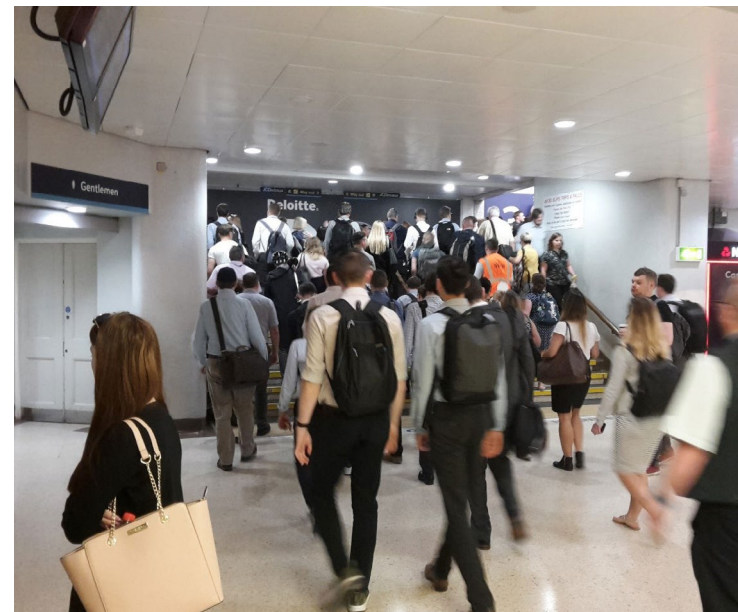


## 5.3 Constraints and opportunities summary

The principal constraints at Bristol Temple Meads are related to the existing station and its continued operation. Bristol Temple Meads is a gateway to the city and an important interchange to the South West and Wales. Minimising disruption to rail operation during construction is a significant factor when considering the feasibility of different solutions. The station is also an iconic, Grade I listed asset, providing opportunities to refurbish and repurpose the historic architecture, but also places constraints on designing sensitive alterations.

From the preceding analysis, Bristol Temple Meads station offers significant opportunities for physical interventions that will encourage and accommodate high growth in railway travel. This includes capacity for new train services and passenger flow throughout the station, as well as overdue improvements to accessibility and user facilities.



## 5.4 Guiding principles

Opportunities and recommendations for application of the five guiding principles to achieve placemaking outcomes in Bristol Temple Meads.



### Integrated and Connected

Our vision for Bristol Temple Meads is to deliver a modern, safe and efficient station, with improvements that celebrate its unique heritage. This will be complemented by a revitalised multi-modal interchange in the surrounding area, providing a seamless interface between train travel and other modes. The station capacity will be expanded to accommodate growing numbers of passengers and rail services. The success of these upgrades will be demonstrated through safe and compliant circulation routes and an improved National Rail Passenger Survey score. The station will be easily navigated and accessible for all, including wider routes between the platforms, enhanced step-free access and intuitive wayfinding for those entering/exiting and interchanging. Best practice and compliance with standards will be followed throughout to achieve a step-change at the station.



### Inclusive Economic Growth

Efficient and reliable transport infrastructure is a key component of economic development, and Bristol Temple Meads will continue to serve economic growth in Bristol and the wider West of England. Substantial improvements to station capacity will make Bristol more accessible for businesses, visitors, tourists and leisure travellers alike. Renewal of the Northern Entrance will cement the relationship between the station, the Enterprise Zone and the City Centre. Similarly, a new Eastern Entrance and Southern Gateway will play an important role in reorienting the station towards the south, acting as a catalyst for future development in this direction. Recognising the importance of continued operation, no 'big bang' scheme will be promoted that risks significant disruption or failure. Instead, intelligent phasing will be employed to introduce incremental improvements when necessary.



### Quality places

84 years on from its last significant upgrade, the station is currently out of step with the expectations of the 21st century rail passenger. Bristol Temple Meads will be reimagined as a gateway station which celebrates its rich history and heritage whilst delivering required capacity. Opportunities will be grasped to enhance passenger experience by improving passenger facilities, such as toilets, waiting rooms, ticket purchasing and assistance. All of these improvements will be designed with sensitivity to the historic station spaces and architecture. In addition, servicing and maintenance of the station will be integrated into the masterplan to ensure smooth operation for years to come.



### Quality spaces

The journey through Bristol Temple Meads will create a true sense of arrival in the city. A clear hierarchy of public spaces around the station will utilise landscaping, intuitive wayfinding and open space to give passengers a chance to dwell and make decisions. The Northern Entrance presents an opportunity for a new terrace, complemented by the nearby Goods Yard development and opportunities on the Friary. The interface between these three spaces will be designed for integration and permeability, while maintaining a distinct crossing point between the city environment and the station environment. Similarly, the new Eastern Entrance and renewed Station Approach will each provide space to breathe and improve the setting of the historic station.



### Vibrant and Creative Communities

Bristol Temple Meads will continue to be an important part of Bristol's heritage and a transport interchange that quietly enables a vibrant city. A programme of station improvements will be aligned with wider network aspirations to provide rail access to poorly served communities, such as lines to Portishead and Henbury, as well as further south and into Wales. The new Eastern Entrance and Southern Gateway will shift the orientation of the station, currently perceived as a physical barrier by communities in south and east Bristol. Accessible, inclusive design will be employed to raise the profile of rail travel for all.

## 5.5 Bristol Temple Meads station masterplan

This masterplan for Bristol Temple Meads station identifies feasible approaches for the future development of the station, fulfilling the requirements and needs for rail service capacity, passenger capacity and station facilities. These are complemented by proposed improvements to the surrounding transport interchange, presented in Chapter 6 City Gateway.

In order to deliver the vision for Bristol Temple Meads Station, a series of improvements have been proposed. Following guidance from Network Rail, these have been grouped into the following packages, each with their own funding and delivery mechanism.

- Package 1a: Platform Improvement Works
- Package 1b: West Junction Remodelling
- Package 2: Circulation Enhancements 0
- Package 3: Circulation Enhancements 1
- Package 4: New Platforms 0/1

The proposed interventions have been developed as part of an extensive feasibility study against the ITSS for the station. Solutions have emerged in response to the constraints and opportunities at the station, including heritage considerations and potential phasing of delivery.

A summary of the proposed phasing for these interventions, together with other planned schemes and interdependencies, is presented in Section 5.6.

### 5.5.1 Package 1a: Platform improvement works

This package comprises platform improvements, canopy alterations and passenger facility improvement. This would improve compliance with the Design Standards for Accessible Railway Stations (DfT, 2015). In addition, signal moves are proposed to improve operational flexibility.

#### Platform improvements

Tactile paving will be provided along the full length of platforms 3, 4, 5, 6, 7, 8, 9, 10, 11 and 12. Measures to address large stepping distances between platforms and trains and to improve poor slip resistance of some platform and circulation surfaces will also be explored during the further development of the schemes.

#### Canopy alterations

Platform canopies could be extended to cover the full length of platforms 3, 4, 8/10 and 9/11. Platforms 13/15 will be addressed in Package 2.

#### Passenger facilities

New passenger toilets and waiting rooms could be provided at the southern end of platforms 4, 6/8 and 10/12.

#### Signal alterations

Two platform signal moves are proposed to optimise operational flexibility in anticipation of longer trains.

- The movement of mid-platform 3/4 signal by approximately 37m in the UP direction
- The movement of platform 8 end signal by approximately 13m in the DOWN direction

It is not expected that the physical length of the platform islands would need to be extended in relation to this enhancement.

### 5.5.2 Package 1b: West Junction remodelling

This package comprises track and signalling works to remodel Bristol West Junction on the approach to the station. This would improve rail capacity and operational flexibility.

#### Track and signal alterations

Modest track layout changes are proposed to reintroduce through-running to Platform 13, and to provide additional down relief and down through lines through Bristol West Junction to Bedminster. This would include reconfiguration of the Old West Carriage Line and West Carriage Washing Sidings into extended down through and additional down relief lines through to the west of Bedminster station. This includes partial realignment and re-gauging to Platforms 13/15. These track modifications could potentially be undertaken in conjunction with Package 2.

It is understood that a similar remodelling scheme is proposed as a freight service loop, as part of the MetroWest Phase 1b scheme for the reintroduction of train services between Portishead and Bristol Temple Meads, and the proposed configuration for passenger service use should either be provided for, or safeguarded, within these works.

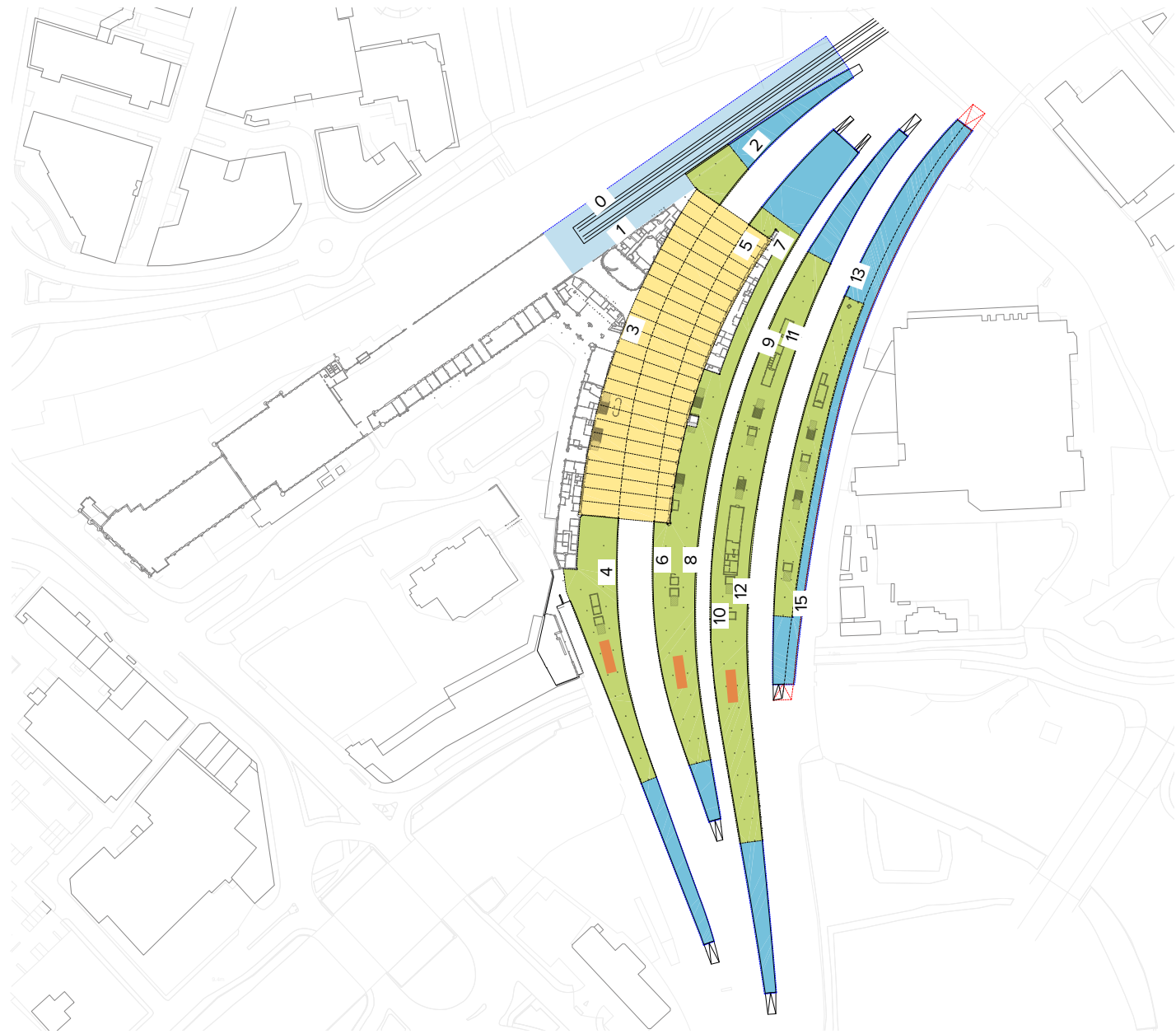


Figure 50 Feasible platform improvement works

**Key**

- Main Shed roof
- Existing platform canopy extension
- New platform canopy extension
- New platform waiting rooms

### 5.5.3 Package 2: Platform 13/15 circulation enhancements

This package is focused on widening platforms 13/15, including associated track works and extension and widening of the platform canopy. This would improve passenger flow capacity, passenger experience and is a key enabling scheme to facilitate introduction of a new internal bridge or widening of the stairs to this platform (Package 3).

#### Platform widening

Platform 13/15 could be widened to increase its passenger flow capacity. It is currently too narrow to accommodate stairs and lifts for the introduction of a new internal circulation route. These works would include realignment of the platform edges and tracks on the eastern side, and will require the acquisition of a small area of the Temple Island development site to accommodate the new track alignment.

#### Canopy alterations

Platform canopies on platforms 13/15 could be extended to cover their full length, improving passenger experience.

### 5.5.4 Package 3: Wider platform circulation enhancements

The package is focussed on improvements to internal passenger circulation capacity. This would improve passenger experience, accessibility and safety.

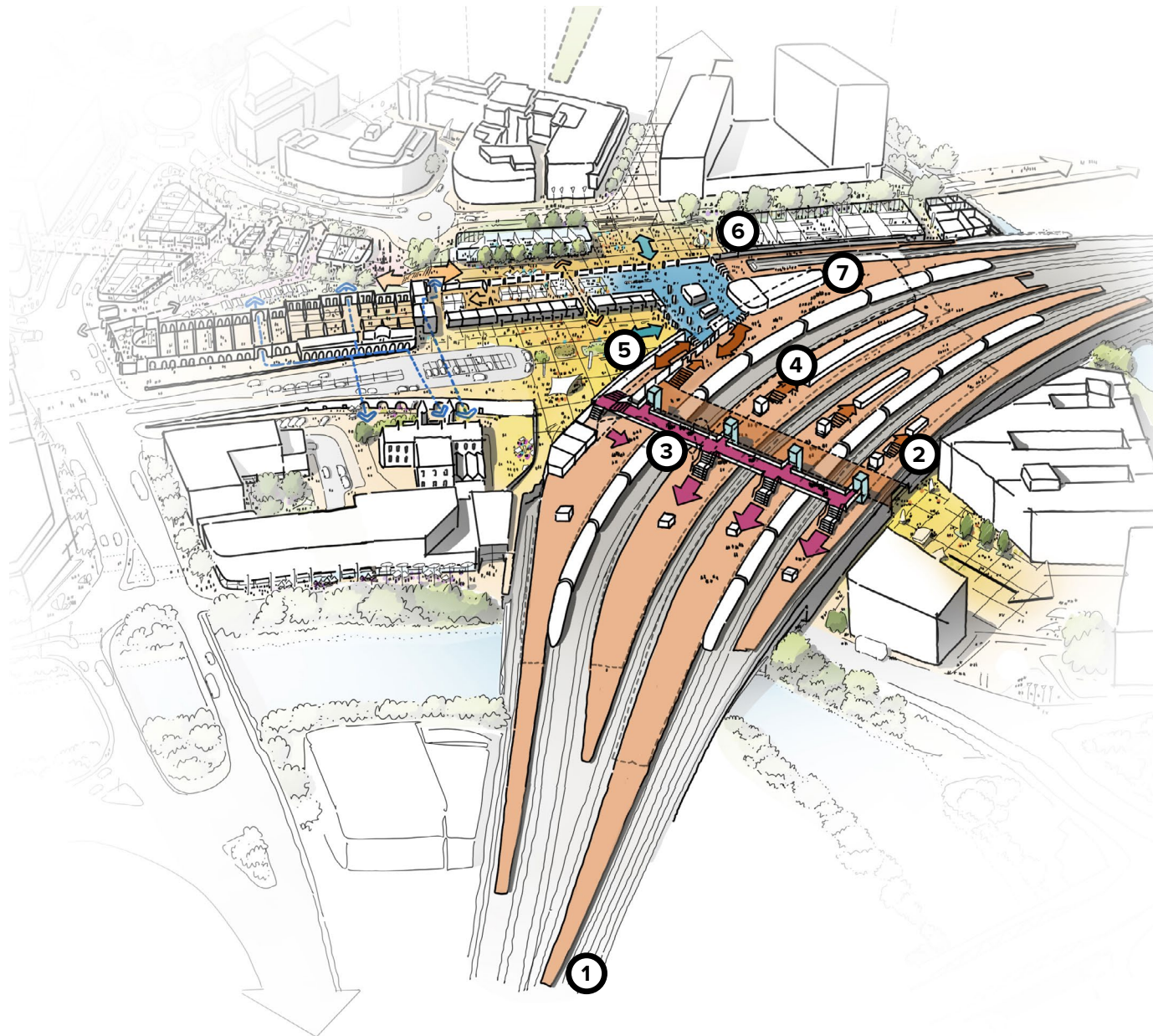
There are several feasible solutions for internal circulation, including a new footbridge or subway. These solutions are subject to further optioneering and development to optimise to both passenger flows and heritage impacts, including:

- Specific location and sizing
- Structural, architectural and construction approaches
- Connectivity to northern entrance via forecourt buildings
- Platform vertical circulation provisions, size and locations
- Phasing and continuous safe station operation
- Refinement of heritage impacts and mitigations in relation to:
  - Key views and settings
  - Interfaces with main train shed walls and forecourt buildings
  - Interfaces with platform canopies
  - Impact on platform buildings and structures

It is envisaged that these issues will be considered and refined during later stages of design, including addressing and resolving heritage issues and concerns.

For illustrative purposes, a potential new internal bridge is shown in this chapter as one feasible solution that could improve internal circulation.

Figure 51 Station improvements illustrative concept



**Key**

- ① Bristol West Junction remodelling
- ② Platform 13/15 widened to accommodate new stairs
- ③ Potential new internal footbridge
- ④ Existing subway enhancements (stairs widening)
- ⑤ Potential walkway from footbridge through station retail and ticket hall
- ⑥ Signal box removal
- ⑦ Platform 1 extended and new Platform 0



### New internal circulation route

Following an extensive optioneering and feasibility assessment process, a single passenger bridge positioned within the Main Shed could be installed which would operate in combination with the existing passenger subway to provide capacity for passenger growth. Alternative feasible solutions to improve circulation include a new or repurposed subway. However, this choice will not be confirmed before the conclusion of more detailed study at GRIP 3.

