

Cardiff Recovery Strategy





1. Introduction

Cardiff, like many cities, due to Covid-19 impacts is currently going through the most significant crisis in a generation that could potentially have a catastrophic impact upon the city's businesses, transport, environment and overall resilience.

The impact on our city has been substantial. Across the Cardiff and Vale Health Board area there have been, up to 28th May, 2,669 confirmed cases and 242 fatalities. The scale of this health crisis is unprecedented in our times and the loss of life has affected many families across the city.

Whilst primarily a public health issue, with the focus of intervention on saving lives and reducing the spread of the coronavirus, the lockdown implemented by UK and Welsh Government to limit social interaction required temporarily closing much of the economy.

The lockdown had an immediate impact on the way in which city and district centres operated. The vast majority of businesses within these areas, notably retail, hospitality and leisure sectors, were required to close. Some retail sectors that provided necessities remained open, albeit with social distancing and sanitation measures put in place. This led to queuing systems being introduced in supermarkets.

City centre businesses during this time were impacted significantly. A survey of businesses undertaken by FOR Cardiff, the city centre's Business Improvement District, noted that most businesses in the city centre ceased operating during the initial phases of lockdown, whilst two-fifths were concerned about a cessation of trading.

The recovery phase will be crucial to mitigate these impacts and allow Cardiff to get back on its feet and rebuild for the future. This strategy defines the essential actions to allow this to occur as effectively as possible in both the city centre and wider city.

2. The Business Need

2.1. Re-booting the Economy

As the Covid-19 public health crisis falls away it is likely to be followed by a long tail of economic impact. Many businesses will fail and others will take a significant length of time to get back to where they were. The impact across the UK has been estimated to be as much as one third of total GDP on some sectors.

In South East Wales, the main impact will be felt in Cardiff city centre, which accounts for around a third of the city's jobs and 10% across the wider region. The city centre hosts a large number of the businesses that are already, and will continue to be, the most impacted by the pandemic, due to their reliance on consumer footfall. Potentially 45,000 jobs in the city are at risk: it is anticipated that only a 20% reduction in the economy would see up to 10,000 jobs lost across these sectors.

It is therefore crucially important to safely re-open businesses as quickly as possible. Cities across the UK will be competing for footfall. Cardiff needs to win back the confidence of local people, visitors, students and investors as a safe, resilient and welcoming environment.

2.2. Engagement and Partnership Working

There is a commitment to partnership working and early engagement is taking place. Engagement will be targeted at key partners (e.g. FOR Cardiff, Emergency Services, Transport for Wales, Public Health Wales, Universities and Leisure/Entertainment/Events). Initial engagement sessions have already taken place to inform the development of the strategy, including structured sessions held by the city's Business Improvement District with specific retail, hospitality and professional and education sessions. Constant and consistent dialogue with business will underpin the continued development of the strategy. The Council has also led discussions with business representative groups and organisations in the city.

A list of the stakeholders engaged during this process is set out in Appendix D. Increased levels of engagement and focus will be needed as activity returns and focus shifts toward a future vision of the city centre.

Emerging Themes

The discussions with local employers and business operators have been very positive overall. All groups understand the need to get the city and the economy moving as soon as it can safely be achieved.

Local business operators have expressed a desire to take advantage of some of the behavioural and working practice changes, by retaining the positive elements highlighted by the impact of Covid-19. These include; increased opportunities for home working; an improved environment (such as, air quality & use of open spaces) reduced commuter transport demand; more use of cycling and improved cycle facilities and improved safe walking opportunities.

An integrated transport strategy is being prepared to better manage access across the city. Discussions are ongoing with the public transport providers, including buses, rail, car park providers and taxis. The operators are positive about supporting city centre employers and business (within operational safety constraints).

We will collaborate with different stakeholder groups throughout the recovery period. There is an accepted understanding that urgent action is required to re-open the city centre and local centres as welcoming destinations. It is accepted that some of the interventions and businesses need to be flexible to best accommodate the different local needs and pressures.

The pedestrian safety proposals have identified a number of potential spill-out areas which can offer socially distanced outdoor seating facilities. These would be used to support the local hospitality businesses, in the form of restaurants and cafes. It is recognised, by local business, that some changes may be required to the opening and closing times, or the way/times that vital functions, such as servicing and loading/unloading, are undertaken.

A long-term strategy to help the homeless and to care for the vulnerable is being developed, although these are issues which require careful consideration.

2.3. Making It Work

As the lockdown is released and footfall returns to the city centre, the commercial basis for businesses to re-open will be determined by the extent to which social distancing measures affect their ability to trade. A reduced operational floorplate and significantly lower flow-through of people will prove difficult for many to mitigate.

A strong public-private partnership is required to get the city working. Winning the public's confidence to come back will rely on effective management of social distancing measures on the public realm, in business premises, and in the transition between the two. The public must feel safe, but also must feel satisfied to ensure they continue to return.

A range of support and assistance for business will be needed. This may include innovative solutions to offset social distancing restrictions, more flexible hours of operation, new marketing campaigns, on-street management, and a range of other interventions, where appropriate, that help businesses to trade such as:

- Opening up public space for free, and implementing flexible licensing arrangements to support businesses in addressing constraints of social distancing
- Investing in shared covered outdoor spaces as 'spillover' space, including pop-up space, to maximise available space for business
- Extending operating hours for the city centre to reduce congestion
- Using the Castle as a safe marketplace for local businesses, using digital technology to enable city centre businesses to utilise a new 'city square'
- Co-ordinated management of the city centre through engagement with the BID and public service providers
- Additional support to improve shop frontages for small hospitality businesses and retailers
- A new 'Visit Cardiff' local marketing campaign that promotes buying local and staying local.



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2.4. Making it the Place to be

Suppressing and restricting innate human behaviour such as meeting, gathering and chance encounters represents a significant challenge to placemaking ideals which seek to create life and animation in our streets and spaces. Restrictions on businesses and events which form part of our shared experience will further compound this issue. Inventive responses and a focus on problem solving will allow us to:

- Affirm a sense of safety whilst creating a welcoming green environment
- Adapt streets and spaces to allow social behaviours to continue – meeting, sitting, browsing whilst maintaining safety measures – ensuring that the city is still an exciting and fun environment
- Avoid an overwhelming sense of control and restriction
- Create an approach that allows for constant innovation which can be implemented at pace
- Ensure effective engagement
- Gain public support and retain it.

2.5. Keeping it Moving

As the economic re-opens, it will be essential to ensure that people can travel and move around while maintaining social distancing. This will involve:

- Developing a system which effectively and intuitively encourages social distancing
- Allowing greater space for pedestrians and cycles while enabling essential vehicle movements (such as for emergency services, loading/deliveries, disabled parking)
- Enabling responsible use of public transport to and from the city centre and across the city
- Implementing measures which are adaptable to changes in regulations and behaviour/demand
- Implementing measures which are affordable, both in terms of capital expenditure and human resources
- Closely monitoring measures - adapt/change based on success.



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2.6. Times Are Changing

The 'new normal' will include the need to potentially fundamentally change commute/office times. City centre businesses, including retail and restaurants, will need to extend and flex opening hours to allow more access spread throughout the day, evening and night.

