- TfL cycle hire at Waterloo enjoy significant usage and this is expected to increase further, and presents a space-efficient option to reduce private cycle parking
- Dockless cycles and scooters present a significant typology without extensive integration
- Large new development works in and around the station are expected to significantly increase overall cycle usage in the area
- The wider masterplan strategy is to increase station permeability, presenting new opportunities for dispersed cycle infrastructure to meet user needs
- Cycle parking may be possible under the emerging IMAX peninsula upon completion, however existing and future structural constraints limit scope and therefore zone is not currently included in masterplan proposals (subject to review at next stage)
- Systra cycle hub demand study commissioned in 2015 requires a holistic review at the next stage of works to take account of post-Covid transport usage numbers, increased TfL and dockless bike usage, future development demand, and paid parking models



# Modal Strategic Principles Cycles

- Framework for future pipeline of dedicated cycle route projects around masterplan area
- Removal of vehicular dominated station perimeter to provide easier access to cycle parking around station
- A connected and integrated network of safe, segregated cycle infrastructure to support active travel



Safe, Clear, Connected Routes

Existing cycle parking at Waterloo Station is concentrated heavily to the north of the station. The masterplan takes advantage of the new station entrances around the site to provide a distributed model of new cycle parking.

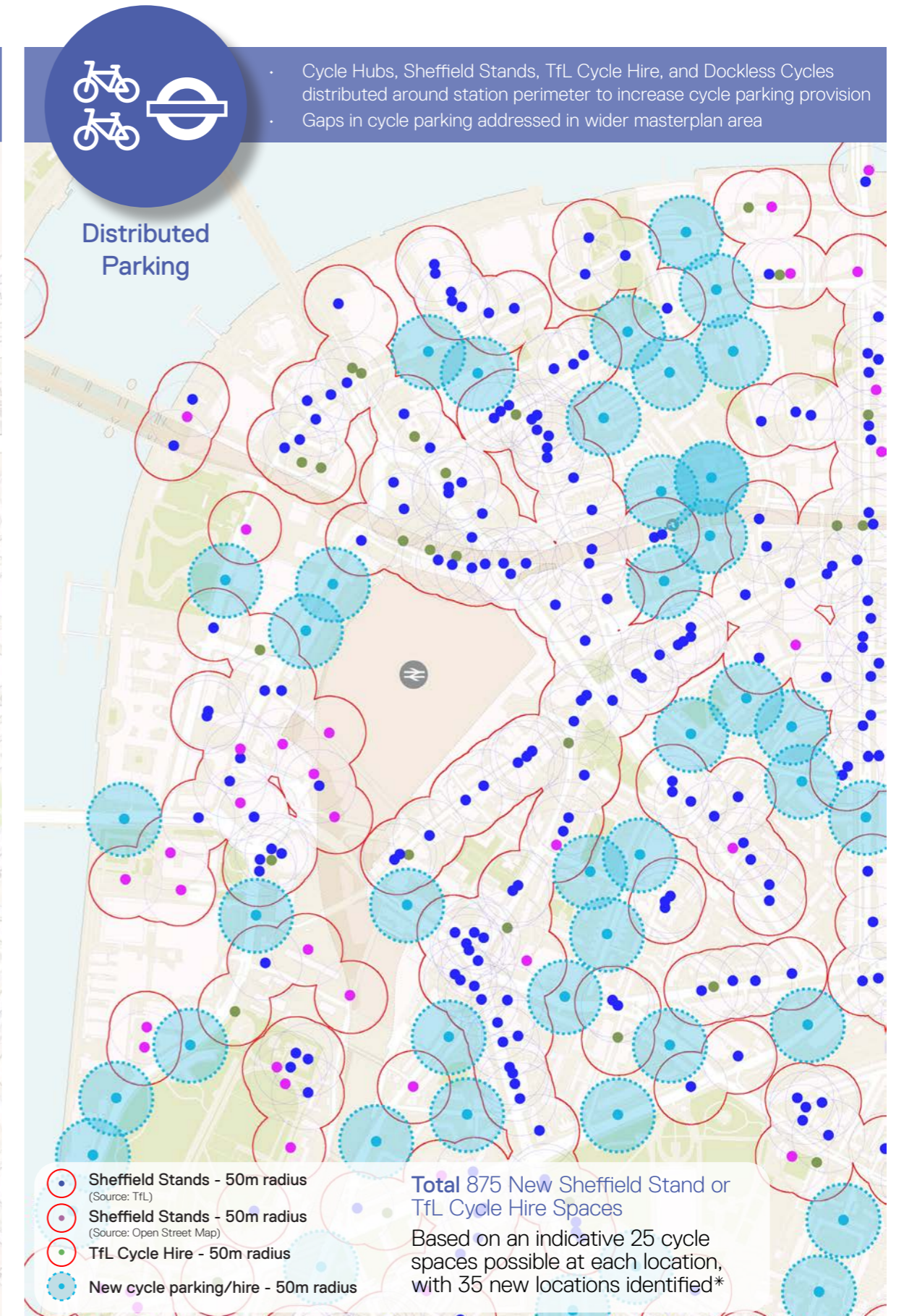
Undercroft spaces and vacant sites provide double-stacked cycle hubs in addition to space allocated beneath the IMAX peninsula. New pedestrianised zones accommodate increased Sheffield stands, TfL cycle stands, and dockless cycle zones. Gaps in the wider area are infilled to meet LBL cycle standards.