Passenger flow and wayfinding are two important influences on the location of a new circulation route. The current passenger subway and stairs concentrate flows in the centre of the platforms. The preferred location of a new route between platforms should seek to relieve the existing passenger subway and simplify and assist intuitive wayfinding for alighting passengers.

A potential new footbridge arrangement could offer an enhanced passenger experience with elevated views from within the station. The choice of location would present options for the main access stairs from the concourse, including within existing buildings. Alternatively, a new or repurposed subway may be selected to improve passenger circulation. The preferred solution should provide a direct and intuitive connection while minimising negative visual impacts in and around the Main Shed. This should be reviewed in conjunction with the full station circulation opportunities at GRIP 3.

### Enhancing the existing subway

Some of the platform stairways to the existing passenger subway would also need to be widened to accommodate 2043 passenger flows, in addition to a new footbridge. Given the current levels of congestion, the new circulation route would need to be in place before these works to relieve the load on the existing stairs. Canopies and other platform facilities would be reinstated to the extent that this is possible around the new circulation infrastructure and routes.

### Platform 3 subway stairs

Significant congestion is experienced on the stairs leading to Platform 3, which acts as the primary route for all passengers into the passenger subway. This platform poses a potentially challenging interface between a new footbridge and the existing subway stairs. At this early stage, three main options have been identified for the Platform 3 stairs:

- New, wider stairs to the subway behind the platform. This would require the extension of the existing subway through to the tunnels behind the existing stairs (used to access rail replacement buses when necessary) in conjunction with the construction of new stairs and a new lift shaft. It is worth noting that this subway extension would require the relocation of significant utility services, including major switch-room services and critical cable runs
- New, wider stairs on Platform 3 (current location)
- Additional stairs between the subway and Platform 3, while retaining the existing stairs

There may be opportunities to expedite enhanced subway stairs to alleviate the worst congestion as a standalone project. However, further work is required at GRIP 3 stage to assess the overall internal station circulation so that the footbridge and subway stairs are considered holistically, maximising opportunities and avoiding preclusion of future enhancements.

### Heritage implications

These circulation enhancements represent significant changes to the internal station environment.

The original circulation provision within the main train shed was via a footbridge, which was dismantled on construction of the central subway during the 1930s Culverhouse extension works. This provides a useful historical precedent for the reintroduction of a new bridge within the Grade I listed station. However a potential new bridge may be approximately twice the width of the original and in a different position, so would require careful design to ensure minimum impact on the station's heritage assets and historic setting.

The potential impacts of this to the forecourt elevation were raised by Historic England. Alternative potential solutions for internal circulation are presented in Figure 522. These options will need to be further refined at GRIP 3 to achieve an optimal balance both heritage and operational requirements before a preferred option is selected.

**Package 4: Platform Improvement Works**

This package comprises the construction of a new platform 0 and extension of platform 1. This would improve capacity for rail services and operational flexibility.

**Signal box removal**

These platform works are contingent upon the removal of the adjacent signal box. This project is being considered by Network Rail in order to remove the signal box at an earlier phase. As such the removal of the signal box is not included in this package, but is an essential part of these capacity improvements. This will also influence the new Northern Entrance, explored in Chapter 6.

**Platform extensions**

Platform 1 will be lengthened to accommodate 6-car trains and a new platform 0 will be introduced, also 6-cars length. There are opportunities for these platforms to be longer by extending into the Midland Shed, though use of these platforms for longer trains would generate additional conflicting moves. These will both terminate 25m short of the concourse area within the extended Midland Shed. A new canopy extension is proposed to cover these platforms, with new gatelines to the new concourse.

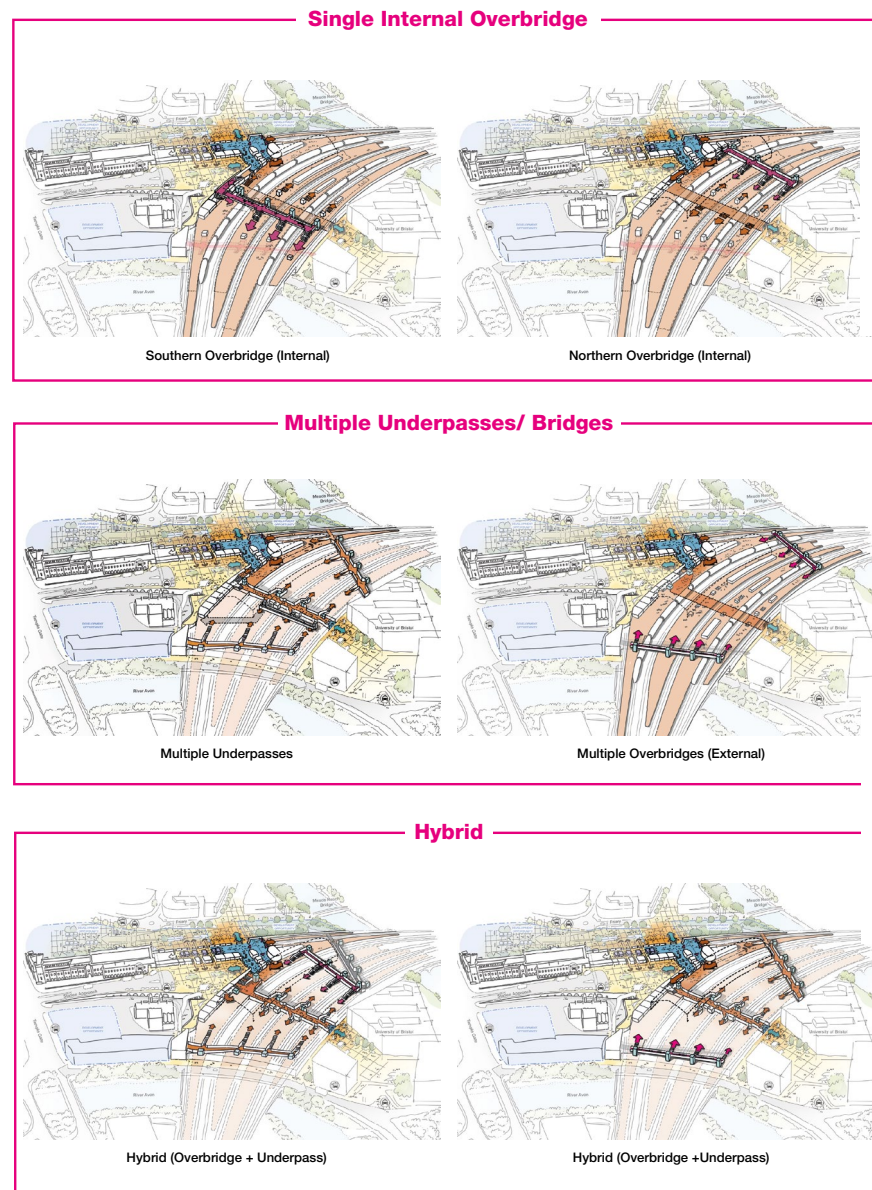


Figure 52 Station internal circulation options

### 5.5.5 Ticket hall modifications

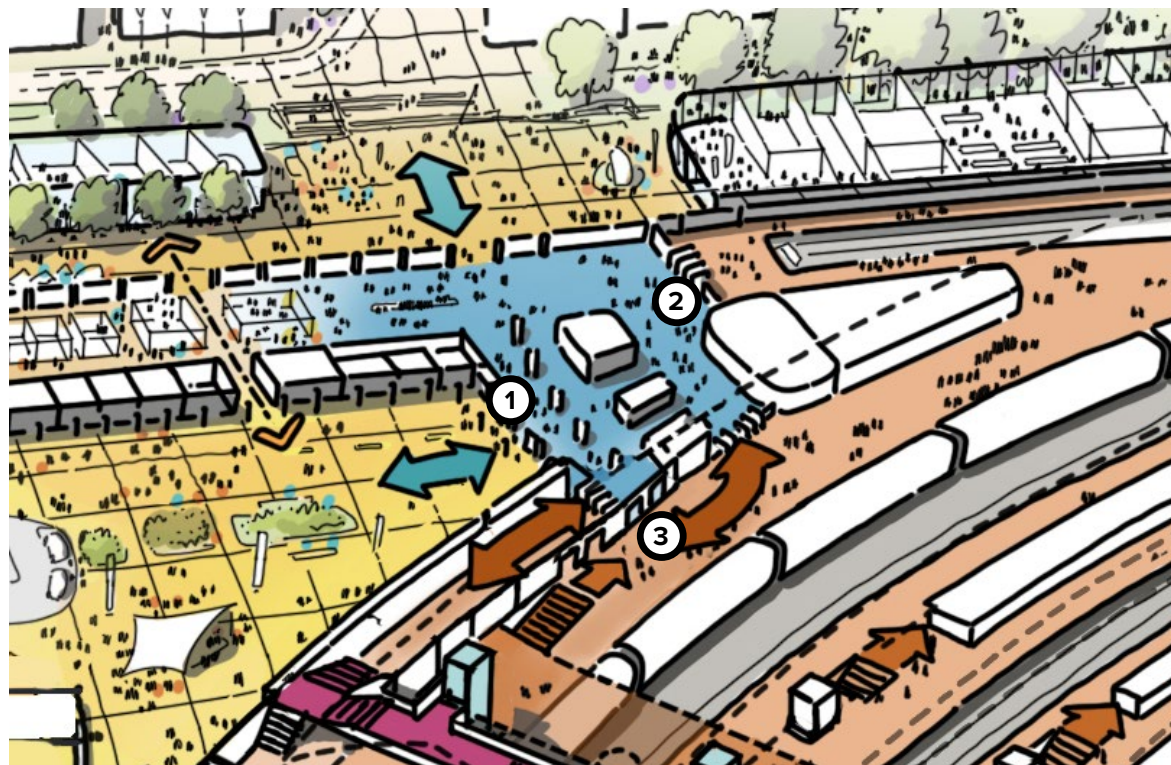
Ticket hall modifications are proposed to improve passenger flow and connection to the platforms as part of a renewed concourse. These would open up the existing building and provide a high quality passenger experience through the Grade I listed station structure.

It is proposed that Bonapartes Alley could be opened up to improve access and capacity to the platforms. Bay platforms 0 and 1 would be positioned far enough north to safeguard this route. This also introduces opportunities for retail or a lounge in Bonapartes

An illustrative concept of the new ticket hall layout is presented in Figure 533.

Further work is required at the GRIP 3 stage of design to determine the position of gatelines inside this hall. The final layout should seek to maximise intuitive wayfinding, flexibility during peak and perturbed scenarios, and connectivity with new vertical circulation options presented in the packages above. This could potentially include closure of the Queen Anne Gate exit.

This is also dependent on decisions around the Northern Entrance, the Midland Shed and the Station Approach entrance, particularly which doors are used for main access routes, how the station will be secured out of hours, and how the floor level challenges are to be overcome. These are explored in more detail Chapter 6.



#### Key

- ① Clock tower passage    ② Bonapartes Alley    ③ Realigned gatelines

Figure 53 Ticket hall modifications illustrative concept

## 5.6 Making it happen

This section presents a set of strategic considerations and objectives to inform the next steps for the City Gateway. These recommendations have been developed in response to the constraints and opportunities (Section 5.3) and the financial modelling undertaken as part of this study.

### 5.6.1 Infrastructure costs

Indicative costs for the main components of the Bristol Temple Meads Station masterplan are outlined below.

Item	Total cost
Package 1a: Platform improvement works	£20-25m
Package 1b: West Junction Remodelling	£20-25m
Package 2: Platforms 13/15 Circulation Enhancements	£35-40m
Package 3: Wider circulation Enhancements	£35-40m
<ul style="list-style-type: none"> <li>• Internal footbridge</li> <li>• Subway enhancements</li> </ul>	£10-15m (incl. Plat. 3 stairs) £10-15m
<ul style="list-style-type: none"> <li>• Alternative Platform 3 access to subway</li> </ul>	£10-15m
Package 4: New Platforms 0/1	£25-30m

All costs are to Q4 2019 base rate, not including any inflation to the anticipated mid-point of construction. They include an uplift factor of 40% applied for risk in accordance with the Network Rail Cost Planning Procedure Document, June 2019.

### 5.6.2 Delivery strategy

The delivery of the station enhancement projects is best suited to Network Rail working independently. Conversation with Network Rail in developing this study has established that Network Rail could be the sole sponsor and delivery client for the core internal station works as Bristol Temple Meads is a major, directly managed station and maintaining a safe, operational station is imperative.

As the delivery client, it is assumed that Network Rail will take on development, interface and construction risks for the core station works described above. The funding arrangements for these core station works is to be determined, although the scenario modelled assumes core station works will be funded by the DfT's rail network enhancements pipeline (RNEP).

### 5.6.3 Planning conformity and strategy

As a Statutory Undertaker, Network Rail benefits from deemed consent ("Permitted Development") for certain types of work to its rail infrastructure. Many of the proposed interventions identified in the Masterplan, such as platform improvement works, track and signalling works and concourse enhancements, are likely to benefit from permitted development rights.

Development that falls outside the permitted development regulations is likely to require planning permission, including works involving the reconstruction or alteration of a building or structure where its design or external appearance would be materially affected. Any planning applications would be assessed in the context of the adopted and emerging Local Plan policies. The principle of the works at Bristol Temple Meads is supported by the adopted Local Plan, in particular,

Core Strategy policy BCS2 (City Centre) and policy BCAP35 (Bristol Temple Quarter) which supports the enhancement of the station.

Whilst works may not require an application for planning permission, Listed Building Consent (LBC) is likely to be required. The requirement for LBC applies to any works for the 'demolition of a listed building, or for its alteration or extension in any manner which would affect its character as a building of special architectural or historical interest'.

Works affecting Listed buildings and structures must be carefully considered. Individually, phases of works may be acceptable in terms of their impact on Listed buildings or structures, but cumulatively the end result of the completed project will need to be taken into account.

#### 5.6.4 Prioritised list of projects

The following projects and activities have been identified as high priority for the next few years to progress the Bristol Temple Meads Station masterplan. These have been selected based on the outcomes they would enable, their benefit cost ratio and deliverability considerations. It is recognised that the exact parcelling of projects and sequence of delivery may change as the project continues to develop, thus a list of known dependencies is presented in the following section.

This list excludes interfacing projects that are subject to their own process but makes reference to them where they introduce a significant interface. Routine asset management and maintenance projects have been excluded from this list.

## Station interventions – design and business case 2020-2021

1. Network Rail Capital Delivery review these proposals and identify strategic priorities in the context of the national infrastructure programme
2. Produce design brief(s) for station packages, including Contract Requirements (Technical):
  - Package 1a: Platform improvement works
  - Package 1b: West junction remodelling
  - Package 2: Circulation enhancements 0
  - Package 3: Circulation enhancements 1
  - Package 4: New platforms 0/1
3. Prepare design programme for station packages
4. Procure designer(s)
5. Further refine the demand forecasts and train timetables to inform the design
6. Develop GRIP 3 designs, including the internal station circulation, implications for stairs positioning on Platform 3 and the ticket hall modifications. This should include engagement with stakeholders such as Historic England
7. Refine WebTAG appraisal to Stages 2 and 3
8. Submit RNEP applications to the Department for Transport
9. Continue to GRIP 4 design and construction

## Additional enablers 2020-2025

1. Create a coordinated Project Management Office (or equivalent) to manage the numerous schemes in/around the station
2. Produce an integrated programme of all planned rail schemes, including:
  - Bristol East Junction Remodelling
  - Station Roof Renewal and Rewire
  - New Eastern Entrance
  - MetroWest
  - Bristol West signalling renewals
  - Signal box removal and relocation of its functionality
  - Electrification of the railway
  - Packages of station works outlined in this masterplan
3. Identify and implement measures to manage customer experience and safety in the meantime, such as peak passenger flows on platforms
4. Continue to quantify and develop station servicing requirements, in liaison with stakeholders, throughout the design process

### 5.6.5 Phasing dependencies

Key phasing dependencies and considerations for the development of the Bristol Temple Meads station masterplan are as follows:

- Platforms 13/15 must be widened (Package 2) before new stairs or lifts to a new footbridge or widened stairs to the existing subway could be installed on this platform (Package 3)
- The existing signal box and its associated buildings and services must be removed and its functionality relocated elsewhere before the new platform 0/1 works can begin
- The enhancements to the passenger subway may not be possible to undertake until an alternative means of circulation between the platforms has been installed, as proposed by the new internal footbridge. This is due to the already high levels of congestion which could present a significant safety hazard if stair widths were temporarily restricted. Further work is required to understand this dependency in more detail.
- It is likely that projects will be timed to coincide with other planned blockades to minimise disruption to the railway, similar to that planned for the East Junction Remodelling and new Eastern Entrance in 2021

### 5.6.6 Phasing strategy

An indicative programme has been produced to illustrate the potential sequence of construction. Other planned projects which represent a significant interface have been included (shown using a lighter colour) with a current best estimate of their construction programme.