The city centre needs to be flexible to support recovery – it needs to provide more space and time. Given the challenge with public transport – it will also need to offer more flexibility in terms of the arrangements for safe access. Time and space in the city will need to be stretched, more flexible and adaptable.



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3. Transport Impacts

Covid-19 has had a dramatic impact upon transport usage with potentially catastrophic impacts upon long term sustainability unless action is taken. It is estimated that commuting levels in Cardiff are around a third of pre-Covid-19 levels. Following lockdown, it is estimated that this will return to around 50% of pre-Covid-19 levels, this will be due to a combination of increased working from home, more flexible working practices (in particular amongst those returning from furlough), and an increase in unemployment, with a limited percentage of the workforce asked to self-isolate as part of emerging testing/contact tracing procedures.

Currently rail passenger numbers are only at around 5% of pre-Covid-19 levels, whilst bus passenger numbers are at around 10%. Previously bus and rail generally operated at around 50% of their seated capacity across the day as a whole. Implementing social distancing and not exceeding 15% of seated capacity, is likely to result in a reduction in bus and rail passenger numbers of 70% pre-Covid-19, if the service frequency is the same as pre-Covid-19.

With regards to car specifically, car numbers were around a third of pre-Covid-19 levels during the early stages of lockdown, however as of the third week of May traffic levels were approaching 50% of pre-Covid-19 levels. Traffic levels during social distancing in the run up to the lockdown were at around 80% of typical levels, it is therefore possible that following easing of restrictions that traffic flows will again return to at least these levels if not higher, particularly in response to the significant decline in use of public transport. On average, peak time traffic congestion over the course of the lockdown has been fairly consistent at around 20% pre-Covid-19 levels, however as traffic continues to rise, so will congestion at some point begin to rise with it.

With regards to active travel, footfall within the city centre during lockdown has been around 10% of pre-Covid-19 levels. Meanwhile the number of cyclists recorded at North Road near the Royal College of Music & Drama is currently on average 40% of pre-Covid-19 levels. As an overall picture of cycling during the lockdown, Nextbike rentals have typically been around 50% pre-Covid-19 levels. The lack of travel by students and tourists will have impacted upon the use of Nextbikes and levels of active travel in general and around the city centre. In contrast in the vicinity of Cardiff Bay, pedestrian numbers have more than doubled along Eastern Bay Link, while cycling numbers have also increased by around 70%. Walking and cycling numbers (combined) have also consistently been more than 50% higher than pre-Covid-19 levels, suggesting a potential resurgence in leisure-based active travel as part of daily exercise allowance. This strategy needs to mitigate the worst impacts, and take forward opportunities to support public transport and enable active travel. All car use will need to be effectively managed.



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Many areas have seen an improvement in air quality and reduction in traffic noise as a result of lower levels of car traffic, and local communities are keen to retain this. Since more stringent lockdown measures were introduced on the 16th March by the UK Government, levels of nitrogen dioxide (NO₂) have dropped significantly. A daily average figure of 9.5µg/m³ (micrograms per cubic metre) was measured at Cardiff's city centre monitoring station, and 17.5µg/m³ at the Newport Road Station. Although yearly comparisons are not considered conclusive given the array of parameters that can influence air quality levels from one year to the next, datasets gathered in 2019, coincided with the same analysis period from the same two monitoring station recorded daily average figures of 25µg/m³ at the Cardiff's city centre station, and 33.8µg/m³ at the Newport Road station.

Notwithstanding the fact that whilst NO₂ concentrations have decreased, there have been slight increases in particulate pollution, overall air quality has significantly improved. It is important to recognise the major benefits of these improvements and to seek to retain them whilst reviving the economy.

4. Policy and Best Practice

4.1. Emerging Guidance

This strategy is informed by two key Government guidance documents:

- Coronavirus (COVID-19): Safer Public Places - Urban Centres and Green Spaces¹ (UK Government guidance)
- Travelling safely during the coronavirus pandemic: guidance for the public² (Welsh Government guidance)

Safer Public Places provides guidance on how to achieve social distancing in areas that are likely to have high footfall such as parks, high streets, district and city centres. Whilst the guidance has been produced by the UK Government and specifically applies to England, it provides an indication of the considerations, assessments and requirements which will be necessary to protect public health as lockdown measures are eased.

The Welsh Government's guidance on travel also emphasises the requirement for social distancing and for "businesses that are open to take all reasonable measures to ensure 2 metres physical distancing between people".

UK Government Guidance



4.2. Best Practice: How other cities are responding

Across the world cities are implementing emergency safety measures to enable their residents to maintain social distancing with new initiatives being announced on virtually a daily basis. Below is a summary some of the best practice from around the world (see Appendix B for more case studies).

4.2.1. Athens

The Greek capital of Athens has announced plans to allocate 50,000 square metres of public space for cyclists and pedestrians. It will include a four-mile "grand walkway" uniting archaeological sites in the historic centre. In addition, there are plans to enlarge squares, pedestrianise boulevards and widen pavements. The intention is for Athens to be cleaner, greener and better lit to ensure it is as welcoming as possible for residents and tourists.

4.2.2. Brussels

Brussels has transformed its entire city centre into "slow streets" in order to give residents more space to walk, cycle and shop. A 20 km/h (12 mph) limit has been implemented across the city centre and drivers must give priority to pedestrians and cyclists. The city is also creating 25 miles of cycle lanes.

¹ <https://www.gov.uk/guidance/safer-public-places-urban-centres-and-green-spaces-covid-19>

² <https://gov.wales/travelling-safely-during-coronavirus-pandemic-guidance-public.html>

4.2.3. Vilnius

Bars, cafes and restaurants will be allowed to expand into squares and streets free of charge in Lithuania's capital, Vilnius this summer as part of the city's response to Covid-19.

The city is giving over most of the public space in the city centre to bars and restaurants. The aim is to allow businesses to expand their outdoor seating areas to ensure they can operate at or close to their normal capacity while observing social distancing rules which requires tables to be placed at least two metres apart. While public safety remains the city's top priority, the measures will help businesses re-open and support the economic recovery.

Vilnius: The city aims to allow businesses to expand their outdoor seating areas.



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4.2.4. Berlin

Berlin has widened existing cycle lanes and installed light segregation to help with social distancing and increase safety. An initial pilot project showed the reduction in traffic due to the lockdown meant that the measures improved the safety of people cycling without impacting traffic. They are now rolling out the measures across the city which can be removed when the current restrictions on movement are lifted.

4.2.5. Manchester

Manchester City Council has closed a section of Deansgate, one of its key shopping streets, to motor traffic to enable visitors and workers to socially distance more easily as they return to shops and offices. The closure has been carried out using removable bollards, which can be taken down for a short period once per weekday, allowing windows for local businesses to accept deliveries. Planters have been placed in the road to make the environment more welcoming for visitors.

The part-pedestrianisation will create new space for events and markets to be held, stimulating activity and increasing footfall as restrictions on movement to limit the spread of Covid-19 are lifted. In other busy areas of Manchester, footways have been widened to allow people to walk from public transport hubs to nearby shops or their place of work, while observing social distancing guidance.

