MOTT MACDONALD

Interim Covid-19 Response Local Cycling and Walking Infrastructure Plan (LCWIP)

Brighton & Hove City Council

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Contents

Executive Summary

Local authorities have been given a strong instruction from the Department for Transport (DfT) to implement ambitious schemes which provide a significant reallocation of road space to pedestrians and cyclists.

These measures are required in order to provide space for active travel in response to Covid-19. This is an issue for all transport authorities in the country to address, for example in creating space for people to socially distance. However, the high levels of bus use in Brighton & Hove and government advice to avoid using public transport means the need for alternative modes of travel is particularly important as businesses reopen.

This was recognised by the council's Policy & Resources Urgency Sub-Committee on 14 May where an Urgent Response Transport Action Plan (the 'Action Plan') was agreed, alongside the production of this Interim Covid-19 Response Local Cycling and Walking Infrastructure Plan (Interim LCWIP).

Mott MacDonald are currently providing technical support to officers developing a full LCWIP for the city. This Interim LCWIP brings forward some of this work to assist in the review of options for temporary walking and cycling measures. However, it should be noted that the development of the full LCWIP will be subject to ongoing stakeholder engagement, followed by a public consultation. Therefore, some aspects of what is presented here may change as the LCWIP is developed further.

The Interim LCWIP reviews all temporary measures currently under consideration by the council. It also identifies other locations where the need for temporary walking and cycling measures should be considered in accordance with government guidance.

The types of infrastructure that would be possible on each of the routes identified has then been reviewed. The design suggestions provided are high-level and would be subject to design development and road safety assessment were they to be taken further. Similarly, costings have not been prepared at this stage and this, together with available funding, will be a factor in determining how many measures can be taken forward.

Planned engagement with stakeholders for the full LCWIP was also used to inform the Interim LCWIP. This included two workshops and an opportunity for stakeholders to complete an online survey highlighting current issues with walking and cycling in the city and improvements they would like to see. A number of representations have also been made to the council by members of the public on temporary measures. Many of these are reflected in the Interim LCWIP; however, it has been necessary to prioritise those on key routes in accordance with the government guidance noted above. Suggestions not taken forward for assessment at this stage will be considered further as part of the full LCWIP.

The measures assessed cover the whole city and not just the city centre. However, the need to prioritise does mean that temporary measures have not been considered in some suburban parts of the city. However, enabling opportunities for cycling and walking in these areas in the longer term is important and they will be included within the full LCWIP.

Each of the potential schemes has been assessed against a range of criteria. These criteria have been selected based on the issues that government guidance advises should be considered in the development of temporary schemes. This includes the 'strategic fit' of potential schemes with the wider network, including that emerging through the LCWIP process.

It is concluded that the schemes identified by the council within the Action Plan would be consistent with the emerging LCWIP network. Therefore, there is value in progressing them both as temporary measures but also as routes with the potential to form part of a future network. This includes measures to introduce temporary cycle facilities on the A23, A259 and Old Shoreham Road.

A number of additional routes were identified, particularly for cycling. These are primarily where they would complete missing gaps in the network or provide routes along key bus corridors in accordance with the government's guidance. Some of these would be more challenging to implement as traffic, including buses, would need to be removed. It should also be noted that potential 'quick win' schemes have already been identified, and in some cases implemented, by the council which means that the routes that remain will be, by their nature, more challenging to deliver. However, it is noted that the DfT has specifically asked local authorities to consider closures of major roads, whilst needing to consider continued access for buses, taxis and disabled people.

Complementary measures such as cycle parking, additional Bike Share hubs and 'park and cycle' locations are also recommended to help support use of the new facilities. It is not the purpose of this Interim LCWIP to consider cycle parking in detail; however, this will be addressed as part of the full LCWIP.

The temporary walking measures proposed in the Action Plan have also been reviewed and are considered to be compatible with the emerging LCWIP. However, more of these measures are to deal with the immediate need for social distancing, for example with queuing outside shops. Measures to introduce restrictions for through traffic are considered to be compatible with the LCWIP and enhance conditions for both walking and cycling in the short and longer term.

1. Introduction

1 Introduction

1.1 Purpose of document

This report provides Brighton & Hove City Council's Interim Covid-19 Response Local Cycling and Walking Infrastructure Plan (Interim LCWIP).

The Department for Transport (DfT) has provided local authorities with a strong instruction to introduce temporary cycling and walking measures in order to assist in the reopening of the economy. This in particular responds to the need to maintain social distancing and advice to avoid travel by public transport. Therefore, emergency measures are needed to make active travel an attractive option for more of the city's residents.

The need to respond was acknowledged by the council's Policy & Resources Urgency Sub-Committee on 14 May 2020, at which an Urgent Response Transport Action Plan (the 'Action Plan') was agreed. The Committee also agreed to the production of the Interim LCWIP.

Work on the full LCWIP commenced in 2019 with the scope of the document being agreed by the council's Environment, Transport & Sustainability Committee. Mott MacDonald was subsequently appointed in Spring 2020 to provide technical advice to officers in the development of the LCWIP with a scheduled completion of late 2020. However, in light of the circumstances which have since arisen, elements of this work have been brought forward in order to review the proposed temporary measures.

This Interim LCWIP has three main purposes:

- To provide a high-level review of measures proposed by the council to date, including those included in the Action Plan.
- To provide an initial response to stakeholder input on walking and cycling issues in the city.
- To review the emerging LCWIP network to identify the need for and opportunities for additional temporary measures.

The purpose of this document is to take a strategic view of routes and, as such, the design suggestions included are high-level. Those which are taken forward will need to be subject to detailed design and safety assessment prior to implementation. It will also be necessary to consider the cost of schemes and available funding.

1.2 Relationship with full LCWIP

The LCWIP is being produced in response to the DfT's Cycling and Walking Investment Strategy which encouraged local authorities to produce an LCWIP. This will indicate the strategic network for cycling and walking in the city and identify infrastructure measures for their improvement. It will then provide a prioritised plan for investment over the short, medium and longer term.

The first stages of the LCWIP include identifying walking and cycling networks, which involves assessing where people travel to, the journeys which could be undertaken on foot or by bike and the routes to be taken. The next stage will be to identify options for permanent infrastructure schemes to complete this network. Members and stakeholders will be involved in each stage of the LCWIP's development and the complete plan will be subject to a public consultation.

The elements of the full LCWIP included in this document are therefore indicative and additional routes may be added and others removed as the plan is developed. However, it has been

necessary to bring forward the draft elements of the plan in order to assist in ensuring that temporary measures introduced now have the potential to become part of a wider network in future. This is in accordance with instructions the DfT have given authorities to consider when developing temporary schemes.

1.3 Engagement

The nature of the DfT's instruction - to implement effective measures that will contribute to a transformation in facilities for active travel - is unprecedented. Furthermore, the government has underlined the urgency of this request. Despite the urgency of these instructions, engagement with stakeholders has taken place in order to inform this document, as well as the wider LCWIP.

Planned workshop sessions with stakeholders as part of the process for the development of the full LCWIP were held on the 1 and 4 June and did provide an opportunity to seek feedback on potential temporary measures. Stakeholders were also asked to provide feedback via an online survey where they could note walking and cycling issues in the city using an online map. A number of representations have also been made directly to the council by members of the public.

The workshops brought together organisations representing transport operators and providers, local businesses, walking and cycling groups, and equality and inclusion groups. Over 130 local community groups and residents' associations across the city were invited to respond to the survey, along with neighbouring local authorities, city councillors and council officers.

This engagement has been reflected in the production of this document and many of the routes suggested are included in this Interim LCWIP. However, owing to the time available, it has been necessary to prioritise measures to those which are likely to have greatest potential in the short term. This process is outlined in Chapter 3.

Alongside officers, Mott MacDonald will continue to engage with stakeholders in the preparation of the full LCWIP as planned.

1.4 Structure

The remainder of this document is structured as follows:

- Chapter 2 provides the policy background, including emergency regulations and guidance provided by central government
- Chapter 3 outlines the methodology for identifying and assessing temporary walking and cycling measures
- Chapter 4 summarises the interim cycle network and measures assessed
- Chapter 5 summarises the interim walking measures assessed
- Chapter 6 presents the results of the high-level assessment exercise
- Chapter 7 provides an initial monitoring plan

2. Policy Context

2 Policy Context

This chapter provides an overview of updated regulations and new guidance issued by the government in relation to the implementation of temporary active travel measures. This has been used to inform the methodology for the identification and assessment of measures in later chapters of this Interim LCWIP.

2.1 Coronavirus (COVID-19) Safer Public Places – Urban Centres and Green Spaces

This guidance was published by the Ministry of Housing, Communities and Local Government (MHCLG) on 13 May 2020. A summary of key points included within this is as follows:

Section 3: Identification of issues in urban centres and green spaces

Sets out a number of steps as follows:

1. Identify public spaces which are likely to be 'focal zones' and require interventions (typical characteristics will be high footfall and constrained areas).
2. Consider user groups and levels of footfall / activity.
3. Assess the key social distancing issues, potential conflicts and risks.
4. Consider interventions to mitigate and reduce social distancing issues (also need to consider existing risks such as security).
5. Consider statutory and legal implications.
6. Consider implementation of temporary physical interventions, timings and procurement implications.
7. Consider management of spaces (e.g guiding movement) and enforcement.
8. Consider maintenance issues.
9. Monitor use, management and maintenance, and effectiveness.
10. Review and consider removing or replacing interventions.

Section 4: Management of urban centres

- Focus should be on areas of high footfall, particularly those that provide a range of attractions.
- Issues likely to include space required for queues, street furniture creating obstructions and increased need for private vehicle use.
- Measures under consideration should include footway widening including, temporary barriers in the carriageway, changes to parking bays loading bays and cycle lanes, removal of unnecessary obstacles, removal of bus stops / shelters to provide queuing space, and one-way pedestrian movement.
- Need to consider specific requirements of people with disabilities.
- Need to consider security requirements (including protection for queues and extended footway areas).
- Consider need for delivery and essential access and the timing of this.

2.2 Reallocating road space in response to Covid-19: statutory guidance for local authorities

The Department for Transport (DfT) introduced additional statutory guidance on 9 May under Section 18 of the Traffic Management Act 2004. This includes:

- Measures should be undertaken as quickly as possible and within weeks in order to prepare for the further easing of restrictions and could include:
  - Widening cycle facilities, which should be segregated as far as possible to achieve the level of change needed.
  - Cones and barriers should be considered to widen footways in key areas such as outside shops and transport hubs, beside bus stops and at crossings.
  - Introduce more 'school streets' where access to schools is restricted at pick-up and drop-off times.
  - Introduce pedestrian and cycle zones, including restricting motor vehicle access at certain times, particularly in town centres and high streets.
  - Introduce more 20mph speed limits in association with other measures (however, generally this is already the case in much of Brighton & Hove).
  - Filtered permeability, where access to traffic is restricted.
  - Additional cycle parking, including repurposing car parking.
  - Amending junction design to accommodate more cyclists, including extending Advance Stop Lines (ASLs) to the maximum permitted depth (7.5m).
  - Corridor approaches to consider whole route for buses and cycles on key links into town / city centres.
  - Identifying measures planned through existing plans such as Local Cycling and Walking Infrastructure Plans (LCWIP) that can be brought forward and constructed relatively quickly.
- Publication of additional approved temporary signage.
- Authorities should monitor and evaluate any temporary measures with a view to making them permanent.
- Access for Blue Badge holders, deliveries and other essential services should be considered, and local businesses consulted on ensuring access to premises.
- Emergency services should be consulted to ensure access is maintained.
- The requirements of the Equality Act 2010 remain and the needs of disabled people and those with protected characteristics must be considered.

2.3 Temporary Guidance on Making Traffic Regulation Orders (TROs)

On 21 April, the DfT published guidance on making TROs during the current period which applies to both permanent and temporary TROs. The focus is on how TROs are advertised, particularly regarding the requirement to publish in a local newspaper or place notices on street. Highway Authorities are still expected to make reasonable steps to advertise TROs through other channels and the guidance does not change the existing regulations regarding temporary, experimental and permanent TROs.

2.4 DfT letter to Highway Authorities (12 May)

The DfT wrote to Highway Authorities on 12 May requesting that they implement measures to help in the easing of the lockdown restrictions. In respect of reallocating road space, this noted:

- In developing responses, authorities should work closely with other authorities, transport operators, major employers, the NHS, emergency services, schools, Highways England, Network Rail and Local Resilience Forums.
- Reiterated the statutory guidance published on 9 May and summarised in Section 2.2 above, including the need to reallocate road space and stating that "measures to create space for cyclists and pedestrians should have a minimum level of physical separation", stating lined-only schemes "are very unlikely to be sufficient".
- The need for 'pop up' park and ride facilities on the edge or urban areas should be considered in order to prevent congestion and allow active travel in town centres.
- The use of different travel modes by different people at different times of the day should be considered.

The letter also refers to complementary measures relating to Travel Demand Management (encouraging people to change their journeys, such as the mode they take or time they travel), provision of cycle parking at workplaces and electric scooter trials.

2.5 DfT Letter to Highway Authorities (27 May)

The DfT wrote to local authorities again on 27 May to provide details of funding. This outlined how the £250 million emergency travel fund would be allocated to authorities in two tranches with applications for the first tranche closing on 5 June (measures put forward in the council's response are summarised in Sections 4 and 5).

The letter reiterated the DfT's instruction to highway authorities that measures should be ambitious, stating that they need to "meaningfully alter the status quo of the road". It also stated that a focus should be given to strategic corridors to provide for cycling and walking as an alternative to journeys previously made by public transport. In applying for the Tranche 1 funding, the council was required to demonstrate:

- How the scheme or programme will improve mobility, and / or assist with social distancing.
- Whether the scheme is within a cycling and walking network plan or whether it has been prioritised as part of an LCWIP (the DfT noted that this was not compulsory but useful in demonstrating the wider strategic fit of schemes).
- Consideration of access for freight deliveries, bus routes, taxis and disabled people.

Authorities were also instructed to have robust monitoring and evaluation plans in place, and it was stated that Tranche 2 funding would be conditional on the bid representing value for money and there being evidence of suitable evaluation plans.

2.6 Summary

This section has outlined the additional guidance and instructions issued by the government at the time of writing. This includes a clear instruction to authorities to implement emergency active travel measures and the need to be ambitious in the scope of these, yet also consider the needs of other users including bus operators, taxis and disabled people. This guidance is reflected in the methodology for identifying and assessing measures to be included in this Interim LCWIP. The methodology is outlined in further detail in Chapter 3.

3. Methodology

3 Methodology

This chapter outlines how streets in the city have been identified for potential temporary cycling and walking measures. It then details how these have been assessed for their suitability and need.

3.1 Identifying and prioritising a network for temporary measures

3.1.1 Cycling

The study has first identified routes to be assessed for temporary measures. This has been carried out as follows:

- Routes identified for progression within the Action Plan.
- Routes considered but not recommended for progression within the above.
- A review of the route network emerging through the development of the full LCWIP.