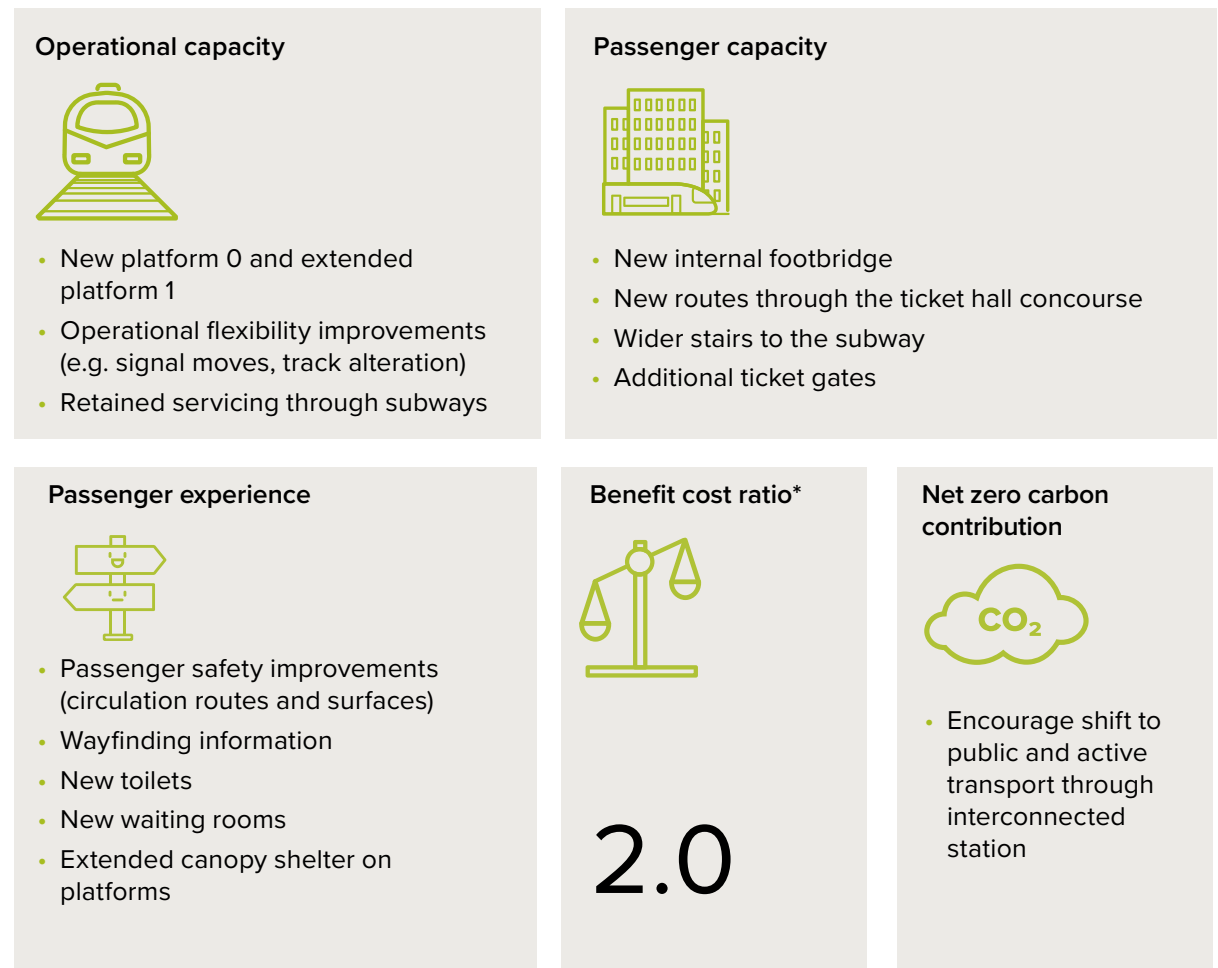
Plot Group	No of years	Construction period										
		2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
Eastern Entrance	2											
Station roof refurbishment and re-wire	3											
Midland Shed (Plot F), including ticket hall modifications	4											
Package 1a: Platform improvement works	2											
Package 1b: West Junction Remodelling	1											
Package 2: Circulation Enhancements (Platforms 13/15)	2											
Package 3: Circulation enhancements – internal footbridge	2											
Package 3: Circulation enhancements – subway enhancements and stairs	2											
Signal box removal	2											
Package 4: New platforms 0/1	2											

### 5.6.7 Key performance indicator outcomes

The adjacent figure summarises the outcome opportunities for the Bristol Temple Meads presented in this Masterplan. It should be noted that these are underpinned by several high-level assumptions that are considered reasonable and appropriate at this stage, but should be tested and refined through further studies and stages of design.

A positive BCR for transport user benefits has been identified for the station programme, which are likely to be publicly funded. This includes both the internal and external station works as they are considered to represent a combined programme of improvements.

Figure 54 Bristol Temple Meads key performance indicator outcomes



\*The BCR assessment considers the costs associated with funding the city gateway enabling public realm and station entrance enhancements. It takes into account the benefits associated with the facilitated development around the station in Goods Yard, Friary North and Mead Street discussed in subsequent chapters.





The background consists of a solid green field with a large white 'X' shape formed by two diagonal lines crossing in the center. The text is positioned in the white triangular area on the left side of the 'X'.

# **6 City Gateway**

## 6.1 Area statement



Figure 55 Aerial view of Bristol Temple Meads City Gateway

The vision is for Bristol Temple Meads to be a landmark gateway, a fitting welcome to the city of Bristol at the culmination of the Brunel Mile. By putting passenger experience first, the new gateway will offer best in class interchange facilities to enable accessible onward journeys to/from the station and address existing issues of capacity, movement conflicts, insufficient retail and safety. The gateway experience will support vibrant, transit-orientated development in the surrounding area, anchored by sustainable transport links, and contribute to Bristol's aims to be Zero Carbon by 2030.

Indicative Timeframe | Next 5 Years



Figure 56 Northern Entrance terrace illustrative view  
(Excluding potential Plot 6/Goods Yard developments)

## 6.2 Introduction

### 6.2.1 City Gateway today

Bristol Temple Meads City Gateway is the interface between the station and the city, representing the point of entry to the Bristol and the Temple Quarter Enterprise Zone.

In this study, the City Gateway is defined as public areas that are part of the immediate station precinct but outside the main Network Rail station building. This includes transport interchange components, movement routes and public realm – up to and including the station entrances.

The rail station sits at the centre of a multi-modal transport interchange and the converging point of several movement networks. Around the station are several spaces which are navigated by passengers to continue their onward journey, and others which have potential for future use. Key spaces are:

- ① **The Station Approach Entrance** – beneath the clock tower, facing west onto the Station Approach ramp and accessed via Temple Gate. This is currently considered the main station entrance. There is a small forecourt area, with the remainder of the ramp largely dominated by vehicular movements (buses, taxis, private car drop-off and parking).
- ② **The Northern Entrance** – access to the main ticket hall and Bonapartes Alley from the Friary/ Temple Quay and via the Midland Shed. The pedestrian route comprises two narrow ramps through an area of surface car parking in the former railway yard. Although the Northern Entrance is

considered a secondary entrance, data counts in April 2019 found that 65% of pedestrians enter/exit via this route.

- ③ **The Friary** – a highway which runs through the Temple Quay estate north of the station, accessed from Temple Gate and Temple Back East. This is set at a lower level than the station and slopes towards Temple Gate in the west. The Friary is unadopted (owned by Homes England) and includes 'shared space' between vehicles, cyclists and pedestrians outside the Northern Entrance. This area is also the converging point of the Brunel Mile and Bristol to Bath Railway Path.
- ④ **Temple Quay** – This area is predominantly commercial office space, with some hotels and residential. There is convenience retail along the Friary and a central square outside a pub. Plot 3 is part of this estate, currently vacant.
- ⑤ **The Friary North** – also referred to as Plot 6, explored in more detail in Chapter 7.
- ⑥ **The Midland Shed** – a 100m long, ex-train shed, most of which is now used for car parking, including vehicle access from the Station Approach ramp. Ticket machines have been installed at the north end of this shed.
- ⑦ **Temple Quarter Enterprise Campus** – the site of a former Royal Mail sorting office, this small island east of the station is bordered by the Floating Harbour and Cattle Market Road.

⑧ **Fish Dock/1-9 Bath Road** – located south of the station, across the River Avon. The Fish Dock is a Network Rail maintenance yard and track access point. 1-9 Bath Road is currently occupied by a vehicle repair garage (Kwik Fit) and a car hire company (Easi-drive). Access is via the A4 Bath Road in the outbound direction only, due to the Bath Bridge Roundabout 'gyratory' system.

These spaces are not well-integrated with one another and do not create a distinctive sense of place within the urban environment.



Figure 57 Bristol Temple Meads - key City Gateway spaces



Figure 58 Midland Shed illustrative view

### 6.2.2 Area history

As Bristol Temple Meads station has evolved since initial construction, its relationship with the spaces surrounding it and its integration with the rest of the city has also experienced numerous iterations. The history of the station area is briefly summarised below:

**1830s:** Brunel selected the site for his terminus station on what was then largely undeveloped land.

**1840-1845:** Construction of the 'Brunel Station', the terminus of Brunel's Great Western Railway from London. This included the offices fronting Temple Gate, the Carriage Shed and the Passenger Shed. Construction of the separate Bristol & Exeter Station and Goods Shed.

**1852:** Construction of Bristol & Exeter House

**1860s:** Construction of the Harbour Railway and viaduct, linking the station to Bristol City Centre.

**1871-1878:** Construction of Matthew Digby Watt's Joint Station which includes the present day main entrance and forecourt buildings on either side, approached via a ramp. Construction of the Midland Shed, an extension of Brunel's Passenger Shed. Construction of the Main Shed, an arched truss roof over the through platforms. Demolition of the Bristol & Exeter Station.

**1930-1935:** The Culverhouse extension, creating additional platforms east of the Main Shed and the replacement of an original footbridge with a subway linking all platforms. Construction of Collett House.

**1948:** Construction of a Royal Mail sorting office east of the station, linked by a subway at the eastern end of the platforms.

**1965-1982:** Closure of the platforms in the Midland and Brunel sheds. Demolition of the Goods Shed and Harbour Railway, to be replaced with a signal box and surface car parking. Rebuilding of the Royal Mail sorting office and a conveyor bridge across the platforms.

**1997-2002:** Construction of the Temple Quay estate.

**2017-2019:** Demolition of the Royal mail sorting office and conveyor bridge.

For more information on the history of the station and surrounding area, refer to the Bristol Temple Meads Conservation and Asset Management Strategy, listed in Appendix A.

### 6.2.3 Heritage assets and significance

Bristol Temple Meads is a complex of station buildings of the highest national significance, comprising:

- Grade I listed Bristol Old Station, including the original Brunel station of 1839-41 (list entry no. 1209622)
- Grade I listed 'Temple Meads Station', including the Digby Wyatt Joint Station of 1865-78, the Main Shed and the Culverhouse Extension of 1930-35 (list entry no. 1282106)

In addition, the nearby Bristol & Exeter House is Grade II\* listed (list entry no. 1209608).

Within these buildings there are smaller components of varying significance, as outlined in the BTM Conservation & Asset Management Strategy (Alan Baxter, 2013).

The historic character of the station should be used as a positive force in the development and implementation of this masterplan, helping to create a successful future identity that draws on the site's past, its character and distinctive sense of place. Proposals to address the station's operational and capacity shortcomings should avoid or minimise harm to the historic significance of the site and, wherever possible, enhance appreciation of it.

#### 6.2.4 Archaeological interest

The following areas are identified as having potential archaeological significance:

- The Portwall, beneath the Goods Yard (also referred to as Plot 6)
- The line of the former 14th century Temple Pipe Conduit, to the south and west of the station
- The Cholera Burial Ground, to the east of the station
- The building foundations of John Hare's floor cloth manufactory
- The Bath stone quay walls of Brunel's Barge dock of the 1840s, beneath Plot 3

#### 6.2.5 Buildings condition

The station buildings have undergone, several refurbishment projects, including the Station Regeneration Project in 1998 which included stonework repair and renewal. However, the buildings are in varying structural condition.

The most notable condition issues are:

- The Midland Shed is in poor condition. The roof was re-clad in 1986

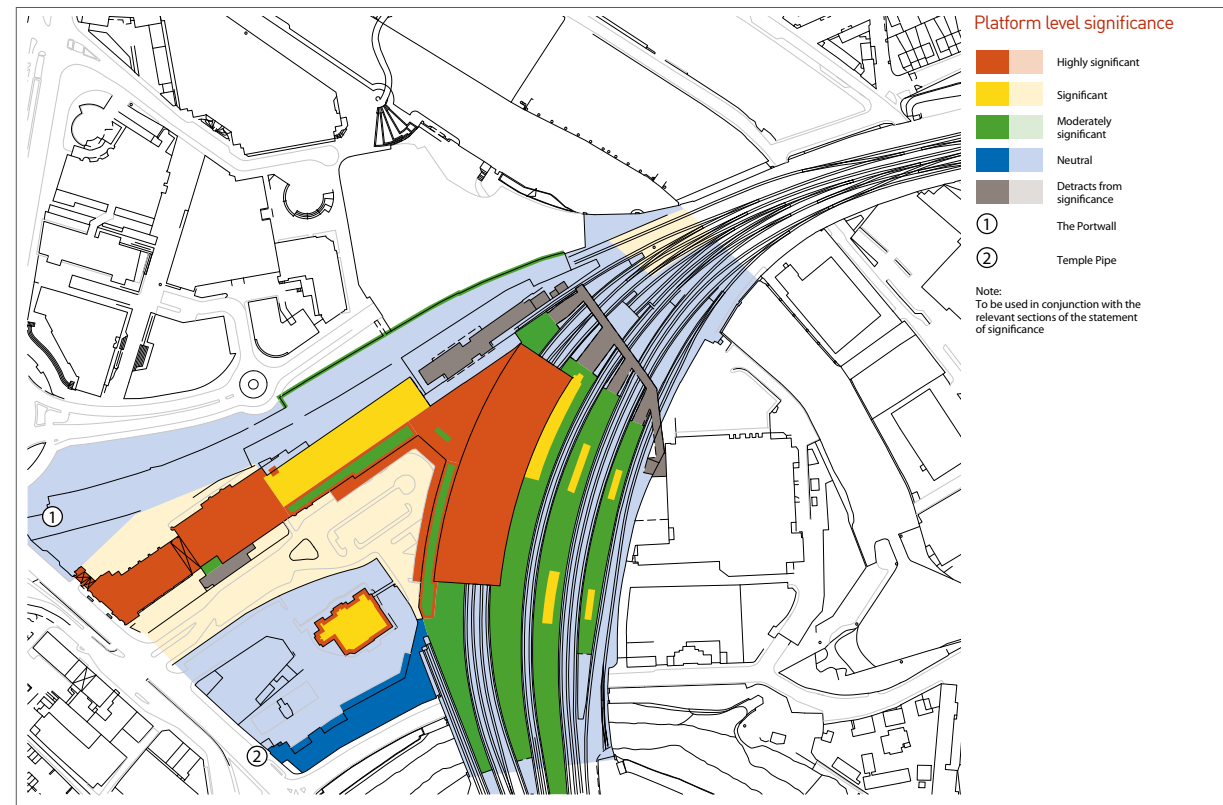


Figure 59 BTM platform level historic significance © Bristol City Council



- The Digby Wyatt buildings on the Midland Shed side of the forecourt are in very poor condition
- The Main Shed roof requires refurbishment (commenced in 2020)
- The Passenger Shed roof is in poor condition

### 6.2.6 Proposed development context

#### Planning policy considerations

Bristol Temple Meads station is within Bristol City Centre and the Bristol Central Area Plan. It is part of the Bristol Temple Quarter Enterprise Zone, designated as a key area in the Bristol Central Area Plan (Policy BCAP35) and covered by the BTQEZ Spatial Framework.

#### Approved developments

There are several third-party development projects in the pipeline which will impact the Bristol Temple Meads City Gateway. Not all of these have been submitted for planning permission or approved. However, they have been a key consideration in optioneering for the City Gateway to ensure that this masterplan is deliverable and does not conflict with other forthcoming developments.

Notable schemes that have an interface with the City Gateway include:

- Temple Quarter Enterprise Campus
- Eastern Entrance
- Temple Square
- Floating Harbour Walkway
- Temple Island

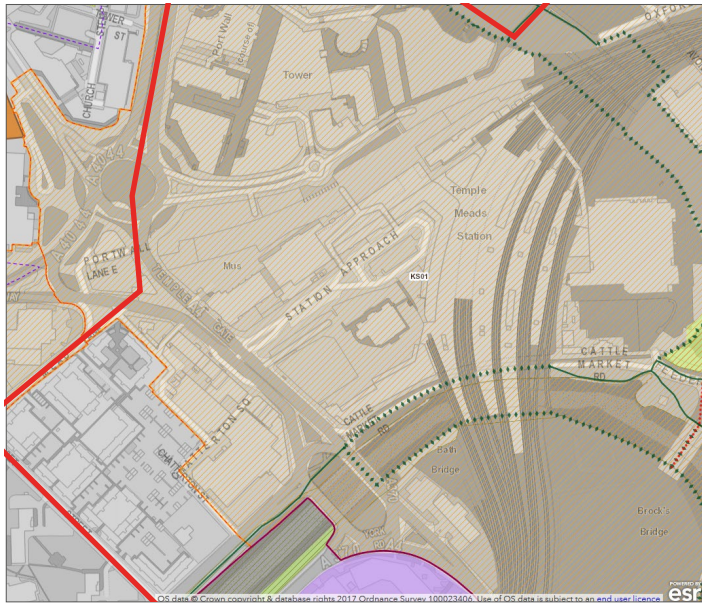
More detailed descriptions and the current status of each development are outlined in section 2.4.1.

The City Gateway also has significant interfaces with other parts of this masterplan, especially Bristol Temple Meads Station (Chapter 5) and the Friary North (Chapter 7)

### 6.2.7 Land ownership

Bristol Temple Meads station is owned by Network Rail. However, it is worth noting that land around the station within Network Rail and Bristol City Council ownership is limited. This imposes a significant constraint on the feasibility of different components of the new City Gateway.

- The Brunel Station, including the Carriage Shed and Offices are owned by Network Rail. The Passenger Shed was transferred to Network Rail ownership in July 2020
- Parts of the Temple Quay area, including the Friary, Plot 3 and adjacent public realm are owned by Homes England
- The Fish Dock yard is owned by Network Rail and Bristol City Council hold the freehold for 1-9 Bath Road
- The Temple Quarter Enterprise Campus site is owned by the University of Bristol
- The Bristol & Exeter House, Lanes, Collett House and Skanska site are in private ownership, whilst Network Rail have agreements to access the arches for servicing the station and trains



**Key**

- Conservation Areas\*
    - BCS22
  - Bristol Local Plan Policies Map
    - City Centre
      - BCS2
    - Safeguarded Transport Links
      - BCS10, BCAP27, DM24
    - Proposed Quayside Walkways
      - BCS10, BCS21, BCAP32
    - Existing Quayside Walkways
      - BCS10, BCS21, BCAP32
    - City Centre Places
      - BCS2, BCAP35 to BCAP40
    - Key Sites
      - BCAP35 to BCAP40
    - Site Allocations
      - SA1 / BCAP SA1 to SA6
    - Sites of Nature Conservation Interest
      - BCS9, DM19
    - Important Open Space
      - BCS9, DM17
    - Principal Industrial and Warehousing Areas
      - BCS8, DM13
- \* These designations are made separately to the Local Plan and may be subject to change.