Manchester: Closure of Deansgate with access for active travel only.



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5. The Strategy

Vision

During the Covid-19 recovery period we need to establish conditions which ensure the City can fully support local business, retailing, and the wider range of positive social and leisure activity associated with Cardiff.

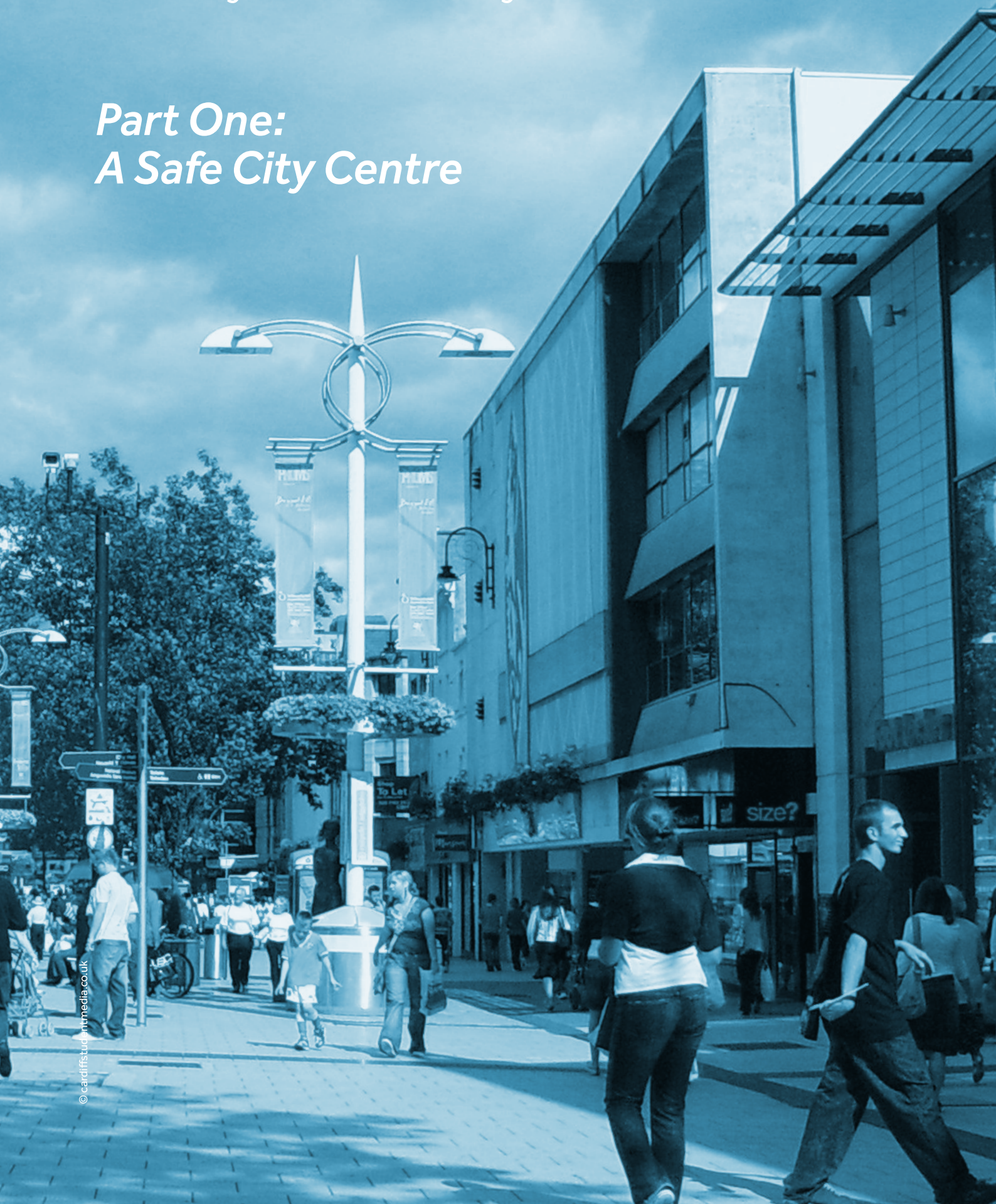
Central to this is a drive to create an environment which is perceived as safe, fully accessible, socially distanced, healthy, well managed and welcoming. We must highlight what people 'can-do' as opposed to what they 'can't do' to help establish a return of footfall to the city and district centres.

Objectives

- Re-open Cardiff
- Create a welcoming city centre and local centres (accessible to all)
- Support businesses to re-open
- Re-establish footfall in the city centre, local centres and key destinations in a safe way that complies with social distancing requirements
- Help people to access the city centre, local centres and key destinations around the city in the absence of normal public transport capacity
- Promote Cardiff so that it develops a brand and reputation as a safe, supportive, accessible, green and forward-thinking place to visit.

6. Key Recovery Measures

Part One: A Safe City Centre



6.1. A Safe City Centre

It is clear that the city centre will have a concentration of the problems impacting upon the commercial areas of the wider urban area. There are three main strands of activity which must be supported in terms of a range of access, safety, management, environmental positive measures to re-start the city's daily life and economy.

These are:

- **Employment** – provision to support commuters attending work
- **Retail** – supporting the re-opening of retail units by the provision of safe social distancing opportunities in the public space
- **Hospitality** – supporting the re-opening of the hospitality industry in the city by supporting social distancing and re-allocation of open space to facilitate safe activity.

The proposed measures will be targeted at welcoming users (workers, business, shoppers, visitors) back to the city centre.

6.1.1. Getting To The City Centre

Access to the city centre needs to be perceived as easy and safe, enabling workers, shoppers; and visitors to enter and use the city. The ability to commute to work must be accommodated, particularly given the reduced desire and opportunity to use public transport (bus and train). Employees, who need to access the centre to work, are likely to need to travel by a different mode, be that increased walking and cycling or by car.

The city centre strategy therefore needs to facilitate and accommodate all the available transport and active travel options, without having a detrimental impact upon the public transport sector. The strategy must, in partnership with public transport providers, ensure a safe environment at the transport interchanges (stations, bus stops and car parks).

Additional direction and marshalling of users (such as shoppers and visitors) will be an inevitable outcome of welcoming people back to the re-opened re-energised city centre.

Public Realm – it is essential that the key streets, public spaces and new spill out spaces allow social distancing, are safe, well connected, and present an attractive green environment appropriate in a capital city environment. Also, the strategy identifies a number of focal welcoming areas and larger 'spill out spaces' where there can be more managed and safe events, and socialising activity.

Car Parking – many of the existing city centre car parks will need to operate at a reduced capacity, primarily to enable people to leave and return to their cars in a safe manner, whilst using the stairs, or lifts. A combined (public/private) approach to the availability of city centre car parking is being developed. To support this a comprehensive network of park and ride facilities needs to be developed to manage car access away from the centre but allow easy walking/cycling/bus access for the 'last mile' of the journey.

Walking – the number of people walking in the centre will increase as restrictions are lifted and additional walking space will be provided to help people undertake their daily activities whilst maintaining safe social distancing. Within the city centre a number of walking measures and protocols are being developed (in tandem with local business operators). The walking strategy will be outlined below.