As noted in Section 1, the LCWIP is currently at the early stages of assessment and additional routes may be added and others removed. The routes also indicate demand and do not necessarily mean that cycle routes would be suitable or deliverable along them, especially in the short term. This will be assessed in future stages of the LCWIP development and potential permanent measures identified. These will then be prioritised with some being options for the longer term. This process will be subject to engagement with stakeholders at each stage, followed by a public consultation on the draft plan.

However, the draft network assists in narrowing down the network to the main areas of potential demand. These routes have then been further prioritised by looking at key strategic routes, including those with high bus use. This approach reflects the DfT's priorities for funding noted in Chapter 2.

These additional routes also take account of stakeholder representations to the council and received through the initial stages of the development of the LCWIP. However, as per the methodology above, the routes have been narrowed down based on their importance strategically. This is necessary in order to provide a prioritised list for further assessment.

3.1.2 Walking

Routes for the assessment of temporary walking measures have been identified by applying a similar approach:

- Routes or areas identified within the Action Plan.
- A review of the central areas of the city to consider the potential need for intervention.

It should be noted that the need for temporary measures to provide space for queuing and social distancing can be very localised. At the time of writing, council officers had already identified key pinch points and areas most likely to present a challenge as shops and businesses reopen, with plans already in development for managing these areas prior to non-essential retail opening on 15 June.

Therefore, the purpose of this study is not to identify areas for assessment at this level and it instead takes a route or area-wide approach. The focus is also on the more central parts of Brighton, Hove and Portslade, on the basis that these attract the highest footfall and are where

the need for temporary interventions is likely to be greatest. Within this area, the focus is on 'Core Walking Zones' identified through the LCWIP. These are defined in the DfT's LCWIP guidance as areas where there are a number of walking trip generators located close to each other, such as town centres.

3.2 Stakeholder inputs

As noted in Chapter 1, the production of this Interim LCWIP has coincided with planned stakeholder engagement for the full LCWIP. This was also used to allow stakeholders to comment on potential locations for temporary measures.

The locations suggested by stakeholders have been reflected where possible in the identification of routes for the temporary interventions. However, owing to the time available, it was necessary to prioritise those routes that were considered further. As outlined in Section 3.1, this has been based on the priorities provided in government guidance.

Where it has not been possible to include suggestions at this stage, these will be considered further in the development of the full LCWIP.

3.3 Assessment of potential temporary improvements

A series of assessment criteria have been developed and tailored to cycling and walking schemes. This high-level assessment of individual options is qualitative with a score assigned to criteria based on a Red (R), Amber (A), Green (G) rating. It should be noted that a scheme could be assessed as green in a number of areas, such as need and strategic fit, but if it fails against key deliverability criteria, it may not be possible to recommend that it is considered further for a temporary intervention. This is discussed further in Chapter 6.

3.3.1 Cycling

Table 3.1 provides the assessment criteria used for reviewing the suitability of the routes identified for temporary cycling measures and to assist in prioritising the need for these.

Where there is a significant change in street characteristics, such as the number of lanes or type of use, the route has been split into sections and assessed separately.

Table 3.1: Temporary cycling measures assessment criteria

Criteria	Assessment categories	Rationale for criteria
Strategic linkage	R= No linkage to existing strategy A= Some alignment with existing or emerging policies or plans but not direct G = Complete alignment, route included in LCWIP or similar document	Referenced in DfT Guidance.
Expected demand	R= No evidenced need for intervention. May have low potential use or a significant barrier to uptake. A= Some limited evidence for intervention such as route is on desire line to major trip attractors. May have some constraint to potential use such as steep gradient. G = Demand or potential demand is evidenced by existing data and/or an area-wide strategic assessment	Related to above and need for evidence-based interventions and ongoing monitoring referenced in DfT guidance. For the full LCWIP, it is noted that gradient could be addressed through a growth in e-bikes; however, investment in temporary measures is likely to be best prioritised to those routes which have the greatest

Criteria	Assessment categories	Rationale for criteria
	such as that undertaken for an LCWIP. Few barriers to use, or these could be overcome using temporary measures	potential to increase current cycling levels.
Connection to wider network	R= Route is isolated and would not connect to the wider network A= Route has some connections to a wider network but these are currently of low quality G= Route has connections to a wider network and these connections are generally of higher quality (or these are to be provided / upgraded through a planned complementary scheme)	Related to strategic linkage and reflects the fact that a cycle route is as good as its weakest point. A high-quality facility may not serve its intended purpose if potential users find it difficult to access or it does not lead directly to key destinations.
Available width	R= Not possible to provide a facility within the highway boundary or without significant infrastructure works A= Route could be provided but to a limited quality (less than 2m available for single direction within the highway boundary) G= 2m or greater available in each direction providing opportunity for a fully segregated route without the need for significant works	A route will need to be sufficiently wide to be attractive to less confident, inexperienced or non-cyclists who need to be encouraged to cycle more. In addition, space will be required for barriers or means of light segregation. It is noted that ideally more than 2m would be provided in each direction in order to maximise social distancing but recognised this is unlikely to be possible in many instances.
Interaction with junctions	R= At least one junction defined as critical using the LCWIP Route Selection Tool (RST) and this would require significant intervention to overcome A= At least one junction defined as critical using the LCWIP RST but mitigating measures may be possible G= No junctions defined as critical using the LCWIP RST	If junctions cannot be adequately addressed, the route is unlikely to be attractive to less confident, inexperienced or non-cyclists who the temporary measures need to target. For the full LCWIP, addressing critical junctions will be a priority as they often present the biggest hazard or reason people do not cycle. However, for temporary measures these may present a reason for not prioritising a scheme if it is not possible to address them without significant infrastructure works.
Impacts on public transport users (buses and taxis)	R= Route passes a number of bus stops served by frequent services and would either impact on the ability of buses to serve these or introduce significant conflict with cyclists and / or bus route (including bus and taxi lane) would be diverted / removed as a result of scheme with likely journey time implications A= Route passes a number of stops or has interaction with buses, but services are infrequent or interaction with cyclists limited (i.e. low risk of conflict) G= No conflict with buses	The DfT has identified public transport routes as a priority for intervention and this has been an important factor in identifying routes for assessment. However, conflict with buses is likely to affect the desirability of routes for cyclists so the ability to mitigate any impact has been considered in the assessment.

Criteria	Assessment categories	Rationale for criteria
Impacts on pedestrians / public realm	R= Route would significantly reduce space for pedestrians to the extent that this would be detrimental to efforts to maintain social distancing A= Route would have some impact on pedestrian provision but there is sufficient capacity to accommodate this G= Route would either not impact on pedestrians or enhance provision (for example by replacing a shared facility with on-carriageway segregated cycle route)	An aim of the guidance is to increase provision for pedestrians in order to accommodate queuing and social distancing; therefore, a cycling measure which impacts on this may be counterproductive.
Impacts on parking	R= Route would have an unavoidable impact on parking and there is no realistic alternative for those who would lose parking (for example residents in an area of high parking stress) A= Route would have an unavoidable impact on parking; however, this is not essential (e.g. shops) or could be displaced elsewhere with limited impact G= Route would have limited impact on parking	It should be noted that the government guidance fully supports the removal of parking given the priority of needing to reallocate space for active travel. However, the impact on residential parking where there may be no alternative has been considered in the assessment. The guidance also requires the needs of Blue Badge holders in particular to be addressed.
Impacts on loading / freight deliveries	R= Route likely to have an unavoidable impact on loading opportunities and no alternatives exist A= Route would be likely to have an impact on loading but this could be relocated or mitigated G= Route would not have an impact on loading	The guidance requires the consideration of access and loading for businesses but notes that timed restrictions can be considered.
Impacts on traffic flow	R= Route would substantially reduce capacity for vehicular traffic and risks significantly increasing congestion A= Route would substantially reduce capacity for vehicular traffic but this is expected to have a limited impact G= No increase in congestion is expected as a result of the scheme	The impact on congestion has been considered in the assessment; however, it should be noted that the government guidance fully supports and indeed encourages the reallocation of road space for active travel measures. Therefore, a lower score in this area should not necessarily override the need for the scheme. The guidance also notes that driving will be required to some areas but not necessarily town and city centres.
Equality implications	R= Scheme is likely to have a substantial adverse impact on group(s) with protected characteristics and this cannot be mitigated A= Scheme has the potential to have an adverse impact on group(s) with protected characteristics; however, it	Local Authorities have a duty under the Equality Act 2010 to consider the needs of all those with protected characteristics and the guidance states that this should be considered in the development of schemes.

Criteria	Assessment categories	Rationale for criteria
	is expected that this could be satisfactorily mitigated G= The scheme is not expected to have an adverse impact on groups with protected characteristics	
Security implications	Considered for pedestrians only	For cycling there is a lower likelihood of large groups of stationary people gathering.
Legislative requirements	R= Require a permanent or experimental TRO A= Could be introduced under a temporary TRO or parking could be re-provided or addressed through suspensions G= No legal process required	Will determine the complexity of introducing measures and affect the viability of temporary measures.
Value for money	R= Temporary measure would require significant, costly infrastructure with lower expected demand and little likelihood that it could be made permanent A= Measure would require a higher level of expenditure but this would have the potential to provide a longer term benefit for active travel and have higher expected demand G= Measure would be low cost	Measures need to be viable, deliverable within available budgets and justify the initial expenditure. Note that cost is based on a high-level view of whether costs would be low or high based on the type and scale of works involved. Costing of schemes has not been undertaken at this stage.

3.3.2 Walking

Table 3.2 summarises the assessment criteria for walking and provides the rationale for these.

Table 3.2: Temporary walking measures assessment criteria

Criteria	Assessment categories	Rationale
Strategic fit	R= No linkage to existing strategy A= Some alignment with existing or emerging policies or plans but not direct G = Complete alignment, route under consideration for LCWIP	Links to wider strategy to be considered but walking improvements generally a response to a localised need rather than a wider strategy.
Expected demand	R= Limited evidenced need for intervention A= Route serves a small number of premises (such as shops) or bus stops with more limited demand and / or low footfall G = Route is a 'focal point', serving a number of premises, larger premises and transport hubs / stops with high footfall and / or high potential for queuing	Related to above and need for evidence-based interventions and ongoing monitoring referenced in DfT guidance.
Connection to wider network	Not assessed for walking	Interventions will be more localised than for cycling and focused on town centres or areas with trip attractors.

Criteria	Assessment categories	Rationale
Available width	R= 4.5m or greater footway space already available in residential area and 7m alongside active frontage; therefore, increase not required. Alternatively, increase desirable but it is not possible to provide this A= Current width is sub-standard for social distancing (less than 4.5m footway in residential area or less than 7m alongside active frontage). It would be possible to extend in places but compromise may be needed (such as one-way operation) G= Current width is sub-standard for social distancing (less than 4.5m footway in residential area or less than 7m alongside active frontage). It would be possible to extend footways to achieve desired minimums	Necessary in order to meet social distancing requirements.
Interaction with junctions	Not assessed for pedestrians	This is unlikely to be a determining factor in whether or not walking routes are enhanced which are more likely to be driven by the specific requirements of the site such as active frontage. The need to consider temporary buildouts at junctions to increase crossing space would need to be considered in the design of interventions as recommended by the guidance.
Impacts on public transport users (buses and taxis)	R= Significant conflict with or adverse impact on bus routes as a result of the proposals A= Interaction with buses but stops / shelters could be relocated with minimal impact G= No conflict with buses	Guidance states that relocation of bus stops could be considered; however, the impact on groups with protected characteristics under the Equality Act 2010 needs to be considered as per the separate criteria.
Impacts on cyclists	R= Route would significantly reduce space for cyclists and impact on the quality of a strategic route A= Route would have some impact on cycle provision but there is sufficient capacity to accommodate this and / or traffic volumes / speeds are low or measures could be introduced to achieve this G= Route would either not impact on cyclists or enhance provision by reducing conflict with pedestrians	An aim of the guidance is to increase provision for cyclists; therefore, a significant impact on an important route may be counterproductive.
Impacts on parking	R= Intervention would have an unavoidable impact on parking and there is no realistic alternative for those who would lose parking (for example residents in an area of high parking stress) A= Intervention would have an unavoidable impact on parking; however, this is not essential (e.g.	It should be noted that the government guidance fully supports the removal of parking given the priority of needing to reallocate space for active travel. However, the impact on residential parking where there may be no alternative has been considered in the assessment.

Criteria	Assessment categories	Rationale
	shops) or could be displaced elsewhere with limited impact G= Intervention would have limited impact on parking	The guidance also requires the needs of Blue Badge holders in particular to be addressed.
Impacts on loading / freight deliveries	R= Intervention likely to have an unavoidable impact on loading opportunities and no alternatives exist A= Intervention would be likely to have an impact on loading but this could be relocated or mitigated G= Intervention would not have an impact on loading	The guidance requires the consideration of access and loading for businesses but states that timed restrictions could be considered.
Impacts on traffic flow	R= Intervention would substantially reduce capacity for vehicular traffic and risks significantly increasing congestion A= Intervention would substantially reduce capacity for vehicular traffic but this is expected to have a limited impact G= No increase in congestion is expected as a result of the scheme	The impact on congestion has been considered in the assessment; however, it should be noted that the government guidance fully supports and indeed encourages the reallocation of road space for active travel measures. Therefore, a lower score in this area should not necessarily override the need for the scheme. The guidance also notes that driving will be required to some areas but not necessarily town and city centres.
Equality implications	R= Intervention is likely to have a substantial adverse impact on group(s) with protected characteristics and this cannot be mitigated A= Intervention has the potential to have an adverse impact on group(s) with protected characteristics; however, it is expected that this could be satisfactorily mitigated G= The intervention is not expected to have an adverse impact on groups with protected characteristics	Local Authorities have a duty under the Equality Act 2010 to consider the needs of all those with protected characteristics and the guidance states that this should be considered in the development of schemes. Consideration of users with disabilities specifically is also a requirement of the DfT guidance for emergency measures.
Security implications	R= Intervention would substantially increase risk for pedestrians by potentially exposing large numbers of pedestrians in a way that cannot be mitigated A= Intervention has the potential to increase risk with no existing mitigation measures such as street furniture in place; however, this could be addressed G= Intervention would not be expected to increase risk for pedestrians beyond what can be reasonably designed for	Consideration of security implications is a requirement of the guidance.
Legislative requirements	R= Require a permanent or experimental TRO A= Could be introduced under a temporary TRO or parking could be	Will determine the complexity of introducing measures and affect the viability of temporary measures.

Criteria	Assessment categories	Rationale
	re-provided or addressed through suspensions G= No legal process required	
Value for money	R= Temporary measure would require significant, costly infrastructure with lower expected demand and little likelihood that it could be made permanent A= Measure would require a higher level of expenditure but this would have the potential to provide a longer term benefit for active travel and have higher expected demand G= Measure would be low cost	Measures need to be viable, deliverable within available budgets and justify the initial expenditure. Note that cost is based on a high level view of whether costs would be low or high based on the type and scale of works involved. Costing of schemes has not been undertaken at this stage.