Figure 60 Local Plan policies map © Bristol City Council



Figure 62 Spatial Framework land use plan © Bristol City Council

**Key**

- transport emphasis development parcels
- Existing buildings in the EZ where a change of use is not anticipated

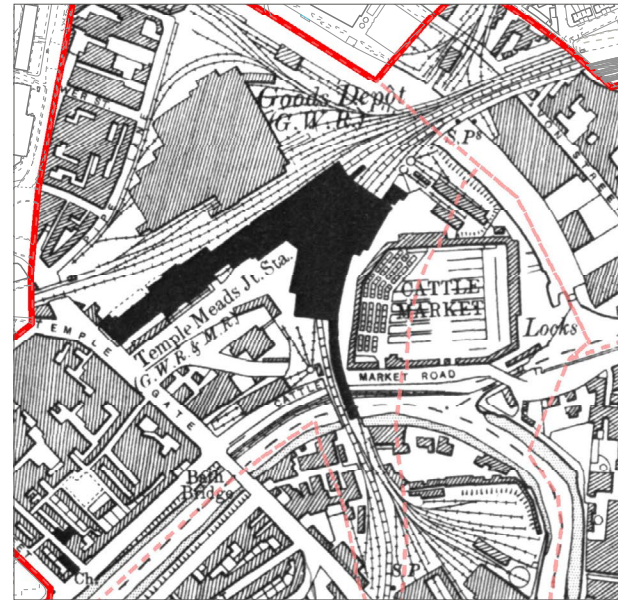
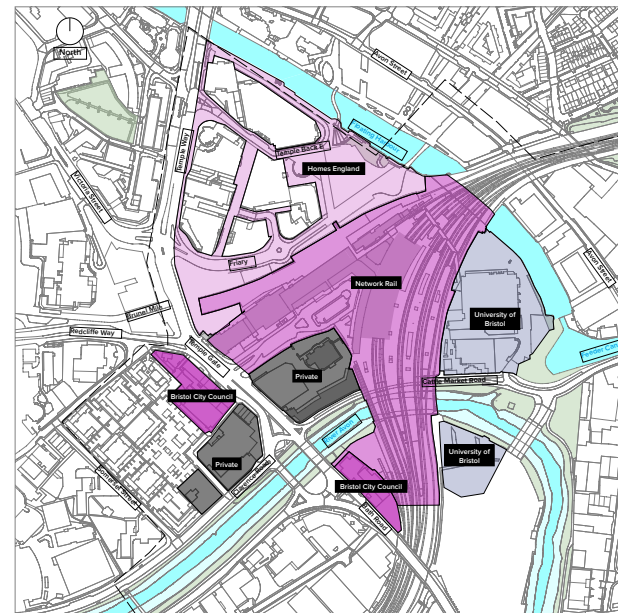


Figure 61 Historic map (1930) © Groundsure



**Key**

- Network Rail Infrastructure Ltd
- Homes England
- Bristol City Council
- University of Bristol
- Private Land Ownership

Figure 63 Land ownership (Jan 2020)

### 6.2.8 Movement networks

Bristol Temple Meads station is positioned at the heart of several movement routes, as shown in Figure 6969 to Figure 711.

Camera data count surveys were undertaken during weekday peak times on 2<sup>nd</sup> and 3<sup>rd</sup> April 2019 to better understand onward modes of travel by station users. The split between different modes is shown in Figure 644 and between the different entrances in Figure 655 to Figure 6868. It is important to note that the camera locations captured the immediate vicinity of the station but not all movement patterns in the surrounding area. As a result, the proportion of pedestrians is overestimated. For example, bus users who board/alight on Temple Gate and car/taxi users who drop-off/pick-up anywhere other than the Station Approach are captured as pedestrians.

#### Highway network

The immediate highway network surrounding Bristol Temple Meads consists of the Friary immediately to the north of the station, Temple Gate to the south-west and Cattle Market Road to the south. Station Approach is also used to access/service the station, passenger shed and adjacent car parking.

Temple Gate is an important artery, providing highway connectivity to north Bristol, south Bristol and the city centre. The recently completed Temple Gate highway scheme simplified the highway junctions in this area by removing the Temple Circus roundabout. However, it did not increase the

road capacity for vehicles.

The Bristol Transport Strategy notes that, "*the road network is at capacity and will be placed under further pressure from planned housing and economic growth*" (Bristol City Council, 2019). This causes heavy congestion at peak times and exacerbates air pollution.

#### Pedestrian routes

Pedestrian routes to reach the station precinct are primarily footways alongside carriageways, as shown in Figure 6969. Nearer the station there is greater separation from vehicles, such as the Temple Quay area, the Station Approach and Portwall Lane – part of the Brunel Mile.

Pedestrian permeability and navigation is challenging around the station. The station, railway and watercourses act as a physical barrier between areas to the north and west of the station and those to the south and east. The difficulties in movement have become more pronounced as the city's population has grown.

#### Cycle network

The station is positioned close to key cycling routes, as shown in Figure 711. Some of these are physically segregated from motor vehicles, although fewer are segregated from pedestrians.

The Friary area represents the link between the Bristol to Bath Railway Path and the Portway route toward the City Centre, with high numbers of cyclists travelling east-west past the station.

The recent Temple Gate highway scheme improved off-street cycleways on the southern side of this highway. However, the experience of cyclists around the station includes several points of severance and movement

conflict with vehicles and pedestrians.

**Railway access points**

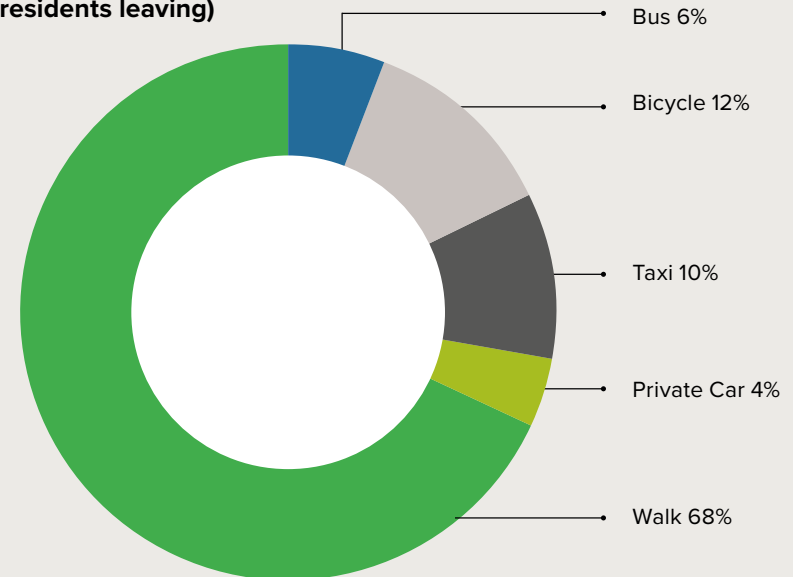
The Bristol Temple Meads City Gateway area currently contains one track access point:

Engineer's Line Reference – miles and yards (chains)	Location description	Current mode of access
MLN 118.0926 118m 42ch	Fish Dock	Bath Road Bridge vehicular

**Drivers for change**

The existing policy base, Bristol Transport Strategy and BTQEZ Sustainable Urban Mobility Plan set a clear direction to prioritise active and public transport in the station area. This includes improving the capacity and quality of pedestrian and cycle routes, while minimising private vehicle use through the area. This shift towards sustainable travel will bring economic, social and environmental benefits for individuals and the city as a whole.

**AM In + PM Out  
(Bristol residents leaving)**



**AM Out + PM In  
(Commuters into Bristol)**

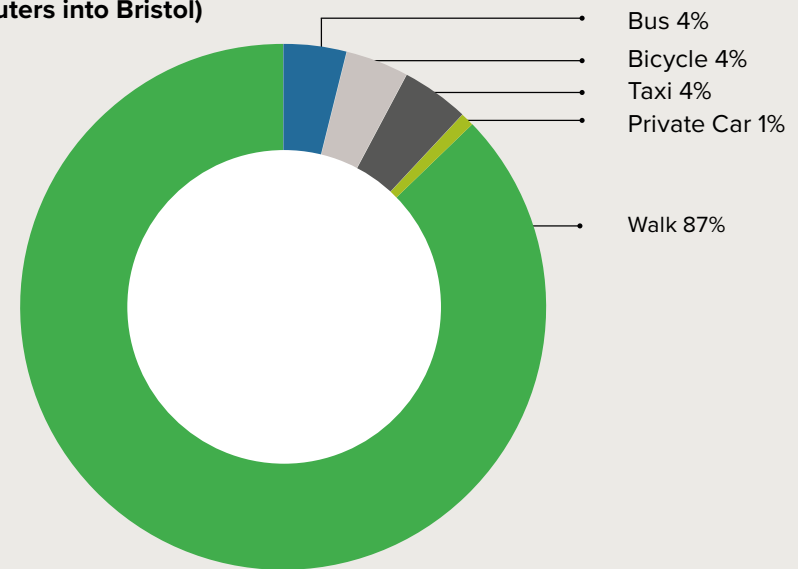


Figure 64 Onward travel modal split, from camera data counts 2nd & 3rd April 2019