Cycling & Cycle Parking – improved cycleways are being introduced to access the city centre, such as the pop-up facility on Castle Street. It is important that there is a systematic network of 'pop up' routes into the city and local centres. There will be increased secure cycle parking facilities installed on-street within the city centre to encourage and facilitate increased cycle use by visitors. Local businesses are being encouraged to increase the amount of secure cycle parking within their properties for staff parking. We have an on-going dialogue with Nextbike about the location and availability of their cycles.

Other (retail centres, arcades, transport interchanges) – safe access to/from the shopping centres and arcades within the city centre is an essential part of the overall walking strategy. The strategy will include queuing areas to access the facility in a safe manner. These facilities will be integrated into the council's on-street strategy.

Disability action groups – in order to ensure that Cardiff remains accessible and that all groups are catered for, we are engaging with the city's disability groups. Equality impact assessments will be undertaken for all measures and we will work closely with disability groups to find positive solutions to any issues identified.

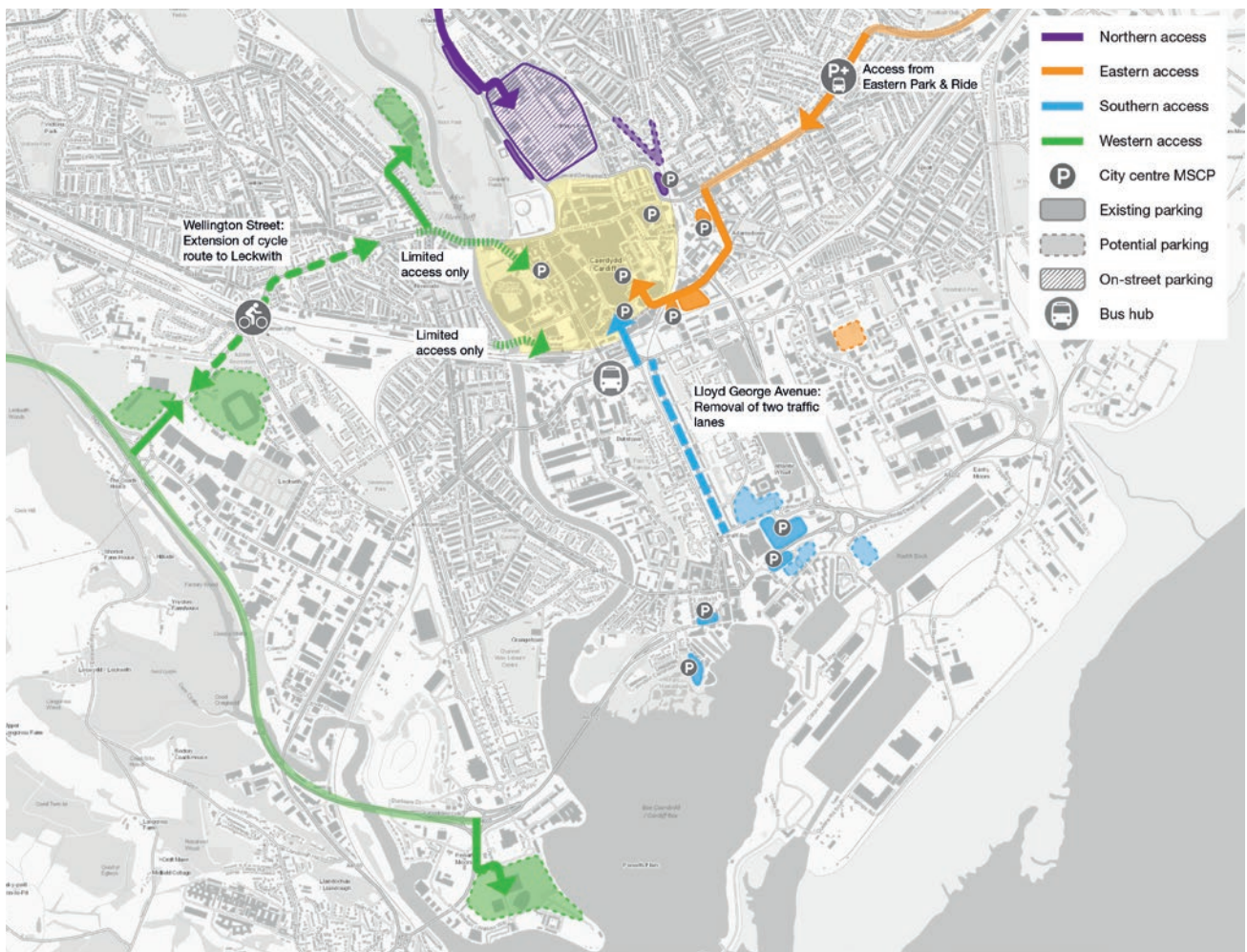
Security – all on-street security issues are being discussed/agreed with the police and security groups. The police have offered support to manage pedestrians and any social distancing issues.

Dragon Heart Hospital – a temporary hospital located at the Principality Stadium opened on the 13th April 2020 to help deal with the impact of the Covid-19 pandemic in Wales. Access will need to be maintained for its continued operation, and during the decommissioning phases.







6.1.2. City Centre Plan

Accessing the City Centre – there will be an integrated city network plan to ensure that people can effectively access the city centre via car, public transport and active travel. To enable this network plan to work the city centre will need to be put into a form of event mode. This will allow the limited city centre spaces to be used most efficiently to deliver all the need for city centre businesses for public movement, access, spill-out space and safe distancing. This new arrangement will need to be designed to allow it to be in place for the duration of the recovery period.

This arrangement will establish a managed cordon around the city centre allowing car access, and bus/active travel through movement. Detailed plans will follow.



Street Hierarchy – pedestrians within the city centre will need to follow signed/marked routes to facilitate movement at a safe social distance. A plan is being developed to cover all city centre streets, dependent upon footfall and the availability of safe (socially distanced) walking space.

-  Pedestrianised street
-  Pedestrian priority street
-  Mixed mode street
-  Gateway point
-  Internal routes / arcades
-  Long-term green loop



One-way pedestrian movement is proposed to ensure that the city centre operates within a safe environment. Pedestrians (shopper/workers/visitors) will be directed to follow a pre-designated route. There will be a series of one-way movements and identified places to reverse the direction of travel (a leap-frog point). A series of routes around the city centre is being developed taking account of the retail offer, transport hubs (bus stops, taxi ranks, stations & car parks).