3.4 Summary

This section has outlined the high-level assessment criteria to be used to consider the suitability of potential emergency active travel measures in Brighton & Hove. Chapters 4 and 5 identify routes and measures to be assessed for cycling and walking respectively.

4. Identification of Potential Cycling Network and Measures

4 Identification of Potential Cycling Network and Measures

This chapter identifies the routes to be considered further for temporary cycling measures and the types of scheme that could be introduced on these streets.

4.1 Network development

Cycling routes have been identified for assessment by following the process outlined in Section 3.1. These are as follows:

Routes identified for progression in the Action Plan

The following were identified as short term measures and have already been implemented:

1. Madeira Drive closure
2. A270 Old Shoreham Road (The Drive to Hangleton Road) cycle lanes

The following were identified as potential medium-term interventions:

3. A259 Marine Parade cycle lane

4a. A23 (National Cycle Network (NCN) 20, Argyle Road to Dyke Road Drive)

In addition, the following were identified for progression within the council's submission to the DfT for Tranche 1 emergency active travel funding:

5. A259 (Madeira Drive to Fourth Avenue)
6. Basin Road South
7. A23 (Valley Gardens to Cheapside)

Routes considered but not progressed in the Action Plan

5b. A259 (Fourth Avenue to Wharf Road)

8. Boundary Road closure
9. New Church Road closure
10. Portland Road traffic restrictions
11. Richardson Road traffic restrictions
12. St George's Road traffic restrictions
13. St James's Street
14. Sackville Road cycle facilities and traffic restrictions

Additional routes considered

Table 4.1 provides a summary of the additional routes considered in this Interim LCWIP and the rationale for including these.

Table 4.1: Summary of additional cycle routes assessed

Route	Rationale
4b. A23 London Road to Argyle Road	Continuation of improvement to NCN noted at Item 4 above.

Route	Rationale
15. A270 Old Shoreham Road (Hangleton Road to West Sussex)	Would provide a continuous cycle facility to the west of the city.
16. A270 Old Shoreham Road (Dyke Road to Preston Circus)	LCWIP development indicates demand as a strategic east-west route.
17. Chatham Place	Alternative to 16 (along with Dyke Road (23)).
18. A270 New England Road and Viaduct Road	LCWIP development indicates demand as a strategic east-west route.
19. A259 (Hove Lagoon to Boundary Road)	Strong strategic case for east-west route based on LCWIP development.
20. A259 (Boundary Road to western boundary)	Strong strategic case for east-west route based on LCWIP development.
21. Nevill Road (Old Shoreham Road to Woodland Drive)	Bus route and provide connection to Hove Park, schools and City Park employment area.
22. Church Road	Demand as an east-west cycle route directly serving shops and businesses and a major bus corridor.
23. Dyke Road	LCWIP development indicates demand as north-south link to the city centre and South Downs. Also a bus route.
24. A23 (Stanford Avenue to Mill Road)	LCWIP development indicates demand as north-south link to the city centre and is a major bus route.
25. A23 Stanford Avenue and Beaconsfield Road	LCWIP development indicates demand as a strategic corridor and is a major bus route.
26. Ditchling Road	LCWIP development indicates demand as north-south link to the city centre and South Downs and is a major bus route.
27. A270 Upper Lewes Road	LCWIP development indicates demand as a strategic east-west route.
28. A270 Lewes Road (Union Road to Bear Road)	Key north-south link for consideration in LCWIP and major bus corridor.
29. A270 Richmond Terrace	North-south link. Although buses run via Union Road, this would provide a route to London Road and Trafalgar Street.
30. A270 Lewes Road (Bear Road to University of Sussex)	Key north-south link for consideration in LCWIP and major bus corridor.
31. Elm Grove	Link to the east of the city and bus route.
32. Queens Park Road	North-south link from Elm Grove and Hanover areas.
33. Edward Street and Eastern Road	LCWIP development indicates demand as a strategic east-west route. Major bus route.
34. North Street	Major bus corridor and east-west link.
35. West Street / Queen's Road	Bus route and north-south link.
36. Terminus Road	Bus route and east-west link.
37. Western Road	Bus route and east-west link.

The Valley Gardens area also provides a key north-south link. However, owing to ongoing works in this area currently, it has not been considered further at this stage for temporary cycling measures.

Figure 4.1 provides a summary of the routes assessed for cycling measures, showing those contained within the Action Plan and the additional routes identified for assessment. Also shown is the 'emerging network' of routes where demand has been identified through the LCWIP

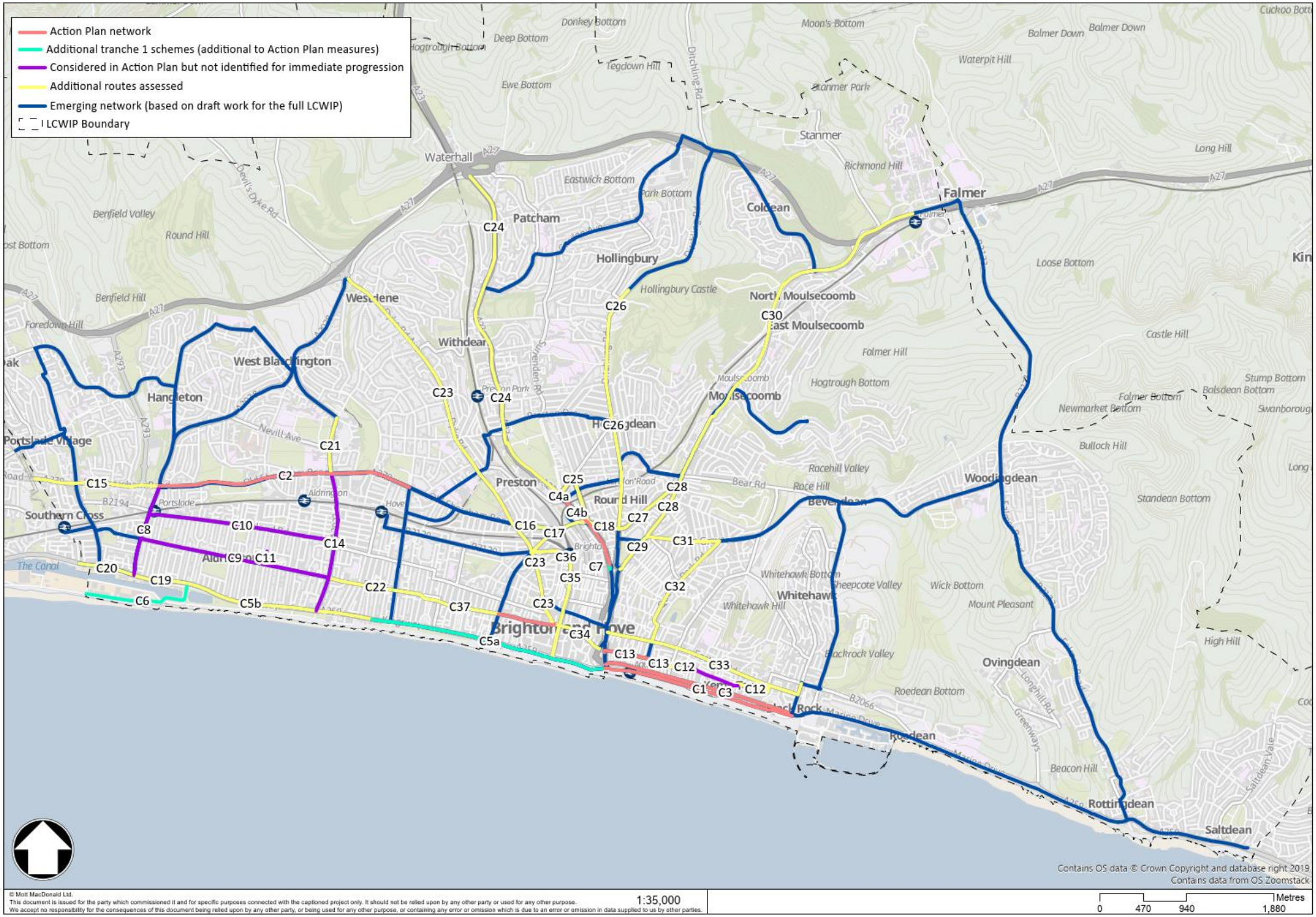
process; however, as noted in the previous chapter, this network is currently in development and has been used as a guide to the strategic fit only.

Whilst it has been necessary to prioritise routes for consideration for temporary measures, the draft network shows that the whole city will be included within the full LCWIP. The need for and nature of temporary measures means they are less focussed on suburban parts of the city. However, the importance of enabling opportunities for cycling and walking in these locations is recognised and they will be considered further within the full LCWIP.

4.2 Neighbouring authority schemes

In assessing the strategic fit of potential schemes, it is also important to consider temporary schemes in preparation by neighbouring authorities. This will be a factor in whether a cycle route would be continuous by linking to other facilities. At the time of writing, West Sussex County Council have indicated that they are progressing proposals for Old Shoreham Road (A270) and have included this within their Tranche 1 funding application. A scheme for the A259 was not included in this application.

Figure 4.1: Summary of the routes assessed for cycling measures



4.3 Types of measure to consider

Potential temporary measures have been identified for each route at a high-level based on the following standard approaches:

- **Road narrowing to create cycle facilities or wider areas for pedestrians**

  This could be by utilising wide carriageway lanes, as has been possible with the section of Old Shoreham west of The Drive. Alternatively, in some locations it may be possible to reallocate a lane of traffic, as has been implemented on Old Shoreham Road east of Holmes Avenue. In other locations, it may be necessary to remove parking; however, in all these variations two-way routes for general traffic would be retained.
- **Removal of traffic in one direction**

  This may be necessary where carriageway widths mean that space for cyclists cannot be provided by removing parking or narrowing traffic lanes alone. Therefore, the only way to provide a temporary facility would be to remove traffic in one direction. In some cases, it may be possible to provide a permanent facility by widening the road; however, this would require significant infrastructure work and not be viable as a temporary measure.
- **Road closures**

  This would involve a full road closure or point closure to provide access only. Access for buses, taxis and disabled users could be retained, subject to consideration on a case-by-case basis. Point closures are also known as filtered permeability and could be used to provide low traffic neighbourhoods.

In providing cycle facilities, the government's guidance, and requirement for funding, is that these be segregated. This could be achieved for temporary measures using dividers such as orcas or wands, shown in Figure 4.2. Planters, traffic cones or barriers could also be used. In other cases, it may be possible to provide some protection by retaining parking on the outside of cycle lanes. This would be similar to the cycle lanes on Grand Avenue (Figure 4.3) but using road markings instead of kerbs.

This high-level assessment is focusing on infrastructure for the routes themselves; however, the following complementary measures should also be considered, but are not included in this assessment:

- **Additional Bike Share hubs and cycle parking**

  Expansion to facilitate use of the new cycle infrastructure. It is noted this has already been requested within the council's Tranche 1 funding submission.
- **Temporary park and cycle facilities**

  Installed to encourage people to park on the edge of the city and then use cycle hire or their own bikes to reach their destination, making use of the temporary facilities that have been provided. This would also help to limit the increase in car trips on roads where capacity has been reduced.

Figure 4.2: Example of light segregation (Victoria Embankment, London)

Figure 4.3: Example of parking on outside of cycle lane (Grand Avenue, Hove)

4.4 Summary of schemes for assessment

Table 4.2 provides a summary of each route and the suggested measures that have been used as the basis for assessment. It also notes key constraints or design issues that will need to be addressed were these to be progressed further.

As noted in Chapter 1, the purpose of this document is not to provide detailed design for schemes, only to identify and then provide a high-level assessment of the potential for a temporary measure. Therefore, further work would be required to develop these further. The assessment provided of these measures within this Interim LCWIP provides a high-level overview of the feasibility of these interventions. However, further design work may indicate that the introduction of temporary measures would not be possible, and a more permanent solution is required. A road safety assessment, costing and funding would also be required prior to implementation.

4.5 Summary

This chapter has introduced the cycle routes and identified types of temporary measure to consider on these streets. The following chapter provides a similar exercise for walking with the assessment for each presented in Chapter 6.

Table 4.2: Summary of potential cycling measures

Route	Section	Section length (km)	Existing conditions	Potential temporary measures	Key constraints
1. Madeira Drive (Scheme already implemented)		2	Road has been closed to through traffic by placing planters at entrance to the road.		Removal of disabled parking.
2. Old Shoreham Road	Hangleton Road to The Drive	2.9	Cycle lane has been painted on wide single lane sections from Grand Avenue to Holmes Avenue. One lane removed on dual carriageway section to Hangleton Way.	Add form of light segregation in addition to the lined scheme (at the time of writing, it is noted that the council have plans to install this in locations where it is feasible). Review connections at western end and in the longer term review junction of Hangleton Road / Carlton Terrace / A2038. Consider connection from shared path into Benfield Valley / Sainsbury's by removing one of the left turn filter lanes to Hangleton Road with ASL added and cycle lane extended across junction, requiring traffic to merge prior to rather than after junction. Consider adding cycle filter to Gladys Road to provide connection to Boundary Road for eastbound cyclists.	Crossovers will limit the amount of light segregation that can be provided along central section in particular. Hangleton Road crossing not signalised. Wider redesign of junctions desirable but not deliverable as a short term measure. Pedestrian refuge south of Hove Park creates pinch point and could be redesigned.
3. A259 Marine Parade	Old Steine to Lewes Crescent	1.8	Two lanes on either side of the carriageway with wide single lanes on other sections. Parking, loading and bus stops on either side of carriageway.	Reduce carriageway widths to create a bi-directional cycle lane on southern side. Parking could be removed if necessary, but there is likely to be scope to relocate some parking to the outside of the cycle facility.	Constraint at eastern end of route where cyclists would have to join shared path to east. There are a number of junctions; however, a facility on the south side would mitigate this. The treatment of pedestrian crossings would need to be considered with an additional refuge area required for pedestrians and measures to encourage cyclists to slow or give way. This would be particularly necessary if the facility is made two-way without changes to signals. Replacement stops for buses would need to be considered.

Route	Section	Section length (km)	Existing conditions	Potential temporary measures	Key constraints
					Retention of parking for blue badge users would need to be prioritised.
4a. A23 Preston Road	Argyle Road to Dyke Road Drive	0.1	One-way dual carriageway. Some active frontage with parking on east side of carriageway. Bus route.	Remove traffic lane on western side of carriageway to create a cycle lane. Complement with a point closure on Argyle Road.	Continued access for loading would need to be considered; however, loading could be retained or provided on the eastern side. Tie in at either end would need to be considered. Some queuing capacity for vehicles turning right into Stanford Avenue would need to be retained. Bus stop south of Springfield Road would need to be addressed, although it may be possible to retain it if adjacent parking is removed and used as a traffic running lane for this section.
4b. A23 Preston Road	London Road to Argyle Road	0.3	Some active frontage with parking on east side of carriageway. Bus route.	Create northbound cycle facility by removing western carriageway lane (southbound cyclists to be routed via Argyle Road and Campbell Road to follow the NCN and avoid Preston Circus).	Tie in at Preston Circus would need to be considered, meaning northbound-only likely to be more feasible as a temporary measure. Bi-directional facility could be provided with more significant works in the longer term.
5a. A259 Kings Road / Grand Junction Road / Kingsway	Madeira Drive to Fourth Avenue	2.5	Dual carriageway in both directions with two-way cycle lane on the promenade. High level of conflict with pedestrians at present as cycle lanes are segregated by line only, particularly at the eastern end and at crossings.	The potential measure assessed for suitability for a temporary intervention is a widening of the existing two-way cycle lane into carriageway, potentially taking out some / all of one of the westbound lanes. This could be used for westbound cycling, reducing demand for the promenade facility. Longer term, could consider reallocating one southbound carriageway lane for a two-way cycle lane; however, this would require more significant interventions at junctions and crossings than is likely to be feasible for a temporary measure. Similarly, one of the northern carriageway lanes could be reallocated in the longer	Junctions and crossings pose constraints for a temporary measure as more substantial design measures will be required to address these. Some right turn lanes would need to be removed which could have capacity implications unless the right turn is banned. Construction works at the shelter hall (West Street) create a pinch point.