A technical analysis of the projected cycle and micromobility demand, origins and destinations should be undertaken at the next design stage. Any new routes to be considered as cycleways should meet London Cycling Design Standards and TfL's Cycling Quality Criteria.



# Modal Strategic Principles Cycles

\*Detailed Cycle Hub and TfL cycle layouts to be developed at next stage of design. Cycle Parking space-proofing based on principles in London Cycling Design Standards (Chapter 8)



# Modal Strategic Principles Personal Mobility

Improving walking and cycling infrastructure through shared electric vehicles contribute to increases in active travel. It will attract people who might not otherwise use traditional push bikes and reduce the barriers created through individual bike ownership.





## The E-Scooter and E-Bike Revolution

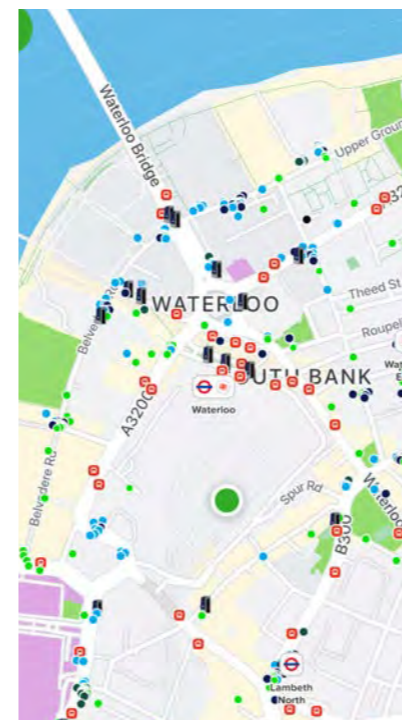
Since June 2021 electric scooters have been available for hire in a number of London Boroughs. However, since e-bikes and scooters have been introduced, it has become apparent that people leave the vehicles (particularly e-bikes) in inconvenient places, compounding street clutter challenges and reducing the available space on footpaths for pedestrians.