-  New welcome gates (car & bike)
-  Cycle parking
-  One way loop
-  Leapfrog point (change of direction)



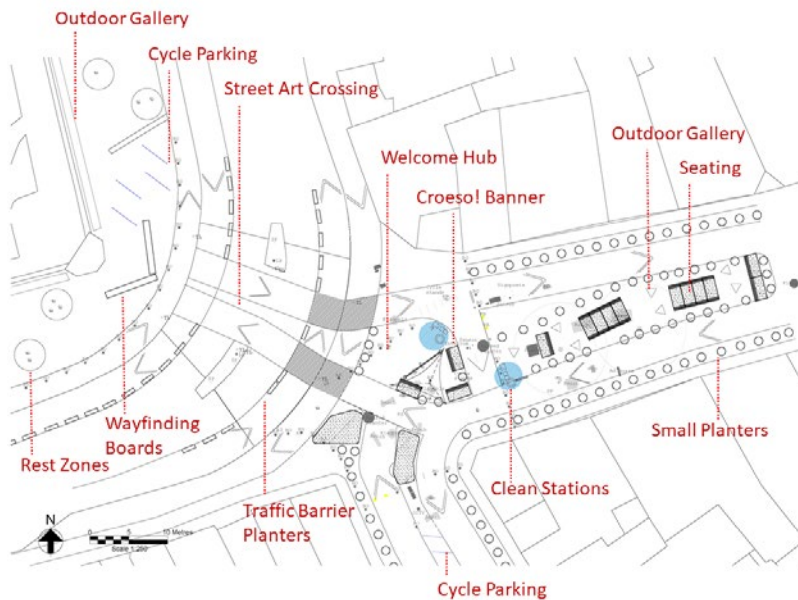
Queues – as each retail unit /shopping centre/arcade will only be able to operate in a safe manner by restricting the number of users at any one time, there will be an inevitable impact on the streets outside the shops. Designated queuing areas will be identified and marked on-street. There will need to be some (hot/cold/wet) weather protection for people queuing outside any of the attractions.

Illustration of initial measures on St Mary Street



Potential **conflict points & pinch-points** have been identified where pedestrian movement will need to be restricted to a one-way travel, or single file movement to ensure an adequate social distance can be achieved. These locations have been identified and are illustrated in the pedestrian movement plan.

Welcome Points – all visitors will need to understand how the city is working to help reduce the possibility of frustration, disorientation or fear. Publicity and communications will be part of the daily experience before, at entry, within and after leaving the city centre. Welcome points will be installed at the main pedestrian access points to the city. These points will offer information to the visitor on how the city centre works, how to visit in a safe way, how to reach particular destinations, a walking plan, hand washing facilities, cycle parking facilities and a member of staff to assist.

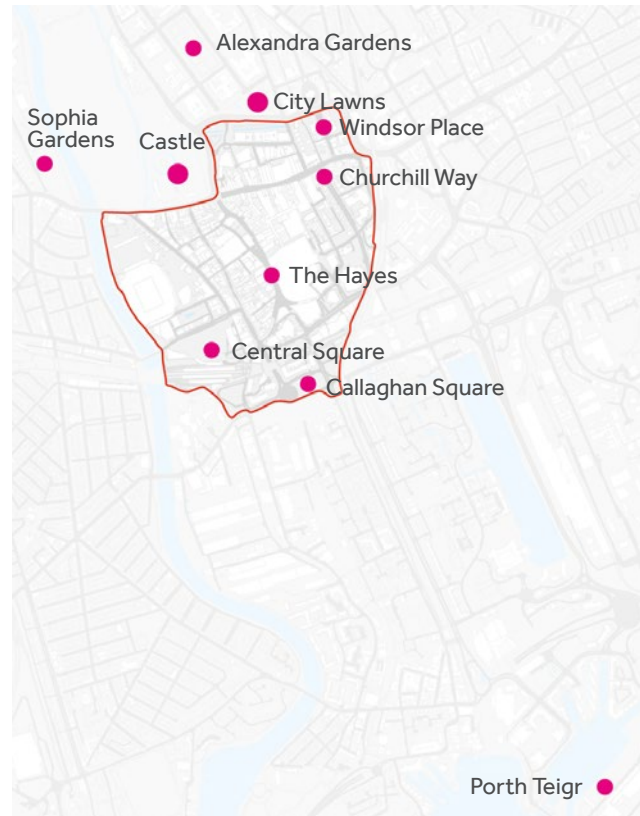


Signing & street ambassadors – will be provided throughout the city centre to assist visitors and re-enforce the information provided at the welcome point. There will be direction signing (both signs and floor markings), channels indicated on the floor showing queuing space outside shops, extended queuing space, walking channels and any other areas available for public use.

Spill-out areas – the location of possible spill-out areas to better facilitate the hospitality trade as the city's offer re-opens have been identified. These spaces can offer shared/dedicated outdoor seating space for restaurants. They will create an environment that is friendly and safe with active management to encourage positive behaviours and a welcoming atmosphere.

City centre management – we will continue to fully engage with the business community as the detailed plans are both designed and implemented on-street. This will enable us to make changes to any features which need improvement, or removal, to better facilitate the city's ability to function.

Bus operators and bus stops – whilst the bus services are currently operating in a reduced manner, it is anticipated restrictions may ease in the coming months which will increase capacity on buses. Any relocated bus stops will have bus boarders and shelters, and bus routing in the city centre may need to be amended to suit.



6. Key Recovery Measures

Part Two: A Safe Connected City



6.2. A Safe Connected City

6.2.1. Introduction

We are proposing a range of measures throughout Cardiff to enable an integrated strategic approach across the city, to achieve the necessary social distancing and ensuring people's safety.

6.2.2. Local Centres

The Covid-19 lockdown has led to a welcome increase in people using shops in local and district centres. In many cases, pavements are not currently wide enough to enable social distancing and this is exacerbated by the need to queue outside shops.

It is important to introduce measures to ensure local centres can re-open for businesses, whilst ensuring safe access for the public. We will introduce a range of schemes throughout the city to ensure local and district centres can return to operating as soon as practical.

We will:

- Introduce a package of safety and greening/clean air measures in local and district centres such as pavement widening, cycle routes, street greening and more significant measures where practical and appropriate
- Implement 20mph speed limits to all local and district centres that are currently 30mph
- Roll out measures being currently piloted at Wellfield Rd to other local and district centres.

Illustration of emerging temporary proposal for Wellfield Road



6.2.3. Key Demand Centres: Parks/University

Facilitating space for socially distanced play is a key intervention for children and young people which would also help reduce pressures on the city's green spaces.

We will:

- Identify other key locations such as Parks, Universities and develop schemes to ensure social distancing, and effective access.

6.2.4. Car Access

As lockdown restrictions ease and people return to work, it is important that the transport system is managed in a way that enables social distancing and keeps people safe. Capacity on public transport is likely to be limited for several months and there would be negative impacts in terms of air quality, congestion and emissions if everyone chose to drive instead. Furthermore, 29% of households in Cardiff do not have access to a car or van meaning it is essential to provide safe and sustainable alternatives to public transport. This will largely be in the form of improving walking and cycling infrastructure to enable more trips, particularly shorter journeys, to be made by active modes.

We will:

- Implement a citywide speed awareness programme aligning with proposals to extend 20mph zones across Cardiff
- Identify and deliver a network of city car parks in new and existing locations to comprehensively manage in a sustainable way the need for car access. This would complement existing city centre car parks
- Integrate into all new and existing parking areas effective 'park and stride' and 'park and pedal' approaches to maximise public transport and active travel links to the city centre.

6.2.5. Cycling

There has been a significant increase in people cycling for both exercise and for essential journeys since the start of the lockdown. This is due to a combination of factors including advice to avoid public transport if possible and the newly quiet roads feeling safer and more attractive for cycling.