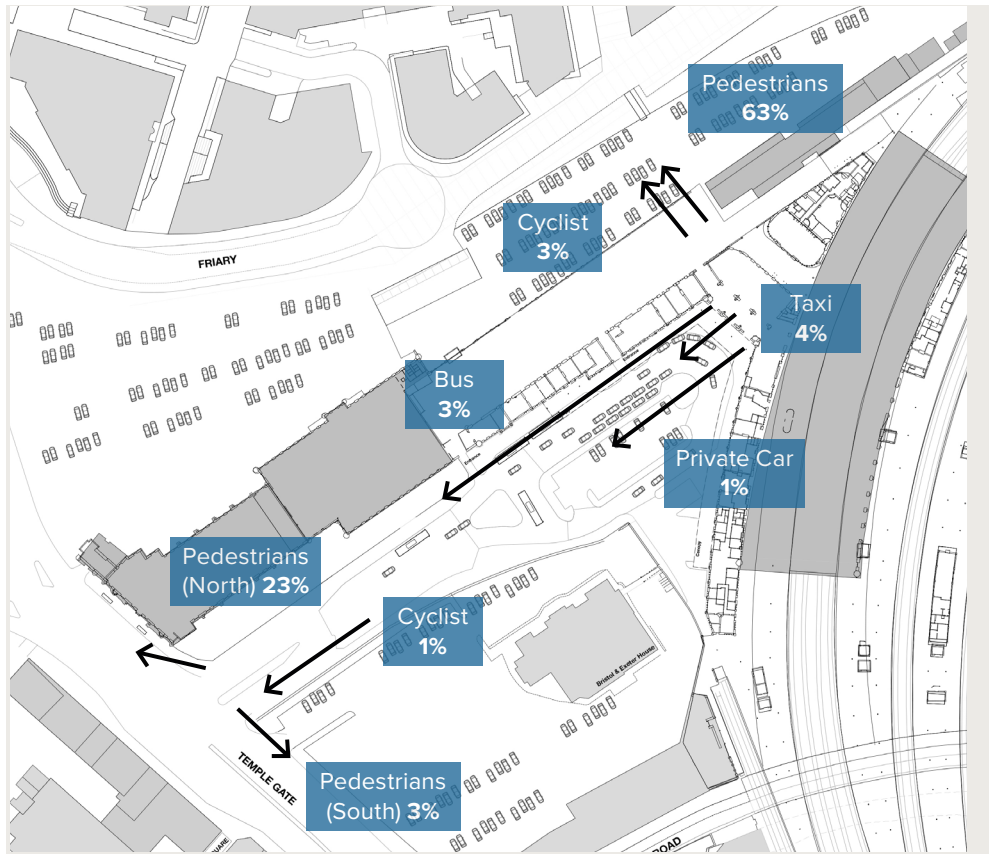


Figure 65 Onward travel (AM out) from camera data counts 2nd & 3rd April 2019

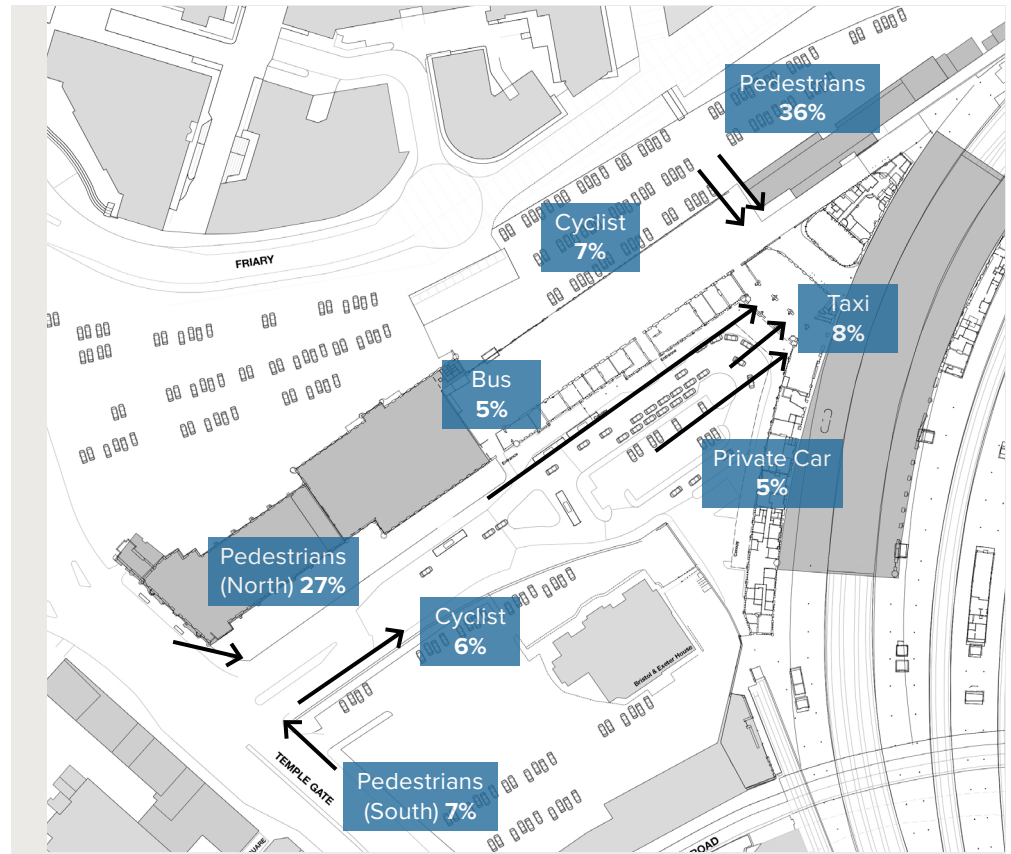


Figure 66 Onward travel (AM In) from camera data counts 2nd & 3rd April 2019

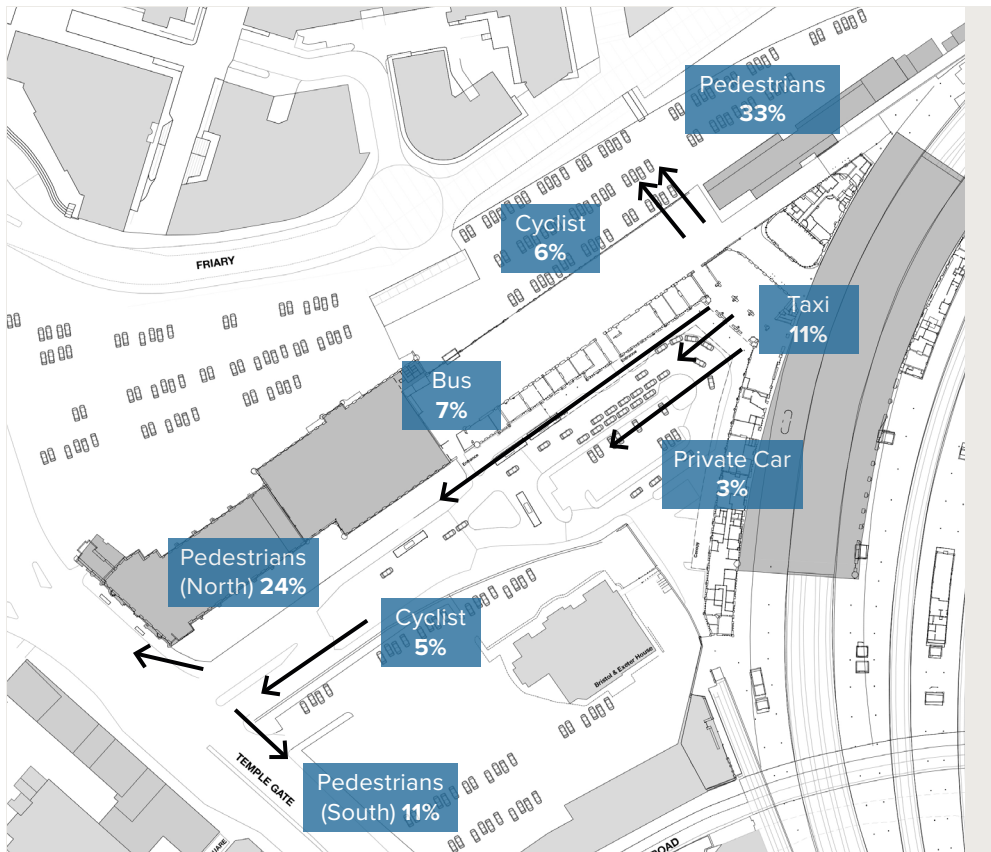


Figure 67 Onward travel (PM Out) from camera data counts 2nd & 3rd April 2019

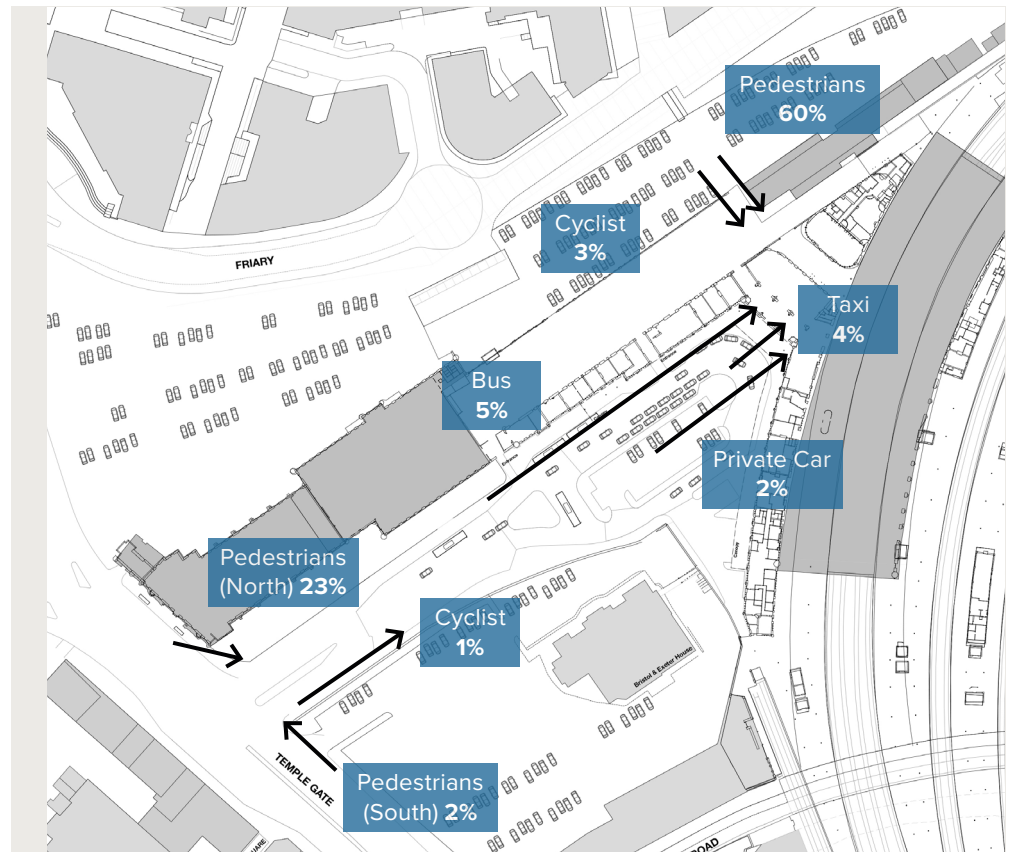
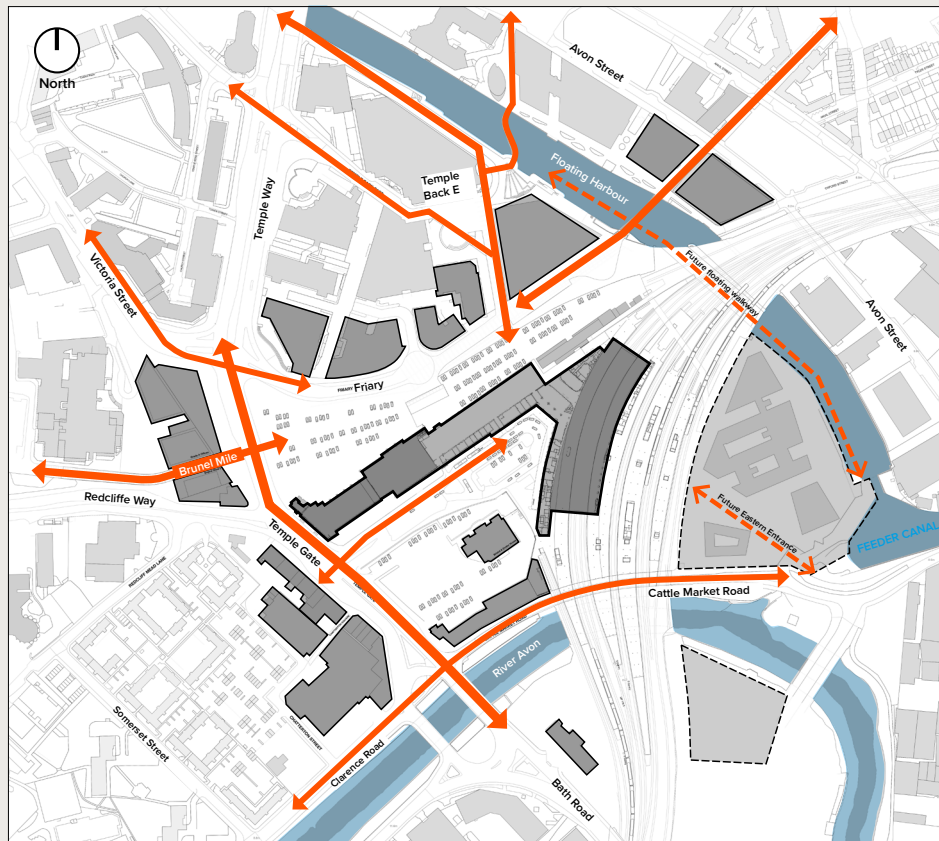


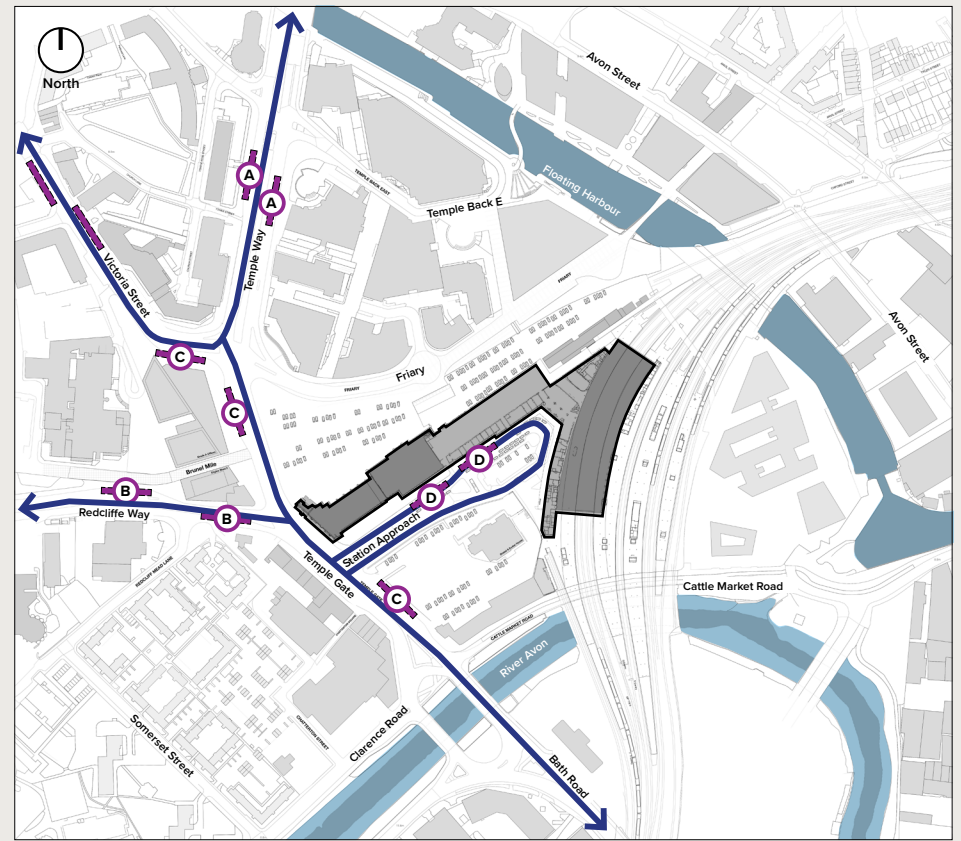
Figure 68 Onward travel (PM In) from camera data counts 2nd & 3rd April 2019



**Key**

- Main pedestrian routes
- Future/desirable routes

Figure 69 Existing pedestrian routes



**Key**

- (A)** Temple Way: 2 bus stops/14 services
- (B)** Redcliffe Way: 2 bus stops/20 services
- (C)** Temple Gate: 2 bus stops/24 services
- (D)** Station Approach: 2 bus stops/7 services

Figure 70 Existing bus routes

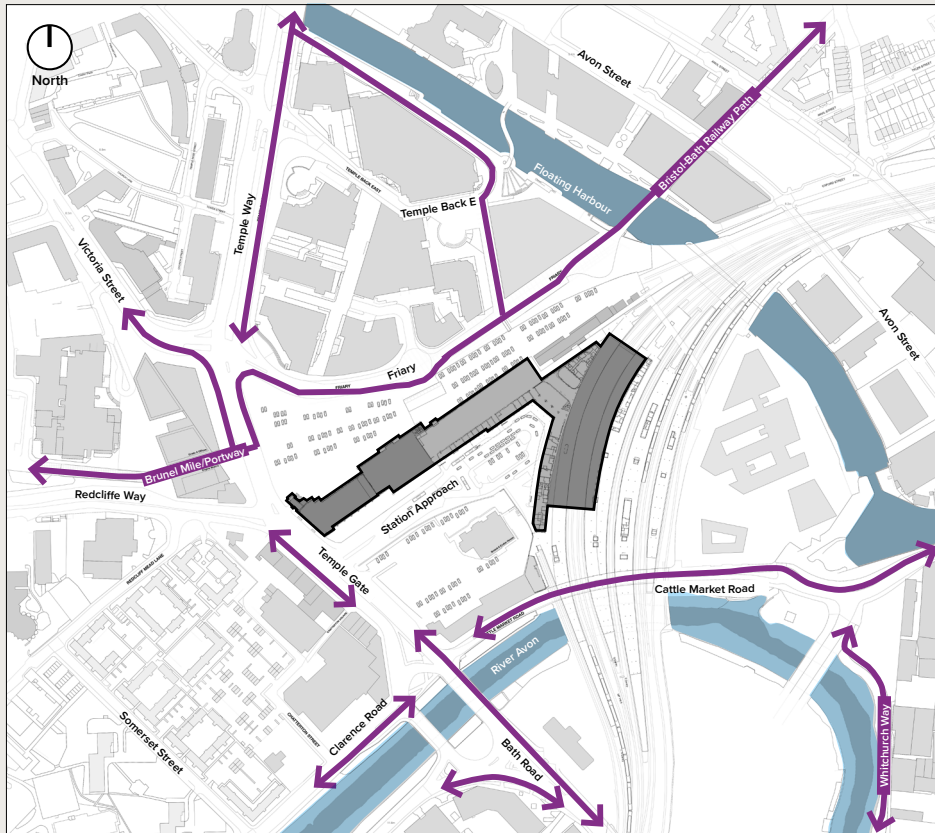


Figure 71 Existing cycle routes

Key

↔ Main cycle routes

.....

.....



### 6.2.9 Transport interchange

Bristol Temple Meads currently operates as a dispersed interchange whereby the distribution of modes is spread throughout the wider station area. However, two key areas are under capacity and poorly designed for the multiple modes that use them: the Friary and the Station Approach. In these two locations, the combination of incremental development and high passenger growth has resulted in an arrangement that is often confusing, congested and unsafe.

The current transport interchange components are shown in Figure 722.

#### Public transport

Bus stops in the area are spread across multiple locations. Those on Temple Gate have recently been reconfigured as part of the Temple Gate highway scheme. This dispersed arrangement creates inherent wayfinding challenges, but there are limited opportunities to consolidate these due to low levels of available land around the station.

The bus stops on the Station Approach suffer from poor visibility from the entrance due to the concentrated use of this space by taxis, buses and private vehicles. In addition, most bus stops on the Station Approach have no shelter or seating.

The nearest boat stop to the station is Temple Meads Station Landing, with public ferry services travelling to and from the City Centre and Hotwells.

#### Taxis

Ten Hackney carriage taxis are allowed in the taxi rank immediately outside the Station Approach entrance. Twenty are allowed in the feeder rank, and an additional thirteen stands are available on the ramp.

There is no official provision for private (or app-based) taxis, many of which currently drop-off and pick up outside the Northern Entrance. Vehicle stopping is prohibited by Homes England, but this is poorly enforced, creating risk of conflict with pedestrians and cyclists in the Friary 'shared space'.

#### Car Parking

The north side of the station is currently dominated by surface car parking, much of which is long-stay. The Station Approach is used for short-stay parking and drop-off, which exacerbates conflicts with taxis, buses, pedestrians and cyclists at peak times. In addition, the Friary area is often used as informal drop-off/pick-up.

Additional public car parks nearby include Portwall Lane (150 spaces) and Temple Gate (440 spaces, 395 of which are private lease).

A weekday parking survey was undertaken in November 2019. Of those using the long-stay station car park outside the Northern Entrance, 37% were train travellers, 26% were railway staff and 38% were parking for other reasons (e.g. City Centre for work). In addition, 47% of those using the Portwall Lane car park were parking to catch a train.

There are currently 11 long-stay, Blue Badge parking spaces located in the Midland Shed and seven on the Station Approach, all of which are non-compliant with Design Standards for Accessible Railway Stations (DfT, 2015)

**Cycle parking**

The station currently has approximately 450 cycle parking spaces, which were relocated from Platform 3 to the Temple Quay area north of the station in 2020.

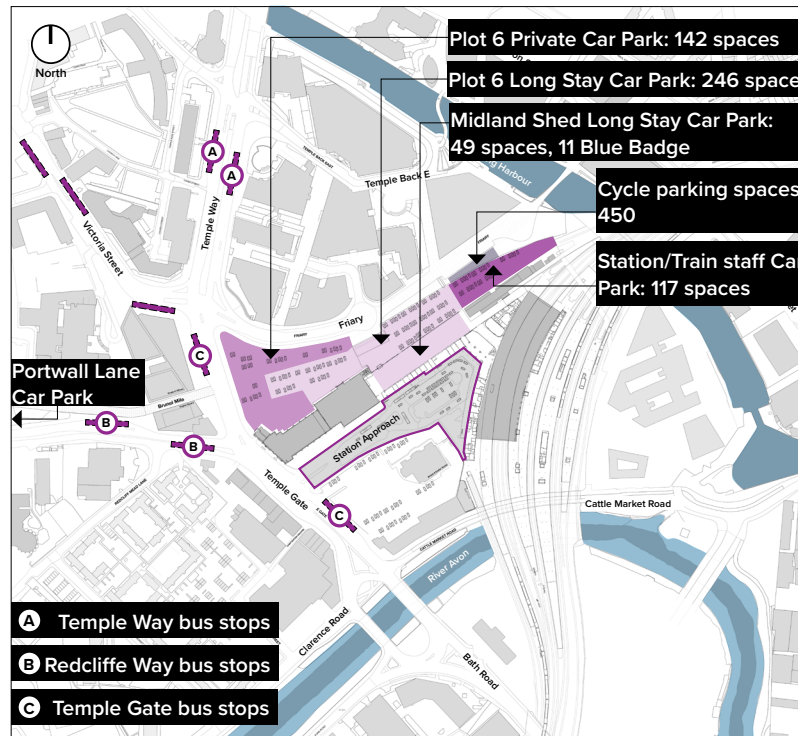
Cycle parking at the station is under capacity for current demand, does not fulfil station security requirements, and has not been designed to reflect the diversity of bicycles in use e.g. trailers, tandems and bicycles for people with disabilities.

There are additional Sheffield stand cycle parking spaces nearby, such as in the wider Temple Quay area, which are also oversubscribed

**Drivers for change**

The current transport interchange at Bristol Temple Meads is unfit for the needs of a 21<sup>st</sup> Century station. This masterplan presents an opportunity to reconfigure the transport interchange to promote sustainable travel choices, improve legibility and accommodate forecast passenger growth.

In particular, the relocation of surface car parking around the Northern Entrance is critical to unlocking sites around the station to create a new City Gateway.



Station Approach Detail

- Key**
- ① Taxi Rank - 10 cars
  - ② Taxi feeder - 20 cars (2 lanes)
  - ③ Short stay parking - 8 taxi, 11 general
  - ④ 2 bus stops (5 bays) for 7 services
  - ⑤ Short stay - 7 Blue Badge, 7 Motorcycle, 20 general, 3 drop-off
  - ⑥ Forecourt cycle parking - 104 bicycles
  - ⑦ British Transport Police - 10 spaces

Figure 72 Existing Bristol Temple Meads station interchange

### 6.2.10 Other drivers for change

The City Gateway is a focal point for the renewal of Bristol Temple Meads, recognising that the station experience spills out into the city environment. In addition to the movement and transport needs outlined above, there are numerous drivers and aspirations that support the need for intervention. Most of these are inter-related, creating a complex set of factors that influence the design of this area.

#### Public realm

The areas outside the station entrances do not fulfil the principles of high quality public realm design. The environment is dominated by movement, with noisy vehicles in close proximity and few places to dwell and make decisions any longer than a momentary pause. As a result, the public realm is mostly hurried through and the historic station is under appreciated.

The areas around the station were previously identified as highly desirable for public realm enhancements in the BTQEZ Public Realm Guide (Bristol City Council, 2015) to create an attractive and fitting City Gateway.

#### Station security

The proximity of vehicles to station entrances and pedestrian flow routes is non-compliant with the Security in Design of Stations (SIDOS) Guide (DfT, 2018). Thus, there is a clear driver to relocate the station's taxi rank and car parking to improve stand-off distances and station security.