## Dedicated Micro-Mobility Dockless Rental Hubs

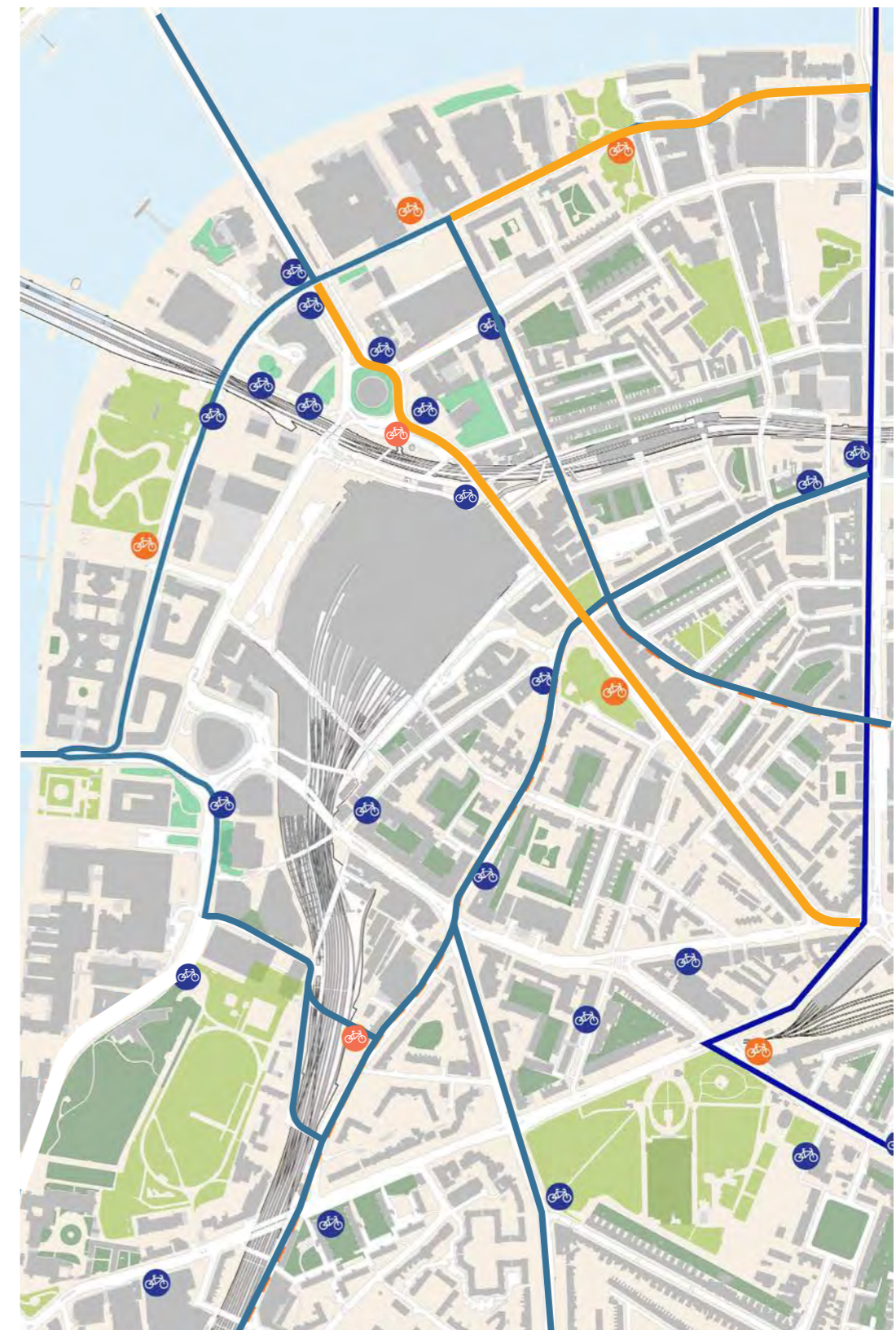
The introduction of dedicated micro-mobility hubs would create a base for scooters and bikes, and keep these resources away from quieter streets. This would also reduce the amount of street clutter in an area that has high pedestrian footfall.

Hubs could be located along existing/proposed cycle route infrastructure and near main tourist attractions, in addition to building on LBL's Kerbside Strategy to broaden the network. As much as possible, dedicated micro-mobility parking spaces should be on the carriageway rather than on pavement.

-  Existing TfL cycle hire docking stations
-  Existing TfL cycleway
-  Proposed TfL cycle docking hubs
-  Proposed LBL cycle route



Precedent Image: E-bike and e-scooter docking station  
Old Quebec Street, Marble Arch, London



# Modal Strategic Principles Healthy Streets Approach

Waterloo's streets should be inclusive, welcoming places for everyone to walk, relax and engage with. The 10 indicators that inform TfL's Healthy Streets approach build a system of policies and strategies to help Londoners make the modal shift away from cars to more sustainable, active modes of travel.

## High-Quality Public Realm Environments

These indicators to improving and creating a pleasant walking experience include;

- Easy to cross
- Shelter
- Places to stop and rest
- Not too noisy
- People feel safe
- Things to see and do
- People feel relaxed
- Clean air
- Choose to walk and cycle
- Pedestrians from all walks of life



10 Healthy Street indicators by Transport for London (TfL)