We will:

- Deliver a comprehensive network of 'pop-up' cycle ways linking city centre, local centres, major destinations, schools, and transport/demand hubs
- Provide additional cycle parking in key locations in the city centre and local centres
- Review the potential for creating 'park and pedal' sites.

6.2.6. Public Transport

It is expected that public transport operators will start to increase the number of services as lockdown restrictions ease, returning towards pre-Covid-19 levels. However, it is likely that there will be a significant reduction in overall capacity on public transport because of the need to keep to social distancing rules.

Public transport operators and authorities such as Transport for Wales and Cardiff Bus will need to introduce measures to control use of their services and ensure safe operation. This could mean that overall capacity is reduced to only around 15% of pre-Covid-2019 capacity. We will:

- Support public transport use by implementing safety measures, pavement widening, and, where relevant, more significant measures around key locations, train stations and bus stops
- Engage fully with public transport bodies and operators including Transport for Wales and Cardiff Bus
- Implement measures to mitigate loss of bus and rail capacity including walking and cycling schemes
- Install bus priority measures such as bus gates to maximise the capacity of buses by minimising journey times and ensuring reliability of services
- Introduce additional pavement widening adjacent to rail stations, where there are safety concerns.

6.2.7. Schools

When schools re-open on 29 June, it is likely that start/finish times will be staggered and/or year groups will return incrementally. This will reduce the volume of students and parents outside the school gates at any one time. However, even with these strategies, additional space will be needed in some locations to facilitate social distancing and to prevent the need for vulnerable road users to step into the road.

We will:

- Implement targeted improvements, including pavement widening and more extensive measures, outside schools to enable safety and social distancing for pupils, staff and parents
- Introduce temporary 20mph limits on roads around schools where possible
- Consider temporary road closures at drop-off and pick up times.

6.2.8 Greening and Clean Air

One of the major lessons from the Covid-19 Crisis has been the positive difference a cleaner and less congested environment has on the city. Many exemplars exist where cities have used the delivery of major benefits in air quality and city greening have major economic benefits as well as those related to healthy and wellbeing.

Where possible, planting will be introduced to streets to add interest. This is likely to be in the form of planters which can be easily moved if needed. Bold avenues of trees will be introduced with streets themed using different tree species. These will be complimented by lower level annual and permanent planting.

We will:

- Implement a strategy for environmental improvement in the city centre and local centres
- Ensure that the green environment and clean air considerations will be central and fully integrated into all the proposals that we will be taking forward
- Record air quality in key areas across the city to allow us to understand what impact the proposals have for air quality in the city
- Employ best practice.

7. Promotion and Publicity

We are seeking to implement a wide range of measures to safe and sustainable travel as lockdown restrictions are eased. It is essential that the roll out of these interventions is accompanied by targeted information and publicity. In addition, lessons learned from around the world show how grass-roots action groups and the third sector can play a key role in taking ownership of the initial strategies and drive positive change.

We will provide information about:

- What we are proposing to do
- Why particular measures are necessary
- Where and when they will be introduced.

Therefore, to support implementation of the infrastructure measures detailed above, we will deliver a programme of communications including:

- Information on programme content and timetable
- Publication of plans and proposals in accessible formats including Frequently Asked Questions, explainers and myth busting etc
- Travel information including 'how to guides'
- Information on highway network changes/public transport provision
- Campaign messaging to influence user behaviour (e.g speed awareness)
- News feeds with bulletins and good news stories etc – publicised across local and social media
- On-street user information provided by ambassador personnel e.g. the support Safe City Centre strategy
- Engagement with residents in the city centre who will have a different experience to those visiting.

8. Funding/Delivery

The safety of our residents is our prime concern and our highways and transport teams are prioritising the delivery of these measures while ensuring the safety and day to day operation of the network. Measures will be implemented in line with the phased approach set out in Section 8 of the strategy and all relevant teams are working closely together to quickly identify, design and safely implement interventions.

The initial focus will be on key safety measures such as reducing speed limits, raising awareness of the need to drive safely and footway widening. Interventions are likely to be made using cones, barriers and bolt down kerbs that can be installed and adjusted quickly.

Given the urgent need to implement safety measures, the usual level of public and stakeholder engagement may not be possible. However, most measures are intended to be temporary and will be under regular review, so they can be removed when no longer required.

Given the urgent need for intervention and the uncertainty around the lockdown and recovery, the timeline, measures and locations are likely to change and evolve over time.

Local Sustainable Transport Covid-19 Response Fund

The Welsh Government has made grant funding available to local authorities to introduce temporary measures to improve the safety and conditions for sustainable and active travel⁴. Initial expressions of interest have been invited for funding for 'pop-up' measures that enable social distancing. These can include schemes such as footway widening, temporary cycle lanes, speed restrictions, and bus infrastructure improvements. Most measures are expected to be introduced on a temporary or experimental basis. However, where they are effective, should be introduced on a permanent basis. Measures are expected to be introduced from early summer.

We have submitted an expression of interest in the funding to implement the measures detailed in this strategy, as set out in Appendix B.

4 <https://gov.wales/written-statement-funding-local-sustainable-transport-measures-response-covid-19>

9. Programme & Next Steps

As the lockdown measures are relaxed by the Welsh Government over the coming weeks, this will enable the city and local centres to begin re-opening, and we need to be ready to implement the changes outlined in this strategy. The strategy sets out the intended approach the council will take to support the re-opening of employment, retail and leisure.

This strategy sets out a programme allowing us to rapidly implement changes on-street to make the city both welcoming and safe. Some of the measures may look temporary in the first instance, but these will be developed to provide an improved cityscape in a short time. A number of the measures are likely to be adapted to give a more permanent appearance in the following months so that the city can fully function for the duration of the emergency, and into the recovery period.

In addition to schemes which have already been installed, such as Castle Street and Roath Park, more changes will be implemented over the next few weeks. This will include:

- Speed limits (more 20mph zones)
- The width of footways (pavements)
- More cycleways
- Manned city centre welcome points
- Demarcated pedestrian footways
- Queuing space
- Spill-out areas
- Changes to car parking; and traffic movement (including buses) around the city centre.

These changes are likely to include some measures that may be amended in the light of stakeholder engagement and the results of monitoring, but some will become longer-term depending on their success and the nature of the recovery.

It is possible that some of the changes work so well that they become a permanent feature of the new city and district centres.

Appendix A

Best practice case studies

UK best practice

As outlined in the main report, many cities across the UK and globally are acting quickly to provide safe space for walking and cycling and to implement measures to support their cities recover from Covid-19. New plans and measures are being announced on almost a daily basis.

Best practice examples from across Europe and the UK are outlined in the main report. Some further best practice from the UK and the rest of the world are detailed below.

London

Hammersmith and Fulham

The London borough of Hammersmith and Fulham have responded to feedback from residents by temporarily removing car lanes and widening footways to help with physical distancing in the busy shopping areas King Street and Uxbridge Road. Barriers and weighted cones have been installed to take roads down from two-lane to one-lane for vehicles to allow pedestrians to queue safely for essential supplies from food stores and pharmacies, and to pass each other while physically distancing.