#### Accessibility and inclusivity

The external station environment presents challenges for people with protected characteristics under the Equality Act 2010. Particular issues include:

- Poor signage and wayfinding; a particular challenge at Temple Meads due to the dispersed interchange
- No public toilets or baby changing facilities outside the ticket gates
- Limited seats with shelter
- Access routes that are non-compliant with Design Standards for Accessible Railway Stations (DfT, 2015) and BS 8300, including slip and trip hazards
- Insufficient and non-compliant Blue Badge parking spaces
- Personal security concerns, such as Cattle Market Road which is perceived as a dark corridor with poor surveillance

Inaccessible and poorly designed public infrastructure is significant factor in social exclusion, dissuading people from choosing to travel by train. The provision of accessible stations helps to ensure everyone can travel safely and access job opportunities, healthcare, education, and, social and recreational opportunities, giving independence to those who are unable to access private transport.

## Retail

Retail provision at the station is mostly inside the Passenger Subway and on the platforms, with only a small WHSmith store outside the ticket gates. In this study it was found that Bristol Temple Meads has the lowest retail provision compared to other benchmarked stations, and retail demand will increase with growing passenger numbers. The lack of retail was also raised as a consistent theme from engagement during this study, including community user groups and businesses. Thus, there is a clear driver to improve the station's retail offering to provide a good passenger experience and a valuable source of revenue for Network Rail.

## Economic benefits

There are localised economic benefits from improving train stations and the surrounding transport infrastructure, as explored in Local Economic Benefits of Station Investment (Steer Davies Gleave, March 2018). The three main areas are:

- Property price impacts – where a transport investment leads to an increase in the price of commercial or residential land/property
- Direct investment (developer-led response) – where a transport investment increases the viability and attractiveness of a location as a place to develop – e.g. stimulating housing or commercial development
- Indirect investment (business-led decisions) – where a change in the accessibility or environment of an area encourages businesses to re-locate or expand

Crucially, this publication notes that, *"all investment is context specific...transport investment should be viewed as a potential enabler of desired economic outcomes, where it addresses identified issues, constraints, opportunities or market failures. The potential success of transport investment will be maximised where transport investment is coordinated with other complementary investment or policy initiatives."* This is the approach being pursued by the City Gateway, to address the constraints and opportunities in a holistic way, including capacity, public realm, retail and more.

## Future mobility

A new mass/rapid transit system is being considered to improve Bristol's public transport offering and reduce congestion, as described in the Bristol Transport Strategy (Bristol City Council, 2019), led by the CA. The choice of routes and form of transport is still in early feasibility stage and subject to change. This Masterplan offers an opportunity to include passive provision for mass transit by incorporating flexibility into the use of sites around the station, particularly those which are likely to be available later in the development, those which are not surrounded by physical barriers (e.g. the railway and river), and those which connect to the existing highway network.

## Smart technology

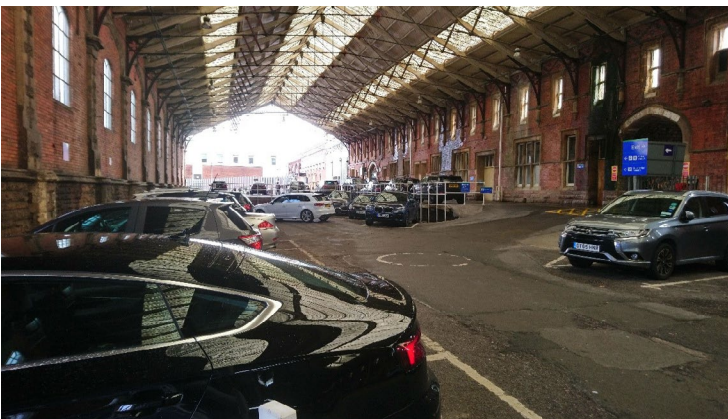
Redevelopment of the City Gateway provides several opportunities for technology-enabled improvements to operation, security and safety at Bristol Temple Meads. At present, 4G mobile network coverage is strong indoors and outdoors, which is set to improve with the development of 5G by each network operator. This can be implemented through fibre and ducting coverage across the masterplan area.

## 6.3 Constraints and opportunities summary

The station is surrounded by physical barriers, including the River Avon, Floating Harbour and Temple Gate highway, further compounded by several areas in private land ownership. This constrains the number of sites which are available for use and intensifies scrutiny on the extent of public land that is currently used for surface car parking. The competing needs for space in this area means that the renewed City Gateway will continue to be dispersed at several locations, presenting some inherent constraints for wayfinding, capacity and accessibility.

Bristol Temple Meads is an iconic, Grade I listed asset. This introduces both opportunities and constraints to design sensitive alterations which improve passenger experience and capacity. In addition, the renewal of this area is one of several projects nearby. The interface between these schemes and works to the station may constrain design solutions and construction methodology.

From the preceding analysis, Bristol Temple Meads City Gateway presents an opportunity to reconfigure the station area to better serve the needs of its users, creating a step-change in transport provision, public realm, station security, accessibility and retail provision. The sum of these works will help to drive sustainable economic growth in the city.



## 6.4 Guiding principles

Opportunities and recommendations for application of the five guiding principles to achieve placemaking outcomes in the City Gateway.



### Integrated and Connected

This masterplan will deliver a revitalised, dispersed transport interchange to improve movement and connectivity around the city. These enhancements will prioritise sustainable and accessible modes of transport, particularly public transport and active modes such as walking and cycling. The sustainable hierarchy of modes will be used to allocate the available space nearest the station to influence transport choices, all while improving essential provision for people with disabilities and operational staff. This project will deliver improved wayfinding integration of legible design principles such as improved sight-lines, clear orientation to landmarks and easily navigable spaces with ample space to manoeuvre and see onward journey options. In addition, potential spaces for future transport infrastructure will be identified to incorporate flexibility for the future. These enhancements will make the station more welcoming, accessible and inclusive for all.



### Inclusive Economic Growth

The renewed City Gateway, combined with internal station improvements, will continue to be an important infrastructure base that facilitates economic growth in the city. This masterplan will propose more efficient uses of land, alongside a clear and achievable delivery strategy to introduce incremental benefits without the disproportionate disruption that could be associated with a 'big bang' scheme. To kick-start this process, relocation of car parking and reconfiguration of transport components will unlock sites around the station and send a clear signal for further redevelopment in the area. Further development will include appropriate retail and facilities to achieve a better balance in the station precinct.



### Quality places

Bristol Temple Meads will become a focal point of civic placemaking which celebrates the historic character of the Grade I listed station while also creating a modern and low carbon gateway to the city. A new Northern Entrance will create a grand, architectural entrance to the station, a 21st Century response to the heritage of these buildings. Similarly, the new Eastern Entrance will be a fitting addition to the station on this side, complementing the new Temple Quarter Enterprise Campus. The Midland Shed also presents an excellent opportunity for revitalisation to better serve the needs of the station, improving the quality of passenger experience, facilities and wayfinding.



### Quality spaces

The new City Gateway will achieve an effective blend of heritage and modernity within an efficient and attractive transport interchange. Together with other development nearby, this masterplan will seek to transform the station and its environs into a destination in their own right, using a clear hierarchy of public spaces to transition from the station to the city. At each entrance, high quality public realm will be created to improve legibility, comfort and accessibility for all users. Improving personal safety will be embedded in design, such as overlooked spaces, clear sight lines and lighting. Public realm design will be integrated with transport interchange components to provide a seamless experience for onward travel. Opportunities for green infrastructure will be utilised where appropriate to complement the functional needs of this space.



### Vibrant and Creative Communities

The new City Gateway will create an arrival experience which is befitting of the unique nature of Bristol – a city that champions sustainability, innovation and equality. Accessible and inclusive design will be incorporated from the outset to better serve a diverse range of users. Smart technology infrastructure will be improved, such as 5G connectivity. The City Gateway will help people to confidently navigate to the wider city and cultural map. Throughout the design process, the public engagement undertaken to date will be continued to refine the proposals for this area.

## 6.5 Design parameters and onward journeys

### 6.5.1 Design parameters

The new City Gateway will represent a significant upgrade to the infrastructure around Bristol Temple Meads, improving the user experience and transport capacity for decades to come.

The area around the Northern Entrance is proposed to be reconfigured quite significantly. However, the constrained nature of the site, coupled with the potential for new development buildings, presents a clear need to plan and safeguard physical space for movement infrastructure and public use. In this area, new movement routes, public realm and accessibility are of vital importance to resolve the current conflicts and provide a fitting introduction to the city. Thus, there is a need to balance the competing demands for space.

The following items represent the key design parameters to inform the design around the Northern Entrance. These reflect the current understanding of what can be achieved in a constrained site, and they can be expected to develop and evolve as the design progresses.

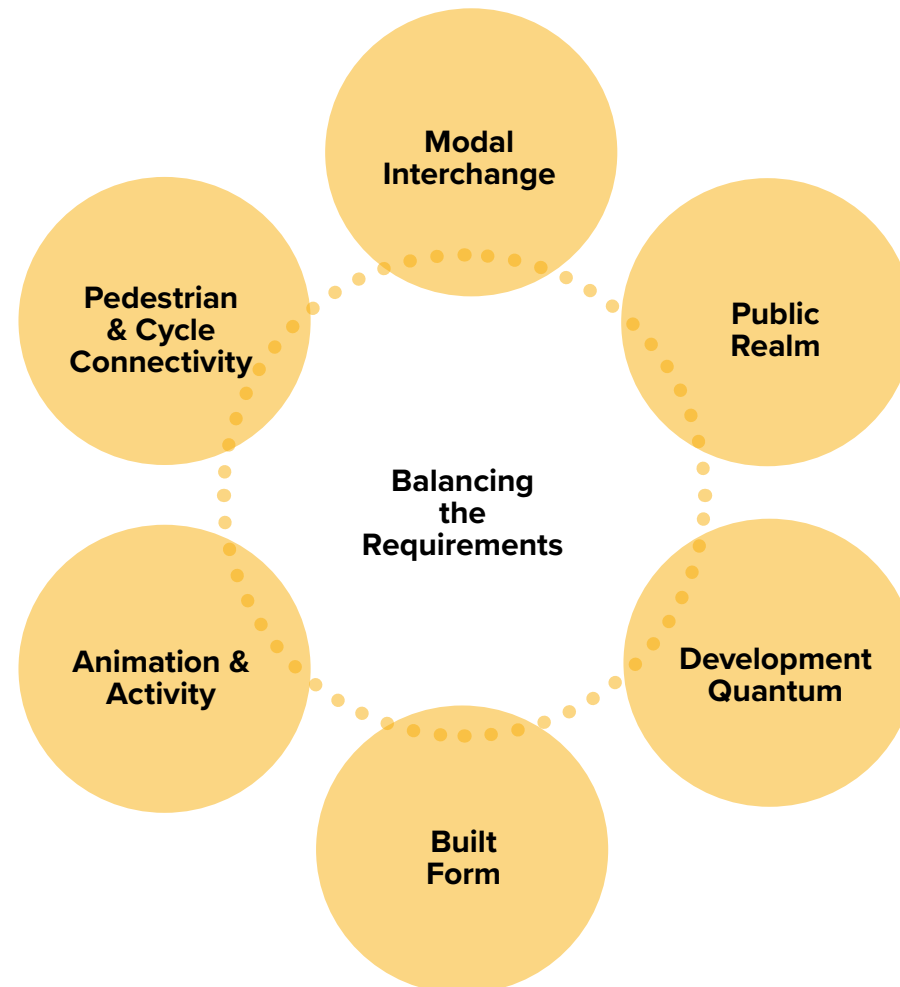


Figure 73 Balancing the Northern Entrance requirements



### Modal Interchange

- Seamless interchange between modes
- Legibility between modes (Visibility, desire-lines and signage)
- Inclusive and accessible, step free routes (including lifts where appropriate)
- Live information
- Shelter and comfort
- Safety and security
- Passenger facilities, ticketing, etc.

### Movement & Access

- Direct and legible routes into the interchange and Midland Shed
- Continuity of east-west pedestrian and cycle routes (i.e. between Brunel Mile and Meads Reach Bridge)
- Segregation between pedestrians, cyclists and vehicles
- Improved permeability and accessibility for different users
- Managed flows at intersections
- Access for servicing, emergency vehicles and rail access
- Bus access and bays on The Friary (including separate rail replacement bus facilities)
- Temple Back East drop-off
- Cycle parking adjacent to Northern Entrance

### Public Realm

- Welcome to Bristol - a fitting gateway
- Generous culmination of the Brunel Mile
- Legible wayfinding to the dispersed interchange
- Comfortable spaces to meet and linger e.g. terrace,
- Defined Goods Yard public space
- Inclusive and accessible, step-free spaces
- Celebrate the historic station
- Green infrastructure (including sustainable drainage), such as street trees and planting
- Durable, maintainable materials
- Smart technology infrastructure (e.g. 5G)

### Development

- New homes, jobs and business space to meet strategic need
- Commercial return to fund new infrastructure
- Adaptability and flexibility

### Built Form

- Enclosure from the Friary and Temple Gate highways
- Active edges to public realm
- Response to heritage assets and setting
- Distinctiveness and character
- Visibility to the buses
- Visibility to the drop-off
- Architecture of merit and distinction

### Animation & Activity

- A diverse mix of uses
- Activity at different times of day, evening and night (18 hour economy)
- Opportunities for pop-up retail, public art, events
- Inclusive and accessible social spaces
- Food & Drink
- Space for diverse events

Figure 74 Northern Entrance key design parameters

### 6.5.2 Illustrative cross sections

In response to these design parameters, the adjacent cross-sections provide an illustration of how the space could be arranged for three key areas:

- The Friary (northern end)
- Isambard Walk
- The Friary (southern end) and Goods Yard

Other movement corridors, such as the Station Approach and surrounding highways, will also undergo minor reconfiguration, but are more characterised by existing physical boundaries such as the river, buildings and retaining structures.

Figure 75 The Friary (north end) illustrative cross section

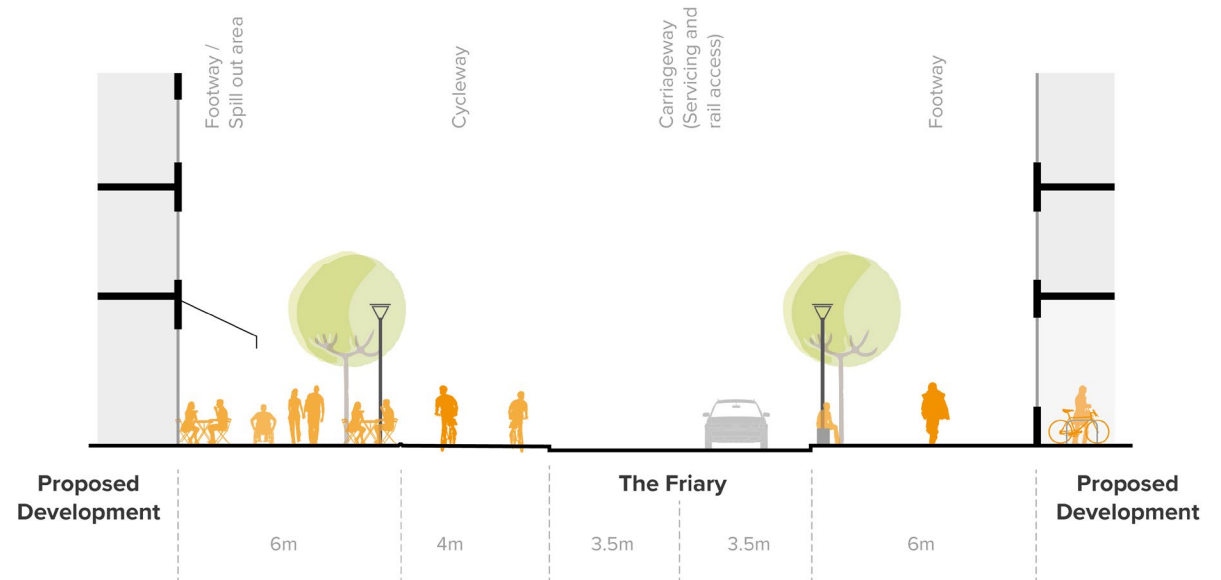


Figure 76 Isambard Walk illustrative cross section

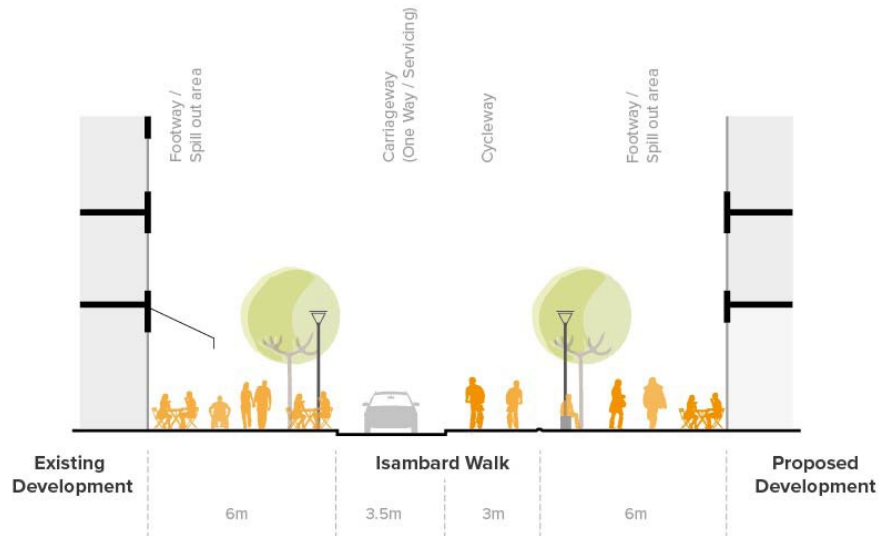
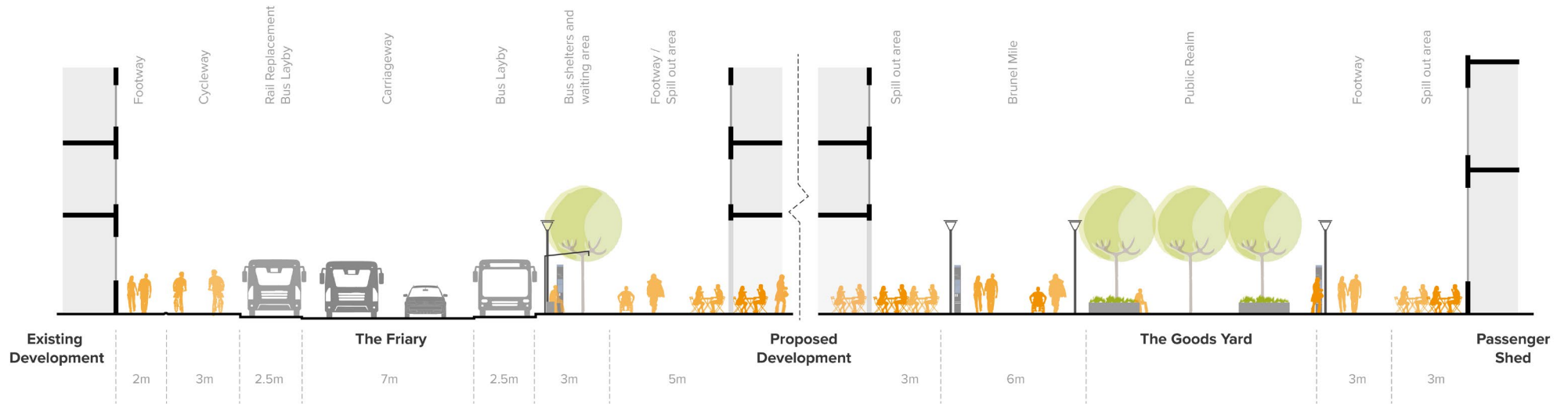


Figure 77 The Friary (southern end) and Goods Yard illustrative cross section



Part 1 - Overview

Part 2 - Masterplan

Part 3 - Development Framework

### 6.5.3 Onward journeys

This masterplan presents proposals for a renewed transport interchange and movement routes that will improve accessibility and encourage sustainable travel.