Route	Section	Section length (km)	Existing conditions	Potential temporary measures	Key constraints
				term but would require detailed consideration of junctions.	
5b. A259 Kingsway	Fourth Avenue to Wharf Road	1.8	Dual carriageway in both directions with two-way cycle lane on the promenade. Some conflict with pedestrians at present as cycle lanes are segregated by line only.	As above, continue temporary westbound cycle lane.	Parking and loading east of King Alfred could create conflict with cycle facility and need to be addressed in design. Junctions and crossings pose constraint to providing eastbound facility; however, this may be possible on some sections if crossings could be amended temporarily to allow two-way on-carriageway cycling as with Marine Parade. Junctions with Wharf Road and Hove Street would need to be addressed.
6. Basin Road South		3	Part of NCN, signed over private roads shared with HGV traffic.	Introduce measures to improve the visibility of cyclists through additional lining and signage.	The majority of the route is not public highway and extends into Adur and Worthing. High number of HGV movements.
7. A23 London Road	Valley Gardens to Cheapside	1.5	Short cycle facility on Cheapside with shared cycle and pedestrian facility at northern end of Valley Gardens.	Extend cycle facility from Valley Gardens into London Road and Cheapside.	
8. Boundary Road		1	Two-way traffic and bus route with active frontage and high demand for loading.	Could create additional space for cyclists and pedestrians by removing car parking. An alternative could be to consider point-closures of certain sections, retaining access for buses.	Localised pinch-points, including pedestrian crossings and bus stops.
9. New Church Road	Between Boundary Road and Sackville Road	2	Wide carriageway with parking on either side. Bus route.	Remove some parking on either side of road to provide cycle lanes in each direction. Replace parking on outside of cycle lane where widths allow.	Bus stops will need to be addressed. Cycle facility will need to be diverted around build-outs if located at the kerb-side.
10. Portland Road	Between Boundary Road and Coleman Avenue	1	Wide carriageway with parking and loading on either side. Shopping area and bus route.	Remove parking on either side of road to provide cycle facility. Reduce speed limit to 20mph.	

Route	Section	Section length (km)	Existing conditions	Potential temporary measures	Key constraints
				Remove right hand turning lanes and central hatchings in places to provide increased space for cyclists. Remove parking on either side of road.	
11. Richardson Road		0.1	Local shopping street with parking on either side.	Provide point closure to retain access to businesses but remove through traffic.	
12. St James's Street / Bristol Road / St George's Rd / Chesham Street / Rock Street	Upper Rock Gardens to Eastern Road		Single traffic lanes in each direction. Parking on both sides at western end of the route and one side in centre. Retail frontages at intervals along route.	Introduce point closures to restrict through traffic and provide an alternative cycle route to Eastern Road. Complement with removal of parking (see walking measures).	Need to retain parking for blue badge holders. Removal of residential parking more challenging where no alternative provision.
13. St James's Street	Old Steine to Upper Rock Gardens	0.5	One-way street with high pedestrian footfall from shops and cafes. Parking and loading bays. Issues with cycling in wrong direction. Major bus route.	Option to shut St James's Street to through traffic. Reduction in volumes and buses will allow two-way cycling and additional space for pedestrians (see walking measures).	Traffic access will still be required to reach residential streets north and south of St James's Street. Alternative routes for buses and stop locations will need to be addressed, including the accessibility of these.
14. Sackville Road	Old Shoreham Road and Kingsway	1.5	Bus route with parking on either side.	Reduce speed limit to 20mph. Remove parking to allow a cycle lane on either side of carriageway.	Junctions with Old Shoreham Road and Portland Road present design challenges with width constraints at the latter. Retention of parking for blue badge holders would need to be considered.
15. Old Shoreham Road	Western boundary to Hangleton Road	1.4	Dual carriageway with 40mph speed limit west from Trafalgar Road. Bus route.	Remove one lane on either side and make this a cycle lane using light segregation. Reduce speed limit to 30mph.	Further consideration required at junctions of Carlton Terrace and A293. Multi-lane junctions provide constraints to introducing a temporary facility and will need to be considered in the design of any scheme. There would be a need to coordinate with West Sussex County Council (WSCC) in order to provide a joined-up route extending into Adur & Worthing; however,

Route	Section	Section length (km)	Existing conditions	Potential temporary measures	Key constraints
					it is noted that WSCC are developing proposals for this route.
16. Old Shoreham Road	Dyke Road to New England Road	0.4	Wide traffic lanes and parking as far as Stanford Road with narrow single carriageway section to New England Road.	Extend facility using light segregation east of Dyke Road to New England Road. Owing to the narrow width, the section east of Prestonville Road would require traffic to be removed in one direction. If the cycle facility is extended, could consider left turn ban to Dyke Road to allow continuation of cycle facility.	Width east of Stanford Road would prevent introduction of cycle facility without removal of traffic in one direction. Steep gradient on eastern section may constrain potential use.
17. Chatham Place / New England Road	Seven Dials to Old Shoreham Road	0.3	Single traffic lanes, wider at Seven Dials end.	Provide southbound (uphill) cycle facility. Alternative would be to remove traffic in one direction and divert via Old Shoreham Road to provide two-way cycle facility.	Width of New England Road section would prevent introduction of cycle facility without removal of traffic lane. If southbound-only facility provided, a consistent width would not be possible for full length because of width at eastern section. Steep gradient may constrain potential use.
18. New England Road and Viaduct Road	Viaduct Road	0.3	One-way dual carriageway.	Remove lane of traffic on north side of carriageway to create a cycle lane.	Need to consider tie-in with Ditchling Road junction.
18. New England Road and Viaduct Road	New England Road between Preston Circus and Old Shoreham Road	0.3	Advisory cycle lane in middle of carriageway providing NCN connection from Campbell Road to Elder Place.	Scope for 2m cycle lane on either side of carriageway in eastern section by removing lanes.	Constrained width through railway bridges.
19. A259 Kingsway	Wharf Road to Boundary Road	0.8	Dual carriageway or wide single lanes. Bus route.	Reconfiguration of carriageway to accommodate cycle provision, removing parking in places to achieve this.	Bus stops would need to be accommodated.
20. A259 Wellington Road	Boundary Road to Church Road	0.5	Single lane carriageway in each direction with narrow footway on each side. Some property boundaries very close to edge of the narrow footways.	There is minimal potential for a cycle facility without major intervention; therefore, the only option for a temporary segregated cycle facility would be to remove traffic in one direction.	Highway boundary very constrained. Likely to require some land take to accommodate any high standard cycle provision.

Route	Section	Section length (km)	Existing conditions	Potential temporary measures	Key constraints
21. Neville Road	Old Shoreham Road to Woodland Drive	0.6	Wide road with parking on either side; however, hatching and central refuges along road reduce the effective width. Bus route.	Extend cycle lane along Neville Road towards Old Shoreham Road. This could be achieved by removing the central hatching and some parking.	Constrained widths. More significant work required to remove buildouts and central refuges. Neville Avenue roundabout would be difficult to address through short term scheme.
22. Church Road	Sackville Road to Palmeria Road	1	Key bus route with wide carriageways. Retail, café and restaurant frontages with kerbside activity.	Ensure loading only occurs outside of peak times. Create cycle lanes on either side of carriageway. Complement with removing parking to extend footways to enable social distancing (see walking measures).	Loading activity at kerb side would need to be managed and enforced.
23. Dyke Road	Old Shoreham Road to Seven Dials	0.3	Single traffic lanes with advisory cycle lanes on each side. Inset parking on inside of cycle lane. Active frontage and kerbside activity. Bus route.	Remove parking and buildouts to widen cycle facility and provide light segregation. Consider left turn vehicle ban into Old Shoreham Road with filtered permeability in intervening streets.	Width constraints with some pinch points, even if parking removed. Bus route with need to accommodate stops, kerbside activity and disabled parking.
23. Dyke Road	Seven Dials to North Street	0.8	Narrower northern section with wider southern section used for bus layover. Bus route.	Removal of traffic in one direction would be necessary to provide a pedestrian or cycle facility. Option for filtered permeability via Clifton Hill to Seven Dials but less direct.	Width constraints.
24. A23	Stanford Avenue to Mill Road	3.8	Unsegregated cycle lanes in both directions. Generally on carriageway with some on-footway sections north of Preston Park with constrained widths. Major bus route.	Introduce light segregation where widths allow. Introduce cycle lane in one southbound traffic lane south of Preston Drove.	Some pinch points which will be hard to address through temporary measures. Bus stops would need to be retained and may be necessary to suspend stop north of Preston Park if on-carriageway cycle facility to be provided.

Route	Section	Section length (km)	Existing conditions	Potential temporary measures	Key constraints
25. A23 Stanford Avenue	Stanford Avenue and Beaconsfield Road	0.2	Wide 3 lane one-way carriageway. Bus route.	Remove lane on northern side and replace with cycle facility. This would preferably be two-way subject to providing a suitable form of segregation for cyclists going against traffic and providing a tie in at Preston Park Avenue.	The design of the tie-in at either end would need to be carefully considered and may require reducing or removing some movements from the junctions with Preston Park Avenue and Beaconsfield Road. Bus stop would need to be relocated.
25 A23 Beaconsfield Road	Stanford Avenue to Preston Circus	0.5	Dual carriageway, one-way with parking and some businesses / kerb side activity. Bus route.	Remove traffic lane to create cycle lane. Complement with removing parking in places to widen footway.	Retention of parking for blue-badge holders. Relocation of bus stops. Tie in with junction at Preston Circus.
26. Ditchling Road	Union Road to Viaduct Road	0.1	Two lanes southbound with one lane northbound.	Creation of two-way cycle facility would only be possible if one southbound lane removed.	Steep incline. Junction with Viaduct Road would require more significant intervention than would be possible for a temporary measure.
26. Ditchling Road	Viaduct Road to Princes Crescent	0.3	Single traffic lanes in each direction. Bus route.	Creation of two-way cycle facility would only be possible if traffic removed in one direction.	Steep incline may constrain potential use. Interaction with bus stops would need to be addressed.
26. Ditchling Road	Princes Crescent to Woodbourne Avenue	2.5	Single traffic lanes in each direction. Residential parking on both sides with some kerbside activity and loading. Bus route.	Create cycle lanes in each direction by removing parking.	Need to consider whether residential parking could be displaced elsewhere. Interaction with bus stops would need to be addressed.
27. Upper Lewes Road		0.8	Single lane carriageway. Narrow carriageway widths in parts. 20mph speed limit. Connector route but mostly residential.	Remove parking to provide cycle lanes. Scope for filtered permeability to remove either north or southbound traffic to address pinch point at eastern end.	Very narrow widths mean traffic would need to be removed in at least one direction.
28. Lewes Road	Bear Road to Union Road	0.8	Single lanes with loading and parking at kerbside. Advisory cycle lanes. Bus lane at southern end and on Vogue Gyratory.	Cycle facilities made mandatory with light segregation added to effectively prevent loading other than in designated areas. Reallocation of road space where possible.	Road widths and constraints will limit width of cycle facility that is possible. Conflict with buses would remain.

Route	Section	Section length (km)	Existing conditions	Potential temporary measures	Key constraints
29. Richmond Terrace		0.5	Multiple lanes with some sections of parking.	Reallocate carriageway space to pedestrians and /or cyclists to assist with maintaining social distancing as well as provide more continuous route for cyclists from Lewes Road.	Tie in at junctions would need to be considered.
30.Lewes Road	Bear Road to Coldean Lane	2.7	Cycle lanes within bus lane for majority of route with floating bus stops at most stops.	Introduce light segregation where widths allow.	Width of bus lane likely to mean that segregation is not possible in all sections without more substantial interventions. It would be difficult to address junctions through temporary schemes, although some such as at Coldean Lane could be improved by introducing some light segregation.
30.Lewes Road	Coldean Lane to University of Sussex	0.5	One lane of traffic in each direction and a bus lane. Shared cycle path on north side with southbound cycle lane on south side.	Remove bus lane on eastbound carriageway to create a wide cycle lane with light segregation from traffic.	Need to consider junction at Stoney Mere Way. Continuation north on A27 slip lane (before re-joining footway) would require safety assessment and agreement from Highways England.
31. Elm Grove	Lewes Road to Queens Park Road	0.8	Single lanes in each direction with residential parking on both sides.	Scope to remove parking bays on street to create 2m cycle lane in both directions or as a minimum in the uphill direction.	Re-provision of residential parking would need to be considered, particularly if this is displaced to the footway without adequate enforcement.
32. Queen's Park Road / Egrement Place		1.4	Bus route with parking on one side in southern and central sections and both to the north.	Removal of parking to create segregated cycle facility.	Narrower section north of Egremont Place.
33. Eastern Road	Pavilion Parade to Freshfield Road	0.8	Dual carriageway with inside bus and cycle lanes.	Introduce light segregation where widths allow.	Interaction with buses.
33. Eastern Road	Freshfield Road to Arundel Road	1.4	Single carriageway. Narrow in central section with parking on either side at eastern end.	It would only be possible to introduce a cycle facility in the central section by removing traffic in one direction.	Width. Major bus route. Emergency access to the hospital.
34. North Street		0.5	Restricted access for buses and taxis with general traffic	Introduce point-closure for all traffic to provide cycle friendly street and space to	Re-routing of buses and associated impacts would need to be considered, particularly if capacity reduced elsewhere.