Measures include:

- Green plastic road barriers in the carriageway to extend pedestrian space
- Physical distancing white markings on footways
- Partial closure of some loading bays
- Bus layby and bus stop closure (buses can still stop but will stop in the running lane, stopping following traffic).

Figure 1: Footway widening scheme in Hammersmith and Fulham, London



© Hammersmith and Fulham Council

Hackney

Hackney in London has suspended parking and closed its busy Broadway Market to through traffic to help residents and shoppers maintain social distancing. The measures were introduced following concerns raised by residents and the police that people were unable to socially distance on crowded pavements. Access for residents and deliveries to businesses has been maintained.

Liverpool

Liverpool City Council are investing £450,000 in outdoor spaces to create covered seating areas. The funding is targeted at local independent businesses to offset the loss of internal space due to the need to social distance. Liverpool is also planning to spend £2 million to create seven temporary cycle routes to boost active travel around the city centre.

Brighton

Brighton and Hove Council closed Madeira Drive, a major seafront thoroughfare, to motor traffic to provide safe space for walking and cycling. The emergency measure was introduced in response to residents' concerns about the speed of motor traffic as well as the ability of people to socially distance. Madeira Drive is also near to the Royal Sussex County Hospital meaning that closing it to motor vehicles has created a safe route for NHS staff to walk and cycle to work. The Council are also considering closing other roads in the city.

Figure 2: Madeira Drive in Brighton has been closed to motor vehicles.



© ibikebrighton, Twitter

International best practice

Initiatives are also being implemented across the world with many global cities such as Bogota, New York and Milan being ahead of UK cities in terms of the speed of implementing measures and the scale of ambition.

Paris

Paris, where the average journey by vehicle is 2.5 miles, is accelerating the delivery of the "Plan Vélo" which aimed to make every street cycle-friendly by 2024. Paris plans to construct 650 kilometres of pop-up cycleways mirroring the metro network by the time lockdown restrictions are eased in France.

Milan

Milan in northern Italy was hit particularly hard by the Covid-19 outbreak, which some scientists have linked to its high air pollution levels¹. In response to the crisis, it is planning to introduce one of Europe's most ambitious schemes to reallocate road space to walking and cycling to protect residents as restrictions are lifted. The city is also aiming to fend off a resurgence in car use as residents return to work. Milan's proposals include:

- Low-cost temporary cycle lanes
- New and widened pavements
- 30kph (20mph) speed limits
- Pedestrian and cyclist priority streets
- Filtered neighbourhoods.

New York

New York is planning to close at least 40 miles of streets to motor traffic to give people better access to safe options for outdoor recreation, relieve pressure on crowded parks and expand space for pedestrians to socially distance. They plan to expand this to 100 miles of "open streets," largely near parks, as well as widened pavements and additional permanent bike lanes.

Figure 3: Measures in New York City.



© Eduardo Munoz, Reuters

¹ <https://www.theguardian.com/world/2020/apr/21/milan-seeks-to-prevent-post-crisis-return-of-traffic-pollution>

Appendix B

Proposed measures

In line with section 6 of the strategy, there will be a rolling programme of measures as we progress through the three phases of lockdown, restrictions being gradually lifted and then recovery. Below is the list of priority measures which will be taken forward first. This will be constantly reviewed and updated as the situation progresses.

PART ONE: CITY CENTRE ACTIONS

Castle St pedestrian/
cycle improvements and
East-West Cycleway

(Already being delivered)

- **Re-allocation** of road space to provide additional space for pedestrians and cyclists to enable social distancing, manage traffic volume and encourage essential journeys to be made by active modes.
- **Phase 1:** Castle Street: Removal of single eastbound traffic lane between Cathedral Road and North Road/Boulevard de Nantes initially using traffic cones.
- **Phase 2:** Replace cones with bolt down light segregation to re-allocate space to pedestrians and cyclists between the north end of Wellington Street through Castle Street, Boulevard De Nantes, Dumfries Place and Newport Road to Four Elms Road, Adamsdown.

City Centre Safety Plan

As a result of the Council's strategic overview of the business/user needs in the city centre the Council is proposing to:

- Review the city centre and surrounding areas highway/transport and access arrangements to produce a **Strategic City Centre Access Plan** to support a durable 'event mode' arrangement in the city centre. However, to ensure that this may be in place for a number of month's access arrangements for all modes / existing parking areas/taxis etc. will be supported, whilst ensuring a safe high quality environment.
- An effective network of new and existing car parking areas with parking and ride/stride/pedal arrangements
- New popup cycle ways connecting surrounding areas into and across these new arrangements
- Access to and management of public transport (buses, trains, taxis)
- Where necessary one-way vehicular traffic routes, bus gates and priority measures
- Identification of key new and existing public / spill out spaces

Within the new Event Mode City Centre there will be a detailed **City Centre Pedestrian Public Realm Plan** to layout in an effective manner safe movement/ access arrangements:

- Introduction of pedestrian flow management system with vehicle restricted areas using barriers, way marking
- One-way pedestrian systems
- Footway widening using bolt down kerbs to facilitate social distancing
- Directional and information signing
- On-street markings
- The creation of major new spillout spaces, including:
 - Cardiff Castle – Covered outdoor dining space utilising Yeollo App with supporting entertainment events
 - The Hayes – Covered outdoor dining space utilising Yeollo App with street animation
 - Churchill Way (Queen Street end) - Covered outdoor dining space utilising Yeollo App with street animation
 - Castle Street – reduction in traffic to utilise space on the highway to provide additional space for businesses to extend into the street
 - Mill Lane – simple road closure to provide additional space for businesses to extend into the street
 - Lower St Mary Street – reduction in traffic to utilise space on the highway to provide additional space for businesses to extend into the street
- Systematic public realm enhancements including greening, planters, parklets, spill over areas, cycle parking
- Bus pads to enable safe passenger bus boarding/alighting
- Publicity/flyers
- Shelter for pedestrians

PART ONE: CITY CENTRE ACTIONS

City Centre Operational Management	<p>Need to create an environment that is safe, socially distanced, well managed and welcoming, that highlights what people 'can-do' as opposed to what they 'can't-do' to establish a return of footfall to the main urban centres. Operationally this will be supported in the following ways:</p> <ul style="list-style-type: none">• Ambassadors and welcome points• Management of pedestrian queues• Street cleansing and waste management• Police and security resourcing, and control of anti-social behaviour• Licensing and management of tables and chairs• Health and Safety, sanitation and wellbeing protocols• Car parking management• Management of cycle parking• Servicing and deliveries• Promotion of measures to spread demand throughout the day
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PART TWO: WIDER CITY ACTIONS