At the start of this project, several engagement workshops were undertaken with a particular focus on transport needs, opportunities and aspirations. The output from these workshops was combined with best practice and other client requirements for each mode of transport. Potential options were then assessed against criteria including capacity, user experience and deliverability, to achieve an appropriate balance.

The adjacent figure is a graphical representation of onward journey options from the renewed station and City Gateway. The necessity of adopting a dispersed approach (as outlined in Section 6.3) creates a plethora of options for the user, but also presents challenges for legibility and wayfinding. It is recommended that this user-centric approach should be continued and refined during the next stages of design to maximise integration and connectivity.

The figure overleaf shows the proposed overall dispersed interchange, including the reconfigured transport interchange.

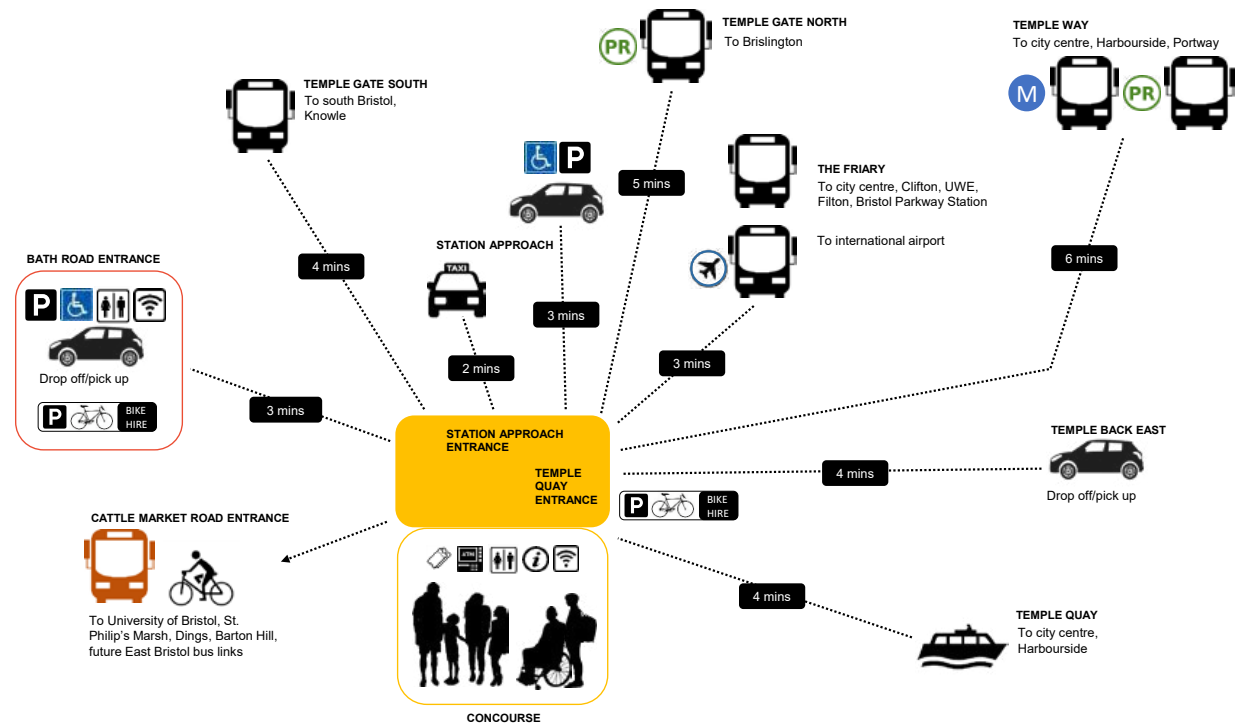


Figure 78 Onward journey options

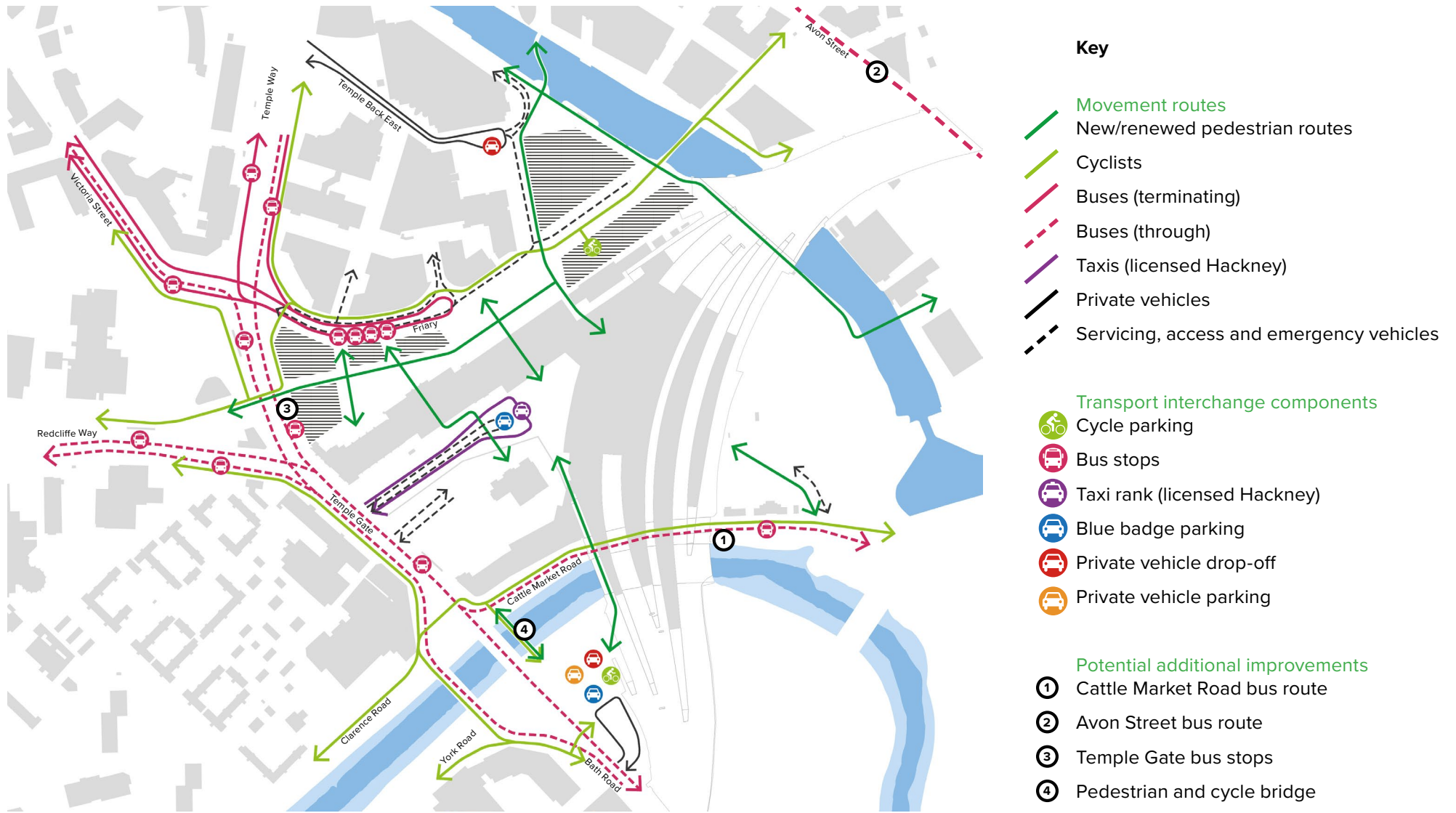


Figure 79 Potential overall dispersed interchange, connections and wayfinding



### 6.5.4 Wayfinding

Early delivery wayfinding and information provision will have to address the spatially dispersed nature of the interchange zone and take into account walking distances between the concourse and travel mode choices. The layout and design of adjacent public spaces and new buildings can assist legibility.





Figure 80 shows potential locations identified for new map monoliths, direction posts, interchange and bus information points envisaged by the wayfinding framework. Network Rail guidelines do not extend to the provision of pedestrian wayfinding to onward city destinations in the station's external zone. Bristol Legible City monolith units are therefore proposed as shown. These units are particularly important in assisting arriving passengers with their route planning, route selection and route following. Their detailed siting will need to take into account increases in future flows of pedestrians, proximity of street furniture and street lighting to ensure an adequate reading zone within which to engage with displayed information. Wayfinding proposals will be developed further throughout future stages of design.

**KEY**

**UNITS PROPOSED IN SPATIAL FRAMEWORK**

-  Bristol City Council proposed monolith
-  Bristol City Council proposed direction sign
-  Bristol City Council proposed major interchange information product

**PROPOSED ADDITIONAL UNITS TO SPATIAL FRAMEWORK**

-  Monolith
-  Direction sign
-  Major interchange information product
-  Bus stop
-  Key pedestrian route
-  Potential meanwhile uses location

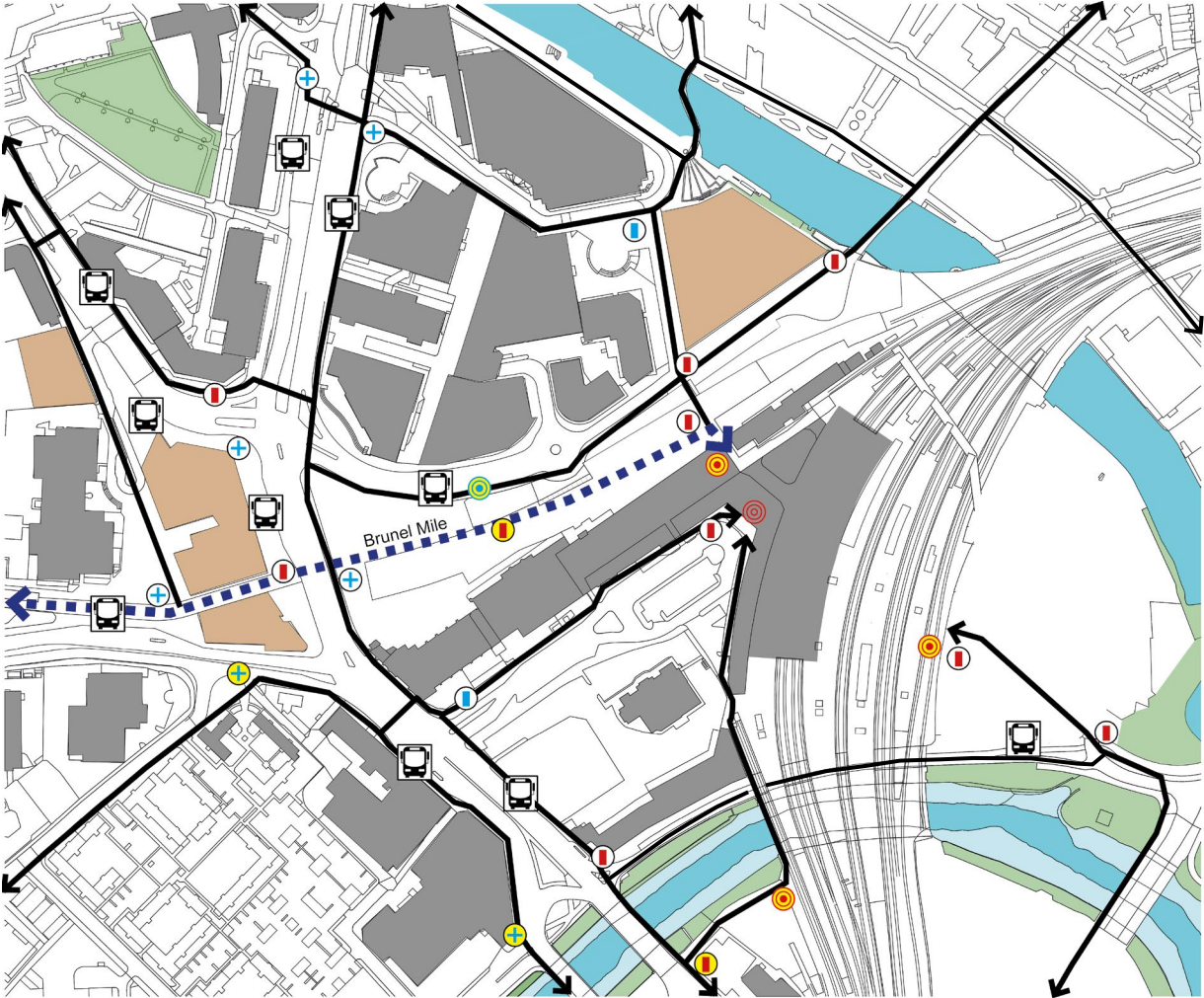


Figure 80 Wayfinding Units Location Plan (Extract from Wayfinding Strategy)

## 6.6 City Gateway masterplan

This masterplan for Bristol Temple Meads City Gateway identifies preferred approaches for the future development around the station, fulfilling the requirements and needs for movement and user experience. These are complemented by proposed improvements to the internal rail station and the Friary North development, presented in Chapter 5 and 7, respectively.

This design is based on the dispersed interchange principles set out in the BTQEZ Spatial Framework. Designs for each key area are presented in turn, including commentary on their relationship with other surrounding areas.

- Midland Shed
- Northern Entrance and terrace
- The Friary
- Station Approach
- Southern Gateway
- Eastern Entrance

The proposed interventions have been developed as part of an extensive feasibility study. Solutions have emerged in response to the constraints and opportunities at the station, including land ownership and heritage considerations. Options were assessed against criteria such as capacity, user experience and urban integration.

It should be noted that these proposals represent one feasible scenario to balance the competing needs for space. Further design and planning work is needed to continue their development.

The inter-dependencies between these different areas and potential phasing of delivery are outlined in Section 6.7.

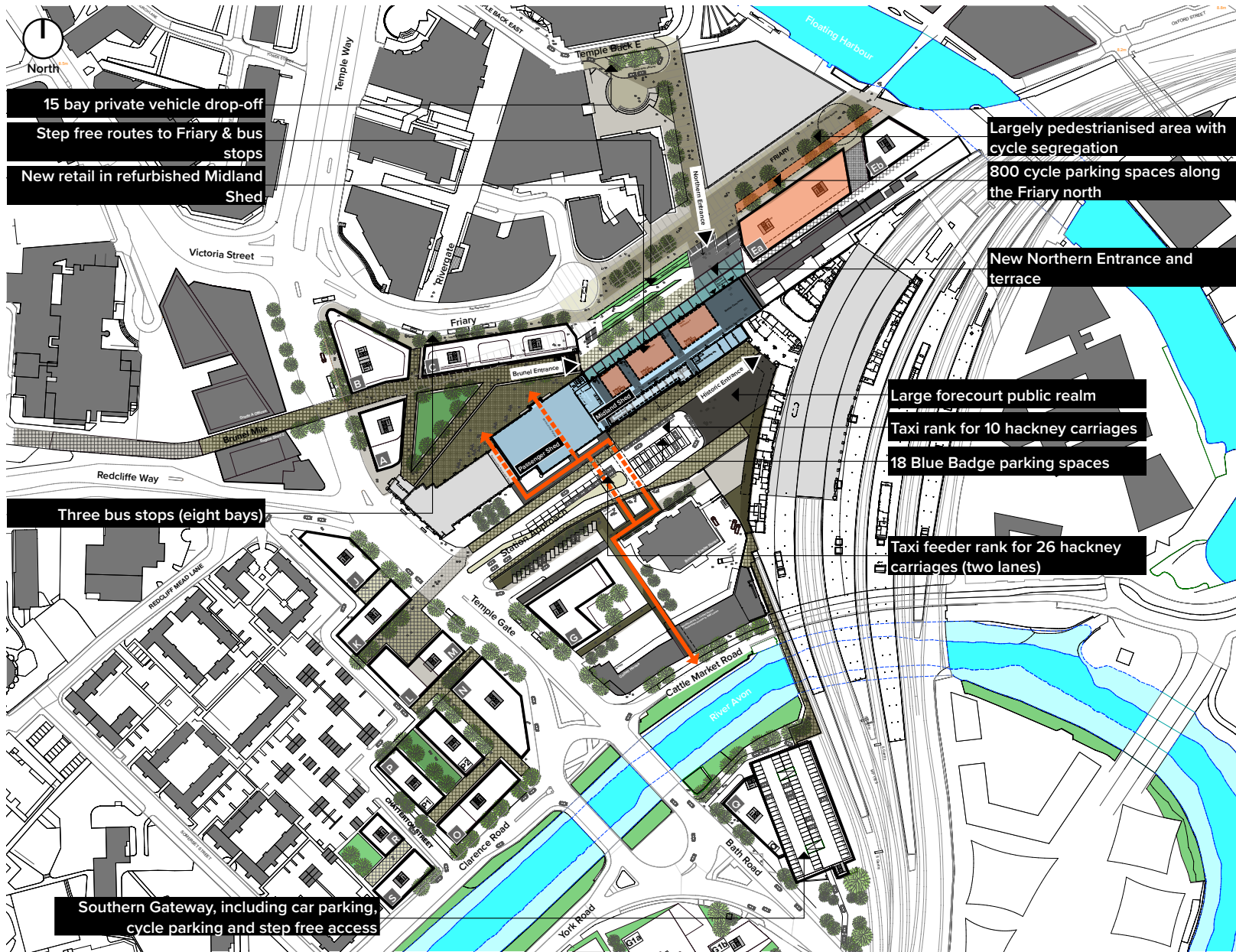


Figure 81 Potential new City Gateway



### 6.6.1 Midland Shed

#### Design

Revitalisation of the Midland Shed would extend the station concourse to this northern side of the station, linking the Northern Entrance, Station Approach and existing ticket hall. It would provide new facilities, retail and wayfinding to enhance the passenger experience and aid with onward travel.