Route	Section	Section length (km)	Existing conditions	Potential temporary measures	Key constraints
			also able to enter from side roads. Major bus route. High pedestrian footfall with active frontage.	widen footways to accommodate queuing at shops (see walking measures).	
35. Queens Road	Clock Tower junction to Brighton Station	0.5	Main route to / from Brighton Station to seafront. High pedestrian footfall with active frontage. Major bus route. Narrow footways in places.	Northbound buses and cyclists only on Queens Road. Extend footway on east side of carriageway by removing the southbound lane on Queens Road to allow for social distancing (see walking measures).	Re-routing of buses would need to be considered.
36. Terminus Road / Buckingham Place		0.6	Single traffic lanes on Terminus Road, with road widening at Buckingham Road end. Major bus route.	Narrow lanes Buckingham Road to introduce cycle facility. Southern section would require closure of one traffic lane on Terminus Road. Alternative would be filtered permeability for Buckingham Road area.	Bus route. Steep gradient.
37. Western Road	Montpelier Road to Churchill Square	0.5	Restricted access, cycles share with buses and taxis east of Montpelier Road	Removal of loading (or timed restrictions) and rationalisation of bus stops in conjunction with walking measures.	
37. Western Road	Palmeira Square to Montpelier Road	0.7	Major bus route. Generally wide lanes with some loading.	Provide on-carriageway cycle facility, installing light segregation where possible; however, opportunities for this are likely to be constrained by junctions and access to bus stops.	Limited opportunity to widen footways and provide marked cycle facilities. Bus stops are a key conflict point. Width constraints in places, including at bus stops. Need to maintain loading.

5. Identification of Potential Walking Network and Measures

5 Identification of Potential Walking Network and Measures

This chapter identifies the routes to be considered further for temporary walking measures and the types of scheme that could be introduced on these streets.

5.1 Network development

Pedestrian routes have been identified for assessment by following the process outlined in Section 3.1. There is some overlap between these measures and the cycling interventions considered in the previous chapter.

Routes identified for progression in Action Plan

1. Madeira Drive closure (already implemented)
2. St James's Street
3. Sydney Street and Gardner Street extension of closure to weekdays
4. The Lanes / Old Town

5a. Western Road (Churchill Square to Montpelier Road) increase pedestrian space, including relocation or rationalisation of bus stops

In addition, the following were identified for progression within the council's submission to the DfT for Tranche 1 Emergency Active Travel funding:

6. Church Road
7. London Road
8. Queens Road / West Street

Routes considered but not progressed in Action Plan

9. Boundary Road closure
10. New Church Road closure
11. Portland Road traffic restrictions
12. Richardson Road traffic restrictions
13. St George's Road traffic restrictions

Additional routes considered

Table 5.1 provides a summary of the additional routes considered and the rationale for including these. As noted in Section 3.1, this focuses on Core Walking Zones which are clusters of trip generators, such as shopping areas. They have been used to assist in identifying additional locations that may require temporary walking measures.

Table 5.1: Summary of additional walking routes assessed

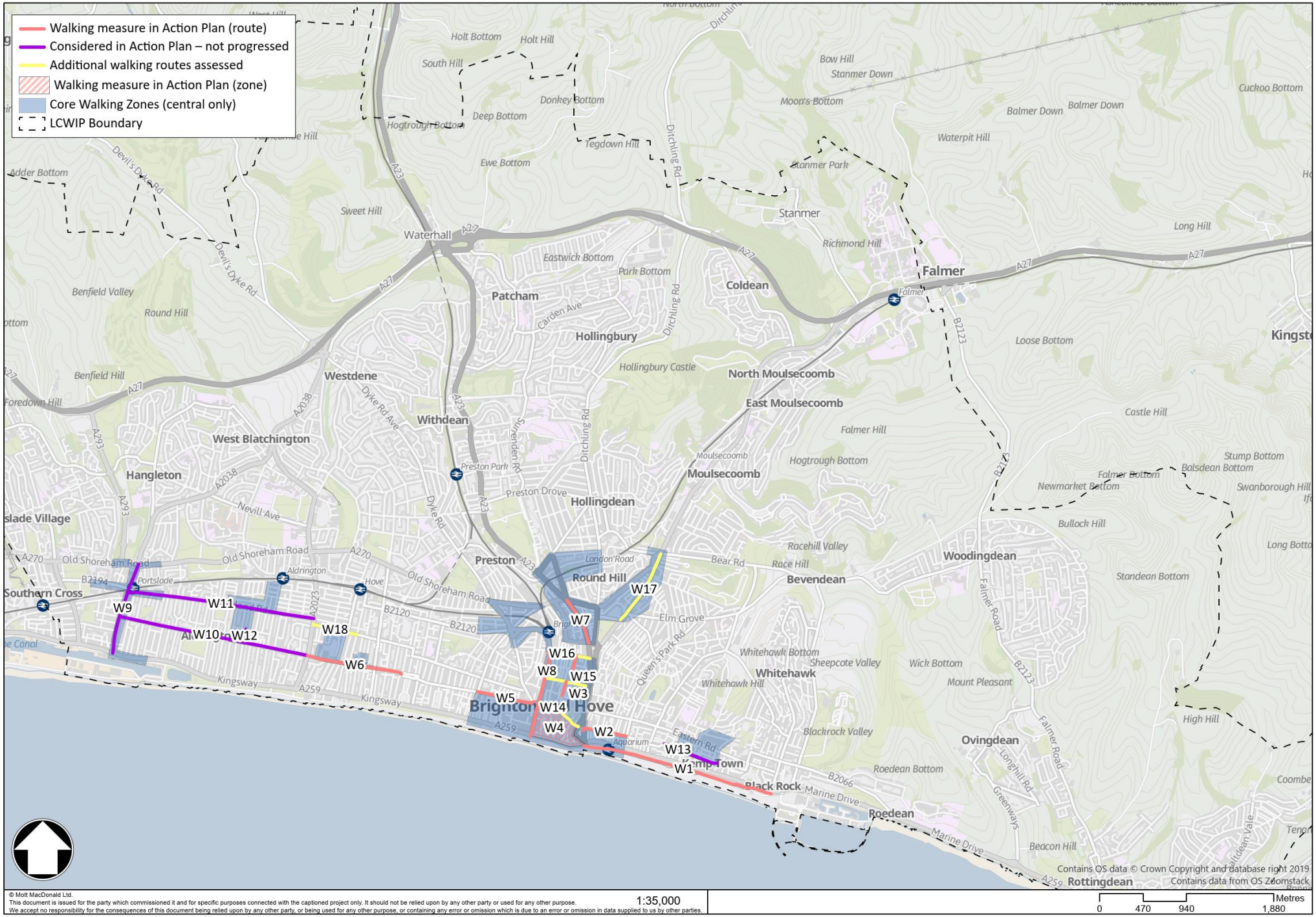
Route	Rationale
5b. Western Road	Retail area within Core Walking Zone considered in emerging LCWIP.
14. North Street	Retail area within Core Walking Zone considered in emerging LCWIP.
15. North Road	Retail area within Core Walking Zone considered in emerging LCWIP.

Route	Rationale
16. Trafalgar Street	Retail area within Core Walking Zone considered in emerging LCWIP.
17. Lewes Road (Elm Grove to Bear Road)	Retail area within Core Walking Zone considered in emerging LCWIP.
18. Blatchington Road	Retail area within Core Walking Zone considered in emerging LCWIP.

As with cycling, the Valley Gardens area provides a key north-south and east-west link for pedestrians. Owing to ongoing works in this area, it has not been considered further at this stage for temporary measures. However, there would be sufficient carriageway capacity to widen footways on a temporary basis in the Old Steine area.

Figure 5.1 provides an overview of those areas assessed for temporary walking measures. This also includes the draft Core Walking Zones from work currently in progress on the full LCWIP but only those covering the central parts of the city.

Figure 5.1: Location of walking measures for assessment



5.2 Types of measure to consider

The main temporary walking measure considered is the widening of footways, either using space from wide traffic lanes or by removing parking. Based on social distancing guidelines in place at the time of writing (2m), it is a reasonable assumption that 4.5m would be required on footways without active frontage and up to 7m on footways where queuing is required as shown in Figures 5.2 and 5.3. This has therefore been used for the basis of understanding the extent of reduction in traffic lane width or parking that may be necessary. These assumptions could be reviewed were the government to reduce its guideline social distancing widths to a level applied in many other countries. This was under review at the time of writing; however, even at 1m, widening in many areas would be required to accommodate queuing.

Figure 5.2: Indicative footway widths – residential street

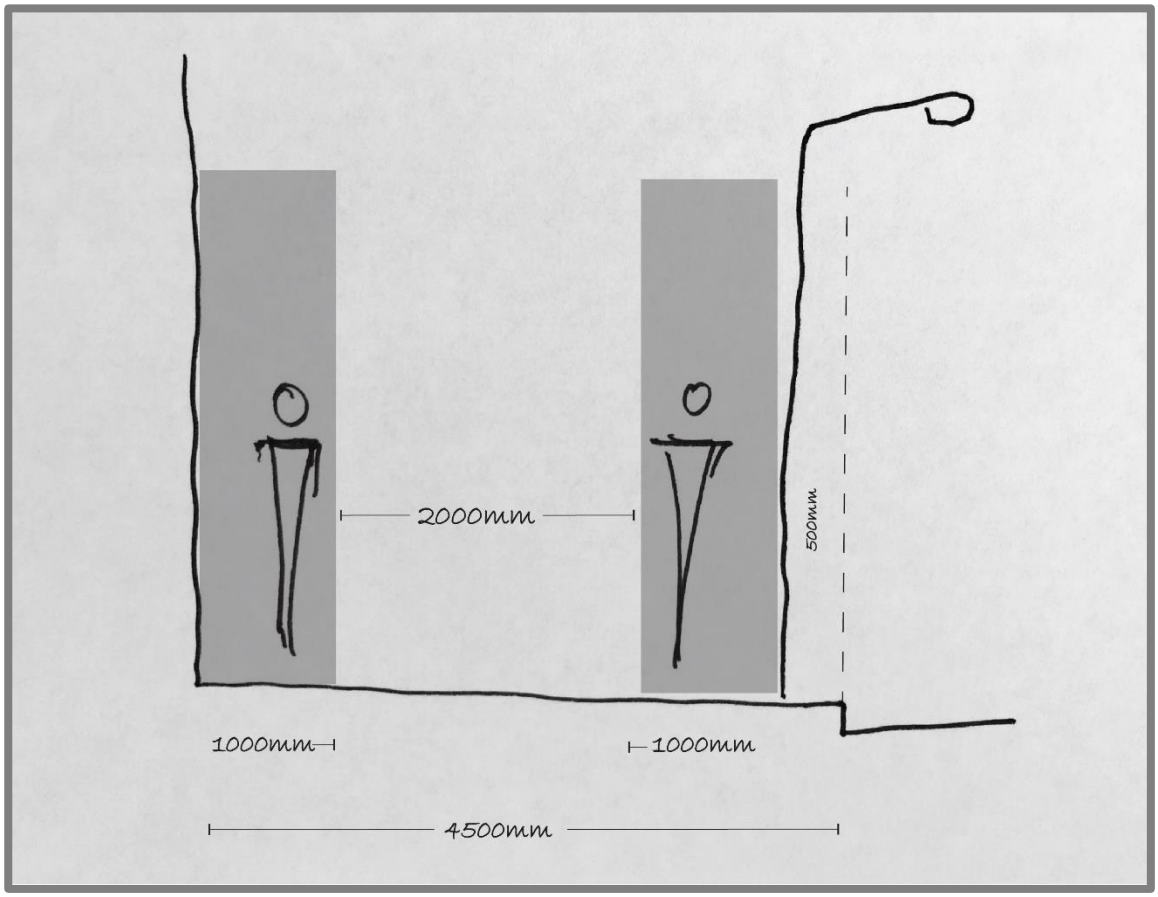
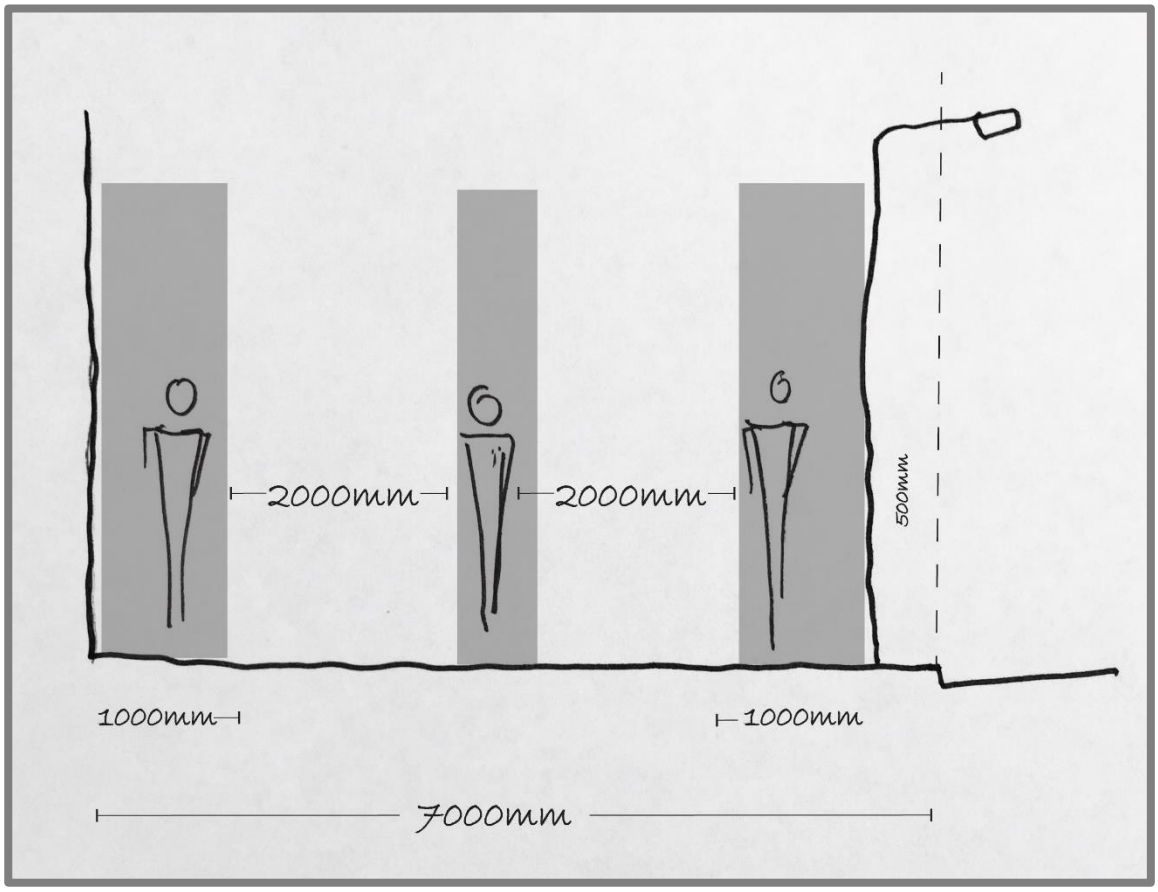


Figure 5.3: Indicative footway widths – retail street



On some retail streets, such as Blatchington Road and Church Road, a small reduction from the 7m would be necessary if two-way traffic is to be maintained. In other locations this would not be possible, and the street would need to be closed to traffic in at least one direction.