Speed awareness signage and 20mph limits on key routes including routes through district and local centres to improve public safety.	<p>This project focusses on managing vehicle speeds, to improve public safety. As lockdown lifts, walking and cycling will become increasingly important for essential journeys. Reducing vehicle speeds will make an important contribution to making the public safer when travelling by active modes. It will also help to reduce the risk of injury collisions which would negatively impact on NHS capacity. The project involves:</p> <ul style="list-style-type: none"> • Introduction of temporary speed awareness signage • Introduction of 20mph limits on key routes through district and local centres by way of Temporary Traffic Regulation Orders • Monitoring of vehicle speeds • Targeting communications and messaging to encourage slower speeds and careful driving via social media
District and Local Centre footway/social distancing and public realm improvements – up to 15 locations	<p>This project will focus initially on Wellfield Road in Plasnewydd. This will serve as a pilot to test interventions which will then inform the design/ implementation and future adjustment of measures to be rolled out across other district and local centres. Implementation in other local and district centres will be subject to further engagement with local ward members to finalise extent of measures required.</p> <p>Each individual project will combine functional interventions to facilitate safety and social distancing with public realm improvements. These measures will enhance the greening / amenity of each location thus helping to attract footfall, while providing the safeguards necessary to ensure public safety. The measures are likely to include:</p> <ul style="list-style-type: none"> • Removal of car parking and re-allocating road space by providing additional segregated space for pedestrians including spill over areas • Widening of footways with the introduction of bolt down kerbs • Public realm improvements, including, the introduction of greening features, planters and parklets • Provision of temporary pedestrian crossings, where required • Potential introduction of one-way vehicle routes • Provision of cycle parking
Measures to support safe access to Citywide Focal Areas	<p>In addition to measures associated specifically with the city and local centres there are a range of measures related to key trip generators/destinations across the city such as busy parks, hospitals, higher education institutions, public transport railway stations and hubs. It is proposed that in these locations we will assess the introduction of a range of measures including:</p> <ul style="list-style-type: none"> • Introduce a pilot to support increased student access to Cardiff University Campus and Cathays St. by potentially bus-gating measures on Park Place and consider the potential at other locations. • Removal of car parking and re-allocating road space by providing additional segregated space for pedestrians including spill over areas • Widening of footways with the introduction of bolt down kerbs • Public realm improvements, including, where possible, the introduction of greening features • Provision of temporary pedestrian crossings, where required • Potential introduction of one-way vehicle routes and bus gates • Provision of cycle parking • Plus other safety measures.

PART TWO: WIDER CITY ACTIONS

A Network of Pop up Cycleways	<p>As a result of the significant negative impacts that Covid safety will have on public transport capacity it will be essential to support and encourage all forms of active travel. A safe segregated network of cycle routes, that of necessity will be of a 'pop up' nature, will be needed to connect the city centre to local centres and all other key destinations. This will require proactive planning, full engagement and implementation, using lines, signs, and bolt down technology to enable this network to be established quickly and to the appropriate safety design standards. This will be a city-wide process. These proposals will include:</p> <ul style="list-style-type: none"> • North Road – segregated two-way cycle lane along North Road between ambulance depot access and Parkfield Place junction to provide an alternative route for cyclists during construction of WG-funded cycling scheme North Road Phase 2 (currently closed to enable contractors to observe social distancing) • Splott-Taff Trail/Penarth Road – segregated temporary two way cycle lane cycling facility between Splott and Taff Trail via Tyndall Street and Penarth Road • Lloyd George Avenue – re-allocated road space for use as a temporary segregated cycle lane with access for pedestrians linking the Bay to City Centre – this will align with Bay Park & Stride/Pedal arrangements • James Street, Butetown – segregated cycle lanes along James Street between Taff Trail and junction with Bute Street using light segregation bolt down kerbs and wands • Roath Park – one-way traffic and a segregated cycle route through Roath Recreation Ground & Roath Park corridor • Other opportunities – identify other segregated cycle routes in collaboration with local members and stakeholders.
Measures to support safe access to Schools	<p>Focus on priority list schools with most severe constraints (t.b.c)</p> <ul style="list-style-type: none"> • Prepare for schools to reopen at the end of June • Re-allocation of road space with temporary segregation • Pavement widening using temporary bolt-down kerbing etc • Temporary 20mph limits • Temporary closures at drop-off and pick up times • Support of Active Travel Schools team to promote active travel.
City Centre and Local Centres Cycle Parking	Up to 200 additional cycle parking units in City Centre and local district centre locations
Covid19 Transport Recovery Plan – Promotion & Publicity	<p>It is essential that the roll out of these interventions is accompanied by targeted information and publicity. This is necessary to provide information about:</p> <ul style="list-style-type: none"> • what the Council is proposing to do • why particular measures are necessary • where and when they will be introduced. <p>Therefore, to support implementation of the infrastructure measures detailed above, the Council will deliver a programme of communications including:</p> <ul style="list-style-type: none"> • Information on programme content and timetable • Publication of plans and proposals in accessible formats including Frequently Asked Questions, myth busting and explainers • Travel information including 'how to guides' • Information on highway network changes/public transport provision • Campaign messaging to influence user behaviour (e.g. speed awareness) • News feeds with bulletins and good news stories etc. – publicised across local and social media • On street user information provided by ambassador personnel.

Appendix C

Materials palette

A range of materials and products are proposed which will vary depending on the measure, availability and context. Below are some examples.

Signage



© Cardiff Council

We will use temporary signs and variable message signs across the city to encourage safe driving and to advise about reduced speed limits on some roads.

Plastic barriers and cones



© willnorman twitter

Plastic barriers or even cones may be used for the most urgent interventions as well as where flexibility is experimentation is needed such as where footways need widening in district centres. These may be upgraded to more robust measures if needed.

Bolt down kerbs



© Rediweid

Bolt down kerbs and other “light segregation” measures will be installed where more protection is required such as on our cycleways.

Planters



© Tower Hamlets, Twitter

Large planters and other temporary street furniture could be used to provide traffic calming or prevent rat running to make residential streets and streets around schools safer for people playing, walking and cycling.

Bus gates



© Mark Philipotts City Infinity

Similar to bus lanes, bus gates are stretches of road that are only open to buses, cycles and sometimes taxis. They are highlighted with signage and can be enforced using rising bollards or cameras. Bus gates improve the punctuality and reliability of buses and can improve safety for people walking and cycling by reducing the amount of traffic on streets.

Parklets



© Cyclehoop

Parklets provide more space for people to stop, play, sit and rest and can also provide greenery, art and cycle parking. During the recovery phase, parklets may provide an opportunity to provide additional safe space for people, particularly outside cafes, bars and restaurants.

Cycle parking



© Cyclehoop

© PlantLock, Front Yard Company

Attractive bolt down cycle parking is a quick way of installing the additional cycle parking that will be needed.

Appendix D

Stakeholders

Discussions have been had with the following stakeholders:

City Centre Consultation	Hospitality Sector	Employers	Retail
City Centre Management Team	National Museum for Wales	Cardiff University	St David's Centre
FOR Cardiff	Clayton Hotels	South Wales University	Queens Arcade
South Wales Police	Holiday Inn Hotels	Cardiff & Vale College	Capitol Centre
Transport for Wales	SA Brains public houses	Royal Wales College of Music & Drama	Morgan Arcades
Bus operators	Public House Licencing	Admiral	John Lewis
NCP	Creative Hospitality Group	Acorn	Rugby Shop
	200 Degrees	Optimum Credit	Mermaid Quay
	Cardiff Music Board	Wales Development Bank	Brogue Trader
		Capital Law	Land Securities
		Marsh Commercial	Hacker Limited
		CPS	

ARUP