The Midland Shed currently has two internal floor levels: a disused platform along the inner/southern wall and track bed level for the remainder, approximately 900mm lower. Coupled with differing levels outside the shed, there are challenges for providing compliant, step-free access to the clock tower hall. The design of this internal floor should be undertaken in parallel with the Northern Entrance (explored in 6.6.1 below) to achieve a logical, accessible progression of routes.

The northern end of the shed could form part of a larger, centralised and more intuitive unpaid concourse area, including wayfinding components and space for future introduction of platforms 0/1.

The Midland Shed presents opportunities for new ticketing facilities and convenience retail (envisioned as single-storey units), potentially including active frontages onto the Station Approach. There is also an opportunity to introduce a lift from an arch beneath the Station Approach to service these units. Other new facilities could include public toilets.

This masterplan proposes options for new pedestrian openings to improve permeability into and through the Midland Shed. At the Northern Entrance, the last three arches could be opened up to provide a new entrance threshold, maximising sight-lines from the new station terrace into the new concourse. There are also opportunities at the south end, providing access between the new terrace and the main forecourt.

The northern end of the Midland Shed is currently open. Further work is required to determine the design of enclosure at this end and its interface with the Northern Entrance to provide a suitable internal environment. If this design progressed soon, there will be a temporary case before the existing signal box is removed and Platforms 0/1 are installed (see Section 5.6). A glass wall may be a suitable temporary solution, lasting 5-10 years. Similarly, there may be a desire to permanently modify the dividing wall between the Midland Shed and Passenger Shed.

#### Heritage

This building is owned by Network Rail and will require some structural refurbishment and new building services before permanent facilities can be built inside, including the roof that is in poor condition. Conversion of this space has been discussed with Historic England and a sympathetic conversion is generally considered suitable at the stage of design. Further work is required to determine which arches are appropriate for opening.

#### Functionality and movement outcomes

The re-purposed Midland Shed could provide:

- Enhanced visibility of the historic station
- An enlarged concourse area to accommodate passenger growth to 2043, including the eventual introduction of platforms 0/1
- Wayfinding components, including rail departure/arrivals boards and for onward travel by other modes
- New ticketing facilities and passenger information centre, size and layout to be determined
- Public toilets, capacity to be determined
- Convenience retail, likely to be small format, self-contained units. Up to 1,286m<sup>2</sup> is considered suitable, to be confirmed with the Network Rail retail team
- Access between the new terrace and the station forecourt on either side of the shed further away from the concourse, to be assessed against structural and heritage implications
- Structural and building services refurbishment
- An ability to securely close the station outside operational hours
- Design for safety and personal security, including lighting, natural surveillance and CCTV
- A suitable internal environment, potentially including enclosure at the northern end of the shed, the feasibility of which is to be determined

**Key**

1. New northern entrance (formed through 3no. arches)
2. New northern unpaid concourse
3. Enhanced unpaid passenger route 1 - Clock tower
4. Enhanced unpaid passenger route 2 – Bonaparte’s
5. New northern entrance terrace
6. New station approach forecourt
7. New Customer Information Screen (CIS)
8. Potential retail use
9. New public toilets
10. New access into passageway
11. Former west Digby Wyatt range rooms
12. Existing access point extended through Midland Shed out onto Friary
13. First class lounge
14. Retail use
15. Potential to open up additional arches along façade to facilitate retail street
16. New 6-car platform and buffer stops positioned 25m back from end of Midland Shed
17. Proposed gateline to platform 0/1
18. Potential gateline behind Platform 3
19. Proposed gateline through Bonapartes Alley
20. Platform 3
21. Relocated Taxi and blue badge parking
22. Service access
23. Existing signalling facility

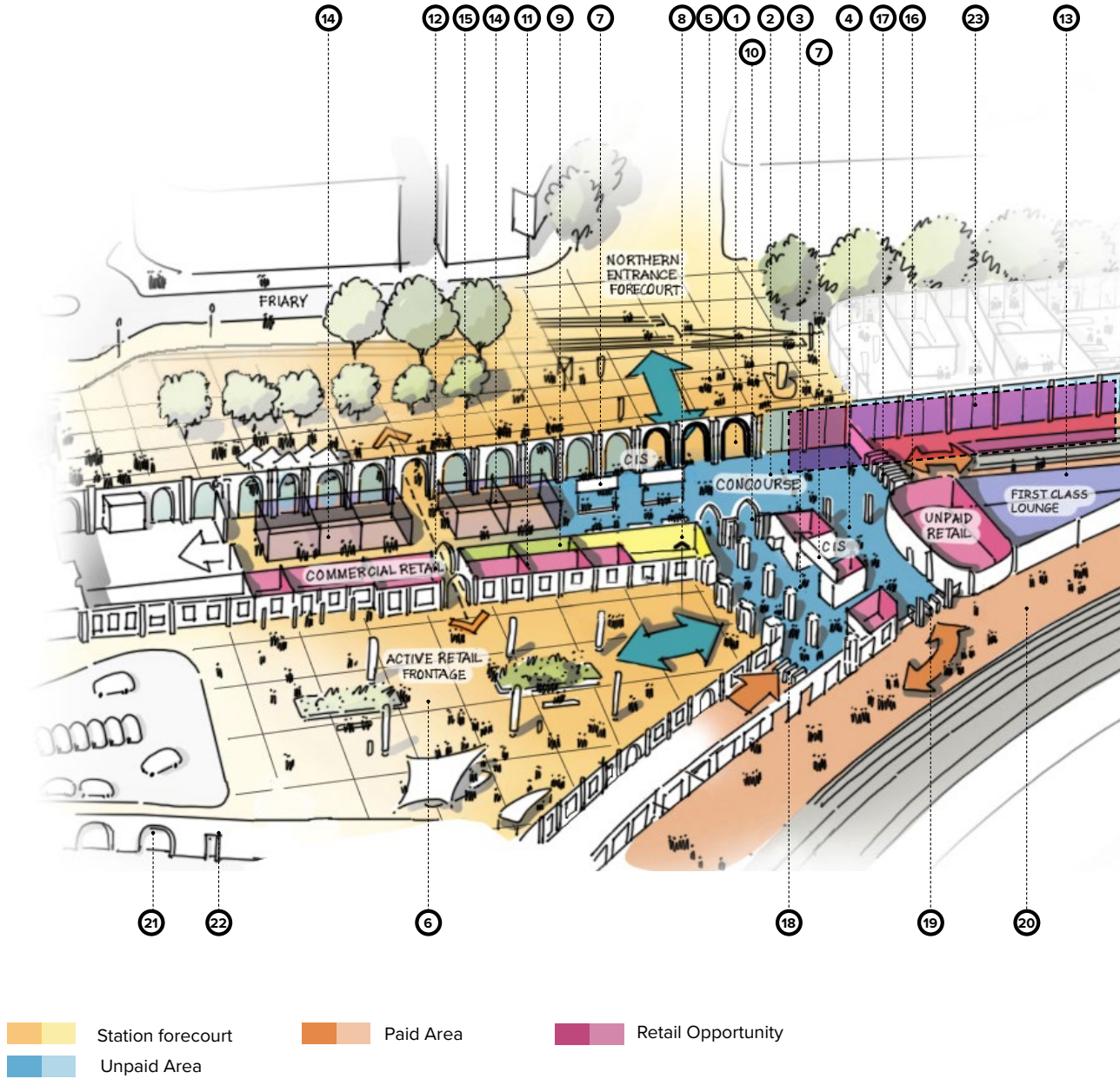


Figure 82 Midland Shed illustrative concept

## 6.6.2 Northern Entrance and terrace

### Design

Creation of a new Northern Entrance will enhance Bristol Temple Meads' role as a gateway to the city that will enhance the passenger experience through an attractive and legible space.

Two main options have been identified for new entrances via the Midland Shed.

1. Keeping separate entrances from the Station Approach and from the Friary. On the Friary side this widened entrance could occupy the end three bays, leading out on to a generous terrace
2. A single or internally linked pair of station entrances through the southern end of the Midland Shed by providing free and open access on foot through the southern end of the Midland Shed

These two options present different challenges and opportunities to successfully address the difference in ground levels, passenger flow capacity, onward travel connections and a logical progression through a new concourse, ticket sales area and gatelines to the platforms. Further work is required at GRIP 3 stage of design to determine the most optimal solution.

A new entrance into the Midland Shed could potentially include a new canopy, designed to reflect Bristol's unique character. The structural form of this canopy is to be determined, although it is highly likely that superstructure and foundations will need to be independent from the existing shed.

A new terrace area is proposed on the northern side of the Midland Shed. This represents the convergence of several routes, and will need to provide step-free access between the terrace and:

- The Friary outside Plot 3
- Relocated bus stops
- The Goods Yard
- The Midland Shed, concourse and ticket hall

### Heritage

The existing station clock tower forms the highest point of the station and is prominent on approach, identified as a key view in the BTQEZ Spatial Framework. The option of a northern entrance at the north end of the Midland Shed would align with this when viewed from movement corridors from the north. The architectural and civil design is to be progressed in liaison with Historic England.

### Functionality and movement outcomes

The redesigned Northern Entrance and terrace could provide:

- An architectural entrance and public realm design befitting of the heritage station and which aids legibility
- Improved passenger flow capacity to accommodate forecast growth to 2043
- Legible wayfinding from the station to onward travel options, including the Brunel Mile, the relocated bus stops on the Friary and the drop-off on Temple Back East, including key sight-lines and signage

- An open terrace to aid decision-making, including places outside of the main flows to dwell and places with shelter
- Convenient, step-free access between the Friary (outside Plot 3), new bus stops, the new Goods Yard and into the Midland Shed, concourse and ticket hall
- Opportunities for small permanent or temporary units to animate the space, such as a 'Welcome to Bristol' hub and small retail stands
- Emergency vehicle access to the terrace, using one of the ramps

It should be noted that the further development and configuration of the Northern Entrance cannot be progressed in isolation from the external city gateway, and the internal circulation enhancement, both of which will require a level of further definition to define appropriate Northern Entrance solutions, and which may result in the selected option varying from that shown in current visualisations.

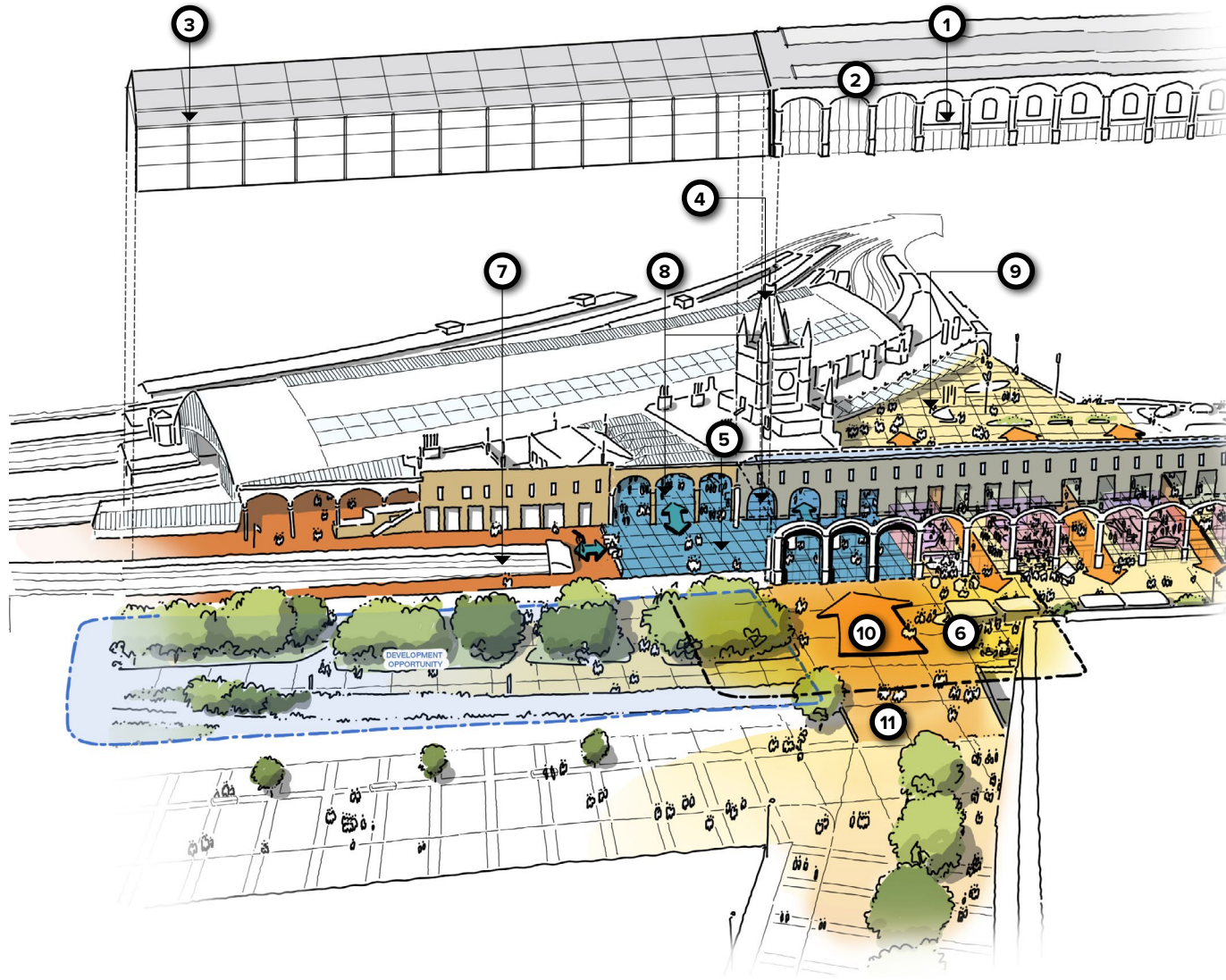


Figure 83 Northern Entrance and terrace illustrative concept

**Key**

1. Refurbished Midland Shed
2. New Northern Entrance
3. Platform 0/1 canopy/Facade
4. Potential reinstated clock tower spire for enhanced wayfinding/ civic presence
5. Consolidated central concourse served by Northern Entrance and Station Approach Entrance
6. New terrace
7. New 6-car platforms 0/1
8. Enhanced unpaid passenger links through existing ticket hall/clock tower and Bonapartes Alley
9. Renewed Station Approach forecourt
10. New northern entrance formed through 3 arches of Midland Shed
11. New widened/enhanced northern access

### 6.6.3 The Friary

#### Design

The Friary represents a crucial part of the dispersed City Gateway where several modes of travel and desire lines converge. The re-design of this area would provide an accessible, legible and safe space which minimises conflict. With completion of the Northern Entrance, Temple Meads would effectively turn to face the Friary, rather than the current impression that the route is behind the station.

This masterplan proposes relocation of the terminating bus stops from the Station Approach to the south end of the Friary. This will require re-routing of buses via Redcliffe Way, but will provide a dedicated space for ease of operation and greater opportunities for bus shelters. Permeability links and sight-lines between the terrace, Goods Yard and bus stops will provide clarity for passengers.

At the northern end of the Friary, outside the Northern Entrance, the current 'shared space' loop will be removed, giving priority pedestrians and cyclists. Detailed design will need to resolve potential conflict between these modes, as well as integrating safe access for service vehicles to serve potential new buildings. A new private car drop-off loop will be created from Temple Back East.

The Friary provides an opportunity to create a high quality cycle link between the Brunel Mile and the Bristol to Bath Railway Path. The proposed route is from Meads Reach Bridge (the Cheesegrater) around the north side of the Friary, with a new crossing over the mouth of the Friary. This is a slightly indirect route, but would avoid conflict with pedestrians

and buses around the busy Goods Yard. This route should segregate cyclists from other modes where possible, including pedestrians, in order to create a safe environment. Opportunities for more direct cycle routes will be explored at the next design stage.

The northern Friary area, near Meads Reach Bridge, has been used as the site for initial decant of the station cycle parking to improve station security and facilitate the roof refurbishment. The projected demand for cycle parking spaces is likely to exceed the capacity of this area in the mid-2020s, thus the permanent solution is an expanded and enhanced facility within the Gateway area.

It is highly desirable for buildings at the northern end of the Friary to include active frontages and, where possible, shelter for pedestrians. This includes a new building on Plot 3 (see Section 2.4) and the Friary North development (see Section 7.5).

The existing boat/ferry stop at Temple Quay Amphitheatre is well positioned for station users and the forthcoming harbour walkway. The topography and bridge cables mean that there are few alternative uses for this site, thus its continued use as a boat stop is recommended.

#### Heritage

The remodelling of the Northern Entrance terrace and Friary is likely to impact the historic masonry retaining wall. This was assessed as 'moderately significant' in the previous Conservation & Asset Management Strategy (Alan Baxter, 2013). Design is to be progressed in liaison with Historic England.