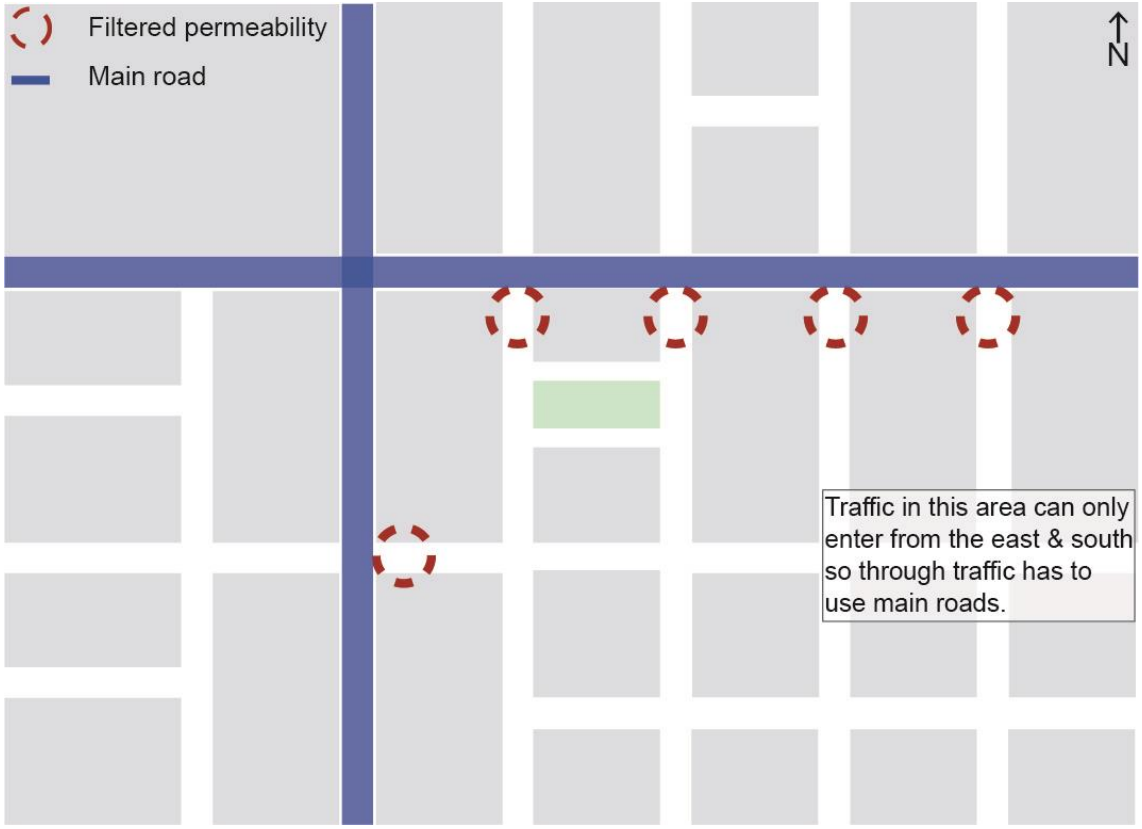
Alongside these measures, the localised management of street furniture and the placement of tables and chairs through the street licensing process would be required. This will be particularly necessary as cafes and restaurants reopen.

The approach required to enable social distancing in residential streets will need to be different. Footways are unlikely to reach 4m width in most residential streets; however, footway widening will require the loss of significant amounts (if not all) on-street parking, which is not considered viable.

The only alternative is to better accommodate pedestrians who choose to walk in the carriageway. That means reducing traffic numbers to such an extent that the threat of passing traffic largely disappears.

This can be achieved through filtered permeability, introduced in the previous chapter regarding cycling. This involves the creation of 'cells' whereby all 'rat runs' or viable through routes for residential access streets are removed through the careful location of road closures. An illustration of how this could work is shown in Figure 5.4.

Figure 5.4: Example of filtered permeability scheme



Initially this could be achieved by locating planters or similar in the street at appropriate points. This is the approach taken on Madeira Drive, shown in Figure 5.5. In the medium to longer term, subject to consultation, these closures on residential streets could be made permanent, similar to the example shown in Figure 5.6.

School streets could follow a similar approach but also be timed to school opening and closing periods or restricted to certain streets outside schools only.

Locations for filtered permeability and school streets have not been identified at this stage as further work would be needed on the suitability of these. This would also need to consider whether they could form part of strategic routes within the emerging LCWIP (as opposed to standalone neighbourhood schemes) or whether they could be complementary schemes to wider LCWIP measures. For example, it is considered that there is potential for filtered permeability schemes to be introduced around Core Walking Zones, for example streets adjoining the Boundary Road / New Church Road / Portland Road area, Seven Dials and Kemptown. This list is not exhaustive nor is it intended to predetermine the suitability of such interventions on all streets in these areas.

Figure 5.5: Example of temporary closure (Madeira Drive)

Figure 5.6: Example of permanent closure (Richmond Road, Brighton)

5.3 Summary of schemes for assessment

Table 5.2 provides a summary of each route and the suggested measures that have been used as the basis for assessment. It also notes key constraints or design issues that will need to be addressed were these to be progressed further.

As with the cycling measures, the assessment of these measures within this Interim LCWIP provides a high-level overview of the feasibility only and further design work and road safety assessment would be required prior to implementation. Similarly, value for money is based on an assumption of whether measures are likely to be high or low cast and further costing and identification of funding would be required before these can be progressed.

5.4 Summary

This chapter has introduced the walking routes and identified what measures would be likely to be required for temporary measures to be introduced on these streets.

Table 5.2: Summary of potential walking measures

Route	Section	Existing conditions	Potential measures	Key constraints
1. Madeira Drive (Scheme already implemented)		Road has been closed to through traffic by placing planters at entrance to the road		Provision of disabled parking.
2. St James's Street	Old Steine to Upper Rock Gardens	One-way street with high pedestrian footfall from shops and cafes. Parking and loading bays. Major bus route.	Option to close St James's Street to through traffic. Reduction in volumes and buses will allow additional space for pedestrians and two-way cycling (see cycling measures).	Option to introduce a bus gate would be unlikely to solve the problem as access for other vehicles is already restricted through left turn ban from the A23. Access for general traffic is possible via North Street; however, restrictions mean this is light. Bus movements would limit opportunities to widen footways or for pedestrians to use the carriageway which would be possible if traffic is restricted to essential access only. Traffic access will still be required to reach residential streets north and south of St James's Street. Alternative routes for buses and stop locations will need to be addressed, including the accessibility of these, including the well-used Morrison's bus stop. Delivery and servicing access would need to be maintained.
3. Sydney Street and Gardner Street		Narrow street with active frontage and on-street displays. Currently closed to traffic at weekends.	Extend weekend closures to weekdays.	
4. The Lanes / Old Town		Narrow streets and footways with some on-street parking. Some restriction on through traffic through point closure at Ship Street and weekend closure of East Street.	Further extend access restrictions and remove parking.	
5a. Western Road	Churchill Square to	Major bus route.	Removal of loading (or timed restrictions) and rationalisation of bus stops.	Need to maintain bus route and stop capacity. Pinch points.

Route	Section	Existing conditions	Potential measures	Key constraints
	Montpelier Road	Restricted access, cycles share with buses and taxis.		Local access traffic maintained westbound.
5b. Western Road	Palmeira Square to Montpelier Road	Major bus route. Generally wide lanes with some loading.	Widen footways by reducing carriageway space.	In order to maintain two-way bus access, reduction from 7m pedestrian space will be required in some areas. Will limit opportunities to provide a facility for cyclists.
6. Church Road	Sackville Road to Palmeira Square	Key bus route with wide carriageways. Retail frontage with kerbside activity.	Ensure loading only occurs outside of peak times. Removing parking to extend footways to enable social distancing. Complement with cycle facilities (see cycling measures).	Loading activity at kerb side would need to be managed and enforced.
7. London Road	Cheapside to Preston Circus		Extension of footways by removing parking and relocating bus stops.	Major bus route with stops in high demand. Need to accommodate loading.
8. Queen's Road / West Street		Main route to / from Brighton Station to seafront. High pedestrian footfall with active frontage. Major bus route. Narrow footways in places making social distancing difficult.	Southbound buses and cyclists only on Queens Road. Extend footway on east side of carriageway by removing the northbound lane on Queens Road to allow for social distancing.	Re-routing of buses would need to be considered.
9. Boundary Road	Halyburton Road to New Church Road	Two-way traffic and bus route with active frontage and high demand for loading.	Could create additional space for pedestrians by removing car parking. An alternative could be to consider point-closure, retaining access for buses.	Localised pinch-points, including pedestrian crossings and bus stops.
10. New Church Road		Wide carriageway with parking on either side. Bus route.	Remove some parking on either side of road to provide cycle lanes in each direction. Replace parking on outside of cycle lane where widths allow.	Bus stops will need to be addressed. Cycle facility will need to be diverted around build-outs if located at the kerb-side.
11. Portland Road		Wide carriageway with parking and loading on either side. Shopping area and bus route.	Remove parking on either side of road to provide extended pedestrian space. Reduce speed limit to 20mph.	Need to maintain loading.

Route	Section	Existing conditions	Potential measures	Key constraints
			Remove right hand turning lanes and central hatchings in places to provide increased space for cyclists (see cycling measures).	
12. Richardson Road		Local shopping street with parking on either side.	Provide point closure to retain access to businesses but remove through traffic.	
13. St James's St / Bristol Road / St George's Road / Chesham Road / Rock Street	From Upper Rock Gardens to Eastern Road	Single traffic lanes in each direction. Parking on both sides at western end of the route and one side in centre. Retail frontages at intervals along route.	Introduce point closures to restrict through traffic and provide an alternative cycle route to Eastern Road (see cycling measures) as well as traffic calmed streets. Complement with removal of parking.	Need to retain parking for blue badge holders. Removal of residential parking more challenging where no alternative provision.
14. North Street		Restricted access for buses and taxis with general traffic also able to enter from side roads. Major bus route. High pedestrian footfall with active frontage.	Introduce point-closure for all traffic to provide cycle friendly street (see cycling measures) and space to widen footways to accommodate queuing at shops.	Re-routing of buses and associated impacts would need to be considered, particularly if capacity reduced elsewhere.
15. North Road		Western section is two way with wide traffic and filter lanes. Narrows east of Spring Street with some parking before widening on approach to A23 junction.	In order to maintain some traffic circulation through the North Laine, it has been assumed that this road would be kept open with widening of footways at either end where this is possible. There would be a case for restricting movement completely; however, were Queens Road to be closed, an exit point would need to be identified. It is also noted that key pedestrian movements in the central area are north-south.	Width.
16. Trafalgar Street		Narrow carriageway and footways, reducing further in one-way section at eastern end.	Were footways to be widened to the widths identified, traffic would need to be removed in both directions.	Width.
17. Lewes Road	Bear Road to Union Road	Single lanes with loading and parking at kerbside. Advisory cycle lanes.	Extend footways into parking areas.	Road widths and constraints will limit extension of footways possible without encroaching on cycle facility. Some bus stops would need to be maintained.

Route	Section	Existing conditions	Potential measures	Key constraints
		Bus lane at southern end and on Vogue Gyratory.		
18. Blatchington Road		Retail street with car parking on both sides.	Remove / relocate parking to create extended footways. Space would be available for a cycle lane or retention of some parking.	Width means a slight departure from the guideline widths would be necessary to maintain two-way traffic.

6. Assessment

6 High-level Assessment

This chapter provides a high-level assessment of each of the measures identified for cycling in Chapter 4 and walking in Chapter 5. It then provides an overall summary for each route, combining the assessment for cycling and walking for each street where applicable.

6.1 Assessment

Tables 6.1 and 6.2 on the following pages provide the assessment for cycling and walking respectively. These use the assessment criteria introduced in Chapter 3.

In addition, a summary of the overall category assigned to each street is provided in Figure 6.1. The overall score is indicative of the feasibility and need for a particular measure based on a review of the other assessment criteria. As noted previously, some criteria will have a greater influence on the feasibility of a route than others. These include:

- Available width within the carriageway, without the need for significant infrastructure works.
- The need to close major bus routes.
- The removal of large stretches of residential parking where there is no alternative provision (the removal of some residential parking or parking at destinations is considered more feasible).

The rationale for the overall categorisation of each route is summarised in Section 6.3 and is based on consideration of the following:

- Green has been assigned to routes which have a strong strategic case and would be expected to be feasible. There may be some design issues to overcome; however, it is expected these could be managed. There may be TRO requirements but these could be mitigated, such as relocating parking into a carriageway lane rather than removing it completely.
- Amber has been assigned to routes which have a good strategic fit; however, have more challenging issues to overcome. This may affect their deliverability which will need to be addressed in the design of schemes. If these issues cannot be addressed, the quality of the scheme may be compromised.
- Red has been assigned to routes which would have a major challenge to implementation, for example the removal of traffic in at least one direction on a major route. This is not necessarily a reason for not progressing an option and indeed the removal of traffic is consistent with DfT guidance. However, these measures are likely to be significantly harder to implement and the displacement of traffic would need to be considered. In addition, the potential demand for temporary measures has also been considered. If this has the potential to be high, the impacts may be justified; however, if low, for example as the road is on a steep gradient, there is likely to be less justification.

6.2 Equalities implications

A number of routes have been assessed as amber when considering the impact on groups with protected characteristics under the Equality Act 2010. This is generally resulting from the loss of disabled parking or relocation of bus stops. These issues are not considered to be insurmountable at this stage of high-level assessment; however, these will need to be reviewed further as schemes progress and it is recommended that alternative provision be considered as part of the design of all schemes.

Table 6.1: Cycling temporary measures assessment

Route	Section	Strategic fit	Expected demand	Connection to wider network	Available width	Interaction with junctions	Impact on buses	Impact on pedestrians	Impacts on parking	Impacts on loading	Impacts on traffic flow	Equality implications	Legislative requirements	Value for money	Overall assessment
1. Madeira Drive closure (already implemented)		G	G	G	G	G	G	G	A	A	G	A	A	G	**G**
2. A270 Old Shoreham Road	The Drive to Hangleton Road (already implemented)	G	G	G	G	R	A	G	G	G	A	G	G	A	**A**
3. A259 Marine Parade	Old Steine to Lewes Crescent	G	G	G	G	A	A	A	A	A	G	A	A	A	**G**
4a. A23	Argyle Road to Dyke Road Drive	G	G	G	G	A	A	G	G	A	A	G	G	A	**G**
4b. A23	London Road to Dyke Road Drive	G	G	G	G	A	A	G	G	A	A	G	G	A	**G**
5a. A259	Madeira Drive to Fourth Avenue	G	G	G	G	A	A	G	A	A	A	A	A	A	**A**
5b. A259	Fourth Avenue to Wharf Road	G	G	G	G	A	A	G	A	A	A	A	A	A	**A**
6. Basin Road South		G	G	G	G	G	G	G	G	G	G	G	G	G	**G**

Route	Section	Strategic fit	Expected demand	Connection to wider network	Available width	Interaction with junctions	Impact on buses	Impact on pedestrians	Impacts on parking	Impacts on loading	Impacts on traffic flow	Equality implications	Legislative requirements	Value for money	Overall assessment
7. A23	Valley Gardens to Cheapside	G	G	G	G	A	G	G	G	G	A	G	G	G	**G**
8. Boundary Road	Old Shoreham Road to New Church Road	G	G	G	A	A	A	G	A	R	A	G	G	G	**A**
8. Boundary Road	New Church Road to A259	G	G	A	A	A	A	G	R	A	G	G	R	A	**A**
9. New Church Road		G	G	A	G	A	A	G	A	G	G	G	A	A	**A**
10. Portland Road		G	G	A	A	A	A	G	R	A	G	G	R	A	**A**
11. Richardson Road		R	A	A	A	G	G	G	A	A	G	G	R	G	**A**
12.St George's Road		G	G	A	A	A	A	G	A	A	G	G	R	G	**A**
13. St James's Street		G	G	A	A	A	R	G	R	A	G	A	R	G	**R**
14. Sackville Road		G	G	G	A	A	A	G	A	A	G	G	R	A	**A**
15. A270 Old Shoreham Road	Hangleton Road to West Sussex	G	G	A	G	R	A	G	A	A	A	G	G	A	**A**
16. A270 Old Shoreham Road	Dyke Road to New England Road	G	A	G	R	R	G	G	A	A	R	G	R	A	**R**

Route	Section	Strategic fit	Expected demand	Connection to wider network	Available width	Interaction with junctions	Impact on buses	Impact on pedestrians	Impacts on parking	Impacts on loading	Impacts on traffic flow	Equality implications	Legislative requirements	Value for money	Overall assessment
17.Chatham Place		G	A	A	R	A	G	G	A	G	G	G	G	A	**A**
18. A270 Preston Circus	New England Road	G	G	G	A	R	G	G	G	G	A	G	G	A	**A**
18. A270 Preston Circus	Viaduct Road	G	G	A	G	A	G	G	G	G	A	G	G	A	**A**
19. A259	Hove Lagoon to Boundary Road	G	G	A	G	A	A	G	R	A	A	G	R	A	**A**
20. A259	Boundary Road to western boundary	G	G	A	R	A	A	G	G	G	R	G	R	R	**R**
21. Nevill Road	Old Shoreham Road to Woodland Drive	G	G	G	R	R	A	G	R	A	G	G	R	R	**R**
22. Church Road	Sackville Road to Palmeira Square	G	G	A	G	A	R	G	A	A	G	G	A	A	**A**
23. Dyke Road	Churchill Square to Seven Dials	G	G	A	A	A	A	G	A	A	R	G	R	A	**R**
23. Dyke Road	Seven Dials to Old Shoreham Road	G	G	G	A	A	A	G	A	A	G	G	G	A	**A**

Route	Section	Strategic fit	Expected demand	Connection to wider network	Available width	Interaction with junctions	Impact on buses	Impact on pedestrians	Impacts on parking	Impacts on loading	Impacts on traffic flow	Equality implications	Legislative requirements	Value for money	Overall assessment
23. Dyke Road	Old Shoreham Road to Dyke Road Drive	G	G	G	A	A	A	G	R	A	G	G	R	A	**A**
23. Dyke Road	Old Shoreham Road to A27	G	G	A	A	R	A	G	A	G	G	G	G	A	**A**
24. A23	Stanford Avenue to Mill Road	G	G	G	A	A	R	G	G	G	A	G	G	A	**A**
25. A23	Stanford Avenue	G	G	G	G	A	A	G	G	G	G	A	G	A	**A**
25. A23	Beaconsfield Road	G	G	A	G	A	A	G	A	A	A	A	A	A	**A**
26. Ditchling Road	Union Road to Viaduct Road	G	A	A	R	R	R	G	G	G	R	A	R	A	**R**
26. Ditchling Road	Viaduct Road to Princes Crescent	G	A	A	R	A	R	G	G	A	R	A	R	A	**R**
26. Ditchling Road	Princes Crescent to Woodbourne Avenue	G	A	A	A	A	A	G	R	A	G	G	R	A	**A**
27. A270 Upper Lewes Road		G	G	G	R	G	G	G	R	G	R	G	R	A	**R**
28. A270 Lewes Road	Union Road to Bear Road	G	G	G	A	R	A	G	A	A	G	A	G	A	**A**

Route	Section	Strategic fit	Expected demand	Connection to wider network	Available width	Interaction with junctions	Impact on buses	Impact on pedestrians	Impacts on parking	Impacts on loading	Impacts on traffic flow	Equality implications	Legislative requirements	Value for money	Overall assessment
29. A270 Richmond Terrace		G	A	G	G	A	G	G	G	G	A	G	G	A	**A**
30. A270 Lewes Road	Bear Road to Coldean lane	G	G	G	A	G	G	G	G	G	G	G	G	A	**A**
30. A270 Lewes Road	Coldean lane to Stoney Mere Way	G	G	G	R	A	R	G	G	G	A	G	G	A	**A**
30. A270 Lewes Road	Stoney Mere Way to University of Sussex	G	G	G	R	A	R	G	G	G	A	G	R	A	**R**
31. Elm Grove		G	A	G	A	A	A	G	R	G	G	G	R	A	**A**
32. Queens Park Road		G	A	A	A	A	A	G	R	G	G	G	R	A	**R**
33. Edward Street and Eastern Road	Pavilion Parade to Freshfield Road	G	G	A	G	A	A	G	G	G	G	G	G	A	**A**
33. Edward Street and Eastern Road	Freshfield Road to Arundel Road	G	G	A	R	A	A	G	R	A	A	G	R	A	**R**
34.North Street		G	G	A	G	A	R	G	G	A	A	A	R	A	**R**
35. West Street / Queen's Road		G	G	A	A	A	R	G	G	A	A	A	R	A	**R**

Route	Section	Strategic fit	Expected demand	Connection to wider network	Available width	Interaction with junctions	Impact on buses	Impact on pedestrians	Impacts on parking	Impacts on loading	Impacts on traffic flow	Equality implications	Legislative requirements	Value for money	Overall assessment
36.Terminus Road		G	A	A	A	G	R	G	G	G	A	G	R	A	**R**
37. Western Road	Montpelier Road to Churchill Square	G	G	A	A	A	A	G	G	A	G	A	G	A	**A**
37. Western Road	Palmeira Square to Churchill Square	G	G	A	A	A	A	G	G	A	A	A	G	A	**A**

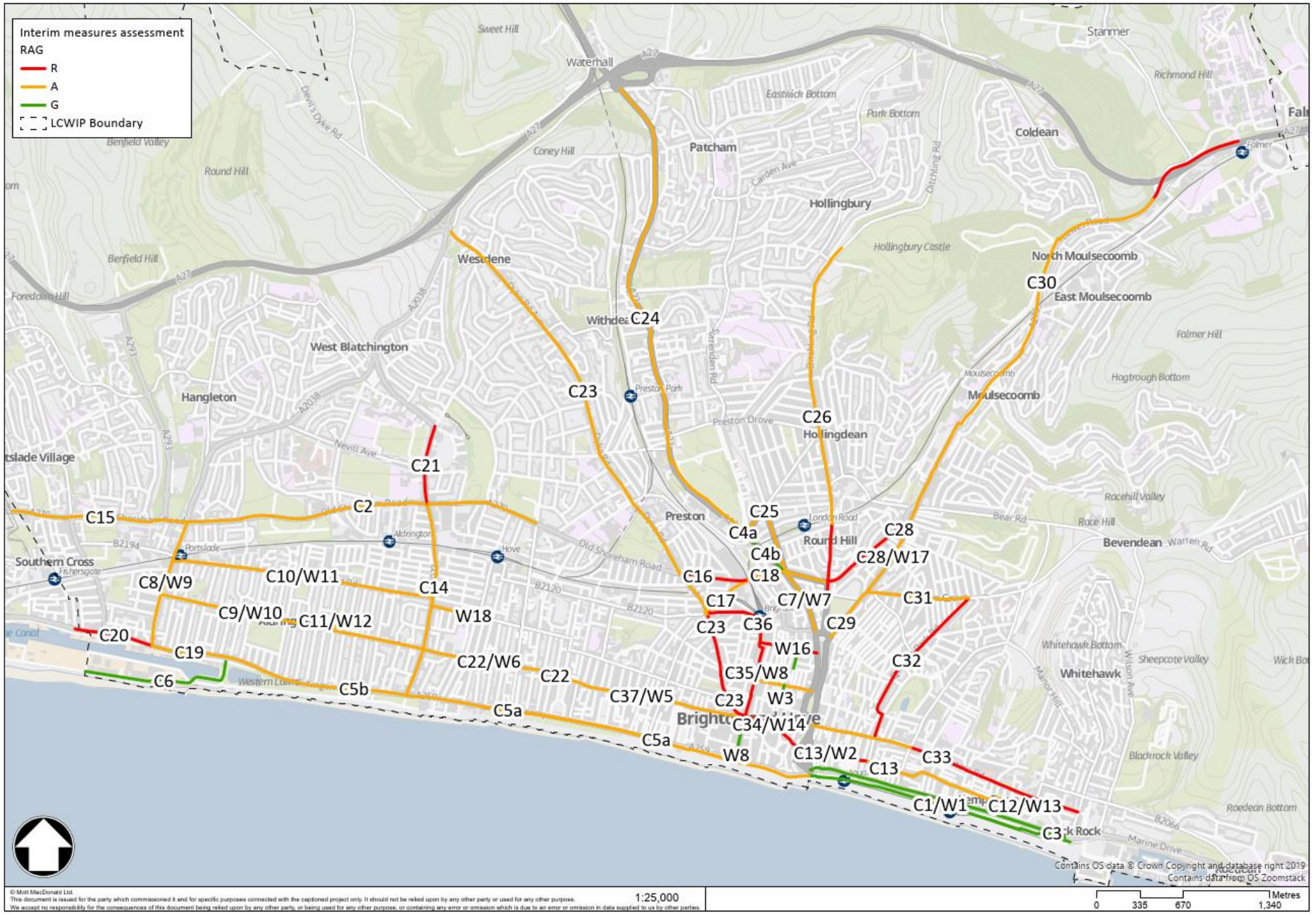
Table 6.2: Walking measures assessment

Route	Section	Strategic fit	Expected demand	Available width	Impact on buses	Impact on cyclists	Impacts on parking	Impacts on loading	Impacts on traffic flow	Equality implications	Security implications	Legislative requirements	Value for money	Overall assessment
1. Madeira Drive (Scheme already implemented)		G	G	G	G	G	A	A	G	A	G	A	G	**G**

Route	Section	Strategic fit	Expected demand	Available width	Impact on buses	Impact on cyclists	Impacts on parking	Impacts on loading	Impacts on traffic flow	Equality implications	Security implications	Legislative requirements	Value for money	Overall assessment
2. St James's Street	Old Steine to Upper Rock Gardens	G	G	A	R	G	R	A	G	A	A	R	G	**R**
3. Sydney Street and Gardner Street		G	G	A	G	G	A	A	A	G	G	R	G	**G**
4. The Lanes / Old Town		G	G	G	G	G	A	A	G	A	G	R	G	**G**
5a. Western Road	Churchill Square to Montpelier Road	G	G	G	R	G	G	A	A	A	G	G	A	**A**
5b. Western Road	Palmeira Square to Montpelier Road	G	G	G	R	A	G	A	A	A	A	G	A	**A**
6. Church Road	Sackville Road to Palmeira Square	G	G	G	A	G	R	A	G	G	A	G	G	**A**
7. London Road	Cheapside to Preston Circus	G	G	G	A	G	A	A	G	A	A	G	A	**A**
8. Queen's Road / West Street		G	G	A	R	G	G	G	A	A	A	R	A	**R**

Route	Section	Strategic fit	Expected demand	Available width	Impact on buses	Impact on cyclists	Impacts on parking	Impacts on loading	Impacts on traffic flow	Equality implications	Security implications	Legislative requirements	Value for money	Overall assessment
9. Boundary Road	Halyburton Road to New Church Road	G	G	A	A	G	R	R	G	G	G	G	G	**A**
10. New Church Road		R	A	G	R	G	A	G	A	G	G	G	G	**A**
11. Portland Road		G	G	A	A	G	R	A	A	G	G	G	G	**A**
12. Richardson Road		A	A	A	G	G	A	A	A	G	G	R	G	**A**
13. St George's Road	From Upper Rock Gardens to Eastern Road	G	G	A	A	G	A	A	A	G	G	R	G	**A**
14. North Street		G	G	A	R	G	G	A	G	A	A	R	G	**R**
15. North Road		G	G	R	A	G	A	A	G	G	A	G	A	**A**
16. Trafalgar Street		G	G	A	A	G	A	A	R	A	A	R	A	**R**
17. Lewes Road	Bear Road to Union Road	G	G	A	A	A	A	A	G	A	A	G	G	**A**
18. Blatchington Road		G	G	A	A	G	R	A	G	A	A	A	A	**A**

Figure 6.1: Summary of combined walking and cycling assessment based on feasibility and need



6.3 Assessment overview and recommendations

The following provides a summary of the assessment and recommendations for each route:

Madeira Drive

The temporary road closure has already been implemented and is providing a wide area for pedestrians and cyclists as both a through route and to allow socially distanced leisure use. The scheme has resulted in the removal of significant amounts of parking and continued access to businesses would need to be considered in the longer term. However, the route has been categorised as **green** overall.

Old Shoreham Road

Providing a cycle lane on Old Shoreham Road has been achieved through reducing carriageway capacity for vehicles. There is sufficient width along the length of the route and opportunities to extend the route to the western boundary to link with Adur and Worthing were a similar scheme to be implemented west of the border.

There are constraints along the route which would be difficult to overcome through temporary measures, such as at major junctions. There may also be an impact on traffic capacity through the removal of one lane of traffic on a dual carriageway; however, much of the route operates as wide single lanes and would be expected to have a more limited impact as traffic flows return to normal levels.

The route has a strong strategic fit in connecting to the existing high-quality segregated cycle facility to the east to provide an east-west link. However, width constraints mean this could not be extended west of Prestonville Road without closing the road to traffic in one direction.

Constraints posed by junctions means the section west of The Drive has been given an overall rating of **amber**. The section east of Dyke Road has been classified as **red** as a result of the traffic implications noted above.

Chatham Place provides an alternative east-west connection via Dyke Road; however, this would also have width constraints and it is likely a cycle lane could be provided in one direction only. This could be provided uphill on the basis this is where cyclists would be most vulnerable to overtaking vehicles. However, the width would not be able to be maintained for the full extent of the route, meaning it has been categorised as **amber**.

A259 Marine Parade

Marine Parade provides substantial opportunity to reallocate space to cyclists. The removal of parking and loading bays would be necessary; however, the width of the road means there would be an opportunity to retain much of this and provide replacement bus stops. Although a facility is provided on Madeira Drive, it is considered that the route would have good strategic fit, particularly for commuting cyclists from the east of the city. This is noting that it is not possible for cyclists north of Madeira Drive to access it, or exit, if they wish to leave before they reach the pier.

Given the impacts on traffic and parking are expected to be relatively small, this route has been given an overall assessment of **green**, although some issues, such as modification of pedestrian crossings will need to be addressed in the design.

Were the alternative option to remove through traffic from St James's Street, including buses, to be progressed, the priority for a facility on Marine Parade would reduce.

A259 Madeira Drive to Hove Lagoon

There is a clear strategic need for upgrading this facility as a key east-west route for both commuting and leisure journeys. It is currently at capacity, even without considering the additional need for social distancing. The wide carriageway, particularly to the east of the route makes a westbound cycle facility feasible; however, this would require the removal of either traffic lanes or parking. There are also localised sections which will compromise the quality of the cycle facility in the shorter term, most notably owing to construction works at the shelter hall (West Street junction).

Providing an eastbound facility is more complicated; however, this could continue to be provided in the short term by retaining the promenade cycle lane, the quality of which would be improved by reducing demand from westbound cyclists.

The route has been given an overall assessment of **amber**.

A259 Hove Lagoon to Western Boundary

The section from Wharf Road to Boundary Road provides similar opportunities to reduce parking or the width of traffic lanes to provide a westbound cycle route. However, the greater impact on residential parking may make this section harder to deliver.

The section west of Boundary Road is more constrained in width meaning the introduction of an on-carriageway facility as a temporary measure would not be possible for this section. This could be mitigated by providing improved north-south connections to Old Shoreham Road allowing cyclists to join the seafront route further east.

The route has been given an overall assessment of **amber** to Boundary Road and **red** further west.

A23

The A23 route has a high strategic fit and would provide an upgrade to the current sub-standard NCN route. On **Preston Road**, south of Preston Park, there is an opportunity to remove a traffic lane, noting that the A23 is single file further north. Therefore, this section has been categorised as **green**, although the relocation of bus stops and connection with the existing cycle facility north of Stanford Avenue would need to be addressed, as will queuing capacity for traffic turning right.

Further north, there would be an opportunity to introduce light segregation to existing on-carriageway facilities; however, addressing pinch-points on the shared section north of Preston Park would require the removal of traffic lanes or the temporary suspension of the bus lane, making them harder to deliver without further design consideration. There is also a need to address a missing link in the on-carriageway cycle route at the junction with Carden Avenue; however, it is likely that this would require a longer term intervention. This section has been categorised as **amber**.

The need for a route via **Beaconsfield Road** may not be as high a priority if a two-way cycle facility can be implemented on the northbound (Preston Road) arm of the A23 gyratory. For this reason, and the added complications of loading and bus stops, it has been categorised as **amber**. However, longer term, this route could provide a means for residents from this area to connect with the city centre without needing to negotiate traffic to reach Preston Road. As a minimum, it is considered there would be benefit in providing a two-way connection along **Stanford Avenue** to Preston Park and the NCN route. This would utilise the wide carriageway space in this location, although junctions at either end would need to be addressed which may require removing or reducing some traffic movements on a temporary basis, for example at Preston Park Avenue.

A270 New England Road, Viaduct Road Upper Lewes Road and Lewes Road

Viaduct Road provides an opportunity to remove a traffic lane to provide a bi-directional cycle facility, although the need to address junctions at either end means this has been categorised as **amber**.

This would lead into **Upper Lewes Road** where a cycle facility could be introduced for much of the length by removing parking. However, this would not be possible at the western end without removing traffic. For this reason, the route has been classified as **red** on the grounds of deliverability. However, it would fit the DfT's brief for closing major roads to through traffic and, along with Viaduct Road, complete a significant gap in the city's east-west cycle route.

The section of **Lewes Road** between Upper Lewes Road and Coldean Lane has existing on-carriageway cycle facilities. Although some light segregation would be possible, other improvements at junctions and bus stops would be harder to achieve through temporary interventions. This section has been classified as **amber**.

There would be an opportunity to continue the on-carriageway facility using the bus lane between Coldean Lane and Stanmer Park. This is not considered an immediate priority but may need to be reviewed as demand to travel to the universities increases, for which the capacity of the shared path is unlikely to be sufficient. However, it is noted that there is some current demand from those accessing Stanmer Park and travelling further afield. This section has been classified as **amber**.

The section north of this on the A27 slip road would require further work to tie into or widen the footway. It is also outside of the council's control (being managed by Highways England) and for this reason has been categorised as **red**.

South of Upper Lewes Road, there would be scope to upgrade the existing cycle facilities by making these mandatory, removing loading and parking and introducing light segregation. This section has been classified as **amber**.

There would also be an opportunity to continue a facility to St Peter's Church along **Richmond Terrace**, which would avoid the need to divert on to the path around the Level. This would be feasible; however, the immediate priority is less clear for a temporary intervention and, as such, it has been classified as **amber**.

Elm Grove

Elm Grove has a potential strategic fit in the longer term, were there to be a growth in electric bike use; however, the steep hill may restrict numbers of cyclists in the shorter term. There is scope to remove parking bays and create a 2m cycle lane, particularly in the uphill direction; however, it is unclear where this would be displaced to and could increase footway parking and restrict pedestrian space. The junction with Lewes Road would also need further consideration. This route has therefore been categorised as **amber.**

Queens Park Road

Queens Park Road would require the removal of a substantial amount of residential parking whilst there are width constraints at the southern end. The immediate demand for a temporary facility is also unclear and, as such, the route has been categorised as **red**.

The Lanes / Old Town

The Old Town area would be suitable for further access restrictions and the removal of parking. The introduction of pedestrian priority would also be consistent with likely LCWIP

recommendations for the city centre. Although there would be an option for access for servicing to be based on timed restrictions, access to private car parks would need to be maintained. It is also recommended that measures to restrict traffic access ensure permeability for cyclists.

For the roads within The Old Town, this measure has been rated **green**. The need to restrict access to individual twittens would need to be considered on a case-by-case basis and has not been considered in further detail here.

North Laine

As with The Old Town, measures to extend current access restrictions would be compatible with longer term interventions that could be recommended through the LCWIP. Therefore, measures on minor roads within the North Laine have been given an overall rating of **green**.

It is noted that, to maintain social distancing, access restrictions would also be required on **Trafalgar Street** and **North Road**; however, it is unlikely to be viable to close all east-west routes, particularly if access on Queen's Road is also restricted. North Road is considered to have higher crossing movements (as opposed to east-west). Therefore, it is suggested that this be kept open, with the removal of traffic lanes where possible at the eastern and western ends to provide additional footway capacity. On the basis of the measures assessed, North Road has been categorised as **amber** and Trafalgar Street as **red**.

Clock Tower Queens Road/North Street (to Brighton Station)

In order to provide social distancing space for pedestrians and a cycle facility, it would be necessary to remove all traffic in at least one direction. This would require bus routes to be re-routed and would therefore be challenging to deliver. It has been assessed as **red** overall because of these issues; however, it should be noted that removing traffic and bus capacity is likely to be necessary in some form.

Boundary Road

Measures considered for Boundary Road include creating additional space for cyclists and pedestrians by removing car parking. This proposal would also impact on buses and loading but have a high strategic fit and connections to the wider network, including Old Shoreham Road, and complement an extension to the seafront facility. This route has been given an overall assessment of **amber**.

An alternative would be to consider point-closures of certain sections, retaining access for buses.

New Church Road and Portland Road

The identified measures include removing parking on either side of the carriageway to make space for a cycle lane in both directions. As with the seafront and Old Shoreham Road, these routes provide an east-west connection and have strategic fit. However, it would not necessarily be a priority to implement all of these in the short term with a need to provide routes across the city. It is therefore recommended that either New Church Road or Portland Road be progressed.

New Church Road has greater opportunity to reallocate carriageway space owing to the available width, which would also reduce the impact on parking. There would also be less conflict with loading than there is on Portland Road; however, owing to the interaction with buses on New Church Road, the overall assessment for both streets is **amber**.

Richardson Road

The closure of Richardson Road for through traffic would be feasible and provide additional space for pedestrians and cyclists to use the carriageway without restricting access to businesses

completely. It would have less strategic fit than some of the other routes considered here as it would not provide an alternative longer distance route. It has been given an overall rating of **amber**.

However, there would be strong potential for complementary filtered permeability schemes on streets between the railway, Portland Road and New Church Road as per the example provided in Chapter 5.

St James Street, St George's Road and Eastern Road

Two-way cycling would only be possible were St James's Street to be shut to buses. It is also noted that this would be the only way that queuing and adequate social distancing could be accommodated in this location.

Access to residential streets either side of St James's Street would still be required which would restrict options for a complete closure. However, the introduction of pedestrian and cycle priority would mitigate this. The impact on buses, and the need to identify alternative stop locations which are accessible to all, means that this scheme would be harder to deliver; therefore, it has been categorised as **red**. However, it may be necessary to overcome these constraints for the reasons noted above.

East of Rock Gardens, there would be an opportunity to restrict access along St James's Street, Bristol Road, St George's Road and Chesham Road. This would provide a quiet route for cycling and also provide greater opportunities for social distancing measures alongside shops on this route, potentially by introducing localised 'give way to oncoming traffic' sections and / or removal of car parking. It is also noted that bus services on this section are relatively infrequent so the impact of any through traffic restrictions or closures would be reduced. This could also be maintained through introducing a bus gate.

The eastern section is considered to be feasible, although would require some issues to be addressed and has therefore been categorised as **amber**.

Sackville Road

Sackville Road provides a north-south route that connects the new temporary cycle lane along Old Shoreham Road to the seafront. The removal of parking along this street could allow for cycle lanes on either side of the carriageway with 'floating' parking on the outside of a cycle lane possible in some locations.

However, there are some pinch points, such as at the junction with Portland Road, and the route has been categorised overall as **amber**.

Neville Road

Neville Road would provide a connection between the Old Shoreham Road cycle facility and schools, residential and employment areas to the north. Potential measures would be to remove parking and the central hatching to create a cycle facility. However, the need to remove build-outs and central pedestrian refuges, and modify junctions means this would be more difficult to deliver as a temporary scheme. For this reason, it has been classified as **red**.

Church Road and Western Road

West of Montpelier Road, there is scope to create cycle lanes on either side of the carriageway as widths are wide, although some removal of parking on either side of the carriageway is likely to be required. Footways can also be extended to maintain social distancing, although it is unlikely both widened footways and dedicated cycle facilities could be provided. Either the cycling or pedestrian proposals are feasible and both have high strategic fit and connections to the wider

network. However, owing to the impacts on pedestrians or cyclists respectively and the need for parking and bus access / stops to be addressed, both roads have been classified as **amber.**

Blatchington Road

Blatchington Road has a need for measures to increase footway capacity for social distancing and queuing. This would be feasible if parking is removed; however, would also require amendments to bus stops. Temporary measures in this area would be consistent with the wider LCWIP; however, would not necessarily be of a nature where they would form part of a permanent scheme. The route has been given an overall rating of **amber**.

Dyke Road

Dyke Road provides a link into the city centre from the north and has strategic fit with the LCWIP. An upgrade to the northern section of Dyke Road (from Dyke Road Drive) is considered to be feasible, although there are some constraints which are unlikely to be possible to address as a temporary measure, particularly where the road narrows to the north and the junction with Mill Road and the A27. It has therefore been given an overall rating of **amber**.

The section south of Old Shoreham Road will have greater challenges with the removal of parking and loading; however, this is not considered insurmountable and the overall assessment is also **amber**. The southern section to Churchill Square would be more challenging without road closures in at least one direction. This has therefore been given an overall assessment of **red**.

Ditchling Road

The southern section of Ditchling Road (north of Union Road) has width constraints and is likely to require the removal of traffic in one direction to provide a two-way cycle facility. In addition, the topography is likely to limit a significant increase in usage in the shorter term and as such this would be less suitable as a temporary measure. It has therefore been given an overall assessment of **red**.

Further north, there would be available width to extend cycle facilities to the off-road path north of Woodbourne Avenue. However, this would require the removal of substantial residential parking and it is unclear where this could be displaced to. For this reason, the northern sections have been categorised as **amber**.

6.4 Complementary measures

As introduced in Chapters 4 and 5, it is also recommended that the following be considered to complement the above.

- Additional cycle parking to be introduced at destinations to cater for increased users. Cycle parking is not considered further as part of this Interim LCWIP; however, will be addressed as part of the full LCWIP.
- Bike Share hubs expanded to additional locations served by the new temporary infrastructure. Informal or formal park and cycle locations could also be considered where there is car parking capacity on the edge of the city. This could be achieved by locating Bike Share docking points in these locations.
- Review of residential areas to see whether filtered permeability would be desirable to create low traffic neighbourhoods. These could be used to link areas and create pleasant walking and cycling routes away from major roads at limited cost.
- Introduction of school streets, restricting vehicle access in the vicinity of schools, possibly in conjunction with filtered permeability schemes.

These would not be directly related to the more strategic measures identified by the LCWIP; however, would be complementary, particularly in and around the Core Walking Zones. It should also be noted that guidance from the DfT has stated that, although using low-traffic filtered permeability neighbourhoods will be funded, the priority is to provide direct, strategic routes.

6.5 Summary

This section has reviewed the parts of the network where temporary measures would in principle have strategic fit with the LCWIP. It is considered that there would be merit in progressing many of these. However, constraints such as space will limit how deliverable some of these are in the short term, unless the closure of major roads is considered.

7. Monitoring

7 Monitoring

This chapter provides an overview of the monitoring requirements for temporary schemes and provides recommendations for how the council could meet these.

7.1 Monitoring requirements

The DfT's guidance on temporary walking and cycling schemes has stated that local authorities should monitor the success of these. In particular, the Tranche 1 Emergency Active Travel Funding announcement stated that:

> "For any grant, Government is required to monitor the effectiveness of any public investment. We therefore expect you to have robust monitoring and evaluation plans in place. Funding for the second tranche of money will be conditional on demonstrating that bids represent value for money and evidence of suitable evaluation plans."

It is therefore necessary that a monitoring plan is developed in anticipation of an application for the next stage of funding.

An advantage of introducing schemes on a temporary basis, compared to permanent is that they can be relatively low cost and flexible. If it is considered appropriate to turn them into permanent schemes, designs can be refined based on the experience of the temporary scheme and before more costly infrastructure is installed. Monitoring of the success and operation would therefore assist greatly in this process.

7.2 Sources of data and ongoing monitoring

It is recognised that the urgency with which schemes are introduced means that there is not usually time to organise baseline data collection. Even if this were to be collected, data collected now will not be representative of typical conditions. It will therefore be necessary to build-up a picture of the pre-existing situation using historic data. This will come primarily from the city's network of Automatic Cycle Counters. Not every location will be covered by ATCs; however, these can be used to provide an indication of background change in cycling levels.

Post-implementation cycle and footfall counts can then be undertaken on specific temporary schemes following their introduction. This will help to build up a picture of use and establish the case for future schemes.

As part of the post-scheme monitoring, it will also be necessary to monitor other impacts of schemes, such as the displacement of traffic where roads are closed or traffic restricted. This will help inform whether any temporary schemes should be made permanent or the possible modification of these. However, this will not be the only factor and may be outweighed by the benefits of schemes where they are successful in generating increases in active travel.

Finally, qualitative feedback from surveys or other forms of engagement with stakeholders, for example, through the ongoing development of the full LCWIP, can be used to inform potential modifications to temporary measures were they to be recommended as permanent schemes